TATHAM ENGINEERING

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# Linksview Subdivision

## PRELIMINARY STORMWATER MANAGEMENT REPORT

Rayville Developments (Legacy) Inc.

File 125027 | July 11, 2025

# Document Control

File:

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Date:

**July 11, 2025**

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| Issue | Date | Description |
|---|---|---|
| 1 | July 11, 2025 | Draft Plan Amendment |

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# 1 Introduction

Tatham Engineering Limited (Tatham) has been retained by Rayville Developments (Legacy) Inc. to prepare a Preliminary Stormwater Management Report to support revisions to the draft plan approved Linksview Subdivision located in the Town of Collingwood.

## 1.1 PURPOSE

An application for a zoning by-law amendment and revisions to the draft approved subdivision was submitted in April 2024. The purpose of this report is to address agency comments received November 2024 including coordination with the revised Draft Plan dated June 3, 2025. Section 3.3 details the peak flow rates discharged from the proposed SWMF and confirms the proposed SWM plan achieves the targets identified by the Regional Stormwater Management Report (C.F. Crozier & Associates, 2014) and Taylor's Creek peak design flow rates (C.C. Tatham & Associates Ltd., 2016).

## 1.2 GUIDELINES AND BACKGROUND DOCUMENTS

This report was prepared recognizing the previous engineering studies completed to date and applicable Municipal and Provincial guidelines, including the following:

- C.F. Crozier & Associates, Functional Servicing & Stormwater Management Report, Linksview Subdivision, Town of Collingwood, Simcoe County (April 2022);
- C.C. Tatham & Associates Ltd., Taylor's Creek Rechannelization, Town of Collingwood, Design Brief (June 2016);
- C.F. Crozier & Associates, Regional Stormwater Management Report, Linksview Residential Development, Town of Collingwood (December 2014);
- The Ministry of the Environment (MECP) Stormwater Management Practices Planning and Design Manual (2003);
- Corporation of the Town of Collingwood Development Standards, (August 5, 2022); and
- Nottawasaga Valley Conservation Authority Stormwater Technical Guide (2013).

## 1.3 PROPOSED DEVELOPMENT

It is proposed to develop the 40.66 ha property with 277 single family units, 184 townhouse units, 2.13 ha school block, and a 2.10 ha apartment block estimated to yield between 116 to 189 units. An additional 5.69 ha are allocated to provide servicing, amenity, and open space/environmental

blocks including a 2.13 ha SWM block. It is expected that the subdivision will be serviced in 3 phases to meet market demands.

Access to the proposed development will be provided as summarized below:

- Street A via connection to Tenth Line; and
- emergency access block to Tenth Line on the northern limit of the proposed development.

To accommodate future development on neighbouring properties, right-of-ways have been extended to the property limits as follows:

- a 20 m right-of-way extended at the northern limit of Streets C and K;
- 26 m right-of-way extended to the property boundary at the western limit of Street A; and
- 20 m right-of-way extended to the property boundary at the southern limit of Streets E and K.

The proposed development is shown on the Draft Plan of Subdivision by MHBC, dated May 26, 2025 with a revision date of June 3, 2025, enclosed.

From a stormwater perspective, storm sewers will convey surface runoff from the majority of the developed area to an end-of-pipe wet pond stormwater management facility (SWMF) described in Section 3 of this report.

# 2 Taylor's Creek

The subject property is part of a larger catchment area of approximately 174.3 ha draining to Taylor's Creek. Under existing conditions, the tributary area consists of woodland, agricultural land, and the Blue Mountain Golf and Country Club. Runoff generally sheet flows northeast across the development lands to the Blue Mountain Golf and Country Club and Taylor's Creek. Flows concentrate at a 1,900 mm x 1,500 mm CSPA culvert crossing Tenth Line identified as Outlet 'A', approximately 230 m north of the subject property as shown on the enclosed Post Development Drainage Plan (Drawing DP.1).

The Taylor's Creek drainage area and impacts associated with future development were initially assessed in the report entitled:

*Regional Stormwater Management Report, Linksview Residential Development, Town of Collingwood, C.F. Crozier & Associates Inc., December 2014.*

This report is enclosed in Appendix A and identified target peak unit flow rates to be applied to future development in the Taylor's Creek catchment to match pre-development peak flow rates, which are summarized in Table 1 below.

**Table 1: Peak Unit Flow Rates (C.F. Crozier & Associates, 2014)**

| | UNIT FLOW RATE (L/s/ha)[1] | |
|---|---|---|
| STORM | Chicago | SCS |
| 25 mm | - | - |
| 1:2-Year | 4 | 5 |
| 1:5-Year | 6 | 8 |
| 1:10-Year | 9 | 11 |
| 1:25-Year | 12 | 15 |
| 1:50-Year | 14 | 18 |
| 1:100-Year | 17 | 23 |
| Timmins | 41 | - |

[1] Flows obtained from Regional Stormwater Management Report, C.F. Crozier & Associates, 2014, Table 2, Target Unit Flow Rates for Taylor's Creek Development Areas

Taylors Creek was channelized in 2020 to improve conveyance capacity and establish a suitable outlet for future upstream development. Further details regarding the channelization and drainage conditions are outlined in the design brief entitled:

*Taylor's Creek Rechannelization, Design Brief,* C.C. Tatham & Associates*, June 16, 2016.*

The Taylor's Creek Design Brief is enclosed in Appendix B and concluded that strict quantity control is not required for upstream development lands provided the future SWMF's are designed to respect the design peak flow rates. Table 2 below summarizes the design peak flow rates specified for the Linksview, BMGC and external drainage areas to Taylor's Creek.

**Table 2: Taylor's Creek Design Flow (C.C. Tatham & Associates, 2016)**

| STORM | PEAK FLOW RATE ($m^3/s$)[1] Linksview, BMGC & External (Outlet 'A') 24-Hour SCS Type II |
|---|---|
| 25 mm | 0.317 |
| 1:2-Year | 0.762 |
| 1:5-Year | 1.477 |
| 1:10-Year | 1.985 |
| 1:25-Year | 2.771 |
| 1:50-Year | 3.313 |
| 1:100-Year | 4.014 |
| Timmins | 8.070 |

[1] Flows obtained from Taylor's Creek Rechannelization Design Brief, C.C. Tatham & Associates Ltd., 2016, Table 2, Proposed Condition Peak Flow Rates

The Linksview SWMF must provide sufficient quantity control to ensure the flow targets identified in the previous studies are not exceeded under the post development condition.

# 3 Preliminary Stormwater Management Plan

The proposed stormwater management plan has been developed to address adverse impacts the development will have on the local surface water features and surface water quality. The proposed stormwater management plan is outlined in the following sections.

## 3.1 DESIGN CRITERIA

Based on the guidelines and background documents reviewed, the following design criteria are to be satisfied by the proposed SWM Plan:

- Discharge rates from the proposed SWMF must be controlled to levels at or below the target unit flow rates identified in the Regional Stormwater Management Report (C.F. Crozier & Associates, 2014);
- Post development peak flow rates at the Taylor's Creek culvert crossing at Tenth Line (Outlet 'A') must not exceed Taylor's Creek design peak flow rates (C.C. Tatham & Associates, 2016);
- Level 1 "Enhanced" water quality treatment in the form of 80% Total Suspended Solids (TSS) removal for site effluent is required;
- The Regional Storm must be controlled and safely conveyed through the development to the designated outlet to prevent on-site flooding;
- Best management efforts shall be incorporated into the SWMF design to mitigate elevated water temperatures discharged from the facility;
- Erosion protection must be provided by controlling post development 25 mm storm runoff to a detention time between 24-48 hours to protect the downstream system from erosion. Per Section 4.1 of the NVCA SWM Technical Guide, the first 5mm of rainfall should be retained on site and opportunities will be reviewed and implemented if feasible during detailed design; and
- A siltation and erosion control plan is required to prevent the migration of sediment off-site during construction.

## 3.2 PROPOSED DRAINAGE CONDITIONS

The Post Development Drainage Plan (Drawing DP.1) should be referenced when reviewing this section of the report. For consistency with the Regional Stormwater Management Report (C.F. Crozier & Associates, 2014) and Taylor's Creek Design Brief (C.C. Tatham & Associates, 2016),

the existing Tenth Line culvert crossing (Outlet 'A') has been utilized to compare and confirm post development flow targets are achieved. Consistent with the previous design report, a wet pond SWMF will be implemented for stormwater quantity control and stormwater water quality treatment.

### 3.2.1 Proposed Condition Hydrology

An updated Visual OTTHYMO hydrologic model was prepared to reflect the revised draft plan and compute the post development peak flows and verify the SWMF provides the requisite quantity control for the proposed development. The site imperviousness has been modelled recognizing increased lot coverage proposed under the site specific Zoning By-Law Amendment.

The peak flow rates for the 25 mm, 1:2-year through 1:100-year return frequency, and Regional (Timmins) Storm events at the SWMF outlet and Outlet 'A' are summarized in Table 3. Detailed hydrologic modelling inputs and results are provided in Appendix C.

**Table 3: Post Development Peak Flow Summary**

| STORM | PEAK FLOW RATE ($m^3/s$) | | | |
|---|---|---|---|---|
| | Linksview SWM Pond Outlet | | Outlet 'A' | |
| | 4-Hr Chicago[1,2] | 24-Hr SCS Type II[1,2] | 4-Hr Chicago[3] | 24-Hr SCS Type II[3] |
| 25 mm | 0.071 | - | 0.316 (*0.317*) | - |
| 1:2-Year | 0.086 (1.8) (*4*) | 0.092 (1.9) (*5*) | 0.558 | 0.760 (*0.762*) |
| 1:5-Year | 0.103 (2.1) (*6*) | 0.110 (2.2) (*8*) | 0.955 | 1.216 (*1.477*) |
| 1:10-Year | 0.113 (2.3) (*9*) | 0.119 (2.4) (*11*) | 1.249 | 1.514 (*1.985*) |
| 1:25-Year | 0.124 (2.5) (*12*) | 0.131 (2.7) (*15*) | 1.669 | 1.957 (*2.771*) |
| 1:50-Year | 0.179 (3.7) (*14*) | 0.250 (5.0) (*18*) | 2.026 | 2.346 (*3.313*) |
| 1:100-Year | 0.325 (6.7) (*17*) | 0.390 (8.0) (*23*) | 2.537 | 2.862 (*4.014*) |
| Timmins | 1.470 (30.0) (*41*) | - | 7.487 (*8.070*) | - |

[1] (29.3) denotes discharge unit flow rate (L/s/ha)
[2] (*41*) denotes target unit flow rates (L/s/ha)
[3] (*4.014*) denotes Taylor's Creek design peak flow rate ($m^3/s$)

The peak flow rates summarized in Table 3 indicate that the proposed SWMF controls peak flows at the SWMF outlet to levels below the target rates listed in Table 1 identified in the Regional Stormwater Management Report (C.F. Crozier & Associates, 2014).

Further, peak flow rates at Outlet 'A' are controlled below the peak design flow rates listed in Table 2 identified in the Taylor's Creek Rechannelization Design Brief (C.C. Tatham & Associates

Ltd., 2016). As such, the proposed SWMF provides sufficient quantity controls to attenuate peak flows from the proposed development.

The assessment considers build-out of the subject development and has not considered potential future development of external lands at Outlet 'A'.

## 3.3 PROPOSED STORMWATER MANAGEMENT FACILITY

### 3.3.1 Water Quantity Control

As demonstrated in Section 3.2, the proposed SWMF will provide the requisite water quantity control for the development. Surface runoff will be conveyed to the SWMF via a combination of storm sewers, swales, and overland flow routes. The storm sewer network will be designed to convey the 1:5-year return frequency design storm peak flow from the majority of the development to the SWMF. The overland flow routes, consisting primarily of the internal road allowance, will convey flows from catchments 201, 301, and 302 exceeding the capacity of the storm sewer system to the wet pond SWMF.

The wet pond SWMF outlets are described as follows:

- Primary outlet – bottom draw 300 mm perforated riser with a 300 mm diameter reverse grade outlet pipe complete with a 245 mm diameter orifice plate;
- Secondary outlet – 1200 mm x 600 mm ditch inlet catch basin with a 5:1 grate slope and a 600 mm diameter outlet pipe; and
- Emergency overflow – 40 m wide trapezoidal broad crested weir with 10:1 (H:V) side slopes.

The primary outlet control for the wet pond SWMF will discharge runoff generated by the 25 mm through 1:5-year return frequency design storm at controlled rates. Runoff produced by the 1:10-year through 1:100-year return frequency and regional (Timmins) design storms will be discharged at controlled rates by the primary and secondary outlets. An emergency overflow weir has been designed to convey the major storm in the event of an obstruction to the primary and secondary outlets.

As designed, the wet pond SWMF provides 13,536 $m^3$ of permanent pool storage, 13,244 $m^3$ of extended detention storage, and 41,289 $m^3$ of active storage. The proposed SWMF and outlet details are illustrated on Drawing PND.1 enclosed. The proposed SWMF operating characteristics are detailed in Table 4 and further detailed in Appendix D.

**Table 4: Wet Pond SWMF Design Operating Characteristics**

| STORM | STORAGE VOLUME ($m^3$) | | DISCHARGE ($m^3/s$) | | WATER ELEVATION (m) | |
|---|---|---|---|---|---|---|
| | 4-Hour Chicago | 24-Hour SCS Type II | 4-Hour Chicago | 24-Hour SCS Type II | 4-Hour Chicago | 24-Hour SCS Type II |
| 25 mm | 3,710 | - | 0.071 | - | 195.09 | - |
| 1:2-Year | 5,430 | 6,330 | 0.086 | 0.092 | 195.23 | 195.29 |
| 1:5-Year | 7,850 | 9,010 | 0.103 | 0.110 | 195.41 | 195.50 |
| 1:10-Year | 9,500 | 10,690 | 0.113 | 0.119 | 195.54 | 195.62 |
| 1:25-Year | 11,790 | 13,190 | 0.124 | 0.131 | 195.69 | 195.79 |
| 1:50-Year | 13,560 | 14,030 | 0.179 | 0.250 | 195.83 | 195.88 |
| 1:100-Year | 14,530 | 14,970 | 0.325 | 0.390 | 195.92 | 195.94 |
| Timmins | 31,540 | - | 1.470 | - | 196.96 | - |

As indicated in Table 4, peak flows from the various design storms are controlled below the emergency overflow weir sill elevation. During the Regional Storm event the SWMF stores excess runoff at an elevation of 196.96 while maintaining 0.54 m of freeboard.

The peak uncontrolled flow into the wet pond SWMF (6.748 $m^3/s$) is generated by the 1:100-year SCS design storm. If the primary and secondary outlets are 100% obstructed, the overflow weir will convey this flow at an elevation of 197.21 m (0.29 m freeboard). A Detailed weir flow calculation is provided in Appendix D.

### 3.3.2 External Storm Sewer

The peak controlled discharge of 1.470 $m^3/s$ is proposed to be conveyed via storm sewer along Tenth Line to Taylor's Creek. Based on the available topographic survey, it is anticipated that a storm sewer can be constructed with an average slope of 0.5% from the SWMF outlet to Taylor's Creek. Using the average slope, it has been determined that a minimum 1,050 mm diameter storm sewer will be required to convey the anticipated controlled peak flow rate discharged by the future development.

Supporting storm sewer sizing calculations are included in Appendix D and the conceptual storm sewer alignment is illustrated on drawing CSP.1 enclosed.

### 3.3.3 Water Quality Treatment

The wet pond SWMF has been designed to provide "Enhanced" Level 1 water quality treatment for the SWMF tributary area. The tributary area (49.02 ha) has an overall imperviousness of approximately 43%. The required water quality storage volume for the wet pond SWMF is 157.5 $m^3$/ha, equating to approximately 7,721 $m^3$, of which 5,760 $m^3$ is permanent pool storage. The required extended detention volume is the greater of 40 $m^3$/ha (1,960.8 $m^3$) or the volume produced by 25 mm of rainfall over the pervious area (4,328 $m^3$). Therefore, the required extended detention volume is approximately 4,328 $m^3$. The simplified approach for determining the erosion control storage was also considered and is approximately 8,333 $m^3$. Supporting calculations are provided in Appendix D for reference.

As previously described, the wet pond SWMF provides 13,536 $m^3$ of permanent pool storage, 13,244 $m^3$ of extended detention storage, and 41,289 $m^3$ of active storage. The wet pond SWMF will have a drawdown time of approximately 28 hours for the water quality storm (25 mm event) and an extended detention drawdown time of approximately 56 hours. The quality treatment volumes and drawdown time will be further optimized during detailed design.

# 4 Sediment and Erosion Control

Siltation and erosion controls will be implemented for all construction activities, including topsoil stripping, material stockpiling, road construction activities and grading operations. Erosion and sediment control measures will be implemented during construction and are anticipated to include the following:

- heavy duty silt fence will be erected around the perimeter of the site before any grading operations commence to control sediment movement;
- rock check flow dams and straw bale check flow dams will be installed prior to construction and will be maintained and inspected throughout the course of construction as required to prevent the transportation of sediment and deleterious materials offsite;
- installation of temporary interceptor swales and sediment basin/traps to control drainage and mitigate sediment laden runoff during construction; and
- a construction vehicle entrance will be constructed and maintained consisting of a stone mud mat to reduce off-site tracking of material.

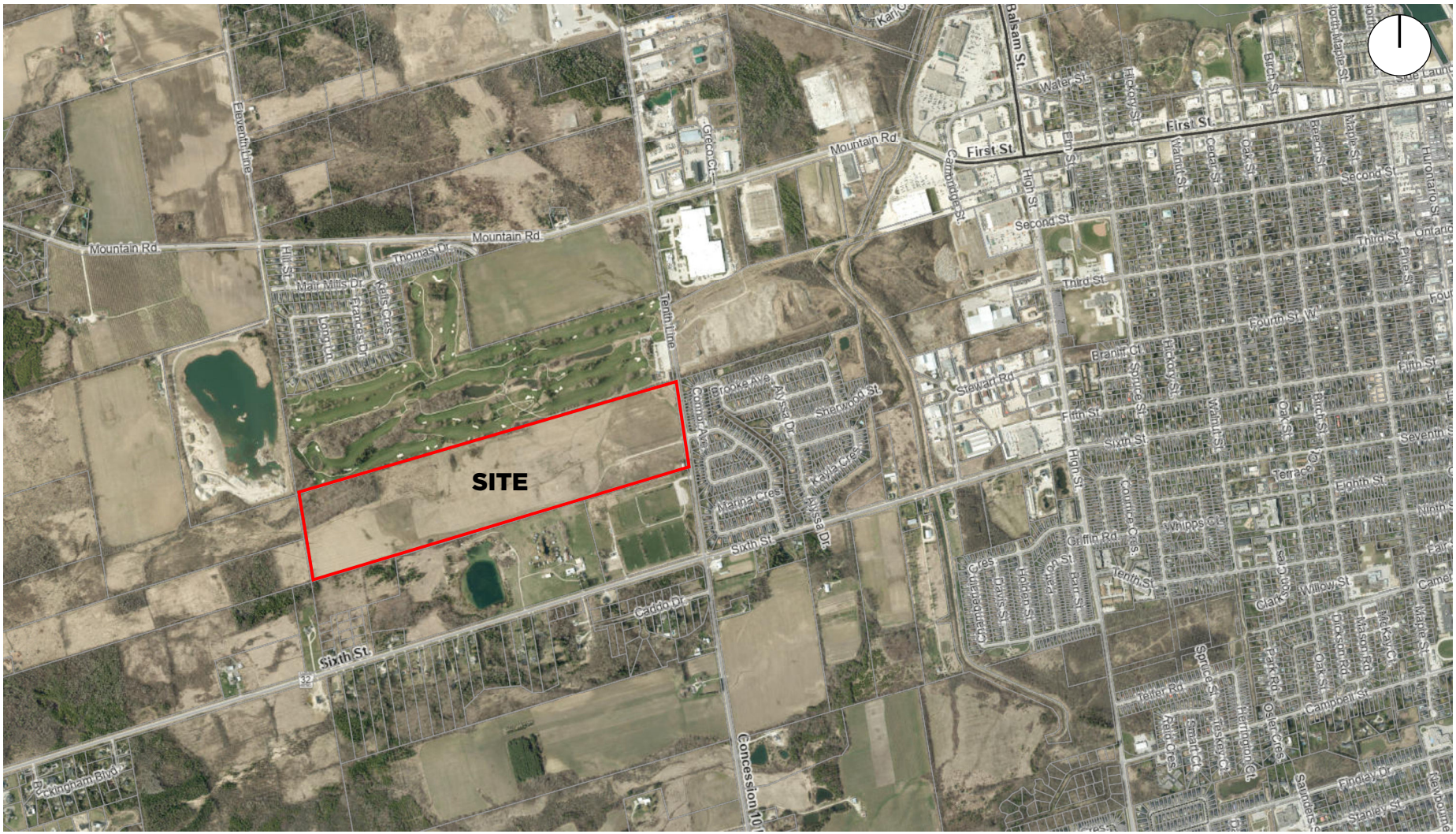
An erosion and sediment control plan will be prepared during detailed design and submitted for approval prior to the commencement of construction.

# 5 Summary

This report has been prepared to address agency comments received November 2024 including coordination with the revised draft Plan dated June 3, 2025. The SWM plan ensures the development can be constructed in accordance with the previously completed Regional Stormwater Management Report (C.F. Crozier & Associates, 2014) and Taylor's Design Brief (C.C. Tatham & Associates Ltd., 2016) while conforming to the applicable Town and Provincial guidelines.

As detailed in Section 3.3, the proposed SWMF provides sufficient quantity control to meet the flow targets (C.F. Crozier, 2014) and Taylor's Creek peak design flows (C.C. Tatham, 2016). The proposed SWMF has been designed to provide the requisite water quality treatment and erosion control. The proposed SWMF provides enhanced level water quality treatment with a 24hr draw down time during the 25mm event. The proposed stormwater management facility will be further optimized during detailed design.

Construction and maintenance of siltation and erosion control facilities and implementation of erosion and sediment control best management practices during and after site servicing and building construction will reduce the transportation of sediment from the site, improve the stormwater quality and mitigate any environmental impacts to the surrounding area.




**LINKSVIEW SUBDIVISION – TOWN OF COLLINGWOOD**

Figure 1: Site Location Plan

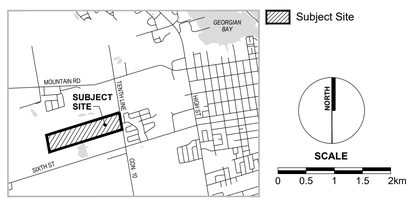
**LAND USE SUMMARY**

| LAND USE | LOT / BLOCK # | UNITS | AREA |
|---|---|---|---|
| SINGLE DETACHED - 40ft / 12.2m LOTS | 015-020, 033, 034, 050-052, 072-074, 076-078, 082-087, 089-091, 094-102, 105-113, 116, 117, 120, 121, 123-136, 138, 139, 142, 143, 145-154, 156, 157, 159-186, 188, 189, 191-196, 201-221, 224-232, 235-277 | 187 | 7.939ha |
| SINGLE DETACHED - 50ft / 15.24m LOTS | 001-014, 021-032, 035-049, 053-071, 075, 079-081, 088, 092, 093, 103, 104, 114, 115, 118, 119, 122, 137, 140, 141, 144, 155, 158, 187, 190, 197-200, 222, 223, 233, 234, 257 | 90 | 5.139ha |
| TOWNHOUSE - 24.5ft / 7.5m UNITS | 278-312 | 184 | 5.438ha |
| APARTMENT (MIN. 55 UPH / MAX. 90 UPH) | 313 | (MIN. 116) (MAX. 189) | 2.094ha |
| SCHOOL | 314 | | 2.126ha |
| PARK (5%) | 315-317 | | 1.905ha |
| 10m BUFFER | 318-320 | | 0.858ha |
| EMERGENCY EXIT | 321-322 | | 0.292ha |
| WALKWAY | 323-326 | | 0.085ha |
| ENVIRONMENTAL PROTECTION | 327 | | 2.557ha |
| STORMWATER MANAGEMENT AREA | 328 | | 2.125ha |
| FUTURE RIGHT OF WAY | 329-332 | | 0.303ha |
| 0.3m RESERVE | 333-335 | | 0.004ha |
| ROAD WIDENING | 336 | | 0.091ha |
| RIGHT OF WAY | A, B, C, D, E, F, G, H, I, J, K | | 9.704ha |
| TOTALS | | 461 (MIN. 577) (MAX. 650) | 40.660ha |

**LEGAL DESCRIPTION**

NORTH HALF OF LOT 43
CONCESSION 11
GEOGRAPHIC TOWNSHIP OF NOTTAWASAGA
TOWN OF COLLINGWOOD
COUNTY OF SIMCOE

**KEY PLAN**




**ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT R.S.O. 1990 C.P.13 AS AMENDED**

**A.** AS SHOWN
**B.** AS SHOWN
**C.** AS SHOWN
**D.** AS SHOWN
**E.** AS SHOWN
**F.** AS SHOWN
**G.** AS SHOWN
**H.** MUNICIPAL WATER SUPPLY
**I.** CLAY LOAM
**J.** AS SHOWN
**K.** ALL SERVICES AS REQUIRED (WATER, SANITARY, STORMWATER, HYDRO)
**L.** AS SHOWN

**OWNER'S CERTIFICATE**

I HEREBY AUTHORIZE MACNAUGHTON HERMSEN BRITTON CLARKSON PLANNING LIMITED TO SUBMIT THIS PLAN FOR APPROVAL.

DATE: _____ _____

**SURVEYOR'S CERTIFICATE**

I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE: _____ _____

| REVISION No. | DATE | ISSUED / REVISION | BY |
|---|---|---|---|
| No. 1 | JUN. 3, 2025 | REDLINE DRAFT PLAN REVISION | M.M. |

**LEGEND**

- SUBDIVISION BOUNDARY
- ROW LINE
- BLOCK LINE
- LOT LINE
- UNIT LINE
- PARCEL FABRIC


PLANNING
URBAN DESIGN
& LANDSCAPE
ARCHITECTURE
MHBC PLANNING
113 COLLIER STREET
BARRIE, ON, L4M 1H2
P: 705 728 0045 F: 705 728 2010
WWW.MHBCPLAN.COM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| DATE | MAY 26, 2025 |
| FILE No. | 18138B |
| SCALE | 1:1,800 (ARCH D) |
| DRAWN BY | M.M. |
| CHECKED BY | K.C. |
| OTHER | |

**PROJECT**

# LINKSVIEW SUBDIVISION

RAYVILLE DEVELOPMENTS (LEGACY) INC.

NORTH

**FILE NAME** DRAFT PLAN OF SUBDIVISION

**DWG No.** 1 of 1

**SCALE BAR**

0 8 16 24 32 40 60 80 120 160m

MEASUREMENTS SHOWN ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

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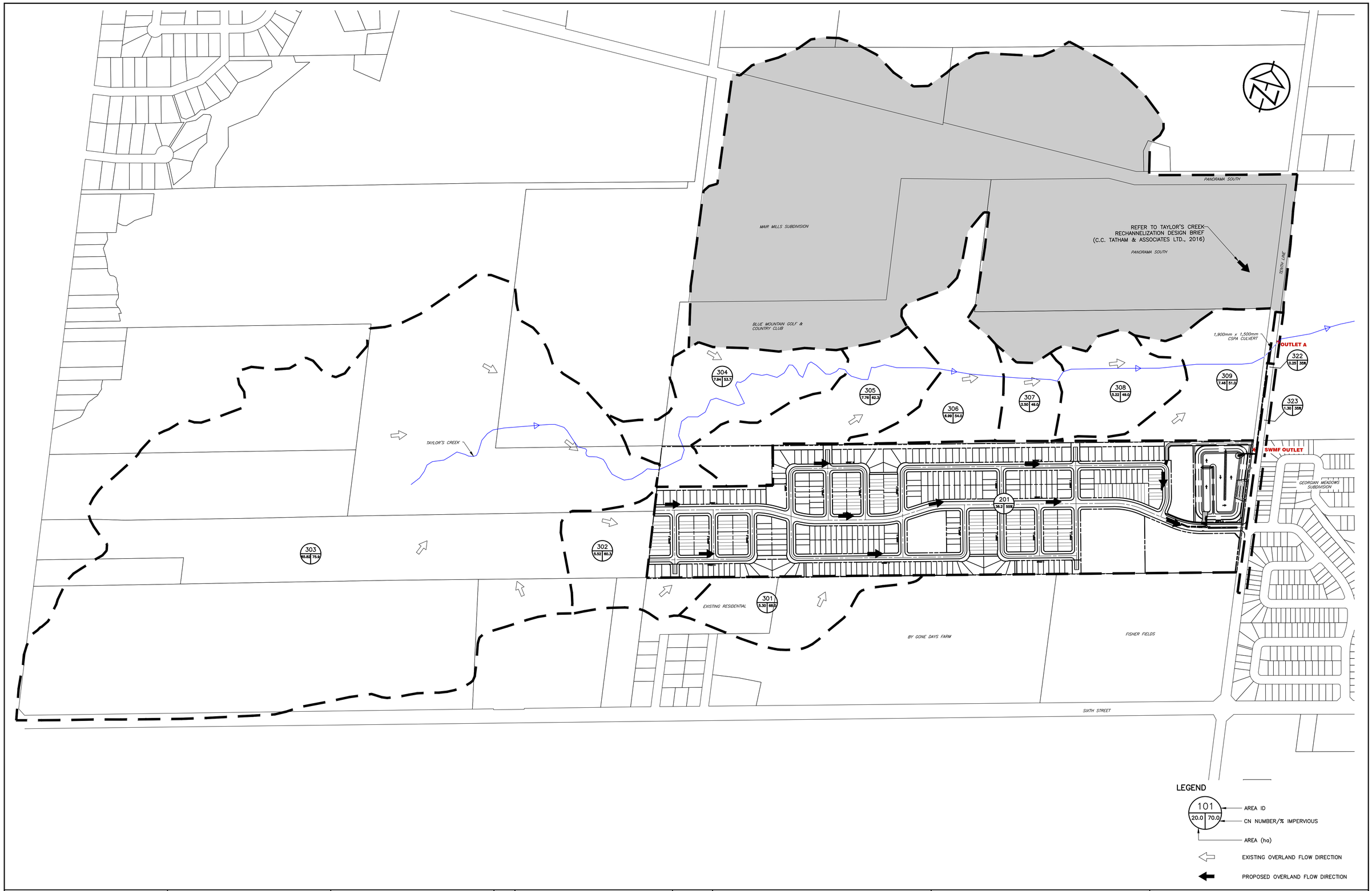


LEGEND

101 | 20.0 | 70.0 — AREA ID / CN NUMBER/% IMPERVIOUS / AREA (ha)

EXISTING OVERLAND FLOW DIRECTION

PROPOSED OVERLAND FLOW DIRECTION


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**FOR AMENDED DRAFT PLAN APPROVAL**
**JULY 11, 2025**

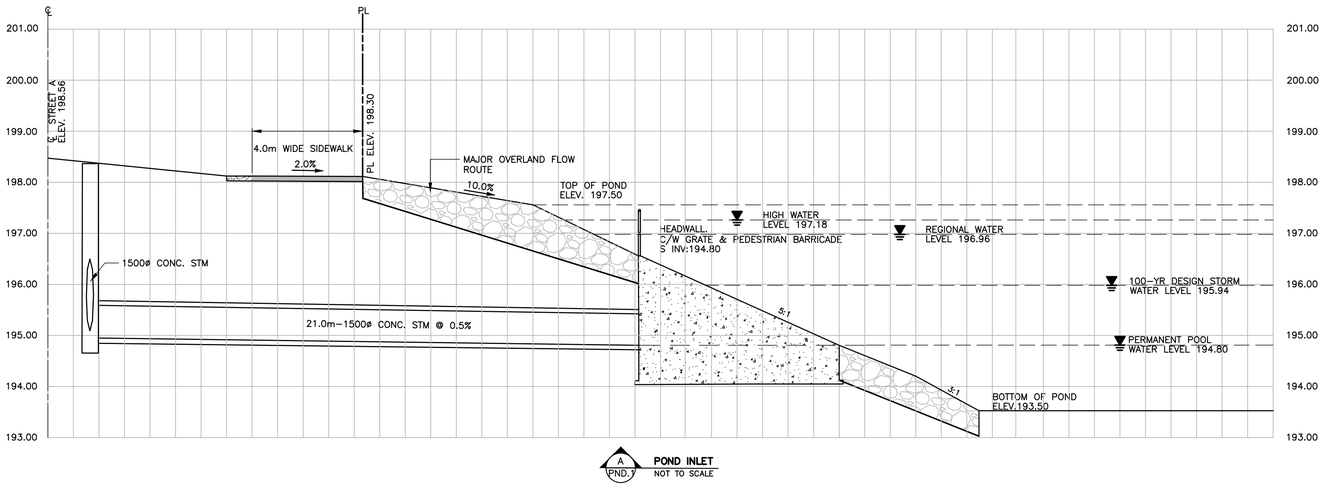
# LINKSVIEW SUBDIVISION
## TOWN OF COLLINGWOOD

## POST DEVELOPMENT DRAINAGE PLAN

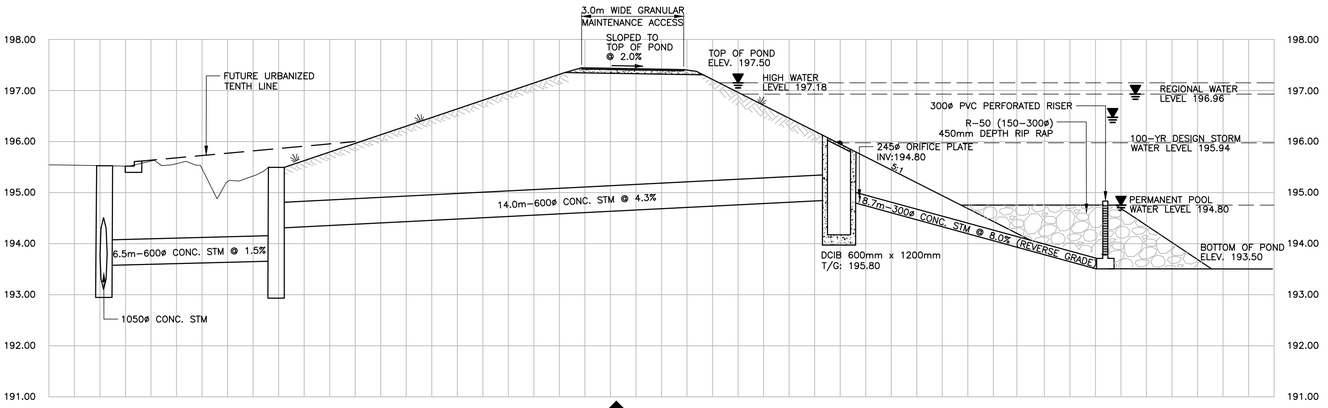
TATHAM ENGINEERING

| | | |
|---|---|---|
| DESIGN: EL | FILE: 125027 | DWG: **DP.1** |
| DRAWN: KB | DATE: JUNE 2025 | |
| CHECK: | SCALE: 1:4,000 | |

Drawing Name: 125027 – DP02.dwg, Plotted: Jul 10, 2025




A
POND.1
**POND INLET**
NOT TO SCALE




B
POND.1
**POND OUTLET**
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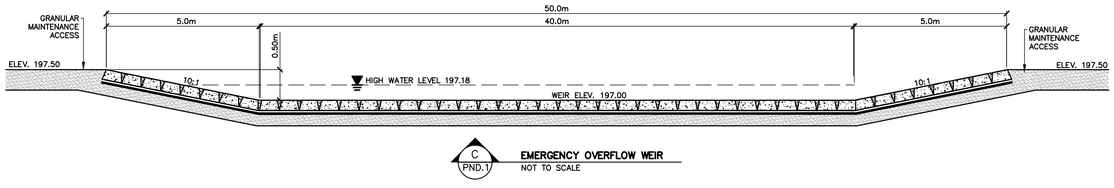


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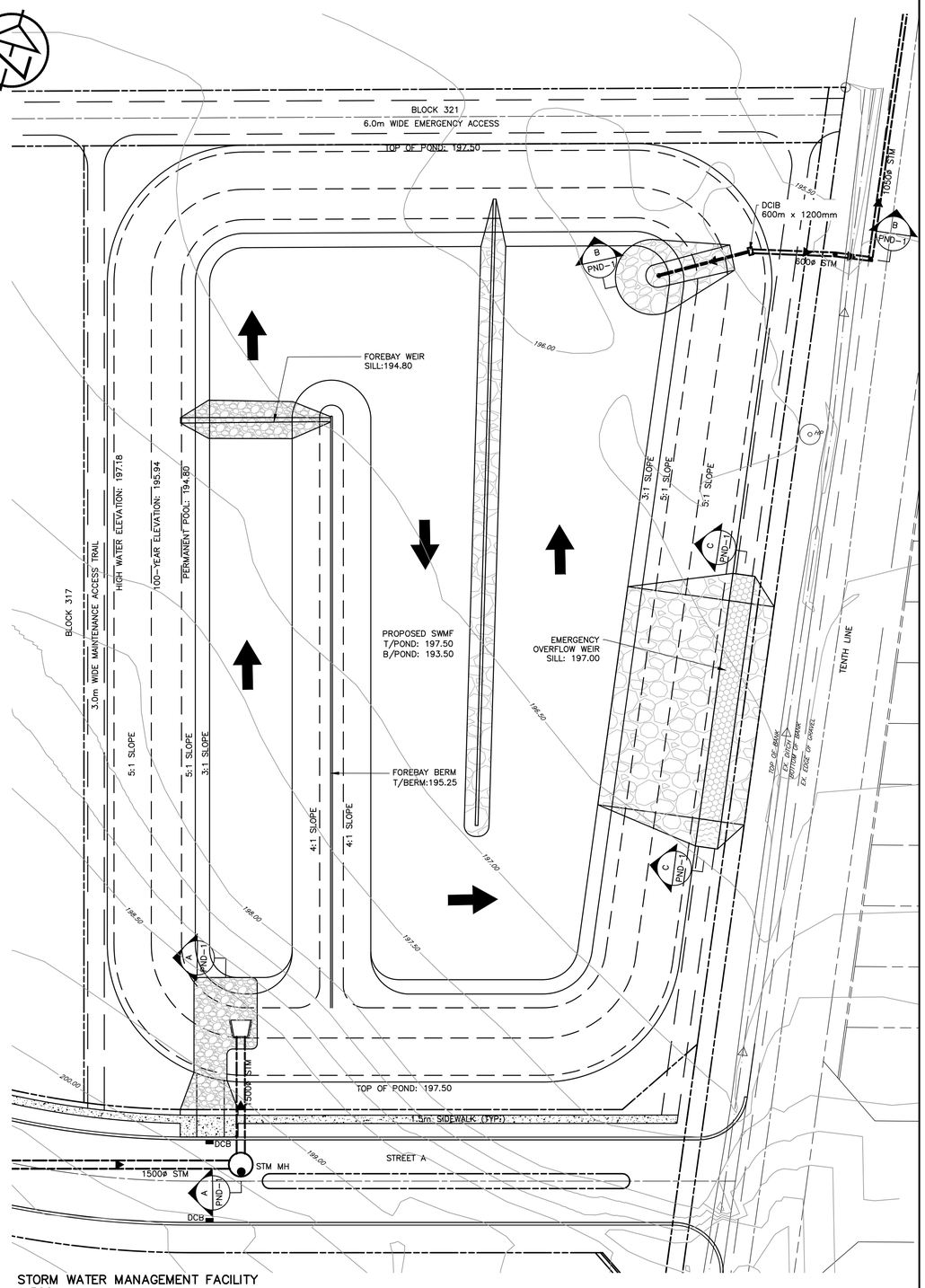


STORM WATER MANAGEMENT FACILITY
1:500

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1. LEGAL LINE WORK SHOWN PER DRAFT PLAN OF SUBDIVISION PREPARED BY MHBC, DATED MAY 26, 2025.
2. TOPOGRAPHIC SURVEY BY ZUBEK DATED MARCH 24, 2025.

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**FOR AMENDED DRAFT PLAN APPROVAL**
**JULY 11, 2025**

**LINKSVIEW SUBDIVISION**
**TOWN OF COLLINGWOOD**

# STORMWATER MANAGEMENT FACILITY LAYOUT & DETAILS

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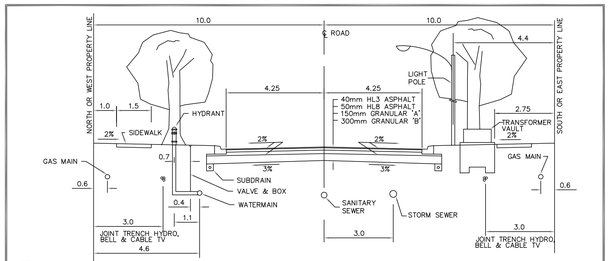
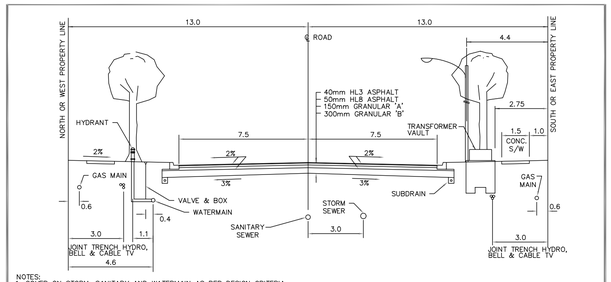



NOTES:
1. COVER ON STORM, SANITARY AND WATERMAIN AS PER DESIGN CRITERIA. UTILITY CORRIDOR SHALL HAVE A MINIMUM COVER OF 0.9m.
2. MINIMUM PAVEMENT AND ROAD STRUCTURE DESIGN AS PER TOWN DESIGN CRITERIA OR AS PER GEOTECHNICAL INVESTIGATION RECOMMENDATION.
3. TREES TO BE PLACED IN LOCATIONS AS PER APPROVED LANDSCAPE PLAN.
4. ACTIVELY GROWING NURSERY SOD TO BE LAID ON 100mm OF TOPSOIL PROPERLY GRADED AND ROLLED.
5. HYDRANTS AND WATERMAINS TO BE ON OPPOSITE SIDE OF ROAD FROM ELECTRICAL TRANSFORMER.
6. SUBDRAINS TO BE INSTALLED AS PER OPSD 216.021.
7. ALL SERVICE LOCATIONS SHOWN ARE FOR GUIDELINE PURPOSES ONLY AND MAY DEVIATE AS PER THE DIRECTION OF THE TOWN WHEN STANDARD LOCATION CANNOT BE ACHIEVED.
8. WHERE ONE SIDEWALK IS CONSTRUCTED IT SHALL BE ON THE SOUTH AND EAST SIDE OF THE ROAD.
9. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SHOWN.

| NO. | REVISION | APR'D | DATE | TOWN OF COLLINGWOOD | APR'D: EDH | DATE: JAN/03 |
|---|---|---|---|---|---|---|
| | | | | | DRAWN: | SCALE: NTS |
| | | | | URBAN – LOCAL RESIDENTIAL<br>20.0m ROAD ALLOWANCE<br>8.5m ASPHALT SURFACE | STD. No. | 201 |

**TYPICAL RIGHT–OF–WAY SECTION (LOCAL)**




NOTES:
1. COVER ON STORM, SANITARY AND WATERMAIN AS PER DESIGN CRITERIA. UTILITY CORRIDOR SHALL HAVE A MINIMUM COVER OF 0.9m.
2. MINIMUM PAVEMENT AND ROAD STRUCTURE DESIGN AS PER TOWN DESIGN CRITERIA OR AS PER GEOTECHNICAL INVESTIGATION RECOMMENDATION.
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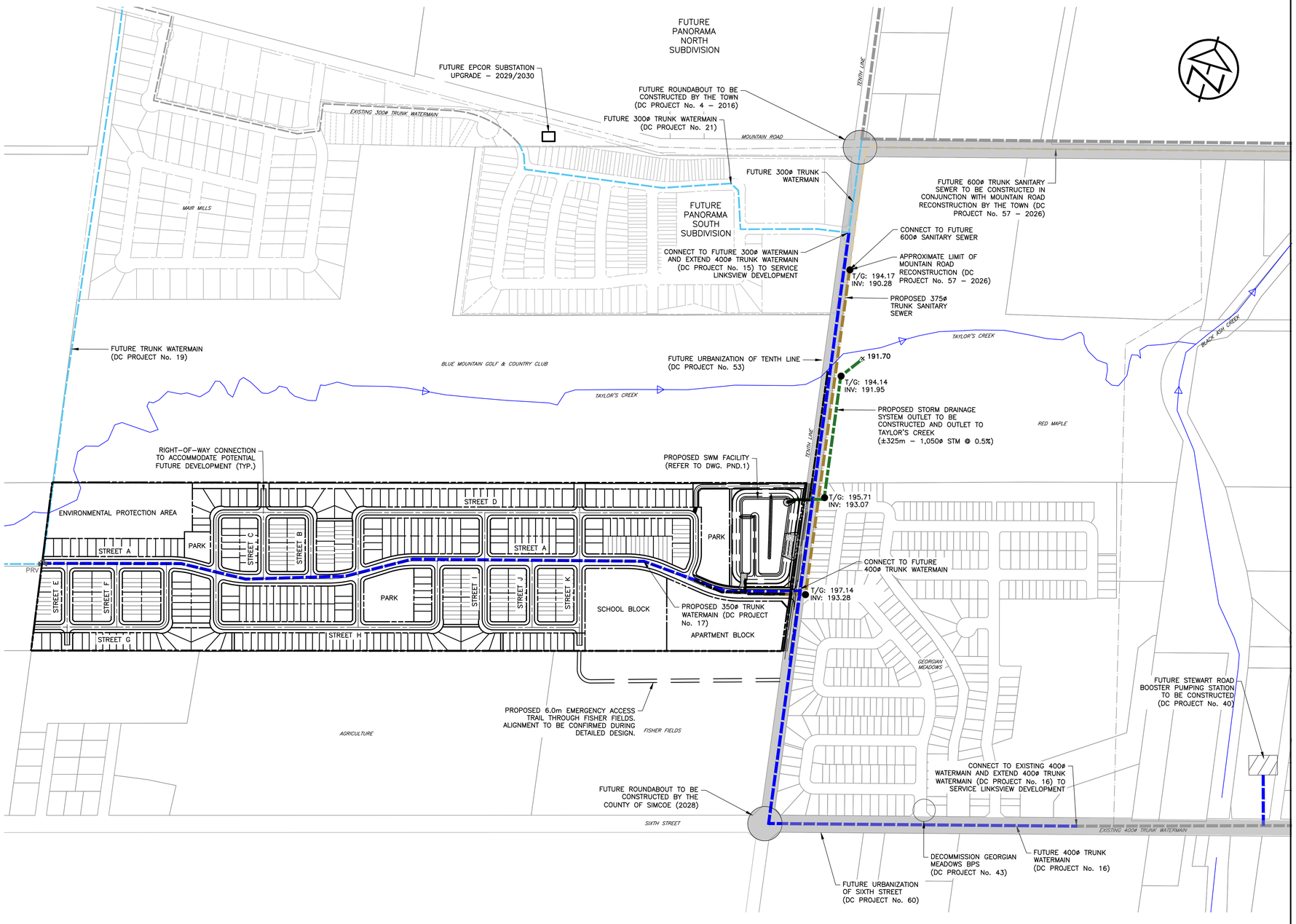
| NO. | REVISION | APR'D | DATE | TOWN OF COLLINGWOOD | APR'D: EDH | DATE: JAN/03 |
|---|---|---|---|---|---|---|
| 1. | REVISED ASPHALT WIDTH | EDH | APR/07 | | DRAWN: | SCALE: NTS |
| | | | | URBAN – COLLECTOR<br>26.0m ROAD ALLOWANCE<br>15.0m ASPHALT SURFACE | STD. No. | 205 |

**TYPICAL RIGHT–OF–WAY SECTION (COLLECTOR – STREET A)**

**LEGEND**

- SUBJECT LINKSVIEW DEVELOPMENT
- EXISTING TRUNK WATERMAIN
- PROPOSED TRUNK WATERMAIN
- FUTURE TRUNK WATERMAIN
- EXISTING SANITARY SEWER
- PROPOSED SANITARY SEWER
- FUTURE SANITARY SEWER
- FUTURE ROAD IMPROVEMENT
- PROPOSED STORM SEWER
- EXISTING CREEK & DIRECTION OF FLOW

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**DRAWING REFERENCES**

1. SURROUNDING BACKGROUND PARCEL FABRIC BASED ON SIMCOE COUNTY GIS.
2. LINKSVIEW DEVELOPMENT LAYOUT PER DRAFT PLAN OF SUBDIVISION (MHBC, MAY 26, 2025).
3. EXTERNAL SERVICING PROJECTS BASED ON TOWN OF COLLINGWOOD DEVELOPMENT CHARGE BACKGROUND STUDY (HENSON, 2024).
4. PANORAMA SOUTH SUBDIVISION RIGHT–OF–WAY AND LOT FABRIC SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM PANORAMA SUBDIVISION UPDATED FIRST SUBMISSION BY TATHAM ENGINEERING DATED MARCH 4, 2025.
5. MAIR MILLS SUBDIVISION RIGHT–OF–WAY AND LOT FABRIC SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM WELLINGTON GLEN PROPOERTIES, MIAR MILLS ESTATES BY TATHAM ENGINEERING DATED DECEMBER 2003.

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**FOR AMENDED DRAFT PLAN APPROVAL**
**JULY 11, 2025**

# LINKSVIEW SUBDIVISION
## TOWN OF COLLINGWOOD

TATHAM ENGINEERING

CONCEPT SERVICING PLAN

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# Appendix A: Regional Stormwater Management Report, C.F. Crozier & Associates

# REGIONAL STORMWATER MANAGEMENT REPORT

## LINKSVIEW RESIDENTIAL DEVELOPMENT
## TOWN OF COLLINGWOOD

## LANDEX CAPITAL CORPORATION

**PREPARED BY:**

**C.F. CROZIER & ASSOCIATES INC.**
**40 HURON STREET, SUITE 301**
**COLLINGWOOD, ONTARIO**
**L9Y 4R3**

**DECEMBER 2014**

**CFCA FILE NO. 183-2687**

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# 1.0 INTRODUCTION AND BACKGROUND

C.F. Crozier & Associates Inc. (Crozier) was retained by Landex Capital Corporation (Developer) to prepare a Regional Stormwater Management Study in support of the proposed Linksview residential development located west of the existing Georgian Meadows subdivision in the Town of Collingwood (Town). The site location is illustrated on Figure 1. The 40.8 ha site is bounded by Tenth Line to the east, Blue Mountain Golf and Country Club (BMGCC) to the north, agricultural lands to the west, and Fisher Field and agricultural lands to the south. The site is located within the Taylor's Creek subwatershed, which is tributary to Black Ash Creek.

The proposed Draft Plan of subdivision for the site was produced by Patten & Thompson Limited (December, 2014), and is provided in Appendix B. The anticipated range in the number of residential units is between 650 and 1000.

## 1.1 Planning Context

The subject lands are currently designated in the Town Collingwood Official Plan as Recreational and are located within the Mountain West Secondary Plan. As such, to realize this development, Official Plan Amendment (OPA), Zoning Bylaw Amendment (ZBA) and Draft Plan Approval (DPA) applications will be required by the Town of Collingwood. In the vicinity of the Linksview property, two other developments have obtained Draft Plan approval but are not yet fully constructed; the Mair Mills Village development (north of the BMGCC), and the Red Maple Development, located north of Georgian Meadows. The Mair Mills Estates Development is approved and constructed, and is also located north of the BMGCC.

To meet the test mandated by the Town to support Linksview ***being that the development will not inhibit the development of the remaining Secondary Plan lands,*** there are four main engineering components that must be analyzed. Each of the four engineering components will require strategies to be developed to present how these engineering issues will be addressed on a regional and long-term basis. These components are: Transportation, Sanitary Sewage, Stormwater Management and Potable Water. This report address the Town requirements with respect to a regional approach to Stormwater Management.

## 1.2 Study Objectives

The study limits and objectives have been determined via multiple pre-consultation meetings with Town staff. Given that the subject development is located within the Taylor's Creek catchment area (tributary of Black Ash Creek), the study area has been limited to the Taylor's Creek catchment area and immediate adjacent lands. The study addresses the impacts of land use changes upstream of Tenth Line. Areas downstream of Tenth Line were addressed as part of the Black Ash Creek Subwatershed Plan.

It is assumed that Stormwater Management planning within the Secondary Plan Area will take place on a watershed basis, and therefore areas of the Secondary Plan which drain to other watercourses, such as Silver Creek, will not be materially impacted by drainage planning within the Taylor's Creek system. Stormwater management planning for developments in other watersheds may be addressed as required independent of the Taylor's Creek study.

The objectives of this study are noted below and include:

- Assess existing hydrologic conditions within Taylor's Creek;
- Assess the development potential of the Taylor's Creek catchment area in the immediate and long-term future;
- Develop Stormwater Management criteria for developments within the Taylor's Creek catchment area in keeping with Town, Nottawasaga Valley Conservation Authority (NVCA) and Ministry of the Environment (MOE) requirements and recommendations of the relevant background studies;
- Prepare a preliminary functional design of stormwater quantity and quality control measures to be used on the Linksview site and future development lands in the Taylor's Creek catchment;
- Assess the ability of the proposed SWM control measures to meet the identified criteria; and,
- Provide general commentary on potential alternatives that can be considered and evaluated by future developers for managing stormwater quantity from their subject developments.

## 1.3 Background Review

The Taylor's Creek catchment area was analyzed as part of the Black Ash Creek Subwatershed Plan (NVCA, 2000). Further analysis has been undertaken by C.C. Tatham & Associates (CCTA) to support the Mair Mills Estates and Mair Mills Village developments, located north of the BMGCC. Crozier has therefore reviewed the following documents related to the Taylor's Creek catchment and proposed developments therein.

- Black Ash Creek Subwatershed Plan (NVCA, 2000)
- Mair Mills Estates Final Stormwater Management Report (C.C. Tatham & Associates, 2004)
- Mair Mills Village Final Stormwater Management Report (C.C. Tatham & Associates, 2011)
- Taylor's Creek Preliminary Natural Channel Design (C.C. Tatham & Associates, 2012)
- Updated hydrologic modeling of Taylor's Creek (C.C. Tatham & Associates, 2013)

In addition to this report, several other reports have been prepared for the subject lands, including:

- Functional Servicing & Stormwater Management Report (Crozier) [FSR];
- Traffic Impact Study (Crozier);
- Regional Sanitary Servicing Report (Crozier) [Regional Sanitary Report];
- Geotechnical Report (Peto MacCallum Limited);
- Phase 1 Environmental Site Assessment (Peto MacCallum Limited);
- Phase 1 Environmental Site Assessment Addendum (Azimuth);
- Air Quality & Odour Study (Ortech Environmental);
- Noise Impact Assessment (Aercoustics);
- Environmental Impact Statement (Azimuth); and
- Planning Justification Report (Travis & Associates).

# 2.0 PRE-DEVELOPMENT DRAINAGE CONDITIONS

## 2.1 Black Ash Creek and Taylor's Creek Descriptions

The Linksview development is located entirely within the Taylor's Creek catchment area, which forms part of the Black Ash Creek subwatershed. The Black Ash Creek subwatershed has a total area of approximately 3250 ha, and is comprised of two main branches which ultimately discharge into Collingwood Harbour. The north branch of Black Ash Creek flows north-east, providing coldwater fish habitat, while the south branch of the creek flows north and is a warm water fish habitat (NVCA, 2000). Black Ash Creek has undergone re-channelization through the Town of Collingwood to mitigate the impacts of flooding in major storm events.

Taylor's Creek is a minor tributary to Black Ash Creek originating in the agricultural lands to the west of the Linksview development and running for approximately 2.5 km eastward to Black Ash Creek. The total drainage area of Taylor's Creek is approximately 1.7 $km^2$ upstream of Tenth Line, not including the Mair Mills drainage areas that contribute to Taylor's Creek via Tenth Line itself. Taylor's Creek originates in the lands to the west of the Linksview development, east of Osler Bluff Road. The creek then runs east through the BMGCC before crossing Tenth Line through a 1900mm by 1500mm CSPA culvert. Taylor's Creek is not identified as exhibiting significant warm water or cold water fish habitat in the Black Ash Creek Subwatershed Plan (NVCA, 2000) as well is in the EIS report.

Several artificial ponds have been constructed along the section of the creek which runs through the BMGCC, serving as irrigation reservoirs for the golf course. Intermittent flows in the creek provide some of the water for the ponds, and the remainder is pumped directly from Georgian Bay (Dan Hurley, Email Communication, August 15, 2014).

Taylor's Creek has historically flooded east of Tenth Line, due to poorly defined channel banks and insufficient hydraulic capacity. As Taylor's Creek serves as an outlet for the Mair Mills development, and traverses the Red Maple development, re-channelization of a portion Taylor's Creek east of Tenth Line is planned for the near future to provide sufficient hydraulic capacity for the Regional event flow. Completion of the re-channelization is a Draft Plan Condition for both developments.

## 2.2 Existing Linksview Site Characteristics

The Linksview site is predominantly occupied by agricultural uses, as well as grass pasture and lawn. The site has an overall gradient of approximately 1.4%, falling from south-west to north-east. The north-east corner of the site is currently occupied by a driving range operated by the Blue Mountain Golf and Country Club.

According to the Soil Survey of Simcoe County (Hoffman, Wicklund and Richards, 1962), the soils on the site are principally Sergeant Gravelly Sandy Loam (Hydrologic Group AB) in the western portion and Tioga Fine Sandy Loam (Hydrologic Group A) in the east. In January 2014, Peto MacCallum Ltd. (PML) advanced twenty boreholes across the site, six of which contained 50 mm diameter PVC wells to permit long term monitoring of the groundwater table. The series of boreholes across the site were advanced to depths between 6.0 and 7.0 m, which confirmed that the site is characterized by a topsoil mantle (ranging from 70to 110mm in depth) over discontinuous layers of silt, sandy silt, silty sand and sand over a glacial till

deposit. Bedrock was not encountered in any of the boreholes. As a result of a groundwater monitoring program undertaken by PML that is ongoing (January - October 2014), the characteristics of the groundwater table on the subject lands has been determined. Refer to the PML 'Groundwater Level Interpretation Plan', which illustrates the seasonally high groundwater table, in the Geotechnical Report. Overall, the seasonally high groundwater table is quite shallow, less than 0.8 m below grade across the site.

Runoff from the site and external catchments is generally conveyed from south-west to north-east through several drainage draws which traverse the site and golf course lands, finally discharging to Taylor's Creek.

## 2.3 External Lands Characteristics

The external lands currently contributing stormwater runoff to Taylor's Creek are principally occupied by mixed agricultural and forested land to the south and west of the Linksview site, and the golf course to the north.

The definition of the pre-development condition for the purposes of this study assumes that subdivisions within the Taylor's Creek subwatershed which have received Draft Plan Approval will be completed prior to the development of the Linksview site. The Draft Plan Approved developments are therefore accounted for as part of the pre-development condition.

Per the Tatham SWM Report and updated hydrologic modeling, the Mair Mills Estates area drains northward, away from Taylor's Creek to a SWM facility located on Mountain Road. This facility provides quality and quantity control of runoff, prior to discharging northward across Mountain Road. The majority of flows from the facility continue northward towards Cranberry Marsh, and out of the study area. However, a flow split does occur north of Mountain Road which allows some flow to drain eastward towards Tenth Line, some of which returns to the Taylor's Creek system.

The Mair Mills Village area is proposed to drain to a SWM pond on Tenth Line, which will discharge to the Tenth Line ditch. A split flow condition in the Tenth Line ditch will cause some of this flow to drain to the Tenth Line and Mountain Road intersection (and from there to Black Ash Creek), which was denoted "Outlet B" in the Tatham Report, while some flow is conveyed south to the crossing of Taylor's Creek at Tenth Line ("Outlet A"). Full details of the Mair Mills drainage investigation and SWM design are available in the approved Tatham design reports.

Soils composition of the pre-development external drainage area varies and is composed mainly of Kemble Clay, Sargent Gravelly Sandy Loam, and Tioga Fine Sandy Loam. These soils area classified as hydrologic groups D, AB, and A respectively.

## 2.4 Catchment Area Delineations

The pre-development drainage delineation of the Taylor's Creek contributing area is generally consistent with that of that provided by C.C. Tatham & Associates. Delineation of areas related to the Mair Mills development was replicated from the provided Tatham figures and hydrologic modeling. The delineation and discretization of the remainder of the Taylor's Creek drainage area was completed by Crozier using Collingwood Base Mapping data and confirmed in the field. The pre-development catchment areas are shown on Figure 2.

As previously discussed, the outlet nomenclature used by Tatham has been referenced throughout this study, however more specific flow nodes have also been identified. Table 1 provides a summary of the various outlets and flow nodes, corresponding to Figures 2 through 4.

**Table 1: Flow Node Descriptions**

| Outlet/ Node ID | Description |
|---|---|
| 1 | Flows in Taylor's Creek upstream of the Linksview west property line. |
| 2 | Flows in Taylor's Creek proper upstream of Tenth Line (ie, excluding Tenth Line drainage and contributions from Mair Mills via Tenth Line ditch). |
| 3* | Flows contributing to Taylor's Creek downstream of Tenth Line. |
| 4* | Flows contributing to Black Ash Creek at Mountain Road. |

* Note: Computed flows at these locations include only flows generated upstream of Tenth Line which contribute to Black Ash Creek. Flows generated from the lands downstream of Tenth Line and within Black Ash Creek itself have not been computed in this analysis. Flows at Nodes 3 and 4 are provided to illustrate relative changes in contributing flows from the study area and do not represent true total flow rates at these locations.

## 2.5 Hydrologic Modeling of Pre-development Conditions

Pre-development modeling of the study area was completed using the SWMHYMO hydrologic model. The 25mm event, Timmins Regional event and 2 through 100 year 24 hour SCS and 4 hour Chicago events were all simulated to obtain existing peak flows at the various flow nodes.

Pre-development hydrologic modeling structure and parameters for the Mair Mills development were maintained from the approved post-development modeling of the Mair Mills development provided by C.C. Tatham & Associates. Hydrologic parameters and modeling of the Taylor's Creek catchment area upstream of Tenth Line were completed by C.F. Crozier and Associates.

The land-use specific curve numbers and runoff coefficients shown in Appendix A were used to calculate area-weighted values for each pre-development catchment area. The time of concentration values used in the pre-development modeling were calculated using the NVCA standard method of applying the Bransby-Williams or Airport Method, and comparing the results to the Uplands method to obtain the longest calculated time of concentration.

Channel routing was introduced into the model to account for the routing impacts of Taylor's Creek and the flow from upstream catchments. Appropriate cross sections for use in the routing routines were obtained using Collingwood Base Mapping contour information and typical low-flow channel cross section data from the Taylor's Creek Preliminary Natural Channel Design Report (C.C. Tatham & Associates, 2012)

Results of the pre-development hydrologic modeling is included in Appendix A. The results from this model will be used as the baseline model in the peak flow comparisons under various development scenarios.

# 3.0 POST-DEVELOPMENT AND ULTIMATE DEVELOPMENT DRAINAGE CONDITIONS

## 3.1 Taylor's Creek Catchment Area Development Potential

Two scenarios were analyzed to illustrate varying levels of development within the Taylor's Creek catchment area upstream of Tenth Line. The first case, denoted "Post-Development" reflects development only of the Linksview subdivision. The remaining lands are considered to remain in an undeveloped state. This case reflects the near-future scenario for development in the Taylor's Creek catchment area, and is reflected in Figure 3.

The second case is denoted "Ultimate Development" (Figure 4) and reflects full development of the Taylor's Creek catchment area. Conservatively, some additional land has been assumed to drain to Taylor's Creek in this case, as it is unlikely that precise catchment boundaries will be respected upon full development of the lands; drainage divides are more likely to reflect land ownership boundaries upon development.

Given the uncertainty in land uses anticipated within the study area, it was assumed that the overall nature of the development would be similar to that planned for the Linksview site, perhaps with some commercial development along main traffic routes. Related assumptions pertaining to hydrologic parameters are further discussed in Section 3.5.

Post and Ultimate Development Scenario catchment areas were delineated with consideration for the following:

- Catchment areas and placement of SWM facilities should be based on a realistic ultimate grading scenario to ensure that future conformance with the Regional SWM Plan does not result in physically or financially infeasible grading requirements;
    - Figure 5 illustrates grading feasibility with respect to the proposed catchment areas and SWM pond locations.
- SWM planning and proposed grading patterns should respect potential natural heritage features;
    - Delineation of catchment areas was completed such that no grading within NVCA Regulated Areas (NVCA, Draft, 2014) is required to conform to the Regional SWM Plan.
    - A buffer along Taylor's Creek has been respected.
- Catchment areas should respect land ownership boundaries wherever possible to allow for independent development of various parcels. This objective must be balanced with the desire to reduce the required number of SWM facilities throughout the Secondary Plan Area.
    - Placing proposed SWM facilities on property lines wherever possible provides for flexibility in the timing of development.

Figure 5 illustrates proposed conceptual grades within the Linksview site as well as within external lands. Conceptual grades within the external lands are based on a 0.5% gradient. Where proposed grades are below existing grades, the actual proposed grades could be increased to reduce 'cut' earthworks while still outleting to the SWM facility. There are no areas that require excessive fill depths to outlet to a proposed SWM facility.

The proposed SWM approach should also allow for flexibility to modify the Regional SWM Plan as development patterns within the Secondary Plan evolve. This is further discussed in Section 3.3.

## 3.2 SWM Criteria

Through review of background studies and to satisfy Town, NVCA and MOE requirements, a series of stormwater management criteria were identified for the Taylor's Creek catchment area upstream of Tenth Line.

### 3.2.1 Quantity Control:

Peak flows in Taylor's Creek at Flow Nodes 1 and 2 must be controlled to pre-development levels. Given that the Taylor's Creek Channelization downstream of Tenth Line was designed to accommodate pre-development Regional Flows, post-to-pre control must be satisfied for 2 year through 100 year events as well as the Regional Event.

The Black Ash Creek Subwatershed Plan and subsequent channelization design accounted for pre-development peak flows from the study area, as any form of development within the study area was not anticipated at the time of the study. As such, peak flows contributing to Black Ash Creek from the study area (Nodes 3 and 4) must be controlled to pre-development levels. Post-to-pre control must be satisfied for 2 year through 100 year events as well the Regional Event.

### 3.2.2 Quality and Erosion Control

Given that Georgian Bay is the ultimate receiver, SWM controls must achieve MOE Enhanced water quality protection, corresponding to 80% Total Suspended Solids (TSS) removal. The SWM pond must also achieve 24 hour extended detention of the 25mm event per the Black Ash Creek Subwatershed Plan to achieve erosion control.

### 3.2.3 Water Balance

The ability to achieve water balance objectives are highly contingent on site conditions such as soil properties and depth to groundwater. Premised on the assumption that the groundwater level characteristics within the study area are similar in nature to the Linksview lands (i.e. seasonally within 1 m of ground surface), it may be difficult to use infiltration-based SWM practices to achieve water balance objectives. Best efforts should be made to provide opportunities to infiltrate stormwater as site conditions permit.

## 3.3 Regional SWM Approach

To achieve the quantity control targets outline in Section 3.2.1, the runoff generated by the future developments within the Taylor's Creek catchment area will be collected and treated in stormwater management "end-of-pipe" facilities. The conceptual future locations of these facilities are illustrated on Figure 4, in keeping with the considerations outline in Section 3.1.

Given the short flow times and minimal storage within the Taylor's Creek conveyance corridor, peak flows from the various SWM facilities are expected to approximately coincide at the downstream flow nodes in the Ultimate Development scenario. Often in such cases, control of post development flows to pre-development levels on a subcatchment-by-subcatchment basis does not achieve net post-to-pre targets further downstream. Due to increased responsiveness associated with development and extended

discharge hydrographs from end-of-pipe facilities, peak flows from the individual subcatchments are no longer temporally offset from one another as in the pre-development case. This results in an increase in net peak flows downstream due to a "timing of peaks" phenomenon, despite post-to-pre flow control of each individual subcatchment.

In larger watersheds with long upstream travel times, this effect can often be mitigated through a "beat the peak" analysis, whereby drainage from lands closest to the watershed outlet is released in an uncontrolled fashion so as to "beat the peak" of controlled drainage from lands further upstream. Given the relatively small nature and short travel times of the Taylor's Creek system the "beat the peak" approach was not applied in this case. To ensure that net post-development flow rates were controlled to pre-development levels, a unit flow rate approach was used to establish target peak flows from each SWM facility. Target unit flow rates for each storm event were developed on a flow-per-area (L/s/ha) basis as shown in Table 2. Calculation details are provided in Appendix B.

**Table 2: Target Unit Flow Rates for Taylor's Creek Development Areas**

| | Storm Event | Unit Flow Rate (L/s/ha) |
|---|---|---|
| | | |
| Chicago | 2 Year | 4 |
| | 5 Year | 6 |
| | 10 Year | 9 |
| | 25 Year | 12 |
| | 50 Year | 14 |
| | 100 Year | 17 |
| | | |
| SCS | 2 Year | 5 |
| | 5 Year | 8 |
| | 10 Year | 11 |
| | 25 Year | 15 |
| | 50 Year | 18 |
| | 100 Year | 23 |
| | | |
| | Regional | 41 |

Hydrologic modeling of the Taylor's Creek catchment area was then performed for the Post- and Ultimate development scenarios based on the implementation of the unit flow rate approach (see Sections 3.5 and 3.6). The resultant peak flows were examined to ensure that Post- and Ultimate development peak flows matched pre-development levels at each flow node. The implementation of the unit flow rate approach may require individual subcatchments to be controlled below pre-development levels to compensate for the timing of peaks phenomenon discussed above.

The unit flow rate approach provides a simple and flexible quantity control criterion to be applied to future development in the Taylors Creek catchment area, regardless of final SWM facility locations or development characteristics. It also provides a land-area based approach to sizing control facilities that ensures that capacity in the downstream watercourse is equitably allocated between developments. By meeting the unit flow rate requirements, the Linksview development may proceed in advance of the

balance of the Secondary Plan without precluding or compromising development potential in the balance of the Taylor's Creek catchment area from a stormwater management perspective.

It is anticipated that quality and erosion control requirements will be met primarily by implementation of stormwater wet ponds designed per MOE criteria, and incorporating extended detention of the 25mm event for 24 hours. The Ultimate Conditions Conceptual Grading Plan (Figure 5) reflects this assumption, however any facility that meets Town, MOE and NVCA approval may be used to achieve quality control criteria.

## 3.4 Linksview Development Stormwater Management Design

The Linksview development contemplates implementation of an end-of-pipe wet pond facility to meet the established quantity and quality control criteria. Preliminary design of this facility is discussed in the FSR, submitted under separate cover.

Two options have been discussed to convey controlled drainage from the Linksview SWM facility to an appropriate drainage outlet, as described below:

**Option 1:**
Controlled drainage from the Linksview site will be conveyed from the SWM pond outlet structure to Taylor's Creek via an external drainage system within the Tenth Line ROW. The drainage system will be sized to convey controlled flows from the pond up to and including the Regional storm event, runoff from the applicable portion of the Tenth Line ROW (5-year storm event) in the future urbanized condition as well as future development controlled flows from the Blue Mountain Golf & Country Club lands, all of which constitute the design flow.

**Option 2:**
Controlled drainage from the Linksview site will be conveyed from the SWM pond outlet structure directly to Black Ash Creek east of the Red Maple development. The external drainage system will be sized to convey the design.

The details of these conveyance options are further discussed in the FSR for the Linksview development. **The eventual selection of either outlet will not impact the results of this study.**

## 3.5 Hydrologic Modeling of Post-Development Conditions

As discussed in Section 3.1, the post-development case accounts for development of the Linksview site. It is assumed that all other catchments drain as in the Pre-development condition.

Post-development modeling of the Taylor's Creek catchment area was completed using the SWMHYMO hydrologic model. The 25mm event, Timmins Regional event and 2 through 100 year 24 hour SCS and 4 hour Chicago events were all simulated to obtain existing peak flows and volumes from the Linksview site.

The land-use specific curve numbers and runoff coefficients were maintained from the pre-development case for all catchment areas, save for the developed Linksview site. The time of concentration values used for the undeveloped catchments were calculated using the NVCA standard method of applying the

Bransby-Williams or Airport method, and comparing the results to the Uplands method to obtain the longest calculated time of concentration.

Hydrologic parameters for the developed Linksview catchment were calculated based on the Draft Plan characteristics as shown in Appendix B. The imperviousness level for the Linksview development is based on 816 units, reflecting a reasonable distribution of unit types. However, as noted in Section 1.0, the Draft Plan allows for the flexibility in the number of residential units in the range of 650 to 1000 units. Should the number and distribution of the types of residential units vary from that specified on the Draft Plan, the imperviousness level may change. We have completed a sensitivity analysis on the assigned imperviousness level and have concluded that the upper limit of the unit count range will result in an imperviousness level that does not alter the size of the proposed SWM pond block. The imperviousness calculations will be refined at the detailed design stage when the unit count and distribution of unit types is finalized.

The stage-storage discharge relationship for the proposed Linksview SWM pond is included in Appendix B, and was represented in the post-development model using a RouteReservoir command. Controlled flows from the Linksview SWM pond and outlet pipe join flow from Tenth Line and Taylor's Creek at Node 3 (downstream of Tenth Line).

Results of the post-development hydrologic modeling are presented in Appendix B for 2 through 100 year design storm events and the Regional (Timmins) storm, with comparisons to the pre-development flow rates. Hydrologic Parameters calculations and full model output are included in Appendix B.

Based on the results of the post-development modeling, overall post-to-pre control can be met at each flow node with development of the Linksview site.

## 3.6 Hydrologic Modeling of Ultimate Development Conditions

As discussed in Section 3.1, the Ultimate Development case accounts for development of the Linksview site, as well as development of the balance of the Taylor's Creek catchment area. Some lands that are presently outside of the Taylor's Creek catchment area have also been assumed to contribute to Taylor's Creek in the ultimate condition, given probable future grading constraints and configuration of ownership parcels.

Post-development modeling of the Taylor's Creek catchment area was completed using the SWMHYMO hydrologic model. The 25mm event, Timmins Regional event and 2 through 100 year 24 hour SCS and 4 hour Chicago events were all simulated.

It was assumed that all development lands will be developed with similar characteristics to the Linksview site. To be conservative, even NVCA regulated areas have been assumed to be developed at 50% imperviousness save for a buffer area around Taylor's Creek itself.

The stage-storage relationships for the external SWM ponds were developed as scaled versions of the Linksview pond, with discharges adjusted to meet unit flow rate objectives. Ponds were represented in the ultimate development model using RouteReservoir commands. The pond scaling calculations and demonstration of general conformance with unit flow rates are provided in Appendix C. Note that, through scaling of the discharge rates associated with the Linksview pond, which is characterized by a realistic outlet structure, the unit flow rates achieved by the external lands ponds vary somewhat. However, the

modeling demonstrates that general conformance with the established unit flow rates will maintain or decrease flow rates within the Taylor's Creek catchment area. Note that the unit flow rates achieved by the proposed Linksview pond are at or below the established target unit flow rate for each storm event.

In keeping with a regional stormwater management approach, the Linksview SWM facility has been sized and modeled to accept uncontrolled flow from potential future development lands to the south (catchment 3504) in a developed condition similar to that of the proposed Linksview site.

Results of the post-development hydrologic modeling are presented in Appendix C for 2 through 100 year design storm events and the Regional (Timmins) storm, with comparisons to the pre-development flow rates. Hydrologic Parameters calculations and full model output are also included in Appendix C.

Based on the results of the ultimate development modeling, overall post-to-pre control can be met at each flow node with development of the Taylor's Creek catchment area.

### 3.7 Linksview SWM Facility Operating Characteristics

Refer to the FSR for the Linksview SWM Facility operating characteristics under both the Post-Development and Ultimate Development scenarios.

## 4.0 CONCLUSIONS & RECOMMENDATIONS

A detailed hydrologic study of the Taylor's Creek catchment area upstream of Tenth Line was undertaken to provide a Regional SWM approach for the catchment area. The Regional SWM approach was developed to ensure that development of the Linksview property in advance of the balance of the Taylor's Creek catchment area would not pose constraints for future development in the watershed. The following conclusions were reached as a result of the study:

- Based on design flow rates that were used during design of the Black Ash Creek channelization and the Taylor's Creek channelization downstream of Tenth Line, it is necessary that post-development peak flows in Taylor's Creek do not exceed pre-development levels up to and including the Regional event.
- Unit flow rates were used on a flow-per-area basis to ensure that post development peak flow rates in Taylor's Creek are maintained at or below pre-development levels.
- Water quality controls within the catchment area must meet MOE standards for Enhanced Protection. Erosion controls must meet the requirements of the Black Ash Creek Subwatershed Plan of 24 hour extended detention of the 25mm event runoff volume.
- A stormwater wet pond facility has been designed to provide quantity, quality and erosion control for the Linksview development.
- Preliminary placement and sizing of SWM facilities for other development lands within the Taylor's Creek catchment area has also been undertaken. This Regional SWM approach has been developed with consideration for grading constraint, land ownership and natural heritage features.

The following recommendations are made with respect to the findings of this study:

- That the unit flow rate approach to stormwater quantity management for the 2 year through 100 year and Regional events be implemented for all developments within the Taylor's Creek catchment area, including the Linksview site.
- That stormwater management facilities be designed to provide MOE Enhanced Protection and 24 hour extended detention of the 25mm event.
- That the Linksview site be permitted to develop in advance of the balance of the Mountain West Secondary Plan, given that the Linksview SWM design conforms to the drainage planning requirements described herein.

We trust this report meets the Town's requirements for a Regional Stormwater Management Study for the Taylor's Creek catchment area.

Respectfully submitted,

**C.F. CROZIER & ASSOCIATES INC.**

Darrin Tone, P.Eng.
Project Manager

**C.F. CROZIER & ASSOCIATES INC.**

Kaitlin Wilmshurst, P. Eng.
Project Engineer

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# APPENDIX A

## Pre-development Hydrologic Modeling

CROZIER & ASSOCIATES
Consulting Engineers

| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **501** |
| Project Number: | 183-2687 | **D.A. AREA** | **85.82** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 501**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Kemble Clay Loam | Kc | D | 85 | 72.9 |
| Sargent gravelly sandy | Stsl | AB | 15 | 12.9 |
| | | | | 0.0 |
| | | | | 0.0 |
| Total Area | | | | 85.8 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Kc | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Pasture/Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Kc | 25.53 | 79 | 0.00 | | 0.00 | | 0.00 | | 47.42 | 84 | 72.95 | 5999.89 |
| Stsl | 0.00 | | 0.00 | | 0.00 | | 12.87 | 59 | 0.00 | | 12.87 | 759.51 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 25.53 | | 0.00 | | 0.00 | | 12.87 | | 47.42 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 85.82 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 78.8 |
| | Total Area Check | 85.82 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Kemble Clay Loam | | Sargent gravelly sandy loam | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 25.531 | 255.3 | 0.40 | 26 | | 0 | | 0 | | 0 | 10.21 |
| Meadow | 8 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Pasture/Lawn | 5 | 12.873 | 64.4 | | 0 | 0.29 | 13 | | 0 | | 0 | 3.73 |
| Cultivated | 7 | 47.416 | 331.9 | 0.55 | 47 | | 0 | | 0 | | 0 | 26.08 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 85.82 | 7.6 | Composite Runoff Coefficient | | | | | | | | 0.47 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Pasture | 140 | 1 | 0.71% | 2.3 | 0.19 | 0.20 | 0.13 | 0.13 | 0.86 | 0.58 | 1.22 | 0.81 |
| Woodland | 450 | 6.5 | 1.4% | 0.6 | 0.07 | 1.73 | 1.16 | 1.30 | | | | |
| Pasture | 300 | 4 | 1.3% | 2.3 | 0.27 | 0.31 | 0.21 | 1.51 | | | | |
| Watercourse | 600 | 8 | 1.3% | 4.6 | 0.53 | 0.31 | 0.21 | 1.72 | | | | |

| Appropriate calculated time to peak: | 1.72 | Appropriate Method: | Uplands |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **502** |
| Project Number: | 183-2687 | **D.A. AREA** | **10.41** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 502**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Sargent gravelly sandy | Stsl | AB | 100 | 10.41 |
| | | | | 0.00 |
| | | | | 0 |
| | | | | 0 |
| Total Area | | | | 10.41 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Stsl | 2.08 | 46 | 0.00 | | 0.00 | | 0.00 | | 8.33 | 65 | 10.41 | 637.09 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 2.08 | | 0.00 | | 0.00 | | 0.00 | | 8.33 | | | |

| | | | |
|---|---|---|---|
| | Composite Area Calculations | Total Pervious Area | 10.41 |
| | | Total Impervious Area | 0 |
| | | % Impervious | 0.0 |
| | | Composite Curve Number | 61.2 |
| | | Total Area Check | 10.41 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sargent gravelly | | 0 | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 2.082 | 20.8 | 0.17 | 2 | | 0 | | 0 | | 0 | 0.35 |
| Meadow | 8 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Cultivated | 7 | 8.328 | 58.3 | 0.29 | 8 | | 0 | | 0 | | 0 | 2.42 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 10.41 | 7.6 | Composite Runoff Coefficient | | | | | | | | 0.27 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Woodland | 170 | 3 | 1.76% | 0.6 | 0.08 | 0.59 | 0.40 | 0.40 | 0.31 | 0.21 | 0.83 | 0.56 |
| Cultivated | 280 | 4 | 1.4% | 2.3 | 0.27 | 0.28 | 0.19 | 0.59 | | | | |

| | | | |
|---|---|---|---|
| Appropriate calculated time to peak: | 0.59 | Appropriate Method: | Uplands |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **503** |
| Project Number: | 183-2687 | **D.A. AREA** | **9.94** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 503**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Harkaway | Hal | B | 50 | 4.97 |
| Sargent gravelly sandy | Stsl | AB | 50 | 4.97 |
| | | | | 0 |
| | | | | 0 |
| Total Area | | | | 9.94 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | 2.49 | 60 | 0.00 | | 0.00 | | 2.49 | 69 | 0.00 | | 4.97 | 320.57 |
| Stsl | 0.00 | 46 | 0.00 | | 0.00 | | 2.49 | 59 | 2.49 | 65 | 4.97 | 308.14 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 2.49 | | 0.00 | | 0.00 | | 4.97 | | 2.49 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 9.94 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 63.3 |
| | Total Area Check | 9.94 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Harkaway | | Sargent gravelly sandy loam | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 2.485 | 24.9 | 0.25 | 2 | 0.17 | 0 | | 0 | | 0 | 0.62 |
| Meadow | 8 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 4.97 | 24.9 | 0.28 | 2 | 0.19 | 2 | | 0 | | 0 | 1.17 |
| Cultivated | 7 | 2.485 | 17.4 | | 0 | 0.29 | 2 | | 0 | | 0 | 0.72 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 9.94 | 6.8 | Composite Runoff Coefficient | | | | | | | | 0.25 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Cultivated | 240 | 6 | 2.50% | 2.3 | 0.36 | 0.18 | 0.12 | 0.12 | 0.33 | 0.22 | 0.81 | 0.54 |
| Woodland | 270 | 5 | 1.85% | 0.6 | 0.08 | 0.92 | 0.62 | 0.74 | | | | |

| Appropriate calculated time to peak: | 0.74 | Appropriate Method: | Uplands |
|---|---|---|---|

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Consulting Engineers

| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **504** |
| Project Number: | 183-2687 | **D.A. AREA** | **7.05** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 504**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Sandy Loam | Tisl | A | 15 | 1.06 |
| Sargent gravelly sandy | Stsl | AB | 85 | 5.99 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 7.05 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tisl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tisl | 1.06 | 32 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 1.06 | 33.84 |
| Stsl | 2.40 | 46 | 0.00 | | 0.00 | | 2.10 | 59 | 1.50 | 65 | 5.99 | 331.39 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 3.45 | | 0.00 | | 0.00 | | 2.10 | | 1.50 | | | |

| | | | |
|---|---|---|---|
| | Composite Area Calculations | Total Pervious Area | 7.05 |
| | | Total Impervious Area | 0 |
| | | % Impervious | 0.0 |
| | | Composite Curve Number | 51.8 |
| | | Total Area Check | 7.05 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tioga Sandy Loam | | Sargent gravelly sandy loam | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 3.45 | 34.5 | 0.08 | 1.06 | 0.17 | 2.40 | | 0.00 | | 0.00 | 0.49 |
| Meadow | 8 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Wetland | 16 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Lawn | 5 | 2.10 | 10.5 | | 0.00 | 0.19 | 2.10 | | 0.00 | | 0.00 | 0.40 |
| Cultivated | 7 | 1.50 | 10.5 | | 0.00 | 0.29 | 1.50 | | 0.00 | | 0.00 | 0.43 |
| Impervious | 2 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Composite IA | | 7.05 | 7.9 | Composite Runoff Coefficient | | | | | | | | 0.19 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 140 | 3 | 2.14% | 2.3 | 0.34 | 0.12 | 0.08 | 0.08 | 0.25 | 0.17 | 0.82 | 0.55 |
| Watercourse | 210 | 2 | 1% | 4.6 | 0.45 | 0.13 | 0.09 | 0.16 | | | | |

| | | | |
|---|---|---|---|
| Appropriate calculated time to peak: | 0.55 | Appropriate Method: | Airport |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **505** |
| Project Number: | 183-2687 | **D.A. AREA** | **24.08** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 505**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Harkaway | Hal | B | 20 | 4.82 |
| Sargent gravelly sandy | Stsl | AB | 70 | 16.86 |
| Tioga Fine Sandy Loam | Tif | A | 10 | 2.41 |
| | | | | 0.00 |
| Total Area | | | | 24.08 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | 0.00 | | 0.00 | | 0.00 | | 4.82 | 69 | 0.00 | | 4.82 | 332.30 |
| Stsl | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 16.86 | 65 | 16.86 | 1095.64 |
| Tif | 0.00 | | 0.00 | | 0.00 | | 1.44 | 49 | 0.96 | 58 | 2.41 | 126.66 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 6.26 | | 17.82 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 24.08 |
| | Total Impervious Area | 0.00 |
| | % Impervious | 0.00 |
| | Composite Curve Number | 64.56 |
| | Total Area Check | 24.08 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Harkaway | | Sargent gravelly sandy loam | | Tioga Fine Sandy | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Meadow | 8 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Wetland | 16 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Lawn | 5 | 6.26 | 31.3 | 0.28 | 4.82 | | 0.00 | 0.10 | 1.44 | | 0.00 | 1.49 |
| Cultivated | 7 | 17.82 | 124.7 | | 0.00 | 0.29 | 16.86 | 0.22 | 0.96 | | 0.00 | 5.10 |
| Impervious | 2 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Composite IA | | 24.08 | 6.5 | Composite Runoff Coefficient | | | | | | | | 0.27 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Cultivated | 900 | 13 | 1.44% | 2.7 | 0.32 | 0.77 | 0.52 | 0.52 | 0.58 | 0.39 | 1.19 | 0.80 |

| Appropriate calculated time to peak: | 0.80 | Appropriate Method: | Airport |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **506** |
| Project Number: | 183-2687 | **D.A. AREA** | **2.81** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 506**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 100 | 2.81 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 2.81 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.00 | | 0.00 | | 0.00 | | 2.53 | 49 | 0.28 | 58 | 2.81 | 140.22 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 2.53 | | 0.28 | | | |

| | | | |
|---|---|---|---|
| Composite Area Calculations | Total Pervious Area | 2.81 | |
| | Total Impervious Area | 0 | |
| | % Impervious | 0.0 | |
| | Composite Curve Number | 49.9 | |
| | Total Area Check | 2.81 | |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tioga Fine Sandy | | 0 | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0.00 | 0.00 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Meadow | 8 | 0.00 | 0.00 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0.00 | 0.00 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 2.53 | 12.65 | 0.10 | 3 | | 0 | | 0 | | 0 | 0.25 |
| Cultivated | 7 | 0.28 | 1.97 | 0.22 | 0 | | 0 | | 0 | | 0 | 0.06 |
| Impervious | 2 | 0.00 | 0.00 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 2.81 | 5.20 | Composite Runoff Coefficient | | | | | | | | 0.11 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 220 | 4 | 1.82% | 2.3 | 0.31 | 0.20 | 0.13 | 0.13 | 0.17 | 0.11 | 0.65 | 0.44 |

| | | | |
|---|---|---|---|
| Appropriate calculated time to peak: | 0.44 | Appropriate Method: | Airport |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **507** |
| Project Number: | 183-2687 | **D.A. AREA** | **5.22** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 507**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 100 | 5.22 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 5.22 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.00 | | 0.00 | | 0.00 | | 5.22 | 49 | 0.00 | | 5.22 | 255.78 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 5.22 | | 0.00 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 5.22 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 49.0 |
| | Total Area Check | 5.22 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landuse | IA (mm) | Area (ha) | A * IA | Tioga Fine Sandy RC | Tioga Fine Sandy Area | 0 RC | 0 Area | 0 RC | 0 Area | 0 RC | 0 Area | A*RC |
| Woodland | 10 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Meadow | 8 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 5.22 | 26.1 | 0.10 | 5 | | 0 | | 0 | | 0 | 0.52 |
| Cultivated | 7 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 5.22 | 5.0 | Composite Runoff Coefficient | | | | | | | | 0.10 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 200 | 5 | 2.50% | 2.3 | 0.36 | 0.15 | 0.10 | 0.10 | 0.25 | 0.16 | 0.81 | 0.54 |
| Watercourse | 150 | 2 | 1.33% | 4.6 | 0.53 | 0.08 | 0.05 | 0.15 | | | | |

| Appropriate calculated time to peak: | 0.54 | Appropriate Method: | Airport |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **508** |
| Project Number: | 183-2687 | **D.A. AREA** | **26.52** |
| Date: | August 6 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Pre Development Drainage Area: Catchment 508**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 80 | 21.22 |
| Percy Fine Sandy Loam | Pfs | B | 5 | 1.33 |
| Sargent gravelly sandy | Stsl | AB | 15 | 3.98 |
| | | | | 0.00 |
| Total Area | | | | 26.52 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Pfs | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.00 | | 0.00 | | 0.00 | | 13.79 | 49 | 7.43 | 58 | 21.22 | 1106.41 |
| Pfs | 0.00 | | 0.00 | | 0.00 | | 1.33 | 69 | 0.00 | | 1.33 | 91.49 |
| Stsl | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 3.98 | 65 | 3.98 | 258.57 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 15.12 | | 11.40 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 26.52 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 54.9 |
| | Total Area Check | 26.52 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tioga Fine Sandy | | Percy Fine Sandy Loam | | Sargent gravelly | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Meadow | 8 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Wetland | 16 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Lawn | 5 | 15.12 | 75.58 | 0.10 | 13.79 | 0.28 | 1.33 | | 0.00 | | 0.00 | 1.75 |
| Cultivated | 7 | 11.40 | 79.83 | 0.22 | 7.43 | | 0.00 | 0.29 | 3.98 | | 0.00 | 2.79 |
| Impervious | 2 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Composite IA | | 26.52 | 5.86 | Composite Runoff Coefficient | | | | | | | | 0.17 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Cultivated | 600 | 10 | 1.67% | 2.7 | 0.35 | 0.48 | 0.32 | 0.32 | 0.61 | 0.41 | 1.38 | 0.93 |
| Lawn | 220 | 3 | 1.36% | 2.3 | 0.27 | 0.23 | 0.15 | 0.47 | | | | |
| Watercourse | 140 | 1 | 0.71% | 4.6 | 0.39 | 0.10 | 0.07 | 0.54 | | | | |

| Appropriate calculated time to peak: | 0.93 | Appropriate Method: | Airport |
|---|---|---|---|

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Consulting Engineers

Project Name:
Project Number:
Date:
By:

**D.A. NAME** **601**
**D.A. AREA (ha)** **0.22**

**Hydrologic Parameters: STANDHYD Command**
**Post Development Drainage Area: 601 (10th Line)**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 100 | 0.22 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area Check | | | | 0.22 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Apartment | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.08 | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0.076 | 7.45 |
| 0 | | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0.08 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 0.14 | 49 | 0 | | 0.1425 | 6.9825 |
| 0 | 0 | | 0 | | 0 | | 0.00 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0.00 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0.00 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0.14 | | 0 | | | |

| | | | |
|---|---|---|---|
| Pervious Area Calculations | Total Pervious Area | 0.1425 |
| | Composite Pervious Curve Number | 49 |
| Impervious Area Calculations | Total Directly Connected Area | 0.076 |
| | Total Indirectly Connected Area | 0 |
| | Total Impervious Area | 0.076 |
| | % X imp | 34.8 |
| | % T imp | 34.8 |
| | Total Area Check | 0.22 |

**Initial Abstraction and Flow Path Calculations**

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0 |
| Meadow | 8 | 0 | 0 |
| Wetland | 16 | 0 | 0 |
| Lawn | 5 | 0.14 | 0.71 |
| Cultivated | 7 | 0 | 0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 3 | 0.25 |
| Impervious | 2.0 | 0.5 | 48 | 0.035 |

CROZIER & ASSOCIATES
Consulting Engineers

Project Name:
Project Number:
Date:
By:

**D.A. NAME** **602**
**D.A. AREA (ha)** **1.15**

**Hydrologic Parameters: STANDHYD Command**
**Post Development Drainage Area: 602 (10th Line)**

## Curve Number Calculation

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 100 | 1.15 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 1.15 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Apartment | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.40 | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0.400 | 39.20 |
| 0 | | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0.40 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 0.75 | 49 | 0 | | 0.75 | 36.75 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0.75 | | 0 | | | |

| | | | |
|---|---|---|---|
| Pervious Area Calculations | Total Pervious Area | 0.75 |
| | Composite Pervious Curve Number | 49 |
| Impervious Area Calculations | Total Directly Connected Area | 0.4 |
| | Total Indirectly Connected Area | 0 |
| | Total Impervious Area | 0.4 |
| | % X imp | 34.8 |
| | % T imp | 34.8 |
| | Total Area Check | 1.15 |

## Initial Abstraction and Flow Path Calculations

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0 |
| Meadow | 8 | 0 | 0 |
| Wetland | 16 | 0 | 0 |
| Lawn | 5 | 0.75 | 3.75 |
| Cultivated | 7 | 0 | 0 |

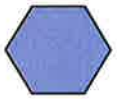
| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 3 | 0.25 |
| Impervious | 2.0 | 0.5 | 250 | 0.035 |

# LEGEND

Drains to Mair Mills Estates SWM Pond

Drains to Mair Mills Village SWM Pond

Drains to Taylor's Creek



Drains to Outlet B

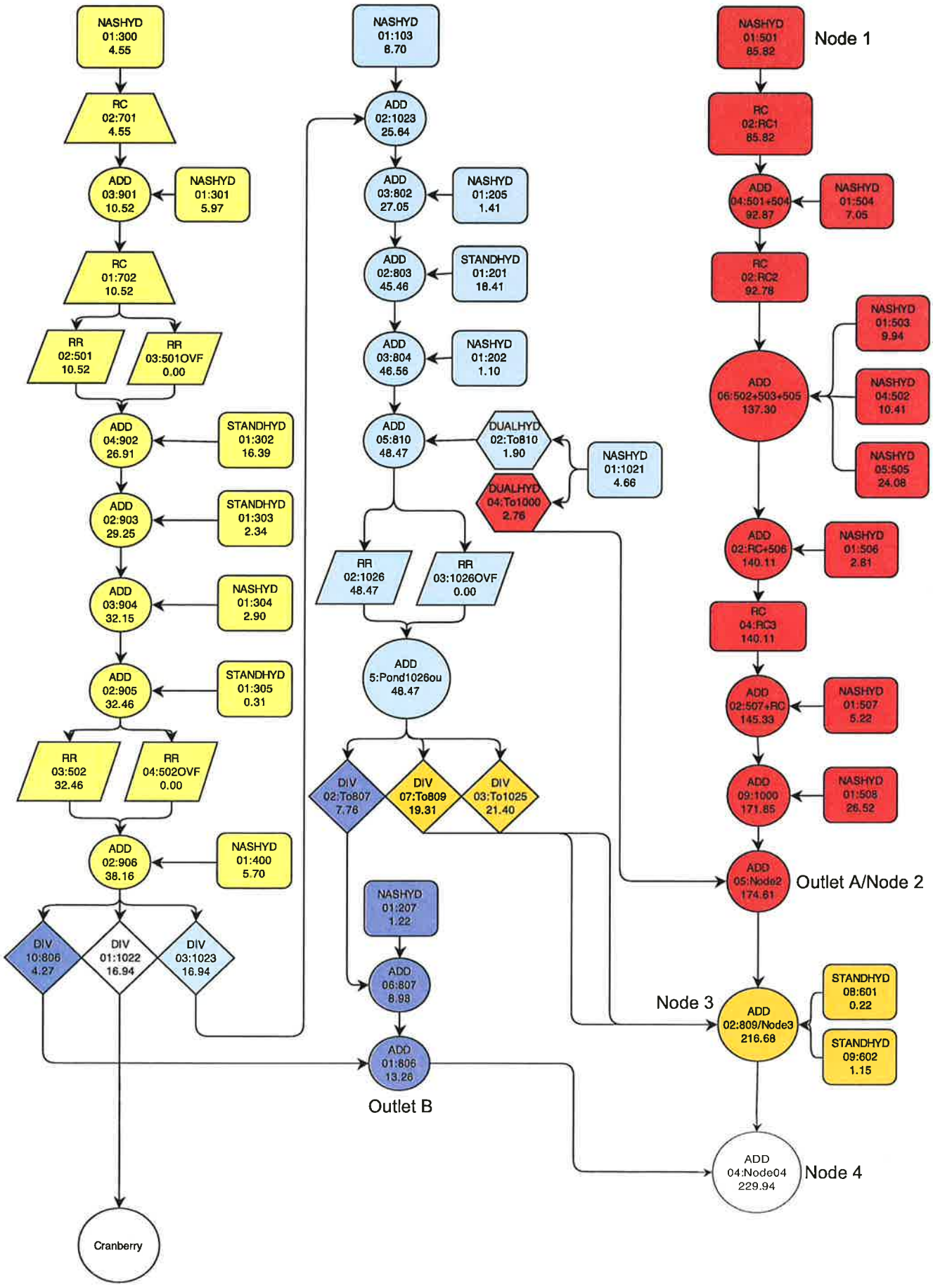
Drains to Node 3

Drains to Potential Future Outlet Pipe

Ultimate Outlet

Format of SWMHYMO Data in Flowchart

# Pre-Development Model



Pre Development



```
00001> ********************************************************************************
00002>
00003>    SSSSS  W    W  M    M  H    H  Y    Y  M    M   OOO          999    999    ==========
00004>   S       W    W  MM  MM  H    H   Y  Y   MM  MM  O   O       9   9  9   9
00005>    SSSSS  W    W  M MM M  HHHHH    Y     M MM M  O   O  ##   9   9  9   9   Ver  4.05
00006>        S  W WW W  M    M  H    H    Y     M    M  O   O        9999   9999   Sept 2011
00007>   SSSSS   W  W   M    M  H    H    Y     M    M   OOO             9      9    ==========
00008>                                                                 9   9  9   9   # 3737016
00009>          StormWater Management HYdrologic Model                  999    999    ==========
00010>
00011> ********************************************************************************
00012> ********************************* SWMHYMO Ver/4.05 *****************************
00013> *********  A single event and continuous hydrologic simulation model  *********
00014> *********     based on the principles of HYMO and its successors      *********
00015> *********                OTTHYMO-83 and OTTHYMO-89                    *********
00016> ********************************************************************************
00017> *********  Distributed by:  J.F. Sabourin and Associates Inc.          *********
00018> *********                   Ottawa, Ontario: (613) 836-3884           *********
00019> *********                   Gatineau, Quebec: (819) 243-6858          *********
00020> *********                   E-Mail: swmhymo@jfsa.Com                  *********
00021> ********************************************************************************
00022>
00023> ********************************************************************************
00024> +++++++++  Licensed user: C.F. Crozier & Associates Inc                +++++++++
00025> +++++++++                 Collingwood          SERIAL#:3737016        +++++++++
00026> ********************************************************************************
00027>
00028> ********************************************************************************
00029> *********           ++++++ PROGRAM ARRAY DIMENSIONS ++++++             *********
00030> *********           Maximum value for ID numbers  :     10            *********
00031> *********           Max. number of rainfall points: 105408            *********
00032> *********           Max. number of flow points    : 105408            *********
00033> ********************************************************************************
00034>
00035> ***** DESCRIPTION SUMMARY TABLE HEADERS (units depend on METOUT in START) *****
00036> *****-------------------------------------------------------------------*****
00037> *****     ID:  Hydrograph IDentification numbers, (1-10).               *****
00038> *****   NHYD:  Hydrograph reference numbers, (6 digits or characters).  *****
00039> *****   AREA:  Drainage area associated with hydrograph, (ac.) or (ha.). *****
00040> *****  QPEAK:  Peak flow of simulated hydrograph, (ft^3/s) or (m^3/s).  *****
00041> ***** TpeakDate_hh:mm is the date and time of the peak flow.            *****
00042> *****  R.V.:  Runoff Volume of simulated hydrograph, (in) or (mm).     *****
00043> *****  R.C.:  Runoff Coefficient of simulated hydrograph, (ratio).     *****
00044> *****     *:  see WARNING or NOTE message printed at end of run.       *****
00045> *****    **:  see ERROR message printed at end of run.                 *****
00046> ********************************************************************************
00047> ********************************************************************************
00048>
00049> !!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
00050>
00051> ********************************************************************************
00052>
00053> ********************  S U M M A R Y   O U T P U T  ********************
00054> ********************************************************************************
00055> *         DATE: 2014-10-10      TIME: 15:20:02      RUN COUNTER: 000367         *
00056> ********************************************************************************
00057> * Input   filename: C:\1PREWI~1.10\PreDev.dat                                   *
00058> * Output  filename: C:\1PREWI~1.10\PreDev.out                                   *
00059> * Summary filename: C:\1PREWI~1.10\PreDev.sum                                   *
00060> * User comments:                                                               *
00061> * 1:_____________________________________________________________________      *
00062> * 2:_____________________________________________________________________      *
00063> * 3:_____________________________________________________________________      *
00064> ********************************************************************************
00065>
00066>
00067> #*******************************************************************************
00068> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
00069> #  Date        : 2014 08 28
00070> #  Modified    :
00071> #  Modeller    : [A. French]
00072> #  Company     : C.F. Crozier & Associates Inc.
00073> #  License #   :  3737016
00074> #*******************************************************************************
00075>  RUN:COMMAND#
00076>  001:0001----------------------------------------------------------------------
00077>      START
00078>       [TZERO =    .00 hrs on        0]
00079>       [METOUT=   2     (1=imperial, 2=metric output)]
00080>       [NSTORM=   1 ]
00081>       [NRUN  =   1 ]
00082> #*******************************************************************************
00083>  001:0002----------------------------------------------------------------------
00084>      READ STORM                                          25mm event
00085>       Filename = STORM.001
00086>       Comment  =
00087>       [SDT= 5.00:SDUR=   4.00:PTOT=  24.99]
00088> #       FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00089>  001:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00090>      CALIB NASHYD        01:300              4.55     .018 No_date    2:25    3.23
00091>       [CN= 71.0: N= 3.00]
00092>       [Tp=  .74:DT= 5.00]
00093>  001:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00094>      ROUTE CHANNEL   -> 01:300              4.55     .018 No_date    2:25    3.23
00095>       [RDT= 1.00] out<- 02:701              4.55     .011 No_date    3:20    3.23
00096>       [L/S/n=  450./ .050/.040]
00097>       [Vmax=  .100:Dmax=  .074]
00098>  001:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00099>      CALIB NASHYD        01:301              5.97     .027 No_date    2:16    3.23
00100>       [CN= 71.0: N= 3.00]
00101>       [Tp=  .63:DT= 1.00]
00102>  001:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00103>      ADD HYD             01:301              5.97     .027 No_date    2:16    3.23
00104>                        + 02:701              4.55     .011 No_date    3:20    3.23
00105>       [DT= 1.00]  SUM=   03:901             10.52     .034 No_date    2:26    3.23
00106>  001:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00107>      ROUTE CHANNEL   -> 03:901             10.52     .034 No_date    2:26    3.23
00108>       [RDT= 1.00] out<- 01:702             10.52     .021 No_date    3:25    3.23
00109>       [L/S/n=  300./ .050/.060]
00110>       [Vmax=  .065:Dmax=  .172]
00111>  001:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00112>      ROUTE RESERVOIR -> 01:702            10.52     .021 No_date    3:25    3.23
00113>       [RDT= 1.00] out<- 02:501             10.52     .021 No_date    3:38    3.23
00114>            overflow <= 03:501OVF            .00     .000 No_date    0:00     .00
00115>       [MxStoUsed=.1048E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00116>  001:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00117>      CALIB STANDHYD      01:302             16.39     .295 No_date    1:33    7.63
00118>       [XIMP=.20:TIMP=.40]
00119>       [LOSS= 2 :CN= 65.2]
00120>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
00121>       [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 700.:MNI=.013:SCI=    .0]
00122>  001:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00123>      ADD HYD             01:302             16.39     .295 No_date    1:33    7.63
00124>                        + 02:501             10.52     .021 No_date    3:38    3.23
00125>                        + 03:501OVF           .00     .000 No_date    0:00     .00
00126>       [DT= 1.00]  SUM=   04:902             26.91     .295 No_date    1:33    5.91
00127>  001:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00128>      CALIB STANDHYD      01:303              2.34     .072 No_date    1:25    9.01
00129>       [XIMP=.25:TIMP=.50]
00130>       [LOSS= 2 :CN= 65.2]
00131>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
00132>       [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 300.:MNI=.013:SCI=    .0]
00133>  001:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00134>      ADD HYD             01:303              2.34     .072 No_date    1:25    9.01
00135>                        + 04:902             26.91     .295 No_date    1:33    5.91
00136>       [DT= 1.00]  SUM=   02:903             29.25     .352 No_date    1:32    6.16
00137>  001:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00138>      CALIB NASHYD        01:304              2.90     .018 No_date    1:46    2.71
00139>       [CN= 66.6: N= 3.00]
00140>       [Tp=  .28:DT= 1.00]
00141>  001:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00142>      ADD HYD             01:304              2.90     .018 No_date    1:46    2.71
00143>                        + 02:903             29.25     .352 No_date    1:32    6.16
00144>       [DT= 1.00]  SUM=   03:904             32.15     .364 No_date    1:32    5.85
00145>  001:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00146>      CALIB STANDHYD      01:305               .31     .013 No_date    1:20    6.75
00147>       [XIMP=.20:TIMP=.20]
00148>       [LOSS= 2 :CN= 65.2]
00149>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
00150>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
00151>  001:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00152>      ADD HYD             01:305               .31     .013 No_date    1:20    6.75
00153>                        + 03:904             32.15     .364 No_date    1:32    5.85
00154>       [DT= 1.00]  SUM=   02:905             32.46     .366 No_date    1:32    5.86
00155> #                   MAIR MILLS ESTATES SWM FACILITY
00156>  001:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00157>      ROUTE RESERVOIR -> 02:905            32.46     .366 No_date    1:32    5.86
00158>       [RDT= 1.00] out<- 03:502            32.46     .013 No_date    5:34    5.86
00159>            overflow <= 04:502OVF            .00     .000 No_date    0:00     .00
00160>       [MxStoUsed=.1591E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00161>  001:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00162>      CALIB NASHYD        01:400              5.70     .006 No_date    2:36     .84
00163>       [CN= 50.2: N= 3.00]
00164>       [Tp=  .70:DT= 1.00]
00165>  001:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00166>      ADD HYD             01:400              5.70     .006 No_date    2:36     .84
00167>                        + 03:502             32.46     .013 No_date    5:34    5.86
00168>                        + 04:502OVF           .00     .000 No_date    0:00     .00
00169>       [DT= 1.00]  SUM=   02:906             38.16     .016 No_date    3:06    5.11
00170> #         FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
00171>  001:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00172>      DIVERT HYD          02:906             38.16     .016 No_date    3:06    5.11
00173>                diverted <= 10:To806         38.16     .016 No_date    3:06    5.11
00174>                diverted <= 03:To1023          .00     .000 No_date    0:00     .00
00175>                diverted <= 01:To1022          .00     .000 No_date    0:00     .00
00176> #          FLOWS FROM TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
00177> #                          FLOWS TO NODE 1
00178>  001:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00179>      CALIB NASHYD        01:501             85.82     .217 No_date    3:55    3.53
00180>       [CN= 78.8: N= 3.00]
00181>       [Tp= 1.72:DT= 1.00]
00182>  001:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00183>      ROUTE CHANNEL   -> 01:501             85.82     .217 No_date    3:55    3.53
00184>       [RDT= 1.00] out<- 02:RC1             85.82     .216 No_date    4:00    3.53
00185>       [L/S/n=  350./1.500/.030]
00186>       [Vmax= 1.146:Dmax=  .513]
00187>  001:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00188>      CALIB NASHYD        01:504              7.05     .011 No_date    2:15    1.15
00189>       [CN= 51.8: N= 3.00]
00190>       [Tp=  .55:DT= 1.00]
00191>  001:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00192>      ADD HYD             01:504              7.05     .011 No_date    2:15    1.15
00193>                        + 02:RC1             85.82     .216 No_date    4:00    3.53
00194>       [DT= 1.00]  SUM=   04:501+504        92.87     .221 No_date    3:58    3.35
00195>  001:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00196>      ROUTE CHANNEL   -> 04:501+504        92.87     .221 No_date    3:58    3.35
00197>       [RDT= 1.00] out<- 02:RC2             92.87     .221 No_date    4:03    3.35
00198>       [L/S/n=  425./1.250/.030]
00199>       [Vmax= 1.087:Dmax=  .448]
00200>  001:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00201>      CALIB NASHYD        01:503              9.94     .024 No_date    2:29    2.00
00202>       [CN= 63.3: N= 3.00]
00203>       [Tp=  .74:DT= 1.00]
00204>  001:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00205>      CALIB NASHYD        04:502             10.41     .024 No_date    2:18    1.70
00206>       [CN= 61.2: N= 3.00]
00207>       [Tp=  .59:DT= 1.00]
00208>  001:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00209>      CALIB NASHYD        05:505             24.08     .061 No_date    2:34    2.17
00210>       [CN= 64.6: N= 3.00]
00211>       [Tp=  .80:DT= 1.00]
00212>  001:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00213>      ADD HYD             01:503              9.94     .024 No_date    2:29    2.00
00214>                        + 02:RC2             92.87     .221 No_date    4:03    3.35
00215>                        + 04:502            10.41     .024 No_date    2:18    1.70
00216>                        + 05:505            24.08     .061 No_date    2:34    2.17
00217>       [DT= 1.00]  SUM=   06:502+503+50    137.30     .282 No_date    3:37    2.92
00218>  001:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00219>      CALIB NASHYD        01:506              2.81     .007 No_date    2:00    1.43
00220>       [CN= 49.9: N= 3.00]
00221>       [Tp=  .44:DT= 1.00]
00222>  001:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00223>      ADD HYD             01:506              2.81     .007 No_date    2:00    1.43
00224>                        + 06:502+503+50    137.30     .282 No_date    3:37    2.92
00225>       [DT= 1.00]  SUM=   02:RC+506        140.11     .284 No_date    3:33    2.89
00226>  001:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00227>      ROUTE CHANNEL   -> 02:RC+506        140.11     .284 No_date    3:33    2.89
00228>       [RDT= 1.00] out<- 04:RC3            140.11     .284 No_date    3:38    2.89
00229>       [L/S/n=  200./1.000/.030]
00230>       [Vmax= 1.044:Dmax=  .508]
00231>  001:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00232>      CALIB NASHYD        01:507              5.22     .011 No_date    2:09    1.41
00233>       [CN= 49.0: N= 3.00]
00234>       [Tp=  .54:DT= 1.00]
00235>  001:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00236>      ADD HYD             01:507              5.22     .011 No_date    2:09    1.41
00237>                        + 04:RC3            140.11     .284 No_date    3:38    2.89
00238>       [DT= 1.00]  SUM=   02:507+RC        145.33     .288 No_date    3:34    2.84
00239>  001:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00240>      CALIB NASHYD        01:508             26.52     .045 No_date    2:44    1.60
00241>       [CN= 54.9: N= 3.00]
00242>       [Tp=  .93:DT= 1.00]
00243>  001:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00244>      ADD HYD             01:508             26.52     .045 No_date    2:44    1.60
00245>                        + 02:507+RC        145.33     .288 No_date    3:34    2.84
00246>       [DT= 1.00]  SUM=   09:1000          171.85     .325 No_date    3:21    2.65
00247> #             FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
00248>  001:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00249>      CALIB NASHYD        01:103              8.70     .022 No_date    2:07    1.62
00250>       [CN= 59.2: N= 3.00]
00251>       [Tp=  .48:DT= 1.00]
00252>  001:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00253>      ADD HYD             01:103              8.70     .022 No_date    2:07    1.62
00254>                        + 03:To1023           .00     .000 No_date    0:00     .00
00255>       [DT= 1.00]  SUM=   02:1023            8.70     .022 No_date    2:07    1.62
00256>  001:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00257>      CALIB NASHYD        01:205              1.41     .004 No_date    1:41    1.20
00258>       [CN= 51.1: N= 3.00]
00259>       [Tp=  .20:DT= 1.00]
00260>  001:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00261>      ADD HYD             01:205              1.41     .004 No_date    1:41    1.20
00262>                        + 02:1023             8.70     .022 No_date    2:07    1.62
00263>       [DT= 1.00]  SUM=   03:802            10.11     .024 No_date    2:04    1.56
00264>  001:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00265>      CALIB STANDHYD      01:201             18.41    1.223 No_date    1:22   11.37
00266>       [XIMP=.43:TIMP=.56]
00267>       [LOSS= 2 :CN= 49.0]
00268>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
00269>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
00270>  001:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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00271>      ADD HYD              01:201          18.41    1.223 No_date    1:22   11.37
00272>                       +  03:802          10.11     .024 No_date    2:04    1.56
00273>        [DT= 1.00]  SUM=  02:803          28.52    1.224 No_date    1:22    7.89
00274>  001:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00275>      CALIB NASHYD         01:202           1.10     .001 No_date    2:00     .64
00276>        [CN= 55.0: N= 3.00]
00277>        [Tp=  .25:DT= 1.00]
00278>  001:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00279>      ADD HYD              01:202           1.10     .001 No_date    2:00     .64
00280>                       +  02:803          28.52    1.224 No_date    1:22    7.89
00281>        [DT= 1.00]  SUM=  03:804          29.62    1.224 No_date    1:22    7.62
00282>  001:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00283>      CALIB NASHYD         01:1021          4.66     .009 No_date    2:32    1.61
00284>        [CN= 55.3: N= 3.00]
00285>        [Tp=  .78:DT= 1.00]
00286>  001:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00287>      COMPUTE DUALHYD      01:1021          4.66     .009 No_date    2:32    1.61
00288>          Major System /   04:To1000          .00     .000 No_date    0:00     .00
00289>          Minor System \   02:To810          4.66     .009 No_date    2:32    1.61
00290>  001:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00291>      ADD HYD              02:To810         4.66     .009 No_date    2:32    1.61
00292>                       +  03:804          29.62    1.224 No_date    1:22    7.62
00293>        [DT= 1.00]  SUM=  05:810          34.28    1.224 No_date    1:22    6.80
00294>  #                      MAIR MILLS VILLAGE SWM FACILITY
00295>  001:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00296>      ROUTE RESERVOIR -> 05:810           34.28    1.224 No_date    1:22    6.80
00297>        [RDT= 1.00] out<- 02:1026         34.28     .023 No_date    4:10    6.80
00298>                  overflow <= 03:10260VF      .00     .000 No_date    0:00     .00
00299>        [MxStoUsed=.2099E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00300>  001:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00301>      ADD HYD              02:1026          34.28     .023 No_date    4:10    6.80
00302>                       +  03:10260VF          .00     .000 No_date    0:00     .00
00303>        [DT= 1.00]  SUM=  05:Pond1026ou     34.28     .023 No_date    4:10    6.80
00304>  #            TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
00305>  001:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00306>      DIVERT HYD       -> 05:Pond1026ou    34.28     .023 No_date    4:10    6.80
00307>                diverted <= 02:To807       34.28     .023 No_date    4:10    6.80
00308>                diverted <= 07:To809          .00     .000 No_date    0:00     .00
00309>                diverted <= 03:To1025         .00     .000 No_date    0:00     .00
00310>  #                      FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
00311>  001:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00312>      ADD HYD              09:1000        171.85     .325 No_date    3:21    2.65
00313>                       +  04:To1000          .00     .000 No_date    0:00     .00
00314>        [DT= 1.00]  SUM=  05:Node 2       171.85     .325 No_date    3:21    2.65
00315>  001:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00316>      CALIB NASHYD         01:207           1.22     .006 No_date    1:33    1.61
00317>        [CN= 55.3: N= 3.00]
00318>        [Tp=  .13:DT= 1.00]
00319>  #                                  FLOWS TO OUTLET B
00320>  001:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00321>      ADD HYD              01:207           1.22     .006 No_date    1:33    1.61
00322>                       +  02:To807         34.28     .023 No_date    4:10    6.80
00323>        [DT= 1.00]  SUM=  06:807           35.50     .023 No_date    4:01    6.63
00324>  001:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00325>      ADD HYD              06:807          35.50     .023 No_date    4:01    6.63
00326>                       +  10:To806         38.16     .016 No_date    3:06    5.11
00327>        [DT= 1.00]  SUM=  01:806           73.66     .039 No_date    4:00    5.84
00328>  #                            FLOWS FROM TENTH LINE
00329>  001:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00330>      CALIB STANDHYD       08:601           .22     .012 No_date    1:22    8.96
00331>        [XIMP=.35:TIMP=.35]
00332>        [LOSS= 2 :CN= 49.0]
00333>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00334>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
00335>  001:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00336>      CALIB STANDHYD       09:602           1.15     .036 No_date    1:32    8.96
00337>        [XIMP=.35:TIMP=.35]
00338>        [LOSS= 2 :CN= 49.0]
00339>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00340>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
00341>  #                  FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
00342>  001:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00343>      ADD HYD              05:Node 2       171.85     .325 No_date    3:21    2.65
00344>                       +  03:To1025          .00     .000 No_date    0:00     .00
00345>                       +  07:To809           .00     .000 No_date    0:00     .00
00346>                       +  08:601             .22     .012 No_date    1:22    8.96
00347>                       +  09:602            1.15     .036 No_date    1:32    8.96
00348>        [DT= 1.00]  SUM=  02:809/Node3     173.22     .329 No_date    3:21    2.69
00349>  #                      FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
00350>  001:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00351>      ADD HYD              02:809/Node3    173.22     .329 No_date    3:21    2.69
00352>                       +  01:806           73.66     .039 No_date    4:00    5.84
00353>        [DT= 1.00]  SUM=  04:Node4        246.88     .367 No_date    3:21    3.63
00354>    ** END OF RUN :   1
00355>
00356>  ************************************************************************
00357>
00358>
00359>
00360>
00361>
00362>  RUN:COMMAND#
00363>  002:0001---------------------------------------------------------------------
00364>      START
00365>        [TZERO =    .00 hrs on       0]
00366>        [METOUT=   2    (1=imperial, 2=metric output)]
00367>        [NSTORM=   1 ]
00368>        [NRUN   =  2 ]
00369>  ************************************************************************
00370>  *  Project Name: [Linksview PreDev]  Project Number: [183-2687]
00371>  *  Date        : 2014 08 28
00372>  *  Modified    :
00373>  *  Modeller    : [A. French]
00374>  *  Company     : C.F. Crozier & Associates Inc.
00375>  *  License #   :  3737016
00376>  ************************************************************************
00377>  ************************************************************************
00378>  002:0002---------------------------------------------------------------------
00379>      READ STORM
00380>        Filename = STORM.001
00381>        Comment  =
00382>        [SDT= 5.00:SDUR=    4.00:PTOT=  34.77]
00383>  #        FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00384>  002:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00385>      CALIB NASHYD         01:300           4.55     .040 No_date    2:20    6.64
00386>        [CN= 71.0: N= 3.00]
00387>        [Tp=  .74:DT= 5.00]
00388>  002:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00389>      ROUTE CHANNEL    -> 01:300           4.55     .040 No_date    2:20    6.64
00390>        [RDT= 1.00] out<- 02:701           4.55     .025 No_date    3:04    6.64
00391>        [L/S/n=  450./ .050/.040]
00392>        [Vmax=   .128:Dmax=   .111]
00393>  002:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00394>      CALIB NASHYD         01:301           5.97     .058 No_date    2:15    6.64
00395>        [CN= 71.0: N= 3.00]
00396>        [Tp=  .63:DT= 1.00]
00397>  002:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00398>      ADD HYD              01:301           5.97     .058 No_date    2:15    6.64
00399>                       +  02:701           4.55     .025 No_date    3:04    6.64
00400>        [DT= 1.00]  SUM=  03:901          10.52     .075 No_date    2:26    6.64
00401>  002:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00402>      ROUTE CHANNEL    -> 03:901          10.52     .075 No_date    2:26    6.64
00403>        [RDT= 1.00] out<- 01:702          10.52     .053 No_date    3:01    6.64
00404>        [L/S/n=  300./ .050/.060]
00405>        [Vmax=   .100:Dmax=   .239]
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2yr CH1

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00406>  002:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00407>      ROUTE RESERVOIR -> 01:702          10.52     .053 No_date    3:01    6.64
00408>        [RDT= 1.00] out<- 02:501          10.52     .052 No_date    3:15    6.64
00409>              overflow <= 03:501OVF          .00     .000 No_date    0:00     .00
00410>        [MxStoUsed=.3162E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00411>  002:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00412>      CALIB STANDHYD       01:302          16.39     .454 No_date    1:32   12.46
00413>        [XIMP=.20:TIMP=.40]
00414>        [LOSS= 2 :CN= 65.2]
00415>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00416>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
00417>  002:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00418>      ADD HYD              01:302          16.39     .454 No_date    1:32   12.46
00419>                       +  02:501          10.52     .052 No_date    3:15    6.64
00420>                       +  03:501OVF          .00     .000 No_date    0:00     .00
00421>        [DT= 1.00]  SUM=  04:902          26.91     .454 No_date    1:32   10.18
00422>  002:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00423>      CALIB STANDHYD       01:303           2.34     .102 No_date    1:26   14.40
00424>        [XIMP=.25:TIMP=.50]
00425>        [LOSS= 2 :CN= 65.2]
00426>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00427>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
00428>  002:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00429>      ADD HYD              01:303           2.34     .102 No_date    1:26   14.40
00430>                       +  04:902          26.91     .454 No_date    1:32   10.18
00431>        [DT= 1.00]  SUM=  02:903          29.25     .545 No_date    1:31   10.52
00432>  002:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00433>      CALIB NASHYD         01:304           2.90     .039 No_date    1:45    5.64
00434>        [CN= 66.6: N= 3.00]
00435>        [Tp=  .28:DT= 1.00]
00436>  002:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00437>      ADD HYD              01:304           2.90     .039 No_date    1:45    5.64
00438>                       +  02:903          29.25     .545 No_date    1:31   10.52
00439>        [DT= 1.00]  SUM=  03:904          32.15     .570 No_date    1:32   10.08
00440>  002:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00441>      CALIB STANDHYD       01:305           .31     .016 No_date    1:20   10.94
00442>        [XIMP=.20:TIMP=.20]
00443>        [LOSS= 2 :CN= 65.2]
00444>        [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
00445>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
00446>  002:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00447>      ADD HYD              01:305           .31     .016 No_date    1:20   10.94
00448>                       +  03:904          32.15     .570 No_date    1:32   10.08
00449>        [DT= 1.00]  SUM=  02:905          32.46     .574 No_date    1:32   10.09
00450>  #                      MAIR MILLS ESTATES SWM FACILITY
00451>  002:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00452>      ROUTE RESERVOIR -> 02:905          32.46     .574 No_date    1:32   10.09
00453>        [RDT= 1.00] out<- 03:502          32.46     .039 No_date    4:57   10.09
00454>              overflow <= 04:502OVF          .00     .000 No_date    0:00     .00
00455>        [MxStoUsed=.2708E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00456>  002:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00457>      CALIB NASHYD         01:400           5.70     .016 No_date    2:28    2.22
00458>        [CN= 50.2: N= 3.00]
00459>        [Tp=  .70:DT= 1.00]
00460>  002:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00461>      ADD HYD              01:400           5.70     .016 No_date    2:28    2.22
00462>                       +  03:502          32.46     .039 No_date    4:57   10.09
00463>                       +  04:502OVF          .00     .000 No_date    0:00     .00
00464>        [DT= 1.00]  SUM=  02:906          38.16     .043 No_date    4:25    8.91
00465>  #        FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
00466>  002:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00467>      DIVERT HYD       -> 02:906          38.16     .043 No_date    4:25    8.91
00468>                diverted <= 10:To806       34.08     .020 No_date    4:25    8.91
00469>                diverted <= 03:To1023       2.04     .012 No_date    4:25    8.91
00470>                diverted <= 01:To1022       2.04     .012 No_date    4:25    8.91
00471>  #        FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
00472>  #                            FLOWS TO NODE 1
00473>  002:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00474>      CALIB NASHYD         01:501          85.82     .483 No_date    3:45    7.73
00475>        [CN= 78.8: N= 3.00]
00476>        [Tp= 1.72:DT= 1.00]
00477>  002:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00478>      ROUTE CHANNEL    -> 01:501          85.82     .483 No_date    3:45    7.73
00479>        [RDT= 1.00] out<- 02:RC1          85.82     .483 No_date    3:49    7.73
00480>        [L/S/n=  350./1.500/.030]
00481>        [Vmax= 1.403:Dmax=  .694]
00482>  002:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00483>      CALIB NASHYD         01:504           7.05     .029 No_date    2:12    2.74
00484>        [CN= 51.8: N= 3.00]
00485>        [Tp=  .55:DT= 1.00]
00486>  002:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00487>      ADD HYD              01:504           7.05     .029 No_date    2:12    2.74
00488>                       +  02:RC1          85.82     .483 No_date    3:49    7.73
00489>        [DT= 1.00]  SUM=  04:501+504       92.87     .493 No_date    3:46    7.35
00490>  002:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00491>      ROUTE CHANNEL    -> 04:501+504      92.87     .493 No_date    3:46    7.35
00492>        [RDT= 1.00] out<- 02:RC2          92.87     .492 No_date    3:53    7.35
00493>        [L/S/n=  425./1.250/.030]
00494>        [Vmax= 1.210:Dmax=  .581]
00495>  002:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00496>      CALIB NASHYD         01:503           9.94     .057 No_date    2:27    4.47
00497>        [CN= 63.3: N= 3.00]
00498>        [Tp=  .74:DT= 1.00]
00499>  002:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00500>      CALIB NASHYD         04:502          10.41     .060 No_date    2:15    3.92
00501>        [CN= 61.2: N= 3.00]
00502>        [Tp=  .59:DT= 1.00]
00503>  002:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00504>      CALIB NASHYD         05:505          24.08     .140 No_date    2:31    4.77
00505>        [CN= 64.6: N= 3.00]
00506>        [Tp=  .80:DT= 1.00]
00507>  002:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00508>      ADD HYD              01:503           9.94     .057 No_date    2:27    4.47
00509>                       +  02:RC2          92.87     .492 No_date    3:53    7.35
00510>                       +  04:502          10.41     .060 No_date    2:15    3.92
00511>                       +  05:505          24.08     .140 No_date    2:31    4.77
00512>        [DT= 1.00]  SUM=  06:502+503+50   137.30     .637 No_date    3:19    6.43
00513>  002:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00514>      CALIB NASHYD         01:506           2.81     .015 No_date    2:00    3.07
00515>        [CN= 49.9: N= 3.00]
00516>        [Tp=  .44:DT= 1.00]
00517>  002:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00518>      ADD HYD              01:506           2.81     .015 No_date    2:00    3.07
00519>                       +  06:502+503+50   137.30     .637 No_date    3:19    6.43
00520>        [DT= 1.00]  SUM=  02:RC+506       140.11     .642 No_date    3:18    6.37
00521>  002:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00522>      ROUTE CHANNEL    -> 02:RC+506       140.11     .642 No_date    3:18    6.37
00523>        [RDT= 1.00] out<- 04:RC3          140.11     .641 No_date    3:22    6.37
00524>        [L/S/n=  200./1.000/.030]
00525>        [Vmax=   .961:Dmax=  .637]
00526>  002:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00527>      CALIB NASHYD         01:507           5.22     .025 No_date    2:08    3.01
00528>        [CN= 49.0: N= 3.00]
00529>        [Tp=  .54:DT= 1.00]
00530>  002:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00531>      ADD HYD              01:507           5.22     .025 No_date    2:08    3.01
00532>                       +  04:RC3          140.11     .641 No_date    3:22    6.37
00533>        [DT= 1.00]  SUM=  02:507+RC       145.33     .652 No_date    3:20    6.24
00534>  002:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00535>      CALIB NASHYD         01:508          26.52     .103 No_date    2:42    3.51
00536>        [CN= 54.9: N= 3.00]
00537>        [Tp=  .93:DT= 1.00]
00538>  002:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00539>      ADD HYD              01:508          26.52     .103 No_date    2:42    3.51
00540>                       +  02:507+RC       145.33     .652 No_date    3:20    6.24
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      [DT= 1.00]  SUM=  09:1000          171.85     .741 No_date    3:13    5.82
#           FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
 002:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:103             8.70     .053 No_date    2:05    3.72
      [CN= 59.2: N= 3.00]
      [Tp=  .48:DT= 1.00]
 002:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:103             8.70     .053 No_date    2:05    3.72
                       + 03:To1023          2.04     .012 No_date    4:25    8.91
      [DT= 1.00]  SUM=  02:1023           10.74     .056 No_date    2:08    4.71
 002:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:205             1.41     .010 No_date    1:40    2.79
      [CN= 51.1: N= 3.00]
      [Tp=  .20:DT= 1.00]
 002:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:205             1.41     .010 No_date    1:40    2.79
                       + 02:1023            10.74     .056 No_date    2:08    4.71
      [DT= 1.00]  SUM=  03:802            12.15     .062 No_date    2:05    4.48
 002:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:201            18.41    1.575 No_date    1:22   16.73
      [XIMP=.43:TIMP=.56]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
 002:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:201            18.41    1.575 No_date    1:22   16.73
                       + 03:802            12.15     .062 No_date    2:05    4.48
      [DT= 1.00]  SUM=  02:803            30.56    1.578 No_date    1:22   11.86
 002:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:202             1.10     .005 No_date    1:51    2.05
      [CN= 55.0: N= 3.00]
      [Tp=  .25:DT= 1.00]
 002:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:202             1.10     .005 No_date    1:51    2.05
                       + 02:803            30.56    1.578 No_date    1:22   11.86
      [DT= 1.00]  SUM=  03:804            31.66    1.579 No_date    1:22   11.52
 002:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:1021            4.66     .020 No_date    2:29    3.54
      [CN= 55.3: N= 3.00]
      [Tp=  .78:DT= 1.00]
 002:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     COMPUTE DUALHYD     01:1021            4.66     .020 No_date    2:29    3.54
       Major System /    04:To1000           .00     .000 No_date    0:00     .00
       Minor System \    02:To810           4.66     .020 No_date    2:29    3.54
 002:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             02:To810           4.66     .020 No_date    2:29    3.54
                       + 03:804            31.66    1.579 No_date    1:22   11.52
      [DT= 1.00]  SUM=  05:810            36.32    1.579 No_date    1:22   10.50
#                       MAIR MILLS VILLAGE SWM FACILITY
 002:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 05:810           36.32    1.579 No_date    1:22   10.50
      [RDT= 1.00] out<- 02:1026          36.32     .036 No_date    4:22   10.50
                overflow <= 03:1026OVF       .00     .000 No_date    0:00     .00
      [MxStoUsed=.3319E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
 002:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             02:1026            36.32     .036 No_date    4:22   10.50
                       + 03:1026OVF         .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  05:Pond1026ou      36.32     .036 No_date    4:22   10.50
#           TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
 002:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 05:Pond1026ou      36.32     .036 No_date    4:22   10.50
              diverted <= 02:To807         36.32     .036 No_date    4:22   10.50
              diverted <= 07:To809            .00     .000 No_date    0:00     .00
              diverted <= 03:To1025           .00     .000 No_date    0:00     .00
#                       FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
 002:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             09:1000          171.85     .741 No_date    3:13    5.82
                       + 04:To1000           .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  05:Node 2          171.85     .741 No_date    3:13    5.82
 002:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:207             1.22     .014 No_date    1:32    3.54
      [CN= 55.3: N= 3.00]
      [Tp=  .13:DT= 1.00]
#                                 FLOWS TO OUTLET B
 002:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:207             1.22     .014 No_date    1:32    3.54
                       + 02:To807           36.32     .036 No_date    4:22   10.50
      [DT= 1.00]  SUM=  06:807             37.54     .037 No_date    4:01   10.27
 002:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             06:807           37.54     .037 No_date    4:01   10.27
                       + 10:To806           34.08     .020 No_date    4:25    8.91
      [DT= 1.00]  SUM=  01:806             71.62     .057 No_date    4:01    9.62
#                                FLOWS FROM TENTH LINE
 002:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      08:601              .22     .016 No_date    1:22   13.43
      [XIMP=.35:TIMP=.35]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
#                       FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
 002:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             05:Node 2        171.85     .741 No_date    3:13    5.82
                       + 03:To1025           .00     .000 No_date    0:00     .00
                       + 07:To809            .00     .000 No_date    0:00     .00
                       + 08:601              .22     .016 No_date    1:22   13.43
                       + 09:602             1.15     .052 No_date    1:31   13.43
      [DT= 1.00]  SUM=  02:809/Node3       173.22     .747 No_date    3:10    5.88
#                       FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
 002:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             02:809/Node3     173.22     .747 No_date    3:10    5.88
                       + 01:806           71.62     .057 No_date    4:01    9.62
      [DT= 1.00]  SUM=  04:Node4           244.84     .802 No_date    3:11    6.98
  ** END OF RUN :   2
 ************************************************************************************


 RUN:COMMAND#
 003:0001----------------------------------------------------------------------------
      START
       [TZERO =    .00 hrs on       0]
       [METOUT=   2    (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN  =   3 ]
#*********************************************************************************
#  Project Name: [Linksview PreDev]  Project Number: [183-2687]
#  Date        : 2014 08 28
#  Modified    :
#  Modeller    : [A. French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 3737016
#*********************************************************************************
#*********************************************************************************
 003:0002----------------------------------------------------------------------------
      READ STORM
       Filename = STORM.001
      Comment  =
      [SDT= 5.00:SDUR=   4.00:PTOT=  46.10]
#       FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
 003:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:300             4.55     .069 No_date    2:20   11.66
      [CN= 71.0: N= 3.00]
      [Tp=  .74:DT= 1.00]
 003:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:300             4.55     .069 No_date    2:20   11.66
      [RDT= 1.00] out<- 02:701             4.55     .050 No_date    2:56   11.66
      [L/S/n=  450./ .050/.040]
      [Vmax=  .167:Dmax=  .152]
 003:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:301             5.97     .101 No_date    2:13   11.66
      [CN= 71.0: N= 3.00]
      [Tp=  .63:DT= 1.00]
 003:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:301             5.97     .101 No_date    2:13   11.66
                       + 02:701             4.55     .050 No_date    2:56   11.66
      [DT= 1.00]  SUM=  03:901            10.52     .138 No_date    2:26   11.66
 003:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 03:901            10.52     .138 No_date    2:26   11.66
      [RDT= 1.00] out<- 01:702            10.52     .109 No_date    2:52   11.66
      [L/S/n=  300./ .050/.060]
      [Vmax=  .136:Dmax=  .305]
 003:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 01:702            10.52     .109 No_date    2:52   11.66
      [RDT= 1.00] out<- 02:501            10.52     .106 No_date    3:06   11.66
                overflow <= 03:501OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.7002E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
 003:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:302            16.39     .699 No_date    1:34   10.88
      [XIMP=.20:TIMP=.40]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 700.:MNI=.013:SCI=   .0]
 003:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:302            16.39     .699 No_date    1:34   10.88
                       + 02:501            10.52     .106 No_date    3:06   11.66
                       + 03:501OVF           .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  04:902            26.91     .700 No_date    1:34   16.06
 003:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:303             2.34     .151 No_date    1:25   21.45
      [XIMP=.25:TIMP=.50]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 300.:MNI=.013:SCI=   .0]
 003:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:303             2.34     .151 No_date    1:25   21.45
                       + 04:902            26.91     .700 No_date    1:34   16.06
      [DT= 1.00]  SUM=  02:903            29.25     .832 No_date    1:32   16.49
 003:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:304             2.90     .069 No_date    1:44   10.02
      [CN= 66.6: N= 3.00]
      [Tp=  .28:DT= 1.00]
 003:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:304             2.90     .069 No_date    1:44   10.02
                       + 02:903            29.25     .832 No_date    1:32   16.49
      [DT= 1.00]  SUM=  03:904            32.15     .885 No_date    1:34   15.91
 003:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:305              .31     .021 No_date    1:20   16.57
      [XIMP=.20:TIMP=.20]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
 003:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:305              .31     .021 No_date    1:20   16.57
                       + 03:904            32.15     .885 No_date    1:34   15.91
      [DT= 1.00]  SUM=  02:905            32.46     .890 No_date    1:34   15.91
#                       MAIR MILLS ESTATES SWM FACILITY
 003:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 02:905            32.46     .890 No_date    1:34   15.91
      [RDT= 1.00] out<- 03:502            32.46     .102 No_date    4:29   15.91
                overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.3970E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
 003:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:400             5.70     .033 No_date    2:25    4.52
      [CN= 50.2: N= 3.00]
      [Tp=  .70:DT= 1.00]
 003:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:400             5.70     .033 No_date    2:25    4.52
                       + 03:502            32.46     .102 No_date    4:29   15.91
                       + 04:502OVF           .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  02:906            38.16     .114 No_date    4:12   14.21
#       FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
 003:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 02:906            38.16     .114 No_date    4:12   14.21
              diverted <= 10:To806         23.70     .020 No_date    4:12   14.21
              diverted <= 03:To1023         7.23     .047 No_date    4:12   14.21
              diverted <= 01:To1022         7.23     .047 No_date    4:12   14.21
#         FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
#                         FLOWS TO NODE 1
 003:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:501            85.82     .866 No_date    3:42   13.87
      [CN= 78.8: N= 3.00]
      [Tp= 1.72:DT= 1.00]
 003:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:501            85.82     .866 No_date    3:42   13.87
      [RDT= 1.00] out<- 02:RC1            85.82     .861 No_date    3:57   13.87
      [L/S/n=  350./1.500/.030]
      [Vmax=  .798:Dmax=  .801]
 003:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:504             7.05     .056 No_date    2:10    5.31
      [CN= 51.0: N= 3.00]
      [Tp=  .55:DT= 1.00]
 003:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:504             7.05     .056 No_date    2:10    5.31
                       + 02:RC1            85.82     .861 No_date    3:57   13.87
      [DT= 1.00]  SUM=  04:501+504         92.87     .879 No_date    3:55   13.22
 003:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 04:501+504        92.87     .879 No_date    3:55   13.22
      [RDT= 1.00] out<- 02:RC2            92.87     .877 No_date    4:02   13.22
      [L/S/n=  425./1.250/.030]
      [Vmax= 1.135:Dmax=  .676]
 003:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:503             9.94     .105 No_date    2:25    8.28
      [CN= 63.3: N= 3.00]
      [Tp=  .74:DT= 1.00]
 003:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        04:502            10.41     .113 No_date    2:13    7.43
      [CN= 61.2: N= 3.00]
      [Tp=  .59:DT= 1.00]
 003:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        05:505            24.08     .257 No_date    2:29    8.77
      [CN= 64.6: N= 3.00]
      [Tp=  .80:DT= 1.00]
 003:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:502             9.94     .105 No_date    2:25    8.28
                       + 02:RC2            92.87     .877 No_date    4:02   13.22
                       + 04:502            10.41     .113 No_date    2:13    7.43
                       + 05:505            24.08     .257 No_date    2:29    8.77
      [DT= 1.00]  SUM=  06:502+503+50     137.30    1.112 No_date    3:30   11.65
 003:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:506             2.81     .028 No_date    1:59    5.65
      [CN= 49.9: N= 3.00]
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00811>       [Tp=  .44:DT= 1.00]
00812>  003:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00813>       ADD HYD             01:506          2.81     .028 No_date    1:59    5.65
00814>                       +  06:502+503+50   137.30    1.112 No_date    3:30   11.65
00815>       [DT= 1.00]  SUM=   02:RC+506       140.11    1.120 No_date    3:29   11.53
00816>  003:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00817>       ROUTE CHANNEL   -> 02:RC+506       140.11    1.120 No_date    3:29   11.53
00818>        [RDT= 1.00] out<- 04:RC3           140.11    1.120 No_date    3:32   11.53
00819>        [L/S/n=  200./1.000/.030]
00820>        [Vmax=  .930:Dmax=  .716]
00821>  003:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00822>       CALIB NASHYD        01:507          5.22     .045 No_date    2:07    5.53
00823>        [CN= 49.0: N= 3.00]
00824>        [Tp=  .54:DT= 1.00]
00825>  003:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00826>       ADD HYD             01:507          5.22     .045 No_date    2:07    5.53
00827>                       +  04:RC3          140.11    1.120 No_date    3:32   11.53
00828>       [DT= 1.00]  SUM=   02:507+RC       145.33    1.136 No_date    3:30   11.31
00829>  003:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00830>       CALIB NASHYD        01:508          26.52     .189 No_date    2:40    6.49
00831>        [CN= 54.9: N= 3.00]
00832>        [Tp=  .93:DT= 1.00]
00833>  003:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00834>       ADD HYD             01:508          26.52     .189 No_date    2:40    6.49
00835>                       +  02:507+RC       145.33    1.136 No_date    3:30   11.31
00836>       [DT= 1.00]  SUM=   09:1000         171.85    1.293 No_date    3:12   10.57
00837> #              FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
00838>  003:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00839>       CALIB NASHYD        01:103          8.70     .102 No_date    2:03    7.03
00840>        [CN= 59.2: N= 3.00]
00841>        [Tp=  .48:DT= 1.00]
00842>  003:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00843>       ADD HYD             01:103          8.70     .102 No_date    2:03    7.03
00844>                       +  03:To1023        7.23     .047 No_date    4:12   14.21
00845>       [DT= 1.00]  SUM=   02:1023         15.93     .117 No_date    2:13   10.29
00846>  003:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00847>       CALIB NASHYD        01:205          1.41     .020 No_date    1:38    5.34
00848>        [CN= 51.1: N= 3.00]
00849>        [Tp=  .20:DT= 1.00]
00850>  003:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00851>       ADD HYD             01:205          1.41     .020 No_date    1:38    5.34
00852>                       +  02:1023         15.93     .117 No_date    2:13   10.29
00853>       [DT= 1.00]  SUM=   03:802          17.34     .126 No_date    2:10    9.89
00854>  003:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00855>       CALIB STANDHYD      01:201          18.41    1.208 No_date    1:21   23.38
00856>        [XIMP=.43:TIMP=.56]
00857>        [LOSS= 2 :CN= 49.0]
00858>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
00859>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
00860>  003:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00861>       ADD HYD             01:201          18.41    1.208 No_date    1:21   23.38
00862>                       +  03:802          17.34     .126 No_date    2:10    9.89
00863>       [DT= 1.00]  SUM=   02:803          35.75    2.215 No_date    1:21   16.84
00864>  003:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00865>       CALIB NASHYD        01:202          1.10     .011 No_date    1:47    4.52
00866>        [CN= 55.0: N= 3.00]
00867>        [Tp=  .25:DT= 1.00]
00868>  003:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00869>       ADD HYD             01:202          1.10     .011 No_date    1:47    4.52
00870>                       +  02:803          35.75    2.215 No_date    1:21   16.84
00871>       [DT= 1.00]  SUM=   03:804          36.85    2.216 No_date    1:21   16.47
00872>  003:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00873>       CALIB NASHYD        01:1021         4.66     .038 No_date    2:28    6.55
00874>        [CN= 55.3: N= 3.00]
00875>        [Tp=  .78:DT= 1.00]
00876>  003:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00877>       COMPUTE DUALHYD     01:1021         4.66     .038 No_date    2:28    6.55
00878>         Major System /    04:To1000        .00     .000 No_date    0:00     .00
00879>         Minor System \    02:To810        4.66     .038 No_date    2:28    6.55
00880>  003:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00881>       ADD HYD             02:To810        4.66     .038 No_date    2:28    6.55
00882>                       +  03:804          36.85    2.216 No_date    1:21   16.47
00883>       [DT= 1.00]  SUM=   05:810          41.51    2.216 No_date    1:21   15.35
00884> #                    MAIR MILLS VILLAGE SWM FACILITY
00885>  003:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00886>       ROUTE RESERVOIR -> 05:810          41.51    2.216 No_date    1:21   15.35
00887>        [RDT= 1.00] out<- 02:1026         41.51     .145 No_date    4:03   15.35
00888>              overflow <= 03:10260VF        .00     .000 No_date    0:00     .00
00889>       [MxStoUsed=.4740E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00890>  003:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00891>       ADD HYD             02:1026         41.51     .145 No_date    4:03   15.35
00892>                       +  03:10260VF         .00     .000 No_date    0:00     .00
00893>       [DT= 1.00]  SUM=   05:Pond1026ou    41.51     .145 No_date    4:03   15.35
00894> #            TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
00895>  003:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00896>       DIVERT HYD      -> 05:Pond1026ou    41.51     .145 No_date    4:03   15.35
00897>              diverted <= 02:To807         34.67     .040 No_date    4:03   15.35
00898>              diverted <= 07:To809          6.85     .105 No_date    4:03   15.35
00899>              diverted <= 03:To1025          .00     .000 No_date    0:00     .00
00900> #                      FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
00901>  003:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00902>       ADD HYD             09:1000        171.85    1.293 No_date    3:12   10.57
00903>                       +  04:To1000          .00     .000 No_date    0:00     .00
00904>       [DT= 1.00]  SUM=   05:Node 2       171.85    1.293 No_date    3:12   10.57
00905>  003:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00906>       CALIB NASHYD        01:207          1.22     .027 No_date    1:31    6.55
00907>        [CN= 55.3: N= 3.00]
00908>        [Tp=  .13:DT= 1.00]
00909> #                                FLOWS TO OUTLET B
00910>  003:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00911>       ADD HYD             01:207          1.22     .027 No_date    1:31    6.55
00912>                       +  02:To807         34.67     .040 No_date    4:03   15.35
00913>       [DT= 1.00]  SUM=   06:807          35.89     .051 No_date    1:35   15.06
00914>  003:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00915>       ADD HYD             06:807          35.89     .051 No_date    1:35   15.06
00916>                       +  10:To806         23.70     .020 No_date    4:12   14.21
00917>       [DT= 1.00]  SUM=   01:806          59.58     .071 No_date    1:39   14.72
00918> #                              FLOWS FROM TENTH LINE
00919>  003:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00920>       CALIB STANDHYD      08:601           .22     .022 No_date    1:21   19.03
00921>        [XIMP=.35:TIMP=.35]
00922>        [LOSS= 2 :CN= 49.0]
00923>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00924>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
00925>  003:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00926>       CALIB STANDHYD      09:602          1.15     .077 No_date    1:29   19.03
00927>        [XIMP=.35:TIMP=.35]
00928>        [LOSS= 2 :CN= 49.0]
00929>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00930>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
00931> #                 FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
00932>  003:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00933>       ADD HYD             05:Node 2       171.85    1.293 No_date    3:12   10.57
00934>                       +  03:To1025          .00     .000 No_date    0:00     .00
00935>                       +  07:To809          6.85     .105 No_date    4:03   15.35
00936>                       +  08:601             .22     .022 No_date    1:21   19.03
00937>                       +  09:602            1.15     .077 No_date    1:29   19.03
00938>       [DT= 1.00]  SUM=   02:809/Node3     180.07    1.380 No_date    3:26   10.81
00939> #                      FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
00940>  003:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00941>       ADD HYD             02:809/Node3    180.07    1.380 No_date    3:26   10.81
00942>                       +  01:806          59.58     .071 No_date    1:39   14.72
00943>       [DT= 1.00]  SUM=   04:Node4        239.65    1.443 No_date    3:22   11.78
00944>   ** END OF RUN :   3
00945>
00946> ************************************************************************
00947>
00948>
00949>
00950>
00951>
00952>  RUN:COMMAND#
00953>  004:0001----------------------------------------------------------------
00954>       START
00955>        [TZERO =    .00 hrs on        0]
00956>        [METOUT=   2    (1=imperial, 2=metric output)]
00957>        [NSTORM=   1 ]
00958>        [NRUN  =   4 ]
00959> #************************************************************************
00960> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
00961> #  Date        : 2014 08 28
00962> #  Modified    :
00963> #  Modeller    : [A. French]
00964> #  Company     : C.F. Crozier & Associates Inc.
00965> #  License #   :  3737016
00966> #************************************************************************
00967> #************************************************************************
00968>  004:0002----------------------------------------------------------------
00969>       READ STORM
00970>        Filename = STORM.001
00971>        Comment  =
00972>        [SDT= 5.00:SDUR=   4.00:PTOT=  53.81]
00973> #         FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00974>  004:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00975>       CALIB NASHYD        01:300          4.55     .093 No_date    2:20   15.62
00976>        [CN= 71.0: N= 3.00]
00977>        [Tp=  .74:DT= 5.00]
00978>  004:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00979>       ROUTE CHANNEL   -> 01:300          4.55     .093 No_date    2:20   15.62
00980>        [RDT= 1.00] out<- 02:701          4.55     .069 No_date    2:50   15.62
00981>        [L/S/n=  450./ .050/.040]
00982>        [Vmax=  .185:Dmax=  .177]
00983>  004:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00984>       CALIB NASHYD        01:301          5.97     .137 No_date    2:13   15.62
00985>        [CN= 71.0: N= 3.00]
00986>        [Tp=  .63:DT= 1.00]
00987>  004:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00988>       ADD HYD             01:301          5.97     .137 No_date    2:13   15.62
00989>                       +  02:701          4.55     .069 No_date    2:50   15.62
00990>       [DT= 1.00]  SUM=   03:901         10.52     .191 No_date    2:23   15.62
00991>  004:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00992>       ROUTE CHANNEL   -> 03:901         10.52     .191 No_date    2:23   15.62
00993>        [RDT= 1.00] out<- 01:702         10.52     .155 No_date    2:45   15.62
00994>        [L/S/n=  300./ .050/.060]
00995>        [Vmax=  .161:Dmax=  .349]
00996>  004:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00997>       ROUTE RESERVOIR -> 01:702         10.52     .155 No_date    2:45   15.62
00998>        [RDT= 1.00] out<- 02:501         10.52     .149 No_date    3:00   15.62
00999>              overflow <= 03:501OVF        .00     .000 No_date    0:00     .00
01000>       [MxStoUsed=.1039E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01001>  004:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01002>       CALIB STANDHYD      01:302         16.39     .914 No_date    1:34   23.68
01003>        [XIMP=.20:TIMP=.40]
01004>        [LOSS= 2 :CN= 65.2]
01005>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01006>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
01007>  004:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01008>       ADD HYD             01:302         16.39     .914 No_date    1:34   23.68
01009>                       +  02:501         10.52     .149 No_date    3:00   15.62
01010>                       +  03:501OVF        .00     .000 No_date    0:00     .00
01011>       [DT= 1.00]  SUM=   04:902         26.91     .915 No_date    1:34   20.53
01012>  004:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01013>       CALIB STANDHYD      01:303          2.34     .187 No_date    1:24   26.65
01014>        [XIMP=.25:TIMP=.50]
01015>        [LOSS= 2 :CN= 65.2]
01016>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01017>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
01018>  004:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01019>       ADD HYD             01:303          2.34     .187 No_date    1:24   26.65
01020>                       +  04:902         26.91     .915 No_date    1:34   20.53
01021>       [DT= 1.00]  SUM=   02:903         29.25    1.080 No_date    1:33   21.02
01022>  004:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01023>       CALIB NASHYD        01:304          2.90     .094 No_date    1:44   13.52
01024>        [CN= 66.6: N= 3.00]
01025>        [Tp=  .28:DT= 1.00]
01026>  004:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01027>       ADD HYD             01:304          2.90     .094 No_date    1:44   13.52
01028>                       +  02:903         29.25    1.080 No_date    1:33   21.02
01029>       [DT= 1.00]  SUM=   03:904         32.15    1.157 No_date    1:34   20.34
01030>  004:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01031>       CALIB STANDHYD      01:305           .31     .024 No_date    1:20   20.80
01032>        [XIMP=.20:TIMP=.20]
01033>        [LOSS= 2 :CN= 65.2]
01034>        [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
01035>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
01036>  004:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01037>       ADD HYD             01:305           .31     .024 No_date    1:20   20.80
01038>                       +  03:904         32.15    1.157 No_date    1:34   20.34
01039>       [DT= 1.00]  SUM=   02:905         32.46    1.163 No_date    1:34   20.34
01040> #                    MAIR MILLS ESTATES SWM FACILITY
01041>  004:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01042>       ROUTE RESERVOIR -> 02:905         32.46    1.163 No_date    1:34   20.34
01043>        [RDT= 1.00] out<- 03:502         32.46     .139 No_date    4:25   20.34
01044>              overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
01045>       [MxStoUsed=.4941E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01046>  004:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01047>       CALIB NASHYD        01:400          5.70     .047 No_date    2:24    6.49
01048>        [CN= 50.2: N= 3.00]
01049>        [Tp=  .70:DT= 1.00]
01050>  004:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01051>       ADD HYD             01:400          5.70     .047 No_date    2:24    6.49
01052>                       +  03:502         32.46     .139 No_date    4:25   20.34
01053>                       +  04:502OVF        .00     .000 No_date    0:00     .00
01054>       [DT= 1.00]  SUM=   02:906         38.16     .162 No_date    3:26   18.27
01055> #      FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
01056>  004:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01057>       DIVERT HYD      -> 02:906         38.16     .162 No_date    3:26   18.27
01058>              diverted <= 10:To806       19.18     .020 No_date    3:26   18.27
01059>              diverted <= 03:To1023       9.49     .071 No_date    3:26   18.27
01060>              diverted <= 01:To1022       9.49     .071 No_date    3:26   18.27
01061> #          FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
01062> #                          FLOWS TO NODE 1
01063>  004:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01064>       CALIB NASHYD        01:501         85.82    1.166 No_date    3:41   18.64
01065>        [CN= 78.8: N= 3.00]
01066>        [Tp= 1.72:DT= 1.00]
01067>  004:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01068>       ROUTE CHANNEL   -> 01:501         85.82    1.166 No_date    3:41   18.64
01069>        [RDT= 1.00] out<- 02:RC1          85.82    1.156 No_date    3:55   18.64
01070>        [L/S/n=  350./1.500/.030]
01071>        [Vmax=  .620:Dmax=  .852]
01072>  004:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01073>       CALIB NASHYD        01:504          7.05     .080 No_date    2:09    7.47
01074>        [CN= 51.8: N= 3.00]
01075>        [Tp=  .55:DT= 1.00]
01076>  004:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01077>       ADD HYD             01:504          7.05     .080 No_date    2:09    7.47
01078>                       +  02:RC1          85.82    1.156 No_date    3:55   18.64
01079>       [DT= 1.00]  SUM=   04:501+504      92.87    1.181 No_date    3:54   17.80
01080>  004:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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01081>      ROUTE CHANNEL   -> 04:501+504        92.87    1.181 No_date    3:54   17.80
01082>       [RDT= 1.00] out<- 02:RC2            92.87    1.178 No_date    4:01   17.80
01083>       [L/S/n=  425./1.250/.030]
01084>       [Vmax= 1.114:Dmax=  .730]
01085>  004:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01086>      CALIB NASHYD        01:503             9.94     .145 No_date    2:24   11.38
01087>       [CN= 63.3: N= 3.00]
01088>       [Tp=  .74:DT= 1.00]
01089>  004:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01090>      CALIB NASHYD        04:502            10.41     .158 No_date    2:12   10.31
01091>       [CN= 61.2: N= 3.00]
01092>       [Tp=  .59:DT= 1.00]
01093>  004:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01094>      CALIB NASHYD        05:505            24.08     .354 No_date    2:28   12.00
01095>       [CN= 64.6: N= 3.00]
01096>       [Tp=  .80:DT= 1.00]
01097>  004:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01098>      ADD HYD             01:503             9.94     .145 No_date    2:24   11.38
01099>                        + 02:RC2            92.87    1.178 No_date    4:01   17.80
01100>                        + 04:502            10.41     .158 No_date    2:12   10.31
01101>                        + 05:505            24.08     .354 No_date    2:28   12.00
01102>       [DT= 1.00]  SUM=  06:502+503+50     137.30    1.492 No_date    3:36   15.75
01103>  004:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01104>      CALIB NASHYD        01:506             2.81     .039 No_date    1:58    7.78
01105>       [CN= 49.9: N= 3.00]
01106>       [Tp=  .44:DT= 1.00]
01107>  004:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01108>      ADD HYD             01:506             2.81     .039 No_date    1:58    7.78
01109>                        + 06:502+503+50     137.30    1.492 No_date    3:36   15.75
01110>       [DT= 1.00]  SUM=  02:RC+506          140.11    1.503 No_date    3:34   15.59
01111>  004:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01112>      ROUTE CHANNEL   -> 02:RC+506         140.11    1.503 No_date    3:34   15.59
01113>       [RDT= 1.00] out<- 04:RC3            140.11    1.502 No_date    3:37   15.59
01114>       [L/S/n=  200./1.000/.030]
01115>       [Vmax=  .914:Dmax=  .774]
01116>  004:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01117>      CALIB NASHYD        01:507             5.22     .062 No_date    2:07    7.61
01118>       [CN= 49.0: N= 3.00]
01119>       [Tp=  .54:DT= 1.00]
01120>  004:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01121>      ADD HYD             01:507             5.22     .062 No_date    2:07    7.61
01122>                        + 04:RC3           140.11    1.502 No_date    3:37   15.59
01123>       [DT= 1.00]  SUM=  02:507+RC          145.33    1.524 No_date    3:34   15.30
01124>  004:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01125>      CALIB NASHYD        01:508            26.52     .261 No_date    2:39    8.95
01126>       [CN= 54.9: N= 3.00]
01127>       [Tp=  .93:DT= 1.00]
01128>  004:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01129>      ADD HYD             01:508            26.52     .261 No_date    2:39    8.95
01130>                        + 02:507+RC         145.33    1.524 No_date    3:34   15.30
01131>       [DT= 1.00]  SUM=  09:1000           171.85    1.738 No_date    3:11   14.32
01132> #            FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
01133>  004:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01134>      CALIB NASHYD        01:103             8.70     .142 No_date    2:02    9.75
01135>       [CN= 59.2: N= 3.00]
01136>       [Tp=  .48:DT= 1.00]
01137>  004:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01138>      ADD HYD             01:103             8.70     .142 No_date    2:02    9.75
01139>                        + 03:To1023          9.49     .071 No_date    3:26   10.27
01140>       [DT= 1.00]  SUM=  02:1023           18.19     .179 No_date    2:11   14.20
01141>  004:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01142>      CALIB NASHYD        01:205             1.41     .028 No_date    1:38    7.47
01143>       [CN= 51.1: N= 3.00]
01144>       [Tp=  .20:DT= 1.00]
01145>  004:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01146>      ADD HYD             01:205             1.41     .028 No_date    1:38    7.47
01147>                        + 02:1023           18.19     .179 No_date    2:11   14.20
01148>       [DT= 1.00]  SUM=  03:802            19.60     .192 No_date    2:08   13.72
01149>  004:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01150>      CALIB STANDHYD      01:201            18.41    2.610 No_date    1:21   28.15
01151>       [XIMP=.43:TIMP=.56]
01152>       [LOSS= 2 :CN= 49.0]
01153>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
01154>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
01155>  004:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01156>      ADD HYD             01:201            18.41    2.610 No_date    1:21   28.15
01157>                        + 03:802            19.60     .192 No_date    2:08   13.72
01158>       [DT= 1.00]  SUM=  02:803            38.01    2.623 No_date    1:21   20.71
01159>  004:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01160>      CALIB NASHYD        01:202             1.10     .016 No_date    1:45    6.67
01161>       [CN= 55.0: N= 3.00]
01162>       [Tp=  .25:DT= 1.00]
01163>  004:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01164>      ADD HYD             01:202             1.10     .016 No_date    1:45    6.67
01165>                        + 02:803            38.01    2.623 No_date    1:21   20.71
01166>       [DT= 1.00]  SUM=  03:804            39.11    2.624 No_date    1:21   20.31
01167>  004:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01168>      CALIB NASHYD        01:1021            4.66     .052 No_date    2:27    9.03
01169>       [CN= 55.3: N= 3.00]
01170>       [Tp=  .78:DT= 1.00]
01171>  004:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01172>      COMPUTE DUALHYD     01:1021            4.66     .052 No_date    2:27    9.03
01173>        Major System /    04:To1000           .13     .006 No_date    2:27    9.03
01174>        Minor System \    02:To810           4.53     .046 No_date    2:07    9.03
01175>  004:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01176>      ADD HYD             02:To810           4.53     .046 No_date    2:07    9.03
01177>                        + 03:804            39.11    2.624 No_date    1:21   20.31
01178>       [DT= 1.00]  SUM=  05:810            43.64    2.625 No_date    1:21   19.14
01179> #                      MAIR MILLS VILLAGE SWM FACILITY
01180>  004:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01181>      ROUTE RESERVOIR -> 05:810           43.64    2.625 No_date    1:21   19.14
01182>       [RDT= 1.00] out<- 02:1026          43.64     .253 No_date    3:42   19.14
01183>                 overflow <= 03:1026OVF      .00     .000 No_date    0:00     .00
01184>       [MxStoUsed=.5327E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01185>  004:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01186>      ADD HYD             02:1026            43.64     .253 No_date    3:42   19.14
01187>                        + 03:1026OVF          .00     .000 No_date    0:00     .00
01188>       [DT= 1.00]  SUM=  05:Pond1026ou      43.64     .253 No_date    3:42   19.14
01189> #            TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
01190>  004:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01191>      DIVERT HYD      -> 05:Pond1026ou     43.64     .253 No_date    3:42   19.14
01192>               diverted <= 02:To807        29.37     .040 No_date    3:42   19.14
01193>               diverted <= 07:To809        14.27     .213 No_date    3:42   19.14
01194>               diverted <= 03:To1025         .00     .000 No_date    0:00     .00
01195> #                      FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
01196>  004:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01197>      ADD HYD             09:1000          171.85    1.738 No_date    3:11   14.32
01198>                        + 04:To1000           .13     .006 No_date    2:27    9.03
01199>       [DT= 1.00]  SUM=  05:Node 2         171.98    1.738 No_date    3:11   14.32
01200>  004:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01201>      CALIB NASHYD        01:207             1.22     .037 No_date    1:31    9.03
01202>       [CN= 55.3: N= 3.00]
01203>       [Tp=  .13:DT= 1.00]
01204> #                                FLOWS TO OUTLET B
01205>  004:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01206>      ADD HYD             01:207             1.22     .037 No_date    1:31    9.03
01207>                        + 02:To807          29.37     .040 No_date    3:42   19.14
01208>       [DT= 1.00]  SUM=  06:807            30.59     .066 No_date    1:34   18.74
01209>  004:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01210>      ADD HYD             06:807            30.59     .066 No_date    1:34   18.74
01211>                        + 10:To806          19.18     .020 No_date    3:26   18.27
01212>       [DT= 1.00]  SUM=  01:806            49.77     .086 No_date    1:34   18.56
01213> #                              FLOWS FROM TENTH LINE
01214>  004:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01215>      CALIB STANDHYD      08:601              .22     .027 No_date    1:21   23.08
01216>       [XIMP=.35:TIMP=.35]
01217>       [LOSS= 2 :CN= 49.0]
01218>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
01219>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=    .0]
01220>  004:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01221>      CALIB STANDHYD      09:602              1.15     .093 No_date    1:29   23.08
01222>       [XIMP=.35:TIMP=.35]
01223>       [LOSS= 2 :CN= 49.0]
01224>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
01225>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=    .0]
01226> #                      FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
01227>  004:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01228>      ADD HYD             05:Node 2        171.98    1.738 No_date    3:11   14.32
01229>                        + 03:To1025           .00     .000 No_date    0:00     .00
01230>                        + 07:To809          14.27     .213 No_date    3:42   19.14
01231>                        + 08:601              .22     .027 No_date    1:21   23.08
01232>                        + 09:602             1.15     .093 No_date    1:29   23.08
01233>       [DT= 1.00]  SUM=  02:809/Node3      187.62    1.952 No_date    3:18   14.75
01234> #                      FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
01235>  004:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01236>      ADD HYD             02:809/Node3     187.62    1.952 No_date    3:18   14.75
01237>                        + 01:806           49.77     .086 No_date    1:34   18.56
01238>       [DT= 1.00]  SUM=  04:Node4          237.39    2.017 No_date    3:18   15.55
01239>   ** END OF RUN :   4
01240>
01241>  ************************************************************************************
01242>
01243>
01244>
01245>
01246>
01247>  RUN:COMMAND#
01248>  005:0001---------------------------------------------------------------------------
01249>      START
01250>       [TZERO =    .00 hrs on       0]
01251>       [METOUT=   2    (1=imperial, 2=metric output)]
01252>       [NSTORM=   1 ]
01253>       [NRUN  =   5 ]
01254> #*************************************************************************************
01255> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
01256> #  Date       : 2014 08 28
01257> #  Modified   :
01258> #  Modeller   : [A. French]
01259> #  Company    : C.F. Crozier & Associates Inc.
01260> #  License #  :  3737016
01261> #*************************************************************************************
01262> #*************************************************************************************
01263>  005:0002---------------------------------------------------------------------------
01264>      READ STORM
01265>       Filename = STORM.001
01266>       Comment  =
01267>       [SDT= 5.00:SDUR=   4.00:PTOT=  63.85]
01268> #       FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
01269>  005:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01270>      CALIB NASHYD        01:300             4.55     .128 No_date    2:20   21.30
01271>       [CN= 71.0: N= 3.00]
01272>       [Tp=  .74:DT= 5.00]
01273>  005:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01274>      ROUTE CHANNEL   -> 01:300             4.55     .128 No_date    2:20   21.30
01275>       [RDT= 1.00] out<- 02:701             4.55     .099 No_date    2:42   21.30
01276>       [L/S/n=  450./ .050/.040]
01277>       [Vmax=  .214:Dmax=  .210]
01278>  005:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01279>      CALIB NASHYD        01:301             5.97     .187 No_date    2:12   21.30
01280>       [CN= 71.0: N= 3.00]
01281>       [Tp=  .63:DT= 1.00]
01282>  005:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01283>      ADD HYD             01:301             5.97     .187 No_date    2:12   21.30
01284>                        + 02:701             4.55     .099 No_date    2:42   21.30
01285>       [DT= 1.00]  SUM=  03:901            10.52     .268 No_date    2:23   21.30
01286>  005:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01287>      ROUTE CHANNEL   -> 03:901            10.52     .268 No_date    2:23   21.30
01288>       [RDT= 1.00] out<- 01:702            10.52     .223 No_date    2:41   21.30
01289>       [L/S/n=  300./ .050/.060]
01290>       [Vmax=  .188:Dmax=  .398]
01291>  005:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01292>      ROUTE RESERVOIR -> 01:702            10.52     .223 No_date    2:41   21.30
01293>       [RDT= 1.00] out<- 02:501            10.52     .171 No_date    3:32   21.30
01294>                 overflow <= 03:501OVF         .00     .000 No_date    0:00     .00
01295>       [MxStoUsed=.2622E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01296>  005:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01297>      CALIB STANDHYD      01:302            16.39    1.229 No_date    1:35   30.33
01298>       [XIMP=.20:TIMP=.40]
01299>       [LOSS= 2 :CN= 65.2]
01300>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01301>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
01302>  005:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01303>      ADD HYD             01:302            16.39    1.229 No_date    1:35   30.33
01304>                        + 02:501            10.52     .171 No_date    3:32   21.30
01305>                        + 03:501OVF           .00     .000 No_date    0:00     .00
01306>       [DT= 1.00]  SUM=  04:902            26.91    1.231 No_date    1:35   26.80
01307>  005:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01308>      CALIB STANDHYD      01:303             2.34     .240 No_date    1:24   33.79
01309>       [XIMP=.25:TIMP=.50]
01310>       [LOSS= 2 :CN= 65.2]
01311>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01312>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
01313>  005:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01314>      ADD HYD             01:303             2.34     .240 No_date    1:24   33.79
01315>                        + 04:902            26.91    1.231 No_date    1:35   26.80
01316>       [DT= 1.00]  SUM=  02:903            29.25    1.444 No_date    1:33   27.36
01317>  005:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01318>      CALIB NASHYD        01:304             2.90     .131 No_date    1:43   18.59
01319>       [CN= 66.6: N= 3.00]
01320>       [Tp=  .28:DT= 1.00]
01321>  005:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01322>      ADD HYD             01:304             2.90     .131 No_date    1:43   18.59
01323>                        + 02:903            29.25    1.444 No_date    1:33   27.36
01324>       [DT= 1.00]  SUM=  03:904            32.15    1.554 No_date    1:35   26.57
01325>  005:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01326>      CALIB STANDHYD      01:305              .31     .029 No_date    1:20   26.72
01327>       [XIMP=.20:TIMP=.20]
01328>       [LOSS= 2 :CN= 65.2]
01329>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
01330>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
01331>  005:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01332>      ADD HYD             01:305              .31     .029 No_date    1:20   26.72
01333>                        + 03:904            32.15    1.554 No_date    1:35   26.57
01334>       [DT= 1.00]  SUM=  02:905            32.46    1.562 No_date    1:35   26.57
01335> #                      MAIR MILLS ESTATES SWM FACILITY
01336>  005:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01337>      ROUTE RESERVOIR -> 02:905            32.46    1.562 No_date    1:35   26.57
01338>       [RDT= 1.00] out<- 03:502            32.46     .150 No_date    4:43   26.57
01339>                 overflow <= 04:502OVF         .00     .000 No_date    0:00     .00
01340>       [MxStoUsed=.6516E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01341>  005:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01342>      CALIB NASHYD        01:400             5.70     .070 No_date    2:22    9.48
01343>       [CN= 50.2: N= 3.00]
01344>       [Tp=  .70:DT= 1.00]
01345>  005:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01346>      ADD HYD             01:400             5.70     .070 No_date    2:22    9.48
01347>                        + 03:502            32.46     .150 No_date    4:43   26.57
01348>                        + 04:502OVF           .00     .000 No_date    0:00     .00
01349>       [DT= 1.00]  SUM=  02:906            38.16     .206 No_date    2:40   24.02
01350> #       FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
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01351> 005:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01352>      DIVERT HYD      -> 02:906           38.16     .206 No_date    2:40   24.02
01353>             diverted <= 10:To806         15.47     .020 No_date    2:40   24.02
01354>             diverted <= 03:To1023        11.35     .093 No_date    2:40   24.02
01355>             diverted <= 01:To1022        11.35     .093 No_date    2:40   24.02
01356> #         FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
01357> #                        FLOWS TO NODE 1
01358> 005:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01359>      CALIB NASHYD       01:501           85.82    1.591 No_date    3:39   25.39
01360>        [CN= 78.8: N= 3.00]
01361>        [Tp= 1.72:DT= 1.00]
01362> 005:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01363>      ROUTE CHANNEL   -> 01:501           85.82    1.591 No_date    3:39   25.39
01364>        [RDT= 1.00] out<- 02:RC1          95.82    1.576 No_date    3:55   25.39
01365>        [L/S/n=  350./1.500/.030]
01366>        [Vmax=  .543:Dmax=  .899]
01367> 005:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01368>      CALIB NASHYD       01:504            7.05     .116 No_date    2:08   10.71
01369>        [CN= 51.8: N= 3.00]
01370>        [Tp=  .55:DT= 1.00]
01371> 005:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01372>      ADD HYD            01:504            7.05     .116 No_date    2:08   10.71
01373>                       + 02:RC1           85.82    1.576 No_date    3:55   25.39
01374>        [DT= 1.00]  SUM=  04:501+504      92.87    1.611 No_date    3:54   24.28
01375> 005:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01376>      ROUTE CHANNEL   -> 04:501+504       92.87    1.611 No_date    3:54   24.28
01377>        [RDT= 1.00] out<- 02:RC2          92.87    1.608 No_date    3:59   24.28
01378>        [L/S/n=  425./1.250/.030]
01379>        [Vmax= 1.118:Dmax=  .785]
01380> 005:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01381>      CALIB NASHYD       01:503            9.94     .205 No_date    2:23   15.93
01382>        [CN= 63.3: N= 3.00]
01383>        [Tp=  .74:DT= 1.00]
01384> 005:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01385>      CALIB NASHYD       04:502           10.41     .226 No_date    2:11   14.56
01386>        [CN= 61.2: N= 3.00]
01387>        [Tp=  .59:DT= 1.00]
01388> 005:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01389>      CALIB NASHYD       05:505           24.08     .496 No_date    2:27   16.73
01390>        [CN= 64.6: N= 3.00]
01391>        [Tp=  .80:DT= 1.00]
01392> 005:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01393>      ADD HYD            01:503            9.94     .205 No_date    2:23   15.93
01394>                       + 02:RC2           92.87    1.608 No_date    3:59   24.28
01395>                       + 04:502           10.41     .226 No_date    2:11   14.56
01396>                       + 05:505           24.08     .496 No_date    2:27   16.73
01397>        [DT= 1.00]  SUM=  06:502+503+50   137.30    2.060 No_date    3:26   21.62
01398> 005:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01399>      CALIB NASHYD       01:506            2.81     .055 No_date    1:58   10.97
01400>        [CN= 49.9: N= 3.00]
01401>        [Tp=  .44:DT= 1.00]
01402> 005:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01403>      ADD HYD            01:506            2.81     .055 No_date    1:58   10.97
01404>                       + 06:502+503+50   137.30    2.060 No_date    3:26   21.62
01405>        [DT= 1.00]  SUM=  02:RC+506       140.11    2.077 No_date    3:25   21.40
01406> 005:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01407>      ROUTE CHANNEL   -> 02:RC+506        140.11    2.077 No_date    3:25   21.40
01408>        [RDT= 1.00] out<- 04:RC3          140.11    2.076 No_date    3:29   21.40
01409>        [L/S/n=  200./1.000/.030]
01410>        [Vmax=  .934:Dmax=  .825]
01411> 005:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01412>      CALIB NASHYD       01:507            5.22     .088 No_date    2:06   10.71
01413>        [CN= 49.0: N= 3.00]
01414>        [Tp=  .54:DT= 1.00]
01415> 005:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01416>      ADD HYD            01:507            5.22     .088 No_date    2:06   10.71
01417>                       + 04:RC3          140.11    2.076 No_date    3:29   21.40
01418>        [DT= 1.00]  SUM=  02:507+RC       145.33    2.109 No_date    3:26   21.02
01419> 005:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01420>      CALIB NASHYD       01:508           26.52     .369 No_date    2:39   12.59
01421>        [CN= 54.9: N= 3.00]
01422>        [Tp=  .93:DT= 1.00]
01423> 005:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01424>      ADD HYD            01:508           26.52     .369 No_date    2:39   12.59
01425>                       + 02:507+RC       145.33    2.109 No_date    3:26   21.02
01426>        [DT= 1.00]  SUM=  09:1000         171.85    2.416 No_date    3:13   19.72
01427> #         FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
01428> 005:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01429>      CALIB NASHYD       01:103            8.70     .203 No_date    2:02   13.79
01430>        [CN= 59.2: N= 3.00]
01431>        [Tp=  .48:DT= 1.00]
01432> 005:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01433>      ADD HYD            01:103            8.70     .203 No_date    2:02   13.79
01434>                       + 03:To1023        11.35     .093 No_date    2:40   24.02
01435>        [DT= 1.00]  SUM=  02:1023         20.05     .272 No_date    2:10   19.58
01436> 005:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01437>      CALIB NASHYD       01:205            1.41     .041 No_date    1:37   10.67
01438>        [CN= 51.1: N= 3.00]
01439>        [Tp=  .20:DT= 1.00]
01440> 005:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01441>      ADD HYD            01:205            1.41     .041 No_date    1:37   10.67
01442>                       + 02:1023          20.05     .272 No_date    2:10   19.58
01443>        [DT= 1.00]  SUM=  03:802          21.46     .291 No_date    2:07   18.99
01444> 005:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01445>      CALIB STANDHYD     01:201           18.41    3.174 No_date    1:21   34.62
01446>        [XIMP=.43:TIMP=.56]
01447>        [LOSS= 2 :CN= 49.0]
01448>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
01449>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
01450> 005:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01451>      ADD HYD            01:201           18.41    3.174 No_date    1:21   34.62
01452>                       + 03:802          21.46     .291 No_date    2:07   18.99
01453>        [DT= 1.00]  SUM=  02:803          39.87    3.195 No_date    1:21   26.21
01454> 005:0043----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01455>      CALIB NASHYD       01:202            1.10     .025 No_date    1:44    9.96
01456>        [CN= 55.0: N= 3.00]
01457>        [Tp=  .25:DT= 1.00]
01458> 005:0044----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01459>      ADD HYD            01:202            1.10     .025 No_date    1:44    9.96
01460>                       + 02:803          39.87    3.195 No_date    1:21   26.21
01461>        [DT= 1.00]  SUM=  03:804          40.97    3.198 No_date    1:21   25.77
01462> 005:0045----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01463>      CALIB NASHYD       01:1021           4.66     .074 No_date    2:26   12.72
01464>        [CN= 55.3: N= 3.00]
01465>        [Tp=  .70:DT= 1.00]
01466> 005:0046----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01467>      COMPUTE DUALHYD    01:1021           4.66     .074 No_date    2:26   12.72
01468>          Major System /  04:To1000         .79     .028 No_date    2:26   12.72
01469>          Minor System \  02:To810          3.87     .046 No_date    1:51   12.72
01470> 005:0047----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01471>      ADD HYD            02:To810          3.87     .046 No_date    1:51   12.72
01472>                       + 03:804          40.97    3.198 No_date    1:21   25.77
01473>        [DT= 1.00]  SUM=  05:810          44.84    3.199 No_date    1:21   24.64
01474> #                      MAIR MILLS VILLAGE SWM FACILITY
01475> 005:0048----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01476>      ROUTE RESERVOIR -> 05:810           44.84    3.199 No_date    1:21   24.64
01477>        [RDT= 1.00] out<- 02:1026         44.84     .391 No_date    3:14   24.64
01478>              overflow <= 03:10260VF        .00     .000 No_date    0:00     .00
01479>        [MxStoUsed=.6075E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01480> 005:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01481>      ADD HYD            02:1026           44.84     .391 No_date    3:14   24.64
01482>                       + 03:10260VF          .00     .000 No_date    0:00     .00
01483>        [DT= 1.00]  SUM=  05:Pond1026ou     44.84     .391 No_date    3:14   24.64
01484> #          TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
01485> 005:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01486>      DIVERT HYD      -> 05:Pond1026ou    44.84     .391 No_date    3:14   24.64
01487>             diverted <= 02:To807         24.59     .040 No_date    3:14   24.64
01488>             diverted <= 07:To809         20.24     .351 No_date    3:14   24.64
01489>             diverted <= 03:To1025          .00     .000 No_date    0:00     .00
01490> #                        FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
01491> 005:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01492>      ADD HYD            09:1000          171.85    2.416 No_date    3:13   19.72
01493>                       + 04:To1000          .79     .028 No_date    2:26   12.72
01494>        [DT= 1.00]  SUM=  05:Node 2       172.64    2.425 No_date    3:11   19.69
01495> 005:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01496>      CALIB NASHYD       01:207            1.22     .053 No_date    1:31   12.72
01497>        [CN= 55.3: N= 3.00]
01498>        [Tp=  .13:DT= 1.00]
01499> #                              FLOWS TO OUTLET B
01500> 005:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01501>      ADD HYD            01:207            1.22     .053 No_date    1:31   12.72
01502>                       + 02:To807          24.59     .040 No_date    3:14   24.64
01503>        [DT= 1.00]  SUM=  06:807          25.81     .088 No_date    1:33   24.08
01504> 005:0054----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01505>      ADD HYD            06:807           25.81     .088 No_date    1:33   24.08
01506>                       + 10:To806          15.47     .020 No_date    2:40   24.02
01507>        [DT= 1.00]  SUM=  01:806          41.28     .108 No_date    1:33   24.06
01508> #                        FLOWS FROM TENTH LINE
01509> 005:0055----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01510>      CALIB STANDHYD     08:601             .22     .033 No_date    1:21   28.61
01511>        [XIMP=.35:TIMP=.35]
01512>        [LOSS= 2 :CN= 49.0]
01513>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
01514>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
01515> 005:0056----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01516>      CALIB STANDHYD     09:602            1.15     .118 No_date    1:20   28.61
01517>        [XIMP=.35:TIMP=.35]
01518>        [LOSS= 2 :CN= 49.0]
01519>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
01520>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
01521> #                 FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
01522> 005:0057----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01523>      ADD HYD            05:Node 2        172.64    2.425 No_date    3:11   19.69
01524>                       + 03:To1025           .00     .000 No_date    0:00     .00
01525>                       + 07:To809          20.24     .351 No_date    3:14   24.64
01526>                       + 08:601              .22     .033 No_date    1:21   28.61
01527>                       + 09:602             1.15     .118 No_date    1:20   28.61
01528>        [DT= 1.00]  SUM=  02:809/Node3    194.25    2.787 No_date    3:11   20.27
01529> #                    FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
01530> 005:0058----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01531>      ADD HYD            02:809/Node3     194.25    2.787 No_date    3:11   20.27
01532>                       + 01:806           41.28     .108 No_date    1:33   24.06
01533>        [DT= 1.00]  SUM=  04:Node4        235.53    2.854 No_date    3:11   20.93
01534>  ** END OF RUN :   5
01535>
01536> ************************************************************************
01537>
01538>
01539>
01540>
01541>
01542>  RUN:COMMAND#
01543> 006:0001----------------------------------------------------------------------
01544>      START
01545>        [TZERO =    .00 hrs on       0]
01546>        [METOUT=    2     (1=imperial, 2=metric output)]
01547>        [NSTORM=    1 ]
01548>        [NRUN  =    6 ]
01549> #*********************************************************************
01550> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
01551> #  Date        : 2014 08 28
01552> #  Modified    :
01553> #  Modeller    : [A. French]
01554> #  Company     : C.F. Crozier & Associates Inc.
01555> #  License #   :  3737016
01556> #*********************************************************************
01557> #*********************************************************************
01558>  006:0002----------------------------------------------------------------------
01559>      READ STORM
01560>        Filename = STORM.001
01561>        Comment  =
01562>        [SDT= 5.00:SDUR=   4.00:PTOT=  70.27]
01563> #        FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
01564> 006:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01565>      CALIB NASHYD       01:300            4.55     .152 No_date    2:20   25.20
01566>        [CN= 71.0: N= 3.00]
01567>        [Tp=  .74:DT= 5.00]
01568> 006:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01569>      ROUTE CHANNEL   -> 01:300            4.55     .152 No_date    2:20   25.20
01570>        [RDT= 1.00] out<- 02:701           4.55     .121 No_date    2:45   25.20
01571>        [L/S/n=  450./ .050/.040]
01572>        [Vmax=  .225:Dmax=  .227]
01573> 006:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01574>      CALIB NASHYD       01:301            5.97     .223 No_date    2:11   25.20
01575>        [CN= 71.0: N= 3.00]
01576>        [Tp=  .63:DT= 1.00]
01577> 006:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01578>      ADD HYD            01:301            5.97     .223 No_date    2:11   25.20
01579>                       + 02:701            4.55     .121 No_date    2:45   25.20
01580>        [DT= 1.00]  SUM=  03:901          10.52     .322 No_date    2:22   25.20
01581> 006:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01582>      ROUTE CHANNEL   -> 03:901          10.52     .322 No_date    2:22   25.20
01583>        [RDT= 1.00] out<- 01:702          10.52     .274 No_date    2:41   25.20
01584>        [L/S/n=  300./ .050/.060]
01585>        [Vmax=  .203:Dmax=  .427]
01586> 006:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01587>      ROUTE RESERVOIR -> 01:702          10.52     .274 No_date    2:41   25.20
01588>        [RDT= 1.00] out<- 02:501          10.52     .171 No_date    3:51   25.20
01589>              overflow <= 03:501OVF         .00     .000 No_date    0:00     .00
01590>        [MxStoUsed=.4942E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01591> 006:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01592>      CALIB STANDHYD     01:302           16.39    1.466 No_date    1:35   34.80
01593>        [XIMP=.20:TIMP=.40]
01594>        [LOSS= 2 :CN= 65.2]
01595>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01596>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
01597> 006:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01598>      ADD HYD            01:302           16.39    1.466 No_date    1:35   34.80
01599>                       + 02:501           10.52     .171 No_date    3:51   25.20
01600>                       + 03:501OVF          .00     .000 No_date    0:00     .00
01601>        [DT= 1.00]  SUM=  04:902          26.91    1.469 No_date    1:35   31.05
01602> 006:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01603>      CALIB STANDHYD     01:303            2.34     .281 No_date    1:27   38.55
01604>        [XIMP=.25:TIMP=.50]
01605>        [LOSS= 2 :CN= 65.2]
01606>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01607>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
01608> 006:0012----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01609>      ADD HYD            01:303            2.34     .281 No_date    1:27   38.55
01610>                       + 04:902           26.91    1.469 No_date    1:35   31.05
01611>        [DT= 1.00]  SUM=  02:903          29.25    1.721 No_date    1:33   31.65
01612> 006:0013----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01613>      CALIB NASHYD       01:304            2.90     .157 No_date    1:43   22.11
01614>        [CN= 66.6: N= 3.00]
01615>        [Tp=  .28:DT= 1.00]
01616> 006:0014----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01617>      ADD HYD            01:304            2.90     .157 No_date    1:43   22.11
01618>                       + 02:903          29.25    1.721 No_date    1:33   31.65
01619>        [DT= 1.00]  SUM=  03:904          32.15    1.852 No_date    1:34   30.79
01620> 006:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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01621>      CALIB STANDHYD     01:305              .31     .032 No_date    1:20    30.72
01622>        [XIMP=.20:TIMP=.20]
01623>        [LOSS= 2 :CN= 65.2]
01624>        [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
01625>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
01626> 006:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01627>      ADD HYD            01:305              .31     .032 No_date    1:20    30.72
01628>                       + 03:904            32.15   1.852 No_date    1:34    30.79
01629>        [DT= 1.00]  SUM=  02:905            32.46   1.862 No_date    1:34    30.79
01630> #                     MAIR MILLS ESTATES SWM FACILITY
01631> 006:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01632>      ROUTE RESERVOIR -> 02:905            32.46   1.862 No_date    1:34    30.79
01633>        [RDT= 1.00] out<- 03:502           32.46    .150 No_date    5:30    30.79
01634>                  overflow <= 04:502OVF      .00    .000 No_date    0:00      .00
01635>        [MxStoUsed=.7529E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01636> 006:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01637>      CALIB NASHYD       01:400              5.70    .087 No_date    2:22    11.63
01638>        [CN= 50.2: N= 3.00]
01639>        [Tp=  .70:DT= 1.00]
01640> 006:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01641>      ADD HYD            01:400              5.70    .087 No_date    2:22    11.63
01642>                       + 03:502            32.46    .150 No_date    5:30    30.79
01643>                       + 04:502OVF           .00    .000 No_date    0:00      .00
01644>        [DT= 1.00]  SUM=  02:906            38.16    .234 No_date    2:34    27.92
01645> #       FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
01646> 006:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01647>      DIVERT HYD         -> 02:906            38.16    .234 No_date    2:34    27.92
01648>                diverted <= 10:To806          13.88    .020 No_date    2:34    27.92
01649>                diverted <= 03:To1023         12.14    .107 No_date    2:34    27.92
01650>                diverted <= 01:To1022         12.14    .107 No_date    2:34    27.92
01651> #       FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
01652> #                          FLOWS TO NODE 1
01653> 006:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01654>      CALIB NASHYD       01:501              85.82   1.883 No_date    3:37    29.98
01655>        [CN= 78.8: N= 3.00]
01656>        [Tp= 1.72:DT= 1.00]
01657> 006:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01658>      ROUTE CHANNEL   -> 01:501            85.82   1.883 No_date    3:37    29.98
01659>        [RDT= 1.00] out<- 02:RC1           85.82   1.865 No_date    3:52    29.98
01660>        [L/S/n=  350./1,500/.030]
01661>        [Vmax=  .517:Dmax=  .926]
01662> 006:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01663>      CALIB NASHYD       01:504              7.05    .142 No_date    2:08    13.02
01664>        [CN= 51.8: N= 3.00]
01665>        [Tp=  .55:DT= 1.00]
01666> 006:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01667>      ADD HYD            01:504              7.05    .142 No_date    2:08    13.02
01668>                       + 02:RC1            85.82   1.865 No_date    3:52    29.98
01669>        [DT= 1.00]  SUM=  04:501+504        92.87   1.909 No_date    3:50    28.70
01670> 006:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01671>      ROUTE CHANNEL   -> 04:501+504        92.87   1.909 No_date    3:50    28.70
01672>        [RDT= 1.00] out<- 02:RC2           92.87   1.904 No_date    3:56    28.70
01673>        [L/S/n=  425./1.250/.030]
01674>        [Vmax= 1.124:Dmax=  .822]
01675> 006:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01676>      CALIB NASHYD       01:503              9.94    .247 No_date    2:22    19.11
01677>        [CN= 63.3: N= 3.00]
01678>        [Tp=  .74:DT= 1.00]
01679> 006:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01680>      CALIB NASHYD       04:502             10.41    .274 No_date    2:10    17.56
01681>        [CN= 61.2: N= 3.00]
01682>        [Tp=  .59:DT= 1.00]
01683> 006:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01684>      CALIB NASHYD       05:505             24.08    .598 No_date    2:27    20.04
01685>        [CN= 64.6: N= 3.00]
01686>        [Tp=  .80:DT= 1.00]
01687> 006:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01688>      ADD HYD            01:503              9.94    .247 No_date    2:22    19.11
01689>                       + 02:RC2            92.87   1.904 No_date    3:56    28.70
01690>                       + 04:502            10.41    .274 No_date    2:10    17.56
01691>                       + 05:505            24.08    .598 No_date    2:27    20.04
01692>        [DT= 1.00]  SUM=  06:502+503+50    137.30   2.449 No_date    3:28    25.64
01693> 006:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01694>      CALIB NASHYD       01:506              2.81    .067 No_date    1:57    13.23
01695>        [CN= 49.9: N= 3.00]
01696>        [Tp=  .44:DT= 1.00]
01697> 006:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01698>      ADD HYD            01:506              2.81    .067 No_date    1:57    13.23
01699>                       + 06:502+503+50    137.30   2.449 No_date    3:28    25.64
01700>        [DT= 1.00]  SUM=  02:RC+506        140.11   2.467 No_date    3:27    25.39
01701> 006:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01702>      ROUTE CHANNEL   -> 02:RC+506        140.11   2.467 No_date    3:27    25.39
01703>        [RDT= 1.00] out<- 04:RC3           140.11   2.467 No_date    3:30    25.39
01704>        [L/S/n=  200./1,000/.030]
01705>        [Vmax=  .948:Dmax=  .861]
01706> 006:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01707>      CALIB NASHYD       01:507              5.22    .107 No_date    2:06    12.92
01708>        [CN= 49.0: N= 3.00]
01709>        [Tp=  .54:DT= 1.00]
01710> 006:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01711>      ADD HYD            01:507              5.22    .107 No_date    2:06    12.92
01712>                       + 04:RC3            140.11   2.467 No_date    3:30    25.39
01713>        [DT= 1.00]  SUM=  02:507+RC        145.33   2.506 No_date    3:27    24.94
01714> 006:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01715>      CALIB NASHYD       01:508             26.52    .446 No_date    2:38    15.17
01716>        [CN= 54.9: N= 3.00]
01717>        [Tp=  .93:DT= 1.00]
01718> 006:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01719>      ADD HYD            01:508             26.52    .446 No_date    2:38    15.17
01720>                       + 02:507+RC        145.33   2.506 No_date    3:27    24.94
01721>        [DT= 1.00]  SUM=  09:1000          171.85   2.880 No_date    3:10    23.44
01722> #          FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
01723> 006:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01724>      CALIB NASHYD       01:103              8.70    .247 No_date    2:01    16.64
01725>        [CN= 59.2: N= 3.00]
01726>        [Tp=  .48:DT= 1.00]
01727> 006:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01728>      ADD HYD            01:103              8.70    .247 No_date    2:01    16.64
01729>                       + 03:To1023         12.14    .107 No_date    2:34    27.92
01730>        [DT= 1.00]  SUM=  02:1023           20.84    .339 No_date    2:08    23.22
01731> 006:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01732>      CALIB NASHYD       01:205              1.41    .051 No_date    1:37    12.96
01733>        [CN= 51.1: N= 3.00]
01734>        [Tp=  .20:DT= 1.00]
01735> 006:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01736>      ADD HYD            01:205              1.41    .051 No_date    1:37    12.96
01737>                       + 02:1023           20.84    .339 No_date    2:08    23.22
01738>        [DT= 1.00]  SUM=  03:802            22.25    .362 No_date    2:06    22.57
01739> 006:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01740>      CALIB STANDHYD     01:201              18.41   3.569 No_date    1:21    38.89
01741>        [XIMP=.43:TIMP=.56]
01742>        [LOSS= 2 :CN= 49.0]
01743>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
01744>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
01745> 006:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01746>      ADD HYD            01:201              18.41   3.569 No_date    1:21    38.89
01747>                       + 03:802            22.25    .362 No_date    2:06    22.57
01748>        [DT= 1.00]  SUM=  02:803            40.66   3.596 No_date    1:21    29.96
01749> 006:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01750>      CALIB NASHYD       01:202              1.10    .032 No_date    1:44    12.33
01751>        [CN= 55.0: N= 3.00]
01752>        [Tp=  .25:DT= 1.00]
01753> 006:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01754>      ADD HYD            01:202              1.10    .032 No_date    1:44    12.33
01755>                       + 02:803            40.66   3.596 No_date    1:21    29.96
01756>        [DT= 1.00]  SUM=  03:804            41.76   3.600 No_date    1:21    29.49
01757> 006:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01758>      CALIB NASHYD       01:1021             4.66    .089 No_date    2:26    15.32
01759>        [CN= 55.3: N= 3.00]
01760>        [Tp=  .78:DT= 1.00]
01761> 006:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01762>      COMPUTE DUALHYD     01:1021             4.66    .089 No_date    2:26    15.32
01763>          Major System /  04:To1000           1.20    .043 No_date    2:26    15.32
01764>          Minor System \  03:To810            3.46    .046 No_date    1:46    15.32
01765> 006:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01766>      ADD HYD            02:To810            3.46    .046 No_date    1:46    15.32
01767>                       + 03:804            41.76   3.600 No_date    1:21    29.49
01768>        [DT= 1.00]  SUM=  05:810            45.22   3.602 No_date    1:21    28.41
01769> #                     MAIR MILLS VILLAGE SWM FACILITY
01770> 006:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01771>      ROUTE RESERVOIR -> 05:810            45.22   3.602 No_date    1:21    28.41
01772>        [RDT= 1.00] out<- 02:1026          45.22    .483 No_date    3:01    28.41
01773>                  overflow <= 03:1026OVF     .00    .000 No_date    0:00      .00
01774>        [MxStoUsed=.6577E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01775> 006:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01776>      ADD HYD            02:1026             45.22    .483 No_date    3:01    28.41
01777>                       + 03:1026OVF           .00    .000 No_date    0:00      .00
01778>        [DT= 1.00]  SUM=  05:Pond1026ou      45.22    .483 No_date    3:01    28.41
01779> #            TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
01780> 006:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01781>      DIVERT HYD         -> 05:Pond1026ou    45.22    .483 No_date    3:01    28.41
01782>                diverted <= 02:To807         22.53    .040 No_date    3:01    28.41
01783>                diverted <= 07:To809         22.69    .443 No_date    3:01    28.41
01784>                diverted <= 03:To1025          .00    .000 No_date    0:00      .00
01785> #                          FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
01786> 006:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01787>      ADD HYD            09:1000           171.85   2.880 No_date    3:10    23.44
01788>                       + 04:To1000           1.20    .043 No_date    2:26    15.32
01789>        [DT= 1.00]  SUM=  05:Node 2         173.05   2.902 No_date    3:07    23.38
01790> 006:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01791>      CALIB NASHYD       01:207              1.22    .065 No_date    1:31    15.32
01792>        [CN= 55.3: N= 3.00]
01793>        [Tp=  .13:DT= 1.00]
01794> #                               FLOWS TO OUTLET B
01795> 006:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01796>      ADD HYD            01:207              1.22    .065 No_date    1:31    15.32
01797>                       + 02:To807           22.53    .040 No_date    3:01    28.41
01798>        [DT= 1.00]  SUM=  06:807            23.75    .104 No_date    1:32    27.74
01799> 006:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01800>      ADD HYD            06:807              23.75    .104 No_date    1:32    27.74
01801>                       + 10:To806           13.88    .020 No_date    2:34    27.92
01802>        [DT= 1.00]  SUM=  01:806            37.63    .124 No_date    1:32    27.81
01803> #                                FLOWS FROM TENTH LINE
01804> 006:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01805>      CALIB STANDHYD     08:601              .22     .038 No_date    1:21    32.29
01806>        [XIMP=.35:TIMP=.35]
01807>        [LOSS= 2 :CN= 49.0]
01808>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
01809>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=    .0]
01810> 006:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01811>      CALIB STANDHYD     09:602              1.15    .136 No_date    1:27    32.29
01812>        [XIMP=.35:TIMP=.35]
01813>        [LOSS= 2 :CN= 49.0]
01814>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
01815>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=    .0]
01816> #                 FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
01817> 006:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01818>      ADD HYD            05:Node 2         173.05   2.902 No_date    3:07    23.38
01819>                       + 03:To1025           .00    .000 No_date    0:00      .00
01820>                       + 07:To809          22.69    .443 No_date    3:01    28.41
01821>                       + 08:601              .22    .038 No_date    1:21    32.29
01822>                       + 09:602             1.15    .136 No_date    1:27    32.29
01823>        [DT= 1.00]  SUM=  02:809/Node3     197.11   3.358 No_date    3:06    24.02
01824> #                    FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
01825> 006:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01826>      ADD HYD            02:809/Node3     197.11   3.358 No_date    3:06    24.02
01827>                       + 01:806            37.63    .124 No_date    1:32    27.81
01828>        [DT= 1.00]  SUM=  04:Node4         234.74   3.426 No_date    3:05    24.63
01829>   ** END OF RUN :   6
01830>
01831> ************************************************************************
01832>
01833>
01834>
01835>
01836>
01837>  RUN:COMMAND#
01838>  007:0001-------------------------------------------------------------------
01839>      START
01840>        [TZERO =     .00 hrs on         0]
01841>        [METOUT=    2      (1=imperial, 2=metric output)]
01842>        [NSTORM=    1 ]
01843>        [NRUN   =   7 ]
01844> #***********************************************************************
01845> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
01846> #  Date        : 2014 08 28
01847> #  Modified    :
01848> #  Modeller    : [A. French]
01849> #  Company     : C.F. Crozier & Associates Inc.
01850> #  License #   :  3737016
01851> #***********************************************************************
01852> #***********************************************************************
01853>  007:0002-------------------------------------------------------------------
01854>      READ STORM
01855>       Filename = STORM.001
01856>      Comment  =
01857>       [SDT= 5.00:SDUR=   4.00:PTOT=  78.22]
01858> #        FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
01859>  007:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01860>      CALIB NASHYD       01:300              4.55    .182 No_date    2:20    30.29
01861>        [CN= 71.0: N= 3.00]
01862>        [Tp=  .74:DT= 5.00]
01863>  007:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01864>      ROUTE CHANNEL   -> 01:300              4.55    .182 No_date    2:20    30.29
01865>        [RDT= 1.00] out<- 02:701             4.55    .146 No_date    2:42    30.29
01866>        [L/S/n=  450./ .050/.040]
01867>        [Vmax=  .240:Dmax=  .246]
01868>  007:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01869>      CALIB NASHYD       01:301              5.97    .267 No_date    2:11    30.29
01870>        [CN= 71.0: N= 3.00]
01871>        [Tp=  .63:DT= 1.00]
01872>  007:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01873>      ADD HYD            01:301              5.97    .267 No_date    2:11    30.29
01874>                       + 02:701             4.55    .146 No_date    2:42    30.29
01875>        [DT= 1.00]  SUM=  03:901            10.52    .391 No_date    2:21    30.29
01876>  007:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01877>      ROUTE CHANNEL   -> 03:901            10.52    .391 No_date    2:21    30.29
01878>        [RDT= 1.00] out<- 01:702           10.52    .335 No_date    2:37    30.29
01879>        [L/S/n=  300./ .050/.060]
01880>        [Vmax=  .221:Dmax=  .461]
01881>  007:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01882>      ROUTE RESERVOIR -> 01:702            10.52    .335 No_date    2:37    30.29
01883>        [RDT= 1.00] out<- 02:501           10.52    .173 No_date    4:11    30.29
01884>                  overflow <= 03:501OVF      .00    .000 No_date    0:00      .00
01885>        [MxStoUsed=.8506E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01886>  007:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01887>      CALIB STANDHYD     01:302             16.39   1.730 No_date    1:34    40.53
01888>        [XIMP=.20:TIMP=.40]
01889>        [LOSS= 2 :CN= 65.2]
01890>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
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01891>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
01892>  007:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01893>      ADD HYD             01:302            16.39     1.730 No_date    1:34   40.53
01894>                        + 02:501            10.52      .173 No_date    4:11   30.29
01895>                        + 03:501OVF          .00      .000 No_date    0:00     .00
01896>       [DT= 1.00]  SUM=  04:902            26.91     1.734 No_date    1:34   36.53
01897>  007:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01898>      CALIB STANDHYD      01:303             2.34      .334 No_date    1:27   44.63
01899>       [XIMP=.25:TIMP=.50]
01900>       [LOSS= 2 :CN= 65.2]
01901>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01902>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
01903>  007:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01904>      ADD HYD             01:303             2.34      .334 No_date    1:27   44.63
01905>                        + 04:902            26.91     1.734 No_date    1:34   36.53
01906>       [DT= 1.00]  SUM=  02:903            29.25     2.031 No_date    1:33   37.18
01907>  007:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01908>      CALIB NASHYD        01:304             2.90      .188 No_date    1:43   26.72
01909>       [CN= 66.6: N= 3.00]
01910>       [Tp=  .28:DT= 1.00]
01911>  007:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01912>      ADD HYD             01:304             2.90      .188 No_date    1:43   26.72
01913>                        + 02:903            29.25     2.031 No_date    1:33   37.18
01914>       [DT= 1.00]  SUM=  03:904            32.15     2.188 No_date    1:34   36.23
01915>  007:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01916>      CALIB STANDHYD      01:305              .31      .035 No_date    1:20   35.88
01917>       [XIMP=.20:TIMP=.20]
01918>       [LOSS= 2 :CN= 65.2]
01919>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
01920>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
01921>  007:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01922>      ADD HYD             01:305              .31      .035 No_date    1:20   35.88
01923>                        + 03:904            32.15     2.188 No_date    1:34   36.23
01924>       [DT= 1.00]  SUM=  02:905            32.46     2.200 No_date    1:34   36.23
01925> #                    MAIR MILLS ESTATES SWM FACILITY
01926>  007:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01927>      ROUTE RESERVOIR -> 02:905            32.46     2.200 No_date    1:34   36.23
01928>       [RDT= 1.00] out<- 03:502            32.46     .210 No_date     4:34   36.23
01929>                overflow <= 04:502OVF        .00      .000 No_date     0:00     .00
01930>       [MxStoUsed=.8559E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01931>  007:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01932>      CALIB NASHYD        01:400             5.70      .108 No_date    2:21   14.53
01933>       [CN= 50.2: N= 3.00]
01934>       [Tp=  .70:DT= 1.00]
01935>  007:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01936>      ADD HYD             01:400             5.70      .108 No_date    2:21   14.53
01937>                        + 03:502            32.46      .210 No_date    4:34   36.23
01938>                        + 04:502OVF          .00      .000 No_date    0:00     .00
01939>       [DT= 1.00]  SUM=  02:906            38.16      .258 No_date    2:21   32.99
01940> #       FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
01941>  007:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01942>      DIVERT HYD      -> 02:906            38.16      .258 No_date    2:21   32.99
01943>           diverted <= 10:To806            12.27      .020 No_date    2:21   32.99
01944>           diverted <= 03:To1023           12.95      .119 No_date    2:21   32.99
01945>           diverted <= 01:To1022           12.95      .119 No_date    2:21   32.99
01946> #         FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
01947> #                          FLOWS TO NODE 1
01948>  007:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01949>      CALIB NASHYD        01:501            85.82     2.252 No_date    3:37   35.89
01950>       [CN= 70.8: N= 3.00]
01951>       [Tp= 1.72:DT= 1.00]
01952>  007:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01953>      ROUTE CHANNEL   -> 01:501            85.82     2.252 No_date    3:37   35.89
01954>       [RDT= 1.00] out<- 02:RC1            85.82     2.231 No_date    3:51   35.89
01955>       [L/S/n=  350./1.500/.030]
01956>       {Vmax=  .504:Dmax=  .953}
01957>  007:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01958>      CALIB NASHYD        01:504             7.05      .175 No_date    2:07   16.12
01959>       [CN= 51.8: N= 3.00]
01960>       [Tp=  .55:DT= 1.00]
01961>  007:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01962>      ADD HYD             01:504             7.05      .175 No_date    2:07   16.12
01963>                        + 02:RC1            85.82     2.231 No_date    3:51   35.89
01964>       [DT= 1.00]  SUM=  04:501+504        92.87     2.285 No_date    3:49   34.40
01965>  007:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01966>      ROUTE CHANNEL   -> 04:501+504        92.87     2.285 No_date    3:49   34.40
01967>       [RDT= 1.00] out<- 02:RC2            92.87     2.281 No_date    3:55   34.40
01968>       [L/S/n=  425./1.250/.030]
01969>       {Vmax= 1.139:Dmax=  .856}
01970>  007:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01971>      CALIB NASHYD        01:503             9.94      .301 No_date    2:22   23.32
01972>       [CN= 63.3: N= 3.00]
01973>       [Tp=  .74:DT= 1.00]
01974>  007:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01975>      CALIB NASHYD        04:502            10.41      .335 No_date    2:10   21.53
01976>       [CN= 61.2: N= 3.00]
01977>       [Tp=  .59:DT= 1.00]
01978>  007:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01979>      CALIB NASHYD        05:505            24.08      .725 No_date    2:26   24.39
01980>       [CN= 64.6: N= 3.00]
01981>       [Tp=  .80:DT= 1.00]
01982>  007:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01983>      ADD HYD             01:503             9.94      .301 No_date    2:22   23.32
01984>                        + 02:RC2            92.87     2.281 No_date    3:55   34.40
01985>                        + 04:502            10.41      .335 No_date    2:10   21.53
01986>                        + 05:505            24.08      .725 No_date    2:26   24.39
01987>       [DT= 1.00]  SUM=  06:502+503+50    137.30     2.964 No_date    3:23   30.87
01988>  007:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01989>      CALIB NASHYD        01:506             2.81      .082 No_date    1:57   16.25
01990>       [CN= 49.9: N= 3.00]
01991>       [Tp=  .44:DT= 1.00]
01992>  007:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01993>      ADD HYD             01:506             2.81      .082 No_date    1:57   16.25
01994>                        + 06:502+503+50    137.30     2.964 No_date    3:23   30.87
01995>       [DT= 1.00]  SUM=  02:RC+506         140.11     2.988 No_date    3:23   30.57
01996>  007:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01997>      ROUTE CHANNEL   -> 02:RC+506         140.11     2.988 No_date    3:23   30.57
01998>       [RDT= 1.00] out<- 04:RC3            140.11     2.987 No_date    3:26   30.57
01999>       [L/S/n=  200./1.000/.030]
02000>       {Vmax=  .967:Dmax=  .905}
02001>  007:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02002>      CALIB NASHYD        01:507             5.22      .130 No_date    2:06   15.88
02003>       [CN= 49.0: N= 3.00]
02004>       [Tp=  .54:DT= 1.00]
02005>  007:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02006>      ADD HYD             01:507             5.22      .130 No_date    2:06   15.88
02007>                        + 04:RC3            140.11     2.987 No_date    3:26   30.57
02008>       [DT= 1.00]  SUM=  02:507+RC         145.33     3.038 No_date    3:23   30.05
02009>  007:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02010>      CALIB NASHYD        01:508            26.52      .545 No_date    2:38   18.61
02011>       [CN= 54.9: N= 3.00]
02012>       [Tp=  .93:DT= 1.00]
02013>  007:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02014>      ADD HYD             01:508            26.52      .545 No_date    2:38   18.61
02015>                        + 02:507+RC         145.33     3.038 No_date    3:23   30.05
02016>       [DT= 1.00]  SUM=  09:1000           171.85     3.495 No_date    3:12   28.28
02017> #              FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
02018>  007:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02019>      CALIB NASHYD        01:103             8.70      .302 No_date    2:01   20.43
02020>       [CN= 59.2: N= 3.00]
02021>       [Tp=  .46:DT= 1.00]
02022>  007:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02023>      ADD HYD             01:103             8.70      .302 No_date    2:01   20.43
02024>                        + 03:To1023          12.95      .119 No_date    2:21   32.99
02025>       [DT= 1.00]  SUM=  02:1023            21.65      .411 No_date    2:05   27.94
02026>  007:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02027>      CALIB NASHYD        01:205             1.41      .062 No_date    1:37   16.02
02028>       [CN= 51.1: N= 3.00]
02029>       [Tp=  .20:DT= 1.00]
02030>  007:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02031>      ADD HYD             01:205             1.41      .062 No_date    1:37   16.02
02032>                        + 02:1023           21.65      .411 No_date    2:05   27.94
02033>       [DT= 1.00]  SUM=  03:802            23.06      .443 No_date    2:02   27.21
02034>  007:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02035>      CALIB STANDHYD      01:201             18.41     3.985 No_date    1:21   44.32
02036>       [XIMP=.43:TIMP=.56]
02037>       [LOSS= 2 :CN= 49.0]
02038>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
02039>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02040>  007:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02041>      ADD HYD             01:201             18.41     3.985 No_date    1:21   44.32
02042>                        + 03:802            23.06      .443 No_date    2:02   27.21
02043>       [DT= 1.00]  SUM=  02:803            41.47     4.023 No_date    1:21   34.81
02044>  007:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02045>      CALIB NASHYD        01:202             1.10      .040 No_date    1:43   15.54
02046>       [CN= 55.0: N= 3.00]
02047>       [Tp=  .25:DT= 1.00]
02048>  007:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02049>      ADD HYD             01:202             1.10      .040 No_date    1:43   15.54
02050>                        + 02:803            41.47     4.023 No_date    1:21   34.81
02051>       [DT= 1.00]  SUM=  03:804            42.57     4.028 No_date    1:21   34.31
02052>  007:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02053>      CALIB NASHYD        01:1021             4.66      .109 No_date    2:26   18.79
02054>       [CN= 55.3: N= 3.00]
02055>       [Tp=  .78:DT= 1.00]
02056>  007:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02057>      COMPUTE DUALHYD     01:1021             4.66      .109 No_date    2:26   18.79
02058>         Major System /   04:To1000            1.63      .063 No_date    2:26   18.79
02059>         Minor System \   02:To810             3.03      .046 No_date    1:42   18.79
02060>  007:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02061>      ADD HYD             02:To810            3.03      .046 No_date    1:42   18.79
02062>                        + 03:804            42.57     4.028 No_date    1:21   34.31
02063>       [DT= 1.00]  SUM=  05:810            45.59     4.031 No_date    1:21   33.28
02064> #                    MAIR MILLS VILLAGE SWM FACILITY
02065>  007:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02066>      ROUTE RESERVOIR -> 05:810            45.59     4.031 No_date    1:21   33.28
02067>       [RDT= 1.00] out<- 02:1026           45.59      .601 No_date    2:53   33.28
02068>              overflow <= 03:1026OVF         .00      .000 No_date    0:00     .00
02069>       (MxStoUsed=.7219E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02070>  007:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02071>      ADD HYD             02:1026            45.59      .601 No_date    2:53   33.28
02072>                        + 03:1026OVF          .00      .000 No_date    0:00     .00
02073>       [DT= 1.00]  SUM=  05:Pond1026ou      45.59      .601 No_date    2:53   33.28
02074> #              TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
02075>  007:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02076>      DIVERT HYD      -> 05:Pond1026ou    45.59      .601 No_date    2:53   33.28
02077>           diverted <= 02:To807           20.30      .040 No_date    2:53   33.28
02078>           diverted <= 07:To809           25.30      .560 No_date    2:53   33.28
02079>           diverted <= 03:To1025            .00      .001 No_date    2:53   33.28
02080> #                          FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
02081>  007:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02082>      ADD HYD             09:1000          171.85     3.495 No_date    3:12   28.28
02083>                        + 04:To1000           1.63      .063 No_date    2:26   18.79
02084>       [DT= 1.00]  SUM=  05:Node 2         173.48     3.530 No_date    3:10   28.19
02085>  007:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02086>      CALIB NASHYD        01:207             1.22      .079 No_date    1:30   18.79
02087>       [CN= 55.3: N= 3.00]
02088>       [Tp=  .13:DT= 1.00]
02089> #                                FLOWS TO OUTLET B
02090>  007:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02091>      ADD HYD             01:207             1.22      .079 No_date    1:30   18.79
02092>                        + 02:To807           20.30      .040 No_date    2:53   33.28
02093>       [DT= 1.00]  SUM=  06:807            21.52      .119 No_date    1:30   32.46
02094>  007:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02095>      ADD HYD             06:807            21.52      .119 No_date    1:30   32.46
02096>                        + 10:To806           12.27      .020 No_date    2:21   32.99
02097>       [DT= 1.00]  SUM=  01:806            33.78      .139 No_date    1:30   32.65
02098> #                          FLOWS FROM TENTH LINE
02099>  007:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02100>      CALIB STANDHYD      08:601              .22      .043 No_date    1:21   37.00
02101>       [XIMP=.35:TIMP=.35]
02102>       [LOSS= 2 :CN= 49.0]
02103>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02104>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
02105>  007:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02106>      CALIB STANDHYD      09:602             1.15      .154 No_date    1:27   37.00
02107>       [XIMP=.35:TIMP=.35]
02108>       [LOSS= 2 :CN= 49.0]
02109>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02110>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
02111> #                FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
02112>  007:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02113>      ADD HYD             05:Node 2        173.48     3.530 No_date    3:10   28.19
02114>                        + 03:To1025           .00      .001 No_date    2:53   33.28
02115>                        + 07:To809          25.30      .560 No_date    2:53   33.28
02116>                        + 08:601              .22      .043 No_date    1:21   37.00
02117>                        + 09:602             1.15      .154 No_date    1:27   37.00
02118>       [DT= 1.00]  SUM=  02:809/Node3     200.15     4.099 No_date    3:07   28.90
02119> #                  FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
02120>  007:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02121>      ADD HYD             02:809/Node3     200.15     4.099 No_date    3:07   28.90
02122>                        + 01:806            33.78      .139 No_date    1:30   32.65
02123>       [DT= 1.00]  SUM=  04:Node4          233.93     4.169 No_date    3:07   29.44
02124>  ** END OF RUN :   7
02125>
02126> ************************************************************************
02127>
02128>
02129>
02130>
02131>
02132>  RUN:COMMAND#
02133>  008:0001---------------------------------------------------------------
02134>      START
02135>       [TZERO =    .00 hrs on       0]
02136>       [METOUT=   2    (1=imperial, 2=metric output)]
02137>       [NSTORM=   1 ]
02138>       [NRUN  =   8 ]
02139> #*********************************************************************
02140> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
02141> #  Date        : 2014 08 28
02142> #  Modified    :
02143> #  Modeller    : [A. French]
02144> #  Company     : C.F. Crozier & Associates Inc.
02145> #  License #   : 3737016
02146> #*********************************************************************
02147> #*********************************************************************
02148>  008:0002---------------------------------------------------------------
02149>      READ STORM
02150>       Filename = STORM.001
02151>       Comment  =
02152>       [SDT= 1.00:SDUR=  24.00:PTOT=  45.60]
02153> #         FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02154>  008:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02155>      CALIB NASHYD        01:300             4.55      .050 No_date   12:55   11.42
02156>       [CN= 71.0: N= 3.00]
02157>       [Tp=  .74:DT= 5.00]
02158>  008:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02159>      ROUTE CHANNEL   -> 01:300             4.55      .050 No_date   12:55   11.42
02160>       [RDT= 1.00] out<- 02:701             4.55      .031 No_date   13:25   11.42
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2yr SCS

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02161>       [L/S/n=  450./ .050/.040]
02162>       |Vmax=  .147:Dmax=  .129]
02163>  008:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02164>       CALIB NASHYD      01:301          5.97     .074 No_date   12:47   11.42
02165>         [CN= 71.0: N= 3.00]
02166>         [Tp=  .63:DT= 1.00]
02167>  008:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02168>       ADD HYD           01:301          5.97     .074 No_date   12:47   11.42
02169>                       + 02:701          4.55     .031 No_date   13:25   11.42
02170>         [DT= 1.00]  SUM=  03:901         10.52     .097 No_date   12:56   11.42
02171>  008:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02172>       ROUTE CHANNEL   -> 03:901         10.52     .097 No_date   12:56   11.42
02173>         [RDT= 1.00] out<- 01:702         10.52     .069 No_date   13:20   11.42
02174>         [L/S/n=  300./ .050/.060]
02175>         [Vmax=  .117:Dmax=  .267]
02176>  008:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02177>       ROUTE RESERVOIR -> 01:702         10.52     .069 No_date   13:20   11.42
02178>         [RDT= 1.00] out<- 02:501         10.52     .067 No_date   13:34   11.42
02179>                overflow <= 03:501OVF       .00     .000 No_date    0:00     .00
02180>       [MxStoUsed=.4120E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02181>  008:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02182>       CALIB STANDHYD    01:302         16.39     .446 No_date   12:22   18.58
02183>         [XIMP=.20:TIMP=.40]
02184>         [LOSS= 2 :CN= 65.2]
02185>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02186>         [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 700.:MNI=.013:SCI=   .0]
02187>  008:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02188>       ADD HYD           01:302         16.39     .446 No_date   12:22   18.58
02189>                       + 02:501         10.52     .067 No_date   13:34   11.42
02190>                       + 03:501OVF        .00     .000 No_date    0:00     .00
02191>         [DT= 1.00]  SUM=  04:902         26.91     .452 No_date   12:22   15.78
02192>  008:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02193>       CALIB STANDHYD    01:303          2.34     .093 No_date   12:16   21.13
02194>         [XIMP=.25:TIMP=.50]
02195>         [LOSS= 2 :CN= 65.2]
02196>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02197>         [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 300.:MNI=.013:SCI=   .0]
02198>  008:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02199>       ADD HYD           01:303          2.34     .093 No_date   12:16   21.13
02200>                       + 04:902         26.91     .452 No_date   12:22   15.78
02201>         [DT= 1.00]  SUM=  02:903         29.25     .532 No_date   12:21   16.21
02202>  008:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02203>       CALIB NASHYD      01:304          2.90     .053 No_date   12:24    9.81
02204>         [CN= 66.6: N= 3.00]
02205>         [Tp=  .28:DT= 1.00]
02206>  008:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02207>       ADD HYD           01:304          2.90     .053 No_date   12:24    9.81
02208>                       + 02:903         29.25     .532 No_date   12:21   16.21
02209>         [DT= 1.00]  SUM=  03:904         32.15     .584 No_date   12:21   15.63
02210>  008:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02211>       CALIB STANDHYD    01:305           .31     .009 No_date   12:12   16.31
02212>         [XIMP=.20:TIMP=.20]
02213>         [LOSS= 2 :CN= 65.2]
02214>         [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
02215>         [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
02216>  008:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02217>       ADD HYD           01:305           .31     .009 No_date   12:12   16.31
02218>                       + 03:904         32.15     .584 No_date   12:21   15.63
02219>         [DT= 1.00]  SUM=  02:905         32.46     .586 No_date   12:21   15.64
02220> #                      MAIR MILLS ESTATES SWM FACILITY
02221>  008:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02222>       ROUTE RESERVOIR -> 02:905         32.46     .586 No_date   12:21   15.64
02223>         [RDT= 1.00] out<- 03:502         32.46     .060 No_date   17:13   15.64
02224>                overflow <= 04:502OVF       .00     .000 No_date    0:00     .00
02225>       [MxStoUsed=.3135E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02226>  008:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02227>       CALIB NASHYD      01:400          5.70     .023 No_date   12:56    4.41
02228>         [CN= 50.2: N= 3.00]
02229>         [Tp=  .70:DT= 1.00]
02230>  008:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02231>       ADD HYD           01:400          5.70     .023 No_date   12:56    4.41
02232>                       + 03:502         32.46     .060 No_date   17:13   15.64
02233>                       + 04:502OVF        .00     .000 No_date    0:00     .00
02234>         [DT= 1.00]  SUM=  02:906         38.16     .063 No_date   17:08   13.96
02235> #       FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
02236>  008:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02237>       DIVERT HYD      -> 02:906         38.16     .063 No_date   17:08   13.96
02238>              diverted <= 10:To806       26.40     .020 No_date   17:08   13.96
02239>              diverted <= 03:To1023       5.88     .022 No_date   17:08   13.96
02240>              diverted <= 01:To1022       5.88     .022 No_date   17:08   13.96
02241> #       FLOWS FROM TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
02242> #                            FLOWS TO NODE 1
02243>  008:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02244>       CALIB NASHYD      01:501         85.82     .593 No_date   14:09   13.58
02245>         [CN= 78.8: N= 3.00]
02246>         [Tp= 1.72:DT= 1.00]
02247>  008:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02248>       ROUTE CHANNEL   -> 01:501         85.82     .593 No_date   14:09   13.58
02249>         [RDT= 1.00] out<- 02:RC1         85.82     .592 No_date   14:19   13.58
02250>         [L/S/n=  350./1.500/.030]
02251>         [Vmax= 1.169:Dmax=  .733]
02252>  008:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02253>       CALIB NASHYD      01:504          7.05     .041 No_date   12:44    5.19
02254>         [CN= 51.8: N= 3.00]
02255>         [Tp=  .55:DT= 1.00]
02256>  008:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02257>       ADD HYD           01:504          7.05     .041 No_date   12:44    5.19
02258>                       + 02:RC1         85.82     .592 No_date   14:19   13.58
02259>         [DT= 1.00]  SUM=  04:501+504     92.87     .603 No_date   14:18   12.94
02260>  008:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02261>       ROUTE CHANNEL   -> 04:501+504     92.87     .603 No_date   14:18   12.94
02262>         [RDT= 1.00] out<- 02:RC2         92.87     .601 No_date   14:24   12.94
02263>         [L/S/n=  425./1.250/.030]
02264>         [Vmax= 1.182:Dmax=  .611]
02265>  008:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02266>       CALIB NASHYD      01:503          9.94     .075 No_date   12:57    8.09
02267>         [CN= 63.3: N= 3.00]
02268>         [Tp=  .74:DT= 1.00]
02269>  008:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02270>       CALIB NASHYD      04:502         10.41     .082 No_date   12:46    7.26
02271>         [CN= 61.2: N= 3.00]
02272>         [Tp=  .59:DT= 1.00]
02273>  008:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02274>       CALIB NASHYD      05:505         24.08     .182 No_date   13:01    8.57
02275>         [CN= 64.6: N= 3.00]
02276>         [Tp=  .80:DT= 1.00]
02277>  008:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02278>       ADD HYD           01:503          9.94     .075 No_date   12:57    8.09
02279>                       + 02:RC2         92.87     .601 No_date   14:24   12.94
02280>                       + 04:502         10.41     .082 No_date   12:46    7.26
02281>                       + 05:505         24.08     .182 No_date   13:01    8.57
02282>         [DT= 1.00]  SUM=  06:502+503+50  137.30     .772 No_date   13:29   11.40
02283>  008:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02284>       CALIB NASHYD      01:506          2.81     .021 No_date   12:35    5.52
02285>         [CN= 49.9: N= 3.00]
02286>         [Tp=  .44:DT= 1.00]
02287>  008:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02288>       ADD HYD           01:506          2.81     .021 No_date   12:35    5.52
02289>                       + 06:502+503+50  137.30     .772 No_date   13:29   11.40
02290>         [DT= 1.00]  SUM=  02:RC+506     140.11     .780 No_date   13:28   11.28
02291>  008:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02292>       ROUTE CHANNEL   -> 02:RC+506     140.11     .780 No_date   13:28   11.28
02293>         [RDT= 1.00] out<- 04:RC3         140.11     .778 No_date   13:32   11.28
02294>         [L/S/n=  200./1.000/.030]
02295>         [Vmax=  .952:Dmax=  .660]
02296>  008:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02297>       CALIB NASHYD      01:507          5.22     .033 No_date   12:42    5.40
02298>         [CN= 49.0: N= 3.00]
02299>         [Tp=  .54:DT= 1.00]
02300>  008:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02301>       ADD HYD           01:507          5.22     .033 No_date   12:42    5.40
02302>                       + 04:RC3        140.11     .778 No_date   13:32   11.28
02303>         [DT= 1.00]  SUM=  02:507+RC     145.33     .795 No_date   13:30   11.07
02304>  008:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02305>       CALIB NASHYD      01:508         26.52     .131 No_date   13:10    6.35
02306>         [CN= 54.9: N= 3.00]
02307>         [Tp=  .93:DT= 1.00]
02308>  008:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02309>       ADD HYD           01:508         26.52     .131 No_date   13:10    6.35
02310>                       + 02:507+RC     145.33     .795 No_date   13:30   11.07
02311>         [DT= 1.00]  SUM=  09:1000       171.85     .919 No_date   13:27   10.34
02312> #              FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
02313>  008:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02314>       CALIB NASHYD      01:103          8.70     .075 No_date   12:38    6.87
02315>         [CN= 59.2: N= 3.00]
02316>         [Tp=  .48:DT= 1.00]
02317>  008:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02318>       ADD HYD           01:103          8.70     .075 No_date   12:38    6.87
02319>                       + 03:To1023       5.80     .022 No_date   17:08   13.96
02320>         [DT= 1.00]  SUM=  02:1023        14.58     .082 No_date   12:40    9.73
02321>  008:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02322>       CALIB NASHYD      01:205          1.41     .016 No_date   12:19    5.21
02323>         [CN= 51.1: N= 3.00]
02324>         [Tp=  .20:DT= 1.00]
02325>  008:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02326>       ADD HYD           01:205          1.41     .016 No_date   12:19    5.21
02327>                       + 02:1023        14.58     .082 No_date   12:40    9.73
02328>         [DT= 1.00]  SUM=  03:802         15.99     .090 No_date   12:37    9.33
02329>  008:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02330>       CALIB STANDHYD    01:201          10.41     1.132 No_date   12:12   23.08
02331>         [XIMP=.43:TIMP=.56]
02332>         [LOSS= 2 :CN= 49.0]
02333>         [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
02334>         [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02335>  008:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02336>       ADD HYD           01:201          10.41     1.132 No_date   12:12   23.08
02337>                       + 03:802         15.99     .090 No_date   12:37    9.33
02338>         [DT= 1.00]  SUM=  02:803         34.40     1.174 No_date   12:13   16.69
02339>  008:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02340>       CALIB NASHYD      01:202          1.10     .008 No_date   12:24    4.39
02341>         [CN= 55.0: N= 3.00]
02342>         [Tp=  .25:DT= 1.00]
02343>  008:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02344>       ADD HYD           01:202          1.10     .008 No_date   12:24    4.39
02345>                       + 02:803         34.40     1.174 No_date   12:13   16.69
02346>         [DT= 1.00]  SUM=  03:804         35.50     1.179 No_date   12:13   16.31
02347>  008:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02348>       CALIB NASHYD      01:1021         4.66     .026 No_date   12:59    6.40
02349>         [CN= 55.3: N= 3.00]
02350>         [Tp=  .78:DT= 1.00]
02351>  008:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02352>       COMPUTE DUALHYD    01:1021         4.66     .026 No_date   12:59    6.40
02353>          Major System /  04:To1000        .00     .000 No_date    0:00     .00
02354>          Minor System \  02:To810         4.66     .026 No_date   12:59    6.40
02355>  008:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02356>       ADD HYD           02:To810         4.66     .026 No_date   12:59    6.40
02357>                       + 03:804         35.50     1.179 No_date   12:13   16.31
02358>         [DT= 1.00]  SUM=  05:810         40.16     1.186 No_date   12:13   15.16
02359> #                      MAIR MILLS VILLAGE SWM FACILITY
02360>  008:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02361>       ROUTE RESERVOIR -> 05:810         40.16     1.186 No_date   12:13   15.16
02362>         [RDT= 1.00] out<- 02:1026        40.16     .044 No_date   21:16   15.16
02363>                overflow <= 03:1026OVF      .08     .000 No_date    0:00     .00
02364>       [MxStoUsed=.4109E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02365>  008:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02366>       ADD HYD           02:1026         40.16     .044 No_date   21:16   15.16
02367>                       + 03:1026OVF        .00     .000 No_date    0:00     .00
02368>         [DT= 1.00]  SUM=  05:Pond1026ou   40.16     .044 No_date   21:16   15.16
02369> #            TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
02370>  008:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02371>       DIVERT HYD      -> 05:Pond1026ou   40.16     .044 No_date   21:16   15.16
02372>              diverted <= 02:To807       39.33     .040 No_date   21:16   15.16
02373>              diverted <= 07:To809         .83     .004 No_date   21:16   15.16
02374>              diverted <= 03:To1025        .00     .000 No_date    0:00     .00
02375> #                        FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
02376>  008:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02377>       ADD HYD           09:1000        171.85     .919 No_date   13:27   10.34
02378>                       + 04:To1000         .00     .000 No_date    0:00     .00
02379>         [DT= 1.00]  SUM=  05:Node 2      171.85     .919 No_date   13:27   10.34
02380>  008:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02381>       CALIB NASHYD      01:207          1.22     .022 No_date   12:15    6.40
02382>         [CN= 55.3: N= 3.00]
02383>         [Tp=  .13:DT= 1.00]
02384> #                              FLOWS TO OUTLET B
02385>  008:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02386>       ADD HYD           01:207          1.22     .022 No_date   12:15    6.40
02387>                       + 02:To807        39.33     .040 No_date   21:16   15.16
02388>         [DT= 1.00]  SUM=  06:807         40.55     .045 No_date   12:17   14.90
02389>  008:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02390>       ADD HYD           06:807         40.55     .045 No_date   12:17   14.90
02391>                       + 10:To806        26.40     .020 No_date   17:08   13.96
02392>         [DT= 1.00]  SUM=  01:806         66.95     .063 No_date   12:21   14.53
02393> #                        FLOWS FROM TENTH LINE
02394>  008:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02395>       CALIB STANDHYD    08:601          1.22     .012 No_date   12:13   10.77
02396>         [XIMP=.35:TIMP=.35]
02397>         [LOSS= 2 :CN= 49.0]
02398>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02399>         [Impervious   area: IAimp= 2.00:SLPI=  .50:LGI=  48.:MNI=.035:SCI=   .0]
02400>  008:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02401>       CALIB STANDHYD    09:602          1.15     .044 No_date   12:19   10.77
02402>         [XIMP=.35:TIMP=.35]
02403>         [LOSS= 2 :CN= 49.0]
02404>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02405>         [Impervious   area: IAimp= 2.00:SLPI=  .50:LGI= 250.:MNI=.035:SCI=   .0]
02406> #                    FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
02407>  008:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02408>       ADD HYD           05:Node 2      171.85     .919 No_date   13:27   10.34
02409>                       + 03:To1025         .00     .000 No_date    0:00     .00
02410>                       + 07:To809          .83     .004 No_date   21:16   15.16
02411>                       + 08:601            .22     .012 No_date   12:13   10.77
02412>                       + 09:602           1.15     .044 No_date   12:19   10.77
02413>         [DT= 1.00]  SUM=  02:809/Node3   174.05     .925 No_date   13:26   10.43
02414> #                    FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
02415>  008:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02416>       ADD HYD           02:809/Node3   174.05     .925 No_date   13:26   10.43
02417>                       + 01:806         66.95     .063 No_date   12:21   14.53
02418>         [DT= 1.00]  SUM=  04:Node4     241.00     .983 No_date   13:27   11.57
02419>  ** END OF RUN :   8
02420>
02421> ************************************************************************
02422>
02423>
02424>
02425>
02426>
02427>  RUN:COMMAND#
02428>  009:0001-----------------------------------------------------------------
02429>       START
02430>         [TZERO =     .00 hrs on        0]
```

```
02431>       [METOUT=   2    (1=imperial, 2=metric output)]
02432>       [NSTORM=   1 ]
02433>       [NRUN  =   9 ]
02434> #*******************************************************************************
02435> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
02436> #  Date         : 2014 08 28
02437> #  Modified     :
02438> #  Modeller     : [A. French]
02439> #  Company      : C.F. Crozier & Associates Inc.
02440> #  License #    : 3737016
02441> #*******************************************************************************
02442> #*******************************************************************************
02443> 009:0002----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02444>      READ STORM
02445>       Filename = STORM.001
02446>       Comment  =
02447>      [SDT= 1.00:SDUR=  24.00:PTOT=  62.40]
02448> #        FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02449> 009:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02450>      CALIB NASHYD       01:300              4.55     .091 No_date   12:50    20.45
02451>       [CN= 71.0: N= 3.00]
02452>       [Tp=  .74:DT= 5.00]
02453> 009:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02454>      ROUTE CHANNEL   -> 01:300              4.55     .091 No_date   12:50    20.45
02455>       [RDT= 1.00] out<- 02:701              4.55     .066 No_date   13:20    20.45
02456>       [L/S/n=  450./ .050/.040]
02457>       [Vmax=  .183:Dmax=  .174]
02458> 009:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02459>      CALIB NASHYD       01:301              5.97     .135 No_date   12:47    20.45
02460>       [CN= 71.0: N= 3.00]
02461>       [Tp=  .63:DT= 1.00]
02462> 009:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02463>      ADD HYD            01:301              5.97     .135 No_date   12:47    20.45
02464>                       + 02:701              4.55     .066 No_date   13:20    20.45
02465>       [DT= 1.00]  SUM=  03:901             10.52     .188 No_date   12:55    20.45
02466> 009:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02467>      ROUTE CHANNEL   -> 03:901             10.52     .188 No_date   12:55    20.45
02468>       [RDT= 1.00] out<- 01:702             10.52     .150 No_date   13:12    20.45
02469>       [L/S/n=  300./ .050/.060]
02470>       [Vmax=  .160:Dmax=  .347]
02471> 009:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02472>      ROUTE RESERVOIR -> 01:702            10.52     .150 No_date   13:12    20.45
02473>       [RDT= 1.00] out<- 02:501            10.52     .143 No_date   13:28    20.45
02474>              overflow <= 03:501OVF          .00     .000 No_date    0:00      .00
02475>       [MxStoUsed=.9899E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02476> 009:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02477>      CALIB STANDHYD     01:302             16.39     .787 No_date   12:21    29.34
02478>       [XIMP=.20:TIMP=.40]
02479>       [LOSS= 2 :CN= 65.2]
02480>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02481>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
02482> 009:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02483>      ADD HYD            01:302             16.39     .787 No_date   12:21    29.34
02484>                       + 02:501             10.52     .143 No_date   13:28    20.45
02485>                       + 03:501OVF            .00     .000 No_date    0:00      .00
02486>       [DT= 1.00]  SUM=  04:902             26.91     .808 No_date   12:21    25.87
02487> 009:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02488>      CALIB STANDHYD     01:303              2.34     .158 No_date   12:15    32.73
02489>       [XIMP=.25:TIMP=.50]
02490>       [LOSS= 2 :CN= 65.2]
02491>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02492>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
02493> 009:0012----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02494>      ADD HYD            01:303              2.34     .158 No_date   12:15    32.73
02495>                       + 04:902             26.91     .808 No_date   12:21    25.87
02496>       [DT= 1.00]  SUM=  02:903             29.25     .947 No_date   12:20    26.41
02497> 009:0013----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02498>      CALIB NASHYD       01:304              2.90     .099 No_date   12:23    17.83
02499>       [CN= 66.6: N= 3.00]
02500>       [Tp=  .28:DT= 1.00]
02501> 009:0014----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02502>      ADD HYD            01:304              2.90     .099 No_date   12:23    17.83
02503>                       + 02:903             29.25     .947 No_date   12:20    26.41
02504>       [DT= 1.00]  SUM=  03:904             32.15    1.042 No_date   12:20    25.64
02505> 009:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02506>      CALIB STANDHYD     01:305               .31     .013 No_date   12:12    25.84
02507>       [XIMP=.20:TIMP=.20]
02508>       [LOSS= 2 :CN= 65.2]
02509>       [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
02510>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
02511> 009:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02512>      ADD HYD            01:305               .31     .013 No_date   12:12    25.84
02513>                       + 03:904             32.15    1.042 No_date   12:20    25.64
02514>       [DT= 1.00]  SUM=  02:905             32.46    1.046 No_date   12:20    25.64
02515> #                    MAIR MILLS ESTATES SWM FACILITY
02516> 009:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02517>      ROUTE RESERVOIR -> 02:905            32.46    1.046 No_date   12:20    25.64
02518>       [RDT= 1.00] out<- 03:502            32.46     .134 No_date   15:25    25.64
02519>              overflow <= 04:502OVF          .00     .000 No_date    0:00      .00
02520>       [MxStoUsed=.4662E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02521> 009:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02522>      CALIB NASHYD       01:400              5.70     .049 No_date   12:54     9.02
02523>       [CN= 50.2: N= 3.00]
02524>       [Tp=  .70:DT= 1.00]
02525> 009:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02526>      ADD HYD            01:400              5.70     .049 No_date   12:54     9.02
02527>                       + 03:502             32.46     .134 No_date   15:25    25.64
02528>                       + 04:502OVF            .00     .000 No_date    0:00      .00
02529>       [DT= 1.00]  SUM=  02:906             38.16     .150 No_date   14:32    23.16
02530> #       FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
02531> 009:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02532>      DIVERT HYD      -> 02:906            38.16     .150 No_date   14:32    23.16
02533>              diverted <= 10:To806         17.06     .020 No_date   14:32    23.16
02534>              diverted <= 03:To1023        10.55     .065 No_date   14:32    23.16
02535>              diverted <= 01:To1022        10.55     .065 No_date   14:32    23.16
02536> #         FLOWS FROM TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
02537> #                        FLOWS TO NODE 1
02538> 009:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02539>      CALIB NASHYD       01:501             85.82    1.103 No_date   14:05    24.39
02540>       [CN= 78.8: N= 3.00]
02541>       [Tp= 1.72:DT= 1.00]
02542> 009:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02543>      ROUTE CHANNEL   -> 01:501            85.82    1.103 No_date   14:05    24.39
02544>       [RDT= 1.00] out<- 02:RC1            85.82    1.091 No_date   14:24    24.39
02545>       [L/S/n=  350./1.500/.030]
02546>       [Vmax=  .633:Dmax=  .845]
02547> 009:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02548>      CALIB NASHYD       01:504              7.05     .083 No_date   12:42    10.21
02549>       [CN= 51.8: N= 3.00]
02550>       [Tp=  .55:DT= 1.00]
02551> 009:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02552>      ADD HYD            01:504              7.05     .083 No_date   12:42    10.21
02553>                       + 02:RC1            85.82    1.091 No_date   14:24    24.39
02554>       [DT= 1.00]  SUM=  04:501+504        92.87    1.111 No_date   14:23    23.31
02555> 009:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02556>      ROUTE CHANNEL   -> 04:501+504        92.87    1.111 No_date   14:23    23.31
02557>       [RDT= 1.00] out<- 02:RC2            92.87    1.109 No_date   14:28    23.31
02558>       [L/S/n=  425./1.250/.030]
02559>       [Vmax= 1.119:Dmax=  .717]
02560> 009:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02561>      CALIB NASHYD       01:503              9.94     .145 No_date   12:55    15.24
02562>       [CN= 63.3: N= 3.00]
02563>       [Tp=  .74:DT= 1.00]
02564> 009:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02565>      CALIB NASHYD       04:502             10.41     .163 No_date   12:45    13.91
02566>       [CN= 61.2: N= 3.00]
02567>       [Tp=  .59:DT= 1.00]
02568> 009:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02569>      CALIB NASHYD       05:505             24.08     .350 No_date   12:59    16.02
02570>       [CN= 64.6: N= 3.00]
02571>       [Tp=  .80:DT= 1.00]
02572> 009:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02573>      ADD HYD            01:503              9.94     .145 No_date   12:55    15.24
02574>                       + 02:RC2            92.87    1.109 No_date   14:28    23.31
02575>                       + 04:502            10.41     .163 No_date   12:45    13.91
02576>                       + 05:505            24.08     .350 No_date   12:59    16.02
02577>       [DT= 1.00]  SUM=  06:502+503+50     137.30    1.401 No_date   13:44    20.74
02578> 009:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02579>      CALIB NASHYD       01:506              2.81     .040 No_date   12:34    10.48
02580>       [CN= 49.9: N= 3.00]
02581>       [Tp=  .44:DT= 1.00]
02582> 009:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02583>      ADD HYD            01:506              2.81     .040 No_date   12:34    10.48
02584>                       + 06:502+503+50     137.30    1.401 No_date   13:44    20.74
02585>       [DT= 1.00]  SUM=  02:RC+506         140.11    1.412 No_date   13:41    20.53
02586> 009:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02587>      ROUTE CHANNEL   -> 02:RC+506        140.11    1.412 No_date   13:41    20.53
02588>       [RDT= 1.00] out<- 04:RC3            140.11    1.411 No_date   13:46    20.53
02589>       [L/S/n=  200./1.000/.030]
02590>       [Vmax=  .912:Dmax=  .764]
02591> 009:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02592>      CALIB NASHYD       01:507              5.22     .063 No_date   12:41    10.24
02593>       [CN= 49.0: N= 3.00]
02594>       [Tp=  .54:DT= 1.00]
02595> 009:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02596>      ADD HYD            01:507              5.22     .063 No_date   12:41    10.24
02597>                       + 04:RC3            140.11    1.411 No_date   13:46    20.53
02598>       [DT= 1.00]  SUM=  02:507+RC         145.33    1.436 No_date   13:38    20.16
02599> 009:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02600>      CALIB NASHYD       01:508             26.52     .255 No_date   13:09    12.04
02601>       [CN= 54.9: N= 3.00]
02602>       [Tp=  .93:DT= 1.00]
02603> 009:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02604>      ADD HYD            01:508             26.52     .255 No_date   13:09    12.04
02605>                       + 02:507+RC         145.33    1.436 No_date   13:38    20.16
02606>       [DT= 1.00]  SUM=  09:1000           171.85    1.670 No_date   13:26    18.91
02607> #          FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
02608> 009:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02609>      CALIB NASHYD       01:103              8.70     .149 No_date   12:37    13.18
02610>       [CN= 59.2: N= 3.00]
02611>       [Tp=  .48:DT= 1.00]
02612> 009:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02613>      ADD HYD            01:103              8.70     .149 No_date   12:37    13.18
02614>                       + 03:To1023         10.55     .065 No_date   14:32    23.16
02615>       [DT= 1.00]  SUM=  02:1023           19.25     .185 No_date   12:43    18.65
02616> 009:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02617>      CALIB NASHYD       01:205              1.41     .033 No_date   12:19    10.18
02618>       [CN= 51.1: N= 3.00]
02619>       [Tp=  .20:DT= 1.00]
02620> 009:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02621>      ADD HYD            01:205              1.41     .033 No_date   12:19    10.18
02622>                       + 02:1023           19.25     .185 No_date   12:43    18.65
02623>       [DT= 1.00]  SUM=  03:802            20.66     .198 No_date   12:40    18.07
02624> 009:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02625>      CALIB STANDHYD     01:201             18.41    1.694 No_date   12:12    33.67
02626>       [XIMP=.43:TIMP=.56]
02627>       [LOSS= 2 :CN= 49.0]
02628>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
02629>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02630> 009:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02631>      ADD HYD            01:201             18.41    1.694 No_date   12:12    33.67
02632>                       + 03:802            20.66     .198 No_date   12:40    18.07
02633>       [DT= 1.00]  SUM=  02:803            39.07    1.784 No_date   12:12    25.42
02634> 009:0043----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02635>      CALIB NASHYD       01:202              1.10     .020 No_date   12:23     9.45
02636>       [CN= 55.0: N= 3.00]
02637>       [Tp=  .25:DT= 1.00]
02638> 009:0044----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02639>      ADD HYD            01:202              1.10     .020 No_date   12:23     9.45
02640>                       + 02:803            39.07    1.784 No_date   12:12    25.42
02641>       [DT= 1.00]  SUM=  03:804            40.17    1.797 No_date   12:12    24.98
02642> 009:0045----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02643>      CALIB NASHYD       01:1021             4.66     .051 No_date   12:58    12.15
02644>       [CN= 55.3: N= 3.00]
02645>       [Tp=  .78:DT= 1.00]
02646> 009:0046----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02647>      COMPUTE DUALHYD    01:1021             4.66     .051 No_date   12:58    12.15
02648>        Major System /   04:To1000            .07     .005 No_date   12:58    12.15
02649>        Minor System \   02:To810            4.59     .046 No_date   12:41    12.15
02650> 009:0047----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02651>      ADD HYD            04:To810            4.59     .046 No_date   12:41    12.15
02652>                       + 03:804            40.17    1.797 No_date   12:12    24.98
02653>       [DT= 1.00]  SUM=  05:810            44.76    1.810 No_date   12:12    23.67
02654> #                    MAIR MILLS VILLAGE SWM FACILITY
02655> 009:0048----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02656>      ROUTE RESERVOIR -> 05:810            44.76    1.810 No_date   12:12    23.67
02657>       [RDT= 1.00] out<- 02:1026           44.76     .213 No_date   14:16    23.67
02658>              overflow <= 03:1026OVF         .00     .000 No_date    0:00      .00
02659>       [MxStoUsed=.5111E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02660> 009:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02661>      ADD HYD            02:1026             44.76     .213 No_date   14:16    23.67
02662>                       + 03:1026OVF           .00     .000 No_date    0:00      .00
02663>       [DT= 1.00]  SUM=  05:Pond1026ou      44.76     .213 No_date   14:16    23.67
02664> #          TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
02665> 009:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02666>      DIVERT HYD      -> 05:Pond1026ou    44.76     .213 No_date   14:16    23.67
02667>              diverted <= 02:To807         27.48     .040 No_date   14:16    23.67
02668>              diverted <= 07:To809         17.27     .173 No_date   14:16    23.67
02669>              diverted <= 03:To1025          .00     .000 No_date    0:00      .00
02670> #                    FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
02671> 009:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02672>      ADD HYD            09:1000           171.85    1.670 No_date   13:26    18.91
02673>                       + 04:To1000            .07     .005 No_date   12:58    12.15
02674>       [DT= 1.00]  SUM=  05:Node 2         171.92    1.670 No_date   13:26    18.91
02675> 009:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02676>      CALIB NASHYD       01:207              1.22     .043 No_date   12:15    12.15
02677>       [CN= 55.3: N= 3.00]
02678>       [Tp=  .13:DT= 1.00]
02679> #                          FLOWS TO OUTLET B
02680> 009:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02681>      ADD HYD            01:207              1.22     .043 No_date   12:15    12.15
02682>                       + 02:To807           27.48     .040 No_date   14:16    23.67
02683>       [DT= 1.00]  SUM=  06:807            28.70     .077 No_date   12:16    23.18
02684> 009:0054----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02685>      ADD HYD            06:807             28.70     .077 No_date   12:16    23.18
02686>                       + 10:To806           17.06     .020 No_date   14:32    23.16
02687>       [DT= 1.00]  SUM=  01:806            45.77     .097 No_date   12:16    23.17
02688> #                        FLOWS FROM TENTH LINE
02689> 009:0055----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02690>      CALIB STANDHYD     08:601               .22     .018 No_date   12:12    27.80
02691>       [XIMP=.35:TIMP=.35]
02692>       [LOSS= 2 :CN= 49.0]
02693>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02694>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
02695> 009:0056----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02696>      CALIB STANDHYD     09:602              1.15     .069 No_date   12:17    27.80
02697>       [XIMP=.35:TIMP=.35]
02698>       [LOSS= 2 :CN= 49.0]
02699>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02700>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
```

5yr SCS

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02701> #                    FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
02702>  009:0057--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02703>       ADD HYD           05:Node 2        171.92    1.670 No_date   13:26   18.91
02704>                       + 03:To1025          .00     .000 No_date    0:00     .00
02705>                       + 07:To809         17.27     .173 No_date   14:16   23.67
02706>                       + 08:601             .22     .018 No_date   12:12   27.80
02707>                       + 09:602           1.15     .069 No_date   12:17   27.80
02708>       [DT= 1.00]  SUM=  02:809/Node3     190.57    1.832 No_date   13:32   19.40
02709> #                    FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
02710>  009:0058--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02711>       ADD HYD           02:809/Node3     190.57    1.832 No_date   13:32   19.40
02712>                       + 01:806            45.77     .097 No_date   12:16   23.17
02713>       [DT= 1.00]  SUM=  04:Node4         236.33    1.895 No_date   13:32   20.13
02714>    ** END OF RUN :   9
02715>
02716> ************************************************************************************
02717>
02718>
02719>
02720>
02721>
02722>  RUN:COMMAND#
02723>  010:0001--------------------------------------------------------------------------
02724>       START
02725>        [TZERO =    .00 hrs on       0]
02726>        [METOUT=    2     (1=imperial, 2=metric output)]
02727>        [NSTORM=    1 ]
02728>        [NRUN  =   10 ]
02729> #*************************************************************************************
02730> #  Project Name: [Linksview PreDev]  Project Number: [103-2687]
02731> #  Date        : 2014 08 28
02732> #  Modified    :
02733> #  Modeller    : [A. French]
02734> #  Company     : C.F. Crozier & Associates Inc.
02735> #  License #   : 3737016
02736> #*************************************************************************************
02737> #*************************************************************************************
02738>  010:0002--------------------------------------------------------------------------
02739>       READ STORM
02740>        Filename = STORM.001
02741>        Comment  =
02742>        [SDT= 1.00:SDUR=  24.00:PTOT=  72.00]
02743> #        FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02744>  010:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02745>       CALIB NASHYD        01:300            4.55     .118 No_date   12:50   26.29
02746>         [CN= 71.0: N= 3.00]
02747>         [Tp=  .74:DT= 5.00]
02748>  010:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02749>       ROUTE CHANNEL    -> 01:300            4.55     .118 No_date   12:50   26.29
02750>         [RDT= 1.00] out<- 02:701            4.55     .088 No_date   13:15   26.29
02751>         [L/S/n=  450./ .050/.040]
02752>         [Vmax=  .208:Dmax=  .202]
02753>  010:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02754>       CALIB NASHYD        01:301            5.97     .175 No_date   12:46   26.29
02755>         [CN= 71.0: N= 3.00]
02756>         [Tp=  .63:DT= 1.00]
02757>  010:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02758>       ADD HYD             01:301            5.97     .175 No_date   12:46   26.29
02759>                         + 02:701            4.55     .088 No_date   13:15   26.29
02760>         [DT= 1.00]  SUM=  03:901           10.52     .248 No_date   12:55   26.29
02761>  010:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02762>       ROUTE CHANNEL    -> 03:901           10.52     .248 No_date   12:55   26.29
02763>         [RDT= 1.00] out<- 01:702           10.52     .203 No_date   13:11   26.29
02764>         [L/S/n=  300./ .050/.060]
02765>         [Vmax=  .180:Dmax=  .386]
02766>  010:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02767>       ROUTE RESERVOIR -> 01:702           10.52     .203 No_date   13:11   26.29
02768>         [RDT= 1.00] out<- 02:501           10.52     .170 No_date   13:45   26.29
02769>                  overflow <= 03:501OVF       .00     .000 No_date    0:00     .00
02770>         [MxStoUsed=.1770E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02771>  010:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02772>       CALIB STANDHYD      01:302           16.39    1.012 No_date   12:20   36.03
02773>         [XIMP=.20:TIMP=.40]
02774>         [LOSS= 2 :CN= 65.2]
02775>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02776>         [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
02777>  010:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02778>       ADD HYD             01:302           16.39    1.012 No_date   12:20   36.03
02779>                         + 02:501           10.52     .170 No_date   13:45   26.29
02780>                         + 03:501OVF          .00     .000 No_date    0:00     .00
02781>         [DT= 1.00]  SUM=  04:902           26.91    1.043 No_date   12:21   32.22
02782>  010:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02783>       CALIB STANDHYD      01:303            2.34     .199 No_date   12:16   39.86
02784>         [XIMP=.25:TIMP=.50]
02785>         [LOSS= 2 :CN= 65.2]
02786>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02787>         [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
02788>  010:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02789>       ADD HYD             01:303            2.34     .199 No_date   12:16   39.86
02790>                         + 04:902           26.91    1.043 No_date   12:21   32.22
02791>         [DT= 1.00]  SUM=  02:903           29.25    1.220 No_date   12:20   32.83
02792>  010:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02793>       CALIB NASHYD        01:304            2.90     .129 No_date   12:23   23.09
02794>         [CN= 66.6: N= 3.00]
02795>         [Tp=  .28:DT= 1.00]
02796>  010:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02797>       ADD HYD             01:304            2.90     .129 No_date   12:23   23.09
02798>                         + 02:903           29.25    1.220 No_date   12:20   32.83
02799>         [DT= 1.00]  SUM=  03:904           32.15    1.346 No_date   12:20   31.95
02800>  010:0015--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02801>       CALIB STANDHYD      01:305             .31     .016 No_date   12:12   31.83
02802>         [XIMP=.20:TIMP=.20]
02803>         [LOSS= 2 :CN= 65.2]
02804>         [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
02805>         [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
02806>  010:0016--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02807>       ADD HYD             01:305             .31     .016 No_date   12:12   31.83
02808>                         + 03:904           32.15    1.346 No_date   12:20   31.95
02809>         [DT= 1.00]  SUM=  02:905           32.46    1.351 No_date   12:20   31.95
02810> #                    MAIR MILLS ESTATES SWM FACILITY
02811>  010:0017--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02812>       ROUTE RESERVOIR -> 02:905           32.46    1.351 No_date   12:20   31.95
02813>         [RDT= 1.00] out<- 03:502           32.46     .150 No_date   15:38   31.95
02814>                  overflow <= 04:502OVF       .00     .000 No_date    0:00     .00
02815>         [MxStoUsed=.5887E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02816>  010:0018--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02817>       CALIB NASHYD        01:400            5.70     .068 No_date   12:53   12.24
02818>         [CN= 50.2: N= 3.00]
02819>         [Tp=  .70:DT= 1.00]
02820>  010:0019--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02821>       ADD HYD             01:400            5.70     .068 No_date   12:53   12.24
02822>                         + 03:502           32.46     .150 No_date   15:38   31.95
02823>                         + 04:502OVF          .00     .000 No_date    0:00     .00
02824>         [DT= 1.00]  SUM=  02:906           38.16     .197 No_date   13:07   29.01
02825> #        FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
02826>  010:0020--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02827>       DIVERT HYD       -> 02:906           38.16     .197 No_date   13:07   29.01
02828>                 diverted <= 10:To806       14.16     .020 No_date   13:07   29.01
02829>                 diverted <= 03:To1023      12.00     .089 No_date   13:07   29.01
02830>                 diverted <= 01:To1022      12.00     .089 No_date   13:07   29.01
02831> #        FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
02832> #                    FLOWS TO NODE 1
02833>  010:0021--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02834>       CALIB NASHYD        01:501           85.82    1.429 No_date   14:03   31.25
02835>         [CN= 78.8: N= 3.00]
02836>         [Tp= 1.72:DT= 1.00]
02837>  010:0022--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02838>       ROUTE CHANNEL    -> 01:501           85.82    1.429 No_date   14:03   31.25
02839>         [RDT= 1.00] out<- 02:RC1           85.82    1.414 No_date   14:19   31.25
02840>         [L/S/n=  350./1.500/.030]
02841>         [Vmax=  .570:Dmax=  .881]
02842>  010:0023--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02843>       CALIB NASHYD        01:504            7.05     .113 No_date   12:42   13.68
02844>         [CN= 51.8: N= 3.00]
02845>         [Tp=  .55:DT= 1.00]
02846>  010:0024--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02847>       ADD HYD             01:504            7.05     .113 No_date   12:42   13.68
02848>                         + 02:RC1           85.82    1.414 No_date   14:19   31.25
02849>         [DT= 1.00]  SUM=  04:501+504       92.87    1.443 No_date   14:13   29.91
02850>  010:0025--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02851>       ROUTE CHANNEL    -> 04:501+504       92.87    1.443 No_date   14:13   29.91
02852>         [RDT= 1.00] out<- 02:RC2           92.87    1.440 No_date   14:23   29.91
02853>         [L/S/n=  425./1.250/.030]
02854>         [Vmax= 1.115:Dmax=  .765]
02855>  010:0026--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02856>       CALIB NASHYD        01:503            9.94     .193 No_date   12:55   20.01
02857>         [CN= 63.3: N= 3.00]
02858>         [Tp=  .74:DT= 1.00]
02859>  010:0027--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02860>       CALIB NASHYD        04:502           10.41     .217 No_date   12:44   18.40
02861>         [CN= 61.2: N= 3.00]
02862>         [Tp=  .59:DT= 1.00]
02863>  010:0028--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02864>       CALIB NASHYD        05:505           24.08     .463 No_date   12:59   20.96
02865>         [CN= 64.6: N= 3.00]
02866>         [Tp=  .80:DT= 1.00]
02867>  010:0029--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02868>       ADD HYD             01:503            9.94     .193 No_date   12:55   20.01
02869>                         + 02:RC2           92.87    1.440 No_date   14:23   29.91
02870>                         + 04:502           10.41     .217 No_date   12:44   18.40
02871>                         + 05:505           24.08     .463 No_date   12:59   20.96
02872>         [DT= 1.00]  SUM=  06:502+503+50   137.30    1.841 No_date   13:47   26.75
02873>  010:0030--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02874>       CALIB NASHYD        01:506            2.81     .054 No_date   12:34   13.87
02875>         [CN= 49.9: N= 3.00]
02876>         [Tp=  .44:DT= 1.00]
02877>  010:0031--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02878>       ADD HYD             01:506            2.81     .054 No_date   12:34   13.87
02879>                         + 06:502+503+50   137.30    1.841 No_date   13:47   26.75
02880>         [DT= 1.00]  SUM=  02:RC+506       140.11    1.854 No_date   13:46   26.49
02881>  010:0032--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02882>       ROUTE CHANNEL    -> 02:RC+506       140.11    1.854 No_date   13:46   26.49
02883>         [RDT= 1.00] out<- 04:RC3           140.11    1.853 No_date   13:50   26.49
02884>         [L/S/n=  200./1.000/.030]
02885>         [Vmax=  .926:Dmax=  .805]
02886>  010:0033--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02887>       CALIB NASHYD        01:507            5.22     .084 No_date   12:41   13.55
02888>         [CN= 49.0: N= 3.00]
02889>         [Tp=  .54:DT= 1.00]
02890>  010:0034--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02891>       ADD HYD             01:507            5.22     .084 No_date   12:41   13.55
02892>                         + 04:RC3           140.11    1.853 No_date   13:50   26.49
02893>         [DT= 1.00]  SUM=  02:507+RC        145.33    1.882 No_date   13:47   26.03
02894>  010:0035--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02895>       CALIB NASHYD        01:508           26.52     .340 No_date   13:09   15.90
02896>         [CN= 54.9: N= 3.00]
02897>         [Tp=  .93:DT= 1.00]
02898>  010:0036--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02899>       ADD HYD             01:508           26.52     .340 No_date   13:09   15.90
02900>                         + 02:507+RC        145.33    1.882 No_date   13:47   26.03
02901>         [DT= 1.00]  SUM=  09:1000          171.85    2.177 No_date   13:31   24.47
02902> #              FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
02903>  010:0037--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02904>       CALIB NASHYD        01:103            8.70     .199 No_date   12:37   17.45
02905>         [CN= 59.2: N= 3.00]
02906>         [Tp=  .48:DT= 1.00]
02907>  010:0038--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02908>       ADD HYD             01:103            8.70     .199 No_date   12:37   17.45
02909>                         + 03:To1023        12.00     .089 No_date   13:07   29.01
02910>         [DT= 1.00]  SUM=  02:1023          20.70     .263 No_date   12:43   24.15
02911>  010:0039--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02912>       CALIB NASHYD        01:205            1.41     .044 No_date   12:19   13.60
02913>         [CN= 51.1: N= 3.00]
02914>         [Tp=  .20:DT= 1.00]
02915>  010:0040--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02916>       ADD HYD             01:205            1.41     .044 No_date   12:19   13.60
02917>                         + 02:1023          20.70     .263 No_date   12:43   24.15
02918>         [DT= 1.00]  SUM=  03:802           22.11     .281 No_date   12:39   23.48
02919>  010:0041--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02920>       CALIB STANDHYD      01:201           18.41    2.035 No_date   12:12   40.06
02921>         [XIMP=.43:TIMP=.56]
02922>         [LOSS= 2 :CN= 49.0]
02923>         [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
02924>         [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02925>  010:0042--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02926>       ADD HYD             01:201           18.41    2.035 No_date   12:12   40.06
02927>                         + 03:802           22.11     .281 No_date   12:39   23.48
02928>         [DT= 1.00]  SUM=  02:803           40.52    2.162 No_date   12:12   31.01
02929>  010:0043--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02930>       CALIB NASHYD        01:202            1.10     .028 No_date   12:22   13.01
02931>         [CN= 55.0: N= 3.00]
02932>         [Tp=  .25:DT= 1.00]
02933>  010:0044--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02934>       ADD HYD             01:202            1.10     .028 No_date   12:22   13.01
02935>                         + 02:803           40.52    2.162 No_date   12:12   31.01
02936>         [DT= 1.00]  SUM=  03:804           41.62    2.180 No_date   12:12   30.54
02937>  010:0045--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02938>       CALIB NASHYD        01:1021           4.66     .069 No_date   12:58   16.06
02939>         [CN= 55.3: N= 3.00]
02940>         [Tp=  .78:DT= 1.00]
02941>  010:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02942>       COMPUTE DUALHYD     01:1021           4.66     .069 No_date   12:58   16.06
02943>          Major System /   04:To1000           .42     .023 No_date   12:58   16.06
02944>          Minor System \   02:To810           4.24     .046 No_date   12:28   16.06
02945>  010:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02946>       ADD HYD             02:To810          4.24     .046 No_date   12:28   16.06
02947>                         + 03:804           41.62    2.180 No_date   12:12   30.54
02948>         [DT= 1.00]  SUM=  05:810           45.86    2.200 No_date   12:12   29.20
02949> #                    MAIR MILLS VILLAGE SWM FACILITY
02950>  010:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02951>       ROUTE RESERVOIR -> 05:810           45.86    2.200 No_date   12:12   29.20
02952>         [RDT= 1.00] out<- 02:1026          45.86     .323 No_date   13:40   29.19
02953>                  overflow <= 03:1026OVF      .00     .000 No_date    0:00     .00
02954>         [MxStoUsed=.5707E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02955>  010:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02956>       ADD HYD             02:1026          45.86     .323 No_date   13:40   29.19
02957>                         + 03:1026OVF         .00     .000 No_date    0:00     .00
02958>         [DT= 1.00]  SUM=  05:Pond1026ou    45.86     .323 No_date   13:40   29.19
02959> #              TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
02960>  010:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02961>       DIVERT HYD       -> 05:Pond1026ou    45.86     .323 No_date   13:40   29.19
02962>                 diverted <= 02:To807       23.24     .040 No_date   13:40   29.19
02963>                 diverted <= 07:To809       22.63     .283 No_date   13:40   29.19
02964>                 diverted <= 03:To1025        .00     .000 No_date    0:00     .00
02965> #                    FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
02966>  010:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02967>       ADD HYD           09:1000          171.85    2.177 No_date   13:31   24.47
02968>                       + 04:To1000            .42     .023 No_date   12:58   16.06
02969>         [DT= 1.00]  SUM=  05:Node 2        172.27    2.188 No_date   13:25   24.45
02970>  010:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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10yr SCS

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02971>      CALIB NASHYD       01:207              1.22      .057 No_date   12:15    16.06
02972>       [CN= 55.3: N= 3.00]
02973>       [Tp=  .13:DT= 1.00]
02974> #                                  FLOWS TO OUTLET B
02975>  010:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02976>      ADD HYD            01:207              1.22      .057 No_date   12:15    16.06
02977>                       + 02:To807           23.24      .040 No_date   13:40    29.19
02978>       [DT= 1.00]  SUM=  06:807            24.46      .097 No_date   12:15    28.54
02979>  010:0054--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02980>      ADD HYD            06:807              24.46      .097 No_date   12:15    28.54
02981>                       + 10:To806           14.16      .020 No_date   13:07    29.01
02982>       [DT= 1.00]  SUM=  01:806            38.62      .117 No_date   12:15    28.71
02983> #                                  FLOWS FROM TENTH LINE
02984>  010:0055--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02985>      CALIB STANDHYD     08:601              1.15      .022 No_date   12:12    33.31
02986>       [XIMP=.35:TIMP=.35]
02987>       [LOSS= 2 :CN= 49.0]
02988>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02989>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
02990>  010:0056--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02991>      CALIB STANDHYD     09:602              1.15      .085 No_date   12:17    33.31
02992>       [XIMP=.35:TIMP=.35]
02993>       [LOSS= 2 :CN= 49.0]
02994>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02995>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
02996> #                  FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
02997>  010:0057--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02998>      ADD HYD            05:Node 2          172.27     2.188 No_date   13:25    24.45
02999>                       + 03:To1025           .00      .000 No_date    0:00      .00
03000>                       + 07:To809          22.63      .283 No_date   13:40    29.19
03001>                       + 08:601              .22      .022 No_date   12:12    33.31
03002>                       + 09:602             1.15      .085 No_date   12:17    33.31
03003>       [DT= 1.00]  SUM=  02:909/Node3      196.26     2.478 No_date   13:26    25.06
03004> #                  FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
03005>  010:0058--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03006>      ADD HYD            02:809/Node3       196.26     2.478 No_date   13:26    25.06
03007>                       + 01:806             38.62      .117 No_date   12:15    28.71
03008>       [DT= 1.00]  SUM=  04:Node4          234.88     2.542 No_date   13:26    25.66
03009>   ** END OF RUN :  10
03010>
03011>  ************************************************************************************
03012>
03013>
03014>
03015>
03016>
03017>  RUN:COMMAND#
03018>  011:0001--------------------------------------------------------------------------
03019>      START
03020>       [TZERO =    .00 hrs on        0]
03021>       [METOUT=   2     (1=imperial, 2=metric output)]
03022>       [NSTORM=   1 ]
03023>       [NRUN   =  11 ]
03024> #*************************************************************************
03025> #  Project Name: [Linksview PreDev]  Project Number: [103-2687]
03026> #  Date        : 2014 08 28
03027> #  Modified    :
03028> #  Modeller    : [A. French]
03029> #  Company     : C.F. Crozier & Associates Inc.
03030> #  License #   :  3737016
03031> #*************************************************************************
03032> #*************************************************************************
03033>  011:0002--------------------------------------------------------------------------
03034>      READ STORM
03035>       Filename = STORM.001
03036>       Comment  =
03037>       [SDT= 1.00:SDUR=  24.00:PTOT=  86.40]
03038> #       FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03039>  011:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03040>      CALIB NASHYD       01:300              4.55      .162 No_date   12:50    35.79
03041>       [CN= 71.0: N= 3.00]
03042>       [Tp=  .74:DT= 5.00]
03043>  011:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03044>      ROUTE CHANNEL   -> 01:300              4.55      .162 No_date   12:50    35.79
03045>       [RDT= 1.00] out<- 02:701              4.55      .128 No_date   13:13    35.79
03046>       [L/S/n=  450./ .050/.040]
03047>       [Vmax=  .229:Dmax=  .234]
03048>  011:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03049>      CALIB NASHYD       01:301              5.97      .240 No_date   12:46    35.79
03050>       [CN= 71.0: N= 3.00]
03051>       [Tp=  .63:DT= 1.00]
03052>  011:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03053>      ADD HYD            01:301              5.97      .240 No_date   12:46    35.79
03054>                       + 02:701              4.55      .128 No_date   13:13    35.79
03055>       [DT= 1.00]  SUM=  03:901            10.52      .348 No_date   12:55    35.79
03056>  011:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03057>      ROUTE CHANNEL   -> 03:901            10.52      .348 No_date   12:55    35.79
03058>       [RDT= 1.00] out<- 01:702            10.52      .295 No_date   13:09    35.79
03059>       [L/S/n=  300./ .050/.060]
03060>       [Vmax=  .209:Dmax=  .440]
03061>  011:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03062>      ROUTE RESERVOIR -> 01:702            10.52      .295 No_date   13:09    35.79
03063>       [RDT= 1.00] out<- 02:501            10.52      .172 No_date   14:17    35.79
03064>                 overflow <- 03:501OVF        .00      .000 No_date    0:00      .00
03065>       (MxStoUsed=.5546E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03066>  011:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03067>      CALIB STANDHYD     01:302              16.39     1.414 No_date   12:20    46.63
03068>       [XIMP=.20:TIMP=.40]
03069>       [LOSS= 2 :CN= 65.2]
03070>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03071>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
03072>  011:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03073>      ADD HYD            01:302              16.39     1.414 No_date   12:20    46.63
03074>                       + 02:501              10.52      .172 No_date   14:17    35.79
03075>                       + 03:501OVF             .00      .000 No_date    0:00      .00
03076>       [DT= 1.00]  SUM=  04:902            26.91     1.466 No_date   12:20    42.39
03077>  011:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03078>      CALIB STANDHYD     01:303              2.34      .270 No_date   12:15    51.06
03079>       [XIMP=.25:TIMP=.50]
03080>       [LOSS= 2 :CN= 65.2]
03081>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03082>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
03083>  011:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03084>      ADD HYD            01:303              2.34      .270 No_date   12:15    51.06
03085>                       + 04:902            26.91     1.466 No_date   12:20    42.39
03086>       [DT= 1.00]  SUM=  02:903            29.25     1.705 No_date   12:19    43.08
03087>  011:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03088>      CALIB NASHYD       01:304              2.90      .178 No_date   12:23    31.74
03089>       [CN= 66.6: N= 3.00]
03090>       [Tp=  .28:DT= 1.00]
03091>  011:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03092>      ADD HYD            01:304              2.90      .178 No_date   12:23    31.74
03093>                       + 02:903            29.25     1.705 No_date   12:19    43.08
03094>       [DT= 1.00]  SUM=  03:904            32.15     1.876 No_date   12:19    42.06
03095>  011:0015--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03096>      CALIB STANDHYD     01:305               .31      .021 No_date   12:12    41.41
03097>       [XIMP=.20:TIMP=.20]
03098>       [LOSS= 2 :CN= 65.2]
03099>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
03100>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
03101>  011:0016--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03102>      ADD HYD            01:305               .31      .021 No_date   12:12    41.41
03103>                       + 03:904            32.15     1.876 No_date   12:19    42.06
03104>       [DT= 1.00]  SUM=  02:905            32.46     1.884 No_date   12:19    42.05
03105> #                  MAIR MILLS ESTATES SWM FACILITY
```

25 yr SCS

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03106>  011:0017--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03107>      ROUTE RESERVOIR -> 02:905            32.46     1.884 No_date   12:19    42.05
03108>       [RDT= 1.00] out<- 03:502            32.46      .150 No_date   17:05    42.05
03109>                 overflow <- 04:502OVF        .00      .000 No_date    0:00      .00
03110>       (MxStoUsed=.8311E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03111>  011:0018--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03112>      CALIB NASHYD       01:400              5.70      .100 No_date   12:53    17.78
03113>       [CN= 50.2: N= 3.00]
03114>       [Tp=  .70:DT= 1.00]
03115>  011:0019--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03116>      ADD HYD            01:400              5.70      .100 No_date   12:53    17.78
03117>                       + 03:502            32.46      .150 No_date   17:05    42.05
03118>                       + 04:502OVF           .00      .000 No_date    0:00      .00
03119>       [DT= 1.00]  SUM=  02:906            38.16      .250 No_date   12:53    38.43
03120> #       FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
03121>  011:0020--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03122>      DIVERT HYD         -> 02:906            38.16      .250 No_date   12:53    38.43
03123>                 diverted <= 10:To806        11.71      .020 No_date   12:53    38.43
03124>                 diverted <= 03:To1023       13.23      .115 No_date   12:53    38.43
03125>                 diverted <= 01:To1022       13.23      .115 No_date   12:53    38.43
03126> #         FLOWS FROM TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
03127> #                              FLOWS TO NODE 1
03128>  011:0021--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03129>      CALIB NASHYD       01:501              85.82     1.952 No_date   14:01    42.20
03130>       [CN= 78.8: N= 3.00]
03131>       [Tp= 1.72:DT= 1.00]
03132>  011:0022--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03133>      ROUTE CHANNEL   -> 01:501            85.82     1.952 No_date   14:01    42.20
03134>       [RDT= 1.00] out<- 02:RC1            85.82     1.932 No_date   14:16    42.20
03135>       [L/S/n=  350./1.500/.030]
03136>       [Vmax=  .514:Dmax=  .931]
03137>  011:0023--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03138>      CALIB NASHYD       01:504              7.05      .164 No_date   12:42    19.57
03139>       [CN= 51.8: N= 3.00]
03140>       [Tp=  .55:DT= 1.00]
03141>  011:0024--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03142>      ADD HYD            01:504              7.05      .164 No_date   12:42    19.57
03143>                       + 02:RC1            85.82     1.932 No_date   14:16    42.20
03144>       [DT= 1.00]  SUM=  04:501+504        92.87     1.972 No_date   14:14    40.49
03145>  011:0025--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03146>      ROUTE CHANNEL   -> 04:501+504        92.87     1.972 No_date   14:14    40.49
03147>       [RDT= 1.00] out<- 02:RC2            92.87     1.960 No_date   14:20    40.49
03148>       [L/S/n=  425./1.250/.030]
03149>       (Vmax= 1.126:Dmax=  .828]
03150>  011:0026--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03151>      CALIB NASHYD       01:503              9.94      .272 No_date   12:54    27.93
03152>       [CN= 63.3: N= 3.00]
03153>       [Tp=  .74:DT= 1.00]
03154>  011:0027--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03155>      CALIB NASHYD       04:502             10.41      .310 No_date   12:44    25.89
03156>       [CN= 61.2: N= 3.00]
03157>       [Tp=  .59:DT= 1.00]
03158>  011:0028--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03159>      CALIB NASHYD       05:505             24.08      .651 No_date   12:58    29.14
03160>       [CN= 64.6: N= 3.00]
03161>       [Tp=  .80:DT= 1.00]
03162>  011:0029--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03163>      ADD HYD            01:503              9.94      .272 No_date   12:54    27.93
03164>                       + 02:RC2            92.87     1.960 No_date   14:20    40.49
03165>                       + 04:502            10.41      .310 No_date   12:44    25.89
03166>                       + 05:505            24.08      .651 No_date   12:58    29.14
03167>       [DT= 1.00]  SUM=  06:502+503+50    137.30     2.540 No_date   13:45    36.48
03168>  011:0030--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03169>      CALIB NASHYD       01:506              2.81      .076 No_date   12:34    19.61
03170>       [CN= 49.9: N= 3.00]
03171>       [Tp=  .44:DT= 1.00]
03172>  011:0031--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03173>      ADD HYD            01:506              2.81      .076 No_date   12:34    19.61
03174>                       + 06:502+503+50    137.30     2.540 No_date   13:45    36.48
03175>       [DT= 1.00]  SUM=  02:RC+506        140.11     2.560 No_date   13:39    36.15
03176>  011:0032--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03177>      ROUTE CHANNEL   -> 02:RC+506        140.11     2.560 No_date   13:39    36.15
03178>       [RDT= 1.00] out<- 04:RC3           140.11     2.559 No_date   13:45    36.14
03179>       [L/S/n=  200./1.000/.030]
03180>       [Vmax=  .951:Dmax=  .869]
03181>  011:0033--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03182>      CALIB NASHYD       01:507              5.22      .120 No_date   12:41    19.16
03183>       [CN= 49.0: N= 3.00]
03184>       [Tp=  .54:DT= 1.00]
03185>  011:0034--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03186>      ADD HYD            01:507              5.22      .120 No_date   12:41    19.16
03187>                       + 04:RC3           140.11     2.559 No_date   13:45    36.14
03188>       [DT= 1.00]  SUM=  02:507+RC        145.33     2.606 No_date   13:38    35.54
03189>  011:0035--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03190>      CALIB NASHYD       01:508             26.52      .483 No_date   13:08    22.41
03191>       [CN= 54.9: N= 3.00]
03192>       [Tp=  .93:DT= 1.00]
03193>  011:0036--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03194>      ADD HYD            01:508             26.52      .483 No_date   13:08    22.41
03195>                       + 02:507+RC        145.33     2.606 No_date   13:38    35.54
03196>       [DT= 1.00]  SUM=  09:1000          171.85     3.047 No_date   13:27    33.51
03197> #            FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
03198>  011:0037--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03199>      CALIB NASHYD       01:103              8.70      .284 No_date   12:37    24.60
03200>       [CN= 59.2: N= 3.00]
03201>       [Tp=  .48:DT= 1.00]
03202>  011:0038--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03203>      ADD HYD            01:103              8.70      .284 No_date   12:37    24.60
03204>                       + 03:To1023         13.23      .115 No_date   12:53    38.43
03205>       [DT= 1.00]  SUM=  02:1023           21.93      .388 No_date   12:39    32.94
03206>  011:0039--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03207>      CALIB NASHYD       01:205              1.41      .063 No_date   12:19    19.42
03208>       [CN= 51.1: N= 3.00]
03209>       [Tp=  .20:DT= 1.00]
03210>  011:0040--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03211>      ADD HYD            01:205              1.41      .063 No_date   12:19    19.42
03212>                       + 02:1023           21.93      .388 No_date   12:39    32.94
03213>       [DT= 1.00]  SUM=  03:802            23.34      .419 No_date   12:36    32.12
03214>  011:0041--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03215>      CALIB STANDHYD     01:201              18.41     2.601 No_date   12:12    50.05
03216>       [XIMP=.43:TIMP=.56]
03217>       [LOSS= 2 :CN= 49.0]
03218>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
03219>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
03220>  011:0042--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03221>      ADD HYD            01:201              18.41     2.601 No_date   12:12    50.05
03222>                       + 03:802            23.34      .419 No_date   12:36    32.12
03223>       [DT= 1.00]  SUM=  02:803            41.75     2.795 No_date   12:12    40.03
03224>  011:0043--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03225>      CALIB NASHYD       01:202              1.10      .042 No_date   12:22    19.11
03226>       [CN= 55.0: N= 3.00]
03227>       [Tp=  .25:DT= 1.00]
03228>  011:0044--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03229>      ADD HYD            01:202              1.10      .042 No_date   12:22    19.11
03230>                       + 02:803            41.75     2.795 No_date   12:12    40.03
03231>       [DT= 1.00]  SUM=  03:804            42.85     2.823 No_date   12:12    39.49
03232>  011:0045--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03233>      CALIB NASHYD       01:1021             4.66      .098 No_date   12:57    22.62
03234>       [CN= 55.3: N= 3.00]
03235>       [Tp=  .78:DT= 1.00]
03236>  011:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03237>      COMPUTE DUALHYD    01:1021             4.66      .098 No_date   12:57    22.62
03238>        Major System /   04:To1000           .90      .052 No_date   12:57    22.62
03239>        Minor System \   02:To810            3.76      .046 No_date   12:20    22.62
03240>  011:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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ADD HYD            02:To810          3.76     .046 No_date   12:20   22.62
                +  03:804           42.85   2.823 No_date   12:12   39.49
  [DT= 1.00]  SUM=  05:810          46.60   2.852 No_date   12:12   38.13
#                 MAIR MILLS VILLAGE SWM FACILITY
011:0048----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE RESERVOIR -> 05:810         46.60   2.852 No_date   12:12   38.13
   [RDT= 1.00] out<-  02:1026       46.60    .510 No_date   13:16   38.13
        overflow <= 03:10260VF        .00    .000 No_date    0:00     .00
  [MxStoUsed=.6726E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
011:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           02:1026         46.60    .510 No_date   13:16   38.13
                +  03:10260VF         .00    .000 No_date    0:00     .00
  [DT= 1.00]  SUM=  05:Pond1026cu   46.60    .510 No_date   13:16   38.13
#          TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
011:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  DIVERT HYD        -> 05:Pond1026cu  46.60    .510 No_date   13:16   38.13
        diverted <= 02:To807        19.80    .040 No_date   13:16   38.13
        diverted <= 07:To809        26.80    .470 No_date   13:16   38.13
        diverted <= 03:To1025         .00    .000 No_date    0:00     .00
#                      FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
011:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           09:1000         171.85   3.047 No_date   13:27   33.51
                +  04:To1000          .90    .052 No_date   12:57   22.62
  [DT= 1.00]  SUM=  05:Node 2       172.75   3.084 No_date   13:24   33.45
011:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:207          1.22     .080 No_date   12:15   22.62
   [CN= 55.3: N= 3.00]
   [Tp=  .13:DT= 1.00]
#                                FLOWS TO OUTLET B
011:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:207          1.22     .080 No_date   12:15   22.62
                +  02:To807         19.80    .040 No_date   13:16   38.13
  [DT= 1.00]  SUM=  06:807          21.02    .120 No_date   12:15   37.23
011:0054----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           06:807          21.02    .120 No_date   12:15   37.23
                +  10:To806         11.71    .020 No_date   12:53   38.43
  [DT= 1.00]  SUM=  01:806          32.73    .140 No_date   12:15   37.66
#                      FLOWS FROM TENTH LINE
011:0055----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB STANDHYD    08:601           .22     .028 No_date   12:12   42.00
   [XIMP=.35:TIMP=.35]
   [LOSS= 2 :CN= 49.0]
   [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  3.:MNP=.250:SCP=   .0]
   [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
011:0056----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB STANDHYD    09:602          1.15     .110 No_date   12:17   42.00
   [XIMP=.35:TIMP=.35]
   [LOSS= 2 :CN= 49.0]
   [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  3.:MNP=.250:SCP=   .0]
   [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 48.:MNI=.035:SCI=   .0]
#                FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
011:0057----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           05:Node 2       172.75   3.084 No_date   13:24   33.45
                +  03:To1025          .00    .000 No_date    0:00     .00
                +  07:To809         26.80    .470 No_date   13:16   38.13
                +  08:601             .22    .028 No_date   12:12   42.00
                +  09:602             1.15   .110 No_date   12:17   42.00
  [DT= 1.00]  SUM=  02:#09/Node3    200.92   3.563 No_date   13:23   34.14
#                FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
011:0058----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           02:809/Node3    200.92   3.563 No_date   13:23   34.14
                +  01:806           32.73    .140 No_date   12:15   37.66
  [DT= 1.00]  SUM=  04:Node4        233.66   3.630 No_date   13:22   34.63
 ** END OF RUN :  11
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RUN:COMMAND#
012:0001----------
  START
   [TZERO =    .00 hrs on       0]
   [METOUT=   2    (1=imperial, 2=metric output)]
   [NSTORM=   1 ]
   [NRUN  =  12 ]
#*********************************************************************
#  Project Name: [Linksview PreDev]  Project Number: [183-2687]
#  Date        : 2014 08 28
#  Modified    :
#  Modeller    : [A. French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 37370016
#*********************************************************************
#*********************************************************************
012:0002----------
  READ STORM
   Filename = STORM.001
   Comment  =
   [SDT= 1.00:SDUR=  24.00:PTOT=  96.00]
#       FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
012:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:300          4.55     .194 No_date   12:50   42.52
   [CN= 71.0: N= 3.00]
   [Tp=  .74:DT= 5.00]
012:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE CHANNEL   -> 01:300         4.55     .194 No_date   12:50   42.52
   [RDT= 1.00] out<- 02:701         4.55     .154 No_date   13:11   42.52
   [L/S/n=  450./ .050/.040]
   [Vmax=  .246:Dmax=  .257]
012:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:301          5.97     .287 No_date   12:46   42.52
   [CN= 71.0: N= 3.00]
   [Tp=  .63:DT= 1.00]
012:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:301          5.97     .287 No_date   12:46   42.52
                +  02:701          4.55     .154 No_date   13:11   42.52
  [DT= 1.00]  SUM=  03:901          10.52    .420 No_date   12:53   42.52
012:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE CHANNEL   -> 03:901         10.52    .420 No_date   12:53   42.52
   [RDT= 1.00] out<- 01:702         10.52    .361 No_date   13:06   42.52
   [L/S/n=  300./ .050/.060]
   [Vmax=  .230:Dmax=  .475]
012:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE RESERVOIR -> 01:702         10.52    .361 No_date   13:06   42.52
   [RDT= 1.00] out<- 02:501         10.52    .173 No_date   14:33   42.52
        overflow <= 03:501OVF         .00    .000 No_date    0:00     .00
  [MxStoUsed=.9014E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
012:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB STANDHYD    01:302          16.39    1.701 No_date   12:19   54.01
   [XIMP=.20:TIMP=.40]
   [LOSS= 2 :CN= 65.2]
   [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
   [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
012:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:302          16.39    1.701 No_date   12:19   54.01
                +  02:501          10.52    .173 No_date   14:33   42.52
                +  03:501OVF          .00    .000 No_date    0:00     .00
  [DT= 1.00]  SUM=  04:902          26.91    1.767 No_date   12:20   49.52
012:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB STANDHYD    01:303          2.34     .322 No_date   12:15   58.81
   [XIMP=.25:TIMP=.50]
   [LOSS= 2 :CN= 65.2]
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50 yr SCS

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   [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
   [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
012:0012----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:303          2.34     .322 No_date   12:15   58.81
                +  04:902          26.91    1.767 No_date   12:20   49.52
  [DT= 1.00]  SUM=  02:903          29.25    2.052 No_date   12:19   50.26
012:0013----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:304          2.90     .214 No_date   12:23   37.92
   [CN= 66.6: N= 3.00]
   [Tp=  .28:DT= 1.00]
012:0014----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:304          2.90     .214 No_date   12:23   37.92
                +  02:903          29.25    2.052 No_date   12:19   50.26
  [DT= 1.00]  SUM=  03:904          32.15    2.257 No_date   12:19   49.15
012:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB STANDHYD    01:305           .31     .024 No_date   12:12   48.14
   [XIMP=.20:TIMP=.20]
   [LOSS= 2 :CN= 65.2]
   [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
   [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
012:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:305           .31     .024 No_date   12:12   48.14
                +  03:904          32.15    2.257 No_date   12:19   49.15
  [DT= 1.00]  SUM=  02:905          32.46    2.269 No_date   12:19   49.14
#                 MAIR MILLS ESTATES SWM FACILITY
012:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE RESERVOIR -> 02:905         32.46    2.269 No_date   12:19   49.14
   [RDT= 1.00] out<- 03:502         32.46    .284 No_date   15:46   49.13
        overflow <= 04:502OVF         .00    .000 No_date    0:00     .00
  [MxStoUsed=.8774E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
012:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:400          5.70     .124 No_date   12:52   21.88
   [CN= 50.2: N= 3.00]
   [Tp=  .70:DT= 1.00]
012:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:400          5.70     .124 No_date   12:52   21.88
                +  03:502          32.46    .284 No_date   15:46   49.13
                +  04:502OVF          .00    .000 No_date    0:00     .00
  [DT= 1.00]  SUM=  02:906          38.16    .305 No_date   15:31   45.06
#      FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
012:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  DIVERT HYD        -> 02:906         38.16    .305 No_date   15:31   45.06
        diverted <= 10:To806        10.21    .020 No_date   15:31   45.06
        diverted <= 03:To1023       13.98    .142 No_date   15:31   45.06
        diverted <= 01:To1022       13.98    .142 No_date   15:31   45.06
#       FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
#                      FLOWS TO NODE 1
012:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:501          85.82    2.319 No_date   14:00   49.86
   [CN= 78.8: N= 3.00]
   [Tp= 1.72:DT= 1.00]
012:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE CHANNEL   -> 01:501         85.82    2.319 No_date   14:00   49.86
   [RDT= 1.00] out<- 02:RC1         85.82    2.294 No_date   14:15   49.86
   [L/S/n=  350./1.500/.030]
   [Vmax=  .502:Dmax=  .958]
012:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:504          7.05     .201 No_date   12:42   23.92
   [CN= 51.8: N= 3.00]
   [Tp=  .55:DT= 1.00]
012:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:504          7.05     .201 No_date   12:42   23.92
                +  02:RC1          85.82    2.294 No_date   14:15   49.86
  [DT= 1.00]  SUM=  04:501+504      92.87    2.343 No_date   14:13   47.89
012:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE CHANNEL   -> 04:501+504     92.87    2.343 No_date   14:13   47.89
   [RDT= 1.00] out<- 02:RC2         92.87    2.338 No_date   14:19   47.89
   [L/S/n=  425./1.250/.030]
   [Vmax= 1.141:Dmax=  .861]
012:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:503          9.94     .330 No_date   12:54   33.65
   [CN= 63.3: N= 3.00]
   [Tp=  .74:DT= 1.00]
012:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      04:502          10.41    .378 No_date   12:44   31.33
   [CN= 61.2: N= 3.00]
   [Tp=  .59:DT= 1.00]
012:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      05:505          24.08    .787 No_date   12:58   35.03
   [CN= 64.6: N= 3.00]
   [Tp=  .80:DT= 1.00]
012:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:503          9.94     .330 No_date   12:54   33.65
                +  02:RC2          92.87    2.338 No_date   14:19   47.89
                +  04:502          10.41    .378 No_date   12:44   31.33
                +  05:505          24.08    .787 No_date   12:58   35.03
  [DT= 1.00]  SUM=  06:502+503+50   137.30   3.061 No_date   13:40   43.35
012:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:506          2.81     .093 No_date   12:34   23.84
   [CN= 49.9: N= 3.00]
   [Tp=  .44:DT= 1.00]
012:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:506          2.81     .093 No_date   12:34   23.84
                +  06:502+503+50   137.30   3.061 No_date   13:40   43.35
  [DT= 1.00]  SUM=  02:RC+506       140.11   3.087 No_date   13:39   42.96
012:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ROUTE CHANNEL   -> 02:RC+506      140.11   3.087 No_date   13:39   42.96
   [RDT= 1.00] out<- 04:RC3         140.11   3.085 No_date   13:42   42.96
   [L/S/n=  200./1.000/.030]
   [Vmax=  .970:Dmax=  .911]
012:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:507          5.22     .146 No_date   12:41   23.30
   [CN= 49.0: N= 3.00]
   [Tp=  .54:DT= 1.00]
012:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:507          5.22     .146 No_date   12:41   23.30
                +  04:RC3          140.11   3.085 No_date   13:42   42.96
  [DT= 1.00]  SUM=  02:507+RC       145.33   3.143 No_date   13:38   42.25
012:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:508          26.52    .589 No_date   13:08   27.17
   [CN= 54.9: N= 3.00]
   [Tp=  .93:DT= 1.00]
012:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:508          26.52    .589 No_date   13:08   27.17
                +  02:507+RC       145.33   3.143 No_date   13:38   42.25
  [DT= 1.00]  SUM=  09:1000         171.85   3.676 No_date   13:27   39.93
#          FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
012:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:103          8.70     .346 No_date   12:36   29.81
   [CN= 59.2: N= 3.00]
   [Tp=  .48:DT= 1.00]
012:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:103          8.70     .346 No_date   12:36   29.81
                +  03:To1023        13.98    .142 No_date   15:31   45.06
  [DT= 1.00]  SUM=  02:1023         22.68    .467 No_date   12:38   39.21
012:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB NASHYD      01:205          1.41     .077 No_date   12:19   23.71
   [CN= 51.1: N= 3.00]
   [Tp=  .20:DT= 1.00]
012:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  ADD HYD           01:205          1.41     .077 No_date   12:19   23.71
                +  02:1023         22.68    .467 No_date   12:38   39.21
  [DT= 1.00]  SUM=  03:802          24.09    .507 No_date   12:36   38.31
012:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  CALIB STANDHYD    01:201          18.41    2.973 No_date   12:12   56.96
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03511>       [XIMP=.43:TIMP=.56]
03512>       [LOSS= 2 :CN= 49.0]
03513>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
03514>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
03515>  012:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03516>       ADD HYD            01:201          18.41     2.973 No_date   12:12   56.96
03517>                        + 03:802          24.09      .507 No_date   12:36   38.31
03518>       [DT= 1.00]  SUM=  02:803          42.50     3.224 No_date   12:12   46.39
03519>  012:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03520>       CALIB NASHYD       01:202           1.10      .053 No_date   12:22   23.64
03521>       [CN= 55.0: N= 3.00]
03522>       [Tp=  .25:DT= 1.00]
03523>  012:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03524>       ADD HYD            01:202           1.10      .053 No_date   12:22   23.64
03525>                        + 02:803          42.50     3.224 No_date   12:12   46.39
03526>       [DT= 1.00]  SUM=  03:804          43.60     3.261 No_date   12:12   45.81
03527>  012:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03528>       CALIB NASHYD       01:1021          4.66      .119 No_date   12:57   27.43
03529>       [CN= 55.3: N= 3.00]
03530>       [Tp=  .78:DT= 1.00]
03531>  012:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03532>       COMPUTE DUALHYD    01:1021          4.66      .119 No_date   12:57   27.43
03533>         Major System /   04:To1000        1.17      .073 No_date   12:57   27.43
03534>         Minor System \   02:To810         3.49      .046 No_date   12:16   27.43
03535>  012:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03536>       ADD HYD            02:To810         3.49      .046 No_date   12:16   27.43
03537>                        + 03:804          43.60     3.261 No_date   12:12   45.81
03538>       [DT= 1.00]  SUM=  05:810          47.08     3.296 No_date   12:12   44.45
03539> #                    MAIR MILLS VILLAGE SWM FACILITY
03540>  012:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03541>       ROUTE RESERVOIR -> 05:810           47.08     3.296 No_date   12:12   44.45
03542>        [RDT= 1.00] out<- 02:1026          47.08      .645 No_date   13:09   44.45
03543>              overflow <= 03:10260VF        .00      .000 No_date    0:00     .00
03544>       [MxStoUsed=.7458E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03545>  012:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03546>       ADD HYD            02:1026          47.08      .645 No_date   13:09   44.45
03547>                        + 03:10260VF        .00      .000 No_date    0:00     .00
03548>       [DT= 1.00]  SUM=  05:Pond1026ou    47.08      .645 No_date   13:09   44.45
03549> #              TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
03550>  012:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03551>       DIVERT HYD      -> 05:Pond1026ou    47.08      .645 No_date   13:09   44.45
03552>              diverted <= 02:To807         17.41      .040 No_date   13:09   44.45
03553>              diverted <= 07:To809         29.44      .560 No_date   13:09   44.45
03554>              diverted <= 03:To1025          .23      .045 No_date   13:09   44.45
03555> #                        FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
03556>  012:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03557>       ADD HYD            09:1000         171.85     3.676 No_date   13:27   39.93
03558>                        + 04:To1000         1.17      .073 No_date   12:57   27.43
03559>       [DT= 1.00]  SUM=  05:Node 2        173.02     3.730 No_date   13:24   39.84
03560>  012:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03561>       CALIB NASHYD       01:207           1.22      .098 No_date   12:15   27.43
03562>       [CN= 55.3: N= 3.00]
03563>       [Tp=  .13:DT= 1.00]
03564> #                                FLOWS TO OUTLET B
03565>  012:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03566>       ADD HYD            01:207           1.22      .098 No_date   12:15   27.43
03567>                        + 02:To807         17.41      .040 No_date   13:09   44.45
03568>       [DT= 1.00]  SUM=  06:807           18.63      .138 No_date   12:15   43.33
03569>  012:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03570>       ADD HYD            06:807          18.63      .138 No_date   12:15   43.33
03571>                        + 10:To806         10.21      .020 No_date   15:31   45.06
03572>       [DT= 1.00]  SUM=  01:806           28.84      .158 No_date   12:15   43.95
03573> #                              FLOWS FROM TENTH LINE
03574>  012:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03575>       CALIB STANDHYD     08:601            .22      .033 No_date   12:12   48.05
03576>       [XIMP=.35:TIMP=.35]
03577>       [LOSS= 2 :CN= 49.0]
03578>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03579>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
03580>  012:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03581>       CALIB STANDHYD     09:602           1.15      .129 No_date   12:16   48.05
03582>       [XIMP=.35:TIMP=.35]
03583>       [LOSS= 2 :CN= 49.0]
03584>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03585>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
03586> #                FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
03587>  012:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03588>       ADD HYD            05:Node 2       173.02     3.730 No_date   13:24   39.84
03589>                        + 03:To1025          .23      .045 No_date   13:09   44.45
03590>                        + 07:To809         29.44      .560 No_date   13:09   44.45
03591>                        + 08:601             .22      .033 No_date   12:12   48.05
03592>                        + 09:602           1.15      .129 No_date   12:16   48.05
03593>       [DT= 1.00]  SUM=  02:809/Node3     204.06     4.340 No_date   13:21   40.57
03594> #                    FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
03595>  012:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03596>       ADD HYD            02:809/Node3    204.06     4.340 No_date   13:21   40.57
03597>                        + 01:806          28.84      .158 No_date   12:15   43.95
03598>       [DT= 1.00]  SUM=  04:Node4        232.90     4.408 No_date   13:20   40.98
03599>   ** END OF RUN :  12
03600>
03601> ************************************************************************
03602>
03603>
03604>
03605>
03606>
03607>  RUN:COMMAND#
03608>  013:0001-----------------------------------------------------------------
03609>       START
03610>        [TZERO =     .00 hrs on        0]
03611>        [METOUT=    2    (1=imperial, 2=metric output)]
03612>        [NSTORM=    1 ]
03613>        [NRUN   =  13 ]
03614> #*********************************************************************
03615> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
03616> #  Date        : 2014 08 28
03617> #  Modified    :
03618> #  Modeller    : [A. French]
03619> #  Company     : C.F. Crozier & Associates Inc.
03620> #  License #   : 37377016
03621> #*********************************************************************
03622> #*********************************************************************
03623>  013:0002-----------------------------------------------------------------
03624>       READ STORM
03625>        Filename = STORM.001
03626>        Comment  =
03627>        [SDT= 1.00:SDUR=  24.00:PTOT= 108.00]
03628> #        FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03629>  013:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03630>       CALIB NASHYD       01:300           4.55      .235 No_date   12:50   51.31
03631>       [CN= 71.0: N= 3.00]
03632>       [Tp=  .74:DT= 5.00]
03633>  013:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03634>       ROUTE CHANNEL   -> 01:300           4.55      .235 No_date   12:50   51.31
03635>        [RDT= 1.00] out<- 02:701           4.55      .192 No_date   13:10   51.31
03636>        [L/S/n=  450./ .050/.040]
03637>        [Vmax=  .265:Dmax=  .282]
03638>  013:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03639>       CALIB NASHYD       01:301           5.97      .348 No_date   12:45   51.31
03640>       [CN= 71.0: N= 3.00]
03641>       [Tp=  .63:DT= 1.00]
03642>  013:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03643>       ADD HYD            01:301           5.97      .348 No_date   12:45   51.31
03644>                        + 02:701           4.55      .192 No_date   13:10   51.31
03645>       [DT= 1.00]  SUM=  03:901          10.52      .515 No_date   12:53   51.31
03646>  013:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03647>       ROUTE CHANNEL   -> 03:901          10.52      .515 No_date   12:53   51.31
03648>        [RDT= 1.00] out<- 01:702          10.52      .450 No_date   13:06   51.31
03649>        [L/S/n=  300./ .050/.060]
03650>        [Vmax=  .248:Dmax=  .512]
03651>  013:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03652>       ROUTE RESERVOIR -> 01:702          10.52      .450 No_date   13:06   51.31
03653>        [RDT= 1.00] out<- 02:501          10.52      .175 No_date   14:49   51.31
03654>              overflow <= 03:501OVF         .00      .000 No_date    0:00     .00
03655>       [MxStoUsed=.1404E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03656>  013:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03657>       CALIB STANDHYD     01:302          16.39     2.065 No_date   12:19   63.52
03658>       [XIMP=.20:TIMP=.40]
03659>       [LOSS= 2 :CN= 65.2]
03660>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03661>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
03662>  013:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03663>       ADD HYD            01:302          16.39     2.065 No_date   12:19   63.52
03664>                        + 02:501          10.52      .175 No_date   14:49   51.31
03665>                        + 03:501OVF         .00      .000 No_date    0:00     .00
03666>       [DT= 1.00]  SUM=  04:902          26.91     2.150 No_date   12:19   58.75
03667>  013:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03668>       CALIB STANDHYD     01:303           2.34      .390 No_date   12:15   68.75
03669>       [XIMP=.25:TIMP=.50]
03670>       [LOSS= 2 :CN= 65.2]
03671>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03672>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
03673>  013:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03674>       ADD HYD            01:303           2.34      .390 No_date   12:15   68.75
03675>                        + 04:902          26.91     2.150 No_date   12:19   58.75
03676>       [DT= 1.00]  SUM=  02:903          29.25     2.504 No_date   12:18   59.55
03677>  013:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03678>       CALIB NASHYD       01:304           2.90      .261 No_date   12:23   46.05
03679>       [CN= 66.6: N= 3.00]
03680>       [Tp=  .28:DT= 1.00]
03681>  013:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03682>       ADD HYD            01:304           2.90      .261 No_date   12:23   46.05
03683>                        + 02:903          29.25     2.504 No_date   12:18   59.55
03684>       [DT= 1.00]  SUM=  03:904          32.15     2.749 No_date   12:18   58.33
03685>  013:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03686>       CALIB STANDHYD     01:305            .31      .029 No_date   12:12   56.88
03687>       [XIMP=.20:TIMP=.20]
03688>       [LOSS= 2 :CN= 65.2]
03689>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
03690>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
03691>  013:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03692>       ADD HYD            01:305            .31      .029 No_date   12:12   56.88
03693>                        + 03:904          32.15     2.749 No_date   12:18   58.33
03694>       [DT= 1.00]  SUM=  02:905          32.46     2.764 No_date   12:18   58.32
03695> #                    MAIR MILLS ESTATES SWM FACILITY
03696>  013:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03697>       ROUTE RESERVOIR -> 02:905          32.46     2.764 No_date   12:18   58.32
03698>        [RDT= 1.00] out<- 03:502          32.46      .412 No_date   14:19   58.32
03699>              overflow <= 04:502OVF         .00      .000 No_date    0:00     .00
03700>       [MxStoUsed=.9148E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03701>  013:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03702>       CALIB NASHYD       01:400           5.70      .157 No_date   12:52   27.44
03703>        [CN= 50.2: N= 3.00]
03704>        [Tp=  .70:DT= 1.00]
03705>  013:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03706>       ADD HYD            01:400           5.70      .157 No_date   12:52   27.44
03707>                        + 03:502          32.46      .412 No_date   14:19   58.32
03708>                        + 04:502OVF         .00      .000 No_date    0:00     .00
03709>       [DT= 1.00]  SUM=  02:906          38.16      .483 No_date   13:43   53.70
03710> #      FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
03711>  013:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03712>       DIVERT HYD      -> 02:906          38.16      .483 No_date   13:43   53.70
03713>              diverted <= 10:To806         8.74      .020 No_date   13:43   53.70
03714>              diverted <= 03:To1023       14.71      .231 No_date   13:43   53.70
03715>              diverted <= 01:To1022       14.71      .231 No_date   13:43   53.70
03716> #        FLOWS FROM TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
03717> #                          FLOWS TO NODE 1
03718>  013:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03719>       CALIB NASHYD       01:501          85.82     2.792 No_date   13:59   59.74
03720>        [CN= 78.8: N= 3.00]
03721>        [Tp= 1.72:DT= 1.00]
03722>  013:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03723>       ROUTE CHANNEL   -> 01:501          85.82     2.792 No_date   13:59   59.74
03724>        [RDT= 1.00] out<- 02:RC1          85.82     2.760 No_date   14:14   59.74
03725>        [L/S/n=  350./1.500/.030]
03726>        [Vmax=  .489:Dmax=  .991]
03727>  013:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03728>       CALIB NASHYD       01:504           7.05      .252 No_date   12:41   29.78
03729>        [CN= 51.8: N= 3.00]
03730>        [Tp=  .55:DT= 1.00]
03731>  013:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03732>       ADD HYD            01:504           7.05      .252 No_date   12:41   29.78
03733>                        + 02:RC1          85.82     2.760 No_date   14:14   59.74
03734>       [DT= 1.00]  SUM=  04:501+504       92.87     2.823 No_date   14:12   57.47
03735>  013:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03736>       ROUTE CHANNEL   -> 04:501+504      92.87     2.823 No_date   14:12   57.47
03737>        [RDT= 1.00] out<- 02:RC2          92.87     2.816 No_date   14:17   57.47
03738>        [L/S/n=  425./1.250/.030]
03739>        [Vmax= 1.161:Dmax=  .904]
03740>  013:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03741>       CALIB NASHYD       01:503           9.94      .406 No_date   12:54   41.22
03742>        [CN= 63.3: N= 3.00]
03743>        [Tp=  .74:DT= 1.00]
03744>  013:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03745>       CALIB NASHYD       04:502          10.41      .468 No_date   12:44   38.56
03746>        [CN= 61.2: N= 3.00]
03747>        [Tp=  .59:DT= 1.00]
03748>  013:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03749>       CALIB NASHYD       05:505          24.08      .968 No_date   12:58   42.80
03750>        [CN= 64.6: N= 3.00]
03751>        [Tp=  .80:DT= 1.00]
03752>  013:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03753>       ADD HYD            01:503           9.94      .406 No_date   12:54   41.22
03754>                        + 02:RC2          92.87     2.816 No_date   14:17   57.47
03755>                        + 04:502          10.41      .468 No_date   12:44   38.56
03756>                        + 05:505          24.08      .968 No_date   12:58   42.80
03757>       [DT= 1.00]  SUM=  06:502+503+50   137.30     3.727 No_date   13:35   52.29
03758>  013:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03759>       CALIB NASHYD       01:506           2.81      .116 No_date   12:34   29.53
03760>        [CN= 49.9: N= 3.00]
03761>        [Tp=  .44:DT= 1.00]
03762>  013:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03763>       ADD HYD            01:506           2.81      .116 No_date   12:34   29.53
03764>                        + 06:502+503+50   137.30     3.727 No_date   13:35   52.29
03765>       [DT= 1.00]  SUM=  02:RC+506       140.11     3.762 No_date   13:33   51.83
03766>  013:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03767>       ROUTE CHANNEL   -> 02:RC+506      140.11     3.762 No_date   13:33   51.83
03768>        [RDT= 1.00] out<- 04:RC3          140.11     3.760 No_date   13:36   51.83
03769>        [L/S/n=  200./1.000/.030]
03770>        [Vmax=  .994:Dmax=  .949]
03771>  013:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03772>       CALIB NASHYD       01:507           5.22      .182 No_date   12:40   28.88
03773>        [CN= 49.0: N= 3.00]
03774>        [Tp=  .54:DT= 1.00]
03775>  013:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03776>       ADD HYD            01:507           5.22      .182 No_date   12:40   28.88
03777>                        + 04:RC3          140.11     3.760 No_date   13:36   51.83
03778>       [DT= 1.00]  SUM=  02:507+RC       145.33     3.841 No_date   13:32   51.01
03779>  013:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03780>       CALIB NASHYD       01:508          26.52      .732 No_date   13:07   33.55
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100 yr SCS

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03781>       [CN= 54.9: N= 3.00]
03782>       [Tp=  .93:DT= 1.00]
03783> 013:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03784>      ADD HYD             01:508          26.52     .732 No_date   13:07   33.55
03785>                        + 02:507+RC       145.33    3.841 No_date   13:32   51.01
03786>       [DT= 1.00]  SUM=  09:1000         171.85    4.522 No_date   13:25   48.31
03787> #              FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
03788> 013:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03789>      CALIB NASHYD        01:103           8.70     .430 No_date   12:36   36.76
03790>       [CN= 59.2: N= 3.00]
03791>       [Tp=  .48:DT= 1.00]
03792> 013:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03793>      ADD HYD             01:103           8.70     .430 No_date   12:36   36.76
03794>                        + 03:To1023       14.71     .231 No_date   13:43   53.70
03795>       [DT= 1.00]  SUM=  02:1023          23.41     .566 No_date   12:38   47.41
03796> 013:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03797>      CALIB NASHYD        01:205           1.41     .097 No_date   12:19   29.50
03798>       [CN= 51.1: N= 3.00]
03799>       [Tp=  .20:DT= 1.00]
03800> 013:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03801>      ADD HYD             01:205           1.41     .097 No_date   12:19   29.50
03802>                        + 02:1023          23.41     .566 No_date   12:38   47.41
03803>       [DT= 1.00]  SUM=  03:802           24.82     .616 No_date   12:34   46.39
03804> 013:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03805>      CALIB STANDHYD      01:201          18.41    3.504 No_date   12:12   65.82
03806>       [XIMP=.43:TIMP=.56]
03807>       [LOSS= 2 :CN= 49.0]
03808>       [Pervious    area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
03809>       [Impervious  area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
03810> 013:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03811>      ADD HYD             01:201          18.41    3.504 No_date   12:12   65.82
03812>                        + 03:802          24.82     .616 No_date   12:34   46.39
03813>       [DT= 1.00]  SUM=  02:803           43.23    3.834 No_date   12:12   54.66
03814> 013:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03815>      CALIB NASHYD        01:202           1.10     .067 No_date   12:22   29.75
03816>       [CN= 55.0: N= 3.00]
03817>       [Tp=  .25:DT= 1.00]
03818> 013:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03819>      ADD HYD             01:202           1.10     .067 No_date   12:22   29.75
03820>                        + 02:803           43.23    3.834 No_date   12:12   54.66
03821>       [DT= 1.00]  SUM=  03:804           44.33    3.880 No_date   12:12   54.05
03822> 013:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03823>      CALIB NASHYD        01:1021          4.66     .140 No_date   12:57   33.86
03824>       [CN= 55.3: N= 3.00]
03825>       [Tp=  .78:DT= 1.00]
03826> 013:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03827>      COMPUTE DUALHYD     01:1021          4.66     .148 No_date   12:57   33.86
03828>        Major System /    04:To1000        1.45     .102 No_date   12:57   33.86
03829>        Minor System \    02:To810         3.21     .046 No_date   12:13   33.86
03830> 013:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03831>      ADD HYD             02:To810         3.21     .046 No_date   12:13   33.86
03832>                        + 03:804           44.33    3.880 No_date   12:12   54.05
03833>       [DT= 1.00]  SUM=  05:810           47.54    3.925 No_date   12:12   52.68
03834> #                      MAIR MILLS VILLAGE SWM FACILITY
03835> 013:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03836>      ROUTE RESERVOIR -> 05:810           47.54    3.925 No_date   12:12   52.68
03837>       [RDT= 1.00] out<- 02:1026          47.54     .820 No_date   13:06   52.68
03838>                  overflow <= 03:10260VF    .00     .000 No_date    0:00     .00
03839>       [MxStoUsed=.8412E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03840> 013:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03841>      ADD HYD             02:1026          47.54     .820 No_date   13:06   52.68
03842>                        + 03:10260VF        .00     .000 No_date    0:00     .00
03843>       [DT= 1.00]  SUM=  05:Pond1026ou    47.54     .820 No_date   13:06   52.68
03844> #          TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
03845> 013:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03846>      DIVERT HYD      -> 05:Pond1026ou    47.54     .820 No_date   13:06   52.68
03847>                diverted <= 02:To807      15.02     .041 No_date   13:06   52.68
03848>                diverted <= 07:To809      29.96     .560 No_date   13:06   52.68
03849>                diverted <= 03:To1025      2.56     .219 No_date   13:06   52.68
03850> #                      FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
03851> 013:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03852>      ADD HYD             09:1000         171.85    4.522 No_date   13:25   48.31
03853>                        + 04:To1000        1.45     .102 No_date   12:57   33.86
03854>       [DT= 1.00]  SUM=  05:Node 2       173.30    4.603 No_date   13:23   48.19
03855> 013:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03856>      CALIB NASHYD        01:207           1.22     .121 No_date   12:15   33.86
03857>       [CN= 55.3: N= 3.00]
03858>       [Tp=  .13:DT= 1.00]
03859> #                                FLOWS TO OUTLET B
03860> 013:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03861>      ADD HYD             01:207           1.22     .121 No_date   12:15   33.86
03862>                        + 02:To807        15.02     .041 No_date   13:06   52.68
03863>       [DT= 1.00]  SUM=  06:807           16.24     .161 No_date   12:15   51.27
03864> 013:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03865>      ADD HYD             06:807          16.24     .161 No_date   12:15   51.27
03866>                        + 10:To806         8.74     .020 No_date   13:43   53.70
03867>       [DT= 1.00]  SUM=  01:806           24.98     .181 No_date   12:15   52.12
03868> #                              FLOWS FROM TENTH LINE
03869> 013:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03870>      CALIB STANDHYD      08:601           .22      .038 No_date   12:12   55.87
03871>       [XIMP=.35:TIMP=.35]
03872>       [LOSS= 2 :CN= 49.0]
03873>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03874>       [Impervious  area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
03875> 013:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03876>      CALIB STANDHYD      09:602           1.15     .154 No_date   12:16   55.87
03877>       [XIMP=.35:TIMP=.35]
03878>       [LOSS= 2 :CN= 49.0]
03879>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03880>       [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
03881> #                FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
03882> 013:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03883>      ADD HYD             05:Node 2       173.30    4.603 No_date   13:23   48.19
03884>                        + 03:To1025        2.56     .219 No_date   13:06   52.68
03885>                        + 07:To809        29.96     .560 No_date   13:06   52.68
03886>                        + 08:601            .22     .038 No_date   12:12   55.87
03887>                        + 09:602           1.15     .154 No_date   12:16   55.87
03888>       [DT= 1.00]  SUM=  02:809/Node3    207.19    5.387 No_date   13:21   48.95
03889> #                      FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
03890> 013:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03891>      ADD HYD             02:809/Node3    207.19    5.387 No_date   13:21   48.95
03892>                        + 01:806          24.98     .181 No_date   12:15   52.12
03893>       [DT= 1.00]  SUM=  04:Node4        232.17    5.458 No_date   13:21   49.29
03894>  ** END OF RUN :  13
03895>
03896> ************************************************************************
03897>
03898>
03899>
03900>
03901>
03902> RUN:COMMAND#
03903> 014:0001----------------------------------------------------------------------
03904>      START
03905>       [TZERO =    .00 hrs on       0]
03906>       [METOUT=   2    (1=imperial, 2=metric output)]
03907>       [NSTORM=   1 ]
03908>       [NRUN  =  14 ]
03909> #**********************************************************************
03910> #  Project Name: [Linksview PreDev]  Project Number: [183-2687]
03911> #  Date       : 2014 08 28
03912> #  Modified   :
03913> #  Modeller   : [A. French]
03914> #  Company    : C.F. Crozier & Associates Inc.
03915> #  License #  :  3737016
```

Timmins

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03916> #**********************************************************************
03917> #**********************************************************************
03918> 014:0002----------------------------------------------------------------------
03919>      READ STORM
03920>       Filename = STORM.001
03921>       Comment  =
03922>       [SDT=60.00:SDUR=  12.00:PTOT= 193.00]
03923> #         FLOW FROM MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03924> 014:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03925>      CALIB NASHYD        01:300           4.55     .300 No_date    7:25   121.15
03926>       [CN= 71.0: N= 3.00]
03927>       [Tp=  .74:DT= 5.00]
03928> 014:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03929>      ROUTE CHANNEL   -> 01:300           4.55     .300 No_date    7:25   121.15
03930>  *    [RDT= 1.00] out<- 02:701           4.55     .273 No_date    7:43   121.15
03931>       [L/S/n=  450./ .050/.040]
03932>       [Vmax=  .288:Dmax=  .317]
03933> 014:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03934>      CALIB NASHYD        01:301           5.97     .420 No_date    7:19   121.15
03935>       [CN= 71.0: N= 3.00]
03936>       [Tp=  .63:DT= 1.00]
03937> 014:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03938>      ADD HYD             01:301           5.97     .420 No_date    7:19   121.15
03939>                        + 02:701           4.55     .273 No_date    7:43   121.15
03940>       [DT= 1.00]  SUM=  03:901           10.52    .679 No_date    7:26   121.15
03941> 014:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03942>      ROUTE CHANNEL   -> 03:901           10.52    .679 No_date    7:26   121.15
03943>  *    [RDT= 1.00] out<- 01:702           10.52    .638 No_date    7:38   121.15
03944>       [L/S/n=  300./ .050/.060]
03945>       [Vmax=  .280:Dmax=  .570]
03946> 014:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03947>      ROUTE RESERVOIR -> 01:702           10.52    .638 No_date    7:38   121.15
03948>       [RDT= 1.00] out<- 02:501           10.52    .193 No_date   12:44   121.15
03949>                  overflow <= 03:501OVF     .00     .000 No_date    0:00     .00
03950>       [MxStoUsed=.6124E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03951> 014:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03952>      CALIB STANDHYD      01:302          16.39    1.423 No_date    7:04   136.79
03953>       [XIMP=.20:TIMP=.40]
03954>       [LOSS= 2 :CN= 65.2]
03955>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03956>       [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
03957> 014:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03958>      ADD HYD             01:302          16.39    1.423 No_date    7:04   136.79
03959>                        + 02:501          10.52     .193 No_date   12:44   121.15
03960>                        + 03:501OVF         .00     .000 No_date    0:00     .00
03961>       [DT= 1.00]  SUM=  04:902           26.91    1.595 No_date    7:04   130.67
03962> 014:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03963>      CALIB STANDHYD      01:303           2.34     .224 No_date    7:01   144.22
03964>       [XIMP=.25:TIMP=.50]
03965>       [LOSS= 2 :CN= 65.2]
03966>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03967>       [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
03968> 014:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03969>      ADD HYD             01:303           2.34     .224 No_date    7:01   144.22
03970>                        + 04:902          26.91    1.595 No_date    7:04   130.67
03971>       [DT= 1.00]  SUM=  02:903           29.25    1.817 No_date    7:03   131.75
03972> 014:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03973>      CALIB NASHYD        01:304           2.90     .230 No_date    7:03   112.07
03974>       [CN= 66.6: N= 3.00]
03975>       [Tp=  .28:DT= 1.00]
03976> 014:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03977>      ADD HYD             01:304           2.90     .230 No_date    7:03   112.07
03978>                        + 02:903          29.25    1.817 No_date    7:03   131.75
03979>       [DT= 1.00]  SUM=  03:904           32.15    2.047 No_date    7:03   129.98
03980> 014:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03981>      CALIB STANDHYD      01:305           .31      .023 No_date    7:00   125.69
03982>       [XIMP=.20:TIMP=.20]
03983>       [LOSS= 2 :CN= 65.2]
03984>       [Pervious    area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
03985>       [Impervious  area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
03986> 014:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03987>      ADD HYD             01:305           .31      .023 No_date    7:00   125.69
03988>                        + 03:904          32.15    2.047 No_date    7:03   129.98
03989>       [DT= 1.00]  SUM=  02:905           32.46    2.066 No_date    7:03   129.94
03990> #                      MAIR MILLS ESTATES SWM FACILITY
03991> 014:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03992>      ROUTE RESERVOIR -> 02:905           32.46    2.066 No_date    7:03   129.94
03993>       [RDT= 1.00] out<- 03:502           32.46    1.386 No_date    7:42   129.94
03994>                  overflow <= 04:502OVF     .00     .000 No_date    0:00     .00
03995>       [MxStoUsed=.1190E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03996> 014:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03997>      CALIB NASHYD        01:400           5.70     .238 No_date    7:27   76.99
03998>       [CN= 50.2: N= 3.00]
03999>       [Tp=  .70:DT= 1.00]
04000> 014:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04001>      ADD HYD             01:400           5.70     .238 No_date    7:27   76.99
04002>                        + 03:502          32.46    1.386 No_date    7:42   129.94
04003>                        + 04:502OVF         .00     .000 No_date    0:00     .00
04004>       [DT= 1.00]  SUM=  02:906           38.16    1.618 No_date    7:40   122.03
04005> #     FLOW SPLIT: CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS
04006> 014:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04007>      DIVERT HYD      -> 02:906           38.16    1.618 No_date    7:40   122.03
04008>                diverted <= 10:To806       4.27     .020 No_date    7:40   122.03
04009>                diverted <= 03:To1023     16.94     .799 No_date    7:40   122.03
04010>                diverted <= 01:To1022     16.94     .799 No_date    7:40   122.03
04011> #        FLOWS FROM TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
04012> #                          FLOWS TO NODE 1
04013> 014:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04014>      CALIB NASHYD        01:501          85.82    4.743 No_date    9:24   135.47
04015>       [CN= 78.8: N= 3.00]
04016>       [Tp= 1.72:DT= 1.00]
04017> 014:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04018>      ROUTE CHANNEL   -> 01:501          85.82    4.743 No_date    9:24   135.47
04019>       [RDT= 1.00] out<- 02:RC1          85.82    4.728 No_date    9:35   135.47
04020>       [L/S/n=  350./1.500/.030]
04021>       [Vmax=  .493:Dmax= 1.084]
04022> 014:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04023>      CALIB NASHYD        01:504           7.05     .340 No_date    7:16   81.30
04024>       [CN= 51.8: N= 3.00]
04025>       [Tp=  .55:DT= 1.00]
04026> 014:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04027>      ADD HYD             01:504           7.05     .340 No_date    7:16   81.30
04028>                        + 02:RC1          85.82    4.728 No_date    9:35   135.47
04029>       [DT= 1.00]  SUM=  04:501+504       92.87    4.965 No_date    9:28   131.37
04030> 014:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04031>      ROUTE CHANNEL   -> 04:501+504       92.87    4.965 No_date    9:28   131.37
04032>       [RDT= 1.00] out<- 02:RC2          92.87    4.962 No_date    9:32   131.37
04033>       [L/S/n=  425./1.250/.030]
04034>       [Vmax= 1.249:Dmax= 1.039]
04035> 014:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04036>      CALIB NASHYD        01:503           9.94     .560 No_date    7:28   103.97
04037>       [CN= 63.3: N= 3.00]
04038>       [Tp=  .74:DT= 1.00]
04039> 014:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04040>      CALIB NASHYD        04:502          10.41     .609 No_date    7:18   99.22
04041>       [CN= 61.2: N= 3.00]
04042>       [Tp=  .59:DT= 1.00]
04043> 014:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04044>      CALIB NASHYD        05:505          24.08    1.352 No_date    7:33   106.80
04045>       [CN= 64.6: N= 3.00]
04046>       [Tp=  .80:DT= 1.00]
04047> 014:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04048>      ADD HYD             01:503           9.94     .560 No_date    7:28   103.97
04049>                        + 02:RC2          92.87    4.962 No_date    9:32   131.37
04050>                        + 04:502          10.41     .609 No_date    7:18   99.22
```

```
                    +  05:505          24.08    1.352 No_date    7:33  106.80
      [DT= 1.00]  SUM=  06:502+503+50   137.30    6.948 No_date    9:15  122.64
014:0030--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:506           2.81     .141 No_date    7:10   79.65
      [CN= 49.9: N= 3.00]
      [Tp=  .44:DT= 1.00]
014:0031--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:506           2.81     .141 No_date    7:10   79.65
                    +  06:502+503+50   137.30    6.948 No_date    9:15  122.64
      [DT= 1.00]  SUM=  02:RC+506       140.11    7.048 No_date    9:15  121.78
014:0032--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 02:RC+506       140.11    7.048 No_date    9:15  121.78
      [RDT= 1.00] out<- 04:RC3          140.11    7.045 No_date    9:17  121.78
      [L/S/n=  200./1.000/.030]
      |Vmax= 1.102:Dmax= 1.106|
014:0033--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:507           5.22     .241 No_date    7:16   78.13
      [CN= 49.0: N= 3.00]
      [Tp=  .54:DT= 1.00]
014:0034--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:507           5.22     .241 No_date    7:16   78.13
                    +  04:RC3         140.11    7.045 No_date    9:17  121.78
      [DT= 1.00]  SUM=  02:507+RC       145.33    7.226 No_date    9:16  120.21
014:0035--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:508          26.52    1.138 No_date    7:47   88.45
      [CN= 54.9: N= 3.00]
      [Tp=  .93:DT= 1.00]
014:0036--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:508          26.52    1.138 No_date    7:47   88.45
                    +  02:507+RC       145.33    7.226 No_date    9:16  120.21
      [DT= 1.00]  SUM=  09:1000         171.85    8.280 No_date    9:15  115.31
#              FLOWS FROM MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
014:0037--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:103           8.70     .523 No_date    7:12   95.57
      [CN= 59.2: N= 3.00]
      [Tp=  .48:DT= 1.00]
014:0038--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:103           8.70     .523 No_date    7:12   95.57
                    +  03:To1023        16.94     .799 No_date    7:40  122.03
      [DT= 1.00]  SUM=  02:1023         25.64    1.261 No_date    7:28  113.05
014:0039--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:205           1.41     .082 No_date    7:02   80.43
      [CN= 51.1: N= 3.00]
      [Tp=  .20:DT= 1.00]
014:0040--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:205           1.41     .082 No_date    7:02   80.43
                    +  02:1023         25.64    1.261 No_date    7:28  113.05
      [DT= 1.00]  SUM=  03:802          27.05    1.309 No_date    7:26  111.35
014:0041--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:201          18.41    1.622 No_date    7:00  134.10
      [XIMP=.43:TIMP=.56]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
014:0042--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:201          18.41    1.622 No_date    7:00  134.10
                    +  03:802          27.05    1.309 No_date    7:26  111.35
      [DT= 1.00]  SUM=  02:803          45.46    2.743 No_date    7:01  120.56
014:0043--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:202           1.10     .066 No_date    7:03   83.47
      [CN= 55.0: N= 3.00]
      [Tp=  .25:DT= 1.00]
014:0044--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:202           1.10     .066 No_date    7:03   83.47
                    +  02:803          45.46    2.743 No_date    7:01  120.56
      [DT= 1.00]  SUM=  03:804          46.56    2.809 No_date    7:01  119.68
014:0045--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:1021          4.66     .217 No_date    7:33   89.14
      [CN= 55.3: N= 3.00]
      [Tp=  .78:DT= 1.00]
014:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     COMPUTE DUALHYD    01:1021          4.66     .217 No_date    7:33   89.14
       Major System /  04:To1000         2.76     .171 No_date    7:33   89.14
       Minor System \  02:To810          1.90     .046 No_date    5:49   89.14
014:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            02:To810         1.90     .046 No_date    5:49   89.14
                    +  03:804          46.56    2.809 No_date    7:01  119.68
      [DT= 1.00]  SUM=  05:810          48.47    2.855 No_date    7:01  118.48
#                      MAIR MILLS VILLAGE SWM FACILITY
014:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 05:810          48.47    2.855 No_date    7:01  118.48
      [RDT= 1.00] out<- 02:1026         48.47    2.733 No_date    7:05  118.48
            overflow <= 03:1026OVF        .00     .000 No_date    0:00     .00
     (MxStoUsed=.9883E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
014:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            02:1026          48.47    2.733 No_date    7:05  118.48
                    +  03:1026OVF         .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  05:Pond1026ou     48.47    2.733 No_date    7:05  118.48
#              TENTH LINE DITCH FLOW SPLIT (OUTLET A AND OUTLET B)
014:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  *  DIVERT HYD      -> 05:Pond1026ou     48.47    2.733 No_date    7:05  118.48
            diverted <= 02:To807           7.76     .050 No_date    7:05  118.48
            diverted <= 07:To809          19.31     .561 No_date    7:05  118.48
            diverted <= 03:To1025         21.40    2.123 No_date    7:05  118.48
#                          FLOWS TO NODE 2 (UPSTREAM OF TENTH LINE)
014:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            09:1000        171.85    8.280 No_date    9:15  115.31
                    +  04:To1000          2.76     .171 No_date    7:33   89.14
      [DT= 1.00]  SUM=  05:Node 2       174.61    8.419 No_date    9:15  114.90
014:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:207           1.22     .081 No_date    7:01   89.14
      [CN= 55.3: N= 3.00]
      [Tp=  .13:DT= 1.00]
#                                  FLOWS TO OUTLET B
014:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:207           1.22     .081 No_date    7:01   89.14
                    +  02:To807           7.76     .050 No_date    7:05  118.48
      [DT= 1.00]  SUM=  06:807            8.98     .130 No_date    7:01  114.49
014:0054--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            06:807           8.98     .130 No_date    7:01  114.49
                    +  10:To806           4.27     .020 No_date    7:40  122.03
      [DT= 1.00]  SUM=  01:806          13.26     .150 No_date    7:01  116.92
#                              FLOWS FROM TENTH LINE
014:0055--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     08:601           .22     .017 No_date    7:00  117.64
      [XIMP=.35:TIMP=.35]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.035:SCI=   .0]
014:0056--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     09:602           1.15     .087 No_date    7:01  117.64
      [XIMP=.35:TIMP=.35]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.035:SCI=   .0]
#                    FLOWS TO NODE 3/ OUTLET A (DOWNSTREAM OF TENTH LINE)
014:0057--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            05:Node 2      174.61    8.419 No_date    9:15  114.90
                    +  03:To1025        21.40    2.123 No_date    7:05  118.48
                    +  07:To809         19.31     .561 No_date    7:05  118.48
                    +  08:601             .22     .017 No_date    7:00  117.64
                    +  09:602            1.15     .087 No_date    7:01  117.64
      [DT= 1.00]  SUM=  02:809/Node3    216.68   10.588 No_date    9:04  115.59
#                      FLOWS TO NODE 4  (SUM OF OUTLETS A&B)
014:0058--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            02:809/Node3    216.68   10.588 No_date    9:04  115.59
                    +  01:806            13.26     .150 No_date    7:01  116.92
      [DT= 1.00]  SUM=  04:Node4        229.94   10.705 No_date    9:04  115.66
014:0002--------------------------------------------------------------------------
     FINISH
--------------------------------------------------------------------------------
********************************************************************************
     WARNINGS / ERRORS / NOTES
     -------------------------
014:0050 DIVERT HYD      ->
     *** WARNING: Outflow tables were exceeded.
   Simulation ended on 2014-10-10      at 15:20:15
================================================================================
```

# APPENDIX B

## Post- development Hydrologic Modeling and SWM Design

# DRAFT PLAN OF SUBDIVISION OF THE NORTH HALF OF LOT 43 CONCESSION 11

( GEOGRAPHIC TOWNSHIP OF NOTTAWASAGA )

## TOWN OF COLLINGWOOD
## COUNTY OF SIMCOE

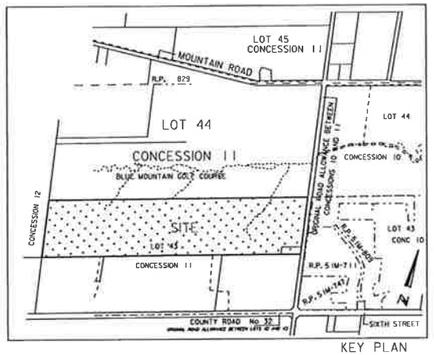
SCALE 1:2000

0 5 10 15 20 25 50 METRES

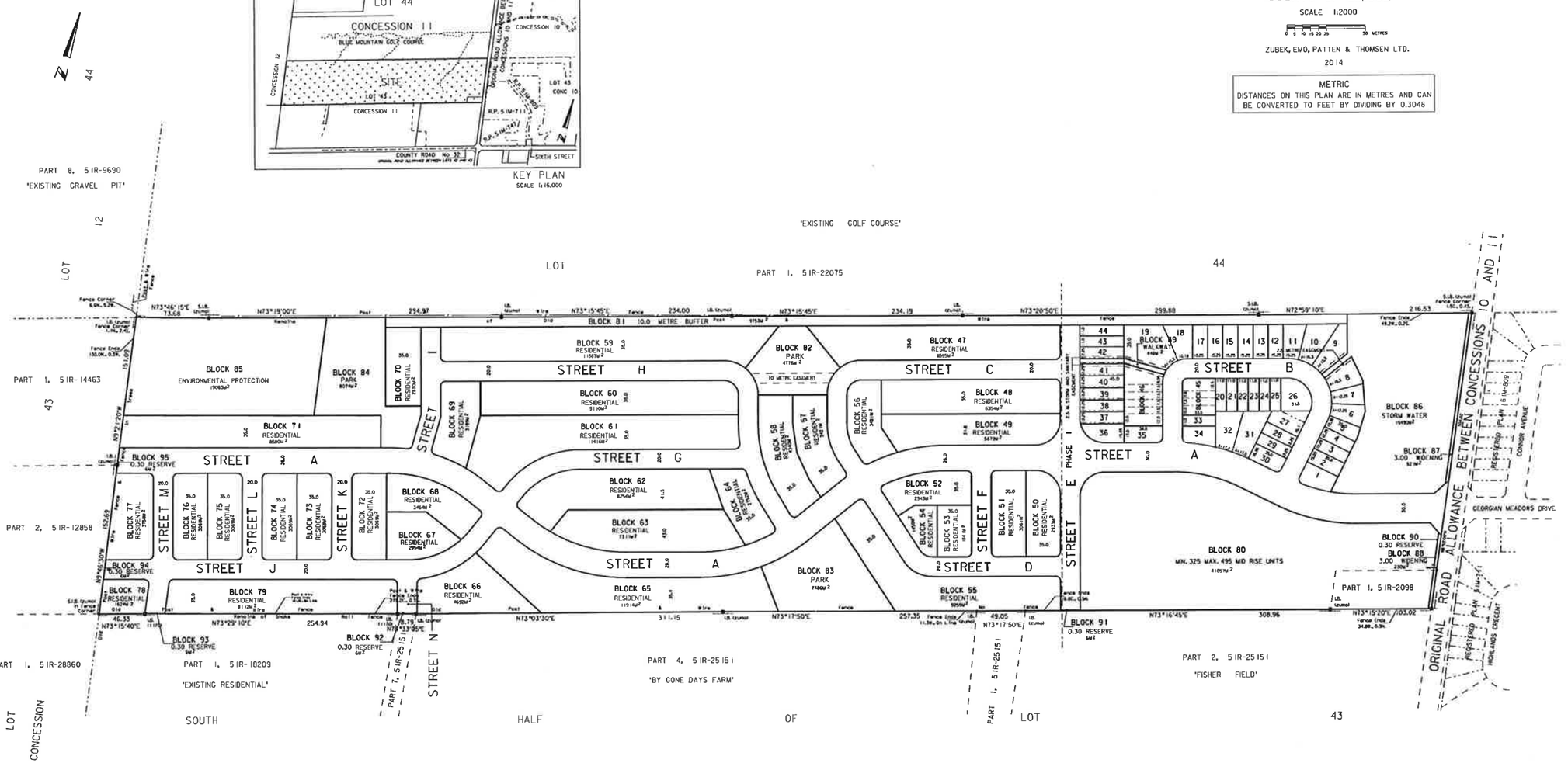
ZUBEK, EMO, PATTEN & THOMSEN LTD.

2014

METRIC
DISTANCES ON THIS PLAN ARE IN METRES AND CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048




KEY PLAN
SCALE 1:15,000




## ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT

A. AS SHOWN
B. AS SHOWN
C. AS SHOWN
D. AS SHOWN
E. AS SHOWN
F. AS SHOWN
G. AS SHOWN
H. MUNICIPAL WATER SUPPLY
I. CLAY LOAM
J. AS SHOWN
K. MUNICIPAL SANITARY SEWERS
L. AS SHOWN

## LAND USE SCHEDULE

| PROPOSED LAND USE | AREA (ha) |
|---|---|
| **LOTS** | |
| 1-44 Incl. RESIDENTIAL MAX 44 UNITS | 2.693 |
| **BLOCKS** | |
| 45-79 RESIDENTIAL MIN. 325 MAX 650 UNITS | 17.362 |
| 80 APARTMENTS MIN. 226 MAX 492 UNITS | 4.106 |
| 81 10.0 METRE DEDICATION | 0.975 |
| 82, 83, 84 PARK LAND | 2.034 |
| 85 ENVIRONMENTAL PROTECTION 'EP' | 1.908 |
| 86 STORM WATER | 1.949 |
| 87, 88 ROAD WIDENING | 0.075 |
| 89 WALKWAY | 0.045 |
| 90 TO 95 INCL. 0.30 RESERVE | 0.004 |
| **ROADS** | |
| STREET A, B, C, D, E, F, G, H, I, J, K, L, M, N | 9.509 |
| **TOTAL** | 40.660 |

## SURVEYOR'S CERTIFICATE

I CERTIFY THAT:
THE BOUNDARIES OF THE LANDS TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY SHOWN ON THIS PLAN.

DECEMBER 16, 2014 _____ O.L.S.

LYNN H. PATTEN
ONTARIO LAND SURVEYOR
COLLINGWOOD

## OWNER'S CERTIFICATE

LINKSVIEW DEVELOPMENT CORPORATION HEREBY AUTHORIZES THE SUBMISSION OF THIS DRAFT PLAN OF SUBDIVISION TO THE TOWN OF COLLINGWOOD PLANNING DEPARTMENT

DECEMBER , 2014

PER _____
LARRY DUNN

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ZUBEK, EMO PATTEN & THOMSEN LIMITED
ONTARIO LAND SURVEYORS
39 STEWART ROAD
COLLINGWOOD, ONTARIO L9Y 4M7
PHONE: (705) 445-4910 FAX: (705) 445-5866

JOB No. 72-253-3 SURVEY FOR: LINKSVIEW DEVELOPMENT CORPORATION

DGN FILE: C:\ZOOM\ 2005-REV\ LINKS47.DGN

CROZIER & ASSOCIATES
Consulting Engineers

| | |
|---|---|
| **Project:** | Linksview |
| **Project No.:** | 183-2687 |
| **Design by:** | KW |
| **Date:** | 13/10/2014 |

## DETERMINATION OF ALLOWABLE UNIT FLOW RATES FOR CATCHMENTS UPSTREAM OF TENTH LINE

Ultimate Contributing Area to Upstream of Tenth Line: 203.4 ha

| | Storm | Pre-Development Flow Rates ($m^3/s$) Node 1 | Node 2 | Node 3 | Node 4 | Target Unit Flow Rate for Taylor's Creek Catchments (L/s/ ha) |
|---|---|---|---|---|---|---|
| CHI | 2 year | 0.483 | 0.741 | 0.747 | 0.802 | 4 |
| | 5 year | 0.866 | 1.293 | 1.38 | 1.443 | 6 |
| | 10 year | 1.166 | 1.738 | 1.952 | 2.017 | 9 |
| | 25 year | 1.591 | 2.425 | 2.787 | 2.854 | 12 |
| | 50 year | 1.883 | 2.902 | 3.358 | 3.426 | 14 |
| | 100 year | 2.252 | 3.53 | 4.099 | 4.169 | 17 |
| SCS | 2 year | 0.593 | 0.919 | 0.925 | 0.983 | 5 |
| | 5 year | 1.103 | 1.67 | 1.832 | 1.895 | 8 |
| | 10 year | 1.429 | 2.188 | 2.478 | 2.542 | 11 |
| | 25 year | 1.952 | 3.084 | 3.563 | 3.63 | 15 |
| | 50 year | 2.319 | 3.73 | 4.34 | 4.408 | 18 |
| | 100 year | 2.792 | 4.603 | 5.387 | 5.458 | 23 |
| | Timmins | 4.743 | 8.419 | 10.588 | 10.705 | 41 |

Note: Target Unit Flow Rates were determined for future development areas upstream of Tenth Line based on pre-development flow rates at Node 2 and anticipated ultimate contributing areas.

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2500** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **38.20** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Post Development Drainage Area: 2500 (Site)**

## Curve Number Calculation

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 50 | 19.1 |
| Sargent Sandy Loam | Stsl | AB | 50 | 19.1 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 38.2 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Road | | Apartment | | Driveway | | Building/ Sidewalk | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 2.0 | 98 | 2.7 | 98 | 1.9 | 98 | 3.9 | 98 | 1.0 | 98 | 11.4 | 1118.5 |
| Stsl | 2.0 | 98 | | 98 | 1.9 | 98 | 3.9 | 98 | | 98 | 7.8 | 764.2 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0.0 | 0.0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0.0 | 0.0 |
| Subtotal Area | 4.0 | | 2.7 | | 3.7 | | 7.8 | | 1.0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 7.7 | 49 | 0 | | 7.7 | 376.7 |
| Stsl | 0 | | 0 | | 0 | | 11.3 | 59 | 0 | | 11.3 | 666.8 |
| 0 | 0 | | 0 | | 0 | | 0.0 | | 0 | | 0.0 | 0.0 |
| 0 | 0 | | 0 | | 0 | | 0.0 | | 0 | | 0.0 | 0.0 |
| Subtotal Area | 0 | | 0 | | 0 | | 19.0 | | 0 | | | |

| | | | |
|---|---|---|---|
| Pervious Area Calculations | Total Pervious Area | 19.0 | |
| | Composite Pervious Curve Number | 55.0 | |
| Impervious Area Calculations | Total Directly Connected Area | 11.4 | |
| | Total Indirectly Connected Area | 7.8 | |
| | Total Impervious Area | 19.2 | |
| | % X imp | 29.8 | |
| | % T imp | 50.3 | |
| | Total Area Check | 38.2 | |

## Initial Abstraction and Flow Path Calculations

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0 |
| Meadow | 8 | 0 | 0 |
| Wetland | 16 | 0 | 0 |
| Lawn | 5 | 18.989 | 94.945 |
| Cultivated | 7 | 0 | 0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 40 | 0.25 |
| Impervious | 2.0 | 0.5 | 505 | 0.013 |

Assumptions: 65% impervious coverage of apartment block (zoning requires 40% landscaped area)

| Lot Type | # Lots | Building & Deck Coverage ($m^2$/lot) | Driveway & Hardscape Coverage ($m^2$/lot) |
|---|---|---|---|
| Townhomes | 144 | 120 | 65 |
| 36' | 76 | 155 | 80 |
| 40' | 131 | 170 | 90 |
| 50' | 92 | 215 | 110 |

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2501** |
| Project Number: | 183-2687 | **D.A. AREA** | **85.82** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2501**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Kemble Clay Loam | Kc | D | 85 | 72.9 |
| Sargent gravelly sandy | Stsl | AB | 15 | 12.9 |
| | | | | 0.0 |
| | | | | 0.0 |
| Total Area | | | | 85.8 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Kc | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Pasture/Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Kc | 25.53 | 79 | 0.00 | | 0.00 | | 0.00 | | 47.42 | 84 | 72.95 | 5999.89 |
| Stsl | 0.00 | | 0.00 | | 0.00 | | 12.87 | 59 | 0.00 | | 12.87 | 759.51 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 25.53 | | 0.00 | | 0.00 | | 12.87 | | 47.42 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 85.82 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 78.8 |
| | Total Area Check | 85.82 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Kemble Clay Loam | | Sargent gravelly sandy loam | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 25.531 | 255.3 | 0.40 | 26 | | 0 | | 0 | | 0 | 10.21 |
| Meadow | 8 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Pasture/Lawn | 5 | 12.873 | 64.4 | | 0 | 0.29 | 13 | | 0 | | 0 | 3.73 |
| Cultivated | 7 | 47.416 | 331.9 | 0.55 | 47 | | 0 | | 0 | | 0 | 26.08 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 85.82 | 7.6 | Composite Runoff Coefficient | | | | | | | | 0.47 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Pasture | 140 | 1 | 0.71% | 2.3 | 0.19 | 0.20 | 0.13 | 0.13 | 0.86 | 0.58 | 1.22 | 0.81 |
| Woodland | 450 | 6.5 | 1.4% | 0.6 | 0.07 | 1.73 | 1.16 | 1.30 | | | | |
| Pasture | 300 | 4 | 1.3% | 2.3 | 0.27 | 0.31 | 0.21 | 1.51 | | | | |
| Watercourse | 600 | 8 | 1.3% | 4.6 | 0.53 | 0.31 | 0.21 | 1.72 | | | | |

| Appropriate calculated time to peak: | 1.72 | Appropriate Method: | Uplands |
|---|---|---|---|

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2502** |
| Project Number: | 183-2687 | **D.A. AREA** | **5.52** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2502**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Sargent gravelly sandy | Stsl | AB | 100 | 5.52 |
| | | | | 0.00 |
| | | | | 0 |
| | | | | 0 |
| Total Area | | | | 5.52 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Stsl | 1.93 | 46 | 0.00 | | 0.00 | | 0.00 | | 3.59 | 65 | 5.52 | 322.09 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 1.93 | | 0.00 | | 0.00 | | 0.00 | | 3.59 | | | |

| | | | |
|---|---|---|---|
| | Composite Area Calculations | Total Pervious Area | 5.52 |
| | | Total Impervious Area | 0 |
| | | % Impervious | 0.0 |
| | | Composite Curve Number | 58.4 |
| | | Total Area Check | 5.52 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sargent gravelly | | 0 | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 1.932 | 19.3 | 0.17 | 2 | | 0 | | 0 | | 0 | 0.33 |
| Meadow | 8 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Cultivated | 7 | 3.588 | 25.1 | 0.29 | 4 | | 0 | | 0 | | 0 | 1.04 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 5.52 | 8.1 | Composite Runoff Coefficient | | | | | | | | 0.25 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Cultivated | 200 | 3.5 | 1.75% | 2.3 | 0.30 | 0.18 | 0.12 | 0.12 | 0.14 | 0.10 | 0.54 | 0.36 |

| | | | |
|---|---|---|---|
| Appropriate calculated time to peak: | 0.54 | Appropriate Method: | Airport |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2503** |
| Project Number: | 183-2687 | **D.A. AREA** | **7.76** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2503**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Harkaway | Hal | B | 60 | 4.66 |
| Sargent gravelly sandy | Stsl | AB | 40 | 3.10 |
| | | | | 0 |
| | | | | 0 |
| Total Area | | | | 7.76 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | 2.33 | 60 | 0.00 | | 0.00 | | 2.33 | 69 | 0.00 | | 4.66 | 300.31 |
| Stsl | 0.00 | 46 | 0.00 | | 0.00 | | 3.10 | 59 | 0.00 | 65 | 3.10 | 183.14 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 2.33 | | 0.00 | | 0.00 | | 5.43 | | 0.00 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 7.76 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 62.3 |
| | Total Area Check | 7.76 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Harkaway | | Sargent gravelly sandy loam | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 2.328 | 23.3 | 0.25 | 2 | 0.17 | 0 | | 0 | | 0 | 0.58 |
| Meadow | 8 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 5.432 | 27.2 | 0.28 | 2 | 0.19 | 3 | | 0 | | 0 | 1.24 |
| Cultivated | 7 | 0 | 0.0 | | 0 | 0.29 | 0 | | 0 | | 0 | 0.00 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 7.76 | 6.5 | Composite Runoff Coefficient | | | | | | | | 0.24 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 100 | 1.5 | 1.50% | 2.3 | 0.28 | 0.10 | 0.07 | 0.07 | 0.26 | 0.17 | 0.75 | 0.50 |
| Woodland | 270 | 5 | 1.85% | 0.6 | 0.08 | 0.92 | 0.62 | 0.68 | | | | |

| Appropriate calculated time to peak: | 0.68 | Appropriate Method: | Uplands |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2504** |
| Project Number: | 183-2687 | **D.A. AREA** | **7.94** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2504**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Sandy Loam | Tisl | A | 10 | 0.79 |
| Sargent gravelly sandy | Stsl | AB | 90 | 7.15 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 7.94 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tisl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tisl | 0.79 | 32 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.79 | 25.41 |
| Stsl | 2.86 | 46 | 0.00 | | 0.00 | | 2.50 | 59 | 1.79 | 65 | 7.15 | 395.17 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 3.65 | | 0.00 | | 0.00 | | 2.50 | | 1.79 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 7.94 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 53.0 |
| | Total Area Check | 7.94 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tioga Sandy Loam | | Sargent gravelly sandy loam | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 3.65 | 36.5 | 0.08 | 0.79 | 0.17 | 2.86 | | 0.00 | | 0.00 | 0.55 |
| Meadow | 8 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Wetland | 16 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Lawn | 5 | 2.50 | 12.5 | | 0.00 | 0.19 | 2.50 | | 0.00 | | 0.00 | 0.48 |
| Cultivated | 7 | 1.79 | 12.5 | | 0.00 | 0.29 | 1.79 | | 0.00 | | 0.00 | 0.52 |
| Impervious | 2 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Composite IA | | 7.94 | 7.8 | Composite Runoff Coefficient | | | | | | | | 0.19 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 140 | 3 | 2.14% | 2.3 | 0.34 | 0.12 | 0.08 | 0.08 | 0.25 | 0.17 | 0.82 | 0.55 |
| Watercourse | 210 | 2 | 1% | 4.6 | 0.45 | 0.13 | 0.09 | 0.16 | | | | |

| Appropriate calculated time to peak: | 0.55 | Appropriate Method: | Airport |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2505** |
| Project Number: | 183-2687 | **D.A. AREA** | **6.99** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2505**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Harkaway | Hal | B | 25 | 1.75 |
| | | | | 0.00 |
| Tioga Fine Sandy Loam | Tif | A | 75 | 5.24 |
| | | | | 0.00 |
| Total Area | | | | 6.99 |

Impervious Landuses Present:

| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

Pervious Landuses Present:

| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | 0.00 | | 0.00 | | 0.00 | | 1.75 | 69 | 0.00 | | 1.75 | 120.58 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 65 | 0.00 | 0.00 |
| Tif | 0.00 | | 0.00 | | 0.00 | | 5.24 | 49 | 0.00 | 58 | 5.24 | 256.88 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 6.99 | | 0.00 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 6.99 |
| | Total Impervious Area | 0.00 |
| | % Impervious | 0.00 |
| | Composite Curve Number | 54.00 |
| | Total Area Check | 6.99 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Harkaway | | 0 | | Tioga Fine Sandy | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Meadow | 8 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Wetland | 16 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Lawn | 5 | 6.99 | 35.0 | 0.28 | 1.75 | | 0.00 | 0.10 | 5.24 | | 0.00 | 1.01 |
| Cultivated | 7 | 0.00 | 0.0 | | 0.00 | 0.29 | 0.00 | 0.22 | 0.00 | | 0.00 | 0.00 |
| Impervious | 2 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Composite IA | | 6.99 | 5.0 | Composite Runoff Coefficient | | | | | | | | 0.15 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 350 | 3.5 | 1.00% | 2.3 | 0.23 | 0.42 | 0.28 | 0.28 | 0.27 | 0.18 | 0.97 | 0.65 |

| Appropriate calculated time to peak: | 0.65 | Appropriate Method: | Airport |
|---|---|---|---|

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2506** |
| Project Number: | 183-2687 | **D.A. AREA** | **2.50** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2506**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 100 | 2.50 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 2.5 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.00 | | 0.00 | | 0.00 | | 2.50 | 49 | 0.00 | 58 | 2.50 | 122.50 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 2.50 | | 0.00 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 2.5 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 49.0 |
| | Total Area Check | 2.5 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tioga Fine Sandy | | 0 | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0.00 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Meadow | 8 | 0.00 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0.00 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 2.50 | 12.5 | 0.10 | 3 | | 0 | | 0 | | 0 | 0.25 |
| Cultivated | 7 | 0.00 | 0.0 | 0.22 | 0 | | 0 | | 0 | | 0 | 0.00 |
| Impervious | 2 | 0.00 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 2.50 | 5.0 | Composite Runoff Coefficient | | | | | | | | 0.10 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 180 | 3 | 1.67% | 2.3 | 0.30 | 0.17 | 0.11 | 0.11 | 0.14 | 0.09 | 0.62 | 0.41 |

| Appropriate calculated time to peak: | 0.41 | Appropriate Method: | Airport |
|---|---|---|---|

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2507** |
| Project Number: | 183-2687 | **D.A. AREA** | **5.22** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2507**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 100 | 5.22 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 5.22 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.00 | | 0.00 | | 0.00 | | 5.22 | 49 | 0.00 | | 5.22 | 255.78 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 5.22 | | 0.00 | | | |

| | | | |
|---|---|---|---|
| Composite Area Calculations | Total Pervious Area | 5.22 | |
| | Total Impervious Area | 0 | |
| | % Impervious | 0.0 | |
| | Composite Curve Number | 49.0 | |
| | Total Area Check | 5.22 | |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Landuse | IA (mm) | Area (ha) | A * IA | Tioga Fine Sandy | | 0 | | 0 | | 0 | | |
| | | | | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Meadow | 8 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Wetland | 16 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 5.22 | 26.1 | 0.10 | 5 | | 0 | | 0 | | 0 | 0.52 |
| Cultivated | 7 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Impervious | 2 | 0 | 0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 5.22 | 5 | Composite Runoff Coefficient | | | | | | | | 0.10 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 200 | 5 | 2.50% | 2.3 | 0.36 | 0.15 | 0.10 | 0.10 | 0.25 | 0.16 | 0.81 | 0.54 |
| Watercourse | 150 | 2 | 1.33% | 4.6 | 0.53 | 0.08 | 0.05 | 0.15 | | | | |

| | | | |
|---|---|---|---|
| Appropriate calculated time to peak: | 0.54 | Appropriate Method: | Airport |

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2508** |
| Project Number: | 183-2687 | **D.A. AREA** | **7.46** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2508**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 90 | 6.71 |
| Percy Fine Sandy Loam | Pfs | B | 10 | 0.75 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 7.46 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Pfs | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.00 | | 0.00 | | 0.00 | | 6.71 | 49 | 0.00 | 58 | 6.71 | 328.99 |
| Pfs | 0.00 | | 0.00 | | 0.00 | | 0.75 | 59 | 0.00 | | 0.75 | 44.01 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 65 | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 7.46 | | 0.00 | | | |

| | | | |
|---|---|---|---|
| Composite Area Calculations | Total Pervious Area | 7.46 | |
| | Total Impervious Area | 0 | |
| | % Impervious | 0.0 | |
| | Composite Curve Number | 50.0 | |
| | Total Area Check | 7.46 | |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tioga Fine Sandy | | Percy Fine Sandy Loam | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Meadow | 8 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Wetland | 16 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Lawn | 5 | 7.46 | 37.3 | 0.10 | 6.71 | 0.28 | 0.75 | | 0.00 | | 0.00 | 0.88 |
| Cultivated | 7 | 0.00 | 0.0 | 0.22 | 0.00 | | 0.00 | 0.29 | 0.00 | | 0.00 | 0.00 |
| Impervious | 2 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Composite IA | | 7.46 | 5.0 | Composite Runoff Coefficient | | | | | | | | 0.12 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Lawn | 400 | 6 | 1.50% | 2.3 | 0.28 | 0.39 | 0.26 | 0.26 | 0.29 | 0.19 | 0.93 | 0.63 |

| | | | |
|---|---|---|---|
| Appropriate calculated time to peak: | 0.63 | Appropriate Method: | Airport |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2509** |
| Project Number: | 183-2687 | **D.A. AREA** | **5.30** |
| Date: | August 19 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Post Development Drainage Area: Catchment 2509**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Sargent gravelly sandy | Stsl | AB | 100 | 5.30 |
| | | | | 0.00 |
| | | | | 0.00 |
| | | | | 0.00 |
| Total Area | | | | 5.3 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Stsl | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 5.30 | 59 | 5.30 | 312.70 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 5.30 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 5.3 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 59.0 |
| | Total Area Check | 5.3 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sargent gravelly | | 0 | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Meadow | 8 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Wetland | 16 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Lawn | 5 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Cultivated | 7 | 5.30 | 37.1 | 0.29 | 5.30 | | 0.00 | | 0.00 | | 0.00 | 1.54 |
| Impervious | 2 | 0.00 | 0.0 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Composite IA | | 5.3 | 7.0 | Composite Runoff Coefficient | | | | | | | | 0.29 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Cultivated | 250 | 7 | 2.80% | 2.7 | 0.45 | 0.15 | 0.10 | 0.10 | 0.16 | 0.11 | 0.50 | 0.33 |

| Appropriate calculated time to peak: | 0.33 | Appropriate Method: | Airport |
|---|---|---|---|

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2601** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **0.25** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Post Development Drainage Area: 2601 (10th Line)**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 100 | 0.247 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 0.247 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Apartment | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.157 | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0.157 | 15.36 |
| 0 | | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0.157 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 0.09025 | 49 | 0 | | 0.0903 | 4.4223 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0.09025 | | 0 | | | |

| | | | |
|---|---|---|---|
| | Pervious Area Calculations | Total Pervious Area | 0.09 |
| | | Composite Pervious Curve Number | 49 |
| | Impervious Area Calculations | Total Directly Connected Area | 0.16 |
| | | Total Indirectly Connected Area | 0 |
| | | Total Impervious Area | 0.16 |
| | | % X imp | 63.5 |
| | | % T imp | 63.5 |
| | | Total Area Check | 0.247 |

**Initial Abstraction and Flow Path Calculations**

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0 |
| Meadow | 8 | 0 | 0 |
| Wetland | 16 | 0 | 0 |
| Lawn | 5 | 0.09 | 0.45 |
| Cultivated | 7 | 0 | 0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 3 | 0.25 |
| Impervious | 2.0 | 0.5 | 48 | 0.013 |

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|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **2602** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **1.30** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Post Development Drainage Area: 2602 (10th Line)**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 100 | 1.3 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 1.3 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Apartment | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.825 | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0.825 | 80.85 |
| 0 | | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0.825 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 0.475 | 49 | 0 | | 0.475 | 23.275 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0.475 | | 0 | | | |

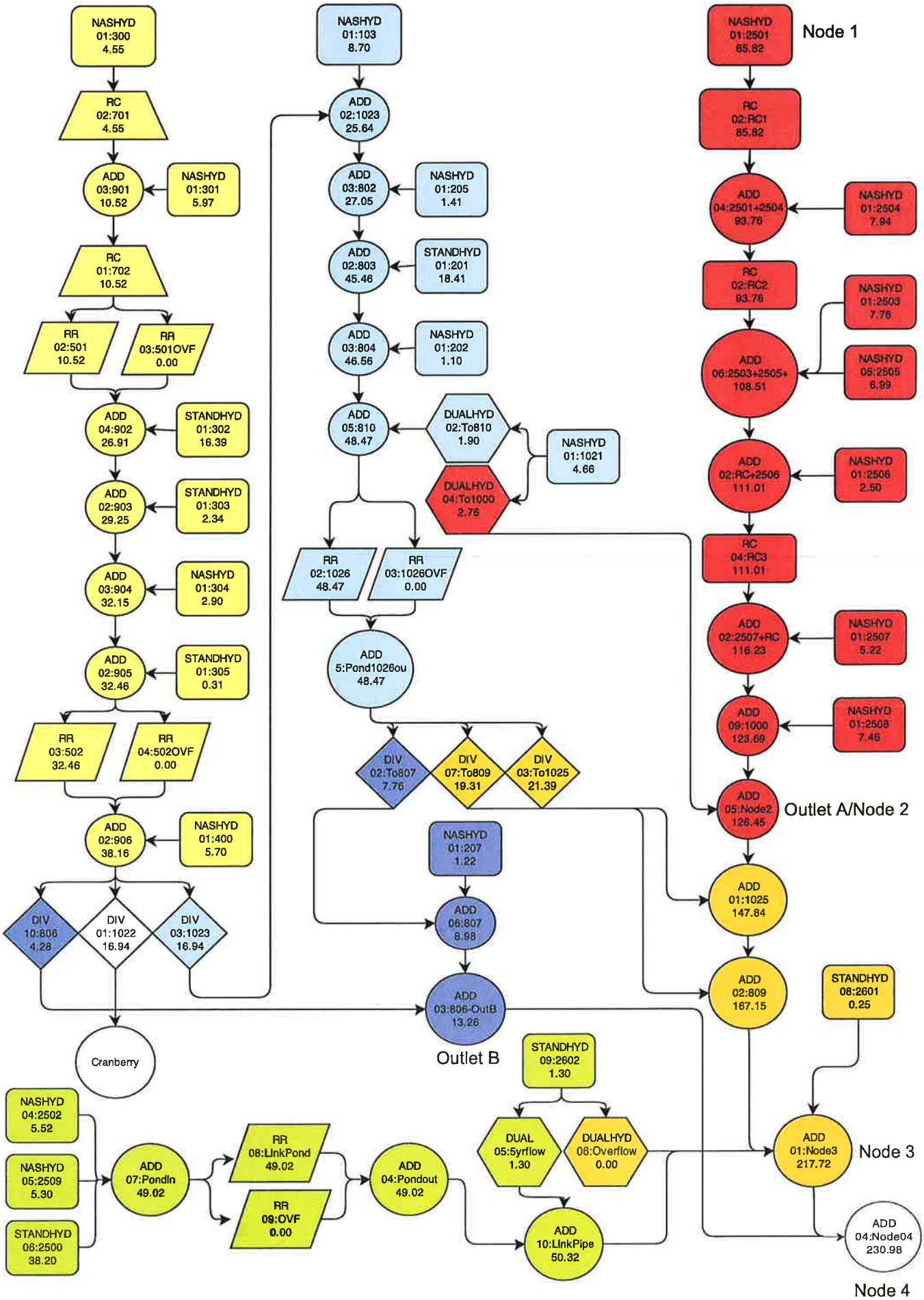
| | | | |
|---|---|---|---|
| | Pervious Area Calculations | Total Pervious Area | 0.48 |
| | | Composite Pervious Curve Number | 49 |
| | Impervious Area Calculations | Total Directly Connected Area | 0.83 |
| | | Total Indirectly Connected Area | 0 |
| | | Total Impervious Area | 0.83 |
| | | % X imp | 63.5 |
| | | % T imp | 63.5 |
| | | Total Area Check | 1.3 |

**Initial Abstraction and Flow Path Calculations**

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0 |
| Meadow | 8 | 0 | 0 |
| Wetland | 16 | 0 | 0 |
| Lawn | 5 | 0.48 | 2.38 |
| Cultivated | 7 | 0 | 0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 500 | 0.25 |
| Impervious | 2.0 | 0.5 | 500 | 0.013 |

# Post-Development Model



POST DEVELOPMENT



```
00001> ********************************************************************************
00002>
00003>    SSSSS  W    W  M    M  H    H  Y    Y  M    M    OOO        999    999      *********
00004>    S      W W W  MM  MM  H    H   Y  Y   MM MM   O   O      9   9  9   9      *********
00005>    SSSSS  W W W  M MM M  HHHHHH    Y     M M M   O   O  ##  9   9  9   9  Ver  4.05
00006>        S  W W W  M    M  H    H    Y     M    M   O   O       9999   9999   Sept 2011
00007>    SSSSS   W W   M    M  H    H    Y     M    M    OOO          9      9      *********
00008>                                                               9   9  9   9   # 3737016
00009>          StormWater Management HYdrologic Model                999    999     *********
00010>
00011> ********************************************************************************
00012> ************************** SWMHYMO Ver/4.05  ***********************************
00013> *********  A single event and continuous hydrologic simulation model  *********
00014> *********     based on the principles of HYMO and its successors      *********
00015> *********                OTTHYMO-83 and OTTHYMO-89.                   *********
00016> ********************************************************************************
00017> *********  Distributed by:  J.F. Sabourin and Associates Inc.          *********
00018> *********                   Ottawa,  Ontario: (613) 836-3884           *********
00019> *********                   Gatineau, Quebec: (819) 243-6858           *********
00020> *********                   E-Mail: swmhymo@jfsa.com                   *********
00021> ********************************************************************************
00022>
00023> ********************************************************************************
00024> +++++++++ Licensed user: C.F. Crozier & Associates Inc                +++++++++
00025> +++++++++                 Collingwood            SERIAL#:3737016     +++++++++
00026> ********************************************************************************
00027>
00028> ********************************************************************************
00029> *********          ++++++ PROGRAM ARRAY DIMENSIONS ++++++              *********
00030> *********          Maximum value for ID numbers  :    10              *********
00031> *********          Max. number of rainfall points: 105408             *********
00032> *********          Max. number of flow points    : 105408             *********
00033> ********************************************************************************
00034>
00035> ***** DESCRIPTION SUMMARY TABLE HEADERS (units depend on METOUT in START) *****
00036> *****-------------------------------------------------------------------*****
00037> *****    ID:  Hydrograph IDentification numbers, (1-10).                *****
00038> *****  NHYD:  Hydrograph reference numbers, (6 digits or characters).   *****
00039> *****  AREA:  Drainage area associated with hydrograph, (ac.) or (ha.).*****
00040> ***** QPEAK:  Peak flow of simulated hydrograph, (ft^3/s) or (m^3/s).   *****
00041> ***** TpeakDate_hh:mm is the date and time of the peak flow.            *****
00042> *****  R.V.:  Runoff Volume of simulated hydrograph, (in) or (mm).     *****
00043> *****  R.C.:  Runoff Coefficient of simulated hydrograph, (ratio).     *****
00044> *****    *:  see WARNING or NOTE message printed at end of run.        *****
00045> *****   **:  see  ERROR  message printed at end of run.                *****
00046> ********************************************************************************
00047> ********************************************************************************
00048>
00049> ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
00050>
00051> ********************************************************************************
00052>
00053> **********************  S U M M A R Y   O U T P U T  **************************
00054> ********************************************************************************
00055> *         DATE: 2014-10-17      TIME: 13:50:27      RUN COUNTER: 000376         *
00056> ********************************************************************************
00057> * Input  filename: C:\1POSTW~1.10\PostDev1.dat                                  *
00058> * Output  filename: C:\1POSTW~1.10\PostDev1.out                                *
00059> * Summary filename: C:\1POSTW~1.10\PostDev1.sum                                *
00060> * User comments:                                                              *
00061> * 1: ___________________________________________________________________      *
00062> * 2: ___________________________________________________________________      *
00063> * 3: ___________________________________________________________________      *
00064> ********************************************************************************
00065>
00066>
00067> #*******************************************************************************
00068> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
00069> #  Date       : 2014 08 22
00070> #  Modified   :
00071> #  Modeller   : [A.French]
00072> #  Company    : C.F. Crozier & Associates Inc.
00073> #  License #  :  3737016
00074> #*******************************************************************************
00075>  RUN:COMMAND#
00076>  001:0001----------------------------------------------------------------------
00077>      START
00078>       [TZERO =    .00 hrs on        0]
00079>       [METOUT=   2    (1=imperial, 2=metric output)]
00080>       [NSTORM=   1 ]
00081>       [NRUN  =   1 ]
00082> #*******************************************************************************
00083>  001:0002----------------------------------------------------------------------
00084>      READ STORM
00085>       Filename = STORM.001
00086>       Comment  =
00087>       [SDT= 5.00:SDUR=   4.00:PTOT=  24.99]
00088> #             MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00089>  001:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00090>      CALIB NASHYD       01:300            4.55     .019 No_date    2:25    3.23
00091>       [CN= 71.0: N= 3.00]
00092>       [Tp=  .74:DT= 1.00]
00093>  001:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00094>      ROUTE CHANNEL   -> 01:300            4.55     .019 No_date    2:25    3.23
00095>       [RDT= 1.00] out<- 02:701            4.55     .011 No_date    3:22    3.23
00096>       [L/S/n=  450./ .050/.040]
00097>       [Vmax=  .100:Dmax=  .074]
00098>  001:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00099>      CALIB NASHYD       01:301            5.97     .027 No_date    2:16    3.23
00100>       [CN= 71.0: N= 3.00]
00101>       [Tp=  .63:DT= 1.00]
00102>  001:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00103>      ADD HYD            01:301            5.97     .027 No_date    2:16    3.23
00104>                       + 02:701           4.55     .011 No_date    3:22    3.23
00105>       [DT= 1.00]  SUM=  03:901           10.52     .034 No_date    2:27    3.23
00106>  001:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00107>      ROUTE CHANNEL   -> 03:901           10.52     .034 No_date    2:27    3.23
00108>       [RDT= 1.00] out<- 01:702           10.52     .021 No_date    3:27    3.23
00109>       [L/S/n=  300./ .050/.060]
00110>       [Vmax=  .065:Dmax=  .172]
00111>  001:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00112>      ROUTE RESERVOIR -> 01:702          10.52     .021 No_date    3:27    3.23
00113>       [RDT= 1.00] out<- 02:501          10.52     .021 No_date    3:39    3.23
00114>             overflow <= 03:501OVF          .00     .000 No_date    0:00     .00
00115>       (MxStoUsed=.1044E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00116>  001:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00117>      CALIB STANDHYD     01:302           16.39     .295 No_date    1:33    7.63
00118>       [XIMP=.20:TIMP=.40]
00119>       [LOSS= 2 :CN= 65.2]
00120>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00121>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
00122>  001:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00123>      ADD HYD            01:302           16.39     .295 No_date    1:33    7.63
00124>                       + 02:501           10.52     .021 No_date    3:39    3.23
00125>                       + 03:501OVF          .00     .000 No_date    0:00     .00
00126>       [DT= 1.00]  SUM=  04:902           26.91     .295 No_date    1:33    5.91
00127>  001:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00128>      CALIB STANDHYD     01:303            2.34     .072 No_date    1:25    9.01
00129>       [XIMP=.25:TIMP=.50]
00130>       [LOSS= 2 :CN= 65.2]
00131>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00132>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
00133>  001:0012----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00134>      ADD HYD            01:303            2.34     .072 No_date    1:25    9.01
00135>                       + 04:902           26.91     .295 No_date    1:33    5.91
00136>       [DT= 1.00]  SUM=  02:903           29.25     .352 No_date    1:32    6.16
00137>  001:0013----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00138>      CALIB NASHYD       01:304            2.90     .018 No_date    1:46    2.71
00139>       [CN= 66.6: N= 3.00]
00140>       [Tp=  .28:DT= 1.00]
00141>  001:0014----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00142>      ADD HYD            01:304            2.90     .018 No_date    1:46    2.71
00143>                       + 02:903           29.25     .352 No_date    1:32    6.16
00144>       [DT= 1.00]  SUM=  03:904           32.15     .364 No_date    1:32    5.85
00145>  001:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00146>      CALIB STANDHYD     01:305             .31     .013 No_date    1:20    6.75
00147>       [XIMP=.20:TIMP=.20]
00148>       [LOSS= 2 :CN= 65.2]
00149>       [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
00150>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
00151>  001:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00152>      ADD HYD            01:305             .31     .013 No_date    1:20    6.75
00153>                       + 03:904           32.15     .364 No_date    1:32    5.85
00154>       [DT= 1.00]  SUM=  02:905           32.46     .366 No_date    1:32    5.86
00155> #                      MAIR MILLS ESTATES SWM FACILITY
00156>  001:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00157>      ROUTE RESERVOIR -> 02:905          32.46     .366 No_date    1:32    5.86
00158>       [RDT= 1.00] out<- 03:502          32.46     .013 No_date    5:35    5.86
00159>             overflow <= 04:502OVF          .00     .000 No_date    0:00     .00
00160>       (MxStoUsed=.1590E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00161>  001:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00162>      CALIB NASHYD       01:400            5.70     .006 No_date    2:36     .84
00163>       [CN= 50.2: N= 3.00]
00164>       [Tp=  .70:DT= 1.00]
00165>  001:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00166>      ADD HYD            01:400            5.70     .006 No_date    2:36     .84
00167>                       + 03:502           32.46     .013 No_date    5:35    5.86
00168>                       + 04:502OVF          .00     .000 No_date    0:00     .00
00169>       [DT= 1.00]  SUM=  02:906           38.16     .016 No_date    3:06    5.11
00170> #        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
00171>  001:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00172>      DIVERT HYD      -> 02:906          38.16     .016 No_date    3:06    5.11
00173>                diverted <= 10:To806     38.16     .016 No_date    3:06    5.11
00174>                diverted <= 03:To1023      .00     .000 No_date    0:00     .00
00175>                diverted <= 01:To1022      .00     .000 No_date    0:00     .00
00176> #                    TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
00177> #                                FLOW AT NODE 1
00178>  001:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00179>      CALIB NASHYD       01:2501          85.82     .217 No_date    3:55    3.53
00180>       [CN= 78.8: N= 3.00]
00181>       [Tp= 1.72:DT= 1.00]
00182>  001:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00183>      ROUTE CHANNEL   -> 01:2501          85.82     .217 No_date    3:55    3.53
00184>       [RDT= 1.00] out<- 02:RC1           85.82     .216 No_date    4:00    3.53
00185>       [L/S/n=  350./1.500/.030]
00186>       [Vmax= 1.146:Dmax=  .513]
00187>  001:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00188>      CALIB NASHYD       01:2504           7.94     .014 No_date    2:15    1.23
00189>       [CN= 53.0: N= 3.00]
00190>       [Tp=  .55:DT= 1.00]
00191>  001:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00192>      ADD HYD            01:2504           7.94     .014 No_date    2:15    1.23
00193>                       + 02:RC1           85.82     .216 No_date    4:00    3.53
00194>       [DT= 1.00]  SUM=  04:2501+2504     93.76     .222 No_date    3:57    3.33
00195>  001:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00196>      ROUTE CHANNEL   -> 04:2501+2504     93.76     .222 No_date    3:57    3.33
00197>       [RDT= 1.00] out<- 02:RC2           93.76     .221 No_date    4:02    3.33
00198>       [L/S/n=  425./1.250/.030]
00199>       [Vmax= 1.088:Dmax=  .448]
00200>  001:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00201>      CALIB NASHYD       01:2503           7.76     .020 No_date    2:24    1.99
00202>       [CN= 62.3: N= 3.00]
00203>       [Tp=  .68:DT= 1.00]
00204>  001:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00205>      CALIB NASHYD       05:2505           6.99     .016 No_date    2:18    1.69
00206>       [CN= 54.0: N= 3.00]
00207>       [Tp=  .65:DT= 1.00]
00208>  001:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00209>      ADD HYD            01:2503           7.76     .020 No_date    2:24    1.99
00210>                       + 02:RC2           93.76     .221 No_date    4:02    3.33
00211>                       + 05:2505          6.99     .016 No_date    2:18    1.69
00212>       [DT= 1.00]  SUM=  06:2503+2505+   108.51     .237 No_date    3:56    3.13
00213>  001:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00214>      CALIB NASHYD       01:2506           2.50     .006 No_date    1:58    1.41
00215>       [CN= 49.0: N= 3.00]
00216>       [Tp=  .41:DT= 1.00]
00217>  001:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00218>      ADD HYD            01:2506           2.50     .006 No_date    1:58    1.41
00219>                       + 06:2503+2505+   108.51     .237 No_date    3:56    3.13
00220>       [DT= 1.00]  SUM=  02:RC+2506       111.01     .238 No_date    3:56    3.09
00221>  001:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00222>      ROUTE CHANNEL   -> 02:RC+2506       111.01     .238 No_date    3:56    3.09
00223>       [RDT= 1.00] out<- 04:RC3           111.01     .238 No_date    3:57    3.09
00224>       [L/S/n=  200./1.000/.030]
00225>       [Vmax= 1.013:Dmax=  .478]
00226>  001:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00227>      CALIB NASHYD       01:2507           5.22     .011 No_date    2:09    1.41
00228>       [CN= 49.0: N= 3.00]
00229>       [Tp=  .54:DT= 1.00]
00230>  001:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00231>      ADD HYD            01:2507           5.22     .011 No_date    2:09    1.41
00232>                       + 04:RC3           111.01     .238 No_date    3:57    3.09
00233>       [DT= 1.00]  SUM=  02:2507+RC       116.23     .242 No_date    3:57    3.02
00234>  001:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00235>      CALIB NASHYD       01:2508           7.46     .015 No_date    2:17    1.46
00236>       [CN= 50.0: N= 3.00]
00237>       [Tp=  .63:DT= 1.00]
00238>  001:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00239>      ADD HYD            01:2508           7.46     .015 No_date    2:17    1.46
00240>                       + 02:2507+RC       116.23     .242 No_date    3:57    3.02
00241>       [DT= 1.00]  SUM=  09:1000          123.69     .248 No_date    3:51    2.92
00242> #                MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
00243>  001:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00244>      CALIB NASHYD       01:103            8.70     .022 No_date    2:07    1.62
00245>       [CN= 59.2: N= 3.00]
00246>       [Tp=  .48:DT= 1.00]
00247>  001:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00248>      ADD HYD            01:103            8.70     .022 No_date    2:07    1.62
00249>                       + 03:To1023          .00     .000 No_date    0:00     .00
00250>       [DT= 1.00]  SUM=  02:1023          8.70     .022 No_date    2:07    1.62
00251>  001:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00252>      CALIB NASHYD       01:205            1.41     .004 No_date    1:41    1.20
00253>       [CN= 51.1: N= 3.00]
00254>       [Tp=  .20:DT= 1.00]
00255>  001:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00256>      ADD HYD            01:205            1.41     .004 No_date    1:41    1.20
00257>                       + 02:1023          8.70     .022 No_date    2:07    1.62
00258>       [DT= 1.00]  SUM=  03:802           10.11     .024 No_date    2:04    1.56
00259>  001:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00260>      CALIB STANDHYD     01:201            18.41    1.223 No_date    1:22   11.37
00261>       [XIMP=.43:TIMP=.56]
00262>       [LOSS= 2 :CN= 49.0]
00263>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
00264>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
00265>  001:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00266>      ADD HYD            01:201            18.41    1.223 No_date    1:22   11.37
00267>                       + 03:802           10.11     .024 No_date    2:04    1.56
00268>       [DT= 1.00]  SUM=  02:803           28.52    1.224 No_date    1:22    7.89
00269>  001:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00270>      CALIB NASHYD       01:202            1.10     .001 No_date    2:00     .64
```

25 mm

```
00271>       [CN= 55.0: N= 3.00]
00272>       [Tp=  .25:DT= 1.00]
00273>  001:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00274>       ADD HYD            01:202             1.10     .001 No_date    2:00     .64
00275>                        + 02:803            28.52    1.224 No_date    1:22    7.89
00276>         [DT= 1.00]  SUM=  03:804            29.62    1.224 No_date    1:22    7.62
00277>  001:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00278>       CALIB NASHYD       01:1021             4.66     .009 No_date    2:32    1.61
00279>         [CN= 55.3: N= 3.00]
00280>         [Tp=  .78:DT= 1.00]
00281>  001:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00282>       COMPUTE DUALHYD     01:1021             4.66     .009 No_date    2:32    1.61
00283>          Major System /  04:To1000            .00     .000 No_date    0:00     .00
00284>          Minor System \  02:To810             4.66     .009 No_date    2:32    1.61
00285>  001:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00286>       ADD HYD            02:To810            4.66     .009 No_date    2:32    1.61
00287>                        + 03:804             29.62    1.224 No_date    1:22    7.62
00288>         [DT= 1.00]  SUM=  05:810             34.28    1.224 No_date    1:22    6.80
00289> #                       MAIR MILLS VILLAGE SWMF
00290>  001:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00291>       ROUTE RESERVOIR -> 05:810            34.28    1.224 No_date    1:22    6.80
00292>         [RDT= 1.00] out<- 02:1026          34.28     .023 No_date    4:10    6.80
00293>                   overflow <= 03:10260VF      .00     .000 No_date    0:00     .00
00294>       {MxStoUsed=.2099E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00295>  001:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00296>       ADD HYD            02:1026            34.28     .023 No_date    4:10    6.80
00297>                        + 03:10260VF         .00     .000 No_date    0:00     .00
00298>         [DT= 1.00]  SUM=  05:Pond1026ou      34.28     .023 No_date    4:10    6.80
00299> #                 TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
00300>  001:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00301>       DIVERT HYD       -> 05:Pond1026ou    34.28     .023 No_date    4:10    6.80
00302>                  diverted <= 02:To807      34.28     .023 No_date    4:10    6.80
00303>                  diverted <= 07:To809         .00     .000 No_date    0:00     .00
00304>                  diverted <= 03:To1025        .00     .000 No_date    0:00     .00
00305> #                         FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
00306>  001:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00307>       ADD HYD            09:1000           123.69     .248 No_date    3:51    2.92
00308>                        + 04:To1000          .00     .000 No_date    0:00     .00
00309>         [DT= 1.00]  SUM=  05:Node 2         123.69     .248 No_date    3:51    2.92
00310> #                               FLOWS TO OUTLET B
00311>  001:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00312>       CALIB NASHYD       01:207              1.22     .006 No_date    1:33    1.61
00313>         [CN= 55.3: N= 3.00]
00314>         [Tp=  .13:DT= 1.00]
00315>  001:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00316>       ADD HYD            01:207              1.22     .006 No_date    1:33    1.61
00317>                        + 02:To807           34.28     .023 No_date    4:10    6.80
00318>         [DT= 1.00]  SUM=  06:807             35.50     .023 No_date    4:01    6.63
00319>  001:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00320>       ADD HYD            03:To1025            .00     .000 No_date    0:00     .00
00321>                        + 05:Node 2          123.69     .248 No_date    3:51    2.92
00322>         [DT= 1.00]  SUM=  01:1025            123.69     .248 No_date    3:51    2.92
00323>  001:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00324>       ADD HYD            07:To809             .00     .000 No_date    0:00     .00
00325>                        + 01:1025            123.69     .248 No_date    3:51    2.92
00326>         [DT= 1.00]  SUM=  02:809             123.69     .248 No_date    3:51    2.92
00327>  001:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00328>       ADD HYD            06:807              35.50     .023 No_date    4:01    6.63
00329>                        + 10:To806            38.16     .016 No_date    3:06    5.11
00330>         [DT= 1.00]  SUM=  03:806-OutB        73.66     .039 No_date    4:00    5.84
00331> #                       LINKSVIEW AND CONTRIBUTING AREAS
00332>  001:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00333>       CALIB NASHYD       04:2502             5.52     .011 No_date    2:14    1.45
00334>         [CN= 58.4: N= 3.00]
00335>         [Tp=  .54:DT= 1.00]
00336>  001:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00337>       CALIB NASHYD       05:2509             5.30     .017 No_date    1:53    1.66
00338>         [CN= 59.0: N= 3.00]
00339>         [Tp=  .33:DT= 1.00]
00340>  001:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00341>       CALIB STANDHYD     06:2500            38.20    1.128 No_date    1:29    8.81
00342>         [XIMP=.30:TIMP=.50]
00343>         [LOSS= 2 :CN= 55.3]
00344>         {Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0}
00345>         {Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0}
00346>  001:0059----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00347>       ADD HYD            04:2502             5.52     .011 No_date    2:14    1.45
00348>                        + 05:2509             5.30     .017 No_date    1:53    1.66
00349>                        + 06:2500            38.20    1.128 No_date    1:29    8.81
00350>         [DT= 1.00]  SUM=  07:Pondin          49.02    1.135 No_date    1:29    7.21
00351> #                                 LINKSVIEW SWM FACILTIY
00352>  001:0060----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00353>       ROUTE RESERVOIR -> 07:Pondin         49.02    1.135 No_date    1:29    7.21
00354>         [RDT= 1.00] out<- 08:LinkPond      49.02     .064 No_date    4:12    7.21
00355>                   overflow <= 09:OVF          .00     .000 No_date    0:00     .00
00356>       {MxStoUsed=.2874E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00357>  001:0061----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00358>       ADD HYD            08:LinkPond         49.02     .064 No_date    4:12    7.21
00359>                        + 09:OVF               .00     .000 No_date    0:00     .00
00360>         [DT= 1.00]  SUM=  04:Pondout         49.02     .064 No_date    4:12    7.21
00361> #                                 FLOWS FROM TENTH LINE
00362>  001:0062----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00363>       CALIB STANDHYD     08:2601              .25     .031 No_date    1:20   15.22
00364>         [XIMP=.64:TIMP=.64]
00365>         [LOSS= 2 :CN= 49.0]
00366>         {Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0}
00367>         {Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0}
00368>  001:0063----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00369>       CALIB STANDHYD     09:2602             1.30     .107 No_date    1:24   15.22
00370>         [XIMP=.64:TIMP=.64]
00371>         [LOSS= 2 :CN= 49.0]
00372>         {Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0}
00373>         {Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0}
00374>  001:0064----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00375>       COMPUTE DUALHYD     09:2602             1.30     .107 No_date    1:24   15.22
00376>          Major System /  06:Overflow          .00     .000 No_date    0:00     .00
00377>          Minor System \  05:5yrflow           1.30     .107 No_date    1:24   15.22
00378> #                 FLOWS IN POTENTIAL FUTURE OUTLET PIPE
00379>  001:0065----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00380>       ADD HYD            04:Pondout          49.02     .064 No_date    4:12    7.21
00381>                        + 05:5yrflow          1.30     .107 No_date    1:24   15.22
00382>         [DT= 1.00]  SUM=  10:LinkPipe        50.32     .116 No_date    1:25    7.41
00383> #                 FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
00384>  001:0066----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00385>       ADD HYD            10:LinkPipe         50.32     .116 No_date    1:25    7.41
00386>                        + 02:809             123.69     .248 No_date    3:51    2.92
00387>                        + 06:Overflow          .00     .000 No_date    0:00     .00
00388>                        + 08:2601              .25     .031 No_date    1:20   15.22
00389>         [DT= 1.00]  SUM=  01:Node3           174.26     .315 No_date    3:51    4.24
00390> #                 FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
00391>  001:0067----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00392>       ADD HYD            01:Node3            174.26     .315 No_date    3:51    4.24
00393>                        + 03:806-OutB         73.66     .039 No_date    4:00    5.84
00394>         [DT= 1.00]  SUM=  04:Node4           247.92     .354 No_date    3:51    4.71
00395>    ** END OF RUN :  1
00396>
00397> ************************************************************************************
00398>
00399>
00400>
00401>
00402>
00403>  RUN:COMMAND#
00404>  002:0001----------------------------------------------------------------------------
00405>       START
00406>       [TZERO =    .00 hrs on       0]
00407>       [METOUT=   2    (1=imperial, 2=metric output)]
00408>       [NSTORM=   1 ]
00409>       [NRUN  =   2 ]
00410> #*******************************************************************************
00411> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
00412> #  Date       : 2014 08 22
00413> #  Modified   :
00414> #  Modeller   : [A.French]
00415> #  Company    : C.F. Crozier & Associates Inc.
00416> #  License #  :  3737016                                        2 yr CHI
00417> #*******************************************************************************
00418> #*******************************************************************************
00419>  002:0002----------------------------------------------------------------------------
00420>       READ STORM
00421>       Filename = STORM.001
00422>       Comment  =
00423>       [SDT= 5.00:SDUR=   4.00:PTOT=  34.77]
00424> #              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00425>  002:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00426>       CALIB NASHYD       01:300              4.55     .040 No_date    2:24    6.64
00427>         [CN= 71.0: N= 3.00]
00428>         [Tp=  .74:DT= 1.00]
00429>  002:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00430>       ROUTE CHANNEL   -> 01:300              4.55     .040 No_date    2:24    6.64
00431>         [RDT= 1.00] out<- 02:701             4.55     .025 No_date    3:06    6.64
00432>         [L/S/n=  450./ .050/.040]
00433>         [Vmax=  .128:Dmax=  .111]
00434>  002:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00435>       CALIB NASHYD       01:301              5.97     .058 No_date    2:15    6.64
00436>         [CN= 71.0: N= 3.00]
00437>         [Tp=  .63:DT= 1.00]
00438>  002:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00439>       ADD HYD            01:301              5.97     .058 No_date    2:15    6.64
00440>                        + 02:701              4.55     .025 No_date    3:06    6.64
00441>         [DT= 1.00]  SUM=  03:901             10.52     .074 No_date    2:27    6.64
00442>  002:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00443>       ROUTE CHANNEL   -> 03:901             10.52     .074 No_date    2:27    6.64
00444>         [RDT= 1.00] out<- 01:702             10.52     .053 No_date    3:02    6.64
00445>         [L/S/n=  300./ .050/.060]
00446>         [Vmax=  .100:Dmax=  .238]
00447>  002:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00448>       ROUTE RESERVOIR -> 01:702            10.52     .053 No_date    3:02    6.64
00449>         [RDT= 1.00] out<- 02:501            10.52     .052 No_date    3:16    6.64
00450>                   overflow <= 03:501OVF        .00     .000 No_date    0:00     .00
00451>       {MxStoUsed=.3147E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00452>  002:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00453>       CALIB STANDHYD     01:302             16.39     .454 No_date    1:32   12.46
00454>         [XIMP=.20:TIMP=.40]
00455>         [LOSS= 2 :CN= 65.2]
00456>         {Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0}
00457>         {Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0}
00458>  002:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00459>       ADD HYD            01:302             16.39     .454 No_date    1:32   12.46
00460>                        + 02:501             10.52     .052 No_date    3:16    6.64
00461>                        + 03:501OVF            .00     .000 No_date    0:00     .00
00462>         [DT= 1.00]  SUM=  04:902             26.91     .454 No_date    1:32   10.18
00463>  002:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00464>       CALIB STANDHYD     01:303              2.34     .102 No_date    1:26   14.40
00465>         [XIMP=.25:TIMP=.50]
00466>         [LOSS= 2 :CN= 65.2]
00467>         {Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0}
00468>         {Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0}
00469>  002:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00470>       ADD HYD            01:303              2.34     .102 No_date    1:26   14.40
00471>                        + 04:902             26.91     .454 No_date    1:32   10.18
00472>         [DT= 1.00]  SUM=  02:903             29.25     .545 No_date    1:31   10.52
00473>  002:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00474>       CALIB NASHYD       01:304              2.90     .039 No_date    1:45    5.64
00475>         [CN= 66.6: N= 3.00]
00476>         [Tp=  .28:DT= 1.00]
00477>  002:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00478>       ADD HYD            01:304              2.90     .039 No_date    1:45    5.64
00479>                        + 02:903             29.25     .545 No_date    1:31   10.52
00480>         [DT= 1.00]  SUM=  03:904             32.15     .570 No_date    1:32   10.08
00481>  002:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00482>       CALIB STANDHYD     01:305              .31     .016 No_date    1:20   10.94
00483>         [XIMP=.20:TIMP=.20]
00484>         [LOSS= 2 :CN= 65.2]
00485>         {Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0}
00486>         {Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0}
00487>  002:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00488>       ADD HYD            01:305              .31     .016 No_date    1:20   10.94
00489>                        + 03:904             32.15     .570 No_date    1:32   10.08
00490>         [DT= 1.00]  SUM=  02:905             32.46     .574 No_date    1:32   10.09
00491> #                 MAIR MILLS ESTATES SWM FACILITY
00492>  002:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00493>       ROUTE RESERVOIR -> 02:905            32.46     .574 No_date    1:32   10.09
00494>         [RDT= 1.00] out<- 03:502            32.46     .039 No_date    4:58   10.09
00495>                   overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
00496>       {MxStoUsed=.2707E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00497>  002:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00498>       CALIB NASHYD       01:400              5.70     .016 No_date    2:28    2.22
00499>         [CN= 50.2: N= 3.00]
00500>         [Tp=  .70:DT= 1.00]
00501>  002:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00502>       ADD HYD            01:400              5.70     .016 No_date    2:28    2.22
00503>                        + 03:502            32.46     .039 No_date    4:58   10.09
00504>                        + 04:502OVF           .00     .000 No_date    0:00     .00
00505>         [DT= 1.00]  SUM=  02:906            38.16     .043 No_date    4:26    8.91
00506> #         FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
00507>  002:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00508>       DIVERT HYD       -> 02:906            38.16     .043 No_date    4:26    8.91
00509>                  diverted <= 10:To806       34.09     .020 No_date    4:26    8.91
00510>                  diverted <= 03:To1023       2.04     .012 No_date    4:26    8.91
00511>                  diverted <= 01:To1022       2.04     .012 No_date    4:26    8.91
00512> #                 TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
00513> #                                 FLOW AT NODE 1
00514>  002:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00515>       CALIB NASHYD       01:2501             85.82     .483 No_date    3:45    7.73
00516>         [CN= 78.8: N= 3.00]
00517>         [Tp=  1.72:DT= 1.00]
00518>  002:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00519>       ROUTE CHANNEL   -> 01:2501            85.82     .483 No_date    3:45    7.73
00520>         [RDT= 1.00] out<- 02:RC1            85.82     .483 No_date    3:49    7.73
00521>         [L/S/n=  350./1.500/.030]
00522>         [Vmax= 1.403:Dmax=  .694]
00523>  002:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00524>       CALIB NASHYD       01:2504             7.94     .035 No_date    2:12    2.89
00525>         [CN= 53.0: N= 3.00]
00526>         [Tp=  .55:DT= 1.00]
00527>  002:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00528>       ADD HYD            01:2504             7.94     .035 No_date    2:12    2.89
00529>                        + 02:RC1             85.82     .483 No_date    3:49    7.73
00530>         [DT= 1.00]  SUM=  04:2501+2504       93.76     .495 No_date    3:46    7.32
00531>  002:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00532>       ROUTE CHANNEL   -> 04:2501+2504       93.76     .495 No_date    3:46    7.32
00533>         [RDT= 1.00] out<- 02:RC2            93.76     .494 No_date    3:52    7.32
00534>         [L/S/n=  425./1.250/.030]
00535>         [Vmax= 1.210:Dmax=  .581]
00536>  002:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00537>       CALIB NASHYD       01:2503             7.76     .046 No_date    2:21    4.39
00538>         [CN= 62.3: N= 3.00]
00539>         [Tp=  .68:DT= 1.00]
00540>  002:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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00541>      CALIB NASHYD       05:2505          6.99      .035 No_date    2:17    3.60
00542>        [CN= 54.0: N= 3.00]
00543>        [Tp=  .65:DT= 1.00]
00544>  002:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00545>      ADD HYD            01:2503           7.76      .046 No_date    2:21    4.39
00546>                       + 02:RC2           93.76      .494 No_date    3:52    7.32
00547>                       + 05:2505           6.99      .035 No_date    2:17    3.60
00548>        [DT= 1.00]  SUM=  06:2503+2505+   108.51      .528 No_date    3:45    6.87
00549>  002:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00550>      CALIB NASHYD       01:2506           2.50      .014 No_date    1:57    3.01
00551>        [CN= 49.0: N= 3.00]
00552>        [Tp=  .41:DT= 1.00]
00553>  002:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00554>      ADD HYD            01:2506           2.50      .014 No_date    1:57    3.01
00555>                       + 06:2503+2505+   108.51      .528 No_date    3:45    6.87
00556>        [DT= 1.00]  SUM=  02:RC+2506      111.01      .531 No_date    3:44    6.79
00557>  002:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00558>      ROUTE CHANNEL   -> 02:RC+2506       111.01      .531 No_date    3:44    6.79
00559>        [RDT= 1.00] out<- 04:RC3           111.01      .531 No_date    3:47    6.79
00560>        [L/S/n=  200./1.000/.030]
00561>        [Vmax=  .983:Dmax=  .600]
00562>  002:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00563>      CALIB NASHYD       01:2507           5.22      .025 No_date    2:08    3.01
00564>        [CN= 49.0: N= 3.00]
00565>        [Tp=  .54:DT= 1.00]
00566>  002:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00567>      ADD HYD            01:2507           5.22      .025 No_date    2:08    3.01
00568>                       + 04:RC3           111.01      .531 No_date    3:47    6.79
00569>        [DT= 1.00]  SUM=  02:2507+RC       116.23      .539 No_date    3:46    6.62
00570>  002:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00571>      CALIB NASHYD       01:2508           7.46      .033 No_date    2:16    3.12
00572>        [CN= 50.0: N= 3.00]
00573>        [Tp=  .63:DT= 1.00]
00574>  002:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00575>      ADD HYD            01:2508           7.46      .033 No_date    2:16    3.12
00576>                       + 02:2507+RC       116.23      .539 No_date    3:46    6.62
00577>        [DT= 1.00]  SUM=  09:1000          123.69      .552 No_date    3:42    6.41
00578> #                  MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
00579>  002:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00580>      CALIB NASHYD       01:103            8.70      .053 No_date    2:05    3.72
00581>        [CN= 59.2: N= 3.00]
00582>        [Tp=  .48:DT= 1.00]
00583>  002:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00584>      ADD HYD            01:103            8.70      .053 No_date    2:05    3.72
00585>                       + 03:To1023         2.04      .012 No_date    4:26    0.91
00586>        [DT= 1.00]  SUM=  02:1023          10.74      .056 No_date    2:08    4.70
00587>  002:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00588>      CALIB NASHYD       01:205            1.41      .010 No_date    1:40    2.79
00589>        [CN= 51.1: N= 3.00]
00590>        [Tp=  .20:DT= 1.00]
00591>  002:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00592>      ADD HYD            01:205            1.41      .010 No_date    1:40    2.79
00593>                       + 02:1023          10.74      .056 No_date    2:08    4.70
00594>        [DT= 1.00]  SUM=  03:802           12.15      .062 No_date    2:05    4.48
00595>  002:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00596>      CALIB STANDHYD     01:201            10.41     1.575 No_date    1:22   16.73
00597>        [XIMP=.43:TIMP=.56]
00598>        [LOSS= 2 :CN= 49.0]
00599>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
00600>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 100.:MNI=.013:SCI=    .0]
00601>  002:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00602>      ADD HYD            01:201            10.41     1.575 No_date    1:22   16.73
00603>                       + 03:802           12.15      .062 No_date    2:05    4.48
00604>        [DT= 1.00]  SUM=  02:803           30.56     1.578 No_date    1:22   11.86
00605>  002:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00606>      CALIB NASHYD       01:202            1.10      .005 No_date    1:51    2.05
00607>        [CN= 55.0: N= 3.00]
00608>        [Tp=  .25:DT= 1.00]
00609>  002:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00610>      ADD HYD            01:202            1.10      .005 No_date    1:51    2.05
00611>                       + 02:803           30.56     1.578 No_date    1:22   11.86
00612>        [DT= 1.00]  SUM=  03:804           31.66     1.579 No_date    1:22   11.52
00613>  002:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00614>      CALIB NASHYD       01:1021           4.66      .020 No_date    2:29    3.54
00615>        [CN= 55.3: N= 3.00]
00616>        [Tp=  .78:DT= 1.00]
00617>  002:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00618>      COMPUTE DUALHYD    01:1021           4.66      .020 No_date    2:29    3.54
00619>         Major System /  04:To1000          .00      .000 No_date    0:00     .00
00620>         Minor System \  02:To810           4.66      .020 No_date    2:29    3.54
00621>  002:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00622>      ADD HYD            02:To810           4.66      .020 No_date    2:29    3.54
00623>                       + 03:804           31.66     1.579 No_date    1:22   11.52
00624>        [DT= 1.00]  SUM=  05:810           36.32     1.579 No_date    1:22   10.50
00625> #                        MAIR MILLS VILLAGE SWMF
00626>  002:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00627>      ROUTE RESERVOIR -> 05:810          36.32     1.579 No_date    1:22   10.50
00628>        [RDT= 1.00] out<- 02:1026          36.32      .036 No_date    4:22   10.50
00629>                  overflow <= 03:10260VF      .00      .000 No_date    0:00     .00
00630>        [MxStoUsed=.3319E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00631>  002:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00632>      ADD HYD            02:1026           36.32      .036 No_date    4:22   10.50
00633>                       + 03:10260VF          .00      .000 No_date    0:00     .00
00634>        [DT= 1.00]  SUM=  05:Pond1026ou     36.32      .036 No_date    4:22   10.50
00635> #              TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
00636>  002:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00637>      DIVERT HYD      -> 05:Pond1026ou     36.32      .036 No_date    4:22   10.50
00638>               diverted <= 02:To807        36.32      .036 No_date    4:22   10.50
00639>               diverted <= 07:To809          .00      .000 No_date    0:00     .00
00640>               diverted <= 03:To1025         .00      .000 No_date    0:00     .00
00641> #                      FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
00642>  002:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00643>      ADD HYD            09:1000          123.69      .552 No_date    3:42    6.41
00644>                       + 04:To1000           .00      .000 No_date    0:00     .00
00645>        [DT= 1.00]  SUM=  05:Node 2        123.69      .552 No_date    3:42    6.41
00646> #                                FLOWS TO OUTLET B
00647>  002:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00648>      CALIB NASHYD       01:207            1.22      .014 No_date    1:32    3.54
00649>        [CN= 55.3: N= 3.00]
00650>        [Tp=  .13:DT= 1.00]
00651>  002:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00652>      ADD HYD            01:207            1.22      .014 No_date    1:32    3.54
00653>                       + 02:To807         36.32      .036 No_date    4:22   10.50
00654>        [DT= 1.00]  SUM=  06:807           37.54      .037 No_date    4:01   10.27
00655>  002:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00656>      ADD HYD            03:To1025           .00      .000 No_date    0:00     .00
00657>                       + 05:Node 2        123.69      .552 No_date    3:42    6.41
00658>        [DT= 1.00]  SUM=  01:1025          123.69      .552 No_date    3:42    6.41
00659>  002:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00660>      ADD HYD            07:To809            .00      .000 No_date    0:00     .00
00661>                       + 01:1025          123.69      .552 No_date    3:42    6.41
00662>        [DT= 1.00]  SUM=  02:809           123.69      .552 No_date    3:42    6.41
00663>  002:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00664>      ADD HYD            06:807             37.54      .037 No_date    4:01   10.27
00665>                       + 10:To806          34.09      .020 No_date    4:26    8.91
00666>        [DT= 1.00]  SUM=  03:806-OutB       71.62      .057 No_date    4:01    9.62
00667> #                      LINKSVIEW AND CONTRIBUTING AREAS
00668>  002:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00669>      CALIB NASHYD       04:2502           5.52      .029 No_date    2:11    3.44
00670>        [CN= 58.4: N= 3.00]
00671>        [Tp=  .54:DT= 1.00]
00672>  002:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00673>      CALIB NASHYD       05:2509           5.30      .041 No_date    1:52    3.78
00674>        [CN= 59.0: N= 3.00]
00675>        [Tp=  .33:DT= 1.00]
00676>  002:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00677>      CALIB STANDHYD     06:2500          38.20     1.617 No_date    1:29   13.66
00678>        [XIMP=.30:TIMP=.50]
00679>        [LOSS= 2 :CN= 55.3]
00680>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
00681>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
00682>  002:0059----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00683>      ADD HYD            04:2502           5.52      .029 No_date    2:11    3.44
00684>                       + 05:2509           5.30      .041 No_date    1:52    3.78
00685>                       + 06:2500          38.20     1.617 No_date    1:29   13.66
00686>        [DT= 1.00]  SUM=  07:Pond1n        49.02     1.636 No_date    1:29   11.44
00687> #                                LINKSVIEW SWMM FACILTIY
00688>  002:0060----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00689>      ROUTE RESERVOIR -> 07:Pond1n       49.02     1.636 No_date    1:29   11.44
00690>        [RDT= 1.00] out<- 08:LinkPond      49.02      .086 No_date    4:13   11.44
00691>                  overflow <= 09:OVF          .00      .000 No_date    0:00     .00
00692>        [MxStoUsed=.4726E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00693>  002:0061----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00694>      ADD HYD            08:LinkPond        49.02      .086 No_date    4:13   11.44
00695>                       + 09:OVF              .00      .000 No_date    0:00     .00
00696>        [DT= 1.00]  SUM=  04:Pondout        49.02      .086 No_date    4:13   11.44
00697> #                              FLOWS FROM TENTH LINE
00698>  002:0062----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00699>      CALIB STANDHYD     08:2601             .25      .038 No_date    1:20   22.06
00700>        [XIMP=.64:TIMP=.64]
00701>        [LOSS= 2 :CN= 49.0]
00702>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
00703>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=    .0]
00704>  002:0063----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00705>      CALIB STANDHYD     09:2602            1.30      .142 No_date    1:24   22.06
00706>        [XIMP=.64:TIMP=.64]
00707>        [LOSS= 2 :CN= 49.0]
00708>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
00709>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
00710>  002:0064----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00711>      COMPUTE DUALHYD    09:2602            1.30      .142 No_date    1:24   22.06
00712>         Major System /  06:Overflow          .00      .000 No_date    0:00     .00
00713>         Minor System \  05:5yrflow          1.30      .142 No_date    1:24   22.06
00714> #                  FLOWS IN POTENTIAL FUTURE OUTLET PIPE
00715>  002:0065----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00716>      ADD HYD            04:Pondout         49.02      .086 No_date    4:13   11.44
00717>                       + 05:5yrflow          1.30      .142 No_date    1:24   22.06
00718>        [DT= 1.00]  SUM=  10:LinkPipe       50.32      .159 No_date    1:25   11.72
00719> #                FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
00720>  002:0066----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00721>      ADD HYD            10:LinkPipe        50.32      .159 No_date    1:25   11.72
00722>                       + 02:809           123.69      .552 No_date    3:42    6.41
00723>                       + 06:Overflow         .00      .000 No_date    0:00     .00
00724>                       + 08:2601             .25      .038 No_date    1:20   22.06
00725>        [DT= 1.00]  SUM=  01:Node3         174.26      .643 No_date    3:42    7.96
00726> #                  FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
00727>  002:0067----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00728>      ADD HYD            01:Node3         174.26      .643 No_date    3:42    7.96
00729>                       + 03:806-OutB      71.62      .057 No_date    4:01    9.62
00730>        [DT= 1.00]  SUM=  04:Node4        245.88      .699 No_date    3:43    8.45
00731>   ** END OF RUN :  2
00732>
00733> ************************************************************************
00734>
00735>
00736>
00737>
00738>                                                          5yr CHI
00739>  RUN:COMMAND#
00740>  003:0001----------------------------------------------------------------------
00741>      START
00742>        [TZERO =    .00 hrs on        0]
00743>        [METOUT=   2    (1=imperial, 2=metric output)]
00744>        [NSTORM=   1 ]
00745>        [NRUN  =   3 ]
00746> #************************************************************************
00747> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
00748> #  Date        : 2014 08 22
00749> #  Modified    :
00750> #  Modeller    : [A.French]
00751> #  Company     : C.F. Crozier & Associates Inc.
00752> #  License #   : 3737016
00753> #************************************************************************
00754> #************************************************************************
00755>  003:0002----------------------------------------------------------------------
00756>      READ STORM
00757>       Filename = STORM.001
00758>       Comment  =
00759>       [SDT= 5.00:SDUR=   4.00:PTOT=  46.10]
00760> #              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00761>  003:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00762>      CALIB NASHYD       01:300            4.55      .069 No_date    2:22   11.66
00763>        [CN= 71.0: N= 3.00]
00764>        [Tp=  .74:DT= 1.00]
00765>  003:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00766>      ROUTE CHANNEL   -> 01:300            4.55      .069 No_date    2:22   11.66
00767>        [RDT= 1.00] out<- 02:701           4.55      .051 No_date    2:57   11.66
00768>        [L/S/n=  450./ .050/.040]
00769>        [Vmax=  .167:Dmax=  .152]
00770>  003:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00771>      CALIB NASHYD       01:301            5.97      .101 No_date    2:13   11.66
00772>        [CN= 71.0: N= 3.00]
00773>        [Tp=  .63:DT= 1.00]
00774>  003:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00775>      ADD HYD            01:301            5.97      .101 No_date    2:13   11.66
00776>                       + 02:701            4.55      .051 No_date    2:57   11.66
00777>        [DT= 1.00]  SUM=  03:901           10.52      .137 No_date    2:27   11.66
00778>  003:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00779>      ROUTE CHANNEL   -> 03:901           10.52      .137 No_date    2:27   11.66
00780>        [RDT= 1.00] out<- 01:702           10.52      .108 No_date    2:54   11.66
00781>        [L/S/n=  300./ .050/.060]
00782>        [Vmax=  .136:Dmax=  .304]
00783>  003:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00784>      ROUTE RESERVOIR -> 01:702          10.52      .108 No_date    2:54   11.66
00785>        [RDT= 1.00] out<- 02:501           10.52      .105 No_date    3:08   11.66
00786>                  overflow <= 03:501OVF       .00      .000 No_date    0:00     .00
00787>        [MxStoUsed=.6970E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00788>  003:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00789>      CALIB STANDHYD     01:302            16.39      .699 No_date    1:34   18.88
00790>        [XIMP=.20:TIMP=.40]
00791>        [LOSS= 2 :CN= 65.2]
00792>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
00793>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
00794>  003:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00795>      ADD HYD            01:302            16.39      .699 No_date    1:34   18.88
00796>                       + 02:501            10.52      .105 No_date    3:08   11.66
00797>                       + 03:501OVF           .00      .000 No_date    0:00     .00
00798>        [DT= 1.00]  SUM=  04:902           26.91      .700 No_date    1:34   16.06
00799>  003:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00800>      CALIB STANDHYD     01:303             2.34      .151 No_date    1:25   21.45
00801>        [XIMP=.25:TIMP=.50]
00802>        [LOSS= 2 :CN= 65.2]
00803>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
00804>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
00805>  003:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00806>      ADD HYD            01:303             2.34      .151 No_date    1:25   21.45
00807>                       + 04:902           26.91      .700 No_date    1:34   16.06
00808>        [DT= 1.00]  SUM=  02:903           29.25      .832 No_date    1:32   16.49
00809>  003:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00810>      CALIB NASHYD       01:304            2.90      .069 No_date    1:44   10.02
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00811>       [CN= 66.6: N= 3.00]
00812>       [Tp=  .28:DT= 1.00]
00813>  003:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00814>       ADD HYD            01:304             2.90     .069 No_date     1:44    10.02
00815>                        + 02:903            29.25     .832 No_date     1:32    16.49
00816>       [DT= 1.00]  SUM=  03:904            32.15     .885 No_date     1:34    15.91
00817>  003:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00818>       CALIB STANDHYD     01:305              .31     .021 No_date     1:20    16.57
00819>         [XIMP=.20:TIMP=.20]
00820>         [LOSS= 2 :CN= 65.2]
00821>         [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
00822>         [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
00823>  003:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00824>       ADD HYD            01:305              .31     .021 No_date     1:20    16.57
00825>                        + 03:904            32.15     .885 No_date     1:34    15.91
00826>       [DT= 1.00]  SUM=  02:905            32.46     .890 No_date     1:34    15.91
00827> #                    MAIR MILLS ESTATES SWM FACILITY
00828>  003:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00829>       ROUTE RESERVOIR -> 02:905            32.46     .890 No_date     1:34    15.91
00830>         [RDT= 1.00] out<- 03:502           32.46     .102 No_date     4:29    15.91
00831>                  overflow <= 04:5020VF        .00     .000 No_date     0:00     .00
00832>       [MxStoUsed=.3968E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00833>  003:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00834>       CALIB NASHYD       01:400             5.70     .033 No_date     2:25     4.52
00835>         [CN= 50.2: N= 3.00]
00836>         [Tp=  .70:DT= 1.00]
00837>  003:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00838>       ADD HYD            01:400             5.70     .033 No_date     2:25     4.52
00839>                        + 03:502            32.46     .102 No_date     4:29    15.91
00840>                        + 04:5020VF           .00     .000 No_date     0:00     .00
00841>       [DT= 1.00]  SUM=  02:906            38.16     .114 No_date     4:12    14.21
00842> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
00843>  003:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00844>       DIVERT HYD       -> 02:906            38.16     .114 No_date     4:12    14.21
00845>                diverted <= 10:To806         23.70     .020 No_date     4:12    14.21
00846>                diverted <= 03:To1023         7.23     .047 No_date     4:12    14.21
00847>                diverted <= 01:To1022         7.23     .047 No_date     4:12    14.21
00848> #                    TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
00849> #                                  FLOW AT NODE 1
00850>  003:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00851>       CALIB NASHYD       01:2501           85.82     .866 No_date     3:42    13.87
00852>         [CN= 78.8: N= 3.00]
00853>         [Tp= 1.72:DT= 1.00]
00854>  003:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00855>       ROUTE CHANNEL    -> 01:2501           85.82     .866 No_date     3:42    13.87
00856>         [RDT= 1.00] out<- 02:RC1           85.82     .861 No_date     3:57    13.87
00857>         [L/S/n=  350./1.500/.030]
00858>         [Vmax=  .798:Dmax=  .801]
00859>  003:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00860>       CALIB NASHYD       01:2504            7.94     .067 No_date     2:10     5.58
00861>         [CN= 53.0: N= 3.00]
00862>         [Tp=  .55:DT= 1.00]
00863>  003:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00864>       ADD HYD            01:2504            7.94     .067 No_date     2:10     5.58
00865>                        + 02:RC1            85.82     .861 No_date     3:57    13.87
00866>       [DT= 1.00]  SUM=  04:2501+2504       93.76     .802 No_date     3:55    13.17
00867>  003:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00868>       ROUTE CHANNEL    -> 04:2501+2504      93.76     .802 No_date     3:55    13.17
00869>         [RDT= 1.00] out<- 02:RC2           93.76     .880 No_date     4:01    13.17
00870>         [L/S/n=  425./1.250/.030]
00871>         [Vmax= 1.135:Dmax=  .676]
00872>  003:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00873>       CALIB NASHYD       01:2503            7.76     .085 No_date     2:19     8.11
00874>         [CN= 62.3: N= 3.00]
00875>         [Tp=  .68:DT= 1.00]
00876>  003:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00877>       CALIB NASHYD       05:2505            6.99     .064 No_date     2:16     6.56
00878>         [CN= 54.0: N= 3.00]
00879>         [Tp=  .65:DT= 1.00]
00880>  003:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00881>       ADD HYD            01:2503            7.76     .085 No_date     2:19     8.11
00882>                        + 02:RC2            93.76     .880 No_date     4:01    13.17
00883>                        + 05:2505            6.99     .064 No_date     2:16     6.56
00884>       [DT= 1.00]  SUM=  06:2503+2505+    108.51     .936 No_date     3:53    12.38
00885>  003:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00886>       CALIB NASHYD       01:2506            2.50     .026 No_date     1:56     5.53
00887>         [CN= 49.0: N= 3.00]
00888>         [Tp=  .41:DT= 1.00]
00889>  003:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00890>       ADD HYD            01:2506            2.50     .026 No_date     1:56     5.53
00891>                        + 06:2503+2505+    108.51     .936 No_date     3:53    12.38
00892>       [DT= 1.00]  SUM=  02:RC+2506        111.01     .941 No_date     3:53    12.23
00893>  003:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00894>       ROUTE CHANNEL    -> 02:RC+2506       111.01     .941 No_date     3:53    12.23
00895>         [RDT= 1.00] out<- 04:RC3           111.01     .941 No_date     3:58    12.23
00896>         [L/S/n=  200./1.000/.030]
00897>         [Vmax=  .941:Dmax=  .686]
00898>  003:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00899>       CALIB NASHYD       01:2507            5.22     .045 No_date     2:07     5.53
00900>         [CN= 49.0: N= 3.00]
00901>         [Tp=  .54:DT= 1.00]
00902>  003:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00903>       ADD HYD            01:2507            5.22     .045 No_date     2:07     5.53
00904>                        + 04:RC3           111.01     .941 No_date     3:58    12.23
00905>       [DT= 1.00]  SUM=  02:2507+RC        116.23     .953 No_date     3:56    11.93
00906>  003:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00907>       CALIB NASHYD       01:2508            7.46     .061 No_date     2:15     5.72
00908>         [CN= 50.0: N= 3.00]
00909>         [Tp=  .63:DT= 1.00]
00910>  003:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00911>       ADD HYD            01:2508            7.46     .061 No_date     2:15     5.72
00912>                        + 02:2507+RC        116.23     .953 No_date     3:56    11.93
00913>       [DT= 1.00]  SUM=  09:1000           123.69     .975 No_date     3:53    11.55
00914> #                    MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
00915>  003:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00916>       CALIB NASHYD       01:103             8.70     .102 No_date     2:03     7.03
00917>         [CN= 59.2: N= 3.00]
00918>         [Tp=  .48:DT= 1.00]
00919>  003:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00920>       ADD HYD            01:103             8.70     .102 No_date     2:03     7.03
00921>                        + 03:To1023          7.23     .047 No_date     4:12    14.21
00922>       [DT= 1.00]  SUM=  02:1023           15.93     .117 No_date     2:13    10.29
00923>  003:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00924>       CALIB NASHYD       01:205             1.41     .020 No_date     1:38     5.34
00925>         [CN= 51.1: N= 3.00]
00926>         [Tp=  .20:DT= 1.00]
00927>  003:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00928>       ADD HYD            01:205             1.41     .020 No_date     1:38     5.34
00929>                        + 02:1023           15.93     .117 No_date     2:13    10.29
00930>       [DT= 1.00]  SUM=  03:802            17.34     .126 No_date     2:10     9.89
00931>  003:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00932>       CALIB STANDHYD     01:201             18.41    2.208 No_date     1:21    23.38
00933>         [XIMP=.43:TIMP=.56]
00934>         [LOSS= 2 :CN= 49.0]
00935>         [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
00936>         [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
00937>  003:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00938>       ADD HYD            01:201             18.41    2.208 No_date     1:21    23.38
00939>                        + 03:802             17.34     .126 No_date     2:10     9.89
00940>       [DT= 1.00]  SUM=  02:803             35.75    2.215 No_date     1:21    16.84
00941>  003:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00942>       CALIB NASHYD       01:202              1.10     .011 No_date     1:47     4.52
00943>         [CN= 55.0: N= 3.00]
00944>         [Tp=  .25:DT= 1.00]
00945>  003:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00946>       ADD HYD            01:202              1.10     .011 No_date     1:47     4.52
00947>                        + 02:803             35.75    2.215 No_date     1:21    16.84
00948>       [DT= 1.00]  SUM=  03:804             36.85    2.216 No_date     1:21    16.47
00949>  003:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00950>       CALIB NASHYD       01:1021            4.66     .038 No_date     2:28     6.55
00951>         [CN= 55.3: N= 3.00]
00952>         [Tp=  .78:DT= 1.00]
00953>  003:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00954>       COMPUTE DUALHYD     01:1021            4.66     .038 No_date     2:28     6.55
00955>         Major System /  04:To1000             .00     .000 No_date     0:00      .00
00956>         Minor System \  02:To810             4.66     .038 No_date     2:28     6.55
00957>  003:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00958>       ADD HYD            02:To810            4.66     .038 No_date     2:28     6.55
00959>                        + 03:804             36.85    2.216 No_date     1:21    16.47
00960>       [DT= 1.00]  SUM=  05:810             41.51    2.216 No_date     1:21    15.35
00961> #                    MAIR MILLS VILLAGE SWMF
00962>  003:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00963>       ROUTE RESERVOIR -> 05:810            41.51    2.216 No_date     1:21    15.35
00964>         [RDT= 1.00] out<- 02:1026          41.51     .145 No_date     4:03    15.35
00965>                  overflow <= 03:1026OVF       .00     .000 No_date     0:00      .00
00966>       [MxStoUsed=.4739E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00967>  003:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00968>       ADD HYD            02:1026            41.51     .145 No_date     4:03    15.35
00969>                        + 03:1026OVF           .00     .000 No_date     0:00      .00
00970>       [DT= 1.00]  SUM=  05:Pond1026ou      41.51     .145 No_date     4:03    15.35
00971> #                TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
00972>  003:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00973>       DIVERT HYD       -> 05:Pond1026ou    41.51     .145 No_date     4:03    15.35
00974>                diverted <= 02:To807         34.67     .040 No_date     4:03    15.35
00975>                diverted <= 07:To809          6.84     .105 No_date     4:03    15.35
00976>                diverted <= 03:To1025          .00     .000 No_date     0:00      .00
00977> #                    FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
00978>  003:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00979>       ADD HYD            09:1000           123.69     .975 No_date     3:53    11.55
00980>                        + 04:To1000            .00     .000 No_date     0:00      .00
00981>       [DT= 1.00]  SUM=  05:Node 2          123.69     .975 No_date     3:53    11.55
00982> #                                  FLOWS TO OUTLET B
00983>  003:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00984>       CALIB NASHYD       01:207              1.22     .027 No_date     1:31     6.55
00985>         [CN= 55.3: N= 3.00]
00986>         [Tp=  .13:DT= 1.00]
00987>  003:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00988>       ADD HYD            01:207              1.22     .027 No_date     1:31     6.55
00989>                        + 02:To807           34.67     .040 No_date     4:03    15.35
00990>       [DT= 1.00]  SUM=  06:807             35.89     .051 No_date     1:35    15.06
00991>  003:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00992>       ADD HYD            03:To1025             .00     .000 No_date     0:00      .00
00993>                        + 05:Node 2          123.69     .975 No_date     3:53    11.55
00994>       [DT= 1.00]  SUM=  01:1025            123.69     .975 No_date     3:53    11.55
00995>  003:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00996>       ADD HYD            07:To809            6.84     .105 No_date     4:03    15.35
00997>                        + 01:1025            123.69     .975 No_date     3:53    11.55
00998>       [DT= 1.00]  SUM=  02:809             130.53    1.078 No_date     3:58    11.75
00999>  003:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01000>       ADD HYD            06:807             35.89     .051 No_date     1:35    15.06
01001>                        + 10:To806           23.70     .020 No_date     4:12    14.21
01002>       [DT= 1.00]  SUM=  03:806-OutB         59.59     .071 No_date     1:39    14.72
01003> #                    LINKSVIEW AND CONTRIBUTING AREAS
01004>  003:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01005>       CALIB NASHYD       04:2502             5.52     .056 No_date     2:09     6.61
01006>         [CN= 58.4: N= 3.00]
01007>         [Tp=  .54:DT= 1.00]
01008>  003:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01009>       CALIB NASHYD       05:2509             5.30     .078 No_date     1:50     7.09
01010>         [CN= 59.0: N= 3.00]
01011>         [Tp=  .33:DT= 1.00]
01012>  003:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01013>       CALIB STANDHYD     06:2500            38.20    2.339 No_date     1:27    19.92
01014>         [XIMP=.30:TIMP=.50]
01015>         [LOSS= 2 :CN= 55.3]
01016>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01017>         [Impervious   area: IAimp= 2.00:SLPI=  .50:LGI= 505.:MNI=.013:SCI=   .0]
01018>  003:0059----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01019>       ADD HYD            04:2502             5.52     .056 No_date     2:09     6.61
01020>                        + 05:2509             5.30     .078 No_date     1:50     7.09
01021>                        + 06:2500            38.20    2.339 No_date     1:27    19.92
01022>       [DT= 1.00]  SUM=  07:Pondin           49.02    2.372 No_date     1:27    17.03
01023> #                    LINKSVIEW SWM FACILTIY
01024>  003:0060----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01025>       ROUTE RESERVOIR -> 07:Pondin         49.02    2.372 No_date     1:27    17.03
01026>         [RDT= 1.00] out<- 08:LinkPond      49.02     .198 No_date     4:01    17.03
01027>                  overflow <= 09:OVF           .00     .000 No_date     0:00      .00
01028>       [MxStoUsed=.6765E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01029>  003:0061----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01030>       ADD HYD            08:LinkPond        49.02     .198 No_date     4:01    17.03
01031>                        + 09:OVF             .00     .000 No_date     0:00      .00
01032>       [DT= 1.00]  SUM=  04:Pondout          49.02     .198 No_date     4:01    17.03
01033> #                                  FLOWS FROM TENTH LINE
01034>  003:0062----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01035>       CALIB STANDHYD     08:2601              .25     .052 No_date     1:20    30.21
01036>         [XIMP=.64:TIMP=.64]
01037>         [LOSS= 2 :CN= 49.0]
01038>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
01039>         [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
01040>  003:0063----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01041>       CALIB STANDHYD     09:2602             1.30     .199 No_date     1:23    30.21
01042>         [XIMP=.64:TIMP=.64]
01043>         [LOSS= 2 :CN= 49.0]
01044>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
01045>         [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
01046>  003:0064----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01047>       COMPUTE DUALHYD     09:2602             1.30     .199 No_date     1:23    30.21
01048>         Major System /  06:Overflow           .00     .000 No_date     0:00      .00
01049>         Minor System \  05:Syrflow           1.30     .199 No_date     1:23    30.21
01050> #                FLOWS IN POTENTIAL FUTURE OUTLET PIPE
01051>  003:0065----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01052>       ADD HYD            04:Pondout         49.02     .198 No_date     4:01    17.03
01053>                        + 05:Syrflow         1.30     .199 No_date     1:23    30.21
01054>       [DT= 1.00]  SUM=  10:LinkPipe         50.32     .225 No_date     1:24    17.37
01055> #                    FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
01056>  003:0066----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01057>       ADD HYD            10:LinkPipe        50.32     .225 No_date     1:24    17.37
01058>                        + 02:809            130.53    1.078 No_date     3:58    11.75
01059>                        + 06:Overflow          .00     .000 No_date     0:00      .00
01060>                        + 08:2601              .25     .052 No_date     1:20    30.21
01061>       [DT= 1.00]  SUM=  01:Node3           181.10    1.284 No_date     3:58    13.34
01062> #                FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
01063>  003:0067----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01064>       ADD HYD            01:Node3           181.10    1.284 No_date     3:58    13.34
01065>                        + 03:806-OutB        59.59     .071 No_date     1:39    14.72
01066>       [DT= 1.00]  SUM=  04:Node4           240.69    1.347 No_date     3:58    13.68
01067>   ** END OF RUN :  3
01068>
01069> ************************************************************************
01070>
01071>
01072>
01073>
01074>
01075> RUN:COMMAND$
01076> 004:0001----------------------------------------------------------------
01077>       START
01078>         [ZERO =    .00 hrs on        0]
01079>         [METOUT=   2    (1=imperial, 2=metric output)]
01080>         [NSTORM=   1 ]
```

10 yr CHI

```
[NRUN  =   4 ]
#*******************************************************************************
#  Project Name: [Linksview Post-Development]  Project Number: [103-2687]
#  Date        : 2014 08 22
#  Modified    :
#  Modeller    : [A.French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 3737016
#*******************************************************************************
#*******************************************************************************
004:0002------------------------------------------------------------------------------
     READ STORM
      Filename = STORM.001
      Comment  =
      [SDT= 5.00:SDUR=   4.00:PTOT=  53.81]
#                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
004:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:300            4.55     .093 No_date    2:22   15.62
      [CN= 71.0: N= 3.00]
      [Tp=  .74:DT= 1.00]
004:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:300            4.55     .093 No_date    2:22   15.62
      [RDT= 1.00] out<- 02:701            4.55     .069 No_date    2:52   15.62
      [L/S/n=  450./ .050/.040]
      [Vmax=  .185:Dmax=  .177]
004:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:301            5.97     .137 No_date    2:13   15.62
      [CN= 71.0: N= 3.00]
      [Tp=  .63:DT= 1.00]
004:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:301            5.97     .137 No_date    2:13   15.62
                     + 02:701            4.55     .069 No_date    2:52   15.62
      [DT= 1.00]  SUM= 03:901           10.52     .190 No_date    2:24   15.62
004:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 03:901           10.52     .190 No_date    2:24   15.62
      [RDT= 1.00] out<- 01:702           10.52     .155 No_date    2:46   15.62
      [L/S/n=  300./ .050/.060]
      [Vmax=  .161:Dmax=  .348]
004:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 01:702          10.52     .155 No_date    2:46   15.62
      [RDT= 1.00] out<- 02:501          10.52     .148 No_date    3:01   15.62
            overflow <= 03:501OVF         .00     .000 No_date    0:00     .00
      (MxStoUsed=.1033E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
004:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD    01:302            16.39     .914 No_date    1:34   23.68
      [XIMP=.20:TIMP=.40]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 700.:MNI=.013:SCI=   .0]
004:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:302            16.39     .914 No_date    1:34   23.68
                     + 02:501            10.52     .148 No_date    3:01   15.62
                     + 03:501OVF           .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM= 04:902            26.91     .915 No_date    1:34   20.53
004:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD    01:303             2.34     .187 No_date    1:24   26.65
      [XIMP=.25:TIMP=.50]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI=  .50:LGI= 300.:MNI=.013:SCI=   .0]
004:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:303             2.34     .187 No_date    1:24   26.65
                     + 04:902            26.91     .915 No_date    1:34   20.53
      [DT= 1.00]  SUM= 02:903            29.25    1.080 No_date    1:33   21.02
004:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:304             2.90     .094 No_date    1:44   13.52
      [CN= 66.6: N= 3.00]
      [Tp=  .28:DT= 1.00]
004:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:304             2.90     .094 No_date    1:44   13.52
                     + 02:903            29.25    1.080 No_date    1:33   21.02
      [DT= 1.00]  SUM= 03:904            32.15    1.157 No_date    1:34   20.34
004:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD    01:305              .31     .024 No_date    1:20   20.80
      [XIMP=.20:TIMP=.20]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
004:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:305              .31     .024 No_date    1:20   20.80
                     + 03:904            32.15    1.157 No_date    1:34   20.34
      [DT= 1.00]  SUM= 02:905            32.46    1.163 No_date    1:34   20.34
#                 MAIR MILLS ESTATES SWM FACILITY
004:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 02:905          32.46    1.163 No_date    1:34   20.34
      [RDT= 1.00] out<- 03:902          32.46     .139 No_date    4:25   20.34
            overflow <= 04:902OVF         .00     .000 No_date    0:00     .00
      (MxStoUsed=.4938E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
004:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:400             5.70     .047 No_date    2:24    6.49
      [CN= 50.2: N= 3.00]
      [Tp=  .70:DT= 1.00]
004:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:400             5.70     .047 No_date    2:24    6.49
                     + 03:502            32.46     .139 No_date    4:25   20.34
                     + 04:502OVF           .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM= 02:906            38.16     .162 No_date    3:26   18.27
#              FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
004:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 02:906            38.16     .162 No_date    3:26   18.27
            diverted <= 10:To806          19.18     .020 No_date    3:26   18.27
            diverted <= 03:To1023          9.49     .071 No_date    3:26   18.27
            diverted <= 01:To1022          9.49     .071 No_date    3:26   18.27
#                  TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
#                                  FLOW AT NODE 1
004:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:2501           85.82    1.166 No_date    3:41   18.64
      [CN= 78.8: N= 3.00]
      [Tp= 1.72:DT= 1.00]
004:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:2501           85.82    1.166 No_date    3:41   18.64
      [RDT= 1.00] out<- 02:RC1            85.82    1.156 No_date    3:55   18.64
      [L/S/n=  350./1.500/.030]
      [Vmax=  .620:Dmax=  .852]
004:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:2504            7.94     .095 No_date    2:09    7.82
      [CN= 53.0: N= 3.00]
      [Tp=  .55:DT= 1.00]
004:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:2504            7.94     .095 No_date    2:09    7.82
                     + 02:RC1            85.82    1.156 No_date    3:55   18.64
      [DT= 1.00]  SUM= 04:2501+2504      93.76    1.186 No_date    3:54   17.73
004:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 04:2501+2504     93.76    1.186 No_date    3:54   17.73
      [RDT= 1.00] out<- 02:RC2            93.76    1.183 No_date    4:00   17.73
      [L/S/n=  425./1.250/.030]
      [Vmax= 1.114:Dmax=  .731]
004:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:2503            7.76     .117 No_date    2:19   11.14
      [CN= 62.3: N= 3.00]
      [Tp=  .68:DT= 1.00]
004:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      05:2505            6.99     .088 No_date    2:16    8.99
      [CN= 54.0: N= 3.00]
      [Tp=  .65:DT= 1.00]
004:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:2503            7.76     .117 No_date    2:19   11.14
                     + 02:RC2           93.76    1.183 No_date    4:00   17.73
                     + 05:2505           6.99     .088 No_date    2:16    8.99
      [DT= 1.00]  SUM= 06:2503+2505+    108.51    1.259 No_date    3:54   16.70
004:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:2506            2.50     .035 No_date    1:56    7.61
      [CN= 49.0: N= 3.00]
      [Tp=  .41:DT= 1.00]
004:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:2506            2.50     .035 No_date    1:56    7.61
                     + 06:2503+2505+    108.51    1.259 No_date    3:54   16.70
      [DT= 1.00]  SUM= 02:RC+2506       111.01    1.266 No_date    3:54   16.49
004:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 02:RC+2506      111.01    1.266 No_date    3:54   16.49
      [RDT= 1.00] out<- 04:RC3          111.01    1.265 No_date    3:58   16.49
      [L/S/n=  200./1.000/.030]
      [Vmax=  .921:Dmax=  .740]
004:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:2507            5.22     .062 No_date    2:07    7.61
      [CN= 49.0: N= 3.00]
      [Tp=  .54:DT= 1.00]
004:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:2507            5.22     .062 No_date    2:07    7.61
                     + 04:RC3          111.01    1.265 No_date    3:58   16.49
      [DT= 1.00]  SUM= 02:2507+RC       116.23    1.283 No_date    3:56   16.09
004:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:2508            7.46     .083 No_date    2:14    7.87
      [CN= 50.0: N= 3.00]
      [Tp=  .63:DT= 1.00]
004:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:2508            7.46     .083 No_date    2:14    7.87
                     + 02:2507+RC       116.23    1.283 No_date    3:56   16.09
      [DT= 1.00]  SUM= 09:1000           123.69    1.312 No_date    3:54   15.60
#                 MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
004:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:103             8.70     .142 No_date    2:02    9.75
      [CN= 59.2: N= 3.00]
      [Tp=  .48:DT= 1.00]
004:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:103             8.70     .142 No_date    2:02    9.75
                     + 03:To1023          9.49     .071 No_date    3:26   18.27
      [DT= 1.00]  SUM= 02:1023           18.19     .179 No_date    2:11   14.20
004:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:205             1.41     .028 No_date    1:38    7.47
      [CN= 51.1: N= 3.00]
      [Tp=  .20:DT= 1.00]
004:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:205             1.41     .028 No_date    1:38    7.47
                     + 02:1023           18.19     .179 No_date    2:11   14.20
      [DT= 1.00]  SUM= 03:802            19.60     .192 No_date    2:08   13.71
004:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD    01:201             18.41    2.610 No_date    1:21   28.15
      [XIMP=.43:TIMP=.56]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
004:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:201             18.41    2.610 No_date    1:21   28.15
                     + 03:802            19.60     .192 No_date    2:08   13.71
      [DT= 1.00]  SUM= 02:803            38.01    2.623 No_date    1:21   20.71
004:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:202             1.10     .016 No_date    1:45    6.67
      [CN= 55.0: N= 3.00]
      [Tp=  .25:DT= 1.00]
004:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:202             1.10     .016 No_date    1:45    6.67
                     + 02:803            38.01    2.623 No_date    1:21   20.71
      [DT= 1.00]  SUM= 03:804            39.11    2.624 No_date    1:21   20.31
004:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:1021            4.66     .052 No_date    2:27    9.03
      [CN= 55.3: N= 3.00]
      [Tp=  .78:DT= 1.00]
004:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     COMPUTE DUALHYD   01:1021            4.66     .052 No_date    2:27    9.03
       Major System /  04:To1000           .13     .006 No_date    2:27    9.03
       Minor System \  02:To810           4.53     .046 No_date    2:07    9.03
004:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           02:To810           4.53     .046 No_date    2:07    9.03
                     + 03:804            39.11    2.624 No_date    1:21   20.31
      [DT= 1.00]  SUM= 05:810            43.64    2.625 No_date    1:21   19.14
#                                MAIR MILLS VILLAGE SWMF
004:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 05:810          43.64    2.625 No_date    1:21   19.14
      [RDT= 1.00] out<- 02:1026         43.64     .253 No_date    3:42   19.14
            overflow <= 03:1026OVF        .00     .000 No_date    0:00     .00
      (MxStoUsed=.5327E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
004:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           02:1026            43.64     .253 No_date    3:42   19.14
                     + 03:1026OVF          .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM= 05:Pond1026ou     43.64     .253 No_date    3:42   19.14
#              TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
004:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 05:Pond1026ou     43.64     .253 No_date    3:42   19.14
            diverted <= 02:To807          29.37     .040 No_date    3:42   19.14
            diverted <= 07:To809          14.27     .213 No_date    3:42   19.14
            diverted <= 03:To1025           .00     .000 No_date    0:00     .00
#                          FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
004:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           09:1000           123.69    1.312 No_date    3:54   15.60
                     + 04:To1000           .13     .006 No_date    2:27    9.03
      [DT= 1.00]  SUM= 05:Node 2         123.82    1.312 No_date    3:54   15.59
#                                FLOWS TO OUTLET B
004:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      01:207             1.22     .037 No_date    1:31    9.03
      [CN= 55.3: N= 3.00]
      [Tp=  .13:DT= 1.00]
004:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           01:207             1.22     .037 No_date    1:31    9.03
                     + 02:To807          29.37     .040 No_date    3:42   19.14
      [DT= 1.00]  SUM= 06:807            30.59     .066 No_date    1:34   18.74
004:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           03:To1025           .00     .000 No_date    0:00     .00
                     + 05:Node 2        123.82    1.312 No_date    3:54   15.59
      [DT= 1.00]  SUM= 01:1025           123.82    1.312 No_date    3:54   15.59
004:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           07:To809           14.27     .213 No_date    3:42   19.14
                     + 01:1025          123.82    1.312 No_date    3:54   15.59
      [DT= 1.00]  SUM= 02:809            138.09    1.524 No_date    3:53   15.96
004:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD           06:807             30.59     .066 No_date    1:34   18.74
                     + 10:To806           19.18     .020 No_date    3:26   18.27
      [DT= 1.00]  SUM= 03:806-OutB       49.78     .086 No_date    1:34   18.56
#                 LINKSVIEW AND CONTRIBUTING AREAS
004:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      04:2502            5.52     .079 No_date    2:08    9.24
      [CN= 58.4: N= 3.00]
      [Tp=  .54:DT= 1.00]
004:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD      05:2509            5.30     .109 No_date    1:49    9.81
      [CN= 59.0: N= 3.00]
      [Tp=  .33:DT= 1.00]
004:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD    06:2500           38.20    2.856 No_date    1:27   24.52
      [XIMP=.30:TIMP=.50]
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      [LOSS= 2 :CN= 55.3]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
004:0059----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              04:2502          5.52     .079 No_date    2:08    9.24
                    +  05:2509          5.30     .109 No_date    1:49    9.81
                    +  06:2500         38.20    2.856 No_date    1:27   24.52
    [DT= 1.00]  SUM=  07:Pondin        49.02    2.906 No_date    1:27   21.21
#                          LINKSVIEW SWM FACILTIY
004:0060----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE RESERVOIR -> 07:Pondin       49.02    2.906 No_date    1:27   21.21
    [RDT= 1.00] out<- 08:LinkPond     49.02     .313 No_date    3:32   21.21
           overflow <= 09:OVF           .00     .000 No_date    0:00     .00
    [MxStoUsed=.7927E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
004:0061----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              08:LinkPond     49.02     .313 No_date    3:32   21.21
                    +  09:OVF            .00     .000 No_date    0:00     .00
    [DT= 1.00]  SUM=  04:Pondout       49.02     .313 No_date    3:32   21.21
#                          FLOWS FROM TENTH LINE
004:0062----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB STANDHYD       08:2601          .25     .061 No_date    1:20   35.90
     [XIMP=.64:TIMP=.64]
     [LOSS= 2 :CN= 49.0]
     [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
     [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
004:0063----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB STANDHYD       09:2602          1.30     .236 No_date    1:23   35.90
     [XIMP=.64:TIMP=.64]
     [LOSS= 2 :CN= 49.0]
     [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
     [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
004:0064----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   COMPUTE DUALHYD      09:2602          1.30     .236 No_date    1:23   35.90
      Major System /    06:Overflow       .01     .016 No_date    1:23   35.90
      Minor System \    05:Syrflow       1.29     .220 No_date    1:22   35.90
#                    FLOWS IN POTENTIAL FUTURE OUTLET PIPE
004:0065----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              04:Pondout      49.02     .313 No_date    3:32   21.21
                    +  05:Syrflow        1.29     .220 No_date    1:22   35.90
    [DT= 1.00]  SUM=  10:LinkPipe      50.31     .323 No_date    3:28   21.59
#                    FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
004:0066----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              10:LinkPipe     50.31     .323 No_date    3:28   21.59
                    +  02:809          138.09    1.524 No_date    3:53   15.96
                    +  06:Overflow        .01     .016 No_date    1:23   35.90
                    +  08:2601            .25     .061 No_date    1:20   35.90
    [DT= 1.00]  SUM=  01:Node3         188.66    1.845 No_date    3:48   17.49
#                    FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
004:0067----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:Node3        188.66    1.845 No_date    3:48   17.49
                    +  03:806-OutB       49.78     .086 No_date    1:34   18.56
    [DT= 1.00]  SUM=  04:Node4         238.43    1.909 No_date    3:48   17.71
 ** END OF RUN :   4
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25 yr CHI

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RUN:COMMAND#
005:0001----------
   START
    [TZERO =    .00 hrs on        0]
    [METOUT=   2    (1=imperial, 2=metric output)]
    [NSTORM=   1 ]
    [NRUN  =   5 ]
#
#  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
#  Date        : 2014 08 22
#  Modified    :
#  Modeller    : [A.French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 3737016
#
#
005:0002----------
   READ STORM
    Filename = STORM.001
    Comment  =
    [SDT= 5.00:SDUR=   4.00:PTOT=  63.85]
#              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
005:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:300           4.55     .128 No_date    2:21   21.30
     [CN= 71.0: N= 3.00]
     [Tp=  .74:DT= 1.00]
005:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE CHANNEL   -> 01:300          4.55     .128 No_date    2:21   21.30
    [RDT= 1.00] out<- 02:701          4.55     .099 No_date    2:45   21.30
    [L/S/n=  450./ .050/.040]
    [Vmax=  .214:Dmax=  .210]
005:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:301           5.97     .187 No_date    2:12   21.30
     [CN= 71.0: N= 3.00]
     [Tp=  .63:DT= 1.00]
005:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:301           5.97     .187 No_date    2:12   21.30
                    +  02:701           4.55     .099 No_date    2:45   21.30
    [DT= 1.00]  SUM=  03:901          10.52     .266 No_date    2:24   21.30
005:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE CHANNEL   -> 03:901          10.52     .266 No_date    2:24   21.30
    [RDT= 1.00] out<- 01:702          10.52     .222 No_date    2:42   21.30
    [L/S/n=  300./ .050/.060]
    [Vmax=  .187:Dmax=  .397]
005:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE RESERVOIR -> 01:702          10.52     .222 No_date    2:42   21.30
    [RDT= 1.00] out<- 02:501          10.52     .171 No_date    3:32   21.30
           overflow <= 03:501OVF        .00     .000 No_date    0:00     .00
    [MxStoUsed=.2590E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
005:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB STANDHYD       01:302          16.39    1.229 No_date    1:35   30.33
     [XIMP=.20:TIMP=.40]
     [LOSS= 2 :CN= 65.2]
     [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
     [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
005:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:302          16.39    1.229 No_date    1:35   30.33
                    +  02:501          10.52     .171 No_date    3:32   21.30
                    +  03:501OVF         .00     .000 No_date    0:00     .00
    [DT= 1.00]  SUM=  04:902          26.91    1.231 No_date    1:35   26.80
005:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB STANDHYD       01:303           2.34     .240 No_date    1:24   33.79
     [XIMP=.25:TIMP=.50]
     [LOSS= 2 :CN= 65.2]
     [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
     [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
005:0012----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:303           2.34     .240 No_date    1:24   33.79
                    +  04:902          26.91    1.231 No_date    1:35   26.80
    [DT= 1.00]  SUM=  02:903          29.25    1.444 No_date    1:33   27.36
005:0013----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:304           2.90     .131 No_date    1:43   18.59
     [CN= 66.6: N= 3.00]
     [Tp=  .28:DT= 1.00]
005:0014----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:304           2.90     .131 No_date    1:43   18.59
                    +  02:903          29.25    1.444 No_date    1:33   27.36
    [DT= 1.00]  SUM=  03:904          32.15    1.554 No_date    1:35   26.57
005:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB STANDHYD       01:305            .31     .029 No_date    1:20   26.72
     [XIMP=.20:TIMP=.20]
     [LOSS= 2 :CN= 65.2]
     [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
     [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
005:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:305            .31     .029 No_date    1:20   26.72
                    +  03:904          32.15    1.554 No_date    1:35   26.57
    [DT= 1.00]  SUM=  02:905          32.46    1.562 No_date    1:35   26.57
#                    MAIR MILLS ESTATES SWM FACILITY
005:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE RESERVOIR -> 02:905          32.46    1.562 No_date    1:35   26.57
    [RDT= 1.00] out<- 03:502          32.46     .150 No_date    4:43   26.57
           overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
    [MxStoUsed=.6511E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
005:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:400           5.70     .070 No_date    2:22    9.48
     [CN= 50.2: N= 3.00]
     [Tp=  .70:DT= 1.00]
005:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:400           5.70     .070 No_date    2:22    9.48
                    +  03:502          32.46     .150 No_date    4:43   26.57
                    +  04:502OVF         .00     .000 No_date    0:00     .00
    [DT= 1.00]  SUM=  02:906          38.16     .206 No_date    2:40   24.02
#          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
005:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   DIVERT HYD           -> 02:906          38.16     .206 No_date    2:40   24.02
            diverted <= 10:To806          15.47     .020 No_date    2:40   24.02
            diverted <= 03:To1023         11.35     .093 No_date    2:40   24.02
            diverted <= 01:To1022         11.35     .093 No_date    2:40   24.02
#                    TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
#                                  FLOW AT NODE 1
005:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:2501          85.82    1.591 No_date    3:39   25.39
     [CN= 78.8: N= 3.00]
     [Tp= 1.72:DT= 1.00]
005:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE CHANNEL   -> 01:2501         85.82    1.591 No_date    3:39   25.39
    [RDT= 1.00] out<- 02:RC1          85.82    1.576 No_date    3:55   25.39
    [L/S/n=  350./1.500/.030]
    [Vmax=  .543:Dmax=  .899]
005:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:2504          7.94     .136 No_date    2:08   11.18
     [CN= 53.0: N= 3.00]
     [Tp=  .55:DT= 1.00]
005:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:2504          7.94     .136 No_date    2:08   11.18
                    +  02:RC1          85.82    1.576 No_date    3:55   25.39
    [DT= 1.00]  SUM=  04:2501+2504     93.76    1.617 No_date    3:53   24.19
005:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE CHANNEL   -> 04:2501+2504    93.76    1.617 No_date    3:53   24.19
    [RDT= 1.00] out<- 02:RC2          93.76    1.614 No_date    3:59   24.19
    [L/S/n=  425./1.250/.030]
    [Vmax= 1.110:Dmax=  .786]
005:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:2503          7.76     .165 No_date    2:18   15.58
     [CN= 62.3: N= 3.00]
     [Tp=  .68:DT= 1.00]
005:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         05:2505          6.99     .124 No_date    2:15   12.58
     [CN= 54.0: N= 3.00]
     [Tp=  .65:DT= 1.00]
005:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:2503          7.76     .165 No_date    2:18   15.58
                    +  02:RC2          93.76    1.614 No_date    3:59   24.19
                    +  05:2505          6.99     .124 No_date    2:15   12.58
    [DT= 1.00]  SUM=  06:2503+2505+   108.51    1.721 No_date    3:51   22.83
005:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:2506          2.50     .050 No_date    1:55   10.71
     [CN= 49.0: N= 3.00]
     [Tp=  .41:DT= 1.00]
005:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:2506          2.50     .050 No_date    1:55   10.71
                    +  06:2503+2505+   108.51    1.721 No_date    3:51   22.83
    [DT= 1.00]  SUM=  02:RC+2506       111.01    1.731 No_date    3:50   22.56
005:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ROUTE CHANNEL   -> 02:RC+2506      111.01    1.731 No_date    3:50   22.56
    [RDT= 1.00] out<- 04:RC3          111.01    1.730 No_date    3:54   22.56
    [L/S/n=  200./1.000/.030]
    [Vmax=  .922:Dmax=  .794]
005:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:2507          5.22     .088 No_date    2:06   10.71
     [CN= 49.0: N= 3.00]
     [Tp=  .54:DT= 1.00]
005:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:2507          5.22     .088 No_date    2:06   10.71
                    +  04:RC3          111.01    1.730 No_date    3:54   22.56
    [DT= 1.00]  SUM=  02:2507+RC       116.23    1.755 No_date    3:52   22.03
005:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:2508          7.46     .118 No_date    2:14   11.07
     [CN= 50.0: N= 3.00]
     [Tp=  .63:DT= 1.00]
005:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:2508          7.46     .118 No_date    2:14   11.07
                    +  02:2507+RC      116.23    1.755 No_date    3:52   22.03
    [DT= 1.00]  SUM=  09:1000          123.69    1.798 No_date    3:49   21.37
#                    MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
005:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:103           8.70     .203 No_date    2:02   13.79
     [CN= 59.2: N= 3.00]
     [Tp=  .48:DT= 1.00]
005:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:103           8.70     .203 No_date    2:02   13.79
                    +  03:To1023        11.35     .093 No_date    2:40   24.02
    [DT= 1.00]  SUM=  02:1023          20.05     .272 No_date    2:10   19.58
005:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:205           1.41     .041 No_date    1:37   10.67
     [CN= 51.1: N= 3.00]
     [Tp=  .20:DT= 1.00]
005:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:205           1.41     .041 No_date    1:37   10.67
                    +  02:1023         20.05     .272 No_date    2:10   19.58
    [DT= 1.00]  SUM=  03:802           21.46     .291 No_date    2:07   18.99
005:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB STANDHYD       01:201          18.41    3.174 No_date    1:21   34.62
     [XIMP=.43:TIMP=.56]
     [LOSS= 2 :CN= 49.0]
     [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
     [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
005:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:201          18.41    3.174 No_date    1:21   34.62
                    +  03:802          21.46     .291 No_date    2:07   18.99
    [DT= 1.00]  SUM=  02:803           39.87    3.195 No_date    1:21   26.21
005:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   CALIB NASHYD         01:202           1.10     .025 No_date    1:44    9.96
     [CN= 55.0: N= 3.00]
     [Tp=  .25:DT= 1.00]
005:0043----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
   ADD HYD              01:202           1.10     .025 No_date    1:44    9.96
                    +  02:803          39.87    3.195 No_date    1:21   26.21
    [DT= 1.00]  SUM=  03:804           40.97    3.198 No_date    1:21   25.77
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005:0044----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:1021          4.66     .074 No_date    2:26   12.72
       [CN= 55.3: N= 3.00]
       [Tp=  .78:DT= 1.00]
005:0045----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     COMPUTE DUALHYD    01:1021          4.66     .074 No_date    2:26   12.72
       Major System /   04:To1000         .79     .028 No_date    2:26   12.72
       Minor System \   02:To810         3.87     .046 No_date    1:51   12.72
005:0046----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            02:To810         3.87     .046 No_date    1:51   12.72
                    +   03:804          40.97    3.190 No_date    1:21   25.77
     [DT= 1.00]  SUM=   05:810          44.84    3.199 No_date    1:21   24.64
#                              MAIR MILLS VILLAGE SWMF
005:0047----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 05:810          44.84    3.199 No_date    1:21   24.64
     [RDT= 1.00] out<- 02:1026          44.84     .391 No_date    3:14   24.64
                overflow <= 03:1026OVF       .00     .000 No_date    0:00     .00
     (MxStoUsed=.6074E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
005:0048----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            02:1026          44.84     .391 No_date    3:14   24.64
                    +   03:1026OVF         .00     .000 No_date    0:00     .00
     [DT= 1.00]  SUM=   05:Pond1026ou     44.84     .391 No_date    3:14   24.64
#                TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
005:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 05:Pond1026ou     44.84     .391 No_date    3:14   24.64
              diverted <= 02:To807          24.60     .040 No_date    3:14   24.64
              diverted <= 07:To809          20.24     .351 No_date    3:14   24.64
              diverted <= 03:To1025           .00     .000 No_date    0:00     .00
#                                FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
005:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            09:1000         123.69    1.798 No_date    3:49   21.37
                    +   04:To1000          .79     .028 No_date    2:26   12.72
     [DT= 1.00]  SUM=   05:Node 2       124.48    1.798 No_date    3:49   21.31
#                                  FLOWS TO OUTLET B
005:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:207           1.22     .053 No_date    1:31   12.72
       [CN= 55.3: N= 3.00]
       [Tp=  .13:DT= 1.00]
005:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:207           1.22     .053 No_date    1:31   12.72
                    +   02:To807         24.60     .040 No_date    3:14   24.64
     [DT= 1.00]  SUM=   06:807          25.82     .088 No_date    1:33   24.08
005:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            03:To1025         .00     .000 No_date    0:00     .00
                    +   05:Node 2       124.48    1.798 No_date    3:49   21.31
     [DT= 1.00]  SUM=   01:1025         124.48    1.798 No_date    3:49   21.31
005:0054----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            07:To809         20.24     .351 No_date    3:14   24.64
                    +   01:1025         124.48    1.798 No_date    3:49   21.31
     [DT= 1.00]  SUM=   02:809          144.72    2.135 No_date    3:45   21.78
005:0055----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            06:807           25.82     .088 No_date    1:33   24.08
                    +   10:To806         15.47     .020 No_date    2:40   24.02
     [DT= 1.00]  SUM=   03:806-OutB      41.28     .108 No_date    1:33   24.06
#                      LINKSVIEW AND CONTRIBUTING AREAS
005:0056----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       04:2502          5.52     .113 No_date    2:07   13.15
       [CN= 59.4: N= 3.00]
       [Tp=  .54:DT= 1.00]
005:0057----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       05:2509          5.30     .156 No_date    1:49   13.85
       [CN= 59.0: N= 3.00]
       [Tp=  .33:DT= 1.00]
005:0058----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     06:2500         38.20    3.610 No_date    1:26   30.84
       [XIMP=.30:TIMP=.50]
       [LOSS= 2 :CN= 55.3]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
005:0059----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            04:2502          5.52     .113 No_date    2:07   13.15
                    +   05:2509          5.30     .156 No_date    1:49   13.85
                    +   06:2500         38.20    3.610 No_date    1:26   30.84
     [DT= 1.00]  SUM=   07:Pondin        49.02    3.676 No_date    1:26   27.01
#                                LINKSVIEW SWM FACILITY
005:0060----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 07:Pondin        49.02    3.676 No_date    1:26   27.01
     [RDT= 1.00] out<- 08:LinkPond       49.02     .475 No_date    3:14   27.01
                overflow <= 09:OVF           .00     .000 No_date    0:00     .00
     (MxStoUsed=.9556E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
005:0061----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            08:LinkPond      49.02     .475 No_date    3:14   27.01
                    +   09:OVF           .00     .000 No_date    0:00     .00
     [DT= 1.00]  SUM=   04:Pondout       49.02     .475 No_date    3:14   27.01
#                                FLOWS FROM TENTH LINE
005:0062----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     08:2601           .25     .073 No_date    1:20   43.44
       [XIMP=.64:TIMP=.64]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=    .0]
005:0063----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     09:2602          1.30     .291 No_date    1:22   43.44
       [XIMP=.64:TIMP=.64]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
005:0064----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     COMPUTE DUALHYD    09:2602          1.30     .291 No_date    1:22   43.44
       Major System /   06:Overflow        .05     .071 No_date    1:22   43.44
       Minor System \   05:5yrflow        1.25     .220 No_date    1:19   43.44
#                      FLOWS IN POTENTIAL FUTURE OUTLET PIPE
005:0065----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            04:Pondout       49.02     .475 No_date    3:14   27.01
                    +   05:5yrflow        1.25     .220 No_date    1:19   43.44
     [DT= 1.00]  SUM=   10:LinkPipe       50.27     .488 No_date    3:10   27.42
#                  FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
005:0066----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            10:LinkPipe      50.27     .488 No_date    3:10   27.42
                    +   02:809          144.72    2.135 No_date    3:45   21.78
                    +   06:Overflow        .05     .071 No_date    1:22   43.44
                    +   08:2601            .25     .073 No_date    1:20   43.44
     [DT= 1.00]  SUM=   01:Node3        195.29    2.613 No_date    3:41   23.26
#                    FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
005:0067----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:Node3        195.29    2.613 No_date    3:41   23.26
                    +   03:806-OutB      41.28     .108 No_date    1:33   24.06
     [DT= 1.00]  SUM=   04:Node4        236.57    2.678 No_date    3:40   23.40
  ** END OF RUN :   5

************************************************************************************



                                                    50 yr CHI

 RUN:COMMAND#
 006:0001----------------------------------------------------------------------
     START
       [TZERO =    .00 hrs on       0]
       [METOUT=   2    (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN   =  6 ]
#*************************************************************************
#  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
#  Date        : 2014 08 22
#  Modified    :
#  Modeller    : [A.French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 3737016
#*************************************************************************
#*************************************************************************
006:0002----------------------------------------------------------------------
     READ STORM
      Filename = STORM.001
      Comment  =
      [SDT= 5.00:SDUR=   4.00:PTOT=  70.27]
#              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
006:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:300           4.55     .153 No_date    2:20   25.20
       [CN= 71.0: N= 3.00]
       [Tp=  .74:DT= 1.00]
006:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:300           4.55     .153 No_date    2:20   25.20
     [RDT= 1.00] out<- 02:701            4.55     .121 No_date    2:46   25.20
     [L/S/n=  450./ .050/.040]
     [Vmax=  .225:Dmax=  .227]
006:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:301           5.97     .223 No_date    2:11   25.20
       [CN= 71.0: N= 3.00]
       [Tp=  .63:DT= 1.00]
006:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:301           5.97     .223 No_date    2:11   25.20
                    +   02:701           4.55     .121 No_date    2:46   25.20
     [DT= 1.00]  SUM=   03:901          10.52     .320 No_date    2:23   25.20
006:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 03:901          10.52     .320 No_date    2:23   25.20
     [RDT= 1.00] out<- 01:702            10.52     .273 No_date    2:42   25.20
     [L/S/n=  300./ .050/.060]
     [Vmax=  .202:Dmax=  .426]
006:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 01:702           10.52     .273 No_date    2:42   25.20
     [RDT= 1.00] out<- 02:501            10.52     .171 No_date    3:52   25.20
                overflow <= 03:501OVF        .00     .000 No_date    0:00     .00
     (MxStoUsed=.4902E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
006:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:302          16.39    1.466 No_date    1:35   34.80
       [XIMP=.20:TIMP=.40]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
006:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:302          16.39    1.466 No_date    1:35   34.80
                    +   02:501          10.52     .171 No_date    3:52   25.20
                    +   03:501OVF          .00     .000 No_date    0:00     .00
     [DT= 1.00]  SUM=   04:902          26.91    1.469 No_date    1:35   31.05
006:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:303           2.34     .281 No_date    1:27   38.55
       [XIMP=.25:TIMP=.50]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
006:0012----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:303           2.34     .281 No_date    1:27   38.55
                    +   04:902          26.91    1.469 No_date    1:35   31.05
     [DT= 1.00]  SUM=   02:903          29.25    1.721 No_date    1:33   31.65
006:0013----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:304           2.90     .157 No_date    1:43   22.11
       [CN= 66.6: N= 3.00]
       [Tp=  .28:DT= 1.00]
006:0014----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:304           2.90     .157 No_date    1:43   22.11
                    +   02:903          29.25    1.721 No_date    1:33   31.65
     [DT= 1.00]  SUM=   03:904          32.15    1.852 No_date    1:34   30.79
006:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:305            .31     .032 No_date    1:20   30.72
       [XIMP=.20:TIMP=.20]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=    .0]
       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
006:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:305            .31     .032 No_date    1:20   30.72
                    +   03:904          32.15    1.852 No_date    1:34   30.79
     [DT= 1.00]  SUM=   02:905          32.46    1.862 No_date    1:34   30.79
#                      MAIR MILLS ESTATES SWM FACILITY
006:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 02:905           32.46    1.862 No_date    1:34   30.79
     [RDT= 1.00] out<- 03:502            32.46     .150 No_date    5:30   30.79
                overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
     (MxStoUsed=.7525E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
006:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:400           5.70     .087 No_date    2:22   11.63
       [CN= 50.2: N= 3.00]
       [Tp=  .70:DT= 1.00]
006:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:400           5.70     .087 No_date    2:22   11.63
                    +   03:502          32.46     .150 No_date    5:30   30.79
                    +   04:502OVF          .00     .000 No_date    0:00     .00
     [DT= 1.00]  SUM=   02:906          38.16     .234 No_date    2:34   27.92
#            FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
006:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 02:906          38.16     .234 No_date    2:34   27.92
              diverted <= 10:To806      13.88     .020 No_date    2:34   27.92
              diverted <= 03:To1023     12.14     .107 No_date    2:34   27.92
              diverted <= 01:To1022     12.14     .107 No_date    2:34   27.92
#                    TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
#                                  FLOW AT NODE 1
006:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:2501          85.82    1.883 No_date    3:37   29.98
       [CN= 78.8: N= 3.00]
       [Tp= 1.72:DT= 1.00]
006:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:2501          85.82    1.883 No_date    3:37   29.98
     [RDT= 1.00] out<- 02:RC1            85.82    1.865 No_date    3:52   29.98
     [L/S/n=  350./1.500/.030]
     [Vmax=  .517:Dmax=  .926]
006:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:2504           7.94     .167 No_date    2:08   13.58
       [CN= 53.0: N= 3.00]
       [Tp=  .55:DT= 1.00]
006:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:2504           7.94     .167 No_date    2:08   13.58
                    +   02:RC1           85.82    1.865 No_date    3:52   29.98
     [DT= 1.00]  SUM=   04:2501+2504      93.76    1.916 No_date    3:46   28.60
006:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 04:2501+2504      93.76    1.916 No_date    3:46   28.60
     [RDT= 1.00] out<- 02:RC2            93.76    1.912 No_date    3:56   28.60
     [L/S/n=  425./1.250/.030]
     [Vmax= 1.124:Dmax=  .822]
006:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:2503           7.76     .200 No_date    2:17   18.70
       [CN= 62.3: N= 3.00]
       [Tp=  .68:DT= 1.00]
006:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       05:2505           6.99     .149 No_date    2:15   15.13
       [CN= 54.0: N= 3.00]
       [Tp=  .65:DT= 1.00]
006:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:2503           7.76     .200 No_date    2:17   18.70
                    +   02:RC2           93.76    1.912 No_date    3:56   28.60
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01891>                    +  05:2505              6.99     .149 No_date    2:15   15.13
01892>       [DT= 1.00]  SUM=  06:2503+2505+    108.51    2.043 No_date    3:48   27.02
01893> 006:0029--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01894>       CALIB NASHYD      01:2506            2.50     .061 No_date    1:55   12.92
01895>         [CN= 49.0: N= 3.00]
01896>         [Tp=  .41:DT= 1.00]
01897> 006:0030--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01898>       ADD HYD           01:2506          2.50     .061 No_date    1:55   12.92
01899>                      +  06:2503+2505+  108.51    2.043 No_date    3:48   27.02
01900>       [DT= 1.00]  SUM=  02:RC+2506      111.01    2.056 No_date    3:48   26.70
01901> 006:0031--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01902>       ROUTE CHANNEL   -> 02:RC+2506      111.01    2.056 No_date    3:48   26.70
01903>         [RDT= 1.00] out<- 04:RC3         111.01    2.054 No_date    3:51   26.70
01904>         [L/S/n=  200./1.000/.030]
01905>         [Vmax=  .933:Dmax=  .824]
01906> 006:0032--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01907>       CALIB NASHYD      01:2507          5.22     .107 No_date    2:06   12.92
01908>         [CN= 49.0: N= 3.00]
01909>         [Tp=  .54:DT= 1.00]
01910> 006:0033--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01911>       ADD HYD           01:2507          5.22     .107 No_date    2:06   12.92
01912>                      +  04:RC3         111.01    2.054 No_date    3:51   26.70
01913>       [DT= 1.00]  SUM=  02:2507+RC      116.23    2.085 No_date    3:50   26.09
01914> 006:0034--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01915>       CALIB NASHYD      01:2508          7.46     .143 No_date    2:13   13.34
01916>         [CN= 50.0: N= 3.00]
01917>         [Tp=  .63:DT= 1.00]
01918> 006:0035--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01919>       ADD HYD           01:2508          7.46     .143 No_date    2:13   13.34
01920>                      +  02:2507+RC      116.23    2.085 No_date    3:50   26.09
01921>       [DT= 1.00]  SUM=  09:1000          123.69    2.137 No_date    3:47   25.32
01922> #                  MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
01923> 006:0036--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01924>       CALIB NASHYD      01:103           8.70     .247 No_date    2:01   16.64
01925>         [CN= 59.2: N= 3.00]
01926>         [Tp=  .48:DT= 1.00]
01927> 006:0037--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01928>       ADD HYD           01:103           8.70     .247 No_date    2:01   16.64
01929>                      +  03:To1023        12.14     .107 No_date    2:34   27.92
01930>       [DT= 1.00]  SUM=  02:1023          20.84     .339 No_date    2:08   23.22
01931> 006:0038--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01932>       CALIB NASHYD      01:205           1.41     .051 No_date    1:37   12.96
01933>         [CN= 51.1: N= 3.00]
01934>         [Tp=  .20:DT= 1.00]
01935> 006:0039--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01936>       ADD HYD           01:205           1.41     .051 No_date    1:37   12.96
01937>                      +  02:1023         20.84     .339 No_date    2:08   23.22
01938>       [DT= 1.00]  SUM=  03:802           22.25     .362 No_date    2:06   22.57
01939> 006:0040--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01940>       CALIB STANDHYD    01:201           18.41    3.569 No_date    1:21   38.89
01941>         [XIMP=.43:TIMP=.56]
01942>         [LOSS= 2 :CN= 49.0]
01943>         [Pervious      area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
01944>         [Impervious    area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
01945> 006:0041--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01946>       ADD HYD           01:201           18.41    3.569 No_date    1:21   38.89
01947>                      +  03:802           22.25     .362 No_date    2:06   22.57
01948>       [DT= 1.00]  SUM=  02:803           40.66    3.596 No_date    1:21   29.96
01949> 006:0042--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01950>       CALIB NASHYD      01:202           1.10     .032 No_date    1:44   12.33
01951>         [CN= 55.0: N= 3.00]
01952>         [Tp=  .25:DT= 1.00]
01953> 006:0043--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01954>       ADD HYD           01:202           1.10     .032 No_date    1:44   12.33
01955>                      +  02:803           40.66    3.596 No_date    1:21   29.96
01956>       [DT= 1.00]  SUM=  03:804           41.76    3.600 No_date    1:21   29.49
01957> 006:0044--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01958>       CALIB NASHYD      01:1021          4.66     .089 No_date    2:26   15.32
01959>         [CN= 55.3: N= 3.00]
01960>         [Tp=  .78:DT= 1.00]
01961> 006:0045--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01962>       COMPUTE DUALHYD   01:1021          4.66     .089 No_date    2:26   15.32
01963>         Major System /  04:To1000        1.20     .043 No_date    2:26   15.32
01964>         Minor System \  02:To810         3.46     .046 No_date    1:46   15.32
01965> 006:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01966>       ADD HYD           02:To810         3.46     .046 No_date    1:46   15.32
01967>                      +  03:804           41.76    3.600 No_date    1:21   29.49
01968>       [DT= 1.00]  SUM=  05:810           45.22    3.602 No_date    1:21   28.41
01969> #                      MAIR MILLS VILLAGE SWMP
01970> 006:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01971>       ROUTE RESERVOIR -> 05:810          45.22    3.602 No_date    1:21   28.41
01972>         [RDT= 1.00] out<- 02:1026        45.22     .483 No_date    3:01   28.41
01973>                  overflow <= 03:1026OVF      .00     .000 No_date    0:00     .00
01974>         [MxStoUsed=.6577E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
01975> 006:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01976>       ADD HYD           02:1026          45.22     .483 No_date    3:01   28.41
01977>                      +  03:1026OVF          .00     .000 No_date    0:00     .00
01978>       [DT= 1.00]  SUM=  05:Pond1026ou     45.22     .483 No_date    3:01   28.41
01979> #              TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
01980> 006:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01981>       DIVERT HYD      -> 05:Pond1026ou   45.22     .483 No_date    3:01   28.41
01982>                  diverted <= 02:To807    22.53     .040 No_date    3:01   28.41
01983>                  diverted <= 07:To809    22.69     .443 No_date    3:01   28.41
01984>                  diverted <= 03:To1025       .00     .000 No_date    0:00     .00
01985> #                      FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
01986> 006:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01987>       ADD HYD           09:1000          123.69    2.137 No_date    3:47   25.32
01988>                      +  04:To1000        1.20     .043 No_date    2:26   15.32
01989>       [DT= 1.00]  SUM=  05:Node 2        124.89    2.137 No_date    3:47   25.22
01990> #                              FLOWS TO OUTLET B
01991> 006:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01992>       CALIB NASHYD      01:207           1.22     .065 No_date    1:31   15.32
01993>         [CN= 55.3: N= 3.00]
01994>         [Tp=  .13:DT= 1.00]
01995> 006:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01996>       ADD HYD           01:207           1.22     .065 No_date    1:31   15.32
01997>                      +  02:To807         22.53     .040 No_date    3:01   28.41
01998>       [DT= 1.00]  SUM=  06:807           23.75     .104 No_date    1:32   27.74
01999> 006:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02000>       ADD HYD           03:To1025           .00     .000 No_date    0:00     .00
02001>                      +  05:Node 2       124.89    2.137 No_date    3:47   25.22
02002>       [DT= 1.00]  SUM=  01:1025          124.89    2.137 No_date    3:47   25.22
02003> 006:0054--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02004>       ADD HYD           07:To809         22.69     .443 No_date    3:01   28.41
02005>                      +  01:1025         124.89    2.137 No_date    3:47   25.22
02006>       [DT= 1.00]  SUM=  02:809           147.58    2.552 No_date    3:40   25.71
02007> 006:0055--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02009>       ADD HYD           06:807           23.75     .104 No_date    1:32   27.74
02009>                      +  10:To806         13.88     .020 No_date    2:34   27.92
02010>       [DT= 1.00]  SUM=  03:806-OutB      37.63     .124 No_date    1:32   27.81
02011> #                      LINKSVIEW AND CONTRIBUTING AREAS
02012> 006:0056--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02013>       CALIB NASHYD      04:2502          5.52     .138 No_date    2:07   15.92
02014>         [CN= 58.4: N= 3.00]
02015>         [Tp=  .54:DT= 1.00]
02016> 006:0057--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02017>       CALIB NASHYD      05:2509          5.30     .190 No_date    1:48   16.69
02018>         [CN= 59.0: N= 3.00]
02019>         [Tp=  .33:DT= 1.00]
02020> 006:0058--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02021>       CALIB STANDHYD    06:2500          38.20    4.135 No_date    1:26   35.08
02022>         [XIMP=.30:TIMP=.50]
02023>         [LOSS= 2 :CN= 55.3]
02024>         [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02025>         [Impervious    area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
02026> 006:0059--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02027>       ADD HYD           04:2502          5.52     .138 No_date    2:07   15.92
02028>                      +  05:2509          5.30     .190 No_date    1:48   16.69
02029>                      +  06:2500         38.20    4.135 No_date    1:26   35.08
02030>       [DT= 1.00]  SUM=  07:Pondin        49.02    4.219 No_date    1:26   30.93
02031> #                              LINKSVIEW SWM FACILITIY
02032> 006:0060--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02033>       ROUTE RESERVOIR -> 07:Pondin       49.02    4.219 No_date    1:26   30.93
02034>         [RDT= 1.00] out<- 08:LinkPond    49.02     .585 No_date    3:07   30.93
02035>                  overflow <= 09:OVF          .00     .000 No_date    0:00     .00
02036>         [MxStoUsed=.1067E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02037> 006:0061--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02038>       ADD HYD           08:LinkPond      49.02     .585 No_date    3:07   30.93
02039>                      +  09:OVF           .00     .000 No_date    0:00     .00
02040>       [DT= 1.00]  SUM=  04:Pondout       49.02     .585 No_date    3:07   30.93
02041> #                              FLOWS FROM TENTH LINE
02042> 006:0062--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02043>       CALIB STANDHYD    08:2601           .25     .081 No_date    1:20   48.34
02044>         [XIMP=.64:TIMP=.64]
02045>         [LOSS= 2 :CN= 49.0]
02046>         [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02047>         [Impervious    area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
02048> 006:0063--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02049>       CALIB STANDHYD    09:2602          1.30     .326 No_date    1:22   48.34
02050>         [XIMP=.64:TIMP=.64]
02051>         [LOSS= 2 :CN= 49.0]
02052>         [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02053>         [Impervious    area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
02054> 006:0064--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02055>       COMPUTE DUALHYD   09:2602          1.30     .326 No_date    1:22   48.34
02056>         Major System /  06:Overflow       .09     .106 No_date    1:22   48.34
02057>         Minor System \  05:Syrflow       1.21     .220 No_date    1:19   48.34
02058> #                      FLOWS IN POTENTIAL FUTURE OUTLET PIPE
02059> 006:0065--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02060>       ADD HYD           04:Pondout       49.02     .585 No_date    3:07   30.93
02061>                      +  05:Syrflow       1.21     .220 No_date    1:19   48.34
02062>       [DT= 1.00]  SUM=  10:LinkPipe      50.23     .601 No_date    3:03   31.35
02063> #                      FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
02064> 006:0066--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02065>       ADD HYD           10:LinkPipe      50.23     .601 No_date    3:03   31.35
02066>                      +  02:809          147.58    2.552 No_date    3:40   25.71
02067>                      +  06:Overflow        .09     .106 No_date    1:22   48.34
02068>                      +  08:2601            .25     .081 No_date    1:20   48.34
02069>       [DT= 1.00]  SUM=  01:Node3         198.15    3.137 No_date    3:36   27.18
02070> #                      FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
02071> 006:0067--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02072>       ADD HYD           01:Node3         198.15    3.137 No_date    3:36   27.18
02073>                      +  03:806-OutB      37.63     .124 No_date    1:32   27.81
02074>       [DT= 1.00]  SUM=  04:Node4         235.78    3.203 No_date    3:36   27.28
02075>   ** END OF RUN :   6
02076>
02077> ************************************************************************
02078>
02079>
02080>                                                          100 yr CHI
02081>
02082>
02083>  RUN:COMMAND#
02084>  007:0001----------------------------------------------------------------------
02085>       START
02086>         [TZERO =    .00 hrs on        0]
02087>         [METOUT=   2    (1=imperial, 2=metric output)]
02088>         [NSTORM=   1 ]
02089>         [NRUN  =   7 ]
02090> #*************************************************************************
02091> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
02092> #  Date        : 2014 08 22
02093> #  Modified    :
02094> #  Modeller    : [A.French]
02095> #  Company     : C.F. Crozier & Associates Inc.
02096> #  License #   : 3737016
02097> #*************************************************************************
02098> #*************************************************************************
02099>  007:0002----------
02100>       READ STORM
02101>         Filename = STORM.001
02102>         Comment  =
02103>         [SDT= 5.00:SDUR=   4.00:PTOT=  78.22]
02104> #                      MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02105>  007:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02106>       CALIB NASHYD      01:300           4.55     .183 No_date    2:20   30.29
02107>         [CN= 71.0: N= 3.00]
02108>         [Tp=  .74:DT= 1.00]
02109>  007:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02110>       ROUTE CHANNEL   -> 01:300          4.55     .183 No_date    2:20   30.29
02111>         [RDT= 1.00] out<- 02:701         4.55     .146 No_date    2:44   30.29
02112>         [L/S/n=  450./ .050/.040]
02113>         [Vmax=  .240:Dmax=  .249]
02114>  007:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02115>       CALIB NASHYD      01:301           5.97     .267 No_date    2:11   30.29
02116>         [CN= 71.0: N= 3.00]
02117>         [Tp=  .63:DT= 1.00]
02118>  007:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02119>       ADD HYD           01:301           5.97     .267 No_date    2:11   30.29
02120>                      +  02:701           4.55     .146 No_date    2:44   30.29
02121>       [DT= 1.00]  SUM=  03:901           10.52    .388 No_date    2:22   30.29
02122>  007:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02123>       ROUTE CHANNEL   -> 03:901          10.52     .388 No_date    2:22   30.29
02124>         [RDT= 1.00] out<- 01:702         10.52     .334 No_date    2:39   30.29
02125>         [L/S/n=  300./ .050/.060]
02126>         [Vmax=  .220:Dmax=  .460]
02127>  007:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02128>       ROUTE RESERVOIR -> 01:702          10.52     .334 No_date    2:39   30.29
02129>         [RDT= 1.00] out<- 02:501         10.52     .173 No_date    4:12   30.29
02130>                  overflow <= 03:501OVF       .00     .000 No_date    0:00     .00
02131>         [MxStoUsed=.8464E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02132>  007:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02133>       CALIB STANDHYD    01:302           16.39    1.730 No_date    1:34   40.53
02134>         [XIMP=.20:TIMP=.40]
02135>         [LOSS= 2 :CN= 65.2]
02136>         [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02137>         [Impervious    area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
02138>  007:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02139>       ADD HYD           01:302           16.39    1.730 No_date    1:34   40.53
02140>                      +  02:501           10.52     .173 No_date    4:12   30.29
02141>                      +  03:501OVF          .00     .000 No_date    0:00     .00
02142>       [DT= 1.00]  SUM=  04:902           26.91    1.734 No_date    1:34   36.53
02143>  007:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02144>       CALIB STANDHYD    01:303           2.34     .334 No_date    1:27   44.63
02145>         [XIMP=.25:TIMP=.50]
02146>         [LOSS= 2 :CN= 65.2]
02147>         [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02148>         [Impervious    area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
02149>  007:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02150>       ADD HYD           01:303           2.34     .334 No_date    1:27   44.63
02151>                      +  04:902           26.91    1.734 No_date    1:34   36.53
02152>       [DT= 1.00]  SUM=  02:903           29.25    2.031 No_date    1:33   37.18
02153>  007:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02154>       CALIB NASHYD      01:304           2.90     .188 No_date    1:43   26.72
02155>         [CN= 66.6: N= 3.00]
02156>         [Tp=  .28:DT= 1.00]
02157>  007:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02158>       ADD HYD           01:304           2.90     .188 No_date    1:43   26.72
02159>                      +  02:903           29.25    2.031 No_date    1:33   37.18
02160>       [DT= 1.00]  SUM=  03:904           32.15    2.188 No_date    1:34   36.23
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02161>  007:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02162>      CALIB STANDHYD     01:305              .31    .035 No_date    1:20   35.88
02163>       [XIMP=.20:TIMP=.20]
02164>       [LOSS= 2 :CN= 65.2]
02165>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
02166>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
02167>  007:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02168>      ADD HYD            01:305              .31    .035 No_date    1:20   35.88
02169>                     +  03:904            32.15   2.188 No_date    1:34   36.23
02170>       [DT= 1.00]  SUM=  02:905            32.46   2.200 No_date    1:34   36.23
02171> #                      MAIR MILLS ESTATES SWM FACILITY
02172>  007:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02173>      ROUTE RESERVOIR -> 02:905            32.46   2.200 No_date    1:34   36.23
02174>       [RDT= 1.00] out<- 03:502            32.46    .210 No_date    4:34   36.23
02175>             overflow <= 04:502OVF          .00    .000 No_date    0:00     .00
02176>       [MxStoUsed=.8557E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02177>  007:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02178>      CALIB NASHYD       01:400             5.70    .108 No_date    2:21   14.53
02179>       [CN= 50.2: N= 3.00]
02180>       [Tp=  .70:DT= 1.00]
02181>  007:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02182>      ADD HYD            01:400             5.70    .108 No_date    2:21   14.53
02183>                     +  03:502            32.46    .210 No_date    4:34   36.23
02184>                     +  04:502OVF           .00    .000 No_date    0:00     .00
02185>       [DT= 1.00]  SUM=  02:906            38.16    .258 No_date    2:21   32.99
02186> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
02187>  007:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02188>      DIVERT HYD         -> 02:906            38.16    .258 No_date    2:21   32.99
02189>                diverted <= 10:To806          12.27    .020 No_date    2:21   32.99
02190>                diverted <= 03:To1023         12.95    .119 No_date    2:21   32.99
02191>                diverted <= 01:To1022         12.95    .119 No_date    2:21   32.99
02192> #                      TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
02193> #                                  FLOW AT NODE 1
02194>  007:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02195>      CALIB NASHYD       01:2501            85.82   2.252 No_date    3:37   35.89
02196>       [CN= 78.8: N= 3.00]
02197>       [Tp= 1.72:DT= 1.00]
02198>  007:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02199>      ROUTE CHANNEL   -> 01:2501            85.82   2.252 No_date    3:37   35.89
02200>       [RDT= 1.00] out<- 02:RC1            85.82   2.231 No_date    3:51   35.89
02201>       [L/S/n=  350./1.500/.030]
02202>       [Vmax=   .504:Dmax=   .953]
02203>  007:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02204>      CALIB NASHYD       01:2504            7.94    .205 No_date    2:07   16.79
02205>       [CN= 53.0: N= 3.00]
02206>       [Tp=  .55:DT= 1.00]
02207>  007:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02208>      ADD HYD            01:2504            7.94    .205 No_date    2:07   16.79
02209>                     +  02:RC1            85.82   2.231 No_date    3:51   35.89
02210>       [DT= 1.00]  SUM=  04:2501+2504      93.76   2.295 No_date    3:49   34.28
02211>  007:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02212>      ROUTE CHANNEL   -> 04:2501+2504      93.76   2.295 No_date    3:49   34.28
02213>       [RDT= 1.00] out<- 02:RC2            93.76   2.290 No_date    3:55   34.28
02214>       [L/S/n=  425./1.250/.030]
02215>       [Vmax=  1.139:Dmax=   .857]
02216>  007:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02217>      CALIB NASHYD       01:2503             7.76    .243 No_date    2:17   22.82
02218>       [CN= 62.3: N= 3.00]
02219>       [Tp=  .68:DT= 1.00]
02220>  007:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02221>      CALIB NASHYD       05:2505             6.99    .182 No_date    2:14   18.51
02222>       [CN= 54.0: N= 3.00]
02223>       [Tp=  .65:DT= 1.00]
02224>  007:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02225>      ADD HYD            01:2503             7.76    .243 No_date    2:17   22.82
02226>                     +  02:RC2            93.76   2.290 No_date    3:55   34.28
02227>                     +  05:2505            6.99    .182 No_date    2:14   18.51
02228>       [DT= 1.00]  SUM=  06:2503+2505+    108.51   2.453 No_date    3:47   32.45
02229>  007:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02230>      CALIB NASHYD       01:2506             2.50    .074 No_date    1:55   15.88
02231>       [CN= 49.0: N= 3.00]
02232>       [Tp=  .41:DT= 1.00]
02233>  007:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02234>      ADD HYD            01:2506             2.50    .074 No_date    1:55   15.88
02235>                     +  06:2503+2505+    108.51   2.453 No_date    3:47   32.45
02236>       [DT= 1.00]  SUM=  02:RC+2506        111.01   2.469 No_date    3:46   32.08
02237>  007:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02238>      ROUTE CHANNEL   -> 02:RC+2506        111.01   2.469 No_date    3:46   32.08
02239>       [RDT= 1.00] out<- 04:RC3            111.01   2.467 No_date    3:50   32.08
02240>       [L/S/n=  200./1.000/.030]
02241>       [Vmax=   .948:Dmax=   .861]
02242>  007:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02243>      CALIB NASHYD       01:2507             5.22    .130 No_date    2:06   15.88
02244>       [CN= 49.0: N= 3.00]
02245>       [Tp=  .54:DT= 1.00]
02246>  007:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02247>      ADD HYD            01:2507             5.22    .130 No_date    2:06   15.88
02248>                     +  04:RC3            111.01   2.467 No_date    3:50   32.08
02249>       [DT= 1.00]  SUM=  02:2507+RC        116.23   2.506 No_date    3:48   31.35
02250>  007:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02251>      CALIB NASHYD       01:2508             7.46    .174 No_date    2:13   16.38
02252>       [CN= 50.0: N= 3.00]
02253>       [Tp=  .63:DT= 1.00]
02254>  007:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02255>      ADD HYD            01:2508             7.46    .174 No_date    2:13   16.38
02256>                     +  02:2507+RC        116.23   2.506 No_date    3:48   31.35
02257>       [DT= 1.00]  SUM=  09:1000           123.69   2.572 No_date    3:44   30.45
02258> #                MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
02259>  007:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02260>      CALIB NASHYD       01:103              8.70    .302 No_date    2:01   20.43
02261>       [CN= 59.2: N= 3.00]
02262>       [Tp=  .48:DT= 1.00]
02263>  007:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02264>      ADD HYD            01:103              8.70    .302 No_date    2:01   20.43
02265>                     +  03:To1023          12.95    .119 No_date    2:21   32.99
02266>       [DT= 1.00]  SUM=  02:1023           21.65    .411 No_date    2:05   27.94
02267>  007:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02268>      CALIB NASHYD       01:205              1.41    .062 No_date    1:37   16.02
02269>       [CN= 51.1: N= 3.00]
02270>       [Tp=  .20:DT= 1.00]
02271>  007:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02272>      ADD HYD            01:205              1.41    .062 No_date    1:37   16.02
02273>                     +  02:1023           21.65    .411 No_date    2:05   27.94
02274>       [DT= 1.00]  SUM=  03:802            23.06    .443 No_date    2:02   27.21
02275>  007:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02276>      CALIB STANDHYD     01:201             18.41   3.985 No_date    1:21   44.32
02277>       [XIMP=.43:TIMP=.56]
02278>       [LOSS= 2 :CN= 49.0]
02279>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
02280>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02281>  007:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02282>      ADD HYD            01:201             18.41   3.985 No_date    1:21   44.32
02283>                     +  03:802            23.06    .443 No_date    2:02   27.21
02284>       [DT= 1.00]  SUM=  02:803            41.47   4.023 No_date    1:21   34.81
02285>  007:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02286>      CALIB NASHYD       01:202              1.10    .040 No_date    1:43   15.54
02287>       [CN= 55.0: N= 3.00]
02288>       [Tp=  .25:DT= 1.00]
02289>  007:0043----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02290>      ADD HYD            01:202              1.10    .040 No_date    1:43   15.54
02291>                     +  02:803            41.47   4.023 No_date    1:21   34.81
02292>       [DT= 1.00]  SUM=  03:804            42.57   4.028 No_date    1:21   34.31
02293>  007:0044----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02294>      CALIB NASHYD       01:1021             4.66    .109 No_date    2:26   18.79
02295>       [CN= 55.3: N= 3.00]
02296>       [Tp=  .78:DT= 1.00]
02297>  007:0045----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02298>      COMPUTE DUALHYD     01:1021            4.66    .109 No_date    2:26   18.79
02299>          Major System /  04:To1000          1.63    .063 No_date    2:26   18.79
02300>          Minor System \  02:To810           3.03    .046 No_date    1:42   18.79
02301>  007:0046----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02302>      ADD HYD            02:To810           3.03    .046 No_date    1:42   18.79
02303>                     +  03:804            42.57   4.028 No_date    1:21   34.31
02304>       [DT= 1.00]  SUM=  05:810            45.59   4.031 No_date    1:21   33.28
02305> #                      MAIR MILLS VILLAGE SWMF
02306>  007:0047----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02307>      ROUTE RESERVOIR -> 05:810            45.59   4.031 No_date    1:21   33.28
02308>       [RDT= 1.00] out<- 02:1026           45.59    .601 No_date    2:53   33.28
02309>             overflow <= 03:1026OVF         .00    .000 No_date    0:00     .00
02310>       [MxStoUsed=.7219E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02311>  007:0048----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02312>      ADD HYD            02:1026            45.59    .601 No_date    2:53   33.28
02313>                     +  03:1026OVF           .00    .000 No_date    0:00     .00
02314>       [DT= 1.00]  SUM=  05:Pond1026ou      45.59    .601 No_date    2:53   33.28
02315> #              TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
02316>  007:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02317>      DIVERT HYD         -> 05:Pond1026ou     45.59    .601 No_date    2:53   33.28
02318>                diverted <= 02:To807          20.30    .040 No_date    2:53   33.28
02319>                diverted <= 07:To809          25.29    .560 No_date    2:53   33.28
02320>                diverted <= 03:To1025           .00    .001 No_date    2:53   33.28
02321> #                      FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
02322>  007:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02323>      ADD HYD            09:1000          123.69   2.572 No_date    3:44   30.45
02324>                     +  04:To1000          1.63    .063 No_date    2:26   18.79
02325>       [DT= 1.00]  SUM=  05:Node 2         125.32   2.584 No_date    3:42   30.29
02326> #                                FLOWS TO OUTLET B
02327>  007:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02328>      CALIB NASHYD       01:207              1.22    .079 No_date    1:30   18.79
02329>       [CN= 55.3: N= 3.00]
02330>       [Tp=  .13:DT= 1.00]
02331>  007:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02332>      ADD HYD            01:207              1.22    .079 No_date    1:30   18.79
02333>                     +  02:To807           20.30    .040 No_date    2:53   33.28
02334>       [DT= 1.00]  SUM=  06:807            21.52    .119 No_date    1:30   32.46
02335>  007:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02336>      ADD HYD            03:To1025           .00    .001 No_date    2:53   33.28
02337>                     +  05:Node 2         125.32   2.584 No_date    3:42   30.29
02338>       [DT= 1.00]  SUM=  01:1025           125.32   2.584 No_date    3:42   30.29
02339>  007:0054----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02340>      ADD HYD            07:To809            25.29    .560 No_date    2:53   33.28
02341>                     +  01:1025           125.32   2.584 No_date    3:42   30.29
02342>       [DT= 1.00]  SUM=  02:809            150.62   3.101 No_date    3:35   30.80
02343>  007:0055----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02344>      ADD HYD            06:807              21.52    .119 No_date    1:30   32.46
02345>                     +  10:To806            12.27    .020 No_date    2:21   32.99
02346>       [DT= 1.00]  SUM=  03:806-OutB         33.79    .139 No_date    1:30   32.65
02347> #                      LINKSVIEW AND CONTRIBUTING AREAS
02348>  007:0056----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02349>      CALIB NASHYD       04:2502             5.52    .170 No_date    2:06   19.61
02350>       [CN= 58.4: N= 3.00]
02351>       [Tp=  .54:DT= 1.00]
02352>  007:0057----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02353>      CALIB NASHYD       05:2509             5.30    .232 No_date    1:48   20.47
02354>       [CN= 59.0: N= 3.00]
02355>       [Tp=  .33:DT= 1.00]
02356>  007:0058----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02357>      CALIB STANDHYD     06:2500            38.20   4.730 No_date    1:26   40.49
02358>       [XIMP=.30:TIMP=.50]
02359>       [LOSS= 2 :CN= 55.3]
02360>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
02361>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
02362>  007:0059----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02363>      ADD HYD            04:2502             5.52    .170 No_date    2:06   19.61
02364>                     +  05:2509             5.30    .232 No_date    1:48   20.47
02365>                     +  06:2500            38.20   4.730 No_date    1:26   40.49
02366>       [DT= 1.00]  SUM=  07:Pondin          49.02   4.837 No_date    1:26   35.97
02367> #                      LINKSVIEW SWM FACILITIY
02368>  007:0060----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02369>      ROUTE RESERVOIR -> 07:Pondin         49.02   4.837 No_date    1:26   35.97
02370>       [RDT= 1.00] out<- 08:LinkPond       49.02    .723 No_date    3:02   35.97
02371>             overflow <= 09:OVF             .00    .000 No_date    0:00     .00
02372>       [MxStoUsed=.1208E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02373>  007:0061----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02374>      ADD HYD            08:LinkPond         49.02    .723 No_date    3:02   35.97
02375>                     +  09:OVF              .00    .000 No_date    0:00     .00
02376>       [DT= 1.00]  SUM=  04:Pondout         49.02    .723 No_date    3:02   35.97
02377> #                                FLOWS FROM TENTH LINE
02378>  007:0062----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02379>      CALIB STANDHYD     08:2601              .25    .090 No_date    1:20   54.50
02380>       [XIMP=.64:TIMP=.64]
02381>       [LOSS= 2 :CN= 49.0]
02382>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
02383>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
02384>  007:0063----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02385>      CALIB STANDHYD     09:2602             1.30    .361 No_date    1:22   54.50
02386>       [XIMP=.64:TIMP=.64]
02387>       [LOSS= 2 :CN= 49.0]
02388>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
02389>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
02390>  007:0064----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02391>      COMPUTE DUALHYD     09:2602             1.30    .361 No_date    1:22   54.50
02392>          Major System /  06:Overflow          .12    .141 No_date    1:22   54.50
02393>          Minor System \  05:5yrflow          1.18    .220 No_date    1:18   54.50
02394> #                      FLOWS IN POTENTIAL FUTURE OUTLET PIPE
02395>  007:0065----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02396>      ADD HYD            04:Pondout          49.02    .723 No_date    3:02   35.97
02397>                     +  05:5yrflow          1.18    .220 No_date    1:18   54.50
02398>       [DT= 1.00]  SUM=  10:LinkPipe        50.20    .742 No_date    2:58   36.41
02399> #                      FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
02400>  007:0066----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02401>      ADD HYD            10:LinkPipe          50.20    .742 No_date    2:58   36.41
02402>                     +  02:809            150.62   3.101 No_date    3:35   30.80
02403>                     +  06:Overflow          .12    .141 No_date    1:22   54.50
02404>                     +  08:2601              .25    .090 No_date    1:20   54.50
02405>       [DT= 1.00]  SUM=  01:Node3          201.19   3.823 No_date    3:31   32.24
02406> #                      FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
02407>  007:0067----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02408>      ADD HYD            01:Node3            201.19   3.823 No_date    3:31   32.24
02409>                     +  03:806-OutB          33.79    .139 No_date    1:30   32.65
02410>       [DT= 1.00]  SUM=  04:Node4           234.98   3.892 No_date    3:31   32.30
02411>   ** END OF RUN :   7
02412>
02413> ************************************************************************
02414>
02415>
02416>                                    2yr SCS
02417>
02418>
02419>  RUN:COMMAND#
02420>  008:0001----------------------------------------------------------------
02421>      START
02422>       [TZERO =    .00 hrs on      0]
02423>       [METOUT=  2    (1=imperial, 2=metric output)]
02424>       [NSTORM=  1 ]
02425>       [NRUN   =  8 ]
02426> #************************************************************************
02427> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
02428> #  Date        : 2014 08 22
02429> #  Modified    :
02430> #  Modeller    : [A.French]
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02431> #  Company     : C.F. Crozier & Associates Inc.
02432> #  License #   : 3737016
02433> #*******************************************************************************
02434> #*******************************************************************************
02435>  008:0002----------------------------------------------------------------------
02436>      READ STORM
02437>       Filename = STORM.001
02438>       Comment  =
02439>       [SDT= 1.00:SDUR=  24.00:PTOT=  45.60]
02440> #              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02441>  008:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02442>      CALIB NASHYD       01:300             4.55     .050 No_date   12:55   11.42
02443>       [CN= 71.0: N= 3.00]
02444>       [Tp=  .74:DT= 1.00]
02445>  008:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02446>      ROUTE CHANNEL   -> 01:300             4.55     .050 No_date   12:55   11.42
02447>       [RDT= 1.00] out<- 02:701             4.55     .031 No_date   13:27   11.42
02448>       [L/S/n=  450./ .050/.040]
02449>       [Vmax=  .148:Dmax=  .129]
02450>  008:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02451>      CALIB NASHYD       01:301             5.97     .074 No_date   12:47   11.42
02452>       [CN= 71.0: N= 3.00]
02453>       [Tp=  .63:DT= 1.00]
02454>  008:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02455>      ADD HYD            01:301             5.97     .074 No_date   12:47   11.42
02456>                       + 02:701             4.55     .031 No_date   13:27   11.42
02457>       [DT= 1.00]  SUM=  03:901            10.52     .096 No_date   12:57   11.42
02458>  008:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02459>      ROUTE CHANNEL   -> 03:901            10.52     .096 No_date   12:57   11.42
02460>       [RDT= 1.00] out<- 01:702            10.52     .068 No_date   13:21   11.42
02461>       [L/S/n=  300./ .050/.060]
02462>       [Vmax=  .117:Dmax=  .266]
02463>  008:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02464>      ROUTE RESERVOIR -> 01:702            10.52     .068 No_date   13:21   11.42
02465>       [RDT= 1.00] out<- 02:501            10.52     .066 No_date   13:35   11.42
02466>             overflow <= 03:501OVF          .00     .000 No_date    0:00     .00
02467>       [MxStoUsed=.4100E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02468>  008:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02469>      CALIB STANDHYD     01:302            16.39     .446 No_date   12:22   10.58
02470>       [XIMP=.20:TIMP=.40]
02471>       [LOSS= 2 :CN= 65.2]
02472>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02473>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
02474>  008:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02475>      ADD HYD            01:302            16.39     .446 No_date   12:22   10.58
02476>                       + 02:501            10.52     .066 No_date   13:35   11.42
02477>                       + 03:501OVF          .00     .000 No_date    0:00     .00
02478>       [DT= 1.00]  SUM=  04:902            26.91     .452 No_date   12:22   15.78
02479>  008:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02480>      CALIB STANDHYD     01:303             2.34     .093 No_date   12:16   21.13
02481>       [XIMP=.25:TIMP=.50]
02482>       [LOSS= 2 :CN= 65.2]
02483>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02484>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
02485>  008:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02486>      ADD HYD            01:303             2.34     .093 No_date   12:16   21.13
02487>                       + 04:902            26.91     .452 No_date   12:22   15.78
02488>       [DT= 1.00]  SUM=  02:903            29.25     .532 No_date   12:21   16.21
02489>  008:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02490>      CALIB NASHYD       01:304             2.90     .053 No_date   12:24    9.81
02491>       [CN= 66.6: N= 3.00]
02492>       [Tp=  .28:DT= 1.00]
02493>  008:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02494>      ADD HYD            01:304             2.90     .053 No_date   12:24    9.81
02495>                       + 02:903            29.25     .532 No_date   12:21   16.21
02496>       [DT= 1.00]  SUM=  03:904            32.15     .584 No_date   12:21   15.63
02497>  008:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02498>      CALIB STANDHYD     01:305              .31     .009 No_date   12:12   16.31
02499>       [XIMP=.20:TIMP=.20]
02500>       [LOSS= 2 :CN= 65.2]
02501>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
02502>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
02503>  008:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02504>      ADD HYD            01:305              .31     .009 No_date   12:12   16.31
02505>                       + 03:904            32.15     .584 No_date   12:21   15.63
02506>       [DT= 1.00]  SUM=  02:905            32.46     .586 No_date   12:21   15.64
02507> #                    MAIR MILLS ESTATES SWM FACILITY
02508>  008:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02509>      ROUTE RESERVOIR -> 02:905            32.46     .586 No_date   12:21   15.64
02510>       [RDT= 1.00] out<- 03:502            32.46     .060 No_date   17:13   15.64
02511>             overflow <= 04:502OVF          .00     .000 No_date    0:00     .00
02512>       [MxStoUsed=.3134E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02513>  008:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02514>      CALIB NASHYD       01:400             5.70     .023 No_date   12:56    4.41
02515>       [CN= 50.2: N= 3.00]
02516>       [Tp=  .70:DT= 1.00]
02517>  008:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02518>      ADD HYD            01:400             5.70     .023 No_date   12:56    4.41
02519>                       + 03:502            32.46     .060 No_date   17:13   15.64
02520>                       + 04:502OVF          .00     .000 No_date    0:00     .00
02521>       [DT= 1.00]  SUM=  02:906            38.16     .063 No_date   17:08   13.96
02522> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
02523>  008:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02524>      DIVERT HYD      -> 02:906            38.16     .063 No_date   17:08   13.96
02525>             diverted <= 10:To806          26.41     .020 No_date   17:08   13.96
02526>             diverted <= 03:To1023          5.88     .022 No_date   17:08   13.96
02527>             diverted <= 01:To1022          5.88     .022 No_date   17:08   13.96
02528> #                    TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
02529> #                                  FLOW AT NODE 1
02530>  008:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02531>      CALIB NASHYD       01:2501           85.82     .593 No_date   14:09   13.58
02532>       [CN= 78.0: N= 3.00]
02533>       [Tp= 1.72:DT= 1.00]
02534>  008:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02535>      ROUTE CHANNEL   -> 01:2501           85.82     .593 No_date   14:09   13.58
02536>       [RDT= 1.00] out<- 02:RC1            85.82     .592 No_date   14:19   13.58
02537>       [L/S/n=  350./1.500/.030]
02538>       [Vmax= 1.169:Dmax=  .733]
02539>  008:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02540>      CALIB NASHYD       01:2504            7.94     .049 No_date   12:43    5.45
02541>       [CN= 53.0: N= 3.00]
02542>       [Tp=  .55:DT= 1.00]
02543>  008:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02544>      ADD HYD            01:2504            7.94     .049 No_date   12:43    5.45
02545>                       + 02:RC1            85.82     .592 No_date   14:19   13.58
02546>       [DT= 1.00]  SUM=  04:2501+2504      93.76     .605 No_date   14:17   12.89
02547>  008:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02548>      ROUTE CHANNEL   -> 04:2501+2504      93.76     .605 No_date   14:17   12.89
02549>       [RDT= 1.00] out<- 02:RC2            93.76     .603 No_date   14:24   12.89
02550>       [L/S/n=  425./1.250/.030]
02551>       [Vmax= 1.181:Dmax=  .612]
02552>  008:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02553>      CALIB NASHYD       01:2503            7.76     .061 No_date   12:52    7.93
02554>       [CN= 62.3: N= 3.00]
02555>       [Tp=  .68:DT= 1.00]
02556>  008:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02557>      CALIB NASHYD       05:2505            6.99     .046 No_date   12:49    6.41
02558>       [CN= 54.0: N= 3.00]
02559>       [Tp=  .65:DT= 1.00]
02560>  008:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02561>      ADD HYD            01:2503            7.76     .061 No_date   12:52    7.93
02562>                       + 02:RC2            93.76     .603 No_date   14:24   12.89
02563>                       + 05:2505            6.99     .046 No_date   12:49    6.41
02564>       [DT= 1.00]  SUM=  06:2503+2505+    108.51     .640 No_date   14:19   12.12
02565>  008:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02566>      CALIB NASHYD       01:2506            2.50     .019 No_date   12:33    5.40
02567>       [CN= 49.0: N= 3.00]
02568>       [Tp=  .41:DT= 1.00]
02569>  008:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02570>      ADD HYD            01:2506            2.50     .019 No_date   12:33    5.40
02571>                       + 06:2503+2505+    108.51     .640 No_date   14:19   12.12
02572>       [DT= 1.00]  SUM=  02:RC+2506       111.01     .643 No_date   14:19   11.97
02573>  008:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02574>      ROUTE CHANNEL   -> 02:RC+2506       111.01     .643 No_date   14:19   11.97
02575>       [RDT= 1.00] out<- 04:RC3            111.01     .643 No_date   14:22   11.97
02576>       [L/S/n=  200./1.000/.030]
02577>       [Vmax=  .961:Dmax=  .637]
02578>  008:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02579>      CALIB NASHYD       01:2507            5.22     .033 No_date   12:42    5.40
02580>       [CN= 49.0: N= 3.00]
02581>       [Tp=  .54:DT= 1.00]
02582>  008:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02583>      ADD HYD            01:2507            5.22     .033 No_date   12:42    5.40
02584>                       + 04:RC3            111.01     .643 No_date   14:22   11.97
02585>       [DT= 1.00]  SUM=  02:2507+RC       116.23     .651 No_date   14:21   11.67
02586>  008:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02587>      CALIB NASHYD       01:2508            7.46     .043 No_date   12:48    5.60
02588>       [CN= 50.0: N= 3.00]
02589>       [Tp=  .63:DT= 1.00]
02590>  008:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02591>      ADD HYD            01:2508            7.46     .043 No_date   12:48    5.60
02592>                       + 02:2507+RC       116.23     .651 No_date   14:21   11.67
02593>       [DT= 1.00]  SUM=  09:1000          123.69     .665 No_date   14:18   11.31
02594> #                    MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
02595>  008:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02596>      CALIB NASHYD       01:103             8.70     .075 No_date   12:38    6.87
02597>       [CN= 59.2: N= 3.00]
02598>       [Tp=  .48:DT= 1.00]
02599>  008:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02600>      ADD HYD            01:103             8.70     .075 No_date   12:38    6.87
02601>                       + 03:To1023          5.88     .022 No_date   17:08   13.96
02602>       [DT= 1.00]  SUM=  02:1023          14.58     .082 No_date   12:40    9.73
02603>  008:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02604>      CALIB NASHYD       01:205             1.41     .016 No_date   12:19    5.21
02605>       [CN= 51.1: N= 3.00]
02606>       [Tp=  .20:DT= 1.00]
02607>  008:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02608>      ADD HYD            01:205             1.41     .016 No_date   12:19    5.21
02609>                       + 02:1023          14.58     .082 No_date   12:40    9.73
02610>       [DT= 1.00]  SUM=  03:802           15.99     .090 No_date   12:37    9.33
02611>  008:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02612>      CALIB STANDHYD     01:201             18.41    1.132 No_date   12:12   23.08
02613>       [XIMP=.43:TIMP=.56]
02614>       [LOSS= 2 :CN= 49.0]
02615>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
02616>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02617>  008:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02618>      ADD HYD            01:201             18.41    1.132 No_date   12:12   23.08
02619>                       + 03:802           15.99     .090 No_date   12:37    9.33
02620>       [DT= 1.00]  SUM=  02:803           34.40    1.174 No_date   12:13   16.69
02621>  008:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02622>      CALIB NASHYD       01:202             1.10     .008 No_date   12:24    4.39
02623>       [CN= 55.0: N= 3.00]
02624>       [Tp=  .25:DT= 1.00]
02625>  008:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02626>      ADD HYD            01:202             1.10     .008 No_date   12:24    4.39
02627>                       + 02:803           34.40    1.174 No_date   12:13   16.69
02628>       [DT= 1.00]  SUM=  03:804           35.50    1.179 No_date   12:13   16.31
02629>  008:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02630>      CALIB NASHYD       01:1021            4.66     .026 No_date   12:59    6.40
02631>       [CN= 55.3: N= 3.00]
02632>       [Tp=  .78:DT= 1.00]
02633>  008:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02634>      COMPUTE DUALHYD    01:1021            4.66     .026 No_date   12:59    6.40
02635>         Major System /  04:To1000           .00     .000 No_date    0:00     .00
02636>         Minor System \  02:To810            4.66     .026 No_date   12:59    6.40
02637>  008:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02638>      ADD HYD            02:To810           4.66     .026 No_date   12:59    6.40
02639>                       + 03:804           35.50    1.179 No_date   12:13   16.31
02640>       [DT= 1.00]  SUM=  05:810           40.16    1.186 No_date   12:13   15.16
02641> #                         MAIR MILLS VILLAGE SWMF
02642>  008:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02643>      ROUTE RESERVOIR -> 05:810           40.16    1.186 No_date   12:13   15.16
02644>       [RDT= 1.00] out<- 02:1026          40.16     .044 No_date   21:16   15.16
02645>             overflow <= 03:1026OVF         .00     .000 No_date    0:00     .00
02646>       [MxStoUsed=.4109E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02647>  008:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02648>      ADD HYD            02:1026            40.16     .044 No_date   21:16   15.16
02649>                       + 03:1026OVF          .00     .000 No_date    0:00     .00
02650>       [DT= 1.00]  SUM=  05:Pond1026ou      40.16     .044 No_date   21:16   15.16
02651> #          TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
02652>  008:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02653>      DIVERT HYD      -> 05:Pond1026ou     40.16     .044 No_date   21:16   15.16
02654>             diverted <= 02:To807          39.33     .040 No_date   21:16   15.16
02655>             diverted <= 07:To809            .83     .004 No_date   21:16   15.16
02656>             diverted <= 03:To1025           .00     .000 No_date    0:00     .00
02657> #                    FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
02658>  008:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02659>      ADD HYD            09:1000          123.69     .665 No_date   14:18   11.31
02660>                       + 04:To1000           .00     .000 No_date    0:00     .00
02661>       [DT= 1.00]  SUM=  05:Node 2         123.69     .665 No_date   14:18   11.31
02662> #                              FLOWS TO OUTLET B
02663>  008:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02664>      CALIB NASHYD       01:207             1.22     .022 No_date   12:15    6.40
02665>       [CN= 55.3: N= 3.00]
02666>       [Tp=  .13:DT= 1.00]
02667>  008:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02668>      ADD HYD            01:207             1.22     .022 No_date   12:15    6.40
02669>                       + 02:To807          39.33     .040 No_date   21:16   15.16
02670>       [DT= 1.00]  SUM=  06:807           40.55     .045 No_date   12:17   14.90
02671>  008:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02672>      ADD HYD            03:To1025           .00     .000 No_date    0:00     .00
02673>                       + 05:Node 2         123.69     .665 No_date   14:18   11.31
02674>       [DT= 1.00]  SUM=  01:1025          123.69     .665 No_date   14:18   11.31
02675>  008:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02676>      ADD HYD            07:To809            .83     .004 No_date   21:16   15.16
02677>                       + 01:1025          123.69     .665 No_date   14:18   11.31
02678>       [DT= 1.00]  SUM=  02:809           124.52     .665 No_date   14:18   11.33
02679>  008:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02680>      ADD HYD            06:807           40.55     .045 No_date   12:17   14.90
02681>                       + 10:To806          26.41     .020 No_date   17:08   13.96
02682>       [DT= 1.00]  SUM=  03:806-OutB       66.95     .063 No_date   12:21   14.53
02683> #                    LINKSVIEW AND CONTRIBUTING AREAS
02684>  008:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02685>      CALIB NASHYD       04:2502            5.52     .041 No_date   12:43    6.45
02686>       [CN= 58.4: N= 3.00]
02687>       [Tp=  .54:DT= 1.00]
02688>  008:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02689>      CALIB NASHYD       05:2509            5.30     .060 No_date   12:28    6.93
02690>       [CN= 59.0: N= 3.00]
02691>       [Tp=  .33:DT= 1.00]
02692>  008:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02693>      CALIB STANDHYD     06:2500           38.20    1.368 No_date   12:17   19.63
02694>       [XIMP=.30:TIMP=.50]
02695>       [LOSS= 2 :CN= 55.3]
02696>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02697>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
02698>  008:0059----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02699>      ADD HYD            04:2502            5.52     .041 No_date   12:43    6.45
02700>                       + 05:2509            5.30     .060 No_date   12:28    6.93
```

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                    +  06:2500          38.20     1.368 No_date   12:17   19.63
      [DT= 1.00]  SUM=  07:Pondin        49.02     1.438 No_date   12:18   16.78
#                                  LINKSVIEW SWM FACILTIY
 008:0060----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 07:Pondin        49.02     1.438 No_date   12:18   16.78
       [RDT= 1.00] out<- 08:LinkPond     49.02      .092 No_date   15:24   16.77
              overflow <= 09:OVF          .00      .000 No_date    0:00     .00
     (MxStoUsed=.5206E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 008:0061----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             08:LinkPond     49.02      .092 No_date   15:24   16.77
                    +  09:OVF           .00      .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  04:Pondout       49.02      .092 No_date   15:24   16.77
#                                  FLOWS FROM TENTH LINE
 008:0062----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      08:2601          .25      .024 No_date   12:12   29.85
       [XIMP=.64:TIMP=.64]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
 008:0063----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      09:2602          1.30      .104 No_date   12:14   29.85
       [XIMP=.64:TIMP=.64]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
 008:0064----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     COMPUTE DUALHYD     09:2602          1.30      .104 No_date   12:14   29.85
       Major System /  06:Overflow        .00      .000 No_date    0:00     .00
       Minor System \  05:5yrflow        1.30      .104 No_date   12:14   29.85
#                  FLOWS IN POTENTIAL FUTURE OUTLET PIPE
 008:0065----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             04:Pondout      49.02      .092 No_date   15:24   16.77
                    +  05:5yrflow        1.30      .104 No_date   12:14   29.85
      [DT= 1.00]  SUM=  10:LinkPipe      50.32      .154 No_date   12:15   17.11
#                  FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
 008:0066----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             10:LinkPipe     50.32      .154 No_date   12:15   17.11
                    +  02:809          124.52      .665 No_date   14:18   11.33
                    +  06:Overflow        .00      .000 No_date    0:00     .00
                    +  08:2601            .25      .024 No_date   12:12   29.85
      [DT= 1.00]  SUM=  01:Node3        175.09      .761 No_date   14:14   13.02
#                  FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
 008:0067----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:Node3        175.09      .761 No_date   14:14   13.02
                    +  03:806-OutB       66.95      .063 No_date   12:21   14.53
      [DT= 1.00]  SUM=  04:Node4        242.04      .822 No_date   14:15   13.44
   ** END OF RUN :   8
                                                                                
 ********************************************************************************
```

5yr SCS

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 RUN:COMMAND#
 009:0001----------------------------------------------------------------------
     START
       [ZERO =    .00 hrs on       0]
       [METOUT=   2     (1=imperial, 2=metric output)]
       [NSTORM=   1 ]
       [NRUN  =   9 ]
#*******************************************************************************
#  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
#  Date        : 2014 08 22
#  Modified    :
#  Modeller    : [A.French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   :  3737016
#*******************************************************************************
#*******************************************************************************
 009:0002----------------------------------------------------------------------
     READ STORM
       Filename = STORM.001
       Comment  =
       [SDT= 1.00:SDUR=  24.00:PTOT=  62.40]
#              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
 009:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:300           4.55      .091 No_date   12:54   20.45
       [CN= 71.0: N= 3.00]
       [Tp=  .74:DT= 1.00]
 009:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:300           4.55      .091 No_date   12:54   20.45
       [RDT= 1.00] out<- 02:701          4.55      .066 No_date   13:22   20.45
       [L/S/n=  450./ .050/.040]
       [Vmax=  .183:Dmax=  .175]
 009:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:301           5.97      .135 No_date   12:47   20.45
       [CN= 71.0: N= 3.00]
       [Tp=  .63:DT= 1.00]
 009:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:301           5.97      .135 No_date   12:47   20.45
                    +  02:701           4.55      .066 No_date   13:22   20.45
      [DT= 1.00]  SUM=  03:901          10.52      .186 No_date   12:56   20.45
 009:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 03:901          10.52      .186 No_date   12:56   20.45
       [RDT= 1.00] out<- 01:702          10.52      .149 No_date   13:13   20.45
       [L/S/n=  300./ .050/.060]
       [Vmax=  .160:Dmax=  .346]
 009:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 01:702          10.52      .149 No_date   13:13   20.45
       [RDT= 1.00] out<- 02:501          10.52      .142 No_date   13:29   20.45
              overflow <= 03:501OVF       .00      .000 No_date    0:00     .00
     [MxStoUsed=.9841E-02, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 009:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:302          16.39      .787 No_date   12:21   29.34
       [XIMP=.20:TIMP=.40]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
 009:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:302          16.39      .787 No_date   12:21   29.34
                    +  02:501          10.52      .142 No_date   13:29   20.45
                    +  03:501OVF         .00      .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  04:902          26.91      .807 No_date   12:21   25.87
 009:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:303           2.34      .158 No_date   12:15   32.73
       [XIMP=.25:TIMP=.50]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
 009:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:303           2.34      .158 No_date   12:15   32.73
                    +  04:902          26.91      .807 No_date   12:21   25.87
      [DT= 1.00]  SUM=  02:903          29.25      .946 No_date   12:20   26.41
 009:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:304           2.90      .099 No_date   12:23   17.83
       [CN= 66.6: N= 3.00]
       [Tp=  .28:DT= 1.00]
 009:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:304           2.90      .099 No_date   12:23   17.83
                    +  02:903          29.25      .946 No_date   12:20   26.41
      [DT= 1.00]  SUM=  03:904          32.15     1.042 No_date   12:20   25.64
 009:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:305            .31      .013 No_date   12:12   25.84
       [XIMP=.20:TIMP=.20]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  100.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=    3.:MNI=.013:SCI=   .0]
 009:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:305            .31      .013 No_date   12:12   25.84
                    +  03:904          32.15     1.042 No_date   12:20   25.64
      [DT= 1.00]  SUM=  02:905          32.46     1.046 No_date   12:20   25.64
#                  MAIR MILLS ESTATES SWM FACILITY
 009:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 02:905          32.46     1.046 No_date   12:20   25.64
       [RDT= 1.00] out<- 03:502          32.46      .134 No_date   15:26   25.64
              overflow <= 04:502OVF       .00      .000 No_date    0:00     .00
     [MxStoUsed=.4661E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 009:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:400           5.70      .049 No_date   12:54    9.02
       [CN= 50.2: N= 3.00]
       [Tp=  .70:DT= 1.00]
 009:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:400           5.70      .049 No_date   12:54    9.02
                    +  03:502          32.46      .134 No_date   15:26   25.64
                    +  04:502OVF         .00      .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  02:906          38.16      .150 No_date   14:33   23.16
#                  FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
 009:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 02:906          38.16      .150 No_date   14:33   23.16
            diverted <= 10:To806        17.06      .020 No_date   14:33   23.16
            diverted <= 03:To1023       10.55      .065 No_date   14:33   23.16
            diverted <= 01:To1022       10.55      .065 No_date   14:33   23.16
#                  TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
#                                  FLOW AT NODE 1
 009:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:2501          85.82     1.103 No_date   14:05   24.39
       [CN= 78.8: N= 3.00]
       [Tp= 1.72:DT= 1.00]
 009:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 01:2501         85.82     1.103 No_date   14:05   24.39
       [RDT= 1.00] out<- 02:RC1          85.82     1.091 No_date   14:24   24.39
       [L/S/n=  350./1.500/.030]
       [Vmax=  .633:Dmax=  .845]
 009:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:2504           7.94      .098 No_date   12:42   10.67
       [CN= 53.0: N= 3.00]
       [Tp=  .55:DT= 1.00]
 009:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:2504           7.94      .098 No_date   12:42   10.67
                    +  02:RC1          85.82     1.091 No_date   14:24   24.39
      [DT= 1.00]  SUM=  04:2501+2504     93.76     1.115 No_date   14:23   23.23
 009:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 04:2501+2504     93.76     1.115 No_date   14:23   23.23
       [RDT= 1.00] out<- 02:RC2          93.76     1.113 No_date   14:28   23.23
       [L/S/n=  425./1.250/.030]
       [Vmax= 1.119:Dmax=  .718]
 009:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:2503           7.76      .118 No_date   12:51   14.91
       [CN= 62.3: N= 3.00]
       [Tp=  .68:DT= 1.00]
 009:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        05:2505           6.99      .087 No_date   12:49   12.03
       [CN= 54.0: N= 3.00]
       [Tp=  .65:DT= 1.00]
 009:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:2503           7.76      .118 No_date   12:51   14.91
                    +  02:RC2          93.76     1.113 No_date   14:28   23.23
                    +  05:2505          6.99      .087 No_date   12:49   12.03
      [DT= 1.00]  SUM=  06:2503+2505+   108.51     1.177 No_date   14:22   21.91
 009:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:2506           2.50      .037 No_date   12:32   10.24
       [CN= 49.0: N= 3.00]
       [Tp=  .41:DT= 1.00]
 009:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:2506           2.50      .037 No_date   12:32   10.24
                    +  06:2503+2505+   108.51     1.177 No_date   14:22   21.91
      [DT= 1.00]  SUM=  02:RC+2506      111.01     1.183 No_date   14:21   21.65
 009:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 02:RC+2506      111.01     1.183 No_date   14:21   21.65
       [RDT= 1.00] out<- 04:RC3          111.01     1.182 No_date   14:26   21.65
       [L/S/n=  200./1.000/.030]
       [Vmax=  .926:Dmax=  .726]
 009:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:2507           5.22      .063 No_date   12:41   10.24
       [CN= 49.0: N= 3.00]
       [Tp=  .54:DT= 1.00]
 009:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:2507           5.22      .063 No_date   12:41   10.24
                    +  04:RC3          111.01     1.182 No_date   14:26   21.65
      [DT= 1.00]  SUM=  02:2507+RC      116.23     1.196 No_date   14:21   21.14
 009:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:2508           7.46      .083 No_date   12:47   10.50
       [CN= 50.0: N= 3.00]
       [Tp=  .63:DT= 1.00]
 009:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:2508           7.46      .083 No_date   12:47   10.50
                    +  02:2507+RC      116.23     1.196 No_date   14:21   21.14
      [DT= 1.00]  SUM=  09:1000          123.69     1.221 No_date   14:20   20.50
#                  MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
 009:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:103            8.70      .149 No_date   12:37   13.18
       [CN= 59.2: N= 3.00]
       [Tp=  .48:DT= 1.00]
 009:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:103            8.70      .149 No_date   12:37   13.18
                    +  03:To1023        10.55      .065 No_date   14:33   23.16
      [DT= 1.00]  SUM=  02:1023          19.25      .185 No_date   12:43   18.65
 009:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:205            1.41      .033 No_date   12:19   10.18
       [CN= 51.1: N= 3.00]
       [Tp=  .20:DT= 1.00]
 009:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:205            1.41      .033 No_date   12:19   10.18
                    +  02:1023         19.25      .185 No_date   12:43   18.65
      [DT= 1.00]  SUM=  03:802          20.66      .198 No_date   12:40   18.07
 009:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD      01:201           18.41     1.694 No_date   12:12   33.67
       [XIMP=.43:TIMP=.56]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI=  180.:MNI=.013:SCI=   .0]
 009:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:201           18.41     1.694 No_date   12:12   33.67
                    +  03:802          20.66      .198 No_date   12:40   18.07
      [DT= 1.00]  SUM=  02:803          39.07     1.784 No_date   12:12   25.42
 009:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:202            1.10      .020 No_date   12:23    9.45
       [CN= 55.0: N= 3.00]
       [Tp=  .25:DT= 1.00]
 009:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD             01:202            1.10      .020 No_date   12:23    9.45
                    +  02:803          39.07     1.764 No_date   12:12   25.42
      [DT= 1.00]  SUM=  03:804          40.17     1.797 No_date   12:12   24.96
 009:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD        01:1021           4.66      .051 No_date   12:58   12.15
       [CN= 55.3: N= 3.00]
       [Tp=  .78:DT= 1.00]
 009:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     COMPUTE DUALHYD     01:1021           4.66      .051 No_date   12:58   12.15
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02971>         Major System /  04:To1000          .07     .005 No_date   12:58   12.15
02972>         Minor System \  02:To810          4.59     .046 No_date   12:41   12.15
02973>  009:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02974>      ADD HYD             02:To810         4.59     .046 No_date   12:41   12.15
02975>                        + 03:804          40.17    1.797 No_date   12:12   24.98
02976>      [DT= 1.00]  SUM=  05:810            44.76    1.810 No_date   12:12   23.67
02977> #                        MAIR MILLS VILLAGE 5MMF
02978>  009:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02979>      ROUTE RESERVOIR -> 05:810           44.76    1.810 No_date   12:12   23.67
02980>       [RDT= 1.00] out<- 02:1026          44.76     .213 No_date   14:16   23.67
02981>                  overflow <= 03:1026OVF    .00     .000 No_date    0:00     .00
02982>       [MxStoUsed=.5110E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02983>  009:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02984>      ADD HYD             02:1026          44.76     .213 No_date   14:16   23.67
02985>                        + 03:1026OVF        .00     .000 No_date    0:00     .00
02986>      [DT= 1.00]  SUM=  05:Pond1026ou     44.76     .213 No_date   14:16   23.67
02987> #          TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
02988>  009:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02989>      DIVERT HYD      -> 05:Pond1026ou    44.76     .213 No_date   14:16   23.67
02990>                 diverted <= 02:To807     27.49     .040 No_date   14:16   23.67
02991>                 diverted <= 07:To809     17.27     .173 No_date   14:16   23.67
02992>                 diverted <= 03:To1025      .00     .000 No_date    0:00     .00
02993> #                    FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
02994>  009:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02995>      ADD HYD             09:1000         123.69    1.221 No_date   14:20   20.50
02996>                        + 04:To1000          .07     .005 No_date   12:58   12.15
02997>      [DT= 1.00]  SUM=  05:Node 2         123.76    1.221 No_date   14:20   20.50
02998> #                          FLOWS TO OUTLET B
02999>  009:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03000>      CALIB NASHYD        01:207            1.22     .043 No_date   12:15   12.15
03001>       [CN= 55.3: N= 3.00]
03002>       [Tp=  .13:DT= 1.00]
03003>  009:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03004>      ADD HYD             01:207            1.22     .043 No_date   12:15   12.15
03005>                        + 02:To807          27.49     .040 No_date   14:16   23.67
03006>      [DT= 1.00]  SUM=  06:807            28.71     .077 No_date   12:16   23.18
03007>  009:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03008>      ADD HYD             03:To1025          .00     .000 No_date    0:00     .00
03009>                        + 05:Node 2       123.76    1.221 No_date   14:20   20.50
03010>      [DT= 1.00]  SUM=  01:1025           123.76    1.221 No_date   14:20   20.50
03011>  009:0054--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03012>      ADD HYD             07:To809          17.27     .173 No_date   14:16   23.67
03013>                        + 01:1025           123.76    1.221 No_date   14:20   20.50
03014>      [DT= 1.00]  SUM=  02:809            141.03    1.395 No_date   14:18   20.88
03015>  009:0055--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03016>      ADD HYD             06:807            28.71     .077 No_date   12:16   23.18
03017>                        + 10:To806          17.06     .020 No_date   14:33   23.16
03018>      [DT= 1.00]  SUM=  03:806-OutB         45.77     .097 No_date   12:16   23.17
03019> #                    LINKSVIEW AND CONTRIBUTING AREAS
03020>  009:0056--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03021>      CALIB NASHYD        04:2502           5.52     .082 No_date   12:42   12.55
03022>       [CN= 58.4: N= 3.00]
03023>       [Tp=  .54:DT= 1.00]
03024>  009:0057--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03025>      CALIB NASHYD        05:2509           5.30     .118 No_date   12:27   13.23
03026>       [CN= 59.0: N= 3.00]
03027>       [Tp=  .33:DT= 1.00]
03028>  009:0058--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03029>      CALIB STANDHYD      06:2500          38.20    2.171 No_date   12:17   29.91
03030>       [XIMP=.30:TIMP=.50]
03031>       [LOSS= 2 :CN= 55.3]
03032>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03033>       [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
03034>  009:0059--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03035>      ADD HYD             04:2502           5.52     .082 No_date   12:42   12.55
03036>                        + 05:2509           5.30     .118 No_date   12:27   13.23
03037>                        + 06:2500          38.20    2.171 No_date   12:17   29.91
03038>      [DT= 1.00]  SUM=  07:Pondin          49.02    2.312 No_date   12:17   26.15
03039> #                    LINKSVIEW SWM FACILTIY
03040>  009:0060--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03041>      ROUTE RESERVOIR -> 07:Pondin        49.02    2.312 No_date   12:17   26.15
03042>       [RDT= 1.00] out<- 08:LinkPond      49.02     .264 No_date   13:59   26.15
03043>                  overflow <= 09:OVF        .00     .000 No_date    0:00     .00
03044>       [MxStoUsed=.7433E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03045>  009:0061--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03046>      ADD HYD             08:LinkPond       49.02     .264 No_date   13:59   26.15
03047>                        + 09:OVF            .00     .000 No_date    0:00     .00
03048>      [DT= 1.00]  SUM=  04:Pondout          49.02     .264 No_date   13:59   26.15
03049> #                          FLOWS FROM TENTH LINE
03050>  009:0062--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03051>      CALIB STANDHYD      08:2601            .25     .034 No_date   12:12   42.34
03052>       [XIMP=.64:TIMP=.64]
03053>       [LOSS= 2 :CN= 49.0]
03054>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03055>       [Impervious  area: IAimp= 2.00:SLPI= .50:LGI=  40.:MNI=.013:SCI=   .0]
03056>  009:0063--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03057>      CALIB STANDHYD      09:2602           1.30     .153 No_date   12:13   42.34
03058>       [XIMP=.64:TIMP=.64]
03059>       [LOSS= 2 :CN= 49.0]
03060>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03061>       [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
03062>  009:0064--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03063>      COMPUTE DUALHYD     09:2602           1.30     .153 No_date   12:13   42.34
03064>         Major System /   06:Overflow        .00     .000 No_date    0:00     .00
03065>         Minor System \   05:5yrflow        1.30     .153 No_date   12:13   42.34
03066> #                    FLOWS IN POTENTIAL FUTURE OUTLET PIPE
03067>  009:0065--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03068>      ADD HYD             04:Pondout        49.02     .264 No_date   13:59   26.15
03069>                        + 05:5yrflow        1.30     .153 No_date   12:13   42.34
03070>      [DT= 1.00]  SUM=  10:LinkPipe         50.32     .273 No_date   13:59   26.57
03071> #                    FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
03072>  009:0066--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03073>      ADD HYD             10:LinkPipe       50.32     .273 No_date   13:59   26.57
03074>                        + 02:809            141.03    1.395 No_date   14:18   20.88
03075>                        + 06:Overflow         .00     .000 No_date    0:00     .00
03076>                        + 08:2601             .25     .034 No_date   12:12   42.34
03077>      [DT= 1.00]  SUM=  01:Node3            191.60    1.667 No_date   14:16   22.40
03078> #                    FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
03079>  009:0067--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03080>      ADD HYD             01:Node3          191.60    1.667 No_date   14:16   22.40
03081>                        + 03:806-OutB        45.77     .097 No_date   12:16   23.17
03082>      [DT= 1.00]  SUM=  04:Node4            237.37    1.730 No_date   14:15   22.55
03083>   ** END OF RUN :  9
03084>
03085>  ************************************************************************
03086>
03087>
03088>
03089>
03090>
03091>  RUN:COMMAND#
03092>  010:0001--------------------------------------------------------------------
03093>       START
03094>         [TZERO =     .00 hrs on       0]
03095>         [METOUT=    2    (1=imperial, 2=metric output)]
03096>         [NSTORM=    1 ]
03097>         [NRUN  =   10 ]
03098> #************************************************************************
03099> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
03100> #  Date        : 2014 08 22
03101> #  Modified    :
03102> #  Modeller    : [A.French]
03103> #  Company     : C.F. Crozier & Associates Inc.
03104> #  License #   : 3737016
03105> #************************************************************************
03106> #************************************************************************
03107>  010:0002--------------------------------------------------------------------
03108>       READ STORM
03109>        Filename = STORM.001
03110>        Comment  =
03111>        [SDT= 1.00:SDUR=  24.00:PTOT=  72.00]
03112> #          MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03113>  010:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03114>      CALIB NASHYD        01:300            4.55     .118 No_date   12:54   26.29
03115>       [CN= 71.0: N= 3.00]
03116>       [Tp=  .74:DT= 1.00]
03117>  010:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03118>      ROUTE CHANNEL   -> 01:300            4.55     .118 No_date   12:54   26.29
03119>       [RDT= 1.00] out<- 02:701            4.55     .089 No_date   13:17   26.29
03120>       [L/S/n=  450./ .050/.040]
03121>       [Vmax=  .209:Dmax=  .203]
03122>  010:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03123>      CALIB NASHYD        01:301            5.97     .175 No_date   12:46   26.29
03124>       [CN= 71.0: N= 3.00]
03125>       [Tp=  .63:DT= 1.00]
03126>  010:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03127>      ADD HYD             01:301            5.97     .175 No_date   12:46   26.29
03128>                        + 02:701            4.55     .089 No_date   13:17   26.29
03129>      [DT= 1.00]  SUM=  03:901            10.52     .246 No_date   12:55   26.29
03130>  010:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03131>      ROUTE CHANNEL   -> 03:901            10.52     .246 No_date   12:55   26.29
03132>       [RDT= 1.00] out<- 01:702            10.52     .202 No_date   13:12   26.29
03133>       [L/S/n=  450./ .050/.060]
03134>       [Vmax=  .179:Dmax=  .385]
03135>  010:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03136>      ROUTE RESERVOIR -> 01:702            10.52     .202 No_date   13:12   26.29
03137>       [RDT= 1.00] out<- 02:501            10.52     .170 No_date   13:45   26.29
03138>                  overflow <= 03:501OVF      .00     .000 No_date    0:00     .00
03139>       [MxStoUsed=.1745E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03140>  010:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03141>      CALIB STANDHYD      01:302            16.39    1.012 No_date   12:20   36.03
03142>       [XIMP=.20:TIMP=.40]
03143>       [LOSS= 2 :CN= 65.2]
03144>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03145>       [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
03146>  010:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03147>      ADD HYD             01:302            16.39    1.012 No_date   12:20   36.03
03148>                        + 02:501            10.52     .170 No_date   13:45   26.29
03149>                        + 03:501OVF           .00     .000 No_date    0:00     .00
03150>      [DT= 1.00]  SUM=  04:902              26.91    1.043 No_date   12:21   32.22
03151>  010:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03152>      CALIB STANDHYD      01:303             2.34     .199 No_date   12:16   39.86
03153>       [XIMP=.25:TIMP=.50]
03154>       [LOSS= 2 :CN= 65.2]
03155>       [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03156>       [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
03157>  010:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03158>      ADD HYD             01:303             2.34     .199 No_date   12:16   39.86
03159>                        + 04:902            26.91    1.043 No_date   12:21   32.22
03160>      [DT= 1.00]  SUM=  02:903              29.25    1.220 No_date   12:19   32.83
03161>  010:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03162>      CALIB NASHYD        01:304             2.90     .129 No_date   12:23   23.09
03163>       [CN= 66.6: N= 3.00]
03164>       [Tp=  .28:DT= 1.00]
03165>  010:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03166>      ADD HYD             01:304             2.90     .129 No_date   12:23   23.09
03167>                        + 02:903            29.25    1.220 No_date   12:19   32.83
03168>      [DT= 1.00]  SUM=  03:904              32.15    1.345 No_date   12:20   31.95
03169>  010:0015--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03170>      CALIB STANDHYD      01:305              .31     .016 No_date   12:12   31.83
03171>       [XIMP=.20:TIMP=.20]
03172>       [LOSS= 2 :CN= 65.2]
03173>       [Pervious    area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
03174>       [Impervious  area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
03175>  010:0016--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03176>      ADD HYD             01:305              .31     .016 No_date   12:12   31.83
03177>                        + 03:904            32.15    1.345 No_date   12:20   31.95
03178>      [DT= 1.00]  SUM=  02:905              32.46    1.351 No_date   12:20   31.95
03179> #          MAIR MILLS ESTATES SWM FACILITY
03180>  010:0017--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03181>      ROUTE RESERVOIR -> 02:905            32.46    1.351 No_date   12:20   31.95
03182>       [RDT= 1.00] out<- 03:902            32.46     .150 No_date   15:40   31.95
03183>                  overflow <= 04:502OVF      .00     .000 No_date    0:00     .00
03184>       [MxStoUsed=.5885E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03185>  010:0018--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03186>      CALIB NASHYD        01:400            5.70     .068 No_date   12:53   12.24
03187>       [CN= 50.2: N= 3.00]
03188>       [Tp=  .70:DT= 1.00]
03189>  010:0019--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03190>      ADD HYD             01:400            5.70     .068 No_date   12:53   12.24
03191>                        + 03:502            32.46     .150 No_date   15:40   31.95
03192>                        + 04:502OVF           .00     .000 No_date    0:00     .00
03193>      [DT= 1.00]  SUM=  02:906              38.16     .197 No_date   13:07   29.01
03194> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
03195>  010:0020--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03196>      DIVERT HYD      -> 02:906            38.16     .197 No_date   13:07   29.01
03197>                 diverted <= 10:To806      14.16     .020 No_date   13:07   29.01
03198>                 diverted <= 03:To1023     12.00     .089 No_date   13:07   29.01
03199>                 diverted <= 01:To1022     12.00     .089 No_date   13:07   29.01
03200> #                    TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
03201> #                              FLOW AT NODE 1
03202>  010:0021--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03203>      CALIB NASHYD        01:2501           85.82    1.429 No_date   14:03   31.25
03204>       [CN= 78.8: N= 3.00]
03205>       [Tp= 1.72:DT= 1.00]
03206>  010:0022--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03207>      ROUTE CHANNEL   -> 01:2501           85.82    1.429 No_date   14:03   31.25
03208>       [RDT= 1.00] out<- 02:RC1            85.82    1.414 No_date   14:19   31.25
03209>       [L/S/n=  350./1.500/.030]
03210>       [Vmax=  .570:Dmax=  .881]
03211>  010:0023--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03212>      CALIB NASHYD        01:2504            7.94     .133 No_date   12:42   14.26
03213>       [CN= 53.0: N= 3.00]
03214>       [Tp=  .55:DT= 1.00]
03215>  010:0024--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03216>      ADD HYD             01:2504            7.94     .133 No_date   12:42   14.26
03217>                        + 02:RC1            85.82    1.414 No_date   14:19   31.25
03218>      [DT= 1.00]  SUM=  04:2501+2504        93.76    1.449 No_date   14:13   29.81
03219>  010:0025--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03220>      ROUTE CHANNEL   -> 04:2501+2504       93.76    1.449 No_date   14:13   29.81
03221>       [RDT= 1.00] out<- 02:RC2            93.76    1.445 No_date   14:23   29.81
03222>       [L/S/n=  425./1.250/.030]
03223>       [Vmax= 1.115:Dmax=  .765]
03224>  010:0026--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03225>      CALIB NASHYD        01:2503            7.76     .156 No_date   12:50   19.57
03226>       [CN= 62.3: N= 3.00]
03227>       [Tp=  .69:DT= 1.00]
03228>  010:0027--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03229>      CALIB NASHYD        05:2505            6.99     .116 No_date   12:48   15.84
03230>       [CN= 54.0: N= 3.00]
03231>       [Tp=  .65:DT= 1.00]
03232>  010:0028--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03233>      ADD HYD             01:2503            7.76     .156 No_date   12:50   19.57
03234>                        + 02:RC2            93.76    1.445 No_date   14:23   29.81
03235>                        + 05:2505            6.99     .116 No_date   12:48   15.84
03236>      [DT= 1.00]  SUM=  06:2503+2505+      108.51    1.534 No_date   14:15   28.18
03237>  010:0029--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03238>      CALIB NASHYD        01:2506            2.50     .049 No_date   12:32   13.55
03239>       [CN= 49.0: N= 3.00]
03240>       [Tp=  .41:DT= 1.00]
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10yr SCS

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03241>  010:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03242>       ADD HYD            01:2506             2.50     .049 No_date   12:32   13.55
03243>                      +  06:2503+2505+     108.51    1.534 No_date   14:15   28.18
03244>         [DT= 1.00]  SUM=  02:RC+2506       111.01    1.542 No_date   14:14   27.85
03245>  010:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03246>       ROUTE CHANNEL   -> 02:RC+2506       111.01    1.542 No_date   14:14   27.85
03247>         [RDT= 1.00] out<- 04:RC3           111.01    1.541 No_date   14:19   27.85
03248>         [L/S/n=  200,/1.000/.030]
03249>         (Vmax=  .915:Dmax=  .777]
03250>  010:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03251>       CALIB NASHYD       01:2507             5.22     .084 No_date   12:41   13.55
03252>         (CN= 49.0: N= 3.00]
03253>         [Tp=  .54:DT= 1.00]
03254>  010:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03255>       ADD HYD            01:2507             5.22     .084 No_date   12:41   13.55
03256>                      +  04:RC3           111.01    1.541 No_date   14:19   27.85
03257>         [DT= 1.00]  SUM=  02:2507+RC       116.23    1.561 No_date   14:17   27.21
03258>  010:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03259>       CALIB NASHYD       01:2508             7.46     .111 No_date   12:47   13.98
03260>         [CN= 50.0: N= 3.00]
03261>         [Tp=  .63:DT= 1.00]
03262>  010:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03263>       ADD HYD            01:2508             7.46     .111 No_date   12:47   13.98
03264>                      +  02:2507+RC       116.23    1.561 No_date   14:17   27.21
03265>         [DT= 1.00]  SUM=  09:1000          123.69    1.595 No_date   14:15   26.41
03266> #                   MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
03267>  010:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03268>       CALIB NASHYD       01:103              8.70     .199 No_date   12:37   17.45
03269>         [CN= 59.2: N= 3.00]
03270>         [Tp=  .48:DT= 1.00]
03271>  010:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03272>       ADD HYD            01:103              8.70     .199 No_date   12:37   17.45
03273>                      +  03:To1023          12.00     .089 No_date   13:07   29.01
03274>         [DT= 1.00]  SUM=  02:1023          20.70     .263 No_date   12:43   24.15
03275>  010:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03276>       CALIB NASHYD       01:205              1.41     .044 No_date   12:19   13.60
03277>         [CN= 51.1: N= 3.00]
03278>         [Tp=  .20:DT= 1.00]
03279>  010:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03280>       ADD HYD            01:205              1.41     .044 No_date   12:19   13.60
03281>                      +  02:1023          20.70     .263 No_date   12:43   24.15
03282>         [DT= 1.00]  SUM=  03:802           22.11     .281 No_date   12:39   23.48
03283>  010:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03284>       CALIB STANDHYD     01:201             18.41    2.035 No_date   12:12   40.06
03285>         [XIMP=.43:TIMP=.56]
03286>         [LOSS= 2 :CN= 49.0]
03287>         (Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
03288>         [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
03289>  010:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03290>       ADD HYD            01:201             18.41    2.035 No_date   12:12   40.06
03291>                      +  03:802           22.11     .281 No_date   12:39   23.48
03292>         [DT= 1.00]  SUM=  02:803           40.52    2.162 No_date   12:12   31.01
03293>  010:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03294>       CALIB NASHYD       01:202              1.10     .028 No_date   12:22   13.01
03295>         [CN= 55.0: N= 3.00]
03296>         [Tp=  .25:DT= 1.00]
03297>  010:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03298>       ADD HYD            01:202              1.10     .028 No_date   12:22   13.01
03299>                      +  02:803           40.52    2.162 No_date   12:12   31.01
03300>         [DT= 1.00]  SUM=  03:804           41.62    2.180 No_date   12:12   30.54
03301>  010:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03302>       CALIB NASHYD       01:1021             4.66     .069 No_date   12:58   16.06
03303>         [CN= 55.3: N= 3.00]
03304>         [Tp=  .78:DT= 1.00]
03305>  010:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03306>       COMPUTE DUALHYD    01:1021             4.66     .069 No_date   12:58   16.06
03307>           Major System /  04:To1000           .42     .023 No_date   12:58   16.06
03308>             Minor System \  02:To810          4.24     .046 No_date   12:28   16.06
03309>  010:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03310>       ADD HYD            02:To810            4.24     .046 No_date   12:28   16.06
03311>                      +  03:804           41.62    2.180 No_date   12:12   30.54
03312>         [DT= 1.00]  SUM=  05:810           45.86    2.200 No_date   12:12   29.20
03313> #                       MAIR MILLS VILLAGE SWMF
03314>  010:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03315>       ROUTE RESERVOIR -> 05:810           45.86    2.200 No_date   12:12   29.20
03316>         [RDT= 1.00] out<- 02:1026         45.86     .323 No_date   13:40   29.19
03317>                overflow <= 03:1026OVF       .00     .000 No_date    0:00     .00
03318>         (MxStoUsed=.5707E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03319>  010:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03320>       ADD HYD            02:1026           45.86     .323 No_date   13:40   29.19
03321>                      +  03:1026OVF          .00     .000 No_date    0:00     .00
03322>         [DT= 1.00]  SUM=  05:Pond1026ou    45.86     .323 No_date   13:40   29.19
03323> #                 TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
03324>  010:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03325>       DIVERT HYD      -> 05:Pond1026ou    45.86     .323 No_date   13:40   29.19
03326>                 diverted <= 02:To807      23.24     .040 No_date   13:40   29.19
03327>                 diverted <= 07:To809      22.63     .283 No_date   13:40   29.19
03328>                 diverted <= 03:To1025       .00     .000 No_date    0:00     .00
03329> #                       FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
03330>  010:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03331>       ADD HYD            09:1000           123.69    1.595 No_date   14:15   26.41
03332>                      +  04:To1000           .42     .023 No_date   12:58   16.06
03333>         [DT= 1.00]  SUM=  05:Node 2        124.11    1.595 No_date   14:15   26.37
03334> #                                 FLOWS TO OUTLET B
03335>  010:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03336>       CALIB NASHYD       01:207              1.22     .057 No_date   12:15   16.06
03337>         [CN= 55.3: N= 3.00]
03338>         [Tp=  .13:DT= 1.00]
03339>  010:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03340>       ADD HYD            01:207              1.22     .057 No_date   12:15   16.06
03341>                      +  02:To807           23.24     .040 No_date   13:40   29.19
03342>         [DT= 1.00]  SUM=  06:807           24.46     .097 No_date   12:15   28.54
03343>  010:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03344>       ADD HYD            03:To1025           .00     .000 No_date    0:00     .00
03345>                      +  05:Node 2        124.11    1.595 No_date   14:15   26.37
03346>         [DT= 1.00]  SUM=  01:1025          124.11    1.595 No_date   14:15   26.37
03347>  010:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03348>       ADD HYD            07:To809            22.63     .283 No_date   13:40   29.19
03349>                      +  01:1025          124.11    1.595 No_date   14:15   26.37
03350>         [DT= 1.00]  SUM=  02:809           146.73    1.870 No_date   14:13   26.81
03351>  010:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03352>       ADD HYD            06:807              24.46     .097 No_date   12:15   28.54
03353>                      +  10:To806            14.16     .020 No_date   13:07   29.01
03354>         [DT= 1.00]  SUM=  03:806-OutB       38.62     .117 No_date   12:15   28.71
03355> #                       LINKSVIEW AND CONTRIBUTING AREAS
03356>  010:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03357>       CALIB NASHYD       04:2502             5.52     .111 No_date   12:41   16.70
03358>         [CN= 58.4: N= 3.00]
03359>         [Tp=  .54:DT= 1.00]
03360>  010:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03361>       CALIB NASHYD       05:2509             5.30     .157 No_date   12:27   17.49
03362>         [CN= 59.0: N= 3.00]
03363>         [Tp=  .33:DT= 1.00]
03364>  010:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03365>       CALIB STANDHYD     06:2500             38.20    2.701 No_date   12:16   36.24
03366>         [XIMP=.30:TIMP=.50]
03367>         [LOSS= 2 :CN= 55.3]
03368>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03369>         [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
03370>  010:0059----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03371>       ADD HYD            04:2502             5.52     .111 No_date   12:41   16.70
03372>                      +  05:2509             5.30     .157 No_date   12:27   17.49
03373>                      +  06:2500            38.20    2.701 No_date   12:16   36.24
03374>         [DT= 1.00]  SUM=  07:Pondin         49.02    2.886 No_date   12:17   32.01
03375> #                             LINKSVIEW SWM FACILTIY
03376>  010:0060----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03377>       ROUTE RESERVOIR -> 07:Pondin        49.02    2.886 No_date   12:17   32.01
03378>         [RDT= 1.00] out<- 08:LinkPond     49.02     .393 No_date   13:36   32.01
03379>                overflow <= 09:OVF           .00     .000 No_date    0:00     .00
03380>         (MxStoUsed=.8733E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03381>  010:0061----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03382>       ADD HYD            08:LinkPond       49.02     .393 No_date   13:36   32.01
03383>                      +  09:OVF              .00     .000 No_date    0:00     .00
03384>         [DT= 1.00]  SUM=  04:Pondout       49.02     .393 No_date   13:36   32.01
03385> #                                 FLOWS FROM TENTH LINE
03386>  010:0062----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03387>       CALIB STANDHYD     08:2601             .25     .040 No_date   12:12   49.68
03388>         [XIMP=.64:TIMP=.64]
03389>         [LOSS= 2 :CN= 49.0]
03390>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03391>         [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
03392>  010:0063----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03393>       CALIB STANDHYD     09:2602             1.30     .181 No_date   12:13   49.68
03394>         [XIMP=.64:TIMP=.64]
03395>         [LOSS= 2 :CN= 49.0]
03396>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03397>         [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
03398>  010:0064----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03399>       COMPUTE DUALHYD    09:2602             1.30     .181 No_date   12:13   49.68
03400>           Major System /  06:Overflow          .00     .000 No_date    0:00     .00
03401>           Minor System \  05:Syrflow          1.30     .181 No_date   12:13   49.68
03402> #                       FLOWS IN POTENTIAL FUTURE OUTLET PIPE
03403>  010:0065----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03404>       ADD HYD            04:Pondout        49.02     .393 No_date   13:36   32.01
03405>                      +  05:Syrflow         1.30     .181 No_date   12:13   49.68
03406>         [DT= 1.00]  SUM=  10:LinkPipe      50.32     .403 No_date   13:35   32.47
03407> #                       FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
03408>  010:0066----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03409>       ADD HYD            10:LinkPipe       50.32     .403 No_date   13:35   32.47
03410>                      +  02:809           146.73    1.870 No_date   14:13   26.81
03411>                      +  06:Overflow          .00     .000 No_date    0:00     .00
03412>                      +  08:2601              .25     .040 No_date   12:12   49.68
03413>         [DT= 1.00]  SUM=  01:Node3         197.30    2.264 No_date   14:08   28.28
03414> #                       FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
03415>  010:0067----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03416>       ADD HYD            01:Node3          197.30    2.264 No_date   14:08   28.28
03417>                      +  03:806-OutB        38.62     .117 No_date   12:15   28.71
03418>         [DT= 1.00]  SUM=  04:Node4         235.92    2.328 No_date   14:08   28.35
03419>    ** END OF RUN :  10
03420>
03421>  ************************************************************************************
03422>
03423>
03424>
03425>
03426>
03427>  RUN:COMMAND#
03428>  011:0001----------------------------------------------------------------------------
03429>       START
03430>         [TZERO =    .00 hrs on        0]
03431>         [METOUT=   2    (1=imperial, 2=metric output)]
03432>         [NSTORM=   1 ]
03433>         [NRUN  =   1 ]
03434> #*****************************************************************************
03435> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
03436> #  Date        : 2014 08 22
03437> #  Modified    :
03438> #  Modeller    : [A.French]
03439> #  Company     : C.F. Crozier & Associates Inc.
03440> #  License #   :  3737016
03441> #*****************************************************************************
03442> #*****************************************************************************
03443>  011:0002----------------------------------------------------------------------------
03444>       READ STORM
03445>         Filename = STORM.001
03446>         Comment  =
03447>         [SDT= 1.00:SDUR=  24.00:PTOT=  86.40]
03448> #                 MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03449>  011:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03450>       CALIB NASHYD       01:300              4.55     .163 No_date   12:53   35.79
03451>         [CN= 71.0: N= 3.00]
03452>         [Tp=  .74:DT= 1.00]
03453>  011:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03454>       ROUTE CHANNEL   -> 01:300              4.55     .163 No_date   12:53   35.79
03455>         [RDT= 1.00] out<- 02:701            4.55     .128 No_date   13:15   35.79
03456>         [L/S/n=  450./ .050/.040]
03457>         (Vmax=  .230:Dmax=  .235]
03458>  011:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03459>       CALIB NASHYD       01:301              5.97     .240 No_date   12:46   35.79
03460>         [CN= 71.0: N= 3.00]
03461>         [Tp=  .63:DT= 1.00]
03462>  011:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03463>       ADD HYD            01:301              5.97     .240 No_date   12:46   35.79
03464>                      +  02:701              4.55     .128 No_date   13:15   35.79
03465>         [DT= 1.00]  SUM=  03:901            10.52     .345 No_date   12:55   35.79
03466>  011:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03467>       ROUTE CHANNEL   -> 03:901            10.52     .345 No_date   12:55   35.79
03468>         [RDT= 1.00] out<- 01:702            10.52     .294 No_date   13:10   35.79
03469>         [L/S/n=  300./ .050/.060]
03470>         (Vmax=  .209:Dmax=  .439]
03471>  011:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03472>       ROUTE RESERVOIR -> 01:702           10.52     .294 No_date   13:10   35.79
03473>         [RDT= 1.00] out<- 02:501            10.52     .172 No_date   14:18   35.79
03474>                overflow <= 03:501OVF          .00     .000 No_date    0:00     .00
03475>         [MxStoUsed=.5508E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03476>  011:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03477>       CALIB STANDHYD     01:302             16.39    1.414 No_date   12:20   46.63
03478>         [XIMP=.20:TIMP=.40]
03479>         [LOSS= 2 :CN= 65.2]
03480>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03481>         [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
03482>  011:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03483>       ADD HYD            01:302             16.39    1.414 No_date   12:20   46.63
03484>                      +  02:501             10.52     .172 No_date   14:18   35.79
03485>                      +  03:501OVF            .00     .000 No_date    0:00     .00
03486>         [DT= 1.00]  SUM=  04:902            26.91    1.464 No_date   12:20   42.39
03487>  011:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03488>       CALIB STANDHYD     01:303              2.34     .270 No_date   12:15   51.06
03489>         [XIMP=.25:TIMP=.50]
03490>         [LOSS= 2 :CN= 65.2]
03491>         [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03492>         [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
03493>  011:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03494>       ADD HYD            01:303              2.34     .270 No_date   12:15   51.06
03495>                      +  04:902             26.91    1.464 No_date   12:20   42.39
03496>         [DT= 1.00]  SUM=  02:903            29.25    1.704 No_date   12:19   43.08
03497>  011:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03498>       CALIB NASHYD       01:304              2.90     .178 No_date   12:23   31.74
03499>         [CN= 66.6: N= 3.00]
03500>         [Tp=  .28:DT= 1.00]
03501>  011:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03502>       ADD HYD            01:304              2.90     .178 No_date   12:23   31.74
03503>                      +  02:903            29.25    1.704 No_date   12:19   43.08
03504>         [DT= 1.00]  SUM=  03:904            32.15    1.875 No_date   12:19   42.06
03505>  011:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03506>       CALIB STANDHYD     01:305               .31     .021 No_date   12:12   41.41
03507>         [XIMP=.20:TIMP=.20]
03508>         [LOSS= 2 :CN= 65.2]
03509>         [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
03510>         [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
```

25 yr SCS

```
03511>  011:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03512>       ADD HYD            01:305             .31     .021 No_date   12:12    41.41
03513>                        + 03:304           32.15    1.875 No_date   12:19    42.06
03514>       [DT= 1.00]  SUM=  02:905            32.46    1.883 No_date   12:19    42.05
03515> #                    MAIR MILLS ESTATES SWM FACILITY
03516>  011:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03517>       ROUTE RESERVOIR -> 02:905           32.46    1.883 No_date   12:19    42.05
03518>       [RDT= 1.00] out<- 03:502            32.46     .150 No_date   17:05    42.05
03519>              overflow <= 04:502OVF          .00     .000 No_date    0:00      .00
03520>       [MxStoUsed=.0309E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03521>  011:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03522>       CALIB NASHYD       01:400             5.70     .100 No_date   12:53    17.78
03523>        [CN= 50.2: N= 3.00]
03524>        [Tp=  .70:DT= 1.00]
03525>  011:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03526>       ADD HYD            01:400             5.70     .100 No_date   12:53    17.78
03527>                        + 03:502           32.46     .150 No_date   17:05    42.05
03528>                        + 04:502OVF          .00     .000 No_date    0:00      .00
03529>       [DT= 1.00]  SUM=  02:906            38.16     .250 No_date   12:53    38.43
03530> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
03531>  011:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03532>       DIVERT HYD         -> 02:906          38.16     .250 No_date   12:53    38.43
03533>                  diverted <= 10:To806      11.71     .020 No_date   12:53    38.43
03534>                  diverted <= 03:To1023     13.23     .115 No_date   12:53    38.43
03535>                  diverted <= 01:To1022     13.23     .115 No_date   12:53    38.43
03536> #                    TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
03537> #                              FLOW AT NODE 1
03538>  011:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03539>       CALIB NASHYD       01:2501           85.82    1.952 No_date   14:01    42.20
03540>        [CN= 78.8: N= 3.00]
03541>        [Tp= 1.72:DT= 1.00]
03542>  011:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03543>       ROUTE CHANNEL   -> 01:2501           85.82    1.952 No_date   14:01    42.20
03544>        [RDT= 1.00] out<- 02:RC1            85.82    1.932 No_date   14:16    42.20
03545>        [L/S/n=  350./1.500/.030]
03546>        [Vmax=  .514:Dmax=  .931]
03547>  011:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03548>       CALIB NASHYD       01:2504            7.94     .192 No_date   12:42    20.36
03549>        [CN= 53.0: N= 3.00]
03550>        [Tp=  .55:DT= 1.00]
03551>  011:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03552>       ADD HYD            01:2504            7.94     .192 No_date   12:42    20.36
03553>                        + 02:RC1           85.82    1.932 No_date   14:16    42.20
03554>       [DT= 1.00]  SUM=  04:2501+2504      93.76    1.979 No_date   14:14    40.36
03555>  011:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03556>       ROUTE CHANNEL   -> 04:2501+2504     93.76    1.979 No_date   14:14    40.36
03557>       [RDT= 1.00] out<- 02:RC2            93.76    1.975 No_date   14:20    40.36
03558>       [L/S/n=  425./1.250/.030]
03559>       [Vmax= 1.126:Dmax=  .828]
03560>  011:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03561>       CALIB NASHYD       01:2503            7.76     .221 No_date   12:50    27.33
03562>        [CN= 62.3: N= 3.00]
03563>        [Tp=  .68:DT= 1.00]
03564>  011:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03565>       CALIB NASHYD       05:2505            6.99     .164 No_date   12:48    22.25
03566>        [CN= 54.0: N= 3.00]
03567>        [Tp=  .65:DT= 1.00]
03568>  011:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03569>       ADD HYD            01:2503            7.76     .221 No_date   12:50    27.33
03570>                        + 02:RC2           93.76    1.975 No_date   14:20    40.36
03571>                        + 05:2505           6.99     .164 No_date   12:48    22.25
03572>       [DT= 1.00]  SUM=  06:2503+2505+   108.51    2.103 No_date   14:12    38.26
03573>  011:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03574>       CALIB NASHYD       01:2506            2.50     .070 No_date   12:32    19.16
03575>        [CN= 49.0: N= 3.00]
03576>        [Tp=  .41:DT= 1.00]
03577>  011:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03578>       ADD HYD            01:2506            2.50     .070 No_date   12:32    19.16
03579>                        + 06:2503+2505+   108.51    2.103 No_date   14:12    38.26
03580>       [DT= 1.00]  SUM=  02:RC+2506       111.01    2.114 No_date   14:12    37.83
03581>  011:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03582>       ROUTE CHANNEL   -> 02:RC+2506      111.01    2.114 No_date   14:12    37.83
03583>       [RDT= 1.00] out<- 04:RC3            111.01    2.113 No_date   14:16    37.83
03584>       [L/S/n=  200./1.000/.030]
03585>       [Vmax=  .935:Dmax=  .829]
03586>  011:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03587>       CALIB NASHYD       01:2507            5.22     .120 No_date   12:41    19.16
03588>        [CN= 49.0: N= 3.00]
03589>        [Tp=  .54:DT= 1.00]
03590>  011:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03591>       ADD HYD            01:2507            5.22     .120 No_date   12:41    19.16
03592>                        + 04:RC3           111.01    2.113 No_date   14:16    37.83
03593>       [DT= 1.00]  SUM=  02:2507+RC        116.23    2.141 No_date   14:15    36.99
03594>  011:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03595>       CALIB NASHYD       01:2508            7.46     .158 No_date   12:47    19.76
03596>        [CN= 50.0: N= 3.00]
03597>        [Tp=  .63:DT= 1.00]
03598>  011:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03599>       ADD HYD            01:2508            7.46     .158 No_date   12:47    19.76
03600>                        + 02:2507+RC        116.23    2.141 No_date   14:15    36.99
03601>       [DT= 1.00]  SUM=  09:1000           123.69    2.192 No_date   14:11    35.95
03602> #                    MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
03603>  011:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03604>       CALIB NASHYD       01:103             8.70     .284 No_date   12:37    24.60
03605>        [CN= 59.2: N= 3.00]
03606>        [Tp=  .48:DT= 1.00]
03607>  011:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03608>       ADD HYD            01:103             8.70     .284 No_date   12:37    24.60
03609>                        + 03:To1023          13.23     .115 No_date   12:53    38.43
03610>       [DT= 1.00]  SUM=  02:1023            21.93     .388 No_date   12:39    32.94
03611>  011:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03612>       CALIB NASHYD       01:205             1.41     .063 No_date   12:19    19.42
03613>        [CN= 51.1: N= 3.00]
03614>        [Tp=  .20:DT= 1.00]
03615>  011:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03616>       ADD HYD            01:205             1.41     .063 No_date   12:19    19.42
03617>                        + 02:1023            21.93     .388 No_date   12:39    32.94
03618>       [DT= 1.00]  SUM=  03:802             23.34     .419 No_date   12:36    32.12
03619>  011:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03620>       CALIB STANDHYD     01:201            10.41    2.601 No_date   12:12    50.05
03621>        [XIMP=.43:TIMP=.56]
03622>        [LOSS= 2 :CN= 49.0]
03623>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
03624>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
03625>  011:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03626>       ADD HYD            01:201            10.41    2.601 No_date   12:12    50.05
03627>                        + 03:802            23.34     .419 No_date   12:36    32.12
03628>       [DT= 1.00]  SUM=  02:803            41.75    2.795 No_date   12:12    40.03
03629>  011:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03630>       CALIB NASHYD       01:202             1.10     .042 No_date   12:22    19.11
03631>        [CN= 55.0: N= 3.00]
03632>        [Tp=  .25:DT= 1.00]
03633>  011:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03634>       ADD HYD            01:202             1.10     .042 No_date   12:22    19.11
03635>                        + 02:803            41.75    2.795 No_date   12:12    40.03
03636>       [DT= 1.00]  SUM=  03:804            42.85    2.823 No_date   12:12    39.49
03637>  011:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03638>       CALIB NASHYD       01:1021            4.66     .098 No_date   12:57    22.62
03639>        [CN= 55.3: N= 3.00]
03640>        [Tp=  .78:DT= 1.00]
03641>  011:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03642>       COMPUTE DUALHYD    01:1021            4.66     .098 No_date   12:57    22.62
03643>         Major System /  04:To1000           .90     .052 No_date   12:57    22.62
03644>         Minor System \  02:To810            3.76     .046 No_date   12:20    22.62
03645>  011:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03646>       ADD HYD            02:To810           3.76     .046 No_date   12:20    22.62
03647>                        + 03:804            42.85    2.823 No_date   12:12    39.49
03648>       [DT= 1.00]  SUM=  05:810            46.60    2.852 No_date   12:12    38.13
03649> #                    MAIR MILLS VILLAGE SWMF
03650>  011:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03651>       ROUTE RESERVOIR -> 05:810           46.60    2.852 No_date   12:12    38.13
03652>       [RDT= 1.00] out<- 02:1026           46.60     .510 No_date   13:16    38.13
03653>              overflow <= 03:1026OVF         .00     .000 No_date    0:00      .00
03654>       [MxStoUsed=.6726E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03655>  011:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03656>       ADD HYD            02:1026            46.60     .510 No_date   13:16    38.13
03657>                        + 03:1026OVF          .00     .000 No_date    0:00      .00
03658>       [DT= 1.00]  SUM=  05:Pond1026ou      46.60     .510 No_date   13:16    38.13
03659> #              TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
03660>  011:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03661>       DIVERT HYD         -> 05:Pond1026ou  46.60     .510 No_date   13:16    38.13
03662>                  diverted <= 02:To807      19.80     .040 No_date   13:16    38.13
03663>                  diverted <= 07:To809      26.80     .470 No_date   13:16    38.13
03664>                  diverted <= 03:To1025       .00     .000 No_date    0:00      .00
03665> #                    FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
03666>  011:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03667>       ADD HYD            09:1000          123.69    2.192 No_date   14:11    35.95
03668>                        + 04:To1000           .90     .052 No_date   12:57    22.62
03669>       [DT= 1.00]  SUM=  05:Node 2         124.59    2.193 No_date   14:09    35.86
03670> #                              FLOWS TO OUTLET B
03671>  011:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03672>       CALIB NASHYD       01:207             1.22     .080 No_date   12:15    22.62
03673>        [CN= 55.3: N= 3.00]
03674>        [Tp=  .13:DT= 1.00]
03675>  011:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03676>       ADD HYD            01:207             1.22     .080 No_date   12:15    22.62
03677>                        + 02:To807           19.80     .040 No_date   13:16    38.13
03678>       [DT= 1.00]  SUM=  06:807             21.02     .120 No_date   12:15    37.23
03679>  011:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03680>       ADD HYD            03:To1025           .00     .000 No_date    0:00      .00
03681>                        + 05:Node 2         124.59    2.193 No_date   14:09    35.86
03682>       [DT= 1.00]  SUM=  01:1025            124.59    2.193 No_date   14:09    35.86
03683>  011:0054---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03684>       ADD HYD            07:To809           26.80     .470 No_date   13:16    38.13
03685>                        + 01:1025           124.59    2.193 No_date   14:09    35.86
03686>       [DT= 1.00]  SUM=  02:809             151.39    2.616 No_date   14:03    36.26
03687>  011:0055---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03688>       ADD HYD            06:807             21.02     .120 No_date   12:15    37.23
03689>                        + 10:To806           11.71     .020 No_date   12:53    38.43
03690>       [DT= 1.00]  SUM=  03:806-OutB        32.73     .140 No_date   12:15    37.66
03691> #                    LINKSVIEW AND CONTRIBUTING AREAS
03692>  011:0056---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03693>       CALIB NASHYD       04:2502            5.52     .159 No_date   12:41    23.68
03694>        [CN= 58.4: N= 3.00]
03695>        [Tp=  .54:DT= 1.00]
03696>  011:0057---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03697>       CALIB NASHYD       05:2509            5.30     .224 No_date   12:27    24.64
03698>        [CN= 59.0: N= 3.00]
03699>        [Tp=  .33:DT= 1.00]
03700>  011:0058---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03701>       CALIB STANDHYD     06:2500           38.20    3.615 No_date   12:16    46.25
03702>        [XIMP=.30:TIMP=.50]
03703>        [LOSS= 2 :CN= 55.3]
03704>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03705>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
03706>  011:0059---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03707>       ADD HYD            04:2502            5.52     .159 No_date   12:41    23.68
03708>                        + 05:2509            5.30     .224 No_date   12:27    24.64
03709>                        + 06:2500           38.20    3.615 No_date   12:16    46.25
03710>       [DT= 1.00]  SUM=  07:Pondin           49.02    3.876 No_date   12:16    41.37
03711> #                    LINKSVIEW SWM FACILTIY
03712>  011:0060---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03713>       ROUTE RESERVOIR -> 07:Pondin       49.02    3.876 No_date   12:16    41.37
03714>        [RDT= 1.00] out<- 08:LinkPond     49.02     .603 No_date   13:23    41.37
03715>              overflow <= 09:OVF             .00     .000 No_date    0:00      .00
03716>       [MxStoUsed=.1086E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03717>  011:0061---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03718>       ADD HYD            08:LinkPond       49.02     .603 No_date   13:23    41.37
03719>                        + 09:OVF              .00     .000 No_date    0:00      .00
03720>       [DT= 1.00]  SUM=  04:Pondout          49.02     .603 No_date   13:23    41.37
03721> #                              FLOWS FROM TENTH LINE
03722>  011:0062---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03723>       CALIB STANDHYD     08:2601             .25     .049 No_date   12:12    60.91
03724>        [XIMP=.64:TIMP=.64]
03725>        [LOSS= 2 :CN= 49.0]
03726>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03727>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
03728>  011:0063---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03729>       CALIB STANDHYD     09:2602            1.30     .225 No_date   12:13    60.92
03730>        [XIMP=.64:TIMP=.64]
03731>        [LOSS= 2 :CN= 49.0]
03732>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03733>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
03734>  011:0064---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03735>       COMPUTE DUALHYD    09:2602            1.30     .225 No_date   12:13    60.92
03736>         Major System /  06:Overflow          .00     .005 No_date   12:13    60.92
03737>         Minor System \  05:5yrflow          1.30     .220 No_date   12:12    60.92
03738> #                    FLOWS IN POTENTIAL FUTURE OUTLET PIPE
03739>  011:0065---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03740>       ADD HYD            04:Pondout        49.02     .603 No_date   13:23    41.37
03741>                        + 05:5yrflow         1.30     .220 No_date   12:12    60.92
03742>       [DT= 1.00]  SUM=  10:LinkPipe        50.32     .616 No_date   13:20    41.87
03743> #                    FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
03744>  011:0066---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03745>       ADD HYD            10:LinkPipe       50.32     .616 No_date   13:20    41.87
03746>                        + 02:809            151.39    2.616 No_date   14:03    36.26
03747>                        + 06:Overflow          .00     .005 No_date   12:13    60.92
03748>                        + 08:2601              .25     .049 No_date   12:12    60.91
03749>       [DT= 1.00]  SUM=  01:Node3          201.96    3.208 No_date   13:57    37.69
03750> #                    FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
03751>  011:0067---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03752>       ADD HYD            01:Node3          201.96    3.208 No_date   13:57    37.69
03753>                        + 03:806-OutB        32.73     .140 No_date   12:15    37.66
03754>       [DT= 1.00]  SUM=  04:Node4          234.70    3.274 No_date   13:57    37.68
03755>   ** END OF RUN :  11
03756>
03757> ************************************************************************
03758>
03759>
03760>
03761>                                                          50 yr SCS
03762>
03763>  RUN:COMMAND#
03764>  012:0001---------------------------------------------------------------
03765>       START
03766>        [TZERO =     .00 hrs on        0]
03767>        [METOUT=    2    (1=imperial, 2=metric output)]
03768>        [NSTORM=    1 ]
03769>        [NRUN  =   12 ]
03770> #*********************************************************************
03771> #  Project Name: [Linksview Post-Development]  Project Number: [103-2687]
03772> #  Date       : 2014 08 22
03773> #  Modified   :
03774> #  Modeller   : [A.French]
03775> #  Company    : C.F. Crozier & Associates Inc.
03776> #  License #  :  3737016
03777> #*********************************************************************
03778> #*********************************************************************
03779>  012:0002---------------------------------------------------------------
03780>       READ STORM
```

```
03781>       Filename = STORM.001
03782>       Comment  =
03783>       [SDT= 1.00:SDUR=  24.00:PTOT=  96.00]
03784> #              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03785> 012:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03786>      CALIB NASHYD       01:300            4.55      .194 No_date   12:53   42.52
03787>        [CN= 71.0: N= 3.00]
03788>        [Tp=  .74:DT= 1.00]
03789> 012:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03790>      ROUTE CHANNEL   -> 01:300            4.55      .194 No_date   12:53   42.52
03791>        [RDT= 1.00] out<- 02:701           4.55      .155 No_date   13:13   42.52
03792>        [L/S/n=  450./ .050/.040]
03793>        [Vmax=  .246:Dmax=  .257]
03794> 012:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03795>      CALIB NASHYD       01:301            5.97      .287 No_date   12:46   42.52
03796>        [CN= 71.0: N= 3.00]
03797>        [Tp=  .63:DT= 1.00]
03798> 012:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03799>      ADD HYD            01:301            5.97      .287 No_date   12:46   42.52
03800>                       + 02:701            4.55      .155 No_date   13:13   42.52
03801>        [DT= 1.00]  SUM=  03:901           10.52      .417 No_date   12:54   42.52
03802> 012:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03803>      ROUTE CHANNEL   -> 03:901           10.52      .417 No_date   12:54   42.52
03804>        [RDT= 1.00] out<- 01:702           10.52      .359 No_date   13:07   42.52
03805>        [L/S/n=  300./ .050/.060]
03806>        [Vmax=  .229:Dmax=  .474]
03807> 012:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03808>      ROUTE RESERVOIR -> 01:702           10.52      .359 No_date   13:07   42.52
03809>        [RDT= 1.00] out<- 02:501           10.52      .173 No_date   14:34   42.52
03810>              overflow <= 03:501OVF         .00      .000 No_date    0:00     .00
03811>        [MxStoUsed=.6975E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03812> 012:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03813>      CALIB STANDHYD     01:302           16.39     1.701 No_date   12:19   54.01
03814>        [XIMP=.20:TIMP=.40]
03815>        [LOSS= 2 :CN= 65.2]
03816>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03817>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
03818> 012:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03819>      ADD HYD            01:302           16.39     1.701 No_date   12:19   54.01
03820>                       + 02:501           10.52      .173 No_date   14:34   42.52
03821>                       + 03:501OVF          .00      .000 No_date    0:00     .00
03822>        [DT= 1.00]  SUM=  04:902           26.91     1.765 No_date   12:20   49.52
03823> 012:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03824>      CALIB STANDHYD     01:303            2.34      .322 No_date   12:15   58.81
03825>        [XIMP=.25:TIMP=.50]
03826>        [LOSS= 2 :CN= 65.2]
03827>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03828>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
03829> 012:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03830>      ADD HYD            01:303            2.34      .322 No_date   12:15   58.81
03831>                       + 04:902           26.91     1.765 No_date   12:20   49.52
03832>        [DT= 1.00]  SUM=  02:903           29.25     2.050 No_date   12:19   50.26
03833> 012:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03834>      CALIB NASHYD       01:304            2.90      .214 No_date   12:23   37.92
03835>        [CN= 66.6: N= 3.00]
03836>        [Tp=  .28:DT= 1.00]
03837> 012:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03838>      ADD HYD            01:304            2.90      .214 No_date   12:23   37.92
03839>                       + 02:903           29.25     2.050 No_date   12:19   50.26
03840>        [DT= 1.00]  SUM=  03:904           32.15     2.256 No_date   12:19   49.15
03841> 012:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03842>      CALIB STANDHYD     01:305             .31      .024 No_date   12:12   48.14
03843>        [XIMP=.20:TIMP=.20]
03844>        [LOSS= 2 :CN= 65.2]
03845>        [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
03846>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
03847> 012:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03848>      ADD HYD            01:305             .31      .024 No_date   12:12   48.14
03849>                       + 03:904           32.15     2.256 No_date   12:19   49.15
03850>        [DT= 1.00]  SUM=  02:905           32.46     2.267 No_date   12:19   49.14
03851> #               MAIR MILLS ESTATES SWM FACILITY
03852> 012:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03853>      ROUTE RESERVOIR -> 02:905           32.46     2.267 No_date   12:19   49.14
03854>        [RDT= 1.00] out<- 03:502           32.46      .284 No_date   15:47   49.13
03855>              overflow <= 04:502OVF         .00      .000 No_date    0:00     .00
03856>        [MxStoUsed=.8773E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03857> 012:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03858>      CALIB NASHYD       01:400            5.70      .124 No_date   12:52   21.88
03859>        [CN= 50.2: N= 3.00]
03860>        [Tp=  .70:DT= 1.00]
03861> 012:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03862>      ADD HYD            01:400            5.70      .124 No_date   12:52   21.88
03863>                       + 03:502           32.46      .284 No_date   15:47   49.13
03864>                       + 04:502OVF          .00      .000 No_date    0:00     .00
03865>        [DT= 1.00]  SUM=  02:906           38.16      .304 No_date   15:32   45.06
03866> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
03867> 012:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03868>      DIVERT HYD      -> 02:906           38.16      .304 No_date   15:32   45.06
03869>              diverted <= 10:To806         10.21      .020 No_date   15:32   45.06
03870>              diverted <= 03:To1023        13.98      .142 No_date   15:32   45.06
03871>              diverted <= 01:To1022        13.98      .142 No_date   15:32   45.06
03872> #                TAYLOR"S CREEK UPSTREAM CATCHMENT AREAS
03873> #                              FLOW AT NODE 1
03874> 012:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03875>      CALIB NASHYD       01:2501           85.82     2.319 No_date   14:00   49.86
03876>        [CN= 78.8: N= 3.00]
03877>        [Tp= 1.72:DT= 1.00]
03878> 012:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03879>      ROUTE CHANNEL   -> 01:2501          85.82     2.319 No_date   14:00   49.86
03880>        [RDT= 1.00] out<- 02:RC1           85.82     2.294 No_date   14:15   49.86
03881>        [L/S/n=  350./1.500/.030]
03882>        [Vmax=  .502:Dmax=  .958]
03883> 012:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03884>      CALIB NASHYD       01:2504            7.94      .236 No_date   12:41   24.84
03885>        [CN= 53.0: N= 3.00]
03886>        [Tp=  .55:DT= 1.00]
03887> 012:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03888>      ADD HYD            01:2504            7.94      .236 No_date   12:41   24.84
03889>                       + 02:RC1           85.82     2.294 No_date   14:15   49.86
03890>        [DT= 1.00]  SUM=  04:2501+2504     93.76     2.352 No_date   14:13   47.74
03891> 012:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03892>      ROUTE CHANNEL   -> 04:2501+2504     93.76     2.352 No_date   14:13   47.74
03893>        [RDT= 1.00] out<- 02:RC2           93.76     2.347 No_date   14:19   47.74
03894>        [L/S/n=  425./1.250/.030]
03895>        [Vmax= 1.141:Dmax=  .862]
03896> 012:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03897>      CALIB NASHYD       01:2503            7.76      .267 No_date   12:50   32.94
03898>        [CN= 62.3: N= 3.00]
03899>        [Tp=  .68:DT= 1.00]
03900> 012:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03901>      CALIB NASHYD       05:2505            6.99      .200 No_date   12:48   26.94
03902>        [CN= 54.0: N= 3.00]
03903>        [Tp=  .65:DT= 1.00]
03904> 012:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03905>      ADD HYD            01:2503            7.76      .267 No_date   12:50   32.94
03906>                       + 02:RC2           93.76     2.347 No_date   14:19   47.74
03907>                       + 05:2505           6.99      .200 No_date   12:48   26.94
03908>        [DT= 1.00]  SUM=  06:2503+2505+   108.51     2.503 No_date   14:12   45.35
03909> 012:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03910>      CALIB NASHYD       01:2506            2.50      .085 No_date   12:32   23.30
03911>        [CN= 49.0: N= 3.00]
03912>        [Tp=  .41:DT= 1.00]
03913> 012:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03914>      ADD HYD            01:2506            2.50      .085 No_date   12:32   23.30
03915>                       + 06:2503+2505+   108.51     2.503 No_date   14:12   45.35
03916>        [DT= 1.00]  SUM=  02:RC+2506      111.01     2.517 No_date   14:10   44.85
03917> 012:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03918>      ROUTE CHANNEL   -> 02:RC+2506      111.01     2.517 No_date   14:10   44.85
03919>        [RDT= 1.00] out<- 04:RC3         111.01     2.516 No_date   14:14   44.85
03920>        [L/S/n=  200./1.000/.030]
03921>        [Vmax=  .950:Dmax=  .865]
03922> 012:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03923>      CALIB NASHYD       01:2507            5.22      .146 No_date   12:41   23.30
03924>        [CN= 49.0: N= 3.00]
03925>        [Tp=  .54:DT= 1.00]
03926> 012:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03927>      ADD HYD            01:2507            5.22      .146 No_date   12:41   23.30
03928>                       + 04:RC3         111.01     2.516 No_date   14:14   44.85
03929>        [DT= 1.00]  SUM=  02:2507+RC      116.23     2.551 No_date   14:12   43.88
03930> 012:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03931>      CALIB NASHYD       01:2508            7.46      .193 No_date   12:47   24.00
03932>        [CN= 50.0: N= 3.00]
03933>        [Tp=  .63:DT= 1.00]
03934> 012:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03935>      ADD HYD            01:2508            7.46      .193 No_date   12:47   24.00
03936>                       + 02:2507+RC      116.23     2.551 No_date   14:12   43.88
03937>        [DT= 1.00]  SUM=  09:1000          123.69     2.615 No_date   14:08   42.68
03938> #                MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
03939> 012:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03940>      CALIB NASHYD       01:103            8.70      .346 No_date   12:36   29.81
03941>        [CN= 59.2: N= 3.00]
03942>        [Tp=  .48:DT= 1.00]
03943> 012:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03944>      ADD HYD            01:103            8.70      .346 No_date   12:36   29.81
03945>                       + 03:To1023         13.98      .142 No_date   15:32   45.06
03946>        [DT= 1.00]  SUM=  02:1023          22.68      .467 No_date   12:38   39.21
03947> 012:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03948>      CALIB NASHYD       01:205            1.41      .077 No_date   12:19   23.71
03949>        [CN= 51.1: N= 3.00]
03950>        [Tp=  .20:DT= 1.00]
03951> 012:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03952>      ADD HYD            01:205            1.41      .077 No_date   12:19   23.71
03953>                       + 02:1023          22.68      .467 No_date   12:38   39.21
03954>        [DT= 1.00]  SUM=  03:802           24.09      .507 No_date   12:36   38.31
03955> 012:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03956>      CALIB STANDHYD     01:201            18.41     2.973 No_date   12:12   56.96
03957>        [XIMP=.43:TIMP=.56]
03958>        [LOSS= 2 :CN= 49.0]
03959>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
03960>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
03961> 012:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03962>      ADD HYD            01:201            18.41     2.973 No_date   12:12   56.96
03963>                       + 03:802           24.09      .507 No_date   12:36   38.31
03964>        [DT= 1.00]  SUM=  02:803           42.50     3.224 No_date   12:12   46.39
03965> 012:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03966>      CALIB NASHYD       01:202            1.10      .053 No_date   12:22   23.64
03967>        [CN= 55.0: N= 3.00]
03968>        [Tp=  .25:DT= 1.00]
03969> 012:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03970>      ADD HYD            01:202            1.10      .053 No_date   12:22   23.64
03971>                       + 02:803           42.50     3.224 No_date   12:12   46.39
03972>        [DT= 1.00]  SUM=  03:804           43.60     3.261 No_date   12:12   45.81
03973> 012:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03974>      CALIB NASHYD       01:1021           4.66      .119 No_date   12:57   27.43
03975>        [CN= 55.3: N= 3.00]
03976>        [Tp=  .78:DT= 1.00]
03977> 012:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03978>      COMPUTE DUALHYD    01:1021           4.66      .119 No_date   12:57   27.43
03979>         Major System /  04:To1000         1.17      .073 No_date   12:57   27.43
03980>         Minor System \  02:To810          3.49      .046 No_date   12:16   27.43
03981> 012:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03982>      ADD HYD            02:To810          3.49      .046 No_date   12:16   27.43
03983>                       + 03:804           43.60     3.261 No_date   12:12   45.81
03984>        [DT= 1.00]  SUM=  05:810           47.08     3.296 No_date   12:12   44.45
03985> #                MAIR MILLS VILLAGE SWMF
03986> 012:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03987>      ROUTE RESERVOIR -> 05:810           47.08     3.296 No_date   12:12   44.45
03988>        [RDT= 1.00] out<- 02:1026          47.08      .645 No_date   13:09   44.45
03989>              overflow <= 03:1026OVF        .00      .000 No_date    0:00     .00
03990>        [MxStoUsed=.7458E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03991> 012:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03992>      ADD HYD            02:1026           47.08      .645 No_date   13:09   44.45
03993>                       + 03:1026OVF          .00      .000 No_date    0:00     .00
03994>        [DT= 1.00]  SUM=  05:Pond1026ou    47.08      .645 No_date   13:09   44.45
03995> #            TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
03996> 012:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03997>      DIVERT HYD      -> 05:Pond1026ou    47.08      .645 No_date   13:09   44.45
03998>              diverted <= 02:To807        17.42      .040 No_date   13:09   44.45
03999>              diverted <= 07:To809        29.44      .560 No_date   13:09   44.45
04000>              diverted <= 03:To1025         .23      .045 No_date   13:09   44.45
04001> #                  FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
04002> 012:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04003>      ADD HYD            09:1000          123.69     2.615 No_date   14:08   42.68
04004>                       + 04:To1000         1.17      .073 No_date   12:57   27.43
04005>        [DT= 1.00]  SUM=  05:Node 2       124.86     2.629 No_date   14:04   42.54
04006> #                          FLOWS TO OUTLET B
04007> 012:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04008>      CALIB NASHYD       01:207            1.22      .098 No_date   12:15   27.43
04009>        [CN= 55.3: N= 3.00]
04010>        [Tp=  .13:DT= 1.00]
04011> 012:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04012>      ADD HYD            01:207            1.22      .098 No_date   12:15   27.43
04013>                       + 02:To807          17.42      .040 No_date   13:09   44.45
04014>        [DT= 1.00]  SUM=  06:807           18.64      .138 No_date   12:15   43.33
04015> 012:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04016>      ADD HYD            03:To1025           .23      .045 No_date   13:09   44.45
04017>                       + 05:Node 2       124.86     2.629 No_date   14:04   42.54
04018>        [DT= 1.00]  SUM=  01:1025         125.09     2.629 No_date   14:04   42.54
04019> 012:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04020>      ADD HYD            07:To809           29.44      .560 No_date   13:09   44.45
04021>                       + 01:1025         125.09     2.629 No_date   14:04   42.54
04022>        [DT= 1.00]  SUM=  02:809          154.53     3.161 No_date   13:54   42.91
04023> 012:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04024>      ADD HYD            06:807            18.64      .138 No_date   12:15   43.33
04025>                       + 10:To806          10.21      .020 No_date   15:32   45.06
04026>        [DT= 1.00]  SUM=  03:806-OutB      28.84      .158 No_date   12:15   43.95
04027> #                LINKSVIEW AND CONTRIBUTING AREAS
04028> 012:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04029>      CALIB NASHYD       04:2502            5.52      .195 No_date   12:41   28.77
04030>        [CN= 58.4: N= 3.00]
04031>        [Tp=  .54:DT= 1.00]
04032> 012:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04033>      CALIB NASHYD       05:2509            5.30      .273 No_date   12:27   29.83
04034>        [CN= 59.0: N= 3.00]
04035>        [Tp=  .33:DT= 1.00]
04036> 012:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04037>      CALIB STANDHYD     06:2500           38.20     4.260 No_date   12:16   53.21
04038>        [XIMP=.30:TIMP=.50]
04039>        [LOSS= 2 :CN= 55.3]
04040>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
04041>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
04042> 012:0059----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04043>      ADD HYD            04:2502            5.52      .195 No_date   12:41   28.77
04044>                       + 05:2509            5.30      .273 No_date   12:27   29.83
04045>                       + 06:2500           38.20     4.260 No_date   12:16   53.21
04046>        [DT= 1.00]  SUM=  07:Pondin         49.02     4.581 No_date   12:16   47.93
04047> #                      LINKSVIEW SWM FACILITIY
04048> 012:0060----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04049>      ROUTE RESERVOIR -> 07:Pondin        49.02     4.581 No_date   12:16   47.93
04050>        [RDT= 1.00] out<- 08:LinkPond     49.02      .752 No_date   13:19   47.93
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```
04051>            overflow <= 09:OVF            .00     .000 No_date    0:00     .00
04052>     (MxStoUsed=.1238E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04053>  012:0061----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04054>     ADD HYD             08:LinkPond      49.02     .752 No_date   13:19   47.93
04055>                       + 09:OVF            .00     .000 No_date    0:00     .00
04056>      [DT= 1.00]  SUM=  04:Pondout       49.02     .752 No_date   13:19   47.93
04057> #                              FLOWS FROM TENTH LINE
04058>  012:0062----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04059>     CALIB STANDHYD      08:2601           .25     .055 No_date   12:12   60.55
04060>      [XIMP=.64:TIMP=.64]
04061>      [LOSS= 2 :CN= 49.0]
04062>      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
04063>      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=    .0]
04064>  012:0063----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04065>     CALIB STANDHYD      09:2602          1.30     .256 No_date   12:12   60.55
04066>      [XIMP=.64:TIMP=.64]
04067>      [LOSS= 2 :CN= 49.0]
04068>      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
04069>      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
04070>  012:0064----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04071>     COMPUTE DUALHYD     09:2602          1.30     .256 No_date   12:12   60.55
04072>       Major System /  06:Overflow         .02     .036 No_date   12:12   60.55
04073>       Minor System \  05:5yrflow         1.28     .220 No_date   12:08   60.55
04074> #                    FLOWS IN POTENTIAL FUTURE OUTLET PIPE
04075>  012:0065----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04076>     ADD HYD             04:Pondout       49.02     .752 No_date   13:19   47.93
04077>                       + 05:5yrflow        1.28     .220 No_date   12:08   60.55
04078>      [DT= 1.00]  SUM=  10:LinkPipe       50.30     .767 No_date   13:16   48.46
04079> #                    FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
04080>  012:0066----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04081>     ADD HYD             10:LinkPipe      50.30     .767 No_date   13:16   48.46
04082>                       + 02:809          154.53    3.161 No_date   13:54   42.91
04083>                       + 06:Overflow        .02     .036 No_date   12:12   60.55
04084>                       + 08:2601            .25     .055 No_date   12:12   60.55
04085>      [DT= 1.00]  SUM=  01:Node3         205.10    3.898 No_date   13:49   44.30
04086> #                    FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
04087>  012:0067----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04088>     ADD HYD             01:Node3         205.10    3.898 No_date   13:49   44.30
04089>                       + 03:806-OutB       28.84     .158 No_date   12:15   43.95
04090>      [DT= 1.00]  SUM=  04:Node4         233.94    3.965 No_date   13:49   44.26
04091>   ** END OF RUN :  12
04092>
04093> ************************************************************************
04094>
04095>
04096>
04097>
04098>
04099>  RUN:COMMAND#
04100>  013:0001----------------------------------------------------------------
04101>      START
04102>       [TZERO =    .00 hrs on        0]
04103>       [METOUT=   2    (1=imperial, 2=metric output)]
04104>       [NSTORM=   1 ]
04105>       [NRUN  =  13 ]
04106> #************************************************************************
04107> #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
04108> #  Date        : 2014 08 22
04109> #  Modified    :
04110> #  Modeller    : [A.French]
04111> #  Company     : C.F. Crozier & Associates Inc.
04112> #  License #   : 3737016
04113> #************************************************************************
04114> #************************************************************************
04115>  013:0002----------------------------------------------------------------
04116>      READ STORM
04117>       Filename = STORM.001
04118>       Comment  =
04119>       [SDT= 1.00:SDUR=  24.00:PTOT= 108.00]
04120> #              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
04121>  013:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04122>     CALIB NASHYD        01:300            4.55     .235 No_date   12:53   51.31
04123>      [CN= 71.0: N= 3.00]
04124>      [Tp=  .74:DT= 1.00]
04125>  013:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04126>     ROUTE CHANNEL   -> 01:300            4.55     .235 No_date   12:53   51.31
04127>      [RDT= 1.00] out<- 02:701            4.55     .193 No_date   13:12   51.31
04128>      [L/S/n=  450./ .050/.040]
04129>      [Vmax=  .265:Dmax=  .283]
04130>  013:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04131>     CALIB NASHYD        01:301            5.97     .348 No_date   12:45   51.31
04132>      [CN= 71.0: N= 3.00]
04133>      [Tp=  .63:DT= 1.00]
04134>  013:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04135>     ADD HYD             01:301            5.97     .348 No_date   12:45   51.31
04136>                       + 02:701            4.55     .193 No_date   13:12   51.31
04137>      [DT= 1.00]  SUM=  03:901           10.52     .511 No_date   12:54   51.31
04138>  013:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04139>     ROUTE CHANNEL   -> 03:901           10.52     .511 No_date   12:54   51.31
04140>      [RDT= 1.00] out<- 01:702           10.52     .447 No_date   13:07   51.31
04141>      [L/S/n=  300./ .050/.060]
04142>      [Vmax=  .248:Dmax=  .511]
04143>  013:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04144>     ROUTE RESERVOIR -> 01:702           10.52     .447 No_date   13:07   51.31
04145>      [RDT= 1.00] out<- 02:501           10.52     .175 No_date   14:50   51.31
04146>                       overflow <= 03:501OVF      .00     .000 No_date    0:00     .00
04147>     (MxStoUsed=.1400E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04148>  013:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04149>     CALIB STANDHYD      01:302           16.39    2.065 No_date   12:19   63.52
04150>      [XIMP=.20:TIMP=.40]
04151>      [LOSS= 2 :CN= 65.2]
04152>      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
04153>      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
04154>  013:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04155>     ADD HYD             01:302           16.39    2.065 No_date   12:19   63.52
04156>                       + 02:501           10.52     .175 No_date   14:50   51.31
04157>                       + 03:501OVF          .00     .000 No_date    0:00     .00
04158>      [DT= 1.00]  SUM=  04:902           26.91    2.149 No_date   12:19   58.75
04159>  013:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04160>     CALIB STANDHYD      01:303            2.34     .390 No_date   12:15   60.75
04161>      [XIMP=.25:TIMP=.50]
04162>      [LOSS= 2 :CN= 65.2]
04163>      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
04164>      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
04165>  013:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04166>     ADD HYD             01:303            2.34     .390 No_date   12:15   60.75
04167>                       + 04:902           26.91    2.149 No_date   12:19   58.75
04168>      [DT= 1.00]  SUM=  02:903           29.25    2.502 No_date   12:18   59.55
04169>  013:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04170>     CALIB NASHYD        01:304            2.90     .261 No_date   12:23   46.05
04171>      [CN= 66.6: N= 3.00]
04172>      [Tp=  .28:DT= 1.00]
04173>  013:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04174>     ADD HYD             01:304            2.90     .261 No_date   12:23   46.05
04175>                       + 02:903           29.25    2.502 No_date   12:18   59.55
04176>      [DT= 1.00]  SUM=  03:904           32.15    2.747 No_date   12:18   58.33
04177>  013:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04178>     CALIB STANDHYD      01:305             .31     .029 No_date   12:12   56.88
04179>      [XIMP=.20:TIMP=.20]
04180>      [LOSS= 2 :CN= 65.2]
04181>      [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=    .0]
04182>      [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
04183>  013:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04184>     ADD HYD             01:305             .31     .029 No_date   12:12   56.88
04185>                       + 03:904           32.15    2.747 No_date   12:18   58.33
04186>      [DT= 1.00]  SUM=  02:905           32.46    2.762 No_date   12:18   58.32
04187> #                     MAIR MILLS ESTATES SWM FACILITY
04188>  013:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04189>     ROUTE RESERVOIR -> 02:905           32.46    2.762 No_date   12:18   58.32
04190>      [RDT= 1.00] out<- 03:502           32.46     .411 No_date   14:20   58.32
04191>                       overflow <= 04:502OVF      .00     .000 No_date    0:00     .00
04192>     (MxStoUsed=.9147E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04193>  013:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04194>     CALIB NASHYD        01:400            5.70     .157 No_date   12:52   27.44
04195>      [CN= 50.2: N= 3.00]
04196>      [Tp=  .70:DT= 1.00]
04197>  013:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04198>     ADD HYD             01:400            5.70     .157 No_date   12:52   27.44
04199>                       + 03:502           32.46     .411 No_date   14:20   58.32
04200>                       + 04:502OVF          .00     .000 No_date    0:00     .00
04201>      [DT= 1.00]  SUM=  02:906           38.16     .482 No_date   13:43   53.70
04202> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
04203>  013:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04204>     DIVERT HYD      -> 02:906           38.16     .482 No_date   13:43   53.70
04205>              diverted <= 10:To806        8.74     .020 No_date   13:43   53.70
04206>              diverted <= 03:To1023      14.71     .231 No_date   13:43   53.70
04207>              diverted <= 01:To1022      14.71     .231 No_date   13:43   53.70
04208> #                    TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
04209> #                              FLOW AT NODE 1
04210>  013:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04211>     CALIB NASHYD        01:2501           85.82    2.792 No_date   13:59   59.74
04212>      [CN= 78.8: N= 3.00]
04213>      [Tp= 1.72:DT= 1.00]
04214>  013:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04215>     ROUTE CHANNEL   -> 01:2501           85.82    2.792 No_date   13:59   59.74
04216>      [RDT= 1.00] out<- 02:RC1            85.82    2.760 No_date   14:14   59.74
04217>      [L/S/n=  350./1.500/.030]
04218>      [Vmax=  .489:Dmax=  .991]
04219>  013:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04220>     CALIB NASHYD        01:2504            7.94     .295 No_date   12:41   30.88
04221>      [CN= 53.0: N= 3.00]
04222>      [Tp=  .55:DT= 1.00]
04223>  013:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04224>     ADD HYD             01:2504            7.94     .295 No_date   12:41   30.88
04225>                       + 02:RC1            85.82    2.760 No_date   14:14   59.74
04226>      [DT= 1.00]  SUM=  04:2501+2504       93.76    2.833 No_date   14:11   57.30
04227>  013:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04228>     ROUTE CHANNEL   -> 04:2501+2504      93.76    2.833 No_date   14:11   57.30
04229>      [RDT= 1.00] out<- 02:RC2            93.76    2.827 No_date   14:17   57.30
04230>      [L/S/n=  425./1.250/.030]
04231>      [Vmax= 1.161:Dmax=  .905]
04232>  013:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04233>     CALIB NASHYD        01:2503            7.76     .330 No_date   12:49   40.37
04234>      [CN= 62.3: N= 3.00]
04235>      [Tp=  .68:DT= 1.00]
04236>  013:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04237>     CALIB NASHYD        05:2505            6.99     .248 No_date   12:48   33.22
04238>      [CN= 54.0: N= 3.00]
04239>      [Tp=  .65:DT= 1.00]
04240>  013:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04241>     ADD HYD             01:2503            7.76     .330 No_date   12:49   40.37
04242>                       + 02:RC2            93.76    2.827 No_date   14:17   57.30
04243>                       + 05:2505           6.99     .248 No_date   12:48   33.22
04244>      [DT= 1.00]  SUM=  06:2503+2505+   108.51    3.022 No_date   14:09   54.54
04245>  013:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04246>     CALIB NASHYD        01:2506            2.50     .106 No_date   12:32   28.88
04247>      [CN= 49.0: N= 3.00]
04248>      [Tp=  .41:DT= 1.00]
04249>  013:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04250>     ADD HYD             01:2506            2.50     .106 No_date   12:32   28.88
04251>                       + 06:2503+2505+   108.51    3.022 No_date   14:09   54.54
04252>      [DT= 1.00]  SUM=  02:RC+2506        111.01    3.039 No_date   14:08   53.96
04253>  013:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04254>     ROUTE CHANNEL   -> 02:RC+2506       111.01    3.039 No_date   14:08   53.96
04255>      [RDT= 1.00] out<- 04:RC3            111.01    3.037 No_date   14:12   53.96
04256>      [L/S/n=  200./1.000/.030]
04257>      [Vmax=  .969:Dmax=  .908]
04258>  013:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04259>     CALIB NASHYD        01:2507            5.22     .182 No_date   12:40   28.88
04260>      [CN= 49.0: N= 3.00]
04261>      [Tp=  .54:DT= 1.00]
04262>  013:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04263>     ADD HYD             01:2507            5.22     .182 No_date   12:40   28.88
04264>                       + 04:RC3            111.01    3.037 No_date   14:12   53.96
04265>      [DT= 1.00]  SUM=  02:2507+RC        116.23    3.082 No_date   14:10   52.84
04266>  013:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04267>     CALIB NASHYD        01:2508            7.46     .241 No_date   12:46   29.72
04268>      [CN= 50.0: N= 3.00]
04269>      [Tp=  .63:DT= 1.00]
04270>  013:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04271>     ADD HYD             01:2508            7.46     .241 No_date   12:46   29.72
04272>                       + 02:2507+RC        116.23    3.082 No_date   14:10   52.84
04273>      [DT= 1.00]  SUM=  09:1000           123.69    3.161 No_date   14:06   51.44
04274> #                MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
04275>  013:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04276>     CALIB NASHYD        01:103             8.70     .430 No_date   12:36   36.76
04277>      [CN= 59.2: N= 3.00]
04278>      [Tp=  .48:DT= 1.00]
04279>  013:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04280>     ADD HYD             01:103             8.70     .430 No_date   12:36   36.76
04281>                       + 03:To1023         14.71     .231 No_date   13:43   53.70
04282>      [DT= 1.00]  SUM=  02:1023           23.41     .566 No_date   12:38   47.41
04283>  013:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04284>     CALIB NASHYD        01:205             1.41     .097 No_date   12:19   29.50
04285>      [CN= 51.1: N= 3.00]
04286>      [Tp=  .20:DT= 1.00]
04287>  013:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04288>     ADD HYD             01:205             1.41     .097 No_date   12:19   29.50
04289>                       + 02:1023           23.41     .566 No_date   12:38   47.41
04290>      [DT= 1.00]  SUM=  03:802            24.82     .616 No_date   12:34   46.39
04291>  013:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04292>     CALIB STANDHYD      01:201            18.41    3.504 No_date   12:12   65.82
04293>      [XIMP=.43:TIMP=.56]
04294>      [LOSS= 2 :CN= 49.0]
04295>      [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
04296>      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
04297>  013:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04298>     ADD HYD             01:201            18.41    3.504 No_date   12:12   65.82
04299>                       + 03:802            24.82     .616 No_date   12:34   46.39
04300>      [DT= 1.00]  SUM=  02:803            43.23    3.834 No_date   12:12   54.66
04301>  013:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04302>     CALIB NASHYD        01:202             1.10     .067 No_date   12:22   29.75
04303>      [CN= 55.0: N= 3.00]
04304>      [Tp=  .25:DT= 1.00]
04305>  013:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04306>     ADD HYD             01:202             1.10     .067 No_date   12:22   29.75
04307>                       + 02:803            43.23    3.834 No_date   12:12   54.66
04308>      [DT= 1.00]  SUM=  03:804            44.33    3.880 No_date   12:12   54.05
04309>  013:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04310>     CALIB NASHYD        01:1021            4.66     .148 No_date   12:57   33.86
04311>      [CN= 55.3: N= 3.00]
04312>      [Tp=  .78:DT= 1.00]
04313>  013:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04314>     COMPUTE DUALHYD     01:1021            4.66     .148 No_date   12:57   33.86
04315>       Major System /  04:To1000           1.45     .102 No_date   12:57   33.86
04316>       Minor System \  02:To810            3.21     .046 No_date   12:13   33.86
04317>  013:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04318>     ADD HYD             02:To810           3.21     .046 No_date   12:13   33.86
04319>                       + 03:804            44.33    3.880 No_date   12:12   54.05
04320>      [DT= 1.00]  SUM=  05:810            47.54    3.925 No_date   12:12   52.68
```

100 yr SCS

```
#                    MAIR MILLS VILLAGE SWMF
 013:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 05:810              47.54    3.925 No_date   12:12   52.68
        [RDT= 1.00] out<- 02:1026            47.54     .820 No_date   13:06   52.68
                  overflow <= 03:1026OVF       .00     .000 No_date    0:00     .00
        [MxStoUsed=.8412E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                02:1026       47.54     .820 No_date   13:06   52.68
                           + 03:1026OVF       .00     .000 No_date    0:00     .00
        [DT= 1.00]  SUM=  05:Pond1026ou      47.54     .820 No_date   13:06   52.68
#              TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
 013:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      DIVERT HYD       -> 05:Pond1026ou      47.54     .820 No_date   13:06   52.68
                diverted <= 02:To807         15.02     .041 No_date   13:06   52.68
                diverted <= 07:To809         29.96     .560 No_date   13:06   52.68
                diverted <= 03:To1025         2.55     .219 No_date   13:06   52.68
#                      FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
 013:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                09:1000      123.69    3.161 No_date   14:06   51.44
                           + 04:To1000      1.45     .102 No_date   12:57   33.86
        [DT= 1.00]  SUM=  05:Node 2        125.14    3.192 No_date   14:01   51.24
                                FLOWS TO OUTLET B
#
 013:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:207          1.22     .121 No_date   12:15   33.86
        [CN= 55.3: N= 3.00]
        [Tp=  .13:DT= 1.00]
 013:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:207          1.22     .121 No_date   12:15   33.86
                           + 02:To807       15.02     .041 No_date   13:06   52.68
        [DT= 1.00]  SUM=  06:807           16.24     .161 No_date   12:15   51.27
 013:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                03:To1025        2.55     .219 No_date   13:06   52.68
                           + 05:Node 2      125.14    3.192 No_date   14:01   51.24
        [DT= 1.00]  SUM=  01:1025          127.70    3.343 No_date   13:53   51.27
 013:0054--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                07:To809        29.96     .560 No_date   13:06   52.68
                           + 01:1025        127.70    3.343 No_date   13:53   51.27
        [DT= 1.00]  SUM=  02:809           157.66    3.903 No_date   13:53   51.54
 013:0055--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                06:807          16.24     .161 No_date   12:15   51.27
                           + 10:To806         8.74     .020 No_date   13:43   53.70
        [DT= 1.00]  SUM=  03:806-OutB        24.98     .181 No_date   12:15   52.12
#                      LINKSVIEW AND CONTRIBUTING AREAS
 013:0056--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           04:2502         5.52     .242 No_date   12:40   35.57
        [CN= 58.4: N= 3.00]
        [Tp=  .54:DT= 1.00]
 013:0057--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           05:2509         5.30     .338 No_date   12:26   36.76
        [CN= 59.0: N= 3.00]
        [Tp=  .33:DT= 1.00]
 013:0058--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD         06:2500        38.20    5.125 No_date   12:16   62.20
        [XIMP=.30:TIMP=.50]
        [LOSS= 2 :CN= 55.3]
        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 305.:MNI=.013:SCI=    .0]
 013:0059--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                04:2502         5.52     .242 No_date   12:40   35.57
                           + 05:2509         5.30     .338 No_date   12:26   36.76
                           + 06:2500        38.20    5.125 No_date   12:16   62.20
        [DT= 1.00]  SUM=  07:Pondin        49.02    5.527 No_date   12:16   56.45
#                                LINKSVIEW SWM FACILITIY
 013:0060--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 07:Pondin         49.02    5.527 No_date   12:16   56.45
        [RDT= 1.00] out<- 08:LinkPond      49.02     .945 No_date   13:15   56.45
                  overflow <= 09:OVF           .00     .000 No_date    0:00     .00
        [MxStoUsed=.1436E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0061--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                08:LinkPond      49.02     .945 No_date   13:15   56.45
                           + 09:OVF             .00     .000 No_date    0:00     .00
        [DT= 1.00]  SUM=  04:Pondout       49.02     .945 No_date   13:15   56.45
#                              FLOWS FROM TENTH LINE
 013:0062--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD         08:2601          .25     .063 No_date   12:12   78.24
        [XIMP=.64:TIMP=.64]
        [LOSS= 2 :CN= 49.0]
        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 48.:MNI=.013:SCI=    .0]
 013:0063--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD         09:2602          1.30     .296 No_date   12:12   78.24
        [XIMP=.64:TIMP=.64]
        [LOSS= 2 :CN= 49.0]
        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
 013:0064--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      COMPUTE DUALHYD        09:2602          1.30     .296 No_date   12:12   78.24
        Major System /  06:Overflow          .04     .076 No_date   12:12   78.24
        Minor System \  05:Syrflow           1.26     .220 No_date   12:06   78.24
#                      FLOWS IN POTENTIAL FUTURE OUTLET PIPE
 013:0065--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                04:Pondout       49.02     .945 No_date   13:15   56.45
                           + 05:Syrflow         1.26     .220 No_date   12:06   78.24
        [DT= 1.00]  SUM=  10:LinkPipe        50.28     .965 No_date   13:13   57.00
#                      FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
 013:0066--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                10:LinkPipe      50.28     .965 No_date   13:13   57.00
                           + 02:809          157.66    3.903 No_date   13:53   51.54
                           + 06:Overflow         .04     .076 No_date   12:12   78.24
                           + 08:2601             .25     .063 No_date   12:12   78.24
        [DT= 1.00]  SUM=  01:Node3         208.23    4.821 No_date   13:45   52.89
#                      FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
 013:0067--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:Node3         208.23    4.821 No_date   13:45   52.89
                           + 03:806-OutB        24.98     .181 No_date   12:15   52.12
        [DT= 1.00]  SUM=  04:Node4         233.21    4.891 No_date   13:45   52.81
   ** END OF RUN :  13

 ***********************************************************************************

                                  Timmins

 RUN:COMMAND#
 014:0001--------------------------------------------------------------------------
      START
        [TZERO =    .00 hrs on       0]
        [METOUT=   2    (1=imperial, 2=metric output)]
        [NSTORM=   1 ]
        [NRUN  =  14 ]
 #*****************************************************************************
 #  Project Name: [Linksview Post-Development]  Project Number: [183-2687]
 #  Date        : 2014 08 22
 #  Modified    :
 #  Modeller    : [A.French]
 #  Company     : C.F. Crozier & Associates Inc.
 #  License #   : 3737016
 #*****************************************************************************
 #*****************************************************************************
 014:0002--------------------------------------------------------------------------
      READ STORM
        Filename = STORM.001
        Comment  =
        [SDT=60.00:SDUR=  12.00:PTOT= 193.00]

#              MAIR MILLS ESTATES AND CONTRIBUTING AREAS
 014:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:300          4.55     .301 No_date    7:27   121.15
        [CN= 71.0: N= 3.00]
        [Tp=  .74:DT= 1.00]
 014:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE CHANNEL    -> 01:300          4.55     .301 No_date    7:27   121.15
        [RDT= 1.00] out<- 02:701          4.55     .274 No_date    7:45   121.15
        [L/S/n=  450./ .050/.040]
        [Vmax=  .288:Dmax=  .317]
 014:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:301          5.97     .420 No_date    7:19   121.15
        [CN= 71.0: N= 3.00]
        [Tp=  .63:DT= 1.00]
 014:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:301          5.97     .420 No_date    7:19   121.15
                           + 02:701          4.55     .274 No_date    7:45   121.15
        [DT= 1.00]  SUM=  03:901          10.52     .677 No_date    7:27   121.15
 014:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE CHANNEL    -> 03:901          10.52     .677 No_date    7:27   121.15
        [RDT= 1.00] out<- 01:702          10.52     .637 No_date    7:39   121.15
        [L/S/n=  300./ .050/.060]
        [Vmax=  .279:Dmax=  .570]
 014:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 01:702          10.52     .637 No_date    7:39   121.15
        [RDT= 1.00] out<- 02:501          10.52     .193 No_date   12:44   121.15
                  overflow <= 03:501OVF        .00     .000 No_date    0:00     .00
        [MxStoUsed=.6122E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 014:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD         01:302         16.39    1.423 No_date    7:04   136.79
        [XIMP=.20:TIMP=.40]
        [LOSS= 2 :CN= 65.2]
        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
        [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
 014:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:302         16.39    1.423 No_date    7:04   136.79
                           + 02:501          10.52     .193 No_date   12:44   121.15
                           + 03:501OVF         .00     .000 No_date    0:00     .00
        [DT= 1.00]  SUM=  04:902           26.91    1.595 No_date    7:04   130.67
 014:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD         01:303          2.34     .224 No_date    7:01   144.22
        [XIMP=.25:TIMP=.50]
        [LOSS= 2 :CN= 65.2]
        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
        [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
 014:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:303          2.34     .224 No_date    7:01   144.22
                           + 04:902          26.91    1.595 No_date    7:04   130.67
        [DT= 1.00]  SUM=  02:903           29.25    1.817 No_date    7:03   131.75
 014:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:304          2.90     .230 No_date    7:03   112.07
        [CN= 66.6: N= 3.00]
        [Tp=  .28:DT= 1.00]
 014:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:304          2.90     .230 No_date    7:03   112.07
                           + 02:903          29.25    1.817 No_date    7:03   131.75
        [DT= 1.00]  SUM=  03:904           32.15    2.047 No_date    7:03   129.98
 014:0015--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD         01:305           .31     .023 No_date    7:00   125.69
        [XIMP=.20:TIMP=.20]
        [LOSS= 2 :CN= 65.2]
        [Pervious    area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
        [Impervious  area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
 014:0016--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:305           .31     .023 No_date    7:00   125.69
                           + 03:904         32.15    2.047 No_date    7:03   129.98
        [DT= 1.00]  SUM=  02:905           32.46    2.066 No_date    7:03   129.94
#                      MAIR MILLS ESTATES SWM FACILITY
 014:0017--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 02:905          32.46    2.066 No_date    7:03   129.94
        [RDT= 1.00] out<- 03:502          32.46    1.385 No_date    7:42   129.94
                  overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
        [MxStoUsed=.1190E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 014:0018--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:400          5.70     .238 No_date    7:27    76.99
        [CN= 50.2: N= 3.00]
        [Tp=  .70:DT= 1.00]
 014:0019--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:400          5.70     .238 No_date    7:27    76.99
                           + 03:502          32.46    1.385 No_date    7:42   129.94
                           + 04:502OVF         .00     .000 No_date    0:00     .00
        [DT= 1.00]  SUM=  02:906           38.16    1.617 No_date    7:40   122.03
#              FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
 014:0020--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      DIVERT HYD       -> 02:906          38.16    1.617 No_date    7:40   122.03
                diverted <= 10:To806         4.28     .020 No_date    7:40   122.03
                diverted <= 03:To1023       16.94     .799 No_date    7:40   122.03
                diverted <= 01:To1022       16.94     .799 No_date    7:40   122.03
#                      TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
#                                FLOW AT NODE 1
 014:0021--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:2501        85.82    4.743 No_date    9:24   135.47
        [CN= 78.8: N= 3.00]
        [Tp= 1.72:DT= 1.00]
 014:0022--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE CHANNEL    -> 01:2501        85.82    4.743 No_date    9:24   135.47
        [RDT= 1.00] out<- 02:RC1          85.82    4.728 No_date    9:35   135.47
        [L/S/n=  350./1.500/.030]
        [Vmax=  .493:Dmax= 1.084]
 014:0023--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:2504         7.94     .395 No_date    7:16    83.60
        [CN= 53.0: N= 3.00]
        [Tp=  .55:DT= 1.00]
 014:0024--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:2504         7.94     .395 No_date    7:16    83.60
                           + 02:RC1          85.82    4.728 No_date    9:35   135.47
        [DT= 1.00]  SUM=  04:2501+2504     93.76    5.002 No_date    9:27   131.09
 014:0025--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE CHANNEL    -> 04:2501+2504     93.76    5.002 No_date    9:27   131.09
        [RDT= 1.00] out<- 02:RC2          93.76    4.998 No_date    9:32   131.09
        [L/S/n=  425./1.250/.030]
        [Vmax= 1.250:Dmax= 1.041]
 014:0026--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:2503         7.76     .443 No_date    7:24   102.24
        [CN= 62.3: N= 3.00]
        [Tp=  .68:DT= 1.00]
 014:0027--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           05:2505         6.99     .341 No_date    7:23    87.41
        [CN= 54.0: N= 3.00]
        [Tp=  .65:DT= 1.00]
 014:0028--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:2503         7.76     .443 No_date    7:24   102.24
                           + 02:RC2          93.76    4.998 No_date    9:32   131.09
                           + 05:2505          6.99     .341 No_date    7:23    87.41
        [DT= 1.00]  SUM=  06:2503+2505+    108.51    5.591 No_date    9:22   126.22
 014:0029--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD           01:2506         2.50     .126 No_date    7:09    78.13
        [CN= 49.0: N= 3.00]
        [Tp=  .41:DT= 1.00]
 014:0030--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD                01:2506         2.50     .126 No_date    7:09    78.13
                           + 06:2503+2505+    108.51    5.591 No_date    9:22   126.22
        [DT= 1.00]  SUM=  02:RC+2506       111.01    5.673 No_date    9:20   125.14
 014:0031--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE CHANNEL    -> 02:RC+2506       111.01    5.673 No_date    9:20   125.14
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04591>       [RDT= 1.00] out<- 04:RC3          111.01    5.671 No_date    9:24  125.14
04592>       [L/S/n=  200./1.000/.030]
04593>       [Vmax= 1.063:Dmax= 1.051]
04594>  014:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04595>      CALIB NASHYD        01:2507           5.22     .241 No_date    7:16   78.13
04596>       [CN= 49.0: N= 3.00]
04597>       [Tp=  .54:DT= 1.00]
04598>  014:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04599>      ADD HYD             01:2507           5.22     .241 No_date    7:16   78.13
04600>                        + 04:RC3          111.01    5.671 No_date    9:24  125.14
04601>       [DT= 1.00]  SUM=  02:2507+RC       116.23    5.848 No_date    9:21  123.02
04602>  014:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04603>      CALIB NASHYD        01:2508           7.46     .334 No_date    7:22   79.96
04604>       [CN= 50.0: N= 3.00]
04605>       [Tp=  .63:DT= 1.00]
04606>  014:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04607>      ADD HYD             01:2508           7.46     .334 No_date    7:22   79.96
04608>                        + 02:2507+RC       116.23    5.848 No_date    9:21  123.02
04609>       [DT= 1.00]  SUM=  09:1000          123.69    6.111 No_date    9:20  120.43
04610> #                  MAIR MILLS VILLAGE AND CONTRIBUTING AREAS
04611>  014:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04612>      CALIB NASHYD        01:103            8.70     .523 No_date    7:12   95.57
04613>       [CN= 59.2: N= 3.00]
04614>       [Tp=  .48:DT= 1.00]
04615>  014:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04616>      ADD HYD             01:103            8.70     .523 No_date    7:12   95.57
04617>                        + 03:To1023        16.94     .799 No_date    7:40  122.03
04618>       [DT= 1.00]  SUM=  02:1023          25.64    1.260 No_date    7:28  113.05
04619>  014:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04620>      CALIB NASHYD        01:205            1.41     .082 No_date    7:02   80.43
04621>       [CN= 51.1: N= 3.00]
04622>       [Tp=  .20:DT= 1.00]
04623>  014:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04624>      ADD HYD             01:205            1.41     .082 No_date    7:02   80.43
04625>                        + 02:1023          25.64    1.260 No_date    7:28  113.05
04626>       [DT= 1.00]  SUM=  03:802           27.05    1.309 No_date    7:26  111.35
04627>  014:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04628>      CALIB STANDHYD      01:201            18.41    1.622 No_date    7:00  134.10
04629>       [XIMP=.43:TIMP=.56]
04630>       [LOSS= 2 :CN= 49.0]
04631>       [Pervious      area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
04632>       [Impervious    area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
04633>  014:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04634>      ADD HYD             01:201            18.41    1.622 No_date    7:00  134.10
04635>                        + 03:802           27.05    1.309 No_date    7:26  111.35
04636>       [DT= 1.00]  SUM=  02:803           45.46    2.742 No_date    7:01  120.56
04637>  014:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04638>      CALIB NASHYD        01:202            1.10     .066 No_date    7:03   83.47
04639>       [CN= 55.0: N= 3.00]
04640>       [Tp=  .25:DT= 1.00]
04641>  014:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04642>      ADD HYD             01:202            1.10     .066 No_date    7:03   83.47
04643>                        + 02:803           45.46    2.742 No_date    7:01  120.56
04644>       [DT= 1.00]  SUM=  03:804           46.56    2.808 No_date    7:01  119.68
04645>  014:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04646>      CALIB NASHYD        01:1021           4.66     .217 No_date    7:33   89.14
04647>       [CN= 55.3: N= 3.00]
04648>       [Tp=  .78:DT= 1.00]
04649>  014:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04650>      COMPUTE DUALHYD     01:1021           4.66     .217 No_date    7:33   89.14
04651>         Major System /   04:To1000          2.76     .171 No_date    7:33   89.14
04652>         Minor System \   02:To810           1.90     .046 No_date    5:49   89.14
04653>  014:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04654>      ADD HYD             02:To810          1.90     .046 No_date    5:49   89.14
04655>                        + 03:804           46.56    2.808 No_date    7:01  119.68
04656>       [DT= 1.00]  SUM=  05:810           48.47    2.854 No_date    7:01  118.49
04657> #                  MAIR MILLS VILLAGE SWMF
04658>  014:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04659>      ROUTE RESERVOIR -> 05:810          48.47    2.854 No_date    7:01  118.49
04660>       [RDT= 1.00] out<- 02:1026         48.47    2.733 No_date    7:05  118.48
04661>                overflow <= 03:1026OVF      .00     .000 No_date    0:00     .00
04662>       [MxStoUsed=.9883E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04663>  014:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04664>      ADD HYD             02:1026           48.47    2.733 No_date    7:05  118.48
04665>                        + 03:1026OVF        .00     .000 No_date    0:00     .00
04666>       [DT= 1.00]  SUM=  05:Pond1026ou     48.47    2.733 No_date    7:05  118.48
04667> #            TENTH LINE DITCH FLOW SPLIT (OUTLETS A AND B)
04668>  014:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04669>   *  DIVERT HYD       -> 05:Pond1026ou     48.47    2.733 No_date    7:05  118.48
04670>                diverted <= 02:To807        7.76     .050 No_date    7:05  118.48
04671>                diverted <= 07:To809       19.31     .561 No_date    7:05  118.48
04672>                diverted <= 03:To1025      21.39    2.122 No_date    7:05  118.48
04673> #                     FLOWS TO OUTLET A/ NODE 2(UPSTREAM OF TENTH LINE)
04674>  014:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04675>      ADD HYD             09:1000          123.69    6.111 No_date    9:20  120.43
04676>                        + 04:To1000          2.76     .171 No_date    7:33   89.14
04677>       [DT= 1.00]  SUM=  05:Node 2        126.45    6.249 No_date    9:19  119.75
04678> #                              FLOWS TO OUTLET B
04679>  014:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04680>      CALIB NASHYD        01:207            1.22     .081 No_date    7:01   89.14
04681>       [CN= 55.3: N= 3.00]
04682>       [Tp=  .13:DT= 1.00]
04683>  014:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04684>      ADD HYD             01:207            1.22     .081 No_date    7:01   89.14
04685>                        + 02:To807          7.76     .050 No_date    7:05  118.48
04686>       [DT= 1.00]  SUM=  06:807            8.98     .130 No_date    7:01  114.49
04687>  014:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04688>      ADD HYD             03:To1025         21.39    2.122 No_date    7:05  118.48
04689>                        + 05:Node 2        126.45    6.249 No_date    9:19  119.75
04690>       [DT= 1.00]  SUM=  01:1025          147.84    7.779 No_date    9:05  119.56
04691>  014:0054----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04692>      ADD HYD             07:To809          19.31     .561 No_date    7:05  118.48
04693>                        + 01:1025          147.84    7.779 No_date    9:05  119.56
04694>       [DT= 1.00]  SUM=  02:809           167.15    8.339 No_date    9:05  119.44
04695>  014:0055----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04696>      ADD HYD             06:807            8.98     .130 No_date    7:01  114.49
04697>                        + 10:To806          4.28     .020 No_date    7:40  122.03
04698>       [DT= 1.00]  SUM=  03:806-OutB       13.26     .150 No_date    7:01  116.92
04699> #                     LINKSVIEW AND CONTRIBUTING AREAS
04700>  014:0056----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04701>      CALIB NASHYD        04:2502           5.52     .312 No_date    7:15   93.49
04702>       [CN= 58.4: N= 3.00]
04703>       [Tp=  .54:DT= 1.00]
04704>  014:0057----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04705>      CALIB NASHYD        05:2509           5.30     .348 No_date    7:05   95.44
04706>       [CN= 59.0: N= 3.00]
04707>       [Tp=  .33:DT= 1.00]
04708>  014:0058----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04709>      CALIB STANDHYD      06:2500          38.20    3.215 No_date    7:02  132.04
04710>       [XIMP=.30:TIMP=.50]
04711>       [LOSS= 2 :CN= 55.3]
04712>       [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04713>       [Impervious    area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
04714>  014:0059----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04715>      ADD HYD             04:2502           5.52     .312 No_date    7:15   93.49
04716>                        + 05:2509           5.30     .348 No_date    7:05   95.44
04717>                        + 06:2500          38.20    3.215 No_date    7:02  132.04
04718>       [DT= 1.00]  SUM=  07:Pondin         49.02    3.854 No_date    7:03  123.74
04719> #                              LINKSVIEW SWM FACILTIY
04720>  014:0060----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04721>      ROUTE RESERVOIR -> 07:Pondin         49.02    3.854 No_date    7:03  123.74
04722>       [RDT= 1.00] out<- 08:LinkPond       49.02    1.816 No_date    9:31  123.74
04723>                overflow <= 09:OVF           .00     .000 No_date    0:00     .00
04724>       [MxStoUsed=.2554E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04725>  014:0061----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04726>      ADD HYD             08:LinkPond       49.02    1.816 No_date    9:31  123.74
04727>                        + 09:OVF             .00     .000 No_date    0:00     .00
04728>       [DT= 1.00]  SUM=  04:Pondout         49.02    1.816 No_date    9:31  123.74
04729> #                              FLOWS FROM TENTH LINE
04730>  014:0062----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04731>      CALIB STANDHYD      08:2601            .25     .024 No_date    7:00  150.37
04732>       [XIMP=.64:TIMP=.64]
04733>       [LOSS= 2 :CN= 49.0]
04734>       [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
04735>       [Impervious    area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
04736>  014:0063----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04737>      CALIB STANDHYD      09:2602           1.30     .126 No_date    7:00  150.37
04738>       [XIMP=.64:TIMP=.64]
04739>       [LOSS= 2 :CN= 49.0]
04740>       [Pervious      area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
04741>       [Impervious    area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
04742>  014:0064----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04743>      COMPUTE DUALHYD     09:2602           1.30     .126 No_date    7:00  150.37
04744>         Major System /   06:Overflow         .00     .000 No_date    0:00     .00
04745>         Minor System \   05:5yrflow         1.30     .126 No_date    7:00  150.37
04746> #                  FLOWS IN POTENTIAL FUTURE OUTLET PIPE
04747>  014:0065----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04748>      ADD HYD             04:Pondout        49.02    1.816 No_date    9:31  123.74
04749>                        + 05:5yrflow         1.30     .126 No_date    7:00  150.37
04750>       [DT= 1.00]  SUM=  10:LinkPipe        50.32    1.858 No_date    9:28  124.42
04751> #                  FLOWS TO OUTLET A/NODE 3 (DOWNSTREAM OF TENTH LINE)
04752>  014:0066----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04753>      ADD HYD             10:LinkPipe       50.32    1.858 No_date    9:28  124.42
04754>                        + 02:809           167.15    8.339 No_date    9:05  119.44
04755>                        + 06:Overflow         .00     .000 No_date    0:00     .00
04756>                        + 08:2601             .25     .024 No_date    7:00  150.37
04757>       [DT= 1.00]  SUM=  01:Node3         217.72   10.195 No_date    9:05  120.62
04758> #                  FLOWS TO NODE 4 (SUM OF OUTLETS A AND B)
04759>  014:0067----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04760>      ADD HYD             01:Node3         217.72   10.195 No_date    9:05  120.62
04761>                        + 03:806-OutB       13.26     .150 No_date    7:01  116.92
04762>       [DT= 1.00]  SUM=  04:Node4         230.98   10.311 No_date    9:04  120.41
04763>  014:0002----------------------------------------------------------------------
04764>      FINISH
04765> ------------------------------------------------------------------------------
04766> ******************************************************************************
04767>      WARNINGS / ERRORS / NOTES
04768>      -------------------------
04769>  014:0049 DIVERT HYD      ->
04770>       *** WARNING: Outflow tables were exceeded.
04771>   Simulation ended on 2014-10-17     at 13:50:43
04772> ------------------------------------------------------------------------------
04773>
04774>
```

CROZIER & ASSOCIATES
Consulting Engineers

**Project:** Linksview
**Project No.:** 183-2687
**Design by:** KW
**Date:** 10-Oct-14

## LINKSVIEW POND HYDRAULIC DESIGN

| | | | |
|---|---|---|---|
| ED Orifice Diameter: | 0.235 m | Emergency Spill Elev. | 197.8 m |
| ED Orifice Invert Elevation: | 195.25 m | Emerg Spill Bot. Width | 25 m |
| Outlet Orifice Diameter | 0.730 m | Trap. Side Slopes | 6 :1 H:V |
| Outlet Orifice Invert Elevation: | 196.00 m | | |
| Rect Weir Invert | 197.00 m | | |
| Rect Weir Width | 0.20 | | |

| Elev. | Depth Above PP | Area | Storage Volume | 1st Orifice Discharge | 2nd Orifice Discharge | Rect Weir Discharge | Emerg. Weir Ave. Width | Emerg. Weir Discharge | Total Discharge | Storage |
|---|---|---|---|---|---|---|---|---|---|---|
| (m) | (m) | (sqm) | (cu.m) | (cu.m/s) | (cu.m/s) | (cu.m/s) | (m) | (cu.m/s) | (cu.m/s) | (ha-m) |
| | | | | | | | | | | 0 |
| 195.25 | 0.00 | 6579 | 0 | 0.0000 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.000 | 0.000 |
| 195.30 | 0.05 | 6724 | 333 | 0.0000 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.000 | 0.033 |
| 195.35 | 0.10 | 6869 | 672 | 0.0000 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.000 | 0.067 |
| 195.40 | 0.15 | 7013 | 1019 | 0.0222 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.022 | 0.102 |
| 195.45 | 0.20 | 7158 | 1374 | 0.0353 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.035 | 0.137 |
| 195.50 | 0.25 | 7303 | 1735 | 0.0448 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.045 | 0.174 |
| 195.55 | 0.30 | 7448 | 2104 | 0.0525 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.053 | 0.210 |
| 195.60 | 0.35 | 7593 | 2480 | 0.0593 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.059 | 0.248 |
| 195.65 | 0.40 | 7737 | 2863 | 0.0654 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.065 | 0.286 |
| 195.70 | 0.45 | 7882 | 3254 | 0.0709 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.071 | 0.325 |
| 195.75 | 0.50 | 8027 | 3652 | 0.0760 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.076 | 0.365 |
| 195.80 | 0.55 | 8172 | 4056 | 0.0809 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.081 | 0.406 |
| 195.85 | 0.60 | 8317 | 4469 | 0.0854 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.085 | 0.447 |
| 195.90 | 0.65 | 8461 | 4888 | 0.0897 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.090 | 0.489 |
| 195.95 | 0.70 | 8606 | 5315 | 0.0938 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.094 | 0.531 |
| 196.00 | 0.75 | 8751 | 5749 | 0.0978 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.098 | 0.575 |
| 196.05 | 0.80 | 8898 | 6190 | 0.1016 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.102 | 0.619 |
| 196.10 | 0.85 | 9046 | 6639 | 0.1052 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.105 | 0.664 |
| 196.15 | 0.90 | 9193 | 7095 | 0.1088 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.109 | 0.709 |
| 196.20 | 0.95 | 9341 | 7558 | 0.1122 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.112 | 0.756 |
| 196.25 | 1.00 | 9488 | 8029 | 0.1155 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.116 | 0.803 |
| 196.30 | 1.05 | 9636 | 8507 | 0.1187 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.119 | 0.851 |
| 196.35 | 1.10 | 9783 | 8992 | 0.1219 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.122 | 0.899 |
| 196.40 | 1.15 | 9931 | 9485 | 0.1249 | 0.2220 | 0.0000 | 0.00 | 0.000 | 0.347 | 0.949 |
| 196.45 | 1.20 | 10078 | 9985 | 0.1279 | 0.3459 | 0.0000 | 0.00 | 0.000 | 0.474 | 0.999 |
| 196.50 | 1.25 | 10226 | 10493 | 0.1309 | 0.4359 | 0.0000 | 0.00 | 0.000 | 0.567 | 1.049 |
| 196.55 | 1.30 | 10373 | 11008 | 0.1337 | 0.5103 | 0.0000 | 0.00 | 0.000 | 0.644 | 1.101 |
| 196.60 | 1.35 | 10520 | 11530 | 0.1365 | 0.5752 | 0.0000 | 0.00 | 0.000 | 0.712 | 1.153 |
| 196.65 | 1.40 | 10668 | 12060 | 0.1392 | 0.6334 | 0.0000 | 0.00 | 0.000 | 0.773 | 1.206 |
| 196.70 | 1.45 | 10815 | 12597 | 0.1419 | 0.6867 | 0.0000 | 0.00 | 0.000 | 0.829 | 1.260 |
| 196.75 | 1.50 | 10963 | 13141 | 0.1446 | 0.7362 | 0.0000 | 0.00 | 0.000 | 0.881 | 1.314 |
| 196.80 | 1.55 | 11110 | 13693 | 0.1472 | 0.7825 | 0.0000 | 0.00 | 0.000 | 0.930 | 1.369 |
| 196.85 | 1.60 | 11258 | 14252 | 0.1497 | 0.8263 | 0.0000 | 0.00 | 0.000 | 0.976 | 1.425 |
| 196.90 | 1.65 | 11405 | 14819 | 0.1522 | 0.8678 | 0.0000 | 0.00 | 0.000 | 1.020 | 1.482 |
| 196.95 | 1.70 | 11553 | 15393 | 0.1547 | 0.9075 | 0.0000 | 0.00 | 0.000 | 1.062 | 1.539 |
| 197.00 | 1.75 | 11700 | 15974 | 0.1571 | 0.9455 | 0.0000 | 0.00 | 0.000 | 1.103 | 1.597 |
| 197.05 | 1.80 | 11817 | 16562 | 0.1595 | 0.9820 | 0.0038 | 0.00 | 0.000 | 1.145 | 1.656 |
| 197.10 | 1.85 | 11933 | 17156 | 0.1618 | 1.0172 | 0.0108 | 0.00 | 0.000 | 1.190 | 1.716 |
| 197.15 | 1.90 | 12050 | 17755 | 0.1642 | 1.0512 | 0.0198 | 0.00 | 0.000 | 1.235 | 1.776 |
| 197.20 | 1.95 | 12166 | 18361 | 0.1664 | 1.0842 | 0.0304 | 0.00 | 0.000 | 1.281 | 1.836 |
| 197.25 | 2.00 | 12283 | 18972 | 0.1687 | 1.1162 | 0.0425 | 0.00 | 0.000 | 1.327 | 1.897 |
| 197.30 | 2.05 | 12400 | 19589 | 0.1709 | 1.1473 | 0.0559 | 0.00 | 0.000 | 1.374 | 1.959 |
| 197.35 | 2.10 | 12516 | 20212 | 0.1731 | 1.1776 | 0.0704 | 0.00 | 0.000 | 1.421 | 2.021 |
| 197.40 | 2.15 | 12633 | 20841 | 0.1753 | 1.2071 | 0.0860 | 0.00 | 0.000 | 1.468 | 2.084 |
| 197.45 | 2.20 | 12749 | 21475 | 0.1774 | 1.2359 | 0.1026 | 0.00 | 0.000 | 1.516 | 2.148 |
| 197.50 | 2.25 | 12866 | 22116 | 0.1796 | 1.2640 | 0.1202 | 0.00 | 0.000 | 1.564 | 2.212 |
| 197.55 | 2.30 | 12983 | 22762 | 0.1816 | 1.2916 | 0.1387 | 0.00 | 0.000 | 1.612 | 2.276 |
| 197.60 | 2.35 | 13099 | 23414 | 0.1837 | 1.3186 | 0.1580 | 0.00 | 0.000 | 1.660 | 2.341 |
| 197.65 | 2.40 | 13216 | 24072 | 0.1858 | 1.3450 | 0.1782 | 0.00 | 0.000 | 1.709 | 2.407 |
| 197.70 | 2.45 | 13332 | 24736 | 0.1878 | 1.3709 | 0.1991 | 0.00 | 0.000 | 1.758 | 2.474 |
| 197.75 | 2.50 | 13449 | 25405 | 0.1898 | 1.3963 | 0.2208 | 0.00 | 0.000 | 1.807 | 2.541 |
| 197.80 | 2.55 | 13565 | 26080 | 0.1918 | 1.4213 | 0.2433 | 25.00 | 0.000 | 1.856 | 2.608 |
| 197.85 | 2.60 | 13682 | 26762 | 0.1937 | 1.4459 | 0.2664 | 25.30 | 0.441 | 2.347 | 2.676 |
| 197.90 | 2.65 | 13799 | 27449 | 0.1957 | 1.4700 | 0.2903 | 25.60 | 1.263 | 3.219 | 2.745 |
| 197.95 | 2.70 | 13915 | 28141 | 0.1976 | 1.4938 | 0.3148 | 25.90 | 2.347 | 4.353 | 2.814 |
| 198.00 | 2.75 | 14032 | 28840 | 0.1995 | 1.5171 | 0.3400 | 26.20 | 3.656 | 5.712 | 2.884 |
| 198.05 | 2.80 | 14148 | 29545 | 0.2014 | 1.5402 | 0.3658 | 26.50 | 5.168 | 7.275 | 2.954 |
| 198.10 | 2.85 | 14265 | 30255 | 0.2033 | 1.5628 | 0.3923 | 26.80 | 6.870 | 9.028 | 3.026 |

# APPENDIX C

## Ultimate Development Hydrologic Modeling and SWM Design

CROZIER & ASSOCIATES
Consulting Engineers

**Project:** Linksview
**Project No.:** 183-2687
**Design by:** KW
**Date:** 10-Oct-14

## LINKSVIEW POND HYDRAULIC DESIGN

ED Orifice Diameter: 0.235 m
ED Orifice Invert Elevation: 195.25 m
Outlet Orifice Diameter 0.730 m
Outlet Orifice Invert Elevation: 196.00 m
Rect Weir Invert 197.00 m
Rect Weir Width 0.20

Emergency Spill Elev. 197.8 m
Emerg Spill Bot. Width 25 m
Trap. Side Slopes 6 :1 H:V

| Elev. | Depth Above PP | Area | Storage Volume | 1st Orifice Discharge | 2nd Orifice Discharge | Rect Weir Discharge | Emerg. Weir Ave. Width | Emerg. Weir Discharge | Total Discharge | Storage |
|---|---|---|---|---|---|---|---|---|---|---|
| (m) | (m) | (sqm) | (cu.m) | (cu.m/s) | (cu.m/s) | (cu.m/s) | (m) | (cu.m/s) | (cu.m/s) | (ha-m) |
| 195.25 | 0.00 | 6579 | 0 | 0.0000 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.000 | 0 |
| 195.30 | 0.05 | 6724 | 333 | 0.0000 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.000 | 0.000 |
| 195.35 | 0.10 | 6869 | 672 | 0.0000 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.000 | 0.033 |
| 195.40 | 0.15 | 7013 | 1019 | 0.0222 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.000 | 0.067 |
| 195.45 | 0.20 | 7158 | 1374 | 0.0353 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.022 | 0.102 |
| 195.50 | 0.25 | 7303 | 1735 | 0.0448 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.035 | 0.137 |
| 195.55 | 0.30 | 7448 | 2104 | 0.0525 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.045 | 0.174 |
| 195.60 | 0.35 | 7593 | 2480 | 0.0593 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.053 | 0.210 |
| 195.65 | 0.40 | 7737 | 2863 | 0.0654 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.059 | 0.248 |
| 195.70 | 0.45 | 7882 | 3254 | 0.0709 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.065 | 0.286 |
| 195.75 | 0.50 | 8027 | 3652 | 0.0760 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.071 | 0.325 |
| 195.80 | 0.55 | 8172 | 4056 | 0.0809 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.076 | 0.365 |
| 195.85 | 0.60 | 8317 | 4469 | 0.0854 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.081 | 0.406 |
| 195.90 | 0.65 | 8461 | 4888 | 0.0897 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.085 | 0.447 |
| 195.95 | 0.70 | 8606 | 5315 | 0.0938 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.090 | 0.489 |
| 196.00 | 0.75 | 8751 | 5749 | 0.0978 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.094 | 0.531 |
| 196.05 | 0.80 | 8898 | 6190 | 0.1016 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.098 | 0.575 |
| 196.10 | 0.85 | 9046 | 6639 | 0.1052 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.102 | 0.619 |
| 196.15 | 0.90 | 9193 | 7095 | 0.1088 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.105 | 0.664 |
| 196.20 | 0.95 | 9341 | 7558 | 0.1122 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.109 | 0.709 |
| 196.25 | 1.00 | 9488 | 8029 | 0.1155 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.112 | 0.756 |
| 196.30 | 1.05 | 9636 | 8507 | 0.1187 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.116 | 0.803 |
| 196.35 | 1.10 | 9783 | 8992 | 0.1219 | 0.0000 | 0.0000 | 0.00 | 0.000 | 0.119 | 0.851 |
| 196.40 | 1.15 | 9931 | 9485 | 0.1249 | 0.2220 | 0.0000 | 0.00 | 0.000 | 0.122 | 0.899 |
| 196.45 | 1.20 | 10078 | 9985 | 0.1279 | 0.3459 | 0.0000 | 0.00 | 0.000 | 0.347 | 0.949 |
| 196.50 | 1.25 | 10226 | 10493 | 0.1309 | 0.4359 | 0.0000 | 0.00 | 0.000 | 0.474 | 0.999 |
| 196.55 | 1.30 | 10373 | 11008 | 0.1337 | 0.5103 | 0.0000 | 0.00 | 0.000 | 0.567 | 1.049 |
| 196.60 | 1.35 | 10520 | 11530 | 0.1365 | 0.5752 | 0.0000 | 0.00 | 0.000 | 0.644 | 1.101 |
| 196.65 | 1.40 | 10668 | 12060 | 0.1392 | 0.6334 | 0.0000 | 0.00 | 0.000 | 0.712 | 1.153 |
| 196.70 | 1.45 | 10815 | 12597 | 0.1419 | 0.6867 | 0.0000 | 0.00 | 0.000 | 0.773 | 1.206 |
| 196.75 | 1.50 | 10963 | 13141 | 0.1446 | 0.7362 | 0.0000 | 0.00 | 0.000 | 0.829 | 1.260 |
| 196.80 | 1.55 | 11110 | 13693 | 0.1472 | 0.7825 | 0.0000 | 0.00 | 0.000 | 0.881 | 1.314 |
| 196.85 | 1.60 | 11258 | 14252 | 0.1497 | 0.8263 | 0.0000 | 0.00 | 0.000 | 0.930 | 1.369 |
| 196.90 | 1.65 | 11405 | 14819 | 0.1522 | 0.8678 | 0.0000 | 0.00 | 0.000 | 0.976 | 1.425 |
| 196.95 | 1.70 | 11553 | 15393 | 0.1547 | 0.9075 | 0.0000 | 0.00 | 0.000 | 1.020 | 1.482 |
| 197.00 | 1.75 | 11700 | 15974 | 0.1571 | 0.9455 | 0.0000 | 0.00 | 0.000 | 1.062 | 1.539 |
| 197.05 | 1.80 | 11817 | 16562 | 0.1595 | 0.9820 | 0.0038 | 0.00 | 0.000 | 1.103 | 1.597 |
| 197.10 | 1.85 | 11933 | 17156 | 0.1618 | 1.0172 | 0.0108 | 0.00 | 0.000 | 1.145 | 1.656 |
| 197.15 | 1.90 | 12050 | 17755 | 0.1642 | 1.0512 | 0.0198 | 0.00 | 0.000 | 1.190 | 1.716 |
| 197.20 | 1.95 | 12166 | 18361 | 0.1664 | 1.0842 | 0.0304 | 0.00 | 0.000 | 1.235 | 1.776 |
| 197.25 | 2.00 | 12283 | 18972 | 0.1687 | 1.1162 | 0.0425 | 0.00 | 0.000 | 1.281 | 1.836 |
| 197.30 | 2.05 | 12400 | 19589 | 0.1709 | 1.1473 | 0.0559 | 0.00 | 0.000 | 1.327 | 1.897 |
| 197.35 | 2.10 | 12516 | 20212 | 0.1731 | 1.1776 | 0.0704 | 0.00 | 0.000 | 1.374 | 1.959 |
| 197.40 | 2.15 | 12633 | 20841 | 0.1753 | 1.2071 | 0.0860 | 0.00 | 0.000 | 1.421 | 2.021 |
| 197.45 | 2.20 | 12749 | 21475 | 0.1774 | 1.2359 | 0.1026 | 0.00 | 0.000 | 1.468 | 2.084 |
| 197.50 | 2.25 | 12866 | 22116 | 0.1796 | 1.2640 | 0.1202 | 0.00 | 0.000 | 1.516 | 2.148 |
| 197.55 | 2.30 | 12983 | 22762 | 0.1816 | 1.2916 | 0.1387 | 0.00 | 0.000 | 1.564 | 2.212 |
| 197.60 | 2.35 | 13099 | 23414 | 0.1837 | 1.3186 | 0.1580 | 0.00 | 0.000 | 1.612 | 2.276 |
| 197.65 | 2.40 | 13216 | 24072 | 0.1858 | 1.3450 | 0.1782 | 0.00 | 0.000 | 1.660 | 2.341 |
| 197.70 | 2.45 | 13332 | 24736 | 0.1878 | 1.3709 | 0.1991 | 0.00 | 0.000 | 1.709 | 2.407 |
| 197.75 | 2.50 | 13449 | 25405 | 0.1898 | 1.3963 | 0.2208 | 0.00 | 0.000 | 1.758 | 2.474 |
| 197.80 | 2.55 | 13565 | 26080 | 0.1918 | 1.4213 | 0.2433 | 25.00 | 0.000 | 1.807 | 2.541 |
| 197.85 | 2.60 | 13682 | 26762 | 0.1937 | 1.4459 | 0.2664 | 25.30 | 0.441 | 1.856 | 2.608 |
| 197.90 | 2.65 | 13799 | 27449 | 0.1957 | 1.4700 | 0.2903 | 25.60 | 1.263 | 2.347 | 2.676 |
| 197.95 | 2.70 | 13915 | 28141 | 0.1976 | 1.4938 | 0.3148 | 25.90 | 2.347 | 3.219 | 2.745 |
| 198.00 | 2.75 | 14032 | 28840 | 0.1995 | 1.5171 | 0.3400 | 26.20 | 3.656 | 4.353 | 2.814 |
| 198.05 | 2.80 | 14148 | 29545 | 0.2014 | 1.5402 | 0.3658 | 26.50 | 5.168 | 5.712 | 2.884 |
| 198.10 | 2.85 | 14265 | 30255 | 0.2033 | 1.5628 | 0.3923 | 26.80 | 6.870 | 7.275 | 2.954 |

## SCALING OF FUTURE PONDS

**POND 1**
Catchment : 3501
LV Pond Cont Area (ha): 45.14
P1 Cont Area (ha): 66.62
Discharge Scaling Factor: 1.5
Storage Scaling Factor: 2.2

**POND 2**
Catchment : 3502
LV Pond Cont Area 45.14
P1 Cont Area 28.7
Discharge Scaling Factor 0.6
Storage Scaling Factor 0.93

**POND 3**
Catchment : 3503
LV Pond Cont Area (ha): 45.14
P1 Cont Area (ha): 23.53
Discharge Scaling Factor: 0.5
Storage Scaling Factor: 0.53

**POND 4**
Catchment : 3507
LV Pond Cont Area (ha): 45.14
P1 Cont Area (ha): 12.59
Discharge Scaling Factor: 0.3
Storage Scaling Factor: 0.24

| Discharge | Storage | Discharge | Storage | Discharge | Storage | Discharge | Storage |
|---|---|---|---|---|---|---|---|
| (cu.m/s) | (ha-m) | (cu.m/s) | (ha-m) | (cu.m/s) | (ha-m) | (cu.m/s) | (ha-m) |
| 0.00 | 0.000 | 0.00 | 0.000 | 0.00 | 0.000 | 0.00 | 0.000 |
| 0.00 | 0.073 | 0.00 | 0.031 | 0.00 | 0.018 | 0.00 | 0.008 |
| 0.00 | 0.148 | 0.00 | 0.063 | 0.00 | 0.036 | 0.00 | 0.016 |
| 0.03 | 0.224 | 0.01 | 0.095 | 0.01 | 0.054 | 0.01 | 0.024 |
| 0.05 | 0.302 | 0.02 | 0.128 | 0.02 | 0.073 | 0.01 | 0.033 |
| 0.07 | 0.382 | 0.03 | 0.161 | 0.02 | 0.092 | 0.01 | 0.042 |
| 0.08 | 0.463 | 0.03 | 0.196 | 0.03 | 0.112 | 0.01 | 0.050 |
| 0.09 | 0.546 | 0.04 | 0.231 | 0.03 | 0.131 | 0.02 | 0.060 |
| 0.10 | 0.630 | 0.04 | 0.266 | 0.03 | 0.152 | 0.02 | 0.069 |
| 0.10 | 0.716 | 0.05 | 0.303 | 0.04 | 0.172 | 0.02 | 0.078 |
| 0.11 | 0.803 | 0.05 | 0.340 | 0.04 | 0.194 | 0.02 | 0.088 |
| 0.12 | 0.892 | 0.05 | 0.377 | 0.04 | 0.215 | 0.02 | 0.097 |
| 0.13 | 0.983 | 0.05 | 0.416 | 0.04 | 0.237 | 0.02 | 0.107 |
| 0.13 | 1.075 | 0.06 | 0.455 | 0.05 | 0.259 | 0.03 | 0.117 |
| 0.14 | 1.169 | 0.06 | 0.494 | 0.05 | 0.282 | 0.03 | 0.128 |
| 0.14 | 1.265 | 0.06 | 0.535 | 0.05 | 0.305 | 0.03 | 0.138 |
| 0.15 | 1.362 | 0.06 | 0.576 | 0.05 | 0.328 | 0.03 | 0.149 |
| 0.16 | 1.460 | 0.07 | 0.617 | 0.05 | 0.352 | 0.03 | 0.159 |
| 0.16 | 1.561 | 0.07 | 0.660 | 0.06 | 0.376 | 0.03 | 0.170 |
| 0.17 | 1.663 | 0.07 | 0.703 | 0.06 | 0.401 | 0.03 | 0.181 |
| 0.17 | 1.766 | 0.07 | 0.747 | 0.06 | 0.426 | 0.03 | 0.193 |
| 0.18 | 1.871 | 0.08 | 0.791 | 0.06 | 0.451 | 0.03 | 0.204 |
| 0.18 | 1.978 | 0.08 | 0.836 | 0.06 | 0.477 | 0.03 | 0.216 |
| 0.51 | 2.087 | 0.22 | 0.882 | 0.18 | 0.503 | 0.10 | 0.228 |
| 0.70 | 2.197 | 0.30 | 0.929 | 0.25 | 0.529 | 0.13 | 0.240 |
| 0.84 | 2.308 | 0.36 | 0.976 | 0.30 | 0.556 | 0.16 | 0.252 |
| 0.95 | 2.422 | 0.41 | 1.024 | 0.34 | 0.583 | 0.18 | 0.264 |
| 1.05 | 2.537 | 0.45 | 1.072 | 0.37 | 0.611 | 0.20 | 0.277 |
| 1.14 | 2.653 | 0.49 | 1.122 | 0.40 | 0.639 | 0.22 | 0.289 |
| 1.22 | 2.771 | 0.53 | 1.172 | 0.43 | 0.668 | 0.23 | 0.302 |
| 1.30 | 2.891 | 0.56 | 1.222 | 0.46 | 0.696 | 0.25 | 0.315 |
| 1.37 | 3.013 | 0.59 | 1.273 | 0.48 | 0.726 | 0.26 | 0.329 |
| 1.44 | 3.136 | 0.62 | 1.325 | 0.51 | 0.755 | 0.27 | 0.342 |
| 1.51 | 3.260 | 0.65 | 1.378 | 0.53 | 0.785 | 0.28 | 0.356 |
| 1.57 | 3.386 | 0.68 | 1.432 | 0.55 | 0.816 | 0.30 | 0.369 |
| 1.63 | 3.514 | 0.70 | 1.486 | 0.57 | 0.847 | 0.31 | 0.383 |
| 1.69 | 3.644 | 0.73 | 1.540 | 0.60 | 0.878 | 0.32 | 0.397 |
| 1.76 | 3.774 | 0.76 | 1.595 | 0.62 | 0.909 | 0.33 | 0.412 |
| 1.82 | 3.906 | 0.79 | 1.651 | 0.64 | 0.941 | 0.34 | 0.426 |
| 1.89 | 4.039 | 0.81 | 1.708 | 0.67 | 0.973 | 0.36 | 0.441 |
| 1.96 | 4.174 | 0.84 | 1.764 | 0.69 | 1.006 | 0.37 | 0.455 |
| 2.03 | 4.310 | 0.87 | 1.822 | 0.72 | 1.038 | 0.38 | 0.470 |
| 2.10 | 4.447 | 0.90 | 1.880 | 0.74 | 1.071 | 0.40 | 0.485 |
| 2.17 | 4.585 | 0.93 | 1.938 | 0.77 | 1.105 | 0.41 | 0.500 |
| 2.24 | 4.725 | 0.96 | 1.997 | 0.79 | 1.138 | 0.42 | 0.515 |
| 2.31 | 4.865 | 0.99 | 2.057 | 0.82 | 1.172 | 0.44 | 0.531 |
| 2.38 | 5.008 | 1.02 | 2.117 | 0.84 | 1.206 | 0.45 | 0.546 |
| 2.45 | 5.151 | 1.06 | 2.177 | 0.87 | 1.241 | 0.46 | 0.562 |
| 2.52 | 5.296 | 1.09 | 2.239 | 0.89 | 1.276 | 0.48 | 0.578 |
| 2.59 | 5.442 | 1.12 | 2.300 | 0.92 | 1.311 | 0.49 | 0.594 |
| 2.67 | 5.589 | 1.15 | 2.363 | 0.94 | 1.346 | 0.50 | 0.610 |
| 2.74 | 5.738 | 1.18 | 2.425 | 0.97 | 1.382 | 0.52 | 0.626 |
| 3.46 | 5.888 | 1.49 | 2.489 | 1.22 | 1.418 | 0.65 | 0.642 |
| 4.75 | 6.039 | 2.05 | 2.553 | 1.68 | 1.455 | 0.90 | 0.659 |
| 6.43 | 6.191 | 2.77 | 2.617 | 2.27 | 1.491 | 1.21 | 0.675 |
| 8.43 | 6.345 | 3.63 | 2.682 | 2.98 | 1.529 | 1.59 | 0.692 |
| 10.74 | 6.500 | 4.63 | 2.748 | 3.79 | 1.566 | 2.03 | 0.709 |
| 13.32 | 6.656 | 5.74 | 2.814 | 4.71 | 1.604 | 2.52 | 0.726 |

CROZIER & ASSOCIATES
Consulting Engineers

| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3500** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **38.20** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3500 (Site)**

## Curve Number Calculation

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 50 | 19.1 |
| Sargent Sandy Loam | Stsl | AB | 50 | 19.1 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 38.2 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Road | | Apartment | | Driveway | | Building/ Sidewalk | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 2.0 | 98 | 2.7 | 98 | 1.9 | 98 | 3.9 | 98 | 1.0 | 98 | 11.4 | 1118.5 |
| Stsl | 2.0 | 98 | | 98 | 1.9 | 98 | 3.9 | 98 | | 98 | 7.8 | 764.2 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0.0 | 0.0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0.0 | 0.0 |
| Subtotal Area | 4.0 | | 2.7 | | 3.7 | | 7.8 | | 1.0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 7.7 | 49 | 0 | | 7.7 | 376.7 |
| Stsl | 0 | | 0 | | 0 | | 11.3 | 59 | 0 | | 11.3 | 666.8 |
| 0 | 0 | | 0 | | 0 | | 0.0 | | 0 | | 0.0 | 0.0 |
| 0 | 0 | | 0 | | 0 | | 0.0 | | 0 | | 0.0 | 0.0 |
| Subtotal Area | 0 | | 0 | | 0 | | 19.0 | | 0 | | | |

| | | | |
|---|---|---|---|
| Pervious Area Calculations | Total Pervious Area | 19.0 |
| | Composite Pervious Curve Number | 55.0 |
| Impervious Area Calculations | Total Directly Connected Area | 11.4 |
| | Total Indirectly Connected Area | 7.8 |
| | Total Impervious Area | 19.2 |
| | % X imp | 29.8 |
| | % T imp | 50.3 |
| | Total Area Check | 38.2 |

## Initial Abstraction and Flow Path Calculations

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.0 |
| Meadow | 8 | 0 | 0.0 |
| Wetland | 16 | 0 | 0.0 |
| Lawn | 5 | 18.989 | 94.9 |
| Cultivated | 7 | 0 | 0.0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 40 | 0.25 |
| Impervious | 2.0 | 0.5 | 505 | 0.013 |

Assumptions: 65% impervious coverage of apartment block (zoning requires 40% landscaped area)

| Lot Type | # Lots | Building & Deck Coverage ($m^2$/lot) | Driveway & Hardscape Coverage ($m^2$/lot) |
|---|---|---|---|
| Townhomes | 144 | 120 | 65 |
| 36' | 76 | 155 | 80 |
| 40' | 131 | 170 | 90 |
| 50' | 92 | 215 | 110 |

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Project Name:
Project Number:
Date:
By:

**D.A. NAME** **3501**
**D.A. AREA (ha)** **66.62**

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3501**

## Curve Number Calculation

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Kemble Clay | Kc | D | 90 | 59.96 |
| Sargent Sandy Loam | Stsl | AB | 10 | 6.66 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 66.62 |

| Impervious Landuses Present: | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Directly Con. | | Indirectly Con | | | | | | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | | | | | | Area | A*CN |
| Kc | 17.9874 | 98 | 11.9916 | 98 | | 98 | | 98 | | 29.979 | 2937.9 |
| Stsl | 1.9986 | 98 | 1.3324 | 98 | | 98 | | 98 | | 3.331 | 326.44 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 0 | 0 |
| Subtotal Area | 19.986 | | 13.324 | | 0 | | 0 | | 0 | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Kc | 0 | | 0 | | 0 | | 29.979 | 84 | 0 | | 29.979 | 2518.2 |
| Stsl | 0 | | 0 | | 0 | | 3.331 | 59 | 0 | | 3.331 | 196.53 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 33.31 | | 0 | | | |

| | | | |
|---|---|---|---|
| | Pervious Area Calculations | Total Pervious Area | 33.31 |
| | | Composite Pervious Curve Number | 81.5 |
| | Impervious Area Calculations | Total Directly Connected Area | 19.986 |
| | | Total Indirectly Connected Area | 13.324 |
| | | Total Impervious Area | 33.31 |
| | | % X imp | 30.0 |
| | | % T imp | 50.0 |
| | | Total Area Check | 66.62 |

## Initial Abstraction and Hydraulics Calculations

0.8184

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.0 |
| Meadow | 8 | 0 | 0.0 |
| Wetland | 16 | 0 | 0.0 |
| Lawn | 5 | 33.31 | 166.6 |
| Cultivated | 7 | 0 | 0.0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 40 | 0.25 |
| Impervious | 2.0 | 0.5 | 666 | 0.013 |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3502** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **28.70** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3502**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Kemble Clay | Kc | D | 85 | 24.40 |
| Sargent Sandy Loam | Stsl | AB | 15 | 4.31 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 28.7 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Directly Con. | | Indirectly Con | | | | | | | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | | | | | | | Area | A*CN |
| Kc | 7.3185 | 98 | 4.879 | 98 | | 98 | | 98 | | 98 | 12.198 | 1195.4 |
| Stsl | 1.2915 | 98 | 0.861 | 98 | | 98 | | 98 | | 98 | 2.1525 | 210.95 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 8.61 | | 5.74 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Kc | 0 | | 0 | | 0 | | 12.1975 | 84 | 0 | | 12.198 | 1024.6 |
| Stsl | 0 | | 0 | | 0 | | 2.1525 | 59 | 0 | | 2.1525 | 127 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 14.35 | | 0 | | | |

| | | | |
|---|---|---|---|
| | Pervious Area Calculations | Total Pervious Area | 14.35 |
| | | Composite Pervious Curve Number | 80.3 |
| | Impervious Area Calculations | Total Directly Connected Area | 8.61 |
| | | Total Indirectly Connected Area | 5.74 |
| | | Total Impervious Area | 14.35 |
| | | % X imp | 30.0 |
| | | % T imp | 50.0 |
| | | Total Area Check | 28.7 |

**Initial Abstraction and Flow Path Calculations**

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.0 |
| Meadow | 8 | 0 | 0.0 |
| Wetland | 16 | 0 | 0.0 |
| Lawn | 5 | 14.35 | 71.8 |
| Cultivated | 7 | 0 | 0.0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 40 | 0.25 |
| Impervious | 2.0 | 0.5 | 437 | 0.013 |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3503** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **23.53** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3503**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 40 | 9.41 |
| Sargent/Berrien | Stsl/Bes | AB | 20 | 4.71 |
| Harkaway | Hal | B | 40 | 9.412 |
| | | | | 0 |
| Total Area Check | | | | 23.53 |

| Impervious Landuses Present: | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Directly Con. | | Indirectly Con | | | | | | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | | | | | | Area | A*CN |
| Tif | 2.8236 | 98 | 1.8824 | 98 | 98 | | 98 | | 98 | 4.706 | 461.19 |
| Stsl/Bes | 1.4118 | 98 | 0.9412 | 98 | 98 | | 98 | | 98 | 2.353 | 230.59 |
| Hal | 2.8236 | 98 | 1.8824 | 98 | 98 | | 98 | | 98 | 4.706 | 461.19 |
| 0 | | 98 | | 98 | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 7.059 | | 4.706 | | 0 | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 4.71 | 49 | 0 | | 4.71 | 230.59 |
| Stsl/Bes | 0 | | 0 | | 0 | | 2.35 | 59 | 0 | | 2.35 | 138.83 |
| Hal | 0 | | 0 | | 0 | | 4.71 | 69 | 0 | | 4.71 | 324.71 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 11.765 | | 0 | | | |

| | | | |
|---|---|---|---|
| Pervious Area Calculations | Total Pervious Area | 11.765 |
| | Composite Pervious Curve Number | 59 |
| Impervious Area Calculations | Total Directly Connected Area | 7.059 |
| | Total Indirectly Connected Area | 4.706 |
| | Total Impervious Area | 11.765 |
| | % X imp | 30.0 |
| | % T imp | 50.0 |
| | Total Area Check | 23.53 |

**Initial Abstraction and Flow Path Calculations**

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.0 |
| Meadow | 8 | 0 | 0.0 |
| Wetland | 16 | 0 | 0.0 |
| Lawn | 5 | 11.765 | 58.8 |
| Cultivated | 7 | 0 | 0.0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 40 | 0.25 |
| Impervious | 2.0 | 0.5 | 396 | 0.013 |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3504** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **6.94** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3504**

## Curve Number Calculation

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| | | | | 0 |
| Sargent Sandy Loam | Stsl | AB | 100 | 6.94 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 6.94 |

| Impervious Landuses Present: | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Directly Con. | | Indirectly Con | | | | | | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | | | | | | Area | A*CN |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | 3.47 | 98 | 1.388 | 98 | | 98 | | 98 | | 98 | 4.858 | 476.08 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 3.47 | | 1.388 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Stsl | 0 | | 0 | | 0 | | 2.082 | 59 | 0 | | 2.082 | 122.84 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 2.082 | | 0 | | | |

| | | | |
|---|---|---|---|
| | Pervious Area Calculations | Total Pervious Area | 2.082 |
| | | Composite Pervious Curve Number | 59 |
| | Impervious Area Calculations | Total Directly Connected Area | 3.47 |
| | | Total Indirectly Connected Area | 1.388 |
| | | Total Impervious Area | 4.858 |
| | | % X imp | 30.0 |
| | | % T imp | 50.0 |
| | | Total Area Check | 6.94 |

## Initial Abstraction and Flow Path Calculations

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.0 |
| Meadow | 8 | 0 | 0.0 |
| Wetland | 16 | 0 | 0.0 |
| Lawn | 5 | 2.082 | 10.4 |
| Cultivated | 7 | 0 | 0.0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 40 | 0.25 |
| Impervious | 2.0 | 0.5 | 215 | 0.013 |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3505** |
| Project Number: | 183-2687 | **D.A. AREA** | **16.57** |
| Date: | August 21 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Ultimate Development Drainage Area: Catchment 3505**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine Sandy Loam | Tif | A | 50 | 8.29 |
| Harkaway | Hal | B | 25 | 4.14 |
| Sargent | Stsl | AB | 25 | 4.14 |
| | | | | 0 |
| Total Area Check | | | | 16.57 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Sidewalk | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.33 | 98 | | 98 | | 98 | 0.33 | 98 | | 98 | 0.66 | 64.68 |
| Hal | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0.33 | | 0 | | 0 | | 0.33 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 3.81 | 32 | 3.81 | 30 | 0.00 | | 0.00 | | 0.00 | | 7.63 | 236.38 |
| Hal | 2.07 | 60 | 2.07 | 58 | 0.00 | | 0.00 | | 0.00 | | 4.14 | 244.41 |
| Stsl | 2.07 | 46 | 2.07 | 44 | 0.00 | | 0.00 | | 0.00 | | 4.14 | 186.41 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 7.96 | | 7.96 | | 0.00 | | 0.00 | | 0.00 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 15.91 |
| | Total Impervious Area | 0.66 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 44.2 |
| | Total Area Check | 16.57 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tioga Fine Sandy | | Harkaway | | Sargent | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 7.955 | 79.6 | 0.08 | 4 | 0.25 | 2 | 0.17 | 2 | | 0 | 1.17 |
| Meadow | 8 | 7.955 | 63.6 | 0.10 | 4 | 0.28 | 2 | 0.19 | 2 | | 0 | 1.35 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Cultivated | 7 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Impervious | 2 | 0.66 | 1.3 | 0.95 | 1 | | 0 | | 0 | | 0 | 0.63 |
| Composite IA | | 16.57 | 8.7 | Composite Runoff Coefficient | | | | | | | | 0.19 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Wood/meadow | 250 | 1.5 | 0.60% | 1 | 0.08 | 0.90 | 0.60 | 0.60 | 0.74 | 0.49 | 1.73 | 1.16 |
| Taylor's Creek | 700 | 5 | 0.7% | 4.6 | 0.39 | 0.50 | 0.34 | 0.94 | | | | |

| Appropriate calculated time to peak: | 0.94 | Appropriate Method: | Uplands |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3506** |
| Project Number: | 183-2687 | **D.A. AREA** | **10.24** |
| Date: | August 21 2014 | | |
| By: | A. French | | |

**Hydrologic Parameters: CALIB NASHYD Command**
**Ultimate Development Drainage Area: Catchment 3506**

**Curve Number Calculation**

Soil Types Present:

| Type | ID | Hydrologic Group | % Area | Area |
|---|---|---|---|---|
| Sargent gravelly sandy | Stsl | AB | 50 | 5.12 |
| Kemble Clay | Kc | D | 50 | 5.12 |
| | | | | 0 |
| | | | | 0 |
| Total Area | | | | 10.24 |

Impervious Landuses Present:

| Soils | Roadway Area (ha) | CN | Sidewalk Area (ha) | CN | Driveway Area (ha) | CN | Building Area (ha) | CN | SWMF Area (ha) | CN | Subtotals Area | A*CN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stsl | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Kc | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0 | | 0 | | | |

Pervious Landuses Present:

| Soils | Woodland Area (ha) | CN | Meadow Area (ha) | CN | Wetland Area (ha) | CN | Lawn Area (ha) | CN | Cultivated Area (ha) | CN | Subtotals Area | A*CN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Stsl | 2.56 | 46 | 2.56 | 44 | 0.00 | | 0.00 | | 0.00 | | 5.12 | 230.40 |
| Kc | 2.56 | 79 | 2.56 | 78 | 0.00 | | 0.00 | | 0.00 | | 5.12 | 401.92 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| 0 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | 0.00 |
| Subtotal Area | 5.12 | | 5.12 | | 0.00 | | 0.00 | | 0.00 | | | |

| Composite Area Calculations | | |
|---|---|---|
| | Total Pervious Area | 10.24 |
| | Total Impervious Area | 0 |
| | % Impervious | 0.0 |
| | Composite Curve Number | 61.8 |
| | Total Area Check | 10.24 |

**Initial Abstraction and Tp Calculations**

| Initial Abstraction | | | | Composite Curve Number | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Sargent gravelly | | Kemble Clay | | 0 | | 0 | | |
| Landuse | IA (mm) | Area (ha) | A * IA | RC | Area | RC | Area | RC | Area | RC | Area | A*RC |
| Woodland | 10 | 5.12 | 51.2 | 0.17 | 3 | 0.35 | 3 | | 0 | | 0 | 1.33 |
| Meadow | 8 | 5.12 | 41.0 | 0.19 | 3 | 0.40 | 3 | | 0 | | 0 | 1.51 |
| Wetland | 16 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Lawn | 5 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Cultivated | 7 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Impervious | 2 | 0 | 0.0 | | 0 | | 0 | | 0 | | 0 | 0.00 |
| Composite IA | | 10.24 | 9.0 | Composite Runoff Coefficient | | | | | | | | 0.28 |

| Time to Peak Inputs | | | | | | Uplands | | | Bransby Williams | | Airport | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow Path Description | Length (m) | Drop (m) | Slope (%) | $V/S^{0.5}$ | Velocity (m/s) | Tc (hr) | Tp(hr) | TOTAL Tp (hr) | Tc (hr) | Tp(hr) | Tc (hr) | Tp(hr) |
| Meadow/Fore | 100 | 3 | 3.00% | 1 | 0.17 | 0.16 | 0.11 | 0.11 | 1.14 | 0.76 | 1.63 | 1.09 |
| Taylor's Creek | 1500 | 18 | 1.2% | 4.6 | 0.50 | 0.83 | 0.55 | 0.66 | | | | |

| Appropriate calculated time to peak: | 0.66 | Appropriate Method: | Uplands |
|---|---|---|---|

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3507** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **12.59** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3507**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Harkaway | Hal | B | 15 | 1.8885 |
| Tioga Fine Sandy Loam | Tif | A | 85 | 10.702 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 12.59 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Directly Con | | Indirectly Con | | | | | | | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | | | | | | | Area | A*CN |
| Hal | 0.56655 | 98 | 0.3777 | 98 | | 98 | | 98 | | 98 | 0.9443 | 92.537 |
| Tif | 3.21045 | 98 | 2.1403 | 98 | | 98 | | 98 | | 98 | 5.3508 | 524.37 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 3.777 | | 2.518 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Hal | 0 | | 0 | | 0 | | 0.94425 | 69 | 0 | | 0.9443 | 65.153 |
| Tif | 0 | | 0 | | 0 | | 5.35075 | 49 | 0 | | 5.3508 | 262.19 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 6.295 | | 0 | | | |

| | | | |
|---|---|---|---|
| Pervious Area Calculations | Total Pervious Area | 6.295 |
| | Composite Pervious Curve Number | 52 |
| Impervious Area Calculations | Total Directly Connected Area | 3.777 |
| | Total Indirectly Connected Area | 2.518 |
| | Total Impervious Area | 6.295 |
| | % X imp | 30.0 |
| | % T imp | 50.0 |
| | Total Area Check | 12.59 |

**Initial Abstraction and Flow Path Calculations**

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.00 |
| Meadow | 8 | 0 | 0.00 |
| Wetland | 16 | 0 | 0.00 |
| Lawn | 5 | 6.295 | 31.48 |
| Cultivated | 7 | 0 | 0.00 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 40 | 0.25 |
| Impervious | 2.0 | 0.5 | 290 | 0.013 |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3601** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **0.25** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3601 (10th Line)**

## Curve Number Calculation

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 100 | 0.247 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 0.247 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Apartment | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.157 | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0.157 | 15.36 |
| 0 | | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0.157 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 0.09025 | 49 | 0 | | 0.0903 | 4.4223 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0.09025 | | 0 | | | |

| | | | |
|---|---|---|---|
| Pervious Area Calculations | Total Pervious Area | 0.0903 | |
| | Composite Pervious Curve Number | 49 | |
| Impervious Area Calculations | Total Directly Connected Area | 0.1568 | |
| | Total Indirectly Connected Area | 0 | |
| | Total Impervious Area | 0.1568 | |
| | % X imp | 63.5 | |
| | % T imp | 63.5 | |
| | Total Area Check | 0.247 | |

## Initial Abstraction and Flow Path Calculations

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.0 |
| Meadow | 8 | 0 | 0.0 |
| Wetland | 16 | 0 | 0.0 |
| Lawn | 5 | 0.09 | 0.5 |
| Cultivated | 7 | 0 | 0.0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 3 | 0.25 |
| Impervious | 2.0 | 0.5 | 48 | 0.013 |

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| | | | |
|---|---|---|---|
| Project Name: | Linksview | **D.A. NAME** | **3602** |
| Project Number: | 183-2687 | **D.A. AREA (ha)** | **1.30** |
| Date: | 19-Aug-14 | | |
| By: | A. French | | |

**Hydrologic Parameters: STANDHYD Command**
**Ultimate Development Drainage Area: 3602 (10th Line)**

**Curve Number Calculation**

| Soil Types Present: | | | | |
|---|---|---|---|---|
| Type | ID | Hydrologic Group | % Area | Area |
| Tioga Fine sandy Loam | Tif | A | 100 | 1.3 |
| | | | | 0 |
| | | | | 0 |
| | | | | 0 |
| Total Area Check | | | | 1.3 |

| Impervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Roadway | | Apartment | | Driveway | | Building | | SWMF | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0.825 | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0.825 | 80.85 |
| 0 | | 98 | | 98 | 0 | 98 | 0 | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| 0 | | 98 | | 98 | | 98 | | 98 | | 98 | 0 | 0 |
| Subtotal Area | 0.825 | | 0 | | 0 | | 0 | | 0 | | | |

| Pervious Landuses Present: | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Woodland | | Meadow | | Wetland | | Lawn | | Cultivated | | Subtotals | |
| Soils | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area (ha) | CN | Area | A*CN |
| Tif | 0 | | 0 | | 0 | | 0.475 | 49 | 0 | | 0.475 | 23.275 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| 0 | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | 0 |
| Subtotal Area | 0 | | 0 | | 0 | | 0.475 | | 0 | | | |

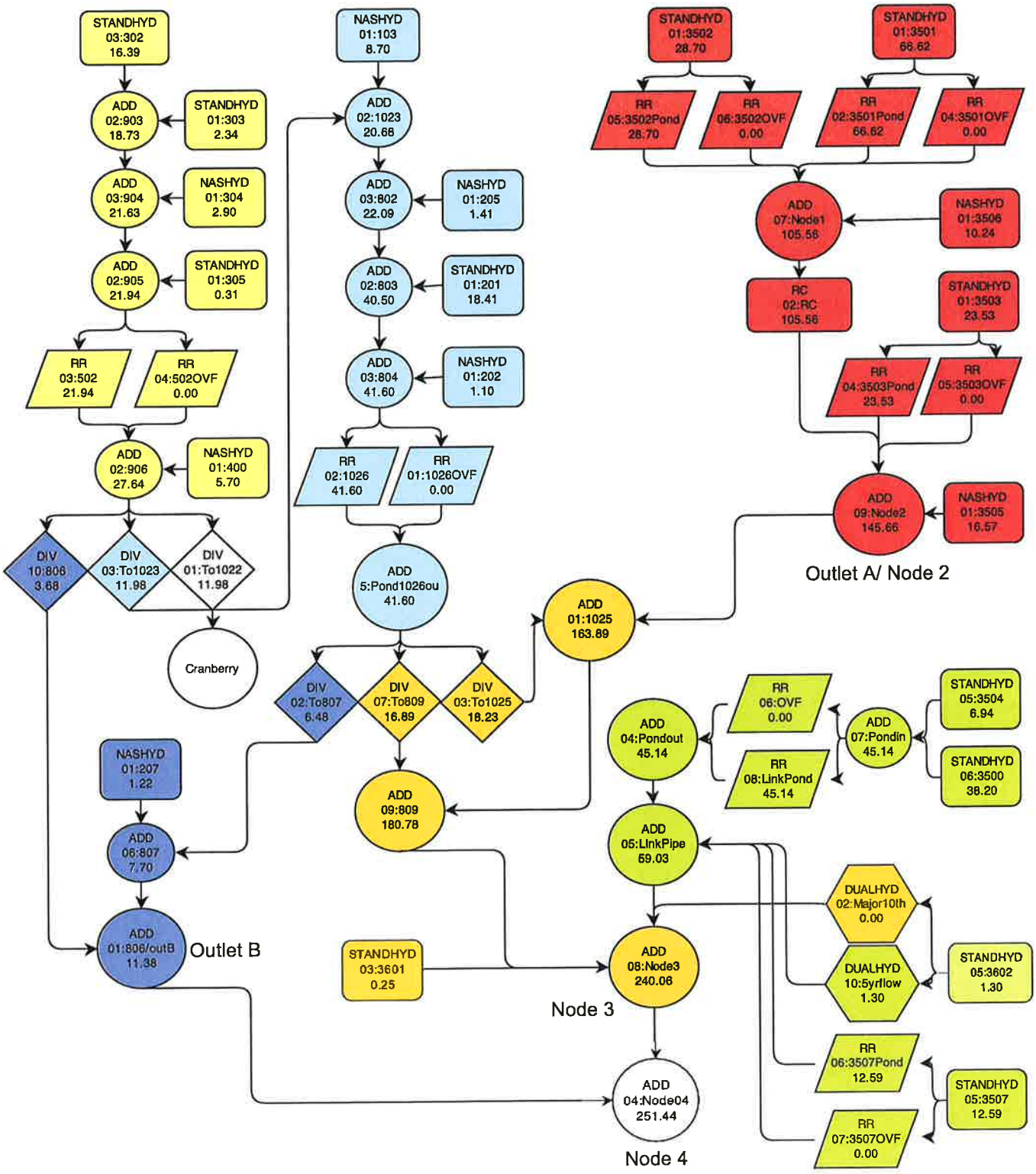
| | | | |
|---|---|---|---|
| | Pervious Area Calculations | Total Pervious Area | 0.475 |
| | | Composite Pervious Curve Number | 49 |
| | Impervious Area Calculations | Total Directly Connected Area | 0.825 |
| | | Total Indirectly Connected Area | 0 |
| | | Total Impervious Area | 0.825 |
| | | % X imp | 63.5 |
| | | % T imp | 63.5 |
| | | Total Area Check | 1.3 |

**Initial Abstraction and Flow Path Calculations**

| Landuse | IA (mm) | Area (ha) | A * IA |
|---|---|---|---|
| Woodland | 10 | 0 | 0.0 |
| Meadow | 8 | 0 | 0.0 |
| Wetland | 16 | 0 | 0.0 |
| Lawn | 5 | 0.48 | 2.4 |
| Cultivated | 7 | 0 | 0.0 |

| Land Use | IA (mm) | Slope (%) | Travel Length (m) | Manning's n |
|---|---|---|---|---|
| Pervious | 5.0 | 2 | 500 | 0.25 |
| Impervious | 2.0 | 0.5 | 500 | 0.013 |

# Ultimate-Development Model



ULTIMATE DEVELOPMENT



```
 ***************************************************************************
 SSSSS  W   W  M   M  H   H  Y   Y  M   M   OOO         999    999   *********
 S      W W W  MM MM  H   H   Y Y   MM MM  O   O       9   9  9   9
 SSSSS  W W W  M M M  HHHHH    Y    M M M  O   O  ##   9   9  9   9   Ver  4.05
     S  W W W  M   M  H   H    Y    M   M  O   O        9999   9999   Sept 2011
 SSSSS  W W W  M   M  H   H    Y    M   M   OOO           9      9     *********
                                                       9   9  9   9   # 3737016
          StormWater Management HYdrologic Model       999    999   *********
 ***************************************************************************
 ***************************************************************************
 ********************** SWMHYMO Ver/4.05 ***********************************
 *********  A single event and continuous hydrologic simulation model  *********
 *********       based on the principles of HYMO and its successors    *********
 *********                 OTTHYMO-83 and OTTHYMO-89.                  *********
 ***************************************************************************
 ********* Distributed by:  J.F. Sabourin and Associates Inc.          *********
 *********                  Ottawa, Ontario: (613) 836-3884            *********
 *********                  Gatineau, Quebec: (819) 243-6858           *********
 *********                  E-Mail: swmhymo@jfsa.Com                   *********
 ***************************************************************************

 ***************************************************************************
 ********** Licensed user: C.F. Crozier & Associates Inc            **********
 *********                  Collingwood          SERIAL#:3737016     **********
 ***************************************************************************

 ***************************************************************************
 *********            ++++++ PROGRAM ARRAY DIMENSIONS ++++++           *********
 *********            Maximum value for ID numbers  :     10          *********
 *********            Max. number of rainfall points: 105408          *********
 *********            Max. number of flow points    : 105408          *********
 ***************************************************************************

 ***** DESCRIPTION SUMMARY TABLE HEADERS (units depend on METOUT in START) *****
 *****-------------------------------------------------------------------*****
 *****    ID:  Hydrograph IDentification numbers, (1-10).                *****
 *****  NHYD:  Hydrograph reference numbers, (6 digits or characters).   *****
 *****  AREA:  Drainage area associated with hydrograph, (ac.) or (ha.).  *****
 ***** QPEAK:  Peak flow of simulated hydrograph, (ft^3/s) or (m^3/s).    *****
 ***** TpeakDate_hh:mm is the date and time of the peak flow.             *****
 *****  R.V.:  Runoff Volume of simulated hydrograph, (in) or (mm).       *****
 *****  R.C.:  Runoff Coefficient of simulated hydrograph, (ratio).       *****
 *****     *:  see WARNING or NOTE message printed at end of run.         *****
 *****    **:  see  ERROR  message printed at end of run.                 *****
 ***************************************************************************

 ::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::

 ***************************************************************************

 ********************  S U M M A R Y   O U T P U T  ************************
 ***************************************************************************
 *         DATE: 2014-10-17     TIME: 14:13:51     RUN COUNTER: 000377      *
 ***************************************************************************
 * Input   filename: C:\1ULTWI~1.10\Ult45Ls.dat                            *
 * Output  filename: C:\1ULTWI~1.10\Ult45Ls.out                            *
 * Summary filename: C:\1ULTWI~1.10\Ult45Ls.sum                            *
 * User comments:                                                          *
 * 1:_____                                                                 *
 * 2:_____                                                                 *
 * 3:_____                                                                 *
 ***************************************************************************

 #*************************************************************************
 #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
 #  Date        : 2014 08 22
 #  Modified    :
 #  Modeller    : [A. French]
 #  Company     : C.F. Crozier & Associates Inc.
 #  License #   : 3737016
 #*************************************************************************
 RUN:COMMAND#
 001:0001-------------------------------------------------------------------
     START
      [TZERO =    .00 hrs on       0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  =   1 ]                                          25mm
 #*************************************************************************
 001:0002-------------------------------------------------------------------
     READ STORM
      Filename = STORM.001
      Comment  =
      [SDT= 5.00:SDUR=   4.00:PTOT=  24.99]
 #                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
 001:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     03:302            16.39     .295 No_date    1:33    7.63
      [XIMP=.20:TIMP=.40]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
 001:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:303             2.34     .072 No_date    1:25    9.01
      [XIMP=.25:TIMP=.50]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
 001:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:303             2.34     .072 No_date    1:25    9.01
                      + 03:302            16.39     .295 No_date    1:33    7.63
      [DT= 1.00]  SUM=  02:903            18.73     .352 No_date    1:32    7.81
 001:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:304             2.90     .018 No_date    1:45    2.71
      [CN= 66.6: N= 3.00]
      [Tp=  .28:DT= 5.00]
 001:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:304             2.90     .018 No_date    1:45    2.71
                      + 02:903            18.73     .352 No_date    1:32    7.81
      [DT= 1.00]  SUM=  03:904            21.63     .365 No_date    1:32    7.12
 001:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:305              .31     .013 No_date    1:20    6.75
      [XIMP=.20:TIMP=.20]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
 001:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:305              .31     .013 No_date    1:20    6.75
                      + 03:904            21.63     .365 No_date    1:32    7.12
      [DT= 1.00]  SUM=  02:905            21.94     .367 No_date    1:32    7.12
 #                      MAIR MILLS ESTATES SWMF
 001:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 02:905            21.94     .367 No_date    1:32    7.12
      [RDT= 1.00] out<- 03:502            21.94     .012 No_date    4:48    7.12
            overflow <= 04:502OVF          .00     .000 No_date    0:00     .00
      [MxStoUsed=.1414E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 001:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:400             5.70     .006 No_date    2:35     .84
      [CN= 50.2: N= 3.00]
      [Tp=  .70:DT= 5.00]
 001:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:400             5.70     .006 No_date    2:35     .84
                      + 03:502            21.94     .012 No_date    4:48    7.12
 001:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 02:906            27.64     .016 No_date    2:55    5.82
            diverted <= 10:To806          27.64     .016 No_date    2:55    5.82
            diverted <= 03:To1023           .00     .000 No_date    0:00     .00
            diverted <= 01:To1022           .00     .000 No_date    0:00     .00
 #                TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
 001:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:3501            66.62    1.944 No_date    1:32   12.03
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 81.5]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
 001:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 01:3501            66.62    1.944 No_date    1:32   12.03
      [RDT= 1.00] out<- 02:3501Pond        66.62     .100 No_date    4:27   12.03
            overflow <= 04:3501OVF          .00     .000 No_date    0:00     .00
      [MxStoUsed=.6940E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 001:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:3502            28.70     .961 No_date    1:29   11.77
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 80.3]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
 001:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 01:3502            28.70     .961 No_date    1:29   11.77
      [RDT= 1.00] out<- 05:3502Pond        28.70     .044 No_date    4:20   11.77
            overflow <= 06:3502OVF          .00     .000 No_date    0:00     .00
      [MxStoUsed=.2918E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 001:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:3506            10.24     .019 No_date    2:25    1.48
      [CN= 61.8: N= 3.00]
      [Tp=  .66:DT= 5.00]
 #                                  FLOWS AT NODE 1
 001:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            02:3501Pond       66.62     .100 No_date    4:27   12.03
                      + 04:3501OVF          .00     .000 No_date    0:00     .00
                      + 05:3502Pond       28.70     .044 No_date    4:20   11.77
                      + 06:3502OVF          .00     .000 No_date    0:00     .00
                      + 01:3506           10.24     .019 No_date    2:25    1.48
      [DT= 1.00]  SUM=  07:Node1         105.56     .153 No_date    3:22   10.93
 001:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE CHANNEL   -> 07:Node1         105.56     .153 No_date    3:22   10.93
      [RDT= 1.00] out<- 02:RC            105.56     .153 No_date    4:06   10.93
      [L/S/n= 1400./1.200/.030]
      [Vmax=  .978:Dmax=  .394]
 001:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:3503            23.53     .769 No_date    1:27    9.07
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 59.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
 001:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 01:3503            23.53     .769 No_date    1:27    9.07
      [RDT= 1.00] out<- 04:3503Pond        23.53     .035 No_date    4:10    9.07
            overflow <= 05:3503OVF          .00     .000 No_date    0:00     .00
      [MxStoUsed=.1768E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 001:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:3505            16.57     .013 No_date    2:50     .79
      [CN= 44.2: N= 3.00]
      [Tp=  .94:DT= 5.00]
 #                  FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
 001:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            04:3503Pond       23.53     .035 No_date    4:10    9.07
                      + 05:3503OVF          .00     .000 No_date    0:00     .00
                      + 02:RC             105.56     .153 No_date    4:06   10.93
                      + 01:3505           16.57      .013 No_date    2:50     .79
      [DT= 1.00]  SUM=  09:Node2         145.66     .198 No_date    3:38    9.48
 #                          MAIR MILLS VILLAGE
 001:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:103             8.70     .022 No_date    2:05    1.62
      [CN= 59.2: N= 3.00]
      [Tp=  .48:DT= 5.00]
 001:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:103             8.70     .022 No_date    2:05    1.62
                      + 03:To1023           .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  02:1023            8.70     .022 No_date    2:05    1.62
 001:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:205             1.41     .004 No_date    1:40    1.20
      [CN= 51.1: N= 3.00]
      [Tp=  .20:DT= 5.00]
 001:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:205             1.41     .004 No_date    1:40    1.20
                      + 02:1023            8.70     .022 No_date    2:05    1.62
      [DT= 1.00]  SUM=  03:802            10.11     .024 No_date    2:00    1.56
 001:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB STANDHYD     01:201             18.41    1.223 No_date    1:22   11.37
      [XIMP=.43:TIMP=.56]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
 001:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:201             18.41    1.223 No_date    1:22   11.37
                      + 03:802            10.11     .024 No_date    2:00    1.56
      [DT= 1.00]  SUM=  02:803            28.52    1.226 No_date    1:22    7.89
 001:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     CALIB NASHYD       01:202             1.10     .001 No_date    2:00     .64
      [CN= 55.0: N= 3.00]
      [Tp=  .25:DT= 5.00]
 001:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:202             1.10     .001 No_date    2:00     .64
                      + 02:803            28.52    1.226 No_date    1:22    7.89
      [DT= 1.00]  SUM=  03:804            29.62    1.226 No_date    1:22    7.62
 #                          MAIR MILLS VILLAGE SWMF
 001:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ROUTE RESERVOIR -> 03:804            29.62    1.226 No_date    1:22    7.62
      [RDT= 1.00] out<- 02:1026           29.62     .022 No_date    4:07    7.62
            overflow <= 01:1026OVF          .00     .000 No_date    0:00     .00
      [MxStoUsed=.2041E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 001:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            02:1026            29.62     .022 No_date    4:07    7.62
                      + 01:1026OVF          .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  05:Pond1026ou      29.62     .022 No_date    4:07    7.62
 #                TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
 001:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     DIVERT HYD      -> 05:Pond1026ou     29.62     .022 No_date    4:07    7.62
            diverted <= 02:To807          29.62     .022 No_date    4:07    7.62
            diverted <= 07:To809            .00     .000 No_date    0:00     .00
            diverted <= 03:To1025           .00     .000 No_date    0:00     .00
 001:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
 *   CALIB NASHYD       01:207             1.22     .006 No_date    1:30    1.61
      [CN= 55.3: N= 3.00]
      [Tp=  .13:DT= 5.00]
 001:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            01:207             1.22     .006 No_date    1:30    1.61
                      + 02:To807           29.62     .022 No_date    4:07    7.62
      [DT= 1.00]  SUM=  06:807             30.84     .023 No_date    4:00    7.38
 001:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            03:To1025           .00     .000 No_date    0:00     .00
                      + 09:Node2          145.66     .198 No_date    3:38    9.48
      [DT= 1.00]  SUM=  01:1025           145.66     .198 No_date    3:38    9.48
 001:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
     ADD HYD            07:To809            .00     .000 No_date    0:00     .00
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00271>                    +  01:1025          145.66      .198 No_date    3:38    9.48
00272>       [DT= 1.00]  SUM=  09:809           145.66      .198 No_date    3:38    9.48
00273> #                                FLOWS TO OUTLET B
00274>  001:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00275>       ADD HYD             06:807           30.84      .023 No_date    4:00    7.38
00276>                      +  10:To806           27.64      .016 No_date    2:55    5.82
00277>       [DT= 1.00]  SUM=  01:806/outB        58.48      .038 No_date    3:58    6.65
00278> #                          LINKSVIEW AND CONTRIBUTING AREAS
00279>  001:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00280>       CALIB STANDHYD      05:3504           6.94      .278 No_date    1:24    9.07
00281>        [XIMP=.30:TIMP=.50]
00282>        [LOSS= 2 :CN= 59.0]
00283>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00284>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
00285>  001:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00286>       CALIB STANDHYD      06:3500          38.20     1.127 No_date    1:29    8.78
00287>        [XIMP=.30:TIMP=.50]
00288>        [LOSS= 2 :CN= 54.9]
00289>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00290>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
00291>  001:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00292>       ADD HYD             05:3504           6.94      .278 No_date    1:24    9.07
00293>                      +  06:3500          38.20     1.127 No_date    1:29    8.78
00294>       [DT= 1.00]  SUM=  07:Pondin          45.14     1.350 No_date    1:29    8.83
00295>  001:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00296>       ROUTE RESERVOIR -> 07:Pondin         45.14     1.350 No_date    1:29    8.83
00297>        [RDT= 1.00] out<- 08:LinkPond       45.14      .068 No_date    4:10    8.83
00298>                  overflow <= 06:OVF          .00      .000 No_date    0:00     .00
00299>       [MxStoUsed=.3267E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00300>  001:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00301>       ADD HYD             08:LinkPond      45.14      .068 No_date    4:10    8.83
00302>                      +  06:OVF             .00      .000 No_date    0:00     .00
00303>       [DT= 1.00]  SUM=  04:Pondout         45.14      .068 No_date    4:10    8.83
00304> #                      FLOWS FROM TENTH LINE (URBANIZED)
00305>  001:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00306>       CALIB STANDHYD      03:3601           .25      .031 No_date    1:20   15.22
00307>        [XIMP=.64:TIMP=.64]
00308>        [LOSS= 2 :CN= 49.0]
00309>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00310>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
00311>  001:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00312>       CALIB STANDHYD      05:3602           1.30      .107 No_date    1:24   15.22
00313>        [XIMP=.64:TIMP=.64]
00314>        [LOSS= 2 :CN= 49.0]
00315>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00316>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
00317>  001:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00318>       COMPUTE DUALHYD     05:3602           1.30      .107 No_date    1:24   15.22
00319>          Major System /  02:Maj10th          .00      .000 No_date    0:00     .00
00320>          Minor System \  10:5yrflow         1.30      .107 No_date    1:24   15.22
00321> #                      FLOWS FROM BMGCC SOUTHERN PORTION
00322>  001:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00323>       CALIB STANDHYD      05:3507          12.59      .459 No_date    1:25    8.60
00324>        [XIMP=.30:TIMP=.50]
00325>        [LOSS= 2 :CN= 52.0]
00326>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00327>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
00328>  001:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00329>       ROUTE RESERVOIR -> 05:3507          12.59      .459 No_date    1:25    8.60
00330>        [RDT= 1.00] out<- 06:3507Pond      12.59      .023 No_date    4:02    8.60
00331>                  overflow <= 07:3507OVF      .00      .000 No_date    0:00     .00
00332>       [MxStoUsed=.8447E-01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00333>  001:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00334>       ADD HYD             04:Pondout       45.14      .068 No_date    4:10    8.83
00335>                      +  07:3507OVF          .00      .000 No_date    0:00     .00
00336>                      +  06:3507Pond       12.59      .023 No_date    4:02    8.60
00337>                      +  10:5yrflow         1.30      .107 No_date    1:24   15.22
00338>       [DT= 1.00]  SUM=  05:LinkPipe        59.03      .127 No_date    1:25    8.92
00339>  001:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00340>       ADD HYD             05:LinkPipe      59.03      .127 No_date    1:25    8.92
00341>                      +  02:Maj10th          .00      .000 No_date    0:00     .00
00342>                      +  03:3601             .25      .031 No_date    1:20   15.22
00343>                      +  09:803           145.66      .198 No_date    3:38    9.48
00344>       [DT= 1.00]  SUM=  08:Node3          204.94      .293 No_date    3:40    9.32
00345>  001:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00346>       ADD HYD             01:806/outB      58.48      .038 No_date    3:58    6.65
00347>                      +  08:Node3          204.94      .293 No_date    3:40    9.32
00348>       [DT= 1.00]  SUM=  02:Node4          263.42      .331 No_date    3:40    8.73
00349>   ** END OF RUN :   1
00350>
00351> ************************************************************************
00352>
00353>
00354>
00355>
00356>
00357>  RUN:COMMAND#
00358>  002:0001---------------------------------------------------------------------
00359>       START
00360>        [TZERO =    .00 hrs on        0]
00361>        [METOUT=   2    (1=imperial, 2=metric output)]
00362>        [NSTORM=   1 ]
00363>        [NRUN  =   2 ]
00364> #************************************************************************
00365> #  Project Name: [Linksview Ultimate]  Project Number: [183-2607]
00366> #  Date        : 2014 08 22
00367> #  Modified    :
00368> #  Modeller    : [A. French]
00369> #  Company     : C.F. Crozier & Associates Inc.
00370> #  License #   : 3737016
00371> #************************************************************************
00372> #************************************************************************
00373>  002:0002---------------------------------------------------------------------
00374>       READ STORM
00375>        Filename = STORM.001
00376>        Comment  =
00377>        [SDT= 5.00:SDUR=   4.00:PTOT=  34.77]
00378> #                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00379>  002:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00380>       CALIB STANDHYD      03:302           16.39      .454 No_date    1:32   12.46
00381>        [XIMP=.20:TIMP=.40]
00382>        [LOSS= 2 :CN= 65.2]
00383>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00384>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
00385>  002:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00386>       CALIB STANDHYD      01:303            2.34      .102 No_date    1:26   14.40
00387>        [XIMP=.25:TIMP=.50]
00388>        [LOSS= 2 :CN= 65.2]
00389>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00390>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
00391>  002:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00392>       ADD HYD             01:303            2.34      .102 No_date    1:26   14.40
00393>                      +  03:302           16.39      .454 No_date    1:32   12.46
00394>       [DT= 1.00]  SUM=  02:903            18.73      .545 No_date    1:31   12.70
00395>  002:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00396>       CALIB NASHYD        01:304            2.90      .038 No_date    1:45    5.64
00397>        [CN= 66.6: N= 3.00]
00398>        [Tp=  .28:DT= 5.00]
00399>  002:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00400>       ADD HYD             01:304            2.90      .038 No_date    1:45    5.64
00401>                      +  02:903           18.73      .545 No_date    1:31   12.70
00402>       [DT= 1.00]  SUM=  03:904            21.63      .573 No_date    1:31   11.75
00403>  002:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00404>       CALIB STANDHYD      01:305             .31      .016 No_date    1:20   10.94
00405>        [XIMP=.20:TIMP=.20]
00406>        [LOSS= 2 :CN= 65.2]
00407>        [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
00408>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
00409>  002:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00410>       ADD HYD             01:305             .31      .016 No_date    1:20   10.94
00411>                      +  03:904           21.63      .573 No_date    1:31   11.75
00412>       [DT= 1.00]  SUM=  02:905            21.94      .577 No_date    1:31   11.74
00413> #                        MAIR MILLS ESTATES SWMF
00414>  002:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00415>       ROUTE RESERVOIR -> 02:905           21.94      .577 No_date    1:31   11.74
00416>        [RDT= 1.00] out<- 03:502           21.94      .022 No_date    4:34   11.74
00417>                  overflow <= 04:502OVF       .00      .000 No_date    0:00     .00
00418>       [MxStoUsed=.2369E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00419>  002:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00420>       CALIB NASHYD        01:400            5.70      .016 No_date    2:25    2.22
00421>        [CN= 50.2: N= 3.00]
00422>        [Tp=  .70:DT= 5.00]
00423>  002:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00424>       ADD HYD             01:400            5.70      .016 No_date    2:25    2.22
00425>                      +  03:502           21.94      .022 No_date    4:34   11.74
00426>                      +  04:502OVF          .00      .000 No_date    0:00     .00
00427>       [DT= 1.00]  SUM=  02:906            27.64      .030 No_date    2:35    9.78
00428> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
00429>  002:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00430>       DIVERT HYD          -> 02:906           27.64      .030 No_date    2:35    9.78
00431>                 diverted <= 10:To806         26.77      .020 No_date    2:35    9.78
00432>                 diverted <= 03:To1023          .43      .005 No_date    2:35    9.78
00433>                 diverted <= 01:To1022          .43      .005 No_date    2:35    9.78
00434> #                TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
00435>  002:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00436>       CALIB STANDHYD      01:3501           66.62     3.125 No_date    1:35   19.25
00437>        [XIMP=.30:TIMP=.50]
00438>        [LOSS= 2 :CN= 81.5]
00439>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00440>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
00441>  002:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00442>       ROUTE RESERVOIR -> 01:3501          66.62     3.125 No_date    1:35   19.25
00443>        [RDT= 1.00] out<- 02:3501Pond      66.62      .132 No_date    4:25   19.25
00444>                  overflow <= 04:3501OVF      .00      .000 No_date    0:00     .00
00445>       [MxStoUsed=.1144E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00446>  002:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00447>       CALIB STANDHYD      01:3502           20.70     1.458 No_date    1:30   18.83
00448>        [XIMP=.30:TIMP=.50]
00449>        [LOSS= 2 :CN= 80.3]
00450>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00451>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
00452>  002:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00453>       ROUTE RESERVOIR -> 01:3502          20.70     1.458 No_date    1:30   18.83
00454>        [RDT= 1.00] out<- 05:3502Pond      20.70      .057 No_date    4:19   18.83
00455>                  overflow <= 06:3502OVF      .00      .000 No_date    0:00     .00
00456>       [MxStoUsed=.4819E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00457>  002:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00458>       CALIB NASHYD        01:3506           10.24      .050 No_date    2:20    3.63
00459>        [CN= 61.8: N= 3.00]
00460>        [Tp=  .66:DT= 5.00]
00461> #                                FLOWS AT NODE 1
00462>  002:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00463>       ADD HYD             02:3501Pond       66.62      .132 No_date    4:25   19.25
00464>                      +  04:3501OVF          .00      .000 No_date    0:00     .00
00465>                      +  05:3502Pond       20.70      .057 No_date    4:19   18.83
00466>                      +  06:3502OVF          .00      .000 No_date    0:00     .00
00467>                      +  01:3506           10.24      .050 No_date    2:20    3.63
00468>       [DT= 1.00]  SUM=  07:Node1          105.56      .217 No_date    2:45   17.62
00469>  002:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00470>       ROUTE CHANNEL   -> 07:Node1         105.56      .217 No_date    2:45   17.62
00471>        [RDT= 1.00] out<- 02:RC            105.56      .212 No_date    3:19   17.62
00472>        [L/S/n= 1400./1.200/.030]
00473>        [Vmax= 1.057:Dmax=  .445]
00474>  002:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00475>       CALIB STANDHYD      01:3503           23.53     1.083 No_date    1:27   14.16
00476>        [XIMP=.30:TIMP=.50]
00477>        [LOSS= 2 :CN= 59.0]
00478>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00479>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
00480>  002:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00481>       ROUTE RESERVOIR -> 01:3503          23.53     1.083 No_date    1:27   14.16
00482>        [RDT= 1.00] out<- 04:3503Pond      23.53      .048 No_date    4:10   14.16
00483>                  overflow <= 05:3503OVF      .00      .000 No_date    0:00     .00
00484>       [MxStoUsed=.2847E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00485>  002:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00486>       CALIB NASHYD        01:3505           16.57      .035 No_date    2:45    1.96
00487>        [CN= 44.2: N= 3.00]
00488>        [Tp=  .94:DT= 5.00]
00489> #                FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
00490>  002:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00491>       ADD HYD             04:3503Pond       23.53      .048 No_date    4:10   14.16
00492>                      +  05:3503OVF          .00      .000 No_date    0:00     .00
00493>                      +  02:RC            105.56      .212 No_date    3:19   17.62
00494>                      +  01:3505           16.57      .035 No_date    2:45    1.96
00495>       [DT= 1.00]  SUM=  09:Node2          145.66      .290 No_date    3:08   15.28
00496> #                              MAIR MILLS VILLAGE
00497>  002:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00498>       CALIB NASHYD        01:103            8.70      .053 No_date    2:05    3.72
00499>        [CN= 59.2: N= 3.00]
00500>        [Tp=  .48:DT= 5.00]
00501>  002:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00502>       ADD HYD             01:103            8.70      .053 No_date    2:05    3.72
00503>                      +  03:To1023           .43      .005 No_date    2:35    9.78
00504>       [DT= 1.00]  SUM=  02:1023            9.13      .056 No_date    2:05    4.01
00505>  002:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00506>       CALIB NASHYD        01:205            1.41      .010 No_date    1:40    2.79
00507>        [CN= 51.1: N= 3.00]
00508>        [Tp=  .20:DT= 5.00]
00509>  002:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00510>       ADD HYD             01:205            1.41      .010 No_date    1:40    2.79
00511>                      +  02:1023           9.13      .056 No_date    2:05    4.01
00512>       [DT= 1.00]  SUM=  03:802            10.54      .062 No_date    2:05    3.84
00513>  002:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00514>       CALIB STANDHYD      01:201            18.41     1.575 No_date    1:22   16.73
00515>        [XIMP=.43:TIMP=.56]
00516>        [LOSS= 2 :CN= 49.0]
00517>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
00518>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
00519>  002:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00520>       ADD HYD             01:201            18.41     1.575 No_date    1:22   16.73
00521>                      +  03:802            10.54      .062 No_date    2:05    3.84
00522>       [DT= 1.00]  SUM=  02:803            28.95     1.582 No_date    1:22   12.04
00523>  002:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00524>       CALIB NASHYD        01:202            1.10      .004 No_date    1:50    2.05
00525>        [CN= 55.0: N= 3.00]
00526>        [Tp=  .25:DT= 5.00]
00527>  002:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00528>       ADD HYD             01:202            1.10      .004 No_date    1:50    2.05
00529>                      +  02:803            28.95     1.582 No_date    1:22   12.04
00530>       [DT= 1.00]  SUM=  03:804            30.05     1.583 No_date    1:22   11.67
00531> #                          MAIR MILLS VILLAGE SWMF
00532>  002:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00533>       ROUTE RESERVOIR -> 03:804           30.05     1.583 No_date    1:22   11.67
00534>        [RDT= 1.00] out<- 02:1026           30.05      .034 No_date    4:09   11.67
00535>                  overflow <= 01:1026OVF      .00      .000 No_date    0:00     .00
00536>       [MxStoUsed=.3165E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00537>  002:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00538>       ADD HYD             02:1026           30.05      .034 No_date    4:09   11.67
00539>                      +  01:1026OVF          .00      .000 No_date    0:00     .00
00540>       [DT= 1.00]  SUM=  05:Pond1026ou      30.05      .034 No_date    4:09   11.67
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2yr CHI

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00541> #                    TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
00542>  002:0035--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00543>      DIVERT HYD      -> 05:Pond1026ou      30.05      .034 No_date    4:09    11.67
00544>                diverted <= 02:To807        30.05      .034 No_date    4:09    11.67
00545>                diverted <= 07:To809          .00      .000 No_date    0:00      .00
00546>                diverted <= 03:To1025         .00      .000 No_date    0:00      .00
00547>  002:0036--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00548>   *  CALIB NASHYD       01:207           1.22      .014 No_date    1:30     3.54
00549>        [CN= 55.3: N= 3.00]
00550>        [Tp=  .13:DT= 5.00]
00551>  002:0037--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00552>      ADD HYD           01:207           1.22      .014 No_date    1:30     3.54
00553>                      + 02:To807        30.05      .034 No_date    4:09    11.67
00554>        [DT= 1.00]  SUM=  06:807        31.27      .035 No_date    4:09    11.36
00555>  002:0038--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00556>      ADD HYD           03:To1025          .00      .000 No_date    0:00      .00
00557>                      + 09:Node2        145.66      .290 No_date    3:08    15.28
00558>        [DT= 1.00]  SUM=  01:1025       145.66      .290 No_date    3:08    15.28
00559>  002:0039--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00560>      ADD HYD           07:To809           .00      .000 No_date    0:00      .00
00561>                      + 01:1025         145.66      .290 No_date    3:08    15.28
00562>        [DT= 1.00]  SUM=  09:809        145.66      .290 No_date    3:08    15.28
00563> #                                FLOWS TO OUTLET B
00564>  002:0040--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00565>      ADD HYD           06:807           31.27      .035 No_date    4:00    11.36
00566>                      + 10:To806           26.77      .020 No_date    2:35     9.78
00567>        [DT= 1.00]  SUM=  01:806/outB      58.05      .055 No_date    4:00    10.63
00568> #                    LINKSVIEW AND CONTRIBUTING AREAS
00569>  002:0041--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00570>      CALIB STANDHYD     05:3504           6.94      .378 No_date    1:23    14.16
00571>        [XIMP=.30:TIMP=.50]
00572>        [LOSS= 2 :CN= 59.0]
00573>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00574>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
00575>  002:0042--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00576>      CALIB STANDHYD     06:3500          38.20     1.612 No_date    1:29    13.61
00577>        [XIMP=.30:TIMP=.50]
00578>        [LOSS= 2 :CN= 54.9]
00579>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00580>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
00581>  002:0043--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00582>      ADD HYD           05:3504           6.94      .378 No_date    1:23    14.16
00583>                      + 06:3500          38.20     1.612 No_date    1:29    13.61
00584>        [DT= 1.00]  SUM=  07:Pondin      45.14     1.929 No_date    1:28    13.70
00585>  002:0044--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00586>      ROUTE RESERVOIR -> 07:Pondin       45.14     1.929 No_date    1:28    13.70
00587>        [RDT= 1.00] out<- 08:LinkPond    45.14      .092 No_date    4:11    13.70
00588>                overflow <= 06:OVF          .00      .000 No_date    0:00      .00
00589>       (MxStoUsed=.5241E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00590>  002:0045--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00591>      ADD HYD           08:LinkPond      45.14      .092 No_date    4:11    13.70
00592>                      + 06:OVF            .00      .000 No_date    0:00      .00
00593>        [DT= 1.00]  SUM=  04:Pondout      45.14      .092 No_date    4:11    13.70
00594> #                    FLOWS FROM TENTH LINE (URBANIZED)
00595>  002:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00596>      CALIB STANDHYD     03:3601           .25      .038 No_date    1:20    22.06
00597>        [XIMP=.64:TIMP=.64]
00598>        [LOSS= 2 :CN= 49.0]
00599>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00600>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
00601>  002:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00602>      CALIB STANDHYD     05:3602          1.30      .142 No_date    1:24    22.06
00603>        [XIMP=.64:TIMP=.64]
00604>        [LOSS= 2 :CN= 49.0]
00605>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
00606>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
00607>  002:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00608>      COMPUTE DUALHYD    05:3602          1.30      .142 No_date    1:24    22.06
00609>         Major System /  02:Maj10th         .00      .000 No_date    0:00      .00
00610>         Minor System \  10:5yrflow        1.30      .142 No_date    1:24    22.06
00611> #                    FLOWS FROM BMGCC SOUTHERN PORTION
00612>  002:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00613>      CALIB STANDHYD     05:3507          12.59      .628 No_date    1:25    13.26
00614>        [XIMP=.30:TIMP=.50]
00615>        [LOSS= 2 :CN= 52.0]
00616>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00617>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
00618>  002:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00619>      ROUTE RESERVOIR -> 05:3507          12.59      .628 No_date    1:25    13.26
00620>        [RDT= 1.00] out<- 06:3507Pond     12.59      .030 No_date    4:04    13.26
00621>                overflow <= 07:3507OVF       .00      .000 No_date    0:00      .00
00622>       (MxStoUsed=.1367E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00623>  002:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00624>      ADD HYD           04:Pondout       45.14      .092 No_date    4:11    13.70
00625>                      + 07:3507OVF         .00      .000 No_date    0:00      .00
00626>                      + 06:3507Pond      12.59      .030 No_date    4:04    13.26
00627>                      + 10:5yrflow        1.30      .142 No_date    1:24    22.06
00628>        [DT= 1.00]  SUM=  05:LinkPipe     59.03      .177 No_date    1:25    13.79
00629>  002:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00630>      ADD HYD           05:LinkPipe       59.03      .177 No_date    1:25    13.79
00631>                      + 02:Maj10th         .00      .000 No_date    0:00      .00
00632>                      + 03:3601            .25      .038 No_date    1:20    22.06
00633>                      + 09:809          145.66      .290 No_date    3:08    15.28
00634>        [DT= 1.00]  SUM=  08:Node3       204.94      .416 No_date    3:10    14.86
00635>  002:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00636>      ADD HYD           01:806/outB       58.05      .055 No_date    4:00    10.63
00637>                      + 09:Node3        204.94      .416 No_date    3:10    14.86
00638>        [DT= 1.00]  SUM=  02:Node4       262.99      .470 No_date    3:12    13.92
00639>    ** END OF RUN :   2
00640>
00641> ************************************************************************************
00642>
00643>
00644>
00645>
00646>
00647>  RUN:COMMAND#
00648>  003:0001--------------------------------------------------------------------------
00649>       START
00650>         [TZERO =    .00 hrs on       0]
00651>         [METOUT=   2    (1=imperial, 2=metric output)]
00652>         [NSTORM=   1 ]
00653>         [NRUN  =   3 ]
00654> #*********************************************************************************
00655> #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
00656> #  Date        : 2014 08 22
00657> #  Modified    :
00658> #  Modeller    : [A. French]
00659> #  Company     : C.F. Crozier & Associates Inc.
00660> #  License #   : 3737016
00661> #*********************************************************************************
00662> #*********************************************************************************
00663>  003:0002--------------------------------------------------------------------------
00664>       READ STORM
00665>         Filename = STORM.001
00666>         Comment  =
00667>         [SDT= 5.00:SDUR=   4.00:PTOT=  46.10]
00668> #                    MAIR MILLS ESTATES AND CONTRIBUTING AREAS
00669>  003:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00670>      CALIB STANDHYD     03:302           16.39      .699 No_date    1:34    18.88
00671>        [XIMP=.20:TIMP=.40]
00672>        [LOSS= 2 :CN= 65.2]
00673>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00674>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
00675>  003:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00676>      CALIB STANDHYD     01:303           2.34      .151 No_date    1:25    21.45
00677>        [XIMP=.25:TIMP=.50]
00678>        [LOSS= 2 :CN= 65.2]
00679>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00680>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
00681>  003:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00682>      ADD HYD           01:303           2.34      .151 No_date    1:25    21.45
00683>                      + 03:302          16.39      .699 No_date    1:34    18.88
00684>        [DT= 1.00]  SUM=  02:903          18.73      .831 No_date    1:32    19.20
00685>  003:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00686>      CALIB NASHYD       01:304           2.90      .069 No_date    1:40    10.02
00687>        [CN= 66.6: N= 3.00]
00688>        [Tp=  .28:DT= 5.00]
00689>  003:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00690>      ADD HYD           01:304           2.90      .069 No_date    1:40    10.02
00691>                      + 02:903          18.73      .831 No_date    1:32    19.20
00692>        [DT= 1.00]  SUM=  03:904          21.63      .889 No_date    1:34    17.97
00693>  003:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00694>      CALIB STANDHYD     01:305            .31      .021 No_date    1:20    16.57
00695>        [XIMP=.20:TIMP=.20]
00696>        [LOSS= 2 :CN= 65.2]
00697>        [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
00698>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
00699>  003:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00700>      ADD HYD           01:305            .31      .021 No_date    1:20    16.57
00701>                      + 03:904          21.63      .889 No_date    1:34    17.97
00702>        [DT= 1.00]  SUM=  02:905          21.94      .894 No_date    1:34    17.95
00703> #                    MAIR MILLS ESTATES SWMF
00704>  003:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00705>      ROUTE RESERVOIR -> 02:905          21.94      .894 No_date    1:34    17.95
00706>        [RDT= 1.00] out<- 03:502         21.94      .072 No_date    4:13    17.95
00707>                overflow <= 04:5020VF        .00      .000 No_date    0:00      .00
00708>       (MxStoUsed=.3376E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00709>  003:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00710>      CALIB NASHYD       01:400           5.70      .033 No_date    2:25     4.52
00711>        [CN= 50.2: N= 3.00]
00712>        [Tp=  .70:DT= 5.00]
00713>  003:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00714>      ADD HYD           01:400           5.70      .033 No_date    2:25     4.52
00715>                      + 03:502         21.94      .072 No_date    4:13    17.95
00716>                      + 04:5020VF          .00      .000 No_date    0:00      .00
00717>        [DT= 1.00]  SUM=  02:906         27.64      .086 No_date    3:29    15.18
00718> #        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
00719>  003:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00720>      DIVERT HYD      -> 02:906          27.64      .086 No_date    3:29    15.18
00721>                diverted <= 10:To806      20.26      .020 No_date    3:29    15.18
00722>                diverted <= 03:To1023      3.69      .033 No_date    3:29    15.18
00723>                diverted <= 01:To1022      3.69      .033 No_date    3:29    15.18
00724> #                    TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
00725>  003:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00726>      CALIB STANDHYD     01:3501          66.62     4.927 No_date    1:34    28.35
00727>        [XIMP=.30:TIMP=.50]
00728>        [LOSS= 2 :CN= 81.5]
00729>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00730>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
00731>  003:0015--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00732>      ROUTE RESERVOIR -> 01:3501          66.62     4.927 No_date    1:34    28.35
00733>        [RDT= 1.00] out<- 02:3501Pond     66.62      .368 No_date    4:08    28.35
00734>                overflow <= 04:3501OVF       .00      .000 No_date    0:00      .00
00735>       (MxStoUsed=.1604E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00736>  003:0016--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00737>      CALIB STANDHYD     01:3502          28.70     2.286 No_date    1:31    27.77
00738>        [XIMP=.30:TIMP=.50]
00739>        [LOSS= 2 :CN= 80.3]
00740>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00741>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
00742>  003:0017--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00743>      ROUTE RESERVOIR -> 01:3502          28.70     2.286 No_date    1:31    27.77
00744>        [RDT= 1.00] out<- 05:3502Pond     28.70      .156 No_date    4:05    27.77
00745>                overflow <= 06:3502OVF       .00      .000 No_date    0:00      .00
00746>       (MxStoUsed=.6765E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00747>  003:0018--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00748>      CALIB NASHYD       01:3506          10.24      .097 No_date    2:20     7.09
00749>        [CN= 61.8: N= 3.00]
00750>        [Tp=  .66:DT= 5.00]
00751> #                                FLOWS AT NODE 1
00752>  003:0019--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00753>      ADD HYD           02:3501Pond       66.62      .368 No_date    4:08    28.35
00754>                      + 04:3501OVF         .00      .000 No_date    0:00      .00
00755>                      + 05:3502Pond      28.70      .156 No_date    4:05    27.77
00756>                      + 06:3502OVF         .00      .000 No_date    0:00      .00
00757>                      + 01:3506          10.24      .097 No_date    2:20     7.09
00758>        [DT= 1.00]  SUM=  07:Node1       105.56      .560 No_date    3:59    26.13
00759>  003:0020--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00760>      ROUTE CHANNEL   -> 07:Node1       105.56      .560 No_date    3:59    26.13
00761>        [RDT= 1.00] out<- 02:RC          105.56      .549 No_date    4:23    26.13
00762>        [L/S/n= 1400./1.200/.030]
00763>        [Vmax=  .963:Dmax=  .589]
00764>  003:0021--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00765>      CALIB STANDHYD     01:3503          23.53     1.559 No_date    1:26    20.74
00766>        [XIMP=.30:TIMP=.50]
00767>        [LOSS= 2 :CN= 59.0]
00768>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
00769>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
00770>  003:0022--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00771>      ROUTE RESERVOIR -> 01:3503          23.53     1.559 No_date    1:26    20.74
00772>        [RDT= 1.00] out<- 04:3503Pond     23.53      .130 No_date    3:36    20.74
00773>                overflow <= 05:3503OVF       .00      .000 No_date    0:00      .00
00774>       (MxStoUsed=.3854E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
00775>  003:0023--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00776>      CALIB NASHYD       01:3505          16.57      .069 No_date    2:45     3.91
00777>        [CN= 44.2: N= 3.00]
00778>        [Tp=  .94:DT= 5.00]
00779> #                    FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
00780>  003:0024--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00781>      ADD HYD           04:3503Pond       23.53      .130 No_date    3:36    20.74
00782>                      + 05:3503OVF         .00      .000 No_date    0:00      .00
00783>                      + 02:RC          105.56      .549 No_date    4:23    26.13
00784>                      + 01:3505          16.57      .069 No_date    2:45     3.91
00785>        [DT= 1.00]  SUM=  09:Node2       145.66      .713 No_date    4:03    22.73
00786> #                    MAIR MILLS VILLAGE
00787>  003:0025--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00788>      CALIB NASHYD       01:103           8.70      .101 No_date    2:00     7.03
00789>        [CN= 59.2: N= 3.00]
00790>        [Tp=  .48:DT= 5.00]
00791>  003:0026--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00792>      ADD HYD           01:103           8.70      .101 No_date    2:00     7.03
00793>                      + 03:To1023          3.69      .033 No_date    3:29    15.18
00794>        [DT= 1.00]  SUM=  02:To23         12.39      .114 No_date    2:10     9.46
00795>  003:0027--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00796>      CALIB NASHYD       01:205           1.41      .020 No_date    1:35     5.34
00797>        [CN= 51.1: N= 3.00]
00798>        [Tp=  .20:DT= 5.00]
00799>  003:0028--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00800>      ADD HYD           01:205           1.41      .020 No_date    1:35     5.34
00801>                      + 02:1023         12.39      .114 No_date    2:10     9.46
00802>        [DT= 1.00]  SUM=  03:802         13.80      .124 No_date    2:00     9.04
00803>  003:0029--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00804>      CALIB STANDHYD     01:201           18.41     2.208 No_date    1:21    23.38
00805>        [XIMP=.43:TIMP=.56]
00806>        [LOSS= 2 :CN= 49.0]
00807>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
00808>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
00809>  003:0030--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
00810>      ADD HYD           01:201           18.41     2.208 No_date    1:21    23.38
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5 yr CHI

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                    +  03:802          13.80     .124 No_date    2:00    9.04
      [DT= 1.00]  SUM=  02:803          32.21    2.223 No_date    1:21   17.24
003:0031--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:202           1.10     .011 No_date    1:45    4.52
      [CN= 55.0: N= 3.00]
      [Tp=  .25:DT= 5.00]
003:0032--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:202           1.10     .011 No_date    1:45    4.52
                    +  02:803          32.21    2.223 No_date    1:21   17.24
      [DT= 1.00]  SUM=  03:804          33.31    2.224 No_date    1:21   16.82
#                              MAIR MILLS VILLAGE SWMF
003:0033--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 03:804          33.31    2.224 No_date    1:21   16.82
      [RDT= 1.00] out<- 02:1026        33.31     .115 No_date    4:03   16.81
            overflow <= 01:10260VF      .00     .000 No_date    0:00     .00
    [MxStoUsed=.4575E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
003:0034--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            02:1026          33.31     .115 No_date    4:03   16.81
                    +  01:10260VF        .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  05:Pond1026ou    33.31     .115 No_date    4:03   16.81
#                        TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
003:0035--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    DIVERT HYD      -> 05:Pond1026ou   33.31     .115 No_date    4:03   16.81
            diverted <= 02:To807       29.74     .040 No_date    4:03   16.81
            diverted <= 07:To809        3.58     .075 No_date    4:03   16.81
            diverted <= 03:To1025        .00     .000 No_date    0:00     .00
003:0036--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  * CALIB NASHYD       01:207           1.22     .027 No_date    1:30    6.55
      [CN= 55.3: N= 3.00]
      [Tp=  .13:DT= 5.00]
003:0037--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:207           1.22     .027 No_date    1:30    6.55
                    +  02:To807        29.74     .040 No_date    4:03   16.81
      [DT= 1.00]  SUM=  06:807          30.96     .050 No_date    1:35   16.41
003:0038--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            03:To1025         .00     .000 No_date    0:00     .00
                    +  09:Node2        145.66     .713 No_date    4:03   22.73
      [DT= 1.00]  SUM=  01:1025         145.66     .713 No_date    4:03   22.73
003:0039--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            07:To809          3.58     .075 No_date    4:03   16.81
                    +  01:1025         145.66     .713 No_date    4:03   22.73
      [DT= 1.00]  SUM=  09:809          149.24     .788 No_date    4:03   22.59
#                                 FLOWS TO OUTLET B
003:0040--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            06:807           30.96     .050 No_date    1:35   16.41
                    +  10:To806         20.26     .020 No_date    3:29   15.18
      [DT= 1.00]  SUM=  01:806/outB      51.21     .070 No_date    1:37   15.92
#                          LINKSVIEW AND CONTRIBUTING AREAS
003:0041--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     05:3504           6.94     .532 No_date    1:23   20.74
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 59.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=    .0]
003:0042--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     06:3500          38.20    2.336 No_date    1:27   19.84
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 54.9]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
003:0043--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            05:3504           6.94     .532 No_date    1:23   20.74
                    +  06:3500          38.20    2.336 No_date    1:27   19.84
      [DT= 1.00]  SUM=  07:Pondin        45.14    2.811 No_date    1:26   19.97
003:0044--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 07:Pondin       45.14    2.811 No_date    1:26   19.97
      [RDT= 1.00] out<- 08:LinkPond    45.14     .236 No_date    3:39   19.97
            overflow <= 06:OVF          .00     .000 No_date    0:00     .00
    [MxStoUsed=.7140E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
003:0045--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            08:LinkPond      45.14     .236 No_date    3:39   19.97
                    +  06:OVF           .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  04:Pondout       45.14     .236 No_date    3:39   19.97
#                              FLOWS FROM TENTH LINE (URBANIZED)
003:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     03:3601            .25     .052 No_date    1:20   30.21
      [XIMP=.64:TIMP=.64]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=    .0]
003:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     05:3602           1.30     .199 No_date    1:23   30.21
      [XIMP=.64:TIMP=.64]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
003:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    COMPUTE DUALHYD    05:3602           1.30     .199 No_date    1:23   30.21
       Major System /  02:Maj10th         .00     .000 No_date    0:00     .00
       Minor System \  10:5yrflow        1.30     .199 No_date    1:23   30.21
#                              FLOWS FROM BMGCC SOUTHERN PORTION
003:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     05:3507          12.59     .881 No_date    1:24   19.26
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 52.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=    .0]
003:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 05:3507         12.59     .881 No_date    1:24   19.26
      [RDT= 1.00] out<- 06:3507Pond    12.59     .079 No_date    3:10   19.26
            overflow <= 07:3507OVF       .00     .000 No_date    0:00     .00
    [MxStoUsed=.1810E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
003:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            04:Pondout       45.14     .236 No_date    3:39   19.97
                    +  07:3507OVF         .00     .000 No_date    0:00     .00
                    +  06:3507Pond      12.59     .079 No_date    3:10   19.26
                    +  10:5yrflow        1.30     .199 No_date    1:23   30.21
      [DT= 1.00]  SUM=  05:LinkPipe      59.03     .321 No_date    3:28   20.05
003:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            05:LinkPipe      59.03     .321 No_date    3:28   20.05
                    +  02:Maj10th         .00     .000 No_date    0:00     .00
                    +  03:3601            .25     .052 No_date    1:20   30.21
                    +  09:809          149.24     .788 No_date    4:03   22.59
      [DT= 1.00]  SUM=  08:Node3       208.52    1.101 No_date    4:00   21.88
003:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:806/outB      51.21     .070 No_date    1:37   15.92
                    +  08:Node3       208.52    1.101 No_date    4:00   21.88
      [DT= 1.00]  SUM=  02:Node4       259.73    1.164 No_date    4:00   20.70
  ** END OF RUN :  3
**************************************************************************

                                                    10 yr CHI

 RUN:COMMAND#
 004:0001--------------------------------------------------------------------
      START
        [TZERO =    .00 hrs on        0]
        [METOUT=   2    (1=imperial, 2=metric output)]
        [NSTORM=   1 ]
        [NRUN  =   4 ]
**************************************************************************
#  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
#  Date        : 2014 08 22
#  Modified    :
#  Modeller    : [A. French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 3737016
**************************************************************************
**************************************************************************
004:0002--------------------------------------------------------------------
      READ STORM
        Filename = STORM.001
        Comment  =
        [SDT= 5.00:SDUR=   4.00:PTOT=  53.81]
#                        MAIR MILLS ESTATES AND CONTRIBUTING AREAS
004:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     03:302           16.39     .914 No_date    1:34   23.68
      [XIMP=.20:TIMP=.40]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
004:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:303            2.34     .187 No_date    1:24   26.65
      [XIMP=.25:TIMP=.50]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
004:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:303            2.34     .187 No_date    1:24   26.65
                    +  03:302           16.39     .914 No_date    1:34   23.68
      [DT= 1.00]  SUM=  02:903          18.73    1.079 No_date    1:33   24.05
004:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:304            2.90     .094 No_date    1:40   13.52
      [CN= 66.6: N= 3.00]
      [Tp=  .28:DT= 5.00]
004:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:304            2.90     .094 No_date    1:40   13.52
                    +  02:903          18.73    1.079 No_date    1:33   24.05
      [DT= 1.00]  SUM=  03:904          21.63    1.161 No_date    1:34   22.64
004:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:305             .31     .024 No_date    1:20   20.80
      [XIMP=.20:TIMP=.20]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
004:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:305             .31     .024 No_date    1:20   20.80
                    +  03:904          21.63    1.161 No_date    1:34   22.64
      [DT= 1.00]  SUM=  02:905          21.94    1.167 No_date    1:34   22.61
#                              MAIR MILLS ESTATES SWMF
004:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 02:905          21.94    1.167 No_date    1:34   22.61
      [RDT= 1.00] out<- 03:502         21.94     .108 No_date    4:07   22.61
            overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
    [MxStoUsed=.4094E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
004:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:400            5.70     .047 No_date    2:20    6.49
      [CN= 50.2: N= 3.00]
      [Tp=  .70:DT= 5.00]
004:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:400            5.70     .047 No_date    2:20    6.49
                    +  03:502          21.94     .108 No_date    4:07   22.61
                    +  04:502OVF         .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  02:906          27.64     .134 No_date    3:04   19.29
#        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
004:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    DIVERT HYD      -> 02:906          27.64     .134 No_date    3:04   19.29
            diverted <= 10:To806       16.76     .020 No_date    3:04   19.29
            diverted <= 03:To1023       5.44     .057 No_date    3:04   19.29
            diverted <= 01:To1022       5.44     .057 No_date    3:04   19.29
#                     TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
004:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:3501          66.62    6.426 No_date    1:34   34.87
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 81.5]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=    .0]
004:0015--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3501         66.62    6.426 No_date    1:34   34.87
      [RDT= 1.00] out<- 02:3501Pond    66.62     .555 No_date    3:52   34.87
            overflow <= 04:3501OVF       .00     .000 No_date    0:00     .00
    [MxStoUsed=.1804E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
004:0016--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:3502          28.70    2.876 No_date    1:31   34.19
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 80.3]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=    .0]
004:0017--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3502         28.70    2.876 No_date    1:31   34.19
      [RDT= 1.00] out<- 05:3502Pond    28.70     .236 No_date    3:46   34.19
            overflow <= 06:3502OVF       .00     .000 No_date    0:00     .00
    [MxStoUsed=.7941E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
004:0018--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:3506          10.24     .138 No_date    2:15    9.95
      [CN= 61.8: N= 3.00]
      [Tp=  .66:DT= 5.00]
#                                FLOWS AT NODE 1
004:0019--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            02:3501Pond      66.62     .555 No_date    3:52   34.87
                    +  04:3501OVF         .00     .000 No_date    0:00     .00
                    +  05:3502Pond      28.70     .236 No_date    3:46   34.19
                    +  06:3502OVF         .00     .000 No_date    0:00     .00
                    +  01:3506          10.24     .138 No_date    2:15    9.95
      [DT= 1.00]  SUM=  07:Node1        105.56     .857 No_date    3:23   32.27
004:0020--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE CHANNEL   -> 07:Node1        105.56     .857 No_date    3:23   32.27
      [RDT= 1.00] out<- 02:RC          105.56     .837 No_date    4:07   32.27
      [L/S/n= 1400./1.200/.030]
      [Vmax=  .902:Dmax=  .640]
004:0021--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:3503          23.53    1.910 No_date    1:26   25.57
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 59.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=    .0]
004:0022--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3503         23.53    1.910 No_date    1:26   25.57
      [RDT= 1.00] out<- 04:3503Pond    23.53     .195 No_date    3:14   25.57
            overflow <= 05:3503OVF       .00     .000 No_date    0:00     .00
    [MxStoUsed=.4510E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
004:0023--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:3505          16.57     .098 No_date    2:40    5.56
      [CN= 44.2: N= 3.00]
      [Tp=  .94:DT= 5.00]
#                        FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
004:0024--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            04:3503Pond      23.53     .195 No_date    3:14   25.57
                    +  05:3503OVF         .00     .000 No_date    0:00     .00
                    +  02:RC            105.56     .837 No_date    4:07   32.27
                    +  01:3505           16.57     .098 No_date    2:40    5.56
      [DT= 1.00]  SUM=  09:Node2        145.66    1.089 No_date    3:44   28.15
#                                MAIR MILLS VILLAGE
004:0025--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:103            8.70     .142 No_date    2:00    9.75
      [CN= 59.2: N= 3.00]
      [Tp=  .48:DT= 5.00]
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01081>  004:0026--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01082>      ADD HYD           01:103          8.70     .142 No_date    2:00    9.75
01083>                      + 03:To1023       5.44     .057 No_date    3:04   19.29
01084>        [DT= 1.00]  SUM=  02:1023       14.14     .176 No_date    2:10   13.42
01085>  004:0027--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01086>      CALIB NASHYD      01:205          1.41     .028 No_date    1:35    7.47
01087>        [CN= 51.1: N= 3.00]
01088>        [Tp=  .20:DT= 5.00]
01089>  004:0028--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01090>      ADD HYD           01:205          1.41     .028 No_date    1:35    7.47
01091>                      + 02:1023         14.14     .176 No_date    2:10   13.42
01092>        [DT= 1.00]  SUM=  03:802        15.55     .189 No_date    2:05   12.88
01093>  004:0029--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01094>      CALIB STANDHYD    01:201          18.41    2.610 No_date    1:21   28.15
01095>        [XIMP=.43:TIMP=.56]
01096>        [LOSS= 2 :CN= 49.0]
01097>        [Pervious    area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
01098>        [Impervious  area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
01099>  004:0030--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01100>      ADD HYD           01:201          18.41    2.610 No_date    1:21   28.15
01101>                      + 03:802          15.55     .189 No_date    2:05   12.88
01102>        [DT= 1.00]  SUM=  02:803        33.96    2.634 No_date    1:21   21.16
01103>  004:0031--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01104>      CALIB NASHYD      01:202          1.10     .016 No_date    1:45    6.67
01105>        [CN= 55.0: N= 3.00]
01106>        [Tp=  .25:DT= 5.00]
01107>  004:0032--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01108>      ADD HYD           01:202          1.10     .016 No_date    1:45    6.67
01109>                      + 02:803          33.96    2.634 No_date    1:21   21.16
01110>        [DT= 1.00]  SUM=  03:804        35.06    2.636 No_date    1:21   20.71
01111> #                          MAIR MILLS VILLAGE SWMF
01112>  004:0033--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01113>      ROUTE RESERVOIR -> 03:804          35.06    2.636 No_date    1:21   20.71
01114>        [RDT= 1.00] out<- 02:1026        35.06     .217 No_date    3:36   20.70
01115>                overflow <= 01:1026OVF      .00     .000 No_date    0:00     .00
01116>       (MxStoUsed=.5128E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01117>  004:0034--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01118>      ADD HYD           02:1026         35.06     .217 No_date    3:36   20.70
01119>                      + 01:1026OVF        .00     .000 No_date    0:00     .00
01120>        [DT= 1.00]  SUM=  05:Pond1026ou   35.06     .217 No_date    3:36   20.70
01121> #                    TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
01122>  004:0035--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01123>      DIVERT HYD        -> 05:Pond1026ou  35.06     .217 No_date    3:36   20.70
01124>                diverted <= 02:To807      25.40     .040 No_date    3:36   20.70
01125>                diverted <= 07:To809       9.66     .177 No_date    3:36   20.70
01126>                diverted <= 03:To1025       .00     .000 No_date    0:00     .00
01127>  004:0036--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01128>    * CALIB NASHYD      01:207          1.22     .037 No_date    1:30    9.03
01129>        [CN= 55.3: N= 3.00]
01130>        [Tp=  .13:DT= 5.00]
01131>  004:0037--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01132>      ADD HYD           01:207          1.22     .037 No_date    1:30    9.03
01133>                      + 02:To807        25.40     .040 No_date    3:36   20.70
01134>        [DT= 1.00]  SUM=  06:807        26.62     .064 No_date    1:33   20.17
01135>  004:0038--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01136>      ADD HYD           03:To1025         .00     .000 No_date    0:00     .00
01137>                      + 09:Node2      145.66    1.089 No_date    3:44   28.15
01138>        [DT= 1.00]  SUM=  01:1025       145.66    1.089 No_date    3:44   28.15
01139>  004:0039--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01140>      ADD HYD           07:To809          9.66     .177 No_date    3:36   20.70
01141>                      + 01:1025       145.66    1.089 No_date    3:44   28.15
01142>        [DT= 1.00]  SUM=  09:809        155.32    1.265 No_date    3:44   27.69
01143> #                              FLOWS TO OUTLET B
01144>  004:0040--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01145>      ADD HYD           06:807          26.62     .064 No_date    1:33   20.17
01146>                      + 10:To806        16.76     .020 No_date    3:04   19.29
01147>        [DT= 1.00]  SUM=  01:806/outB    43.38     .084 No_date    1:33   19.83
01148> #                        LINKSVIEW AND CONTRIBUTING AREAS
01149>  004:0041--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01150>      CALIB STANDHYD    05:3504         6.94     .643 No_date    1:22   25.57
01151>        [XIMP=.30:TIMP=.50]
01152>        [LOSS= 2 :CN= 59.0]
01153>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01154>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
01155>  004:0042--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01156>      CALIB STANDHYD    06:3500         38.20    2.833 No_date    1:27   24.41
01157>        [XIMP=.30:TIMP=.50]
01158>        [LOSS= 2 :CN= 54.9]
01159>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01160>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
01161>  004:0043--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01162>      ADD HYD           05:3504         6.94     .643 No_date    1:22   25.57
01163>                      + 06:3500         38.20    2.833 No_date    1:27   24.41
01164>        [DT= 1.00]  SUM=  07:Pondin     45.14    3.392 No_date    1:26   24.59
01165>  004:0044--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01166>      ROUTE RESERVOIR -> 07:Pondin      45.14    3.392 No_date    1:26   24.59
01167>        [RDT= 1.00] out<- 08:LinkPond   45.14     .354 No_date    3:17   24.59
01168>                overflow <= 06:OVF          .00     .000 No_date    0:00     .00
01169>       (MxStoUsed=.8342E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01170>  004:0045--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01171>      ADD HYD           08:LinkPond     45.14     .354 No_date    3:17   24.59
01172>                      + 06:OVF            .00     .000 No_date    0:00     .00
01173>        [DT= 1.00]  SUM=  04:Pondout     45.14     .354 No_date    3:17   24.59
01174> #                    FLOWS FROM TENTH LINE (URBANIZED)
01175>  004:0046--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01176>      CALIB STANDHYD    03:3601           .25     .061 No_date    1:20   35.90
01177>        [XIMP=.64:TIMP=.64]
01178>        [LOSS= 2 :CN= 49.0]
01179>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
01180>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
01181>  004:0047--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01182>      CALIB STANDHYD    05:3602         1.30     .236 No_date    1:23   35.90
01183>        [XIMP=.64:TIMP=.64]
01184>        [LOSS= 2 :CN= 49.0]
01185>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
01186>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
01187>  004:0048--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01188>      COMPUTE DUALHYD   05:3602         1.30     .236 No_date    1:23   35.90
01189>          Major System /  02:Maj10th     .01     .016 No_date    1:23   35.90
01190>          Minor System \  10:5yrflow    1.29     .220 No_date    1:22   35.90
01191> #                    FLOWS FROM BMGCC SOUTHERN PORTION
01192>  004:0049--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01193>      CALIB STANDHYD    05:3507         12.59    1.070 No_date    1:23   23.66
01194>        [XIMP=.30:TIMP=.50]
01195>        [LOSS= 2 :CN= 52.0]
01196>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01197>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
01198>  004:0050--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01199>      ROUTE RESERVOIR -> 05:3507         12.59    1.070 No_date    1:23   23.66
01200>        [RDT= 1.00] out<- 06:3507Pond    12.59     .115 No_date    2:55   23.66
01201>                overflow <= 07:3507OVF      .00     .000 No_date    0:00     .00
01202>       (MxStoUsed=.2121E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01203>  004:0051--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01204>      ADD HYD           04:Pondout      45.14     .354 No_date    3:17   24.59
01205>                      + 07:3507OVF        .00     .000 No_date    0:00     .00
01206>                      + 06:3507Pond     12.59     .115 No_date    2:55   23.66
01207>                      + 10:5yrflow       1.29     .220 No_date    1:22   35.90
01208>        [DT= 1.00]  SUM=  05:LinkPipe    59.02     .479 No_date    3:08   24.64
01209>  004:0052--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01210>      ADD HYD           05:LinkPipe     59.02     .479 No_date    3:08   24.64
01211>                      + 02:Maj10th        .01     .016 No_date    1:23   35.90
01212>                      + 03:3601           .25     .061 No_date    1:20   35.90
01213>                      + 09:809         155.32    1.265 No_date    3:44   27.69
01214>        [DT= 1.00]  SUM=  08:Node3      214.60    1.734 No_date    3:36   26.86
01215>  004:0053--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01216>      ADD HYD           01:806/outB     43.38     .084 No_date    1:33   19.83
01217>                      + 08:Node3      214.60    1.734 No_date    3:36   26.86
01218>        [DT= 1.00]  SUM=  02:Node4      257.98    1.798 No_date    3:36   25.67
01219>   ** END OF RUN :   4
01220>
01221>  ************************************************************************
01222>
01223>
01224>                                                          25 yr CHI
01225>
01226>
01227>  RUN:COMMAND#
01228>  005:0001--------------------------------------------------------------------
01229>      START
01230>        [TZERO =    .00 hrs on        0]
01231>        [METOUT=   2    (1=imperial, 2=metric output)]
01232>        [NSTORM=   1 ]
01233>        [NRUN  =   5 ]
01234> #*********************************************************************
01235> #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
01236> #  Date        : 2014 08 22
01237> #  Modified    :
01238> #  Modeller    : [A. French]
01239> #  Company     : C.F. Crozier & Associates Inc.
01240> #  License #   : 3737016
01241> #*********************************************************************
01242> #*********************************************************************
01243>  005:0002--------------------------------------------------------------------
01244>      READ STORM
01245>       Filename = STORM.001
01246>       Comment  =
01247>       [SDT= 5.00:SDUR=   4.00:PTOT=  63.85]
01248> #                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
01249>  005:0003--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01250>      CALIB STANDHYD    03:302          16.39    1.229 No_date    1:35   30.33
01251>        [XIMP=.20:TIMP=.40]
01252>        [LOSS= 2 :CN= 65.2]
01253>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01254>        [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
01255>  005:0004--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01256>      CALIB STANDHYD    01:303           2.34     .240 No_date    1:24   33.79
01257>        [XIMP=.25:TIMP=.50]
01258>        [LOSS= 2 :CN= 65.2]
01259>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01260>        [Impervious  area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
01261>  005:0005--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01262>      ADD HYD           01:303           2.34     .240 No_date    1:24   33.79
01263>                      + 03:302          16.39    1.229 No_date    1:35   30.33
01264>        [DT= 1.00]  SUM=  02:903          18.73    1.442 No_date    1:33   30.76
01265>  005:0006--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01266>      CALIB NASHYD      01:304           2.90     .130 No_date    1:40   18.59
01267>        [CN= 66.6: N= 3.00]
01268>        [Tp=  .28:DT= 5.00]
01269>  005:0007--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01270>      ADD HYD           01:304           2.90     .130 No_date    1:40   18.59
01271>                      + 02:903          18.73    1.442 No_date    1:33   30.76
01272>        [DT= 1.00]  SUM=  03:904          21.63    1.559 No_date    1:35   29.13
01273>  005:0008--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01274>      CALIB STANDHYD    01:305            .31     .029 No_date    1:20   26.72
01275>        [XIMP=.20:TIMP=.20]
01276>        [LOSS= 2 :CN= 65.2]
01277>        [Pervious    area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=   .0]
01278>        [Impervious  area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
01279>  005:0009--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01280>      ADD HYD           01:305            .31     .029 No_date    1:20   26.72
01281>                      + 03:904          21.63    1.559 No_date    1:35   29.13
01282>        [DT= 1.00]  SUM=  02:905          21.94    1.567 No_date    1:35   29.10
01283> #                MAIR MILLS ESTATES SWMF
01284>  005:0010--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01285>      ROUTE RESERVOIR -> 02:905          21.94    1.567 No_date    1:35   29.10
01286>        [RDT= 1.00] out<- 03:502         21.94     .142 No_date    4:06   29.10
01287>                overflow <= 04:502OVF       .00     .000 No_date    0:00     .00
01288>       (MxStoUsed=.5145E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01289>  005:0011--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01290>      CALIB NASHYD      01:400           5.70     .070 No_date    2:20    9.48
01291>        [CN= 50.2: N= 3.00]
01292>        [Tp=  .70:DT= 5.00]
01293>  005:0012--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01294>      ADD HYD           01:400           5.70     .070 No_date    2:20    9.48
01295>                      + 03:502          21.94     .142 No_date    4:06   29.10
01296>                      + 04:502OVF         .00     .000 No_date    0:00     .00
01297>        [DT= 1.00]  SUM=  02:906          27.64     .200 No_date    2:35   25.05
01298> #          FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
01299>  005:0013--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01300>      DIVERT HYD        -> 02:906          27.64     .200 No_date    2:35   25.05
01301>                diverted <= 10:To806      13.55     .020 No_date    2:35   25.05
01302>                diverted <= 03:To1023      7.04     .090 No_date    2:35   25.05
01303>                diverted <= 01:To1022      7.04     .090 No_date    2:35   25.05
01304> #                TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
01305>  005:0014--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01306>      CALIB STANDHYD    01:3501          66.62    8.345 No_date    1:33   43.62
01307>        [XIMP=.30:TIMP=.50]
01308>        [LOSS= 2 :CN= 81.5]
01309>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01310>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
01311>  005:0015--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01312>      ROUTE RESERVOIR -> 01:3501         66.62    8.345 No_date    1:33   43.62
01313>        [RDT= 1.00] out<- 02:3501Pond    66.62     .809 No_date    3:30   43.62
01314>                overflow <= 04:3501OVF      .00     .000 No_date    0:00     .00
01315>       (MxStoUsed=.2262E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01316>  005:0016--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01317>      CALIB STANDHYD    01:3502          28.70    3.878 No_date    1:30   42.82
01318>        [XIMP=.30:TIMP=.50]
01319>        [LOSS= 2 :CN= 80.3]
01320>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01321>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
01322>  005:0017--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01323>      ROUTE RESERVOIR -> 01:3502         28.70    3.878 No_date    1:30   42.82
01324>        [RDT= 1.00] out<- 05:3502Pond    28.70     .345 No_date    3:24   42.82
01325>                overflow <= 06:3502OVF      .00     .000 No_date    0:00     .00
01326>       (MxStoUsed=.9543E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01327>  005:0018--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01328>      CALIB NASHYD      01:3506          10.24     .199 No_date    2:15   14.20
01329>        [CN= 61.8: N= 3.00]
01330>        [Tp=  .66:DT= 5.00]
01331> #                              FLOWS AT NODE 1
01332>  005:0019--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01333>      ADD HYD           02:3501Pond      66.62     .809 No_date    3:30   43.62
01334>                      + 04:3501OVF        .00     .000 No_date    0:00     .00
01335>                      + 05:3502Pond     28.70     .345 No_date    3:24   42.82
01336>                      + 06:3502OVF        .00     .000 No_date    0:00     .00
01337>                      + 01:3506         10.24     .199 No_date    2:15   14.20
01338>        [DT= 1.00]  SUM=  07:Node1      105.56    1.274 No_date    3:02   40.55
01339>  005:0020--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01340>      ROUTE CHANNEL     -> 07:Node1      105.56    1.274 No_date    3:02   40.55
01341>        [RDT= 1.00] out<- 02:RC          105.56    1.226 No_date    3:51   40.55
01342>        [L/S/n= 1400./1.200/.030]
01343>        [Vmax=  .853:Dmax=  .697]
01344>  005:0021--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01345>      CALIB STANDHYD    01:3503          23.53    2.424 No_date    1:25   32.20
01346>        [XIMP=.30:TIMP=.50]
01347>        [LOSS= 2 :CN= 59.0]
01348>        [Pervious    area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01349>        [Impervious  area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
01350>  005:0022--------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
```

```
      ROUTE RESERVOIR -> 01:3503          23.53     2.424 No_date    1:25    32.20
       [RDT= 1.00] out<- 04:3503Pond      23.53      .286 No_date    2:58    32.20
            overflow <= 05:3503OVF          .00      .000 No_date    0:00      .00
      {MxStoUsed=.5423E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 005:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD        01:3505          16.57      .144 No_date    2:40     8.09
       [CN= 44.2: N= 3.00]
       [Tp=  .94:DT= 5.00]
#                  FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
 005:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             04:3503Pond      23.53      .286 No_date    2:58    32.20
                        + 05:3503OVF          .00      .000 No_date    0:00      .00
                        + 02:RC             105.56     1.226 No_date    3:51   40.55
                        + 01:3505            16.57      .144 No_date    2:40     8.09
      [DT= 1.00]  SUM=  09:Node2           145.66     1.604 No_date    3:33    35.51
#                                MAIR MILLS VILLAGE
 005:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD        01:103            8.70      .203 No_date    2:00    13.79
       [CN= 59.2: N= 3.00]
       [Tp=  .48:DT= 5.00]
 005:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:103            8.70      .203 No_date    2:00    13.79
                        + 03:To1023         7.04      .090 No_date    2:35    25.05
      [DT= 1.00]  SUM=  02:1023            15.74      .267 No_date    2:06    18.83
 005:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD        01:205            1.41      .041 No_date    1:35    10.67
       [CN= 51.1: N= 3.00]
       [Tp=  .20:DT= 5.00]
 005:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:205            1.41      .041 No_date    1:35    10.67
                        + 02:1023           15.74      .267 No_date    2:06    18.83
      [DT= 1.00]  SUM=  03:802              17.15      .287 No_date    2:05    18.16
 005:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      01:201            18.41     3.174 No_date    1:21    34.62
       [XIMP=.43:TIMP=.56]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
 005:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:201            18.41     3.174 No_date    1:21    34.62
                        + 03:802            17.15      .287 No_date    2:05    18.16
      [DT= 1.00]  SUM=  02:803              35.56     3.211 No_date    1:21    26.68
 005:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD        01:202            1.10      .025 No_date    1:40     9.96
       [CN= 55.0: N= 3.00]
       [Tp=  .25:DT= 5.00]
 005:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:202            1.10      .025 No_date    1:40     9.96
                        + 02:803            35.56     3.211 No_date    1:21    26.68
      [DT= 1.00]  SUM=  03:804              36.66     3.217 No_date    1:21    26.18
#                              MAIR MILLS VILLAGE SWMF
 005:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 03:804           36.66     3.217 No_date    1:21    26.18
       [RDT= 1.00] out<- 02:1026          36.66      .359 No_date    3:06    26.17
            overflow <= 01:1026OVF          .00      .000 No_date    0:00      .00
      {MxStoUsed=.5901E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 005:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             02:1026          36.66      .359 No_date    3:06    26.17
                        + 01:1026OVF          .00      .000 No_date    0:00      .00
      [DT= 1.00]  SUM=  05:Pond1026ou      36.66      .359 No_date    3:06    26.17
#                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
 005:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      DIVERT HYD      -> 05:Pond1026ou    36.66      .359 No_date    3:06    26.17
            diverted <= 02:To807          21.13      .040 No_date    3:06    26.17
            diverted <= 07:To809          15.53      .319 No_date    3:06    26.17
            diverted <= 03:To1025           .00      .000 No_date    0:00      .00
 005:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  *   CALIB NASHYD        01:207            1.22      .053 No_date    1:30    12.72
       [CN= 55.3: N= 3.00]
       [Tp=  .13:DT= 5.00]
 005:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:207            1.22      .053 No_date    1:30    12.72
                        + 02:To807          21.13      .040 No_date    3:06    26.17
      [DT= 1.00]  SUM=  06:807              22.35      .086 No_date    1:30    25.44
 005:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             03:To1025           .00      .000 No_date    0:00      .00
                        + 09:Node2          145.66     1.604 No_date    3:33    35.51
      [DT= 1.00]  SUM=  01:1025             145.66     1.604 No_date    3:33    35.51
 005:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             07:To809          15.53      .319 No_date    3:06    26.17
                        + 01:1025           145.66     1.604 No_date    3:33    35.51
      [DT= 1.00]  SUM=  09:809              161.19     1.916 No_date    3:25    34.61
#                                FLOWS TO OUTLET B
 005:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             06:807            22.35      .086 No_date    1:30    25.44
                        + 10:To806          13.55      .020 No_date    2:35    25.05
      [DT= 1.00]  SUM=  01:806/outB         35.91      .106 No_date    1:30    25.29
#                    LINKSVIEW AND CONTRIBUTING AREAS
 005:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      05:3504            6.94      .802 No_date    1:22    32.20
       [XIMP=.30:TIMP=.50]
       [LOSS= 2 :CN= 59.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
 005:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      06:3500           38.20     3.603 No_date    1:26    30.70
       [XIMP=.30:TIMP=.50]
       [LOSS= 2 :CN= 54.9]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
 005:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             05:3504            6.94      .802 No_date    1:22    32.20
                        + 06:3500           38.20     3.603 No_date    1:26    30.70
      [DT= 1.00]  SUM=  07:Pondin           45.14     4.333 No_date    1:26    30.93
 005:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 07:Pondin        45.14     4.333 No_date    1:26    30.93
       [RDT= 1.00] out<- 08:LinkPond      45.14      .520 No_date    3:01    30.93
            overflow <= 06:OVF              .00      .000 No_date    0:00      .00
      {MxStoUsed=.1002E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 005:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             08:LinkPond       45.14      .520 No_date    3:01    30.93
                        + 06:OVF              .00      .000 No_date    0:00      .00
      [DT= 1.00]  SUM=  04:Pondout          45.14      .520 No_date    3:01    30.93
#                  FLOWS FROM TENTH LINE (URBANIZED)
 005:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      03:3601             .25      .073 No_date    1:20    43.44
       [XIMP=.64:TIMP=.64]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
 005:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      05:3602            1.30      .291 No_date    1:22    43.44
       [XIMP=.64:TIMP=.64]
       [LOSS= 2 :CN= 49.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
 005:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      COMPUTE DUALHYD     05:3602            1.30      .291 No_date    1:22    43.44
         Major System /   02:Maj10th          .05      .071 No_date    1:22    43.44
         Minor System \   10:5yrflow         1.25      .220 No_date    1:19    43.44
#                  FLOWS FROM BMGCC SOUTHERN PORTION
 005:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      05:3507           12.59     1.327 No_date    1:23    29.72
       [XIMP=.30:TIMP=.50]
       [LOSS= 2 :CN= 52.0]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
 005:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 05:3507          12.59     1.327 No_date    1:23    29.72
       [RDT= 1.00] out<- 06:3507Pond      12.59      .164 No_date    2:44    29.72
            overflow <= 07:3507OVF          .00      .000 No_date    0:00      .00
      {MxStoUsed=.2554E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 005:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             04:Pondout        45.14      .520 No_date    3:01    30.93
                        + 07:3507OVF          .00      .000 No_date    0:00      .00
                        + 06:3507Pond       12.59      .164 No_date    2:44    29.72
                        + 10:5yrflow         1.25      .220 No_date    1:19    43.44
      [DT= 1.00]  SUM=  05:LinkPipe         58.98      .698 No_date    2:53    30.94
 005:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             05:LinkPipe       58.98      .698 No_date    2:53    30.94
                        + 02:Maj10th          .05      .071 No_date    1:22    43.44
                        + 03:3601             .25      .073 No_date    1:20    43.44
                        + 09:809            161.19     1.916 No_date    3:25    34.61
      [DT= 1.00]  SUM=  08:Node3            220.47     2.599 No_date    3:19    33.64
 005:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:806/outB       35.91      .106 No_date    1:30    25.29
                        + 08:Node3          220.47     2.599 No_date    3:19    33.64
      [DT= 1.00]  SUM=  02:Node4            256.38     2.665 No_date    3:19    32.47
  ** END OF RUN :  5
 ***********************************************************************

                        50 yr CHI

 RUN:COMMAND#
 006:0001----------------------------------------------------------------------
      START
       [TZERO =     .00 hrs on        0]
       [METOUT=    2      (1=imperial, 2=metric output)]
       [NSTORM=    1 ]
       [NRUN   =   6 ]
 ***********************************************************************
 #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
 #  Date        : 2014 08 22
 #  Modified    :
 #  Modeller    : [A. French]
 #  Company     : C.F. Crozier & Associates Inc.
 #  License #   :  3737016
 ***********************************************************************
 ***********************************************************************
 006:0002----------------------------------------------------------------------
      READ STORM
       Filename = STORM.001
       Comment  =
       [SDT= 5.00:SDUR=   4.00:PTOT=  70.27]
#                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
 006:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      03:302           16.39     1.466 No_date    1:35    34.80
       [XIMP=.20:TIMP=.40]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
 006:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      01:303            2.34      .281 No_date    1:27    38.55
       [XIMP=.25:TIMP=.50]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
 006:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:303            2.34      .281 No_date    1:27    38.55
                        + 03:302            16.39     1.466 No_date    1:35    34.80
      [DT= 1.00]  SUM=  02:903              18.73     1.719 No_date    1:33    35.27
 006:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD        01:304            2.90      .157 No_date    1:40    22.11
       [CN= 66.6: N= 3.00]
       [Tp=  .28:DT= 5.00]
 006:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:304            2.90      .157 No_date    1:40    22.11
                        + 02:903            18.73     1.719 No_date    1:33    35.27
      [DT= 1.00]  SUM=  03:904              21.63     1.858 No_date    1:34    33.50
 006:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      01:305             .31      .032 No_date    1:20    30.72
       [XIMP=.20:TIMP=.20]
       [LOSS= 2 :CN= 65.2]
       [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
 006:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:305             .31      .032 No_date    1:20    30.72
                        + 03:904            21.63     1.858 No_date    1:34    33.50
      [DT= 1.00]  SUM=  02:905              21.94     1.868 No_date    1:34    33.46
#                          MAIR MILLS ESTATES SWMF
 006:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 02:905           21.94     1.868 No_date    1:34    33.46
       [RDT= 1.00] out<- 03:502           21.94      .150 No_date    4:08    33.46
            overflow <= 04:5020VF           .00      .000 No_date    0:00      .00
      {MxStoUsed=.5957E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 006:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD        01:400            5.70      .086 No_date    2:20    11.63
       [CN= 50.2: N= 3.00]
       [Tp=  .70:DT= 5.00]
 006:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ADD HYD             01:400            5.70      .086 No_date    2:20    11.63
                        + 03:502            21.94      .150 No_date    4:08    33.46
                        + 04:5020VF           .00      .000 No_date    0:00      .00
      [DT= 1.00]  SUM=  02:906              27.64      .227 No_date    2:30    28.96
#        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
 006:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      DIVERT HYD      -> 02:906           27.64      .227 No_date    2:30    28.96
            diverted <= 10:To806          12.11      .020 No_date    2:30    28.96
            diverted <= 03:To1023          7.77      .104 No_date    2:30    28.96
            diverted <= 01:To1022          7.77      .104 No_date    2:30    28.96
#                  TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
 006:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      01:3501           66.62     9.745 No_date    1:32    49.34
       [XIMP=.30:TIMP=.50]
       [LOSS= 2 :CN= 81.5]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
 006:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 01:3501          66.62     9.745 No_date    1:32    49.34
       [RDT= 1.00] out<- 02:3501Pond      66.62      .975 No_date    3:20    49.34
            overflow <= 04:3501OVF          .00      .000 No_date    0:00      .00
      {MxStoUsed=.2514E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 006:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB STANDHYD      01:3502           28.70     4.530 No_date    1:29    48.48
       [XIMP=.30:TIMP=.50]
       [LOSS= 2 :CN= 80.3]
       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
 006:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      ROUTE RESERVOIR -> 01:3502          28.70     4.530 No_date    1:29    48.48
       [RDT= 1.00] out<- 05:3502Pond      28.70      .417 No_date    3:14    48.48
            overflow <= 06:3502OVF          .00      .000 No_date    0:00      .00
      {MxStoUsed=.1061E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 006:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
      CALIB NASHYD        01:3506           10.24      .243 No_date    2:15    17.20
       [CN= 61.8: N= 3.00]
       [Tp=  .66:DT= 5.00]
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```
01621> #                                        FLOWS AT NODE 1
01622>  006:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01623>      ADD HYD            02:3501Pond       66.62     .975 No_date    3:20   49.34
01624>                       + 04:3501OVF         .00     .000 No_date    0:00     .00
01625>                       + 05:3502Pond      28.70     .417 No_date    3:14   48.48
01626>                       + 06:3502OVF         .00     .000 No_date    0:00     .00
01627>                       + 01:3506          10.24     .243 No_date    2:15   17.20
01628>       [DT= 1.00]  SUM=  07:Node1        105.56    1.554 No_date    2:52   45.99
01629>  006:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01630>      ROUTE CHANNEL    -> 07:Node1        105.56    1.554 No_date    2:52   45.99
01631>       [RDT= 1.00] out<- 02:RC             105.56    1.482 No_date    3:41   45.99
01632>       [L/S/n= 1400./1.200/.030]
01633>       [Vmax=  .843:Dmax=  .725]
01634>  006:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01635>      CALIB STANDHYD     01:3503           23.53    2.785 No_date    1:25   36.63
01636>       [XIMP=.30:TIMP=.50]
01637>       [LOSS= 2 :CN= 59.0]
01638>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01639>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=    .0]
01640>  006:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01641>      ROUTE RESERVOIR -> 01:3503           23.53    2.785 No_date    1:25   36.63
01642>       [RDT= 1.00] out<- 04:3503Pond       23.53     .345 No_date    2:52   36.63
01643>            overflow <= 05:3503OVF          .00     .000 No_date    0:00     .00
01644>       [MxStoUsed=.6050E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01645>  006:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01646>      CALIB NASHYD       01:3505           16.57     .177 No_date    2:40    9.92
01647>       [CN= 44.2: N= 3.00]
01648>       [Tp=  .94:DT= 5.00]
01649> #                       FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
01650>  006:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01651>      ADD HYD            04:3503Pond       23.53     .345 No_date    2:52   36.63
01652>                       + 05:3503OVF         .00     .000 No_date    0:00     .00
01653>                       + 02:RC            105.56    1.482 No_date    3:41   45.99
01654>                       + 01:3505           16.57     .177 No_date    2:40    9.92
01655>       [DT= 1.00]  SUM=  09:Node2        145.66    1.950 No_date    3:25   40.37
01656> #                                       MAIR MILLS VILLAGE
01657>  006:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01658>      CALIB NASHYD       01:103             8.70     .247 No_date    2:00   16.64
01659>       [CN= 59.2: N= 3.00]
01660>       [Tp=  .48:DT= 5.00]
01661>  006:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01662>      ADD HYD            01:103             8.70     .247 No_date    2:00   16.64
01663>                       + 03:To1023          7.77     .104 No_date    2:30   28.96
01664>       [DT= 1.00]  SUM=  02:1023          16.47     .333 No_date    2:05   22.45
01665>  006:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01666>      CALIB NASHYD       01:205             1.41     .051 No_date    1:35   12.96
01667>       [CN= 51.1: N= 3.00]
01668>       [Tp=  .20:DT= 5.00]
01669>  006:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01670>      ADD HYD            01:205             1.41     .051 No_date    1:35   12.96
01671>                       + 02:1023          16.47     .333 No_date    2:05   22.45
01672>       [DT= 1.00]  SUM=  03:802           17.88     .357 No_date    2:05   21.70
01673>  006:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01674>      CALIB STANDHYD     01:201            18.41    3.569 No_date    1:21   38.89
01675>       [XIMP=.43:TIMP=.56]
01676>       [LOSS= 2 :CN= 49.0]
01677>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
01678>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
01679>  006:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01680>      ADD HYD            01:201            18.41    3.569 No_date    1:21   38.89
01681>                       + 03:802           17.88     .357 No_date    2:05   21.70
01682>       [DT= 1.00]  SUM=  02:803           36.29    3.616 No_date    1:21   30.42
01683>  006:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01684>      CALIB NASHYD       01:202             1.10     .032 No_date    1:40   12.33
01685>       [CN= 55.0: N= 3.00]
01686>       [Tp=  .25:DT= 5.00]
01687>  006:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01688>      ADD HYD            01:202             1.10     .032 No_date    1:40   12.33
01689>                       + 02:803           36.29    3.616 No_date    1:21   30.42
01690>       [DT= 1.00]  SUM=  03:804           37.39    3.624 No_date    1:21   29.89
01691> #                                       MAIR MILLS VILLAGE SWMF
01692>  006:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01693>      ROUTE RESERVOIR -> 03:804           37.39    3.624 No_date    1:21   29.89
01694>       [RDT= 1.00] out<- 02:1026          37.39     .454 No_date    2:56   29.89
01695>            overflow <= 01:1026OVF          .00     .000 No_date    0:00     .00
01696>       [MxStoUsed=.6422E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01697>  006:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01698>      ADD HYD            02:1026            37.39     .454 No_date    2:56   29.89
01699>                       + 01:1026OVF          .00     .000 No_date    0:00     .00
01700>       [DT= 1.00]  SUM=  05:Pond1026ou     37.39     .454 No_date    2:56   29.89
01701> #                       TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
01702>  006:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01703>      DIVERT HYD       -> 05:Pond1026ou     37.39     .454 No_date    2:56   29.89
01704>            diverted <= 02:To807           19.16     .040 No_date    2:56   29.89
01705>            diverted <= 07:To809           18.22     .414 No_date    2:56   29.89
01706>            diverted <= 03:To1025           .00     .000 No_date    0:00     .00
01707>  006:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01708>   * CALIB NASHYD       01:207             1.22     .064 No_date    1:30   15.32
01709>       [CN= 55.3: N= 3.00]
01710>       [Tp=  .13:DT= 5.00]
01711>  006:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01712>      ADD HYD            01:207             1.22     .064 No_date    1:30   15.32
01713>                       + 02:To807           19.16     .040 No_date    2:56   29.89
01714>       [DT= 1.00]  SUM=  06:807           20.38     .102 No_date    1:30   29.02
01715>  006:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01716>      ADD HYD            03:To1025           .00     .000 No_date    0:00     .00
01717>                       + 09:Node2        145.66    1.950 No_date    3:25   40.37
01718>       [DT= 1.00]  SUM=  01:1025          145.66    1.950 No_date    3:25   40.37
01719>  006:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01720>      ADD HYD            07:To809           18.22     .414 No_date    2:56   29.89
01721>                       + 01:1025          145.66    1.950 No_date    3:25   40.37
01722>       [DT= 1.00]  SUM=  09:809           163.88    2.351 No_date    3:20   39.21
01723> #                                       FLOWS TO OUTLET B
01724>  006:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01725>      ADD HYD            06:807             20.38     .102 No_date    1:30   29.02
01726>                       + 10:To806           12.11     .020 No_date    2:30   28.96
01727>       [DT= 1.00]  SUM=  01:806/outB        32.49     .122 No_date    1:30   29.00
01728> #                                       LINKSVIEW AND CONTRIBUTING AREAS
01729>  006:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01730>      CALIB STANDHYD     05:3504            6.94     .915 No_date    1:22   36.63
01731>       [XIMP=.30:TIMP=.50]
01732>       [LOSS= 2 :CN= 59.0]
01733>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01734>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=    .0]
01735>  006:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01736>      CALIB STANDHYD     06:3500           38.20    4.125 No_date    1:26   34.91
01737>       [XIMP=.30:TIMP=.50]
01738>       [LOSS= 2 :CN= 54.9]
01739>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01740>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
01741>  006:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01742>      ADD HYD            05:3504            6.94     .915 No_date    1:22   36.63
01743>                       + 06:3500           38.20    4.125 No_date    1:26   34.91
01744>       [DT= 1.00]  SUM=  07:Pondin         45.14    4.967 No_date    1:26   35.18
01745>  006:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01746>      ROUTE RESERVOIR -> 07:Pondin        45.14    4.967 No_date    1:26   35.18
01747>       [RDT= 1.00] out<- 08:LinkPond      45.14     .632 No_date    2:54   35.18
01748>            overflow <= 06:OVF              .00     .000 No_date    0:00     .00
01749>       [MxStoUsed=.1116E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01750>  006:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01751>      ADD HYD            08:LinkPond        45.14     .632 No_date    2:54   35.18
01752>                       + 06:OVF              .00     .000 No_date    0:00     .00
01753>       [DT= 1.00]  SUM=  04:Pondout         45.14     .632 No_date    2:54   35.18
01754> #                                       FLOWS FROM TENTH LINE (URBANIZED)
01755>  006:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01756>      CALIB STANDHYD     03:3601             .25     .081 No_date    1:20   48.34
01757>       [XIMP=.64:TIMP=.64]
01758>       [LOSS= 2 :CN= 49.0]
01759>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
01760>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=    .0]
01761>  006:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01762>      CALIB STANDHYD     05:3602            1.30     .326 No_date    1:22   48.34
01763>       [XIMP=.64:TIMP=.64]
01764>       [LOSS= 2 :CN= 49.0]
01765>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
01766>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
01767>  006:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01768>      COMPUTE DUALHYD    05:3602            1.30     .326 No_date    1:22   48.34
01769>        Major System /   02:Major10th         .09     .106 No_date    1:22   48.34
01770>        Minor System \   10:Syrflow          1.21     .220 No_date    1:19   48.34
01771> #                                       FLOWS FROM BMGCC SOUTHERN PORTION
01772>  006:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01773>      CALIB STANDHYD     05:3507           12.59    1.506 No_date    1:23   33.78
01774>       [XIMP=.30:TIMP=.50]
01775>       [LOSS= 2 :CN= 52.0]
01776>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01777>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=    .0]
01778>  006:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01779>      ROUTE RESERVOIR -> 05:3507           12.59    1.506 No_date    1:23   33.78
01780>       [RDT= 1.00] out<- 06:3507Pond       12.59     .198 No_date    2:39   33.78
01781>            overflow <= 07:3507OVF          .00     .000 No_date    0:00     .00
01782>       [MxStoUsed=.2849E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01783>  006:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01784>      ADD HYD            04:Pondout         45.14     .632 No_date    2:54   35.18
01785>                       + 07:3507OVF          .00     .000 No_date    0:00     .00
01786>                       + 06:3507Pond       12.59     .198 No_date    2:39   33.78
01787>                       + 10:Syrflow         1.21     .220 No_date    1:19   48.34
01788>       [DT= 1.00]  SUM=  05:LinkPipe       58.94     .847 No_date    2:47   35.15
01789>  006:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01790>      ADD HYD            05:LinkPipe        58.94     .847 No_date    2:47   35.15
01791>                       + 02:Major10th        .09     .106 No_date    1:22   48.34
01792>                       + 03:3601             .25     .081 No_date    1:20   48.34
01793>                       + 09:809           163.88    2.351 No_date    3:20   39.21
01794>       [DT= 1.00]  SUM=  08:Node3         223.16    3.179 No_date    3:14   38.15
01795>  006:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01796>      ADD HYD            01:806/outB        32.49     .122 No_date    1:30   29.00
01797>                       + 08:Node3         223.16    3.179 No_date    3:14   38.15
01798>       [DT= 1.00]  SUM=  02:Node4         255.66    3.246 No_date    3:13   36.99
01799>   ** END OF RUN :   6
01800>
01801> ************************************************************************
01802>
01803>
01804>
01805>
01806>
01807>  RUN:COMMAND#
01808>  007:0001----------------------------------------------------------------------
01809>      START
01810>       [TZERO =    .00 hrs on        0]
01811>       [METOUT=   2    (1=imperial, 2=metric output)]
01812>       [NSTORM=   1 ]
01813>       [NRUN  =   7 ]
01814> #*************************************************************************
01815> #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
01816> #  Date        : 2014 08 22
01817> #  Modified    :
01818> #  Modeller    : [A. French]
01819> #  Company     : C.F. Crozier & Associates Inc.
01820> #  License #   : 3737016
01821> #*************************************************************************
01822> #*************************************************************************
01823>  007:0002----------------------------------------------------------------------
01824>      READ STORM
01825>       Filename = STORM.001
01826>       Comment  =
01827>       [SDT= 5.00:SDUR=   4.00:PTOT=  78.22]
01828> #                       MAIR MILLS ESTATES AND CONTRIBUTING AREAS
01829>  007:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01830>      CALIB STANDHYD     03:302            16.39    1.730 No_date    1:34   40.53
01831>       [XIMP=.20:TIMP=.40]
01832>       [LOSS= 2 :CN= 65.2]
01833>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01834>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
01835>  007:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01836>      CALIB STANDHYD     01:303             2.34     .334 No_date    1:27   44.63
01837>       [XIMP=.25:TIMP=.50]
01838>       [LOSS= 2 :CN= 65.2]
01839>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01840>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
01841>  007:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01842>      ADD HYD            01:303             2.34     .334 No_date    1:27   44.63
01843>                       + 03:302            16.39    1.730 No_date    1:34   40.53
01844>       [DT= 1.00]  SUM=  02:903            18.73    2.028 No_date    1:32   41.04
01845>  007:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01846>      CALIB NASHYD       01:304             2.90     .188 No_date    1:40   26.72
01847>       [CN= 66.6: N= 3.00]
01848>       [Tp=  .28:DT= 5.00]
01849>  007:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01850>      ADD HYD            11:304             2.90     .188 No_date    1:40   26.72
01851>                       + 02:903            18.73    2.028 No_date    1:32   41.04
01852>       [DT= 1.00]  SUM=  03:904            21.63    2.195 No_date    1:33   39.12
01853>  007:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01854>      CALIB STANDHYD     01:305              .31     .035 No_date    1:20   35.88
01855>       [XIMP=.20:TIMP=.20]
01856>       [LOSS= 2 :CN= 65.2]
01857>       [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
01858>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
01859>  007:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01860>      ADD HYD            01:305              .31     .035 No_date    1:20   35.88
01861>                       + 03:904            21.63    2.195 No_date    1:33   39.12
01862>       [DT= 1.00]  SUM=  02:905            21.94    2.207 No_date    1:34   39.08
01863> #                       MAIR MILLS ESTATES SWMF
01864>  007:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01865>      ROUTE RESERVOIR -> 02:905            21.94    2.207 No_date    1:34   39.08
01866>       [RDT= 1.00] out<- 03:502            21.94     .150 No_date    4:11   39.07
01867>            overflow <= 04:502OVF           .00     .000 No_date    0:00     .00
01868>       [MxStoUsed=.7099E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01869>  007:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01870>      CALIB NASHYD       01:400             5.70     .108 No_date    2:20   14.53
01871>       [CN= 50.2: N= 3.00]
01872>       [Tp=  .70:DT= 5.00]
01873>  007:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01874>      ADD HYD            01:400             5.70     .108 No_date    2:20   14.53
01875>                       + 03:502            21.94     .150 No_date    4:11   39.07
01876>                       + 04:502OVF           .00     .000 No_date    0:00     .00
01877>       [DT= 1.00]  SUM=  02:906            27.64     .258 No_date    2:20   34.01
01878> #       FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
01879>  007:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01880>      DIVERT HYD       -> 02:906            27.64     .258 No_date    2:20   34.01
01881>            diverted <= 10:To806           10.77     .020 No_date    2:20   34.01
01882>            diverted <= 03:To1023           8.44     .119 No_date    2:20   34.01
01883>            diverted <= 01:To1022           8.44     .119 No_date    2:20   34.01
01884> #                       TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
01885>  007:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01886>      CALIB STANDHYD     01:3501            66.62   11.449 No_date    1:32   56.54
01887>       [XIMP=.30:TIMP=.50]
01888>       [LOSS= 2 :CN= 81.5]
01889>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
01890>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=    .0]
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01891>  007:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01892>      ROUTE RESERVOIR -> 01:3501          66.62    11.449 No_date    1:32    56.54
01893>        [RDT= 1.00] out<- 02:3501Pond     66.62     1.181 No_date    3:15    56.54
01894>              overflow <= 04:3501OVF        .00      .000 No_date    0:00      .00
01895>      (MxStoUsed=.2829E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01896>  007:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01897>      CALIB STANDHYD     01:3502          28.70     5.199 No_date    1:29    55.60
01898>        [XIMP=.30:TIMP=.50]
01899>        [LOSS= 2 :CN= 80.3]
01900>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01901>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
01902>  007:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01903>      ROUTE RESERVOIR -> 01:3502          28.70     5.199 No_date    1:29    55.60
01904>        [RDT= 1.00] out<- 05:3502Pond     28.70      .506 No_date    3:10    55.60
01905>              overflow <= 06:3502OVF        .00      .000 No_date    0:00      .00
01906>      (MxStoUsed=.1195E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01907>  007:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01908>      CALIB NASHYD       01:3506          10.24      .299 No_date    2:15    21.18
01909>        [CN= 61.8: N= 3.00]
01910>        [Tp=  .66:DT= 5.00]
01911> #                                    FLOWS AT NODE 1
01912>  007:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01913>      ADD HYD            02:3501Pond    66.62     1.181 No_date    3:15    56.54
01914>                       + 04:3501OVF       .00      .000 No_date    0:00      .00
01915>                       + 05:3502Pond    28.70      .506 No_date    3:10    55.60
01916>                       + 06:3502OVF       .00      .000 No_date    0:00      .00
01917>                       + 01:3506        10.24      .299 No_date    2:15    21.18
01918>        [DT= 1.00]  SUM=  07:Node1     105.56    1.898 No_date    2:48    52.85
01919>  007:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01920>      ROUTE CHANNEL   -> 07:Node1     105.56    1.898 No_date    2:48    52.85
01921>        [RDT= 1.00] out<- 02:RC        105.56    1.810 No_date    3:34    52.85
01922>        [L/S/n= 1400./1.200/.030]
01923>        [Vmax=  .853:Dmax=  .750]
01924>  007:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01925>      CALIB STANDHYD     01:3503          23.53     3.196 No_date    1:25    42.30
01926>        [XIMP=.30:TIMP=.50]
01927>        [LOSS= 2 :CN= 59.0]
01928>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
01929>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
01930>  007:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01931>      ROUTE RESERVOIR -> 01:3503          23.53     3.196 No_date    1:25    42.30
01932>        [RDT= 1.00] out<- 04:3503Pond     23.53      .419 No_date    2:49    42.30
01933>              overflow <= 05:3503OVF        .00      .000 No_date    0:00      .00
01934>      (MxStoUsed=.6840E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01935>  007:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01936>      CALIB NASHYD       01:3505          16.57      .220 No_date    2:40    12.39
01937>        [CN= 44.2: N= 3.00]
01938>        [Tp=  .94:DT= 5.00]
01939> #                  FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
01940>  007:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01941>      ADD HYD            04:3503Pond    23.53      .419 No_date    2:49    42.30
01942>                       + 05:3503OVF       .00      .000 No_date    0:00      .00
01943>                       + 02:RC        105.56    1.810 No_date    3:34    52.85
01944>                       + 01:3505        16.57      .220 No_date    2:40    12.39
01945>        [DT= 1.00]  SUM=  09:Node2     145.66    2.392 No_date    3:19    46.54
01946> #                                   MAIR MILLS VILLAGE
01947>  007:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01948>      CALIB NASHYD       01:103            8.70      .301 No_date    2:00    20.43
01949>        [CN= 59.2: N= 3.00]
01950>        [Tp=  .48:DT= 5.00]
01951>  007:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01952>      ADD HYD            01:103            8.70      .301 No_date    2:00    20.43
01953>                       + 03:To1023         8.44      .119 No_date    2:20    34.01
01954>        [DT= 1.00]  SUM=  02:1023         17.14      .407 No_date    2:03    27.12
01955>  007:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01956>      CALIB NASHYD       01:205            1.41      .062 No_date    1:35    16.02
01957>        [CN= 51.1: N= 3.00]
01958>        [Tp=  .20:DT= 5.00]
01959>  007:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01960>      ADD HYD            01:205            1.41      .062 No_date    1:35    16.02
01961>                       + 02:1023         17.14      .407 No_date    2:03    27.12
01962>        [DT= 1.00]  SUM=  03:802          18.55      .440 No_date    2:00    26.27
01963>  007:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01964>      CALIB STANDHYD     01:201           18.41     3.985 No_date    1:21    44.32
01965>        [XIMP=.43:TIMP=.56]
01966>        [LOSS= 2 :CN= 49.0]
01967>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
01968>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
01969>  007:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01970>      ADD HYD            01:201           18.41     3.985 No_date    1:21    44.32
01971>                       + 03:802          18.55      .440 No_date    2:00    26.27
01972>        [DT= 1.00]  SUM=  02:803          36.96     4.047 No_date    1:21    35.26
01973>  007:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01974>      CALIB NASHYD       01:202            1.10      .040 No_date    1:40    15.54
01975>        [CN= 55.0: N= 3.00]
01976>        [Tp=  .25:DT= 5.00]
01977>  007:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01978>      ADD HYD            01:202            1.10      .040 No_date    1:40    15.54
01979>                       + 02:803          36.96     4.047 No_date    1:21    35.26
01980>        [DT= 1.00]  SUM=  03:804          38.06     4.057 No_date    1:21    34.69
01981> #                          MAIR MILLS VILLAGE SWMF
01982>  007:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01983>      ROUTE RESERVOIR -> 03:804           38.06     4.057 No_date    1:21    34.69
01984>        [RDT= 1.00] out<- 02:1026         38.06      .575 No_date    2:48    34.69
01985>              overflow <= 01:1026OVF        .00      .000 No_date    0:00      .00
01986>      (MxStoUsed=.7076E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
01987>  007:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01988>      ADD HYD            02:1026           38.06      .575 No_date    2:48    34.69
01989>                       + 01:1026OVF          .00      .000 No_date    0:00      .00
01990>        [DT= 1.00]  SUM=  05:Pond1026ou    38.06      .575 No_date    2:48    34.69
01991> #                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
01992>  007:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01993>      DIVERT HYD      -> 05:Pond1026ou    38.06      .575 No_date    2:48    34.69
01994>                 diverted <= 02:To807     17.35      .040 No_date    2:48    34.69
01995>                 diverted <= 07:To809     20.71      .535 No_date    2:48    34.69
01996>                 diverted <= 03:To1025        .00      .000 No_date    0:00      .00
01997>  007:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
01998>   * CALIB NASHYD       01:207            1.22      .078 No_date    1:30    18.79
01999>        [CN= 55.3: N= 3.00]
02000>        [Tp=  .13:DT= 5.00]
02001>  007:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02002>      ADD HYD            01:207            1.22      .078 No_date    1:30    18.79
02003>                       + 02:To807        17.35      .040 No_date    2:48    34.69
02004>        [DT= 1.00]  SUM=  06:807          18.57      .118 No_date    1:30    33.65
02005>  007:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02006>      ADD HYD            03:To1025         .00      .000 No_date    0:00      .00
02007>                       + 09:Node2       145.66    2.392 No_date    3:19    46.54
02008>        [DT= 1.00]  SUM=  01:1025        145.66    2.392 No_date    3:19    46.54
02009>  007:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02010>      ADD HYD            07:To809          20.71      .535 No_date    2:48    34.69
02011>                       + 01:1025        145.66    2.392 No_date    3:19    46.54
02012>        [DT= 1.00]  SUM=  09:809         166.37    2.906 No_date    3:13    45.07
02013> #                                 FLOWS TO OUTLET B
02014>  007:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02015>      ADD HYD            06:807          18.57      .118 No_date    1:30    33.65
02016>                       + 10:To806        10.77      .020 No_date    2:20    34.01
02017>        [DT= 1.00]  SUM=  01:806/outB     29.34      .138 No_date    1:30    33.78
02018> #                        LINKSVIEW AND CONTRIBUTING AREAS
02019>  007:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02020>      CALIB STANDHYD     05:3504           6.94     1.042 No_date    1:23    42.30
02021>        [XIMP=.30:TIMP=.50]
02022>        [LOSS= 2 :CN= 59.0]
02023>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02024>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
02025>  007:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02026>      CALIB STANDHYD     06:3500          38.20     4.717 No_date    1:26    40.30
02027>        [XIMP=.30:TIMP=.50]
02028>        [LOSS= 2 :CN= 54.9]
02029>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02030>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
02031>  007:0043----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02032>      ADD HYD            05:3504           6.94     1.042 No_date    1:23    42.30
02033>                       + 06:3500        38.20     4.717 No_date    1:26    40.30
02034>        [DT= 1.00]  SUM=  07:Pondin       45.14     5.692 No_date    1:26    40.61
02035>  007:0044----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02036>      ROUTE RESERVOIR -> 07:Pondin        45.14     5.692 No_date    1:26    40.61
02037>        [RDT= 1.00] out<- 08:LinkPond     45.14      .772 No_date    2:50    40.61
02038>              overflow <= 06:OVF            .00      .000 No_date    0:00      .00
02039>      (MxStoUsed=.1259E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02040>  007:0045----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02041>      ADD HYD            08:LinkPond    45.14      .772 No_date    2:50    40.61
02042>                       + 06:OVF          .00      .000 No_date    0:00      .00
02043>        [DT= 1.00]  SUM=  04:Pondout      45.14      .772 No_date    2:50    40.61
02044> #                      FLOWS FROM TENTH LINE (URBANIZED)
02045>  007:0046----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02046>      CALIB STANDHYD     03:3601           .25      .090 No_date    1:20    54.50
02047>        [XIMP=.64:TIMP=.64]
02048>        [LOSS= 2 :CN= 49.0]
02049>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02050>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
02051>  007:0047----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02052>      CALIB STANDHYD     05:3602           1.30      .361 No_date    1:22    54.50
02053>        [XIMP=.64:TIMP=.64]
02054>        [LOSS= 2 :CN= 49.0]
02055>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02056>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
02057>  007:0048----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02058>      COMPUTE DUALHYD    05:3602           1.30      .361 No_date    1:22    54.50
02059>         Major System /  02:Maj10th         .12      .141 No_date    1:22    54.50
02060>         Minor System \  10:5yrflow         1.18      .220 No_date    1:18    54.50
02061> #                      FLOWS FROM BMGCC SOUTHERN PORTION
02062>  007:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02063>      CALIB STANDHYD     05:3507          12.59     1.706 No_date    1:24    38.98
02064>        [XIMP=.30:TIMP=.50]
02065>        [LOSS= 2 :CN= 52.0]
02066>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02067>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
02068>  007:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02069>      ROUTE RESERVOIR -> 05:3507          12.59     1.706 No_date    1:24    38.98
02070>        [RDT= 1.00] out<- 06:3507Pond     12.59      .240 No_date    2:36    38.97
02071>              overflow <= 07:3507OVF        .00      .000 No_date    0:00      .00
02072>      (MxStoUsed=.3215E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02073>  007:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02074>      ADD HYD            04:Pondout     45.14      .772 No_date    2:50    40.61
02075>                       + 07:3507OVF        .00      .000 No_date    0:00      .00
02076>                       + 06:3507Pond    12.59      .240 No_date    2:36    38.97
02077>                       + 10:5yrflow      1.18      .220 No_date    1:18    54.50
02078>        [DT= 1.00]  SUM=  05:LinkPipe     58.91     1.033 No_date    2:43    40.54
02079>  007:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02080>      ADD HYD            05:LinkPipe    58.91     1.033 No_date    2:43    40.54
02081>                       + 02:Maj10th         .12      .141 No_date    1:22    54.50
02082>                       + 03:3601            .25      .090 No_date    1:20    54.50
02083>                       + 09:809          166.37    2.906 No_date    3:13    45.07
02084>        [DT= 1.00]  SUM=  08:Node3     225.65    3.919 No_date    3:08    43.90
02085>  007:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02086>      ADD HYD            01:806/outB    29.34      .138 No_date    1:30    33.78
02087>                       + 08:Node3     225.65    3.919 No_date    3:08    43.90
02088>        [DT= 1.00]  SUM=  02:Node4     254.99    3.988 No_date    3:07    42.74
02089>   ** END OF RUN :   7
02090>
02091> ************************************************************************
02092>
02093>
02094>
02095>
02096>
02097>  RUN:COMMAND#
02098>  008:0001----------------------------------------------------------------------
02099>      START
02100>        [TZERO =    .00 hrs on        0]
02101>        [METOUT=   2    (1=imperial, 2=metric output)]
02102>        [NSTORM=   1 ]
02103>        [NRUN  =   8 ]
02104> #*********************************************************************
02105> #  Project Name: [Linksview Ultimate]  Project Number: [183-2607]
02106> #  Date       : 2014 08 22
02107> #  Modified   :
02108> #  Modeller   : [A. French]
02109> #  Company    : C.F. Crozier & Associates Inc.
02110> #  License #  : 3737016
02111> #*********************************************************************
02112> #*********************************************************************
02113>  008:0002----------------------------------------------------------------------
02114>      READ STORM
02115>        Filename = STORM.001
02116>        Comment  =
02117>        [SDT= 1.00:SDUR=  24.00:PTOT=  45.60]
02118> #                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02119>  008:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02120>      CALIB STANDHYD     03:302           16.39      .446 No_date   12:22    18.58
02121>        [XIMP=.20:TIMP=.40]
02122>        [LOSS= 2 :CN= 65.2]
02123>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02124>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
02125>  008:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02126>      CALIB STANDHYD     01:303            2.34      .093 No_date   12:16    21.13
02127>        [XIMP=.25:TIMP=.50]
02128>        [LOSS= 2 :CN= 65.2]
02129>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02130>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
02131>  008:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02132>      ADD HYD            01:303            2.34      .093 No_date   12:16    21.13
02133>                       + 03:302          16.39      .446 No_date   12:22    18.58
02134>        [DT= 1.00]  SUM=  02:903          18.73      .527 No_date   12:21    18.90
02135>  008:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02136>      CALIB NASHYD       01:304            2.90      .052 No_date   12:20     9.81
02137>        [CN= 66.6: N= 3.00]
02138>        [Tp=  .28:DT= 5.00]
02139>  008:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02140>      ADD HYD            01:304            2.90      .052 No_date   12:20     9.81
02141>                       + 02:903          18.73      .527 No_date   12:21    18.90
02142>        [DT= 1.00]  SUM=  03:904          21.63      .579 No_date   12:20    17.68
02143>  008:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02144>      CALIB STANDHYD     01:305             .31      .009 No_date   12:12    16.31
02145>        [XIMP=.20:TIMP=.20]
02146>        [LOSS= 2 :CN= 65.2]
02147>        [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
02148>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
02149>  008:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02150>      ADD HYD            01:305             .31      .009 No_date   12:12    16.31
02151>                       + 03:904          21.63      .579 No_date   12:20    17.68
02152>        [DT= 1.00]  SUM=  02:905          21.94      .581 No_date   12:21    17.66
02153> #                        MAIR MILLS ESTATES SWMF
02154>  008:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02155>      ROUTE RESERVOIR -> 02:905           21.94      .581 No_date   12:21    17.66
02156>        [RDT= 1.00] out<- 03:502          21.94      .037 No_date   17:10    17.66
02157>              overflow <= 04:502OVF         .00      .000 No_date    0:00      .00
02158>      (MxStoUsed=.2663E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
02159>  008:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02160>      CALIB NASHYD       01:400            5.70      .023 No_date   12:55     4.41
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2 yr SCS

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02161>       [CN= 50.2: N= 3.00]
02162>       [Tp=  .70:DT= 5.00]
02163>  008:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02164>       ADD HYD            01:400            5.70     .023 No_date   12:55    4.41
02165>                        + 03:502           21.94     .037 No_date   17:10   17.66
02166>                        + 04:502OVF         .00     .000 No_date    0:00     .00
02167>       [DT= 1.00]  SUM=  02:906           27.64     .041 No_date   15:22   14.93
02168> #        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
02169>  008:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02170>       DIVERT HYD       -> 02:906           27.64     .041 No_date   15:22   14.93
02171>                 diverted <= 10:To806       22.82     .020 No_date   15:22   14.93
02172>                 diverted <= 03:To1023       2.41     .010 No_date   15:22   14.93
02173>                 diverted <= 01:To1022       2.41     .010 No_date   15:22   14.93
02174> #                  TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
02175>  008:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02176>       CALIB STANDHYD     01:3501           66.62    3.113 No_date   12:21   27.94
02177>        [XIMP=.30:TIMP=.50]
02178>        [LOSS= 2 :CN= 81.5]
02179>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02180>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
02181>  008:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02182>       ROUTE RESERVOIR -> 01:3501           66.62    3.113 No_date   12:21   27.94
02183>        [RDT= 1.00] out<- 02:3501Pond       66.62     .161 No_date   17:11   27.94
02184>                 overflow <= 04:3501OVF      .00     .000 No_date    0:00     .00
02185>        [MxStoUsed=.1296E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02186>  008:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02187>       CALIB STANDHYD     01:3502           28.70    1.444 No_date   12:18   27.37
02188>        [XIMP=.30:TIMP=.50]
02189>        [LOSS= 2 :CN= 80.3]
02190>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02191>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
02192>  008:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02193>       ROUTE RESERVOIR -> 01:3502           28.70    1.444 No_date   12:18   27.37
02194>        [RDT= 1.00] out<- 05:3502Pond       28.70     .067 No_date   17:09   27.37
02195>                 overflow <= 06:3502OVF      .00     .000 No_date    0:00     .00
02196>        [MxStoUsed=.5457E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02197>  008:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02198>       CALIB NASHYD       01:3506           10.24     .069 No_date   12:50    6.92
02199>        [CN= 61.8: N= 3.00]
02200>        [Tp=  .66:DT= 5.00]
02201> #                                   FLOWS AT NODE 1
02202>  008:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02203>       ADD HYD            02:3501Pond       66.62     .161 No_date   17:11   27.94
02204>                        + 04:3501OVF         .00     .000 No_date    0:00     .00
02205>                        + 05:3502Pond      28.70     .067 No_date   17:09   27.37
02206>                        + 06:3502OVF         .00     .000 No_date    0:00     .00
02207>                        + 01:3506          10.24     .069 No_date   12:50    6.92
02208>       [DT= 1.00]  SUM=  07:Node1         105.56     .245 No_date   13:05   25.74
02209>  008:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02210>       ROUTE CHANNEL   -> 07:Node1         105.56     .245 No_date   13:05   25.74
02211>        [RDT= 1.00] out<- 02:RC            105.56     .237 No_date   17:16   25.74
02212>        [L/S/n= 1400./1.200/.030]
02213>        [Vmax= 1.092:Dmax=  .467]
02214>  008:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02215>       CALIB STANDHYD     01:3503           23.53     .916 No_date   12:16   20.44
02216>        [XIMP=.30:TIMP=.50]
02217>        [LOSS= 2 :CN= 59.0]
02218>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02219>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
02220>  008:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02221>       ROUTE RESERVOIR -> 01:3503           23.53     .916 No_date   12:16   20.44
02222>        [RDT= 1.00] out<- 04:3503Pond       23.53     .055 No_date   15:08   20.43
02223>                 overflow <= 05:3503OVF      .00     .000 No_date    0:00     .00
02224>        [MxStoUsed=.3100E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02225>  008:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02226>       CALIB NASHYD       01:3505           16.57     .046 No_date   13:10    3.81
02227>        [CN= 44.2: N= 3.00]
02228>        [Tp=  .94:DT= 5.00]
02229> #                  FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
02230>  008:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02231>       ADD HYD            04:3503Pond       23.53     .055 No_date   15:08   20.43
02232>                        + 05:3503OVF         .00     .000 No_date    0:00     .00
02233>                        + 02:RC            105.56     .237 No_date   17:16   25.74
02234>                        + 01:3505           16.57     .046 No_date   13:10    3.81
02235>       [DT= 1.00]  SUM=  09:Node2         145.66     .328 No_date   13:26   22.39
02236> #                                  MAIR MILLS VILLAGE
02237>  008:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02238>       CALIB NASHYD       01:103             8.70     .075 No_date   12:35    6.87
02239>        [CN= 59.2: N= 3.00]
02240>        [Tp=  .48:DT= 5.00]
02241>  008:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02242>       ADD HYD            01:103             8.70     .075 No_date   12:35    6.87
02243>                        + 03:To1023          2.41     .010 No_date   15:22   14.93
02244>       [DT= 1.00]  SUM=  02:1023           11.11     .081 No_date   12:40    8.61
02245>  008:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02246>       CALIB NASHYD       01:205             1.41     .016 No_date   12:20    5.21
02247>        [CN= 51.1: N= 3.00]
02248>        [Tp=  .20:DT= 5.00]
02249>  008:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02250>       ADD HYD            01:205             1.41     .016 No_date   12:20    5.21
02251>                        + 02:1023           11.11     .081 No_date   12:40    8.61
02252>       [DT= 1.00]  SUM=  03:802            12.52     .089 No_date   12:35    8.23
02253>  008:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02254>       CALIB STANDHYD     01:201            18.41    1.132 No_date   12:12   23.08
02255>        [XIMP=.43:TIMP=.56]
02256>        [LOSS= 2 :CN= 49.0]
02257>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
02258>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02259>  008:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02260>       ADD HYD            01:201            18.41    1.132 No_date   12:12   23.08
02261>                        + 03:802            12.52     .089 No_date   12:35    8.23
02262>       [DT= 1.00]  SUM=  02:803            30.93    1.180 No_date   12:12   17.07
02263>  008:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02264>       CALIB NASHYD       01:202             1.10     .008 No_date   12:20    4.39
02265>        [CN= 55.0: N= 3.00]
02266>        [Tp=  .25:DT= 5.00]
02267>  008:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02268>       ADD HYD            01:202             1.10     .008 No_date   12:20    4.39
02269>                        + 02:803            30.93    1.180 No_date   12:12   17.07
02270>       [DT= 1.00]  SUM=  03:804            32.03    1.186 No_date   12:13   16.64
02271> #                    MAIR MILLS VILLAGE SWMF
02272>  008:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02273>       ROUTE RESERVOIR -> 03:804            32.03    1.186 No_date   12:13   16.64
02274>        [RDT= 1.00] out<- 02:1026           32.03     .039 No_date   18:09   16.63
02275>                 overflow <= 01:1026OVF      .00     .000 No_date    0:00     .00
02276>        [MxStoUsed=.3678E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02277>  008:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02278>       ADD HYD            02:1026           32.03     .039 No_date   18:09   16.63
02279>                        + 01:1026OVF         .00     .000 No_date    0:00     .00
02280>       [DT= 1.00]  SUM=  05:Pond1026ou     32.03     .039 No_date   18:09   16.63
02281> #                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
02282>  008:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02283>       DIVERT HYD       -> 05:Pond1026ou     32.03     .039 No_date   18:09   16.63
02284>                 diverted <= 02:To807       32.03     .039 No_date   18:09   16.63
02285>                 diverted <= 07:To809         .00     .000 No_date    0:00     .00
02286>                 diverted <= 03:To1025        .00     .000 No_date    0:00     .00
02287>  008:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02288>   * CALIB NASHYD         01:207             1.22     .021 No_date   12:15    6.40
02289>        [CN= 55.3: N= 3.00]
02290>        [Tp=  .13:DT= 5.00]
02291>  008:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02292>       ADD HYD            01:207             1.22     .021 No_date   12:15    6.40
02293>                        + 02:To807          32.03     .039 No_date   18:09   16.63
02294>       [DT= 1.00]  SUM=  06:807            33.25     .043 No_date   12:15   16.26
02295>  008:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02296>       ADD HYD            03:To1025            .00     .000 No_date    0:00     .00
02297>                        + 09:Node2         145.66     .328 No_date   13:26   22.39
02298>       [DT= 1.00]  SUM=  01:1025           145.66     .328 No_date   13:26   22.39
02299>  008:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02300>       ADD HYD            07:To809             .00     .000 No_date    0:00     .00
02301>                        + 01:1025          145.66     .328 No_date   13:26   22.39
02302>       [DT= 1.00]  SUM=  09:809            145.66     .328 No_date   13:26   22.39
02303> #                                  FLOWS TO OUTLET B
02304>  008:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02305>       ADD HYD            06:807            33.25     .043 No_date   12:15   16.26
02306>                        + 10:To806          22.82     .020 No_date   15:22   14.93
02307>       [DT= 1.00]  SUM=  01:806/outB       56.07     .061 No_date   12:19   15.72
02308> #                    LINKSVIEW AND CONTRIBUTING AREAS
02309>  008:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02310>       CALIB STANDHYD     05:3504            6.94     .304 No_date   12:14   20.44
02311>        [XIMP=.30:TIMP=.50]
02312>        [LOSS= 2 :CN= 59.0]
02313>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02314>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
02315>  008:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02316>       CALIB STANDHYD     06:3500           38.20    1.357 No_date   12:17   19.55
02317>        [XIMP=.30:TIMP=.50]
02318>        [LOSS= 2 :CN= 54.9]
02319>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02320>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
02321>  008:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02322>       ADD HYD            05:3504            6.94     .304 No_date   12:14   20.44
02323>                        + 06:3500           38.20    1.357 No_date   12:17   19.55
02324>       [DT= 1.00]  SUM=  07:Pondin          45.14    1.643 No_date   12:16   19.69
02325>  008:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02326>       ROUTE RESERVOIR -> 07:Pondin         45.14    1.643 No_date   12:16   19.69
02327>        [RDT= 1.00] out<- 08:LinkPond       45.14     .097 No_date   15:19   19.69
02328>                 overflow <= 06:OVF           .00     .000 No_date    0:00     .00
02329>        [MxStoUsed=.5703E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02330>  008:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02331>       ADD HYD            08:LinkPond       45.14     .097 No_date   15:19   19.69
02332>                        + 06:OVF             .00     .000 No_date    0:00     .00
02333>       [DT= 1.00]  SUM=  04:Pondout         45.14     .097 No_date   15:19   19.69
02334> #                    FLOWS FROM TENTH LINE (URBANIZED)
02335>  008:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02336>       CALIB STANDHYD     03:3601             .25     .024 No_date   12:12   29.85
02337>        [XIMP=.64:TIMP=.64]
02338>        [LOSS= 2 :CN= 49.0]
02339>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02340>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
02341>  008:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02342>       CALIB STANDHYD     05:3602            1.30     .104 No_date   12:14   29.85
02343>        [XIMP=.64:TIMP=.64]
02344>        [LOSS= 2 :CN= 49.0]
02345>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02346>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
02347>  008:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02348>       COMPUTE DUALHYD    05:3602            1.30     .104 No_date   12:14   29.85
02349>          Major System /  02:Maj10th          .00     .000 No_date    0:00     .00
02350>          Minor System \  10:5yrflow         1.30     .104 No_date   12:14   29.85
02351> #                    FLOWS FROM BMGCC SOUTHERN PORTION
02352>  008:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02353>       CALIB STANDHYD     05:3507           12.59     .495 No_date   12:15   18.98
02354>        [XIMP=.30:TIMP=.50]
02355>        [LOSS= 2 :CN= 52.0]
02356>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02357>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
02358>  008:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02359>       ROUTE RESERVOIR -> 05:3507           12.59     .495 No_date   12:15   18.98
02360>        [RDT= 1.00] out<- 06:3507Pond       12.59     .037 No_date   14:23   18.98
02361>                 overflow <= 07:3507OVF       .00     .000 No_date    0:00     .00
02362>        [MxStoUsed=.1442E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02363>  008:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02364>       ADD HYD            04:Pondout        45.14     .097 No_date   15:19   19.69
02365>                        + 07:3507OVF         .00     .000 No_date    0:00     .00
02366>                        + 06:3507Pond      12.59     .037 No_date   14:23   18.98
02367>                        + 10:5yrflow        1.30     .104 No_date   12:14   29.85
02368>       [DT= 1.00]  SUM=  05:LinkPipe       59.03     .185 No_date   12:14   19.76
02369>  008:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02370>       ADD HYD            05:LinkPipe       59.03     .185 No_date   12:14   19.76
02371>                        + 02:Maj10th          .00     .000 No_date    0:00     .00
02372>                        + 03:3601             .25     .024 No_date   12:12   29.85
02373>                        + 09:809           145.66     .328 No_date   13:26   22.39
02374>       [DT= 1.00]  SUM=  08:Node3         204.94     .461 No_date   13:34   21.64
02375>  008:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02376>       ADD HYD            01:806/outB       56.07     .061 No_date   12:19   15.72
02377>                        + 08:Node3         204.94     .461 No_date   13:34   21.64
02378>       [DT= 1.00]  SUM=  02:Node4         261.01     .518 No_date   13:35   20.37
02379>   ** END OF RUN :   8
02380>
02381> ************************************************************************************
02382>
02383>
02384>                                  5yr SCS
02385>
02386>
02387>  RUN:COMMAND#
02388>  009:0001----------------------------------------------------------------------------
02389>       START
02390>        [ZERO =    .00 hrs on        0]
02391>        [METOUT=   2    (1=imperial, 2=metric output)]
02392>        [NSTORM=   1 ]
02393>        [NRUN  =   9 ]
02394> #*********************************************************************************
02395> #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
02396> #  Date        : 2014 08 22
02397> #  Modified    :
02398> #  Modeller    : [A. French]
02399> #  Company     : C.F. Crozier & Associates Inc.
02400> #  License #   : 37370l6
02401> #*********************************************************************************
02402> #*********************************************************************************
02403>  009:0002----------------------------------------------------------------------------
02404>       READ STORM
02405>        Filename = STORM.001
02406>        Comment  =
02407>        [SDT= 1.00:SDUR=  24.00:PTOT=  62.40]
02408> #                  MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02409>  009:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02410>       CALIB STANDHYD     03:302            16.39     .787 No_date   12:21   29.34
02411>        [XIMP=.20:TIMP=.40]
02412>        [LOSS= 2 :CN= 65.2]
02413>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02414>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
02415>  009:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02416>       CALIB STANDHYD     01:303             2.34     .158 No_date   12:15   32.73
02417>        [XIMP=.25:TIMP=.50]
02418>        [LOSS= 2 :CN= 65.2]
02419>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02420>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
02421>  009:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02422>       ADD HYD            01:303             2.34     .158 No_date   12:15   32.73
02423>                        + 03:302            16.39     .787 No_date   12:21   29.34
02424>       [DT= 1.00]  SUM=  02:903            18.73     .927 No_date   12:20   29.77
02425>  009:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02426>       CALIB NASHYD       01:304             2.90     .097 No_date   12:20   17.83
02427>        [CN= 66.6: N= 3.00]
02428>        [Tp=  .28:DT= 5.00]
02429>  009:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02430>       ADD HYD            01:304             2.90     .097 No_date   12:20   17.83
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                    +  02:903            18.73     .927 No_date   12:20   29.77
      [DT= 1.00]  SUM=  03:904            21.63    1.024 No_date   12:20   28.17
009:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      01:305              .31     .013 No_date   12:12   25.84
      {XIMP=.20:TIMP=.20}
      {LOSS= 2 :CN= 65.2}
      [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
009:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:305              .31     .013 No_date   12:12   25.84
                      +  03:904            21.63    1.024 No_date   12:20   28.17
      [DT= 1.00]  SUM=  02:905            21.94    1.028 No_date   12:20   28.13
#                          MAIR MILLS ESTATES SWMF
009:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 02:905            21.94    1.028 No_date   12:20   28.13
      [RDT= 1.00] out<- 03:502           21.94     .095 No_date   14:36   28.13
              overflow <= 04:502OVF        .00     .000 No_date    0:00     .00
      {MxStoUsed=.3841E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
009:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD        01:400             5.70     .049 No_date   12:50    9.02
      [CN= 50.2: N= 3.00]
      [Tp=  .70:DT= 5.00]
009:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:400             5.70     .049 No_date   12:50    9.02
                      +  03:502           21.94     .095 No_date   14:36   28.13
                      +  04:502OVF          .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  02:906            27.64     .124 No_date   13:20   24.19
#       FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
009:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    DIVERT HYD      -> 02:906            27.64     .124 No_date   13:20   24.19
              diverted <= 10:To806       15.26     .020 No_date   13:20   24.19
              diverted <= 03:To1023       6.19     .052 No_date   13:20   24.19
              diverted <= 01:To1022       6.19     .052 No_date   13:20   24.19
#                  TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
009:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      01:3501            66.62    5.191 No_date   12:20   42.34
      {XIMP=.30:TIMP=.50}
      {LOSS= 2 :CN= 81.5}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=    .0]
009:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3501            66.62    5.191 No_date   12:20   42.34
      [RDT= 1.00] out<- 02:3501Pond       66.62     .484 No_date   14:21   42.34
              overflow <= 04:3501OVF        .00     .000 No_date    0:00     .00
      {MxStoUsed=.1778E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
009:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      01:3502            28.70    2.412 No_date   12:18   41.56
      {XIMP=.30:TIMP=.50}
      {LOSS= 2 :CN= 80.3}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=    .0]
009:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3502            28.70    2.412 No_date   12:18   41.56
      [RDT= 1.00] out<- 05:3502Pond       28.70     .205 No_date   14:18   41.56
              overflow <= 06:3502OVF        .00     .000 No_date    0:00     .00
      {MxStoUsed=.7484E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
009:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD        01:3506            10.24     .142 No_date   12:50   13.55
      [CN= 61.8: N= 3.00]
      [Tp=  .66:DT= 5.00]
#                                  FLOWS AT NODE 1
009:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             02:3501Pond        66.62     .484 No_date   14:21   42.34
                      +  04:3501OVF         .00     .000 No_date    0:00     .00
                      +  05:3502Pond       28.70     .205 No_date   14:18   41.56
                      +  06:3502OVF         .00     .000 No_date    0:00     .00
                      +  01:3506           10.24     .142 No_date   12:50   13.55
      [DT= 1.00]  SUM=  07:Node1          105.56     .755 No_date   13:33   39.34
009:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE CHANNEL   -> 07:Node1          105.56     .755 No_date   13:33   39.34
      [RDT= 1.00] out<- 02:RC            105.56     .730 No_date   14:30   39.34
      [L/S/n= 1400./1.200/.030]
      {Vmax=   .915:Dmax=   .626}
009:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      01:3503            23.53    1.476 No_date   12:15   31.22
      {XIMP=.30:TIMP=.50}
      {LOSS= 2 :CN= 59.0}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=    .0]
009:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3503            23.53    1.476 No_date   12:15   31.22
      [RDT= 1.00] out<- 04:3503Pond       23.53     .169 No_date   13:34   31.22
              overflow <= 05:3503OVF        .00     .000 No_date    0:00     .00
      {MxStoUsed=.4246E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
009:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD        01:3505            16.57     .098 No_date   13:10    7.70
      [CN= 44.2: N= 3.00]
      [Tp=  .94:DT= 5.00]
#                  FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
009:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             04:3503Pond        23.53     .169 No_date   13:34   31.22
                      +  05:3503OVF         .00     .000 No_date    0:00     .00
                      +  02:RC            105.56     .730 No_date   14:30   39.34
                      +  01:3505           16.57     .098 No_date   13:10    7.70
      [DT= 1.00]  SUM=  09:Node2          145.66     .954 No_date   14:08   34.43
#                                  MAIR MILLS VILLAGE
009:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD        01:103              8.70     .148 No_date   12:35   13.18
      [CN= 59.2: N= 3.00]
      [Tp=  .48:DT= 5.00]
009:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:103              8.70     .148 No_date   12:35   13.18
                      +  03:To1023          6.19     .052 No_date   13:20   24.19
      [DT= 1.00]  SUM=  02:1023           14.89     .181 No_date   12:40   17.76
009:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD        01:205              1.41     .031 No_date   12:15   10.18
      [CN= 51.1: N= 3.00]
      [Tp=  .20:DT= 5.00]
009:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:205              1.41     .031 No_date   12:15   10.18
                      +  02:1023          14.89     .181 No_date   12:40   17.76
      [DT= 1.00]  SUM=  03:802            16.30     .194 No_date   12:40   17.10
009:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      01:201             18.41    1.694 No_date   12:12   33.67
      {XIMP=.43:TIMP=.56}
      {LOSS= 2 :CN= 49.0}
      [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
009:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:201             18.41    1.694 No_date   12:12   33.67
                      +  03:802            16.30     .194 No_date   12:40   17.10
      [DT= 1.00]  SUM=  02:803            34.71    1.798 No_date   12:12   25.89
009:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD        01:202              1.10     .020 No_date   12:20    9.45
      [CN= 55.0: N= 3.00]
      [Tp=  .25:DT= 5.00]
009:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:202              1.10     .020 No_date   12:20    9.45
                      +  02:803            34.71    1.798 No_date   12:12   25.89
      [DT= 1.00]  SUM=  03:804            35.81    1.813 No_date   12:12   25.38
#                                  MAIR MILLS VILLAGE SWMF
009:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 03:804            35.81    1.813 No_date   12:12   25.38
      [RDT= 1.00] out<- 02:1026          35.81     .177 No_date   14:15   25.38
              overflow <= 01:1026OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.4914E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
009:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             02:1026            35.81     .177 No_date   14:15   25.38
                      +  01:1026OVF         .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  05:Pond1026ou      35.81     .177 No_date   14:15   25.38
#                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
009:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    DIVERT HYD      -> 05:Pond1026ou     35.81     .177 No_date   14:15   25.38
              diverted <= 02:To807       24.66     .040 No_date   14:15   25.38
              diverted <= 07:To809       11.15     .137 No_date   14:15   25.38
              diverted <= 03:To1025        .00     .000 No_date    0:00     .00
009:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  * CALIB NASHYD        01:207              1.22     .041 No_date   12:15   12.15
      [CN= 55.3: N= 3.00]
      [Tp=  .13:DT= 5.00]
009:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:207              1.22     .041 No_date   12:15   12.15
                      +  02:To807           24.66     .040 No_date   14:15   25.38
      [DT= 1.00]  SUM=  06:807            25.88     .074 No_date   12:15   24.76
009:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             03:To1025            .00     .000 No_date    0:00     .00
                      +  09:Node2         145.66     .954 No_date   14:08   34.43
      [DT= 1.00]  SUM=  01:1025           145.66     .954 No_date   14:08   34.43
009:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             07:To809            11.15     .137 No_date   14:15   25.38
                      +  01:1025          145.66     .954 No_date   14:08   34.43
      [DT= 1.00]  SUM=  09:809            156.81    1.091 No_date   14:09   33.78
#                                  FLOWS TO OUTLET B
009:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             06:807              25.88     .074 No_date   12:15   24.76
                      +  10:To806           15.26     .020 No_date   13:20   24.19
      [DT= 1.00]  SUM=  01:806/outB         41.15     .094 No_date   12:15   24.55
#                  LINKSVIEW AND CONTRIBUTING AREAS
009:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      05:3504             6.94     .479 No_date   12:14   31.22
      {XIMP=.30:TIMP=.50}
      {LOSS= 2 :CN= 59.0}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=    .0]
009:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      06:3500            38.20    2.164 No_date   12:17   29.77
      {XIMP=.30:TIMP=.50}
      {LOSS= 2 :CN= 54.9}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
009:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             05:3504             6.94     .479 No_date   12:14   31.22
                      +  06:3500            38.20    2.164 No_date   12:17   29.77
      [DT= 1.00]  SUM=  07:Pondin           45.14    2.616 No_date   12:16   30.00
009:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 07:Pondin          45.14    2.616 No_date   12:16   30.00
      [RDT= 1.00] out<- 08:LinkPond       45.14     .304 No_date   13:38   30.00
              overflow <= 06:OVF            .00     .000 No_date    0:00     .00
      {MxStoUsed=.7831E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
009:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             08:LinkPond         45.14     .304 No_date   13:38   30.00
                      +  06:OVF             .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  04:Pondout          45.14     .304 No_date   13:38   30.00
#                  FLOWS FROM TENTH LINE (URBANIZED)
009:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      03:3601              .25     .034 No_date   12:12   42.34
      {XIMP=.64:TIMP=.64}
      {LOSS= 2 :CN= 49.0}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=    .0]
009:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      05:3602             1.30     .153 No_date   12:13   42.34
      {XIMP=.64:TIMP=.64}
      {LOSS= 2 :CN= 49.0}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
009:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    COMPUTE DUALHYD     05:3602             1.30     .153 No_date   12:13   42.34
      Major System /    02:Maj10th           .00     .000 No_date    0:00     .00
      Minor System \    10:5yrflow          1.30     .153 No_date   12:13   42.34
#                  FLOWS FROM BMGCC SOUTHERN PORTION
009:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      05:3507            12.59     .777 No_date   12:14   28.82
      {XIMP=.30:TIMP=.50}
      {LOSS= 2 :CN= 52.0}
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=    .0]
009:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 05:3507            12.59     .777 No_date   12:14   28.82
      [RDT= 1.00] out<- 06:3507Pond       12.59     .099 No_date   13:20   28.82
              overflow <= 07:3507OVF        .00     .000 No_date    0:00     .00
      {MxStoUsed=.1984E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
009:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             04:Pondout          45.14     .304 No_date   13:38   30.00
                      +  07:3507OVF         .00     .000 No_date    0:00     .00
                      +  06:3507Pond       12.59     .099 No_date   13:20   28.82
                      +  10:5yrflow         1.30     .153 No_date   12:13   42.34
      [DT= 1.00]  SUM=  05:LinkPipe        59.03     .410 No_date   13:33   30.02
009:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             05:LinkPipe          59.03     .410 No_date   13:33   30.02
                      +  02:Maj10th           .00     .000 No_date    0:00     .00
                      +  03:3601              .25     .034 No_date   12:12   42.34
                      +  09:809            156.81    1.091 No_date   14:09   33.78
      [DT= 1.00]  SUM=  08:Node3           216.09    1.493 No_date   14:01   32.76
009:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD             01:806/outB         41.15     .094 No_date   12:15   24.55
                      +  08:Node3          216.09    1.493 No_date   14:01   32.76
      [DT= 1.00]  SUM=  02:Node4           257.23    1.556 No_date   14:01   31.45
  ** END OF RUN :   9
**************************************************************************
                                                        10 yr SCS
RUN:COMMAND#
010:0001----------------------------------------------------------------------
    START
      [TZERO =    .00 hrs on      0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  =  10 ]
#**************************************************************************
#  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
#  Date        : 2014 08 22
#  Modified    :
#  Modeller    : [A. French]
#  Company     : C.F. Crozier & Associates Inc.
#  License #   : 3737016
#**************************************************************************
#**************************************************************************
010:0002----------------------------------------------------------------------
    READ STORM
      Filename = STORM.001
      Comment  =
      [SDT= 1.00:SDUR=  24.00:PTOT=  72.00]
#                  MAIR MILLS ESTATES AND CONTRIBUTING AREAS
010:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD      03:302             16.39    1.012 No_date   12:20   36.03
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02701>       [XIMP=.20:TIMP=.40]
02702>       [LOSS= 2 :CN= 65.2]
02703>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02704>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
02705>  010:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02706>       CALIB STANDHYD     01:303            2.34     .199 No_date   12:16   39.86
02707>       [XIMP=.25:TIMP=.50]
02708>       [LOSS= 2 :CN= 65.2]
02709>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02710>       [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
02711>  010:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02712>       ADD HYD            01:303            2.34     .199 No_date   12:16   39.86
02713>                        + 03:302           16.39    1.012 No_date   12:20   36.03
02714>       [DT= 1.00]  SUM=  02:903           18.73    1.192 No_date   12:19   36.51
02715>  010:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02716>       CALIB NASHYD       01:304            2.90     .127 No_date   12:20   23.09
02717>       [CN= 66.6: N= 3.00]
02718>       [Tp=  .28:DT= 5.00]
02719>  010:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02720>       ADD HYD            01:304            2.90     .127 No_date   12:20   23.09
02721>                        + 02:903           18.73    1.192 No_date   12:19   36.51
02722>       [DT= 1.00]  SUM=  03:904           21.63    1.317 No_date   12:20   34.71
02723>  010:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02724>       CALIB STANDHYD     01:305             .31     .016 No_date   12:12   31.83
02725>       [XIMP=.20:TIMP=.20]
02726>       [LOSS= 2 :CN= 65.2]
02727>       [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
02728>       [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
02729>  010:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02730>       ADD HYD            01:305             .31     .016 No_date   12:12   31.83
02731>                        + 03:904           21.63    1.317 No_date   12:20   34.71
02732>       [DT= 1.00]  SUM=  02:905           21.94    1.323 No_date   12:20   34.67
02733> #                      MAIR MILLS ESTATES SWMF
02734>  010:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02735>       ROUTE RESERVOIR -> 02:905            21.94    1.323 No_date   12:20   34.67
02736>       [RDT= 1.00] out<- 03:502             21.94     .133 No_date   14:25   34.67
02737>             overflow <- 04:502OVF           .00     .000 No_date    0:00     .00
02738>       [MxStoUsed=.4611E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02739>  010:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02740>       CALIB NASHYD       01:400            5.70     .067 No_date   12:50   12.24
02741>       [CN= 50.2: N= 3.00]
02742>       [Tp=  .70:DT= 5.00]
02743>  010:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02744>       ADD HYD            01:400            5.70     .067 No_date   12:50   12.24
02745>                        + 03:502           21.94     .133 No_date   14:25   34.67
02746>                        + 04:502OVF         .00     .000 No_date    0:00     .00
02747>       [DT= 1.00]  SUM=  02:906           27.64     .181 No_date   13:14   30.04
02748> #        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
02749>  010:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02750>       DIVERT HYD       -> 02:906            27.64     .181 No_date   13:14   30.04
02751>             diverted <= 10:To806           12.69     .020 No_date   13:14   30.04
02752>             diverted <= 03:To1023           7.47     .081 No_date   13:14   30.04
02753>             diverted <= 01:To1022           7.47     .081 No_date   13:14   30.04
02754> #                TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
02755>  010:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02756>       CALIB STANDHYD     01:3501           66.62    6.583 No_date   12:20   50.90
02757>       [XIMP=.30:TIMP=.50]
02758>       [LOSS= 2 :CN= 81.5]
02759>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02760>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
02761>  010:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02762>       ROUTE RESERVOIR -> 01:3501           66.62    6.583 No_date   12:20   50.90
02763>       [RDT= 1.00] out<- 02:3501Pond        66.62     .684 No_date   13:49   50.90
02764>             overflow <- 04:3501OVF          .00     .000 No_date    0:00     .00
02765>       [MxStoUsed=.2076E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02766>  010:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02767>       CALIB STANDHYD     01:3502           28.70    2.996 No_date   12:17   50.02
02768>       [XIMP=.30:TIMP=.50]
02769>       [LOSS= 2 :CN= 80.3]
02770>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02771>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
02772>  010:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02773>       ROUTE RESERVOIR -> 01:3502           28.70    2.996 No_date   12:17   50.02
02774>       [RDT= 1.00] out<- 05:3502Pond        28.70     .292 No_date   13:40   50.02
02775>             overflow <- 06:3502OVF          .00     .000 No_date    0:00     .00
02776>       [MxStoUsed=.8756E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02777>  010:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02778>       CALIB NASHYD       01:3506           10.24     .192 No_date   12:50   18.04
02779>       [CN= 61.8: N= 3.00]
02780>       [Tp=  .66:DT= 5.00]
02781> #                                  FLOWS AT NODE 1
02782>  010:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02783>       ADD HYD            02:3501Pond       66.62     .684 No_date   13:49   50.90
02784>                        + 04:3501OVF          .00     .000 No_date    0:00     .00
02785>                        + 05:3502Pond       28.70     .292 No_date   13:40   50.02
02786>                        + 06:3502OVF          .00     .000 No_date    0:00     .00
02787>                        + 01:3506           10.24     .192 No_date   12:50   18.04
02788>       [DT= 1.00]  SUM=  07:Node1          105.56    1.101 No_date   13:21   47.47
02789>  010:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02790>       ROUTE CHANNEL    -> 07:Node1         105.56    1.101 No_date   13:21   47.47
02791>       [RDT= 1.00] out<- 02:RC              105.56    1.038 No_date   14:12   47.47
02792>       [L/S/n= 1400./1.200/.030]
02793>       [Vmax=  .873:Dmax=  .673]
02794>  010:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02795>       CALIB STANDHYD     01:3503           23.53    1.822 No_date   12:16   37.85
02796>       [XIMP=.30:TIMP=.50]
02797>       [LOSS= 2 :CN= 59.0]
02798>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02799>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
02800>  010:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02801>       ROUTE RESERVOIR -> 01:3503           23.53    1.822 No_date   12:16   37.85
02802>       [RDT= 1.00] out<- 04:3503Pond        23.53     .243 No_date   13:22   37.85
02803>             overflow <- 05:3503OVF          .00     .000 No_date    0:00     .00
02804>       [MxStoUsed=.4987E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02805>  010:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02806>       CALIB NASHYD       01:3505           16.57     .134 No_date   13:10   10.44
02807>       [CN= 44.2: N= 3.00]
02808>       [Tp=  .94:DT= 5.00]
02809> #                  FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
02810>  010:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02811>       ADD HYD            04:3503Pond       23.53     .243 No_date   13:22   37.85
02812>                        + 05:3503OVF          .00     .000 No_date    0:00     .00
02813>                        + 02:RC             105.56    1.038 No_date   14:12   47.47
02814>                        + 01:3505           16.57     .134 No_date   13:10   10.44
02815>       [DT= 1.00]  SUM=  09:Node2          145.66    1.365 No_date   13:54   41.71
02816> #                                 MAIR MILLS VILLAGE
02817>  010:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02818>       CALIB NASHYD       01:103            9.70     .199 No_date   12:35   17.45
02819>       [CN= 59.2: N= 3.00]
02820>       [Tp=  .48:DT= 5.00]
02821>  010:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02822>       ADD HYD            01:103            8.70     .199 No_date   12:35   17.45
02823>                        + 03:To1023         7.47     .081 No_date   13:14   30.04
02824>       [DT= 1.00]  SUM=  02:1023           16.17     .258 No_date   12:40   23.27
02825>  010:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02826>       CALIB NASHYD       01:205            1.41     .042 No_date   12:15   13.60
02827>       [CN= 51.1: N= 3.00]
02828>       [Tp=  .20:DT= 5.00]
02829>  010:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02830>       ADD HYD            01:205            1.41     .042 No_date   12:15   13.60
02831>                        + 02:1023           16.17     .258 No_date   12:40   23.27
02832>       [DT= 1.00]  SUM=  03:802            17.58     .275 No_date   12:38   22.49
02833>  010:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02834>       CALIB STANDHYD     01:201            18.41    2.035 No_date   12:12   40.06
02835>       [XIMP=.43:TIMP=.56]
02836>       [LOSS= 2 :CN= 49.0]
02837>       [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
02838>       [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
02839>  010:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02840>       ADD HYD            01:201            18.41    2.035 No_date   12:12   40.06
02841>                        + 03:802            17.58     .275 No_date   12:38   22.49
02842>       [DT= 1.00]  SUM=  02:803            35.99    2.181 No_date   12:12   31.48
02843>  010:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02844>       CALIB NASHYD       01:202             1.10     .028 No_date   12:20   13.01
02845>       [CN= 55.0: N= 3.00]
02846>       [Tp=  .25:DT= 5.00]
02847>  010:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02848>       ADD HYD            01:202             1.10     .028 No_date   12:20   13.01
02849>                        + 02:803            35.99    2.181 No_date   12:12   31.48
02850>       [DT= 1.00]  SUM=  03:804            37.09    2.203 No_date   12:12   30.93
02851> #                      MAIR MILLS VILLAGE SWMF
02852>  010:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02853>       ROUTE RESERVOIR -> 03:804            37.09    2.203 No_date   12:12   30.93
02854>       [RDT= 1.00] out<- 02:1026            37.09     .291 No_date   13:29   30.93
02855>             overflow <- 01:1026OVF          .00     .000 No_date    0:00     .00
02856>       [MxStoUsed=.5532E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02857>  010:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02858>       ADD HYD            02:1026            37.09     .291 No_date   13:29   30.93
02859>                        + 01:1026OVF          .00     .000 No_date    0:00     .00
02860>       [DT= 1.00]  SUM=  05:Pond1026ou      37.09     .291 No_date   13:29   30.93
02861> #                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
02862>  010:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02863>       DIVERT HYD       -> 05:Pond1026ou    37.09     .291 No_date   13:29   30.93
02864>             diverted <= 02:To807          20.76     .040 No_date   13:29   30.93
02865>             diverted <= 07:To809          16.33     .251 No_date   13:29   30.93
02866>             diverted <= 03:To1025           .00     .000 No_date    0:00     .00
02867>  010:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02868>  *    CALIB NASHYD       01:207             1.22     .054 No_date   12:15   16.06
02869>       [CN= 55.3: N= 3.00]
02870>       [Tp=  .13:DT= 5.00]
02871>  010:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02872>       ADD HYD            01:207             1.22     .054 No_date   12:15   16.06
02873>                        + 02:To807           20.76     .040 No_date   13:29   30.93
02874>       [DT= 1.00]  SUM=  06:807             21.98     .094 No_date   12:15   30.10
02875>  010:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02876>       ADD HYD            03:To1025           .00     .000 No_date    0:00     .00
02877>                        + 09:Node2          145.66    1.365 No_date   13:54   41.71
02878>       [DT= 1.00]  SUM=  01:1025            145.66    1.365 No_date   13:54   41.71
02879>  010:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02880>       ADD HYD            07:To809          16.33     .251 No_date   13:29   30.93
02881>                        + 01:1025           145.66    1.365 No_date   13:54   41.71
02882>       [DT= 1.00]  SUM=  09:809             161.99    1.612 No_date   13:50   40.62
02883> #                            FLOWS TO OUTLET B
02884>  010:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02885>       ADD HYD            06:807            21.98     .094 No_date   12:15   30.10
02886>                        + 10:To806          12.69     .020 No_date   13:14   30.04
02887>       [DT= 1.00]  SUM=  01:806/outB        34.68     .114 No_date   12:15   30.08
02888> #                      LINKSVIEW AND CONTRIBUTING AREAS
02889>  010:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02890>       CALIB STANDHYD     05:3504           6.94     .597 No_date   12:13   37.85
02891>       [XIMP=.30:TIMP=.50]
02892>       [LOSS= 2 :CN= 59.0]
02893>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02894>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
02895>  010:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02896>       CALIB STANDHYD     06:3500           30.20    2.691 No_date   12:16   36.07
02897>       [XIMP=.30:TIMP=.50]
02898>       [LOSS= 2 :CN= 54.9]
02899>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02900>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
02901>  010:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02902>       ADD HYD            05:3504           6.94     .597 No_date   12:13   37.85
02903>                        + 06:3500           30.20    2.691 No_date   12:16   36.07
02904>       [DT= 1.00]  SUM=  07:Pondin          45.14    3.253 No_date   12:15   36.35
02905>  010:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02906>       ROUTE RESERVOIR -> 07:Pondin         45.14    3.253 No_date   12:15   36.35
02907>       [RDT= 1.00] out<- 08:LinkPond        45.14     .438 No_date   13:24   36.34
02908>             overflow <- 06:OVF              .00     .000 No_date    0:00     .00
02909>       [MxStoUsed=.9181E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02910>  010:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02911>       ADD HYD            08:LinkPond       45.14     .438 No_date   13:24   36.34
02912>                        + 06:OVF              .00     .000 No_date    0:00     .00
02913>       [DT= 1.00]  SUM=  04:Pondout         45.14     .438 No_date   13:24   36.34
02914> #                  FLOWS FROM TENTH LINE (URBANIZED)
02915>  010:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02916>       CALIB STANDHYD     03:3601             .25     .040 No_date   12:12   49.68
02917>       [XIMP=.64:TIMP=.64]
02918>       [LOSS= 2 :CN= 49.0]
02919>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02920>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
02921>  010:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02922>       CALIB STANDHYD     05:3602            1.30     .181 No_date   12:13   49.68
02923>       [XIMP=.64:TIMP=.64]
02924>       [LOSS= 2 :CN= 49.0]
02925>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
02926>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
02927>  010:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02928>       COMPUTE DUALHYD    05:3602            1.30     .181 No_date   12:13   49.68
02929>         Major System /   02:Maj10th           .00     .000 No_date    0:00     .00
02930>         Minor System \   10:5yrflow          1.30     .181 No_date   12:13   49.68
02931> #                  FLOWS FROM BMGCC SOUTHERN PORTION
02932>  010:0049----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02933>       CALIB STANDHYD     05:3507           12.59     .961 No_date   12:14   34.89
02934>       [XIMP=.30:TIMP=.50]
02935>       [LOSS= 2 :CN= 52.0]
02936>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
02937>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
02938>  010:0050----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02939>       ROUTE RESERVOIR -> 05:3507           12.59     .961 No_date   12:14   34.89
02940>       [RDT= 1.00] out<- 06:3507Pond        12.59     .138 No_date   13:12   34.89
02941>             overflow <- 07:3507OVF          .00     .000 No_date    0:00     .00
02942>       [MxStoUsed=.2331E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=   0.hrs
02943>  010:0051----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02944>       ADD HYD            04:Pondout        45.14     .438 No_date   13:24   36.34
02945>                        + 07:3507OVF          .00     .000 No_date    0:00     .00
02946>                        + 06:3507Pond       12.59     .138 No_date   13:12   34.89
02947>                        + 10:5yrflow         1.30     .181 No_date   12:13   49.68
02948>       [DT= 1.00]  SUM=  05:LinkPipe        59.03     .586 No_date   13:18   36.33
02949>  010:0052----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02950>       ADD HYD            05:LinkPipe       59.03     .586 No_date   13:18   36.33
02951>                        + 02:Maj10th          .00     .000 No_date    0:00     .00
02952>                        + 03:3601            1.25     .040 No_date   12:12   49.68
02953>                        + 09:809            161.99    1.612 No_date   13:50   40.62
02954>       [DT= 1.00]  SUM=  08:Node3          221.27    2.183 No_date   13:44   39.48
02955>  010:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02956>       ADD HYD            01:806/outB       34.68     .114 No_date   12:15   30.08
02957>                        + 08:Node3          221.27    2.183 No_date   13:44   39.48
02958>       [DT= 1.00]  SUM=  02:Node4          255.95    2.247 No_date   13:44   38.21
02959>  ** END OF RUN :  10
02960>
02961> ************************************************************************
02962>
02963>
02964>                                                    25 yr SCS
02965>
02966>
02967> RUN:COMMAND#
02968> 011:0001-------------------------------------------------------------------
02969>      START
02970>       [TZERO =     .00 hrs on        0]
```

```
02971>       [METOUT=   2    (1=imperial, 2=metric output)]
02972>       [NSTORM=   1 ]
02973>       [NRUN  =  11 ]
02974> #*******************************************************************************
02975> #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
02976> #  Date        : 2014 09 22
02977> #  Modified    :
02978> #  Modeller    : [A. French]
02979> #  Company     : C.F. Crozier & Associates Inc.
02980> #  License #   :  3737016
02981> #*******************************************************************************
02982> #*******************************************************************************
02983>  011:0002-------------------------------------------------------------------------
02984>       READ STORM
02985>        Filename = STORM.001
02986>        Comment  =
02987>       [SDT= 1.00:SDUR=  24.00:PTOT=  86.40]
02988> #                    MAIR MILLS ESTATES AND CONTRIBUTING AREAS
02989>  011:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02990>       CALIB STANDHYD     03:302            16.39     1.414 No_date   12:20   46.63
02991>        [XIMP=.20:TIMP=.40]
02992>        [LOSS= 2 :CN= 65.2]
02993>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
02994>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
02995>  011:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
02996>       CALIB STANDHYD     01:303             2.34      .270 No_date   12:15   51.06
02997>        [XIMP=.25:TIMP=.50]
02998>        [LOSS= 2 :CN= 65.2]
02999>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03000>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
03001>  011:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03002>       ADD HYD            01:303             2.34      .270 No_date   12:15   51.06
03003>                        + 03:302            16.39     1.414 No_date   12:20   46.63
03004>        [DT= 1.00]  SUM=  02:903            18.73     1.656 No_date   12:19   47.18
03005>  011:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03006>       CALIB NASHYD       01:304             2.90      .176 No_date   12:20   31.74
03007>        [CN= 66.6: N= 3.00]
03008>        [Tp=  .20:DT= 5.00]
03009>  011:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03010>       ADD HYD            01:304             2.90      .176 No_date   12:20   31.74
03011>                        + 02:903            18.73     1.656 No_date   12:19   47.18
03012>        [DT= 1.00]  SUM=  03:904            21.63     1.829 No_date   12:19   45.11
03013>  011:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03014>       CALIB STANDHYD     01:305              .31      .021 No_date   12:12   41.41
03015>        [XIMP=.20:TIMP=.20]
03016>        [LOSS= 2 :CN= 65.2]
03017>        [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=    .0]
03018>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
03019>  011:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03020>       ADD HYD            01:305              .31      .021 No_date   12:12   41.41
03021>                        + 03:904            21.63     1.829 No_date   12:19   45.11
03022>        [DT= 1.00]  SUM=  02:905            21.94     1.838 No_date   12:19   45.06
03023> #                      MAIR MILLS ESTATES SWMF
03024>  011:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03025>       ROUTE RESERVOIR -> 02:905            21.94     1.838 No_date   12:19   45.06
03026>        [RDT= 1.00] out<- 03:502            21.94      .150 No_date   14:31   45.06
03027>                overflow <= 04:502OVF         .00      .000 No_date    0:00     .00
03028>        [MxStoUsed=.6084E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03029>  011:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03030>       CALIB NASHYD       01:400             5.70      .100 No_date   12:50   17.78
03031>        [CN= 50.2: N= 3.00]
03032>        [Tp=  .70:DT= 5.00]
03033>  011:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03034>       ADD HYD            01:400             5.70      .100 No_date   12:50   17.78
03035>                        + 03:502            21.94      .150 No_date   14:31   45.06
03036>                        + 04:502OVF           .00      .000 No_date    0:00     .00
03037>        [DT= 1.00]  SUM=  02:906            27.64      .245 No_date   13:00   39.43
03038> #        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
03039>  011:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03040>       DIVERT HYD      -> 02:906            27.64      .245 No_date   13:00   39.43
03041>                diverted <= 10:To806        10.19      .020 No_date   13:00   39.43
03042>                diverted <= 03:To1023        8.73      .113 No_date   13:00   39.43
03043>                diverted <= 01:To1022        8.73      .113 No_date   13:00   39.43
03044> #                  TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
03045>  011:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03046>       CALIB STANDHYD     01:3501            66.62     8.733 No_date   12:19   64.05
03047>        [XIMP=.30:TIMP=.50]
03048>        [LOSS= 2 :CN= 81.5]
03049>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03050>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=    .0]
03051>  011:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03052>       ROUTE RESERVOIR -> 01:3501           66.62     8.733 No_date   12:19   64.05
03053>        [RDT= 1.00] out<- 02:3501Pond       66.62     1.003 No_date   13:31   64.04
03054>                overflow <= 04:3501OVF        .00      .000 No_date    0:00     .00
03055>        [MxStoUsed=.2556E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03056>  011:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03057>       CALIB STANDHYD     01:3502            28.70     4.005 No_date   12:16   63.03
03058>        [XIMP=.30:TIMP=.50]
03059>        [LOSS= 2 :CN= 80.3]
03060>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03061>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=    .0]
03062>  011:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03063>       ROUTE RESERVOIR -> 01:3502           28.70     4.005 No_date   12:16   63.03
03064>        [RDT= 1.00] out<- 05:3502Pond       28.70      .430 No_date   13:24   63.03
03065>                overflow <= 06:3502OVF        .00      .000 No_date    0:00     .00
03066>        [MxStoUsed=.1081E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03067>  011:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03068>       CALIB NASHYD       01:3506            10.24      .276 No_date   12:45   25.56
03069>        [CN= 61.8: N= 3.00]
03070>        [Tp=  .66:DT= 5.00]
03071> #                                    FLOWS AT NODE 1
03072>  011:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03073>       ADD HYD            02:3501Pond        66.62     1.003 No_date   13:31   64.04
03074>                        + 04:3501OVF          .00      .000 No_date    0:00     .00
03075>                        + 05:3502Pond       28.70      .430 No_date   13:24   63.03
03076>                        + 06:3502OVF          .00      .000 No_date    0:00     .00
03077>                        + 01:3506           10.24      .276 No_date   12:45   25.56
03078>        [DT= 1.00]  SUM=  07:Node1          105.56     1.644 No_date   13:12   60.04
03079>  011:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03080>       ROUTE CHANNEL   -> 07:Node1          105.56     1.644 No_date   13:12   60.04
03081>        [RDT= 1.00] out<- 02:RC             105.56     1.520 No_date   13:58   60.04
03082>        [L/S/n= 1400./1.200/.030]
03083>        [Vmax=  .846:Dmax=  .731]
03084>  011:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03085>       CALIB STANDHYD     01:3503            23.53     2.420 No_date   12:15   48.31
03086>        [XIMP=.30:TIMP=.50]
03087>        [LOSS= 2 :CN= 59.0]
03088>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03089>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=    .0]
03090>  011:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03091>       ROUTE RESERVOIR -> 01:3503           23.53     2.420 No_date   12:15   48.31
03092>        [RDT= 1.00] out<- 04:3503Pond       23.53      .358 No_date   13:13   48.31
03093>                overflow <= 05:3503OVF        .00      .000 No_date    0:00     .00
03094>        [MxStoUsed=.6186E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03095>  011:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03096>       CALIB NASHYD       01:3505            16.57      .197 No_date   13:10   15.16
03097>        [CN= 44.2: N= 3.00]
03098>        [Tp=  .94:DT= 5.00]
03099> #                    FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
03100>  011:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03101>       ADD HYD            04:3503Pond        23.53      .358 No_date   13:13   48.31
03102>                        + 05:3503OVF          .00      .000 No_date    0:00     .00
03103>                        + 02:RC             105.56     1.520 No_date   13:58   60.04
03104>                        + 01:3505            16.57      .197 No_date   13:10   15.16
03105>        [DT= 1.00]  SUM=  09:Node2          145.66     2.014 No_date   13:44   53.04
03106> #                                  MAIR MILLS VILLAGE
03107>  011:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03108>       CALIB NASHYD       01:103             8.70      .283 No_date   12:35   24.60
03109>        [CN= 59.2: N= 3.00]
03110>        [Tp=  .40:DT= 5.00]
03111>  011:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03112>       ADD HYD            01:103             8.70      .283 No_date   12:35   24.60
03113>                        + 03:To1023          8.73      .113 No_date   13:00   39.43
03114>        [DT= 1.00]  SUM=  02:1023           17.43      .384 No_date   12:40   32.03
03115>  011:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03116>       CALIB NASHYD       01:205             1.41      .061 No_date   12:15   19.42
03117>        [CN= 51.1: N= 3.00]
03118>        [Tp=  .20:DT= 5.00]
03119>  011:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03120>       ADD HYD            01:205             1.41      .061 No_date   12:15   19.42
03121>                        + 02:1023           17.43      .384 No_date   12:40   32.03
03122>        [DT= 1.00]  SUM=  03:802            18.84      .414 No_date   12:35   31.08
03123>  011:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03124>       CALIB STANDHYD     01:201             18.41     2.601 No_date   12:12   50.05
03125>        [XIMP=.43:TIMP=.56]
03126>        [LOSS= 2 :CN= 49.0]
03127>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
03128>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
03129>  011:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03130>       ADD HYD            01:201             18.41     2.601 No_date   12:12   50.05
03131>                        + 03:802            18.84      .414 No_date   12:35   31.08
03132>        [DT= 1.00]  SUM=  02:803            37.25     2.821 No_date   12:12   40.46
03133>  011:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03134>       CALIB NASHYD       01:202             1.10      .042 No_date   12:20   19.11
03135>        [CN= 55.0: N= 3.00]
03136>        [Tp=  .25:DT= 5.00]
03137>  011:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03138>       ADD HYD            01:202             1.10      .042 No_date   12:20   19.11
03139>                        + 02:803            37.25     2.821 No_date   12:12   40.46
03140>        [DT= 1.00]  SUM=  03:804            38.35     2.853 No_date   12:12   39.85
03141> #                      MAIR MILLS VILLAGE SWMF
03142>  011:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03143>       ROUTE RESERVOIR -> 03:804            38.35     2.853 No_date   12:12   39.85
03144>        [RDT= 1.00] out<- 02:1026           38.35      .483 No_date   13:12   39.85
03145>                overflow <= 01:1026OVF        .00      .000 No_date    0:00     .00
03146>        [MxStoUsed=.6579E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03147>  011:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03148>       ADD HYD            02:1026            38.35      .483 No_date   13:12   39.85
03149>                        + 01:1026OVF          .00      .000 No_date    0:00     .00
03150>        [DT= 1.00]  SUM=  05:Pond1026ou     38.35      .483 No_date   13:12   39.85
03151> #                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
03152>  011:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03153>       DIVERT HYD      -> 05:Pond1026ou     38.35      .483 No_date   13:12   39.85
03154>                diverted <= 02:To807        16.85      .040 No_date   13:12   39.85
03155>                diverted <= 07:To809        21.50      .443 No_date   13:12   39.85
03156>                diverted <= 03:To1025         .00      .000 No_date    0:00     .00
03157>  011:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03158>   * CALIB NASHYD       01:207             1.22      .076 No_date   12:15   22.62
03159>        [CN= 55.3: N= 3.00]
03160>        [Tp=  .13:DT= 5.00]
03161>  011:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03162>       ADD HYD            01:207             1.22      .076 No_date   12:15   22.62
03163>                        + 02:To807          16.85      .040 No_date   13:12   39.85
03164>        [DT= 1.00]  SUM=  06:807            18.07      .116 No_date   12:15   38.68
03165>  011:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03166>       ADD HYD            03:To1025           .00      .000 No_date    0:00     .00
03167>                        + 09:Node2          145.66     2.014 No_date   13:44   53.04
03168>        [DT= 1.00]  SUM=  01:1025           145.66     2.014 No_date   13:44   53.04
03169>  011:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03170>       ADD HYD            07:To809            21.50      .443 No_date   13:12   39.85
03171>                        + 01:1025           145.66     2.014 No_date   13:44   53.04
03172>        [DT= 1.00]  SUM=  09:809            167.16     2.433 No_date   13:39   51.34
03173> #                              FLOWS TO OUTLET B
03174>  011:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03175>       ADD HYD            06:807             18.07      .116 No_date   12:15   38.68
03176>                        + 10:To806          10.19      .020 No_date   13:00   39.43
03177>        [DT= 1.00]  SUM=  01:806/outB        28.26      .136 No_date   12:15   38.95
03178> #                    LINKSVIEW AND CONTRIBUTING AREAS
03179>  011:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03180>       CALIB STANDHYD     05:3504             6.94      .792 No_date   12:13   48.31
03181>        [XIMP=.30:TIMP=.50]
03182>        [LOSS= 2 :CN= 59.0]
03183>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03184>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=    .0]
03185>  011:0042---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03186>       CALIB STANDHYD     06:3500            38.20     3.599 No_date   12:16   46.03
03187>        [XIMP=.30:TIMP=.50]
03188>        [LOSS= 2 :CN= 54.9]
03189>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03190>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
03191>  011:0043---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03192>       ADD HYD            05:3504             6.94      .792 No_date   12:13   48.31
03193>                        + 06:3500            38.20     3.599 No_date   12:16   46.03
03194>        [DT= 1.00]  SUM=  07:Pondin          45.14     4.363 No_date   12:15   46.38
03195>  011:0044---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03196>       ROUTE RESERVOIR -> 07:Pondin         45.14     4.363 No_date   12:15   46.38
03197>        [RDT= 1.00] out<- 08:LinkPond       45.14      .653 No_date   13:14   46.38
03198>                overflow <= 06:OVF            .00      .000 No_date    0:00     .00
03199>        [MxStoUsed=.1137E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03200>  011:0045---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03201>       ADD HYD            08:LinkPond         45.14      .653 No_date   13:14   46.38
03202>                        + 06:OVF              .00      .000 No_date    0:00     .00
03203>        [DT= 1.00]  SUM=  04:Pondout         45.14      .653 No_date   13:14   46.38
03204> #                    FLOWS FROM TENTH LINE (URBANIZED)
03205>  011:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03206>       CALIB STANDHYD     03:3601             .25      .049 No_date   12:12   60.91
03207>        [XIMP=.64:TIMP=.64]
03208>        [LOSS= 2 :CN= 49.0]
03209>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
03210>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  40.:MNI=.013:SCI=    .0]
03211>  011:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03212>       CALIB STANDHYD     05:3602             1.30      .225 No_date   12:13   60.92
03213>        [XIMP=.64:TIMP=.64]
03214>        [LOSS= 2 :CN= 49.0]
03215>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
03216>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
03217>  011:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03218>       COMPUTE DUALHYD    05:3602             1.30      .225 No_date   12:13   60.92
03219>          Major System /  02:Maj10th           .00      .005 No_date   12:13   60.92
03220>          Minor System \  10:5yrflow          1.30      .220 No_date   12:12   60.92
03221> #                    FLOWS FROM BMGCC SOUTHERN PORTION
03222>  011:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03223>       CALIB STANDHYD     05:3507            12.59     1.262 No_date   12:14   44.51
03224>        [XIMP=.30:TIMP=.50]
03225>        [LOSS= 2 :CN= 52.0]
03226>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03227>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=    .0]
03228>  011:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03229>       ROUTE RESERVOIR -> 05:3507           12.59     1.262 No_date   12:14   44.51
03230>        [RDT= 1.00] out<- 06:3507Pond       12.59      .202 No_date   13:04   44.51
03231>                overflow <= 07:3507OVF        .00      .000 No_date    0:00     .00
03232>        [MxStoUsed=.2891E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03233>  011:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03234>       ADD HYD            04:Pondout          45.14      .653 No_date   13:14   46.38
03235>                        + 07:3507OVF          .00      .000 No_date    0:00     .00
03236>                        + 06:3507Pond       12.59      .202 No_date   13:04   44.51
03237>                        + 10:5yrflow         1.30      .220 No_date   12:12   60.92
03238>        [DT= 1.00]  SUM=  05:LinkPipe        59.03      .870 No_date   13:08   46.30
03239>  011:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03240>       ADD HYD            05:LinkPipe        59.03      .870 No_date   13:08   46.30
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03241>                    +  02:Maj10th          .00      .005 No_date   12:13   60.92
03242>                    +  03:3601             .25      .049 No_date   12:12   60.91
03243>                    +  09:809           167.16    2.433 No_date   13:39   51.34
03244>       [DT= 1.00]  SUM=  08:Node3       226.44    3.275 No_date   13:34   50.04
03245> 011:0053----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03246>       ADD HYD           01:806/outB      28.26     .136 No_date   12:15   38.95
03247>                    +  08:Node3         226.44    3.275 No_date   13:34   50.04
03248>       [DT= 1.00]  SUM=  02:Node4       254.70    3.341 No_date   13:34   48.81
03249>    ** END OF RUN :  11
03250>
03251> ************************************************************************
03252>
03253>
03254>                                  50 yr SCS
03255>
03256>
03257>  RUN:COMMAND#
03258>  012:0001----------------------------------------------------------------
03259>       START
03260>        [TZERO =    .00 hrs on       0]
03261>        [METOUT=   2    (1=imperial, 2=metric output)]
03262>        [NSTORM=   1 ]
03263>        [NRUN  =  12 ]
03264> #*********************************************************************
03265> #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
03266> #  Date        : 2014 08 22
03267> #  Modified    :
03268> #  Modeller    : [A. French]
03269> #  Company     : C.F. Crozier & Associates Inc.
03270> #  License #   :  3737016
03271> #*********************************************************************
03272> #*********************************************************************
03273>  012:0002----------------------------------------------------------------
03274>       READ STORM
03275>        Filename = STORM.001
03276>        Comment  =
03277>       [SDT= 1.00:SDUR=  24.00:PTOT=  96.00]
03278> #                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03279>  012:0003----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03280>       CALIB STANDHYD     03:302           16.39    1.701 No_date   12:19   54.01
03281>        [XIMP=.20:TIMP=.40]
03282>        [LOSS= 2 :CN= 65.2]
03283>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03284>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
03285>  012:0004----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03286>       CALIB STANDHYD     01:303            2.34     .322 No_date   12:15   58.81
03287>        [XIMP=.25:TIMP=.50]
03288>        [LOSS= 2 :CN= 65.2]
03289>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03290>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
03291>  012:0005----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03292>       ADD HYD           01:303            2.34     .322 No_date   12:15   58.81
03293>                    +  03:302           16.39    1.701 No_date   12:19   54.01
03294>       [DT= 1.00]  SUM=  02:903           18.73    1.989 No_date   12:18   54.61
03295>  012:0006----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03296>       CALIB NASHYD       01:304            2.90     .212 No_date   12:20   37.92
03297>        [CN= 66.6: N= 3.00]
03298>        [Tp=  .28:DT= 5.00]
03299>  012:0007----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03300>       ADD HYD           01:304            2.90     .212 No_date   12:20   37.92
03301>                    +  02:903           18.73    1.989 No_date   12:18   54.61
03302>       [DT= 1.00]  SUM=  03:904           21.63    2.196 No_date   12:19   52.37
03303>  012:0008----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03304>       CALIB STANDHYD     01:305             .31     .024 No_date   12:12   48.14
03305>        [XIMP=.20:TIMP=.20]
03306>        [LOSS= 2 :CN= 65.2]
03307>        [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=    .0]
03308>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
03309>  012:0009----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03310>       ADD HYD           01:305             .31     .024 No_date   12:12   48.14
03311>                    +  03:904           21.63    2.196 No_date   12:19   52.37
03312>       [DT= 1.00]  SUM=  02:905           21.94    2.207 No_date   12:19   52.31
03313> #                MAIR MILLS ESTATES SWMF
03314>  012:0010----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03315>       ROUTE RESERVOIR -> 02:905           21.94    2.207 No_date   12:19   52.31
03316>        [RDT= 1.00] out<- 03:502           21.94     .150 No_date   14:41   52.31
03317>              overflow <= 04:502OVF         .00     .000 No_date    0:00     .00
03318>       (MxStoUsed=.7242E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03319>  012:0011----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03320>       CALIB NASHYD       01:400            5.70     .124 No_date   12:50   21.88
03321>        [CN= 50.2: N= 3.00]
03322>        [Tp=  .70:DT= 5.00]
03323>  012:0012----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03324>       ADD HYD           01:400            5.70     .124 No_date   12:50   21.88
03325>                    +  03:502           21.94     .150 No_date   14:41   52.31
03326>                    +  04:502OVF          .00     .000 No_date    0:00     .00
03327>       [DT= 1.00]  SUM=  02:906           27.64     .274 No_date   12:50   46.03
03328> #        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
03329>  012:0013----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03330>       DIVERT HYD      -> 02:906           27.64     .274 No_date   12:50   46.03
03331>              diverted <= 10:To806          9.15     .020 No_date   12:50   46.03
03332>              diverted <= 03:To1023         9.24     .127 No_date   12:50   46.03
03333>              diverted <= 01:To1022         9.24     .127 No_date   12:50   46.03
03334> #                TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
03335>  012:0014----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03336>       CALIB STANDHYD     01:3501          66.62   10.092 No_date   12:18   72.96
03337>        [XIMP=.30:TIMP=.50]
03338>        [LOSS= 2 :CN= 81.5]
03339>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03340>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=    .0]
03341>  012:0015----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03342>       ROUTE RESERVOIR -> 01:3501          66.62   10.092 No_date   12:18   72.96
03343>        [RDT= 1.00] out<- 02:3501Pond      66.62    1.220 No_date   13:25   72.96
03344>              overflow <= 04:3501OVF        .00     .000 No_date    0:00     .00
03345>       (MxStoUsed=.2888E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03346>  012:0016----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03347>       CALIB STANDHYD     01:3502          28.70    4.695 No_date   12:16   71.87
03348>        [XIMP=.30:TIMP=.50]
03349>        [LOSS= 2 :CN= 80.3]
03350>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03351>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=    .0]
03352>  012:0017----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03353>       ROUTE RESERVOIR -> 01:3502          28.70    4.695 No_date   12:16   71.87
03354>        [RDT= 1.00] out<- 05:3502Pond      28.70     .525 No_date   13:19   71.87
03355>              overflow <= 06:3502OVF        .00     .000 No_date    0:00     .00
03356>       (MxStoUsed=.1223E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03357>  012:0018----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03358>       CALIB NASHYD       01:3506           10.24     .338 No_date   12:45   31.02
03359>        [CN= 61.8: N= 3.00]
03360>        [Tp=  .66:DT= 5.00]
03361> #                                    FLOWS AT NODE 1
03362>  012:0019----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03363>       ADD HYD           02:3501Pond        66.62    1.220 No_date   13:25   72.96
03364>                    +  04:3501OVF         .00     .000 No_date    0:00     .00
03365>                    +  05:3502Pond        28.70     .525 No_date   13:19   71.87
03366>                    +  06:3502OVF         .00     .000 No_date    0:00     .00
03367>                    +  01:3506            10.24     .338 No_date   12:45   31.02
03368>       [DT= 1.00]  SUM=  07:Node1        105.56    2.016 No_date   13:08   68.59
03369>  012:0020----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03370>       ROUTE CHANNEL   -> 07:Node1        105.56    2.016 No_date   13:08   68.59
03371>        [RDT= 1.00] out<- 02:RC            105.56    1.860 No_date   13:51   68.59
03372>        [L/S/n= 1400./1.200/.030]
03373>        [Vmax=  .856:Dmax=  .758]
03374>  012:0021----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03375>       CALIB STANDHYD     01:3503           23.53    2.906 No_date   12:15   55.57
03376>        [XIMP=.30:TIMP=.50]
03377>        [LOSS= 2 :CN= 59.0]
03378>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03379>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=    .0]
03380>  012:0022----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03381>       ROUTE RESERVOIR -> 01:3503          23.53    2.906 No_date   12:15   55.57
03382>        [RDT= 1.00] out<- 04:3503Pond      23.53     .438 No_date   13:08   55.57
03383>              overflow <= 05:3503OVF        .00     .000 No_date    0:00     .00
03384>       (MxStoUsed=.7043E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03385>  012:0023----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03386>       CALIB NASHYD       01:3505           16.57     .245 No_date   13:10   18.68
03387>        [CN= 44.2: N= 3.00]
03388>        [Tp=  .94:DT= 5.00]
03389> #                    FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
03390>  012:0024----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03391>       ADD HYD           04:3503Pond        23.53     .438 No_date   13:08   55.57
03392>                    +  05:3503OVF         .00     .000 No_date    0:00     .00
03393>                    +  02:RC              105.56    1.860 No_date   13:51   68.59
03394>                    +  01:3505            16.57     .245 No_date   13:10   18.68
03395>       [DT= 1.00]  SUM=  09:Node2         145.66    2.476 No_date   13:40   60.81
03396> #                               MAIR MILLS VILLAGE
03397>  012:0025----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03398>       CALIB NASHYD       01:103             8.70     .346 No_date   12:35   29.81
03399>        [CN= 59.2: N= 3.00]
03400>        [Tp=  .48:DT= 5.00]
03401>  012:0026----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03402>       ADD HYD           01:103             8.70     .346 No_date   12:35   29.81
03403>                    +  03:To1023          9.24     .127 No_date   12:50   46.03
03404>       [DT= 1.00]  SUM=  02:1023          17.94     .464 No_date   12:35   38.17
03405>  012:0027----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03406>       CALIB NASHYD       01:205             1.41     .075 No_date   12:15   23.71
03407>        [CN= 51.1: N= 3.00]
03408>        [Tp=  .20:DT= 5.00]
03409>  012:0028----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03410>       ADD HYD           01:205             1.41     .075 No_date   12:15   23.71
03411>                    +  02:1023          17.94     .464 No_date   12:35   38.17
03412>       [DT= 1.00]  SUM=  03:802           19.35     .502 No_date   12:35   37.12
03413>  012:0029----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03414>       CALIB STANDHYD     01:201            18.41    2.973 No_date   12:12   56.96
03415>        [XIMP=.43:TIMP=.56]
03416>        [LOSS= 2 :CN= 49.0]
03417>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
03418>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
03419>  012:0030----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03420>       ADD HYD           01:201            18.41    2.973 No_date   12:12   56.96
03421>                    +  03:802           19.35     .502 No_date   12:35   37.12
03422>       [DT= 1.00]  SUM=  02:803           37.76    3.255 No_date   12:12   46.79
03423>  012:0031----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03424>       CALIB NASHYD       01:202             1.10     .052 No_date   12:20   23.64
03425>        [CN= 55.0: N= 3.00]
03426>        [Tp=  .25:DT= 5.00]
03427>  012:0032----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03428>       ADD HYD           01:202             1.10     .052 No_date   12:20   23.64
03429>                    +  02:803           37.76    3.255 No_date   12:12   46.79
03430>       [DT= 1.00]  SUM=  03:804           38.86    3.296 No_date   12:12   46.13
03431> #                    MAIR MILLS VILLAGE SWMF
03432>  012:0033----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03433>       ROUTE RESERVOIR -> 03:804           38.86    3.296 No_date   12:12   46.13
03434>        [RDT= 1.00] out<- 02:1026          38.86     .619 No_date   13:06   46.13
03435>              overflow <= 01:1026OVF        .00     .000 No_date    0:00     .00
03436>       (MxStoUsed=.7316E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03437>  012:0034----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03438>       ADD HYD           02:1026            38.86     .619 No_date   13:06   46.13
03439>                    +  01:1026OVF          .00     .000 No_date    0:00     .00
03440>       [DT= 1.00]  SUM=  05:Pond1026ou     38.86     .619 No_date   13:06   46.13
03441> #                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
03442>  012:0035----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03443>       DIVERT HYD      -> 05:Pond1026ou     38.86     .619 No_date   13:06   46.13
03444>              diverted <= 02:To807          15.24     .040 No_date   13:06   46.13
03445>              diverted <= 07:To809          23.57     .560 No_date   13:06   46.13
03446>              diverted <= 03:To1025          .06     .019 No_date   13:06   46.13
03447>  012:0036----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03448>   * CALIB NASHYD       01:207             1.22     .093 No_date   12:15   27.43
03449>        [CN= 55.3: N= 3.00]
03450>        [Tp=  .13:DT= 5.00]
03451>  012:0037----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03452>       ADD HYD           01:207             1.22     .093 No_date   12:15   27.43
03453>                    +  02:To807          15.24     .040 No_date   13:06   46.13
03454>       [DT= 1.00]  SUM=  06:807           16.46     .133 No_date   12:15   44.74
03455>  012:0038----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03456>       ADD HYD           03:To1025           .06     .019 No_date   13:06   46.13
03457>                    +  09:Node2         145.66    2.476 No_date   13:40   60.80
03458>       [DT= 1.00]  SUM=  01:1025          145.72    2.476 No_date   13:40   60.80
03459>  012:0039----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03460>       ADD HYD           07:To809          23.57     .560 No_date   13:06   46.13
03461>                    +  01:1025          145.72    2.476 No_date   13:40   60.80
03462>       [DT= 1.00]  SUM=  09:809           169.29    3.018 No_date   13:34   58.76
03463> #                                FLOWS TO OUTLET B
03464>  012:0040----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03465>       ADD HYD           06:807             16.46     .133 No_date   12:15   44.74
03466>                    +  10:To806            9.15     .020 No_date   12:50   46.03
03467>       [DT= 1.00]  SUM=  01:806/outB       25.61     .153 No_date   12:15   45.21
03468> #                    LINKSVIEW AND CONTRIBUTING AREAS
03469>  012:0041----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03470>       CALIB STANDHYD     05:3504            6.94     .936 No_date   12:13   55.57
03471>        [XIMP=.30:TIMP=.50]
03472>        [LOSS= 2 :CN= 59.0]
03473>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03474>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=    .0]
03475>  012:0042----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03476>       CALIB STANDHYD     06:3500           38.20    4.241 No_date   12:16   52.96
03477>        [XIMP=.30:TIMP=.50]
03478>        [LOSS= 2 :CN= 54.9]
03479>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
03480>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
03481>  012:0043----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03482>       ADD HYD           05:3504            6.94     .936 No_date   12:13   55.57
03483>                    +  06:3500           38.20    4.241 No_date   12:16   52.96
03484>       [DT= 1.00]  SUM=  07:Pondin         45.14    5.139 No_date   12:15   53.37
03485>  012:0044----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03486>       ROUTE RESERVOIR -> 07:Pondin        45.14    5.139 No_date   12:15   53.37
03487>        [RDT= 1.00] out<- 08:LinkPond      45.14     .803 No_date   13:10   53.36
03488>              overflow <= 06:OVF            .00     .000 No_date    0:00     .00
03489>       (MxStoUsed=.1291E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03490>  012:0045----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03491>       ADD HYD           08:LinkPond        45.14     .803 No_date   13:10   53.36
03492>                    +  06:OVF             .00     .000 No_date    0:00     .00
03493>       [DT= 1.00]  SUM=  04:Pondout        45.14     .803 No_date   13:10   53.36
03494> #                    FLOWS FROM TENTH LINE (URBANIZED)
03495>  012:0046----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03496>       CALIB STANDHYD     03:3601             .25     .055 No_date   12:12   68.55
03497>        [XIMP=.64:TIMP=.64]
03498>        [LOSS= 2 :CN= 49.0]
03499>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
03500>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=    .0]
03501>  012:0047----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03502>       CALIB STANDHYD     05:3602            1.30     .256 No_date   12:12   68.55
03503>        [XIMP=.64:TIMP=.64]
03504>        [LOSS= 2 :CN= 49.0]
03505>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=    .0]
03506>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=    .0]
03507>  012:0048----------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03508>       COMPUTE DUALHYD    05:3602            1.30     .256 No_date   12:12   68.55
03509>         Major System /   02:Maj10th          .02     .036 No_date   12:12   68.55
03510>         Minor System \   10:5yrflow         1.28     .220 No_date   12:09   68.55
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                          FLOWS FROM BMGCC SOUTHERN PORTION
 012:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     05:3507          12.59    1.482 No_date   12:14   51.21
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 52.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=    .0]
 012:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 05:3507          12.59    1.482 No_date   12:14   51.21
      [RDT= 1.00] out<- 06:3507Pond     12.59     .248 No_date   13:01   51.21
            overflow <= 07:3507OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.3286E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 012:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            04:Pondout       45.14     .803 No_date   13:10   53.36
                     + 07:3507OVF          .00     .000 No_date    0:00     .00
                     + 06:3507Pond       12.59     .248 No_date   13:01   51.21
                     + 10:5yrflow         1.28     .220 No_date   12:08   68.55
      [DT= 1.00]  SUM=  05:LinkPipe      59.01    1.070 No_date   13:04   53.23
 012:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            05:LinkPipe      59.01    1.070 No_date   13:04   53.23
                     + 02:Maj10th          .02     .036 No_date   12:12   68.55
                     + 03:3601             .25     .055 No_date   12:12   68.55
                     + 09:809           169.29    3.018 No_date   13:34   58.76
      [DT= 1.00]  SUM=  08:Node3       228.57    4.053 No_date   13:29   57.34
 012:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:806/outB      25.61     .153 No_date   12:15   45.21
                     + 08:Node3       228.57    4.053 No_date   13:29   57.34
      [DT= 1.00]  SUM=  02:Node4       254.18    4.120 No_date   13:28   56.12
  ** END OF RUN :  12

 ********************************************************************************


                                                    100 yr SCS


 RUN:COMMAND#
 013:0001----------------------------------------------------------------------
      START
      [TZERO =    .00 hrs on        0]
      [METOUT=   2    (1=imperial, 2=metric output)]
      [NSTORM=   1 ]
      [NRUN  =  13 ]
 #*****************************************************************************
 #  Project Name: (Linksview Ultimate)  Project Number: [183-2687]
 #  Date        : 2014 08 22
 #  Modified    :
 #  Modeller    : (A. French]
 #  Company     : C.F. Crozier & Associates Inc.
 #  License #   :  3737016
 #*****************************************************************************
 #*****************************************************************************
 013:0002----------------------------------------------------------------------
      READ STORM
       Filename = STORM.001
       Comment  =
      [SDT= 1.00:SDUR=  24.00:PTOT= 108.00]
 #                    MAIR MILLS ESTATES AND CONTRIBUTING AREAS
 013:0003----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     03:302           16.39    2.065 No_date   12:19   63.52
      [XIMP=.20:TIMP=.40]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=    .0]
 013:0004----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:303            2.34     .390 No_date   12:15   68.75
      [XIMP=.25:TIMP=.50]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=    .0]
 013:0005----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:303            2.34     .390 No_date   12:15   68.75
                     + 03:302           16.39    2.065 No_date   12:19   63.52
      [DT= 1.00]  SUM=  02:903           18.73    2.423 No_date   12:18   64.17
 013:0006----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:304            2.90     .258 No_date   12:20   46.05
      [CN= 66.6: N= 3.00]
      [Tp=  .28:DT= 5.00]
 013:0007----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:304            2.90     .258 No_date   12:20   46.05
                     + 02:903           18.73    2.423 No_date   12:18   64.17
      [DT= 1.00]  SUM=  03:904           21.63    2.672 No_date   12:18   61.74
 013:0008----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:305             .31     .029 No_date   12:12   56.88
      [XIMP=.20:TIMP=.20]
      [LOSS= 2 :CN= 65.2]
      [Pervious     area: IAper= 5.00:SLPP= .50:LGP= 100.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=    .0]
 013:0009----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:305             .31     .029 No_date   12:12   56.88
                     + 03:904           21.63    2.672 No_date   12:18   61.74
      [DT= 1.00]  SUM=  02:905           21.94    2.687 No_date   12:18   61.68
 #                          MAIR MILLS ESTATES SWMF
 013:0010----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 02:905           21.94    2.687 No_date   12:18   61.68
      [RDT= 1.00] out<- 03:502          21.94     .221 No_date   14:24   61.67
            overflow <= 04:502OVF         .00     .000 No_date    0:00     .00
      [MxStoUsed=.8589E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0011----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:400            5.70     .156 No_date   12:50   27.44
      [CN= 50.2: N= 3.00]
      [Tp=  .70:DT= 5.00]
 013:0012----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:400            5.70     .156 No_date   12:50   27.44
                     + 03:502          21.94     .221 No_date   14:24   61.67
                     + 04:502OVF         .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  02:906          27.64     .307 No_date   12:50   54.61
 #       FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
 013:0013----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    DIVERT HYD       -> 02:906          27.64     .307 No_date   12:50   54.61
            diverted <= 10:To806          8.16     .020 No_date   12:50   54.61
            diverted <= 03:To1023         9.74     .143 No_date   12:50   54.61
            diverted <= 01:To1022         9.74     .143 No_date   12:50   54.61
 #                    TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
 013:0014----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:3501          66.62   11.975 No_date   12:18   84.23
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 81.5]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=    .0]
 013:0015----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3501          66.62   11.975 No_date   12:18   84.23
      [RDT= 1.00] out<- 02:3501Pond     66.62    1.498 No_date   13:20   84.22
            overflow <= 04:3501OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.3312E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0016----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:3502          28.70    5.598 No_date   12:16   83.05
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 80.3]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=    .0]
 013:0017----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3502          28.70    5.598 No_date   12:16   83.05
      [RDT= 1.00] out<- 05:3502Pond     28.70     .645 No_date   13:14   83.05
            overflow <= 06:3502OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.1404E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0018----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:3506          10.24     .420 No_date   12:45   38.28
      [CN= 61.8: N= 3.00]
      [Tp=  .66:DT= 5.00]
 #                              FLOWS AT NODE 1
 013:0019----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            02:3501Pond      66.62    1.498 No_date   13:20   84.22
                     + 04:3501OVF          .00     .000 No_date    0:00     .00
                     + 05:3502Pond      28.70     .645 No_date   13:14   83.05
                     + 06:3502OVF          .00     .000 No_date    0:00     .00
                     + 01:3506          10.24     .420 No_date   12:45   38.28
      [DT= 1.00]  SUM=  07:Node1        105.56    2.498 No_date   13:05   79.45
 013:0020----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE CHANNEL   -> 07:Node1        105.56    2.498 No_date   13:05   79.45
      [RDT= 1.00] out<- 02:RC           105.56    2.298 No_date   13:45   79.45
      [L/S/n= 1400./1,200/.030]
      [Vmax=  .870:Dmax=  .793]
 013:0021----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:3503          23.53    3.500 No_date   12:15   64.92
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 59.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=    .0]
 013:0022----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 01:3503          23.53    3.500 No_date   12:15   64.92
      [RDT= 1.00] out<- 04:3503Pond     23.53     .540 No_date   13:05   64.92
            overflow <= 05:3503OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.8151E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0023----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:3505          16.57     .309 No_date   13:10   23.48
      [CN= 44.2: N= 3.00]
      [Tp=  .94:DT= 5.00]
 #                    FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
 013:0024----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            04:3503Pond      23.53     .540 No_date   13:05   64.92
                     + 05:3503OVF          .00     .000 No_date    0:00     .00
                     + 02:RC           105.56    2.298 No_date   13:45   79.45
                     + 01:3505          16.57     .309 No_date   13:10   23.48
      [DT= 1.00]  SUM=  09:Node2        145.66    3.076 No_date   13:34   70.73
 #                              MAIR MILLS VILLAGE
 013:0025----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:103            8.70     .429 No_date   12:35   36.76
      [CN= 59.2: N= 3.00]
      [Tp=  .48:DT= 5.00]
 013:0026----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:103            8.70     .429 No_date   12:35   36.76
                     + 03:To1023           9.74     .143 No_date   12:50   54.61
      [DT= 1.00]  SUM=  02:1023          18.44     .564 No_date   12:35   46.19
 013:0027----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:205            1.41     .094 No_date   12:15   29.50
      [CN= 51.1: N= 3.00]
      [Tp=  .20:DT= 5.00]
 013:0028----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:205            1.41     .094 No_date   12:15   29.50
                     + 02:1023          18.44     .564 No_date   12:35   46.19
      [DT= 1.00]  SUM=  03:802           19.85     .613 No_date   12:30   45.00
 013:0029----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     01:201            18.41    3.504 No_date   12:12   65.82
      [XIMP=.43:TIMP=.56]
      [LOSS= 2 :CN= 49.0]
      [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=    .0]
 013:0030----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:201            18.41    3.504 No_date   12:12   65.82
                     + 03:802           19.85     .613 No_date   12:30   45.00
      [DT= 1.00]  SUM=  02:803           38.26    3.872 No_date   12:12   55.02
 013:0031----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB NASHYD       01:202            1.10     .067 No_date   12:20   29.75
      [CN= 55.0: N= 3.00]
      [Tp=  .25:DT= 5.00]
 013:0032----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:202            1.10     .067 No_date   12:20   29.75
                     + 02:803           38.26    3.872 No_date   12:12   55.02
      [DT= 1.00]  SUM=  03:804           39.36    3.924 No_date   12:12   54.31
 #                          MAIR MILLS VILLAGE SWMF
 013:0033----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 03:804           39.36    3.924 No_date   12:12   54.31
      [RDT= 1.00] out<- 02:1026         39.36     .794 No_date   13:02   54.31
            overflow <= 01:1026OVF        .00     .000 No_date    0:00     .00
      [MxStoUsed=.8269E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0034----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            02:1026           39.36     .794 No_date   13:02   54.31
                     + 01:1026OVF          .00     .000 No_date    0:00     .00
      [DT= 1.00]  SUM=  05:Pond1026ou    39.36     .794 No_date   13:02   54.31
 #                  TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
 013:0035----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    DIVERT HYD       -> 05:Pond1026ou  39.36     .794 No_date   13:02   54.31
            diverted <= 02:To807         13.76     .041 No_date   13:02   54.31
            diverted <= 07:To809         24.01     .560 No_date   13:02   54.31
            diverted <= 03:To1025         1.59     .193 No_date   13:02   54.31
 013:0036----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
  * CALIB NASHYD       01:207            1.22     .114 No_date   12:15   33.85
      [CN= 55.3: N= 3.00]
      [Tp=  .13:DT= 5.00]
 013:0037----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            01:207            1.22     .114 No_date   12:15   33.85
                     + 02:To807          13.76     .041 No_date   13:02   54.31
      [DT= 1.00]  SUM=  06:807           14.98     .154 No_date   12:15   52.65
 013:0038----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            03:To1025         1.59     .193 No_date   13:02   54.31
                     + 09:Node2        145.66    3.076 No_date   13:34   70.73
      [DT= 1.00]  SUM=  01:1025          147.25    3.217 No_date   13:29   70.56
 013:0039----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            07:To809          24.01     .560 No_date   13:02   54.31
                     + 01:1025          147.25    3.217 No_date   13:29   70.56
      [DT= 1.00]  SUM=  09:809           171.26    3.777 No_date   13:29   68.28
 #                              FLOWS TO OUTLET B
 013:0040----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            06:807            14.98     .154 No_date   12:15   52.65
                     + 10:To806            8.16     .020 No_date   12:50   54.61
      [DT= 1.00]  SUM=  01:806/outB      23.14     .174 No_date   12:15   53.34
 #                          LINKSVIEW AND CONTRIBUTING AREAS
 013:0041----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     05:3504           6.94    1.126 No_date   12:13   64.92
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 59.0]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=    .0]
 013:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    CALIB STANDHYD     06:3500          38.20    5.102 No_date   12:16   61.92
      [XIMP=.30:TIMP=.50]
      [LOSS= 2 :CN= 54.9]
      [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=    .0]
      [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=    .0]
 013:0043----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ADD HYD            05:3504           6.94    1.126 No_date   12:13   64.92
                     + 06:3500          38.20    5.102 No_date   12:16   61.92
      [DT= 1.00]  SUM=  07:Pondin        45.14    6.175 No_date   12:15   62.38
 013:0044----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
    ROUTE RESERVOIR -> 07:Pondin        45.14    6.175 No_date   12:15   62.38
      [RDT= 1.00] out<- 08:LinkPond     45.14    1.000 No_date   13:06   62.38
            overflow <= 06:OVF            .00     .000 No_date    0:00     .00
      [MxStoUsed=.1492E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
 013:0045----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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03781>      ADD HYD            08:LinkPond       45.14    1.000 No_date   13:06   62.38
03782>                    +  06:OVF              .00     .000 No_date    0:00     .00
03783>       [DT= 1.00]  SUM=  04:Pondout        45.14    1.000 No_date   13:06   62.38
03784> #                      FLOWS FROM TENTH LINE (URBANIZED)
03785>  013:0046---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03786>      CALIB STANDHYD     03:3601            .25     .063 No_date   12:12   78.24
03787>        [XIMP=.64:TIMP=.64]
03788>        [LOSS= 2 :CN= 49.0]
03789>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03790>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
03791>  013:0047---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03792>      CALIB STANDHYD     05:3602            1.30     .296 No_date   12:12   78.24
03793>        [XIMP=.64:TIMP=.64]
03794>        [LOSS= 2 :CN= 49.0]
03795>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
03796>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
03797>  013:0048---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03798>      COMPUTE DUALHYD    05:3602            1.30     .296 No_date   12:12   78.24
03799>         Major System /  02:Maj10th          .04     .076 No_date   12:12   78.24
03800>         Minor System \  10:5yrflow         1.26     .220 No_date   12:06   78.24
03801> #                      FLOWS FROM BMGCC SOUTHERN PORTION
03802>  013:0049---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03803>      CALIB STANDHYD     05:3507           12.59    1.777 No_date   12:14   59.88
03804>        [XIMP=.30:TIMP=.50]
03805>        [LOSS= 2 :CN= 52.0]
03806>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03807>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
03808>  013:0050---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03809>      ROUTE RESERVOIR -> 05:3507           12.59    1.777 No_date   12:14   59.88
03810>        [RDT= 1.00] out<- 06:3507Pond      12.59     .307 No_date   12:56   59.87
03811>              overflow <= 07:3507OVF        .00     .000 No_date    0:00     .00
03812>       [MxStoUsed=.3803E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03813>  013:0051---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03814>      ADD HYD                04:Pondout     45.14    1.000 No_date   13:06   62.38
03815>                         +  07:3507OVF        .00     .000 No_date    0:00     .00
03816>                         +  06:3507Pond     12.59     .307 No_date   12:56   59.87
03817>                         +  10:5yrflow       1.26     .220 No_date   12:06   78.24
03818>       [DT= 1.00]  SUM=  05:LinkPipe       58.99    1.331 No_date   13:02   62.18
03819>  013:0052---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03820>      ADD HYD            05:LinkPipe       58.99    1.331 No_date   13:02   62.18
03821>                    +  02:Maj10th          .04     .076 No_date   12:12   78.24
03822>                    +  03:3601             .25     .063 No_date   12:12   78.24
03823>                    +  09:809            171.26    3.777 No_date   13:29   68.20
03824>       [DT= 1.00]  SUM=  08:Node3         230.54    5.064 No_date   13:24   66.73
03825>  013:0053---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03826>      ADD HYD            01:806/outB       23.14     .174 No_date   12:15   53.34
03827>                    +  08:Node3         230.54    5.064 No_date   13:24   66.73
03828>       [DT= 1.00]  SUM=  02:Node4         253.68    5.134 No_date   13:24   65.51
03829>   ** END OF RUN :  13
03830>
03831> ************************************************************************************
03832>
03833>
03834>
03835>
03836>
03837>  RUN:COMMAND#
03838>  014:0001---------------------------------------------------------------------------
03839>      START
03840>       [TZERO =     .00 hrs on        0]
03841>       [METOUT=    2     (1=imperial, 2=metric output)]
03842>       [NSTORM=    1 ]
03843>       [NRUN   =  14 ]
03844> #*********************************************************************************
03845> #  Project Name: [Linksview Ultimate]  Project Number: [183-2687]
03846> #  Date        : 2014 08 22
03847> #  Modified    :
03848> #  Modeller    : [A. French]
03849> #  Company     : C.F. Crozier & Associates Inc.
03850> #  License #   :  3737016
03851> #*********************************************************************************
03852> #*********************************************************************************
03853>  014:0002---------------------------------------------------------------------------
03854>      READ STORM
03855>       Filename = STORM.001
03856>       Comment  =
03857>       [SDT=60.00:SDUR=  12.00:PTOT= 193.00]
03858> #                MAIR MILLS ESTATES AND CONTRIBUTING AREAS
03859>  014:0003---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03860>      CALIB STANDHYD     03:302            16.39    1.423 No_date    7:04  136.79
03861>        [XIMP=.20:TIMP=.40]
03862>        [LOSS= 2 :CN= 65.2]
03863>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03864>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 700.:MNI=.013:SCI=   .0]
03865>  014:0004---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03866>      CALIB STANDHYD     01:303             2.34     .224 No_date    7:01  144.22
03867>        [XIMP=.25:TIMP=.50]
03868>        [LOSS= 2 :CN= 65.2]
03869>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03870>        [Impervious   area: IAimp= 1.50:SLPI= .50:LGI= 300.:MNI=.013:SCI=   .0]
03871>  014:0005---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03872>      ADD HYD            01:303             2.34     .224 No_date    7:01  144.22
03873>                    +  03:302            16.39    1.423 No_date    7:04  136.79
03874>       [DT= 1.00]  SUM=  02:903            18.73    1.645 No_date    7:03  137.71
03875>  014:0006---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03876>      CALIB NASHYD       01:304             2.90     .230 No_date    7:00  112.07
03877>        [CN= 66.6: N= 3.00]
03878>        [Tp=  .28:DT= 5.00]
03879>  014:0007---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03880>      ADD HYD            01:304             2.90     .230 No_date    7:00  112.07
03881>                    +  02:903            18.73    1.645 No_date    7:03  137.71
03882>       [DT= 1.00]  SUM=  03:904            21.63    1.873 No_date    7:03  134.28
03883>  014:0008---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03884>      CALIB STANDHYD     01:305              .31     .023 No_date    7:00  125.69
03885>        [XIMP=.20:TIMP=.20]
03886>        [LOSS= 2 :CN= 65.2]
03887>        [Pervious     area: IAper= 5.00:SLPP=  .50:LGP= 100.:MNP=.250:SCP=   .0]
03888>        [Impervious   area: IAimp= 1.50:SLPI=2.00:LGI=   3.:MNI=.013:SCI=   .0]
03889>  014:0009---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03890>      ADD HYD            01:305              .31     .023 No_date    7:00  125.69
03891>                    +  03:904            21.63    1.873 No_date    7:03  134.28
03892>       [DT= 1.00]  SUM=  02:905            21.94    1.892 No_date    7:03  134.15
03893> #                      MAIR MILLS ESTATES SWMF
03894>  014:0010---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03895>      ROUTE RESERVOIR -> 02:905            21.94    1.892 No_date    7:03  134.15
03896>        [RDT= 1.00] out<- 03:502            21.94    1.143 No_date    9:09  134.15
03897>              overflow <= 04:502OVF         .00     .000 No_date    0:00     .00
03898>       [MxStoUsed=.1129E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03899>  014:0011---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03900>      CALIB NASHYD       01:400             5.70     .237 No_date    7:25   76.99
03901>        [CN= 50.2: N= 3.00]
03902>        [Tp=  .70:DT= 5.00]
03903>  014:0012---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03904>      ADD HYD            01:400             5.70     .237 No_date    7:25   76.99
03905>                    +  03:502            21.94    1.143 No_date    9:09  134.15
03906>                    +  04:502OVF          .00     .000 No_date    0:00     .00
03907>       [DT= 1.00]  SUM=  02:906            27.64    1.345 No_date    9:09  122.36
03908> #        FLOW SPLIT (CRANBERRY MARSH AND BLACK ASH CREEK OUTLETS)
03909>  014:0013---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03910>      DIVERT HYD         -> 02:906            27.64    1.345 No_date    9:09  122.36
03911>              diverted <= 10:To806            3.68     .020 No_date    9:09  122.36
03912>              diverted <= 02:To1023          11.98     .662 No_date    9:09  122.36
03913>              diverted <= 01:To1022          11.98     .662 No_date    9:09  122.36
03914> #                TAYLOR'S CREEK UPSTREAM CATCHMENT AREAS
03915>  014:0014---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03916>      CALIB STANDHYD     01:3501            66.62    7.032 No_date    7:02  166.22
03917>        [XIMP=.30:TIMP=.50]
03918>        [LOSS= 2 :CN= 81.5]
03919>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03920>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 666.:MNI=.013:SCI=   .0]
03921>  014:0015---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03922>      ROUTE RESERVOIR -> 01:3501           66.62    7.032 No_date    7:02  166.22
03923>        [RDT= 1.00] out<- 02:3501Pond      66.62    2.684 No_date    9:44  166.22
03924>              overflow <= 04:3501OVF        .00     .000 No_date    0:00     .00
03925>       [MxStoUsed=.5625E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03926>  014:0016---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03927>      CALIB STANDHYD     01:3502            28.70    3.069 No_date    7:01  164.67
03928>        [XIMP=.30:TIMP=.50]
03929>        [LOSS= 2 :CN= 80.3]
03930>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03931>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 437.:MNI=.013:SCI=   .0]
03932>  014:0017---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03933>      ROUTE RESERVOIR -> 01:3502           28.70    3.069 No_date    7:01  164.67
03934>        [RDT= 1.00] out<- 05:3502Pond      28.70    1.162 No_date    9:36  164.67
03935>              overflow <= 06:3502OVF        .00     .000 No_date    0:00     .00
03936>       [MxStoUsed=.2389E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03937>  014:0018---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03938>      CALIB NASHYD       01:3506            10.24     .576 No_date    7:20   99.28
03939>        [CN= 61.8: N= 3.00]
03940>        [Tp=  .66:DT= 5.00]
03941> #                                FLOWS AT NODE 1
03942>  014:0019---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03943>      ADD HYD            02:3501Pond        66.62    2.684 No_date    9:44  166.22
03944>                    +  04:3501OVF         .00     .000 No_date    0:00     .00
03945>                    +  05:3502Pond       28.70    1.162 No_date    9:36  164.67
03946>                    +  06:3502OVF         .00     .000 No_date    0:00     .00
03947>                    +  01:3506           10.24     .576 No_date    7:20   99.28
03948>       [DT= 1.00]  SUM=  07:Node1         105.56    4.261 No_date    9:25  159.30
03949>  014:0020---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03950>      ROUTE CHANNEL   -> 07:Node1         105.56    4.261 No_date    9:25  159.30
03951>        [RDT= 1.00] out<- 02:RC            105.56    4.211 No_date    9:49  159.30
03952>        [L/S/n= 1400./1.200/.030]
03953>        [Vmax=  .926:Dmax=  .882]
03954>  014:0021---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03955>      CALIB STANDHYD     01:3503            23.53    2.088 No_date    7:01  136.91
03956>        [XIMP=.30:TIMP=.50]
03957>        [LOSS= 2 :CN= 59.0]
03958>        [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
03959>        [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 396.:MNI=.013:SCI=   .0]
03960>  014:0022---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03961>      ROUTE RESERVOIR -> 01:3503           23.53    2.088 No_date    7:01  136.91
03962>        [RDT= 1.00] out<- 04:3503Pond      23.53     .953 No_date    9:24  136.91
03963>              overflow <= 05:3503OVF        .00     .000 No_date    0:00     .00
03964>       [MxStoUsed=.1359E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
03965>  014:0023---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03966>      CALIB NASHYD       01:3505            16.57     .528 No_date    7:50   67.27
03967>        [CN= 44.2: N= 3.00]
03968>        [Tp=  .94:DT= 5.00]
03969> #                  FLOWS AT NODE 2 (UPSTREAM OF TENTH LINE)
03970>  014:0024---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03971>      ADD HYD            04:3503Pond        23.53     .953 No_date    9:24  136.91
03972>                    +  05:3503OVF         .00     .000 No_date    0:00     .00
03973>                    +  02:RC            105.56    4.211 No_date    9:49  159.30
03974>                    +  01:3505           16.57     .528 No_date    7:50   67.27
03975>       [DT= 1.00]  SUM=  09:Node2         145.66    5.642 No_date    9:35  145.21
03976> #                           MAIR MILLS VILLAGE
03977>  014:0025---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03978>      CALIB NASHYD       01:103             8.70     .523 No_date    7:10   95.57
03979>        [CN= 59.2: N= 3.00]
03980>        [Tp=  .48:DT= 5.00]
03981>  014:0026---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03982>      ADD HYD            01:103             8.70     .523 No_date    7:10   95.57
03983>                    +  03:To1023          11.98     .662 No_date    9:09  122.36
03984>       [DT= 1.00]  SUM=  02:1023          20.68    1.102 No_date    7:26  111.09
03985>  014:0027---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03986>      CALIB NASHYD       01:205             1.41     .082 No_date    7:00   80.43
03987>        [CN= 51.1: N= 3.00]
03988>        [Tp=  .20:DT= 5.00]
03989>  014:0028---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03990>      ADD HYD            01:205             1.41     .082 No_date    7:00   80.43
03991>                    +  02:1023          20.68    1.102 No_date    7:26  111.09
03992>       [DT= 1.00]  SUM=  03:802           22.09    1.150 No_date    7:25  109.13
03993>  014:0029---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
03994>      CALIB STANDHYD     01:201             18.41    1.622 No_date    7:00  134.10
03995>        [XIMP=.43:TIMP=.56]
03996>        [LOSS= 2 :CN= 49.0]
03997>        [Pervious     area: IAper= 6.00:SLPP=2.00:LGP=  20.:MNP=.250:SCP=   .0]
03998>        [Impervious   area: IAimp= 1.00:SLPI=1.00:LGI= 180.:MNI=.013:SCI=   .0]
03999>  014:0030---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04000>      ADD HYD            01:201             18.41    1.622 No_date    7:00  134.10
04001>                    +  03:802           22.09    1.150 No_date    7:25  109.13
04002>       [DT= 1.00]  SUM=  02:803           40.50    2.573 No_date    7:01  120.48
04003>  014:0031---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04004>      CALIB NASHYD       01:202             1.10     .066 No_date    7:00   83.47
04005>        [CN= 55.0: N= 3.00]
04006>        [Tp=  .25:DT= 5.00]
04007>  014:0032---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04008>      ADD HYD            01:202             1.10     .066 No_date    7:00   83.47
04009>                    +  02:803           40.50    2.573 No_date    7:01  120.48
04010>       [DT= 1.00]  SUM=  03:804           41.60    2.639 No_date    7:01  119.50
04011> #                      MAIR MILLS VILLAGE SWMF
04012>  014:0033---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04013>      ROUTE RESERVOIR -> 03:804           41.60    2.639 No_date    7:01  119.50
04014>        [RDT= 1.00] out<- 02:1026          41.60    2.510 No_date    7:05  119.50
04015>              overflow <= 01:1026OVF        .00     .000 No_date    0:00     .00
04016>       [MxStoUsed=.9793E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04017>  014:0034---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04018>      ADD HYD            02:1026            41.60    2.510 No_date    7:05  119.50
04019>                    +  01:1026OVF         .00     .000 No_date    0:00     .00
04020>       [DT= 1.00]  SUM=  05:Pond1026ou     41.60    2.510 No_date    7:05  119.50
04021> #                TENTH LINE DITCH FLOW SPLIT (OUTLETS A & B)
04022>  014:0035---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04023>      DIVERT HYD         -> 05:Pond1026ou   41.60    2.510 No_date    7:05  119.50
04024>              diverted <= 02:To807           6.48     .049 No_date    7:05  119.50
04025>              diverted <= 07:To809          16.89     .560 No_date    7:05  119.50
04026>              diverted <= 03:To1025         18.23    1.901 No_date    7:05  119.50
04027>  014:0036---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04028>   * CALIB NASHYD         01:207             1.22     .081 No_date    7:00   89.14
04029>        [CN= 55.3: N= 3.00]
04030>        [Tp=  .13:DT= 5.00]
04031>  014:0037---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04032>      ADD HYD            01:207             1.22     .081 No_date    7:00   89.14
04033>                    +  02:To807            6.48     .049 No_date    7:05  119.50
04034>       [DT= 1.00]  SUM=  06:807             7.70     .130 No_date    7:00  114.69
04035>  014:0038---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04036>      ADD HYD            03:To1025          18.23    1.901 No_date    7:05  119.50
04037>                    +  09:Node2         145.66    5.642 No_date    9:35  145.21
04038>       [DT= 1.00]  SUM=  01:1025          163.89    6.958 No_date    9:05  142.35
04039>  014:0039---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04040>      ADD HYD            07:To809           16.89     .560 No_date    7:05  119.50
04041>                    +  01:1025          163.89    6.958 No_date    9:05  142.35
04042>       [DT= 1.00]  SUM=  09:809           180.78    7.518 No_date    9:05  140.22
04043> #                                FLOWS TO OUTLET B
04044>  014:0040---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04045>      ADD HYD            06:807             7.70     .130 No_date    7:00  114.69
04046>                    +  10:To806            3.68     .020 No_date    9:09  122.36
04047>       [DT= 1.00]  SUM=  01:806/outB       11.38     .150 No_date    7:00  117.17
04048> #                      LINKSVIEW AND CONTRIBUTING AREAS
04049>  014:0041---------------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04050>      CALIB STANDHYD     05:3504            6.94     .628 No_date    7:00  136.91
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04051>       [XIMP=.30:TIMP=.50]
04052>       [LOSS= 2 :CN= 59.0]
04053>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04054>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 215.:MNI=.013:SCI=   .0]
04055>  014:0042----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04056>      CALIB STANDHYD     06:3500          38.20     3.201 No_date    7:02  131.51
04057>       [XIMP=.30:TIMP=.50]
04058>       [LOSS= 2 :CN= 54.9]
04059>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04060>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 505.:MNI=.013:SCI=   .0]
04061>  014:0043----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04062>      ADD HYD            05:3504           6.94      .628 No_date    7:00  136.91
04063>                       + 06:3500          38.20     3.201 No_date    7:02  131.51
04064>       [DT= 1.00]  SUM=  07:Pondin         45.14     3.827 No_date    7:01  132.34
04065>  014:0044----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04066>      ROUTE RESERVOIR -> 07:Pondin         45.14     3.827 No_date    7:01  132.34
04067>       [RDT= 1.00] out<- 08:LinkPond       45.14     1.778 No_date    9:25  132.34
04068>             overflow <= 06:OVF             .00      .000 No_date    0:00     .00
04069>      [MxStoUsed=.2502E+01, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04070>  014:0045----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04071>      ADD HYD            08:LinkPond       45.14     1.778 No_date    9:25  132.34
04072>                       + 06:OVF             .00      .000 No_date    0:00     .00
04073>       [DT= 1.00]  SUM=  04:Pondout        45.14     1.778 No_date    9:25  132.34
04074> #                      FLOWS FROM TENTH LINE (URBANIZED)
04075>  014:0046----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04076>      CALIB STANDHYD     03:3601           .25      .024 No_date    7:00  150.37
04077>       [XIMP=.64:TIMP=.64]
04078>       [LOSS= 2 :CN= 49.0]
04079>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
04080>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI=  48.:MNI=.013:SCI=   .0]
04081>  014:0047----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04082>      CALIB STANDHYD     05:3602           1.30      .126 No_date    7:00  150.37
04083>       [XIMP=.64:TIMP=.64]
04084>       [LOSS= 2 :CN= 49.0]
04085>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=   3.:MNP=.250:SCP=   .0]
04086>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 250.:MNI=.013:SCI=   .0]
04087>  014:0048----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04088>      COMPUTE DUALHYD    05:3602           1.30      .126 No_date    7:00  150.37
04089>        Major System /   02:Majl0th          .00      .000 No_date    0:00     .00
04090>        Minor System \   10:Syrflow         1.30      .126 No_date    7:00  150.37
04091> #                      FLOWS FROM BMGCC SOUTHERN PORTION
04092>  014:0049----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04093>      CALIB STANDHYD     05:3507          12.59     1.043 No_date    7:01  127.68
04094>       [XIMP=.30:TIMP=.50]
04095>       [LOSS= 2 :CN= 52.0]
04096>       [Pervious     area: IAper= 5.00:SLPP=2.00:LGP=  40.:MNP=.250:SCP=   .0]
04097>       [Impervious   area: IAimp= 2.00:SLPI= .50:LGI= 290.:MNI=.013:SCI=   .0]
04098>  014:0050----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04099>      ROUTE RESERVOIR -> 05:3507          12.59     1.043 No_date    7:01  127.68
04100>       [RDT= 1.00] out<- 06:3507Pond      12.59      .509 No_date    9:18  127.68
04101>             overflow <= 07:3507OVF         .00      .000 No_date    0:00     .00
04102>      [MxStoUsed=.6137E+00, TotOvfVol=.0000E+00, N-Ovf=    0, TotDurOvf=    0.hrs
04103>  014:0051----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04104>      ADD HYD            04:Pondout        45.14     1.778 No_date    9:25  132.34
04105>                       + 07:3507OVF         .00      .000 No_date    0:00     .00
04106>                       + 06:3507Pond      12.59      .509 No_date    9:18  127.68
04107>                       + 10:Syrflow        1.30      .126 No_date    7:00  150.37
04108>       [DT= 1.00]  SUM=  05:LinkPipe       59.03     2.330 No_date    9:19  131.74
04109>  014:0052----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
04110>      ADD HYD            05:LinkPipe       59.03     2.330 No_date    9:19  131.74
04111>                       + 02:Majl0th          .00      .000 No_date    0:00     .00
04112>                       + 03:3601             .25      .024 No_date    7:00  150.37
04113>                       + 09:B09           180.78     7.518 No_date    9:05  140.22
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04115>  014:0053----------ID:NHYD----------AREA----QPEAK-TpeakDate_hh:mm----R.V.-
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04117>                       + 08:Node3         240.06     9.852 No_date    9:05  138.14
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04119>  014:0002----------------------------------------------------------------------
04120>       FINISH
04121> ----------------------------------------------------------------------------
04122> ****************************************************************************
04123>      WARNINGS / ERRORS / NOTES
04124>      -------------------------
04125>  001:0036 CALIB NASHYD
04126>       *** WARNING: Time step is too large for value of TP.
04127>                    R.V. may be ok.  Peak flow could be off.
04128>       *** WARNING: Time step is too large for value of TP.
04129>                    R.V. may be ok.  Peak flow could be off.
04130>       *** WARNING: Time step is too large for value of TP.
04131>                    R.V. may be ok.  Peak flow could be off.
04132>       *** WARNING: Time step is too large for value of TP.
04133>                    R.V. may be ok.  Peak flow could be off.
04134>       *** WARNING: Time step is too large for value of TP.
04135>                    R.V. may be ok.  Peak flow could be off.
04136>       *** WARNING: Time step is too large for value of TP.
04137>                    R.V. may be ok.  Peak flow could be off.
04138>       *** WARNING: Time step is too large for value of TP.
04139>                    R.V. may be ok.  Peak flow could be off.
04140>       *** WARNING: Time step is too large for value of TP.
04141>                    R.V. may be ok.  Peak flow could be off.
04142>       *** WARNING: Time step is too large for value of TP.
04143>                    R.V. may be ok.  Peak flow could be off.
04144>       *** WARNING: Time step is too large for value of TP.
04145>                    R.V. may be ok.  Peak flow could be off.
04146>       *** WARNING: Time step is too large for value of TP.
04147>                    R.V. may be ok.  Peak flow could be off.
04148>       *** WARNING: Time step is too large for value of TP.
04149>                    R.V. may be ok.  Peak flow could be off.
04150>       *** WARNING: Time step is too large for value of TP.
04151>                    R.V. may be ok.  Peak flow could be off.
04152>       *** WARNING: Time step is too large for value of TP.
04153>                    R.V. may be ok.  Peak flow could be off.
04154>    Simulation ended on 2014-10-17     at 14:14:04
04155> ----------------------------------------------------------------------------
04156>
04157>
```

**CROZIER & ASSOCIATES**
Consulting Engineers

**Project:** Linksview
**Project No.:** 183-2687
**Design by:** KW
**Date:** 13/10/2014

## POND UNIT FLOW RATE SUMMARY (ULTIMATE DEVELOPMENT SCENARIO MODELING)

| | | 3501 Pond | | 3502 Pond | | 3503 Pond | | 3507 Pond | | Linksview Pond | | Calculated Target |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 66.6 ha | | 28.7 ha | | 23.5 ha | | 12.6 ha | | 45.1 ha | | Unit Flow Rates |
| | Storm | Pond Outflow ($m^3/s$) | Unit Flow Rate (L/s/ha) | Pond Outflow ($m^3/s$) | Unit Flow Rate (L/s/ha) | Pond Outflow ($m^3/s$) | Unit Flow Rate (L/s/ha) | Pond Outflow ($m^3/s$) | Unit Flow Rate (L/s/ha) | Pond Outflow ($m^3/s$) | Unit Flow Rate (L/s/ha) | (L/s/ha) |
| Chicago | 2 | 0.13 | **2** | 0.06 | **2** | 0.05 | **2** | 0.03 | **2** | 0.09 | **2** | 4 |
| | 5 | 0.37 | **6** | 0.16 | **6** | 0.13 | **6** | 0.08 | **6** | 0.24 | **5** | 6 |
| | 10 | 0.56 | **8** | 0.24 | **8** | 0.20 | **8** | 0.12 | **9** | 0.35 | **8** | 9 |
| | 25 | 0.81 | **12** | 0.35 | **12** | 0.29 | **12** | 0.16 | **13** | 0.52 | **12** | 12 |
| | 50 | 0.98 | **15** | 0.42 | **15** | 0.35 | **15** | 0.20 | **16** | 0.63 | **14** | 14 |
| | 100 | 1.18 | **18** | 0.51 | **18** | 0.42 | **18** | 0.24 | **19** | 0.77 | **17** | 17 |
| SCS | 2 | 0.16 | **2** | 0.07 | **2** | 0.06 | **2** | 0.04 | **3** | 0.10 | **2** | 5 |
| | 5 | 0.48 | **7** | 0.21 | **7** | 0.17 | **7** | 0.10 | **8** | 0.30 | **7** | 8 |
| | 10 | 0.68 | **10** | 0.29 | **10** | 0.24 | **10** | 0.14 | **11** | 0.44 | **10** | 11 |
| | 25 | 1.00 | **15** | 0.43 | **15** | 0.36 | **15** | 0.20 | **16** | 0.65 | **14** | 15 |
| | 50 | 1.22 | **18** | 0.53 | **18** | 0.44 | **19** | 0.25 | **20** | 0.80 | **18** | 18 |
| | 100 | 1.50 | **22** | 0.65 | **22** | 0.54 | **23** | 0.31 | **24** | 1.00 | **22** | 23 |
| | Timmins | 2.68 | **40** | 1.16 | **40** | 0.95 | **41** | 0.51 | **40** | 1.78 | **39** | 41 |

CROZIER & ASSOCIATES
Consulting Engineers

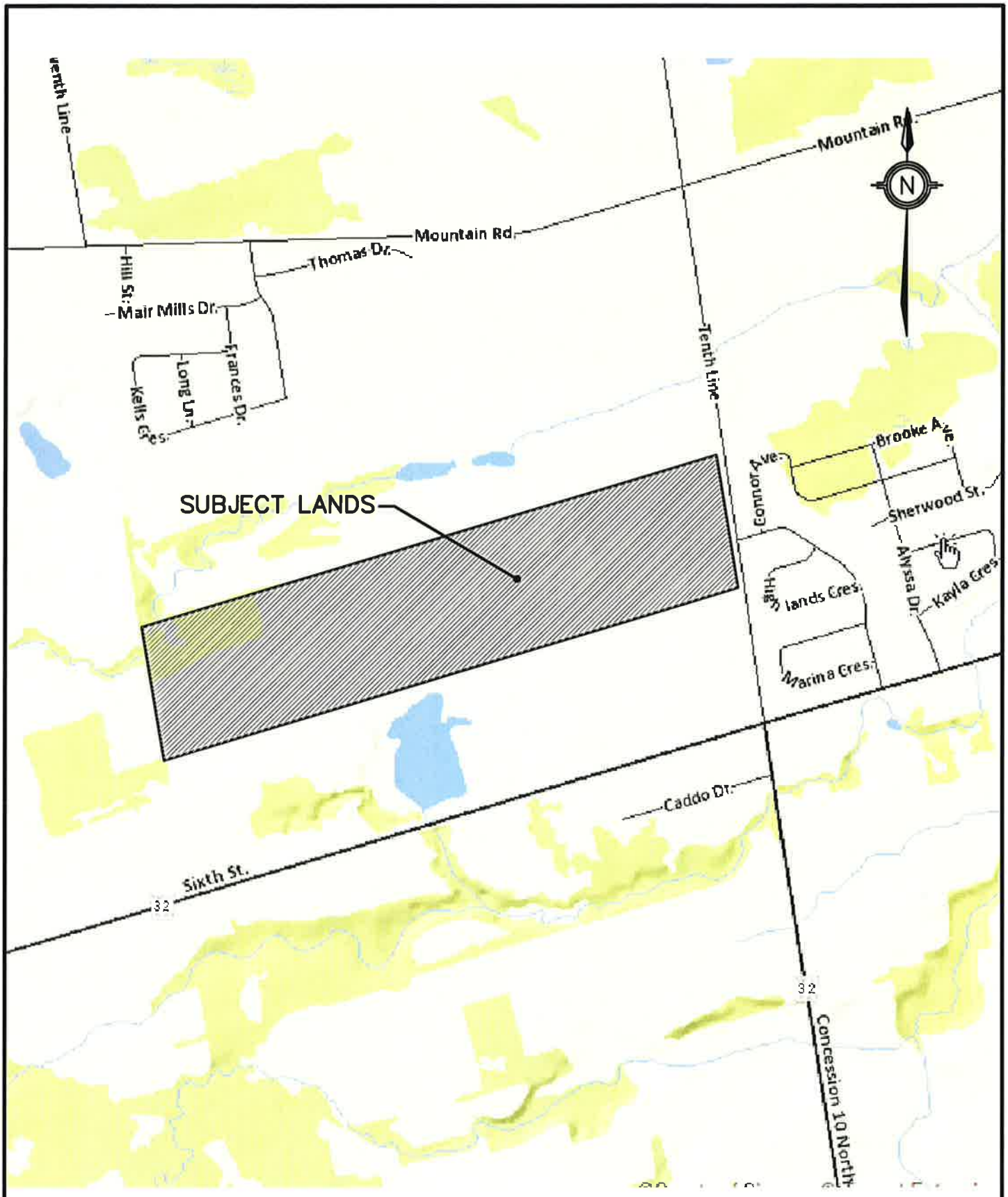
**Project:** Linksview
**Project No.:** 183-2687
**Design by:** KW
**Date:** 13/10/2014

## SWMHYMO MODELING FLOW SUMMARY

| | | NODE 1 FLOWS ($m^3/s$) | | | NODE 2 FLOWS ($m^3/s$) | | | NODE 3 FLOWS ($m^3/s$) | | | NODE 4 FLOWS ($m^3/s$) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Storm** | **Pre** | **Post** | **Ultimate** | **Pre** | **Post** | **Ultimate** | **Pre** | **Post** | **Ultimate** | **Pre** | **Post** | **Ultimate** |
| **CHI** | 2 year | 0.48 | 0.48 | 0.22 | 0.74 | 0.55 | 0.29 | 0.75 | 0.64 | 0.42 | 0.80 | 0.70 | 0.47 |
| | 5 year | 0.87 | 0.87 | 0.56 | 1.29 | 0.98 | 0.71 | 1.38 | 1.28 | 1.10 | 1.44 | 1.35 | 1.16 |
| | 10 year | 1.17 | 1.17 | 0.86 | 1.74 | 1.31 | 1.09 | 1.95 | 1.85 | 1.73 | 2.02 | 1.91 | 1.80 |
| | 25 year | 1.59 | 1.59 | 1.27 | 2.43 | 1.80 | 1.60 | 2.79 | 2.61 | 2.60 | 2.85 | 2.68 | 2.67 |
| | 50 year | 1.88 | 1.88 | 1.55 | 2.90 | 2.14 | 1.95 | 3.36 | 3.14 | 3.18 | 3.43 | 3.20 | 3.25 |
| | 100 year | 2.25 | 2.25 | 1.90 | 3.53 | 2.58 | 2.39 | 4.10 | 3.82 | 3.92 | 4.17 | 3.89 | 3.99 |
| **SCS** | 2 year | 0.59 | 0.59 | 0.25 | 0.92 | 0.67 | 0.33 | 0.93 | 0.76 | 0.46 | 0.98 | 0.82 | 0.52 |
| | 5 year | 1.10 | 1.10 | 0.76 | 1.67 | 1.22 | 0.95 | 1.83 | 1.67 | 1.49 | 1.90 | 1.73 | 1.56 |
| | 10 year | 1.43 | 1.43 | 1.10 | 2.19 | 1.60 | 1.37 | 2.48 | 2.26 | 2.18 | 2.54 | 2.33 | 2.25 |
| | 25 year | 1.95 | 1.95 | 1.64 | 3.08 | 2.19 | 2.01 | 3.56 | 3.21 | 3.28 | 3.63 | 3.27 | 3.34 |
| | 50 year | 2.32 | 2.32 | 2.02 | 3.73 | 2.63 | 2.48 | 4.34 | 3.90 | 4.05 | 4.41 | 3.97 | 4.12 |
| | 100 year | 2.79 | 2.79 | 2.50 | 4.60 | 3.19 | 3.08 | 5.39 | 4.82 | 5.06 | 5.46 | 4.89 | 5.13 |
| | Timmins | 4.74 | 4.74 | 4.21 | 8.42 | 6.25 | 5.64 | 10.59 | 10.20 | 9.85 | 10.71 | 10.31 | 9.96 |

# LIST OF FIGURES

Figure 1: Site Location Plan
Figure 2: Pre-development Drainage Plan
Figure 3: Post-development Drainage Plan
Figure 4: Ultimate development Drainage Plan
Figure 5: Ultimate Development Conceptual Grading Plan




Legend

= SUBJECT LANDS

Project

LINKSVIEW DEVELOPMENT
TOWN OF COLLINGWOOD

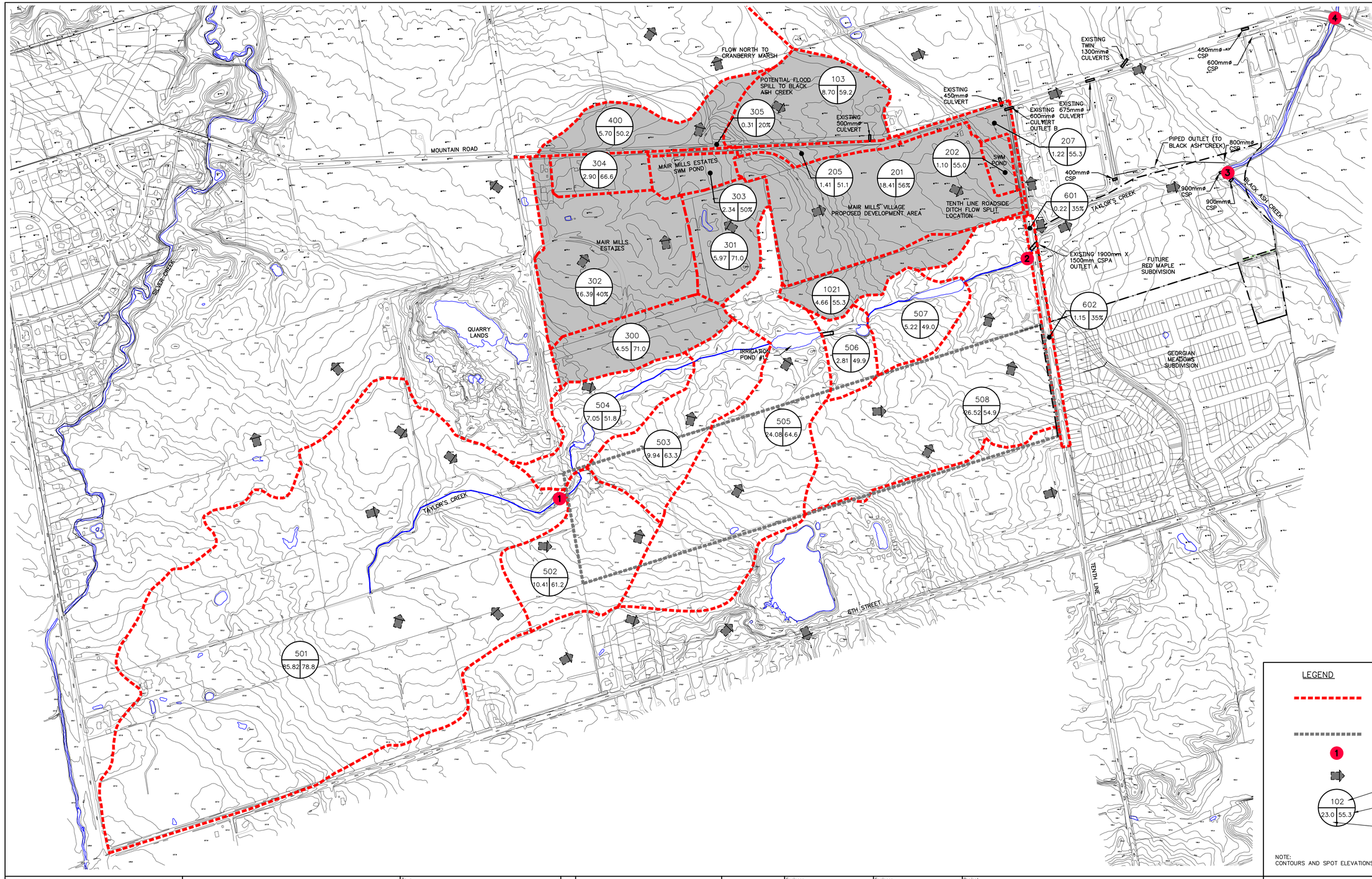
Drawing

SITE LOCATION

CROZIER & ASSOCIATES
Consulting Engineers
THE HARBOUREDGE BUILDING,
40 HURON STREET, SUITE 301,
COLLINGWOOD, ON L9Y 4R3
705 446-3510 T
705 446-3520 F
WWW.CFCROZIER.CA
INFO@CFCROZIER.CA

| Drawn By | Design By | Project |
|---|---|---|
| L.W. | L.W. | 183-2687 |
| Scale | Date | Check By | Drawing |
| N.T.S. | 05/28/2014 | D.T. | FIG. 1 |

J:\100\183 - Londex Projects\2687 Linksview\Cad\2687_701-7xx.dwg, FIG. 1, 12/17/2014 11:49:16 AM, lwaters




## LEGEND

- CATCHMENT BOUNDARY (PER TATHAM DWG. ODP-1)
- *SHADED AREAS PER TATHAM STUDY UNSHADED AREAS PER CROZIER STUDY
- LIMITS OF LINKSVIEW DEVELOPMENT
- 1 — FLOW NODE
- OVERLAND FLOW DIRECTION
- 102 / 23.0 | 55.3 — CATCHMENT AREA ID; CN VALUE OR % IMPERVIOUSNESS; DRAINAGE AREA (ha)

NOTE:
CONTOURS AND SPOT ELEVATIONS PER TOWN OF COLLINGWOOD BASE MAPPING.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Engineer

Engineer

Project

LINKSVIEW DEVELOPMENT
TOWN OF COLLINGWOOD

Drawing

PRE-DEVELOPMENT DRAINAGE PLAN


CROZIER & ASSOCIATES Consulting Engineers
THE HARBOUREDGE BUILDING,
40 HURON STREET, SUITE 301,
COLLINGWOOD, ON L9Y 4R3
705 446-3510 T
705 446-3520 F
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INFO@CFCROZIER.CA


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|---|---|---|
| L.W. | D.T. | 183-2687 |
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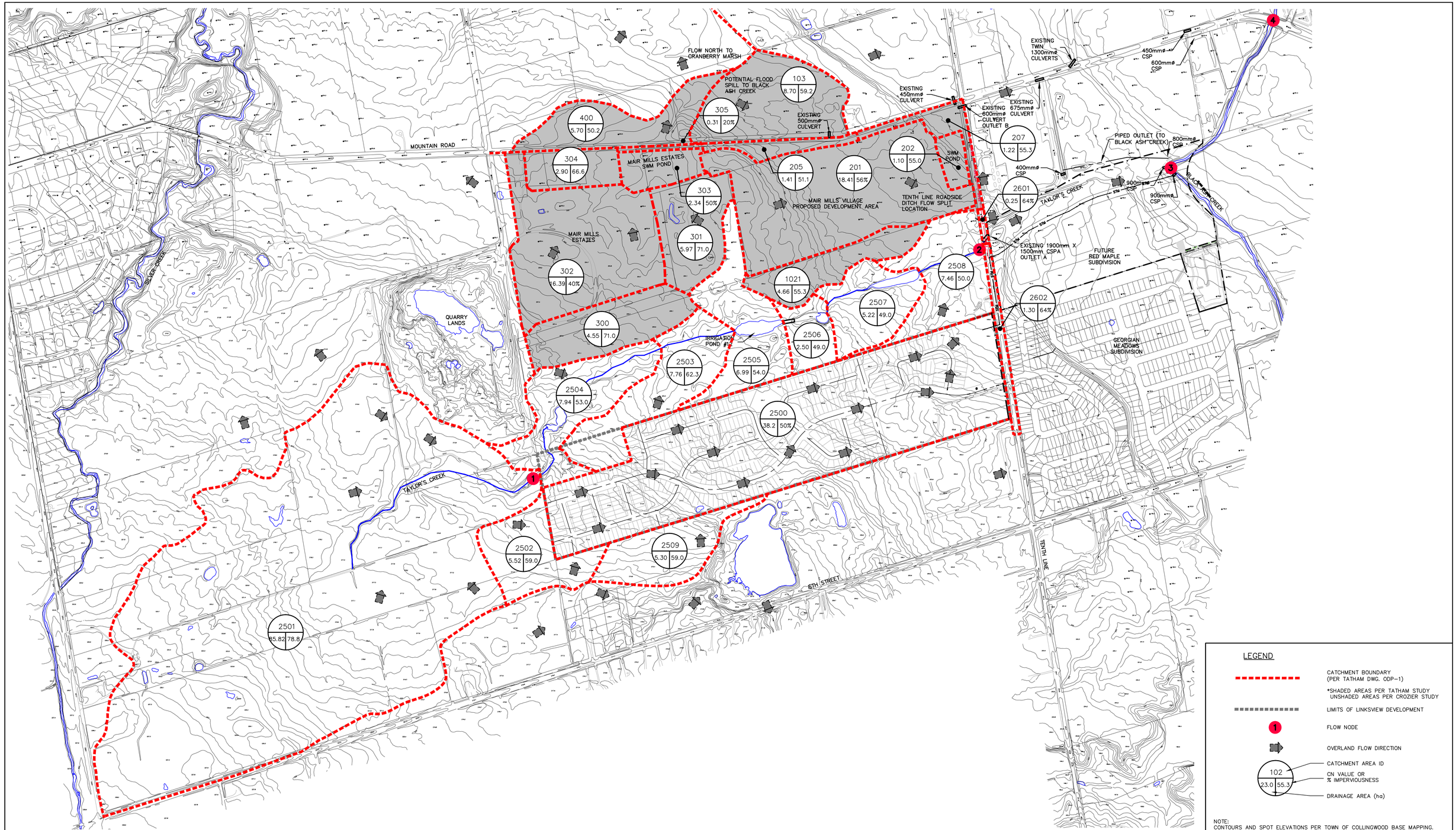
| 1:5000 | 05/28/2014 | D.T. | FIG. 2 |


J:\100\183 - Lindex Projects\2687 Linksview\Civil\2687_701-7xx.dwg, FIG. 2, 11/14/2014 2:51:29 PM, iwaters




LEGEND

- CATCHMENT BOUNDARY (PER TATHAM DWG. ODP-1)
- *SHADED AREAS PER TATHAM STUDY UNSHADED AREAS PER CROZIER STUDY
- LIMITS OF LINKSVIEW DEVELOPMENT
- 1 FLOW NODE
- OVERLAND FLOW DIRECTION
- 102 / 23.0 | 55.3 — CATCHMENT AREA ID; CN VALUE OR % IMPERVIOUSNESS; DRAINAGE AREA (ha)

NOTE:
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Engineer

Engineer

Project

LINKSVIEW DEVELOPMENT
TOWN OF COLLINGWOOD

Drawing

POST-DEVELOPMENT DRAINAGE PLAN


CROZIER & ASSOCIATES Consulting Engineers
THE HARBOUREDGE BUILDING,
40 HURON STREET, SUITE 301,
COLLINGWOOD, ON L9Y 4R3
705 446-3510 T
705 446-3520 F
WWW.CFCROZIER.CA
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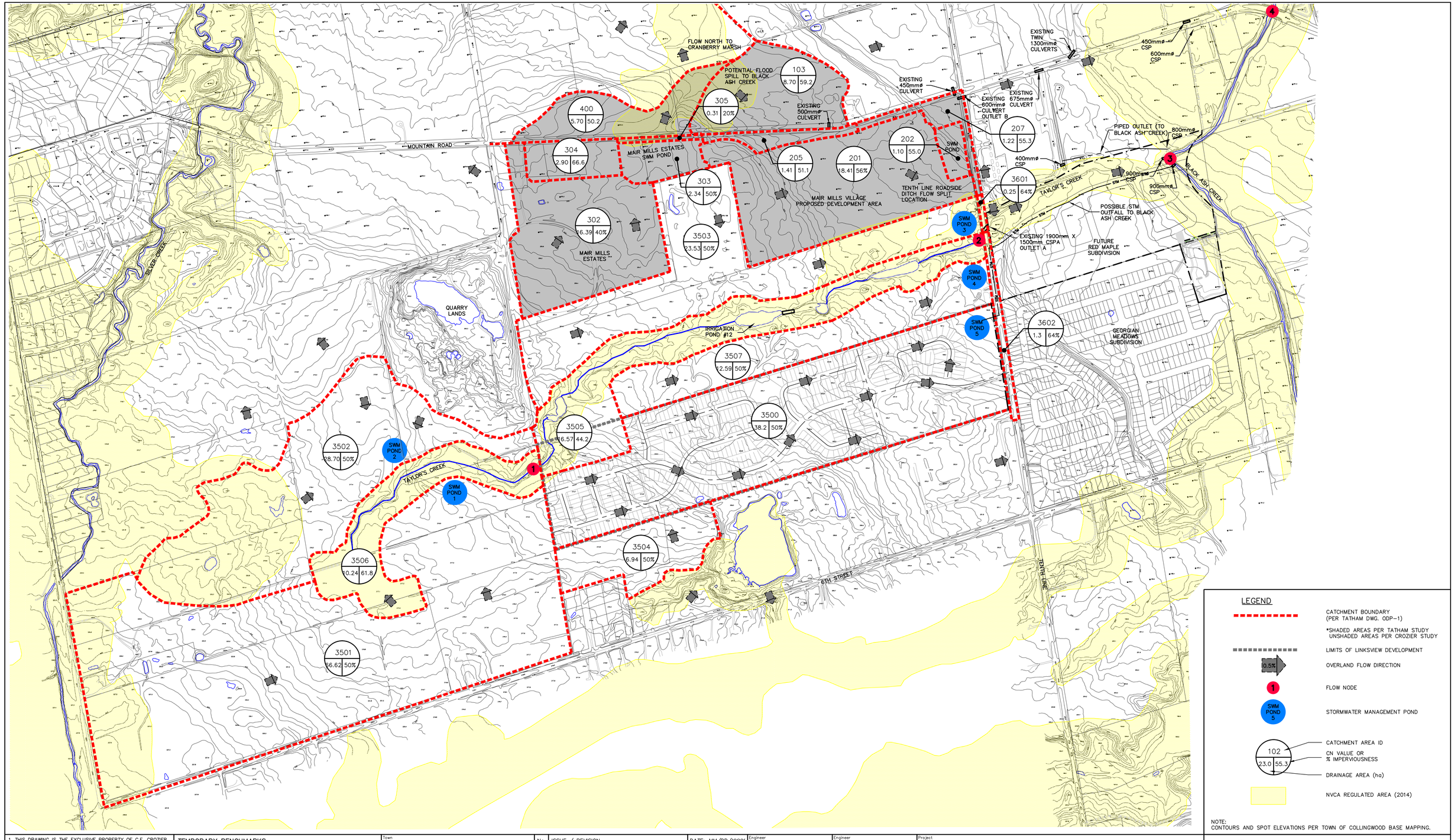
|---|---|---|
| L.W. | D.T. | 183-2687 |
| Scale | Date | Check By | Drawing |
| 1:5000 | 05/28/2014 | D.T. | FIG. 3 |

J:\100\183 - Lundex Projects\2687 Linksview\Cad\2687_701-7xx.dwg, FIG. 3, 11/14/2014 2:52:10 PM, lwaters




LEGEND

- CATCHMENT BOUNDARY (PER TATHAM DWG. ODP-1)
- *SHADED AREAS PER TATHAM STUDY UNSHADED AREAS PER CROZIER STUDY
- LIMITS OF LINKSVIEW DEVELOPMENT
- 0.5% — OVERLAND FLOW DIRECTION
- 1 — FLOW NODE
- SWM POND 5 — STORMWATER MANAGEMENT POND
- 102 / 23.0 / 55.3 — CATCHMENT AREA ID; CN VALUE OR % IMPERVIOUSNESS; DRAINAGE AREA (ha)
- NVCA REGULATED AREA (2014)

NOTE:
CONTOURS AND SPOT ELEVATIONS PER TOWN OF COLLINGWOOD BASE MAPPING.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Engineer

Engineer

Project
LINKSVIEW DEVELOPMENT
TOWN OF COLLINGWOOD

Drawing
ULTIMATE DEVELOPMENT
CONCEPTUAL GRADING


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THE HARBOUREDGE BUILDING,
40 HURON STREET, SUITE 301,
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| Drawn By | Design By | Project |
|---|---|---|
| L.W. | K.W. | 183–2687 |
| Scale: 1:5000 | Date: 05/28/2014 | Check By: D.T. |
| | | Drawing: FIG. 4 |


J:\100\183 – Lindsay Projects\2687 Linksview\Cad\2687_701–7xx.dwg, FIG. 4, 11/14/2014 2:52:47 PM, iwaters

FLOW NORTH TO CRANBERRY MARSH

POTENTIAL FLOOD SPILL TO BLACK ASH CREEK

EXISTING TWIN 1300mmø CULVERTS

450mmø CSP

600mmø CSP

EXISTING 450mmø CULVERT

EXISTING 500mmø CULVERT

EXISTING 600mmø CULVERT OUTLET B

EXISTING 675mmø CULVERT

PIPED OUTLET (TO BLACK ASH CREEK)

800mmø CSP

900mmø CSP

400mmø CSP

MOUNTAIN ROAD

MAIR MILLS ESTATES SWM POND

SWM POND

MAIR MILLS VILLAGE PROPOSED DEVELOPMENT AREA

TENTH LINE ROADSIDE DITCH FLOW SPLIT LOCATION

TAYLOR'S CREEK

POSSIBLE STM OUTFALL TO BLACK ASH CREEK

SILVER CREEK

MAIR MILLS ESTATES

QUARRY LANDS

EXISTING 1900mm X 1500mm CSPA OUTLET A

FUTURE RED MAPLE SUBDIVISION

GEORGIAN MEADOWS SUBDIVISION

IRRIGATION POND #12

SWM POND 1

SWM POND 2

SWM POND 3

SWM POND 4

SWM POND 5

PP 213.95 TOB 216.80

PP 212.60 TOB 215.45

PP 193.7 TOB 196.55

PP 194.1 TOB 196.95

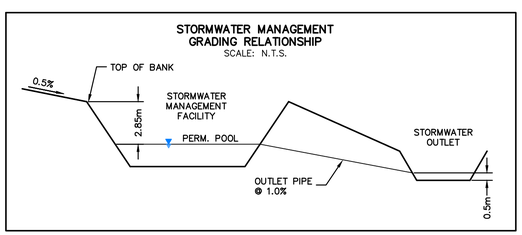
PP 195.25 TOB 198.10

TENTH LINE

6TH STREET

| POND DATA | | | |
|---|---|---|---|
| SWM POND | TOB | PP | OUTLET INV |
| 1 | 215.45 | 212.60 | 212.25 |
| 2 | 216.80 | 213.95 | 213.00 |
| 3 | 196.55 | 193.70 | 193.25 |
| 4 | 196.95 | 194.10 | 193.25 |
| 5 | 198.10 | 195.25 | 193.40 |

**STORMWATER MANAGEMENT GRADING RELATIONSHIP**
SCALE: N.T.S.




LEGEND

| | |
|---|---|
| PR. 202.0 | MINIMUM FUTURE GRADE |
| EX. 208.0 | EXISTING GRADE |
| | CATCHMENT BOUNDARY |
| | LIMITS OF LINKSVIEW DEVELOPMENT |
| 0.5% | OVERLAND FLOW DIRECTION |
| SWM POND 5 | STORMWATER MANAGEMENT POND |
| | NVCA REGULATED AREA (2014) |

NOTE:
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Engineer

Engineer

Project
LINKSVIEW DEVELOPMENT
TOWN OF COLLINGWOOD

Drawing
ULTIMATE DEVELOPMENT
CONCEPTUAL GRADING


CROZIER & ASSOCIATES Consulting Engineers
THE HARBOUREDGE BUILDING,
40 HURON STREET, SUITE 301,
COLLINGWOOD, ON L9Y 4R3
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705 446-3520 F
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INFO@CFCROZIER.CA


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|---|---|---|
| L.W. | K.W. | 183–2687 |
| Scale | Date | Check By | Drawing |
| 1:5000 | 05/28/2014 | D.T. | FIG. 5 |

J:\100\183 - Lontex Projects\2687 Linksview\Cad\2687_201-7xx.dwg, FIG. 5, 11/14/2014 2:53:31 PM, lwatters

# Appendix B:
# Taylor's Creek Design Brief, C.C. Tatham & Associates Ltd.

C.C. Tatham & Associates Ltd.
Consulting Engineers

# TAYLOR'S CREEK RECHANNELIZATION

## Town of Collingwood

## Design Brief

prepared by:

C.C. Tatham & Associates Ltd.
115 Sandford Fleming Drive, Suite 200
Collingwood, ON L9Y 5A6
Tel: (705) 444-2565 Fax: (705) 444-2327
info@cctatham.com

prepared for

2038170 Ontario Inc.

June 2016

CCTA File 115224

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| 1.1 | Objectives | 1 |
| 1.2 | Guidelines and Background Documents | 1 |
| 2 | Existing Conditions Hydrology | 3 |
| 3 | Proposed Conditions Hydrology | 5 |
| 4 | Natural Channel Design | 6 |
| 5 | Existing and Proposed Hydraulic Modelling | 7 |
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| 5.2 | Proposed Condition | 7 |
| 6 | Trail Crossing Culverts | 9 |
| 7 | Construction Staging | 10 |
| 8 | Siltation & Erosion Control | 11 |
| 9 | Conclusions | 12 |

## APPENDICES

Appendix A: Existing and Proposed Condition Peak Flow Rates

Appendix B: Preliminary Natural Channel Design Report - Aqualogic

Appendix C: Existing/Proposed HEC RAS

Appendix D: Hydrographs

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Table 1: Existing Condition Peak Flow Rates 4

Table 2: Proposed Condition Peak Flow Rates 5

## DRAWINGS

ODP-1 CCTA Existing Condition Drainage Plan

ODP-2 CCTA Proposed Condition Drainage Plan

SC-1 Erosion Control Plan

FM-1 Flood Spill Plan

Figure 2 C.F. Crozier Existing Condition Drainage Plan

Figure 3 C.F. Crozier Proposed Condition Drainage Plan

# 1 Introduction

C. C. Tatham & Associates Ltd. (CCTA) has completed this design brief in support of the proposed natural channel design of Taylor's Creek. The channel design is for a tributary to Black Ash Creek, referred to locally as Taylor's Creek, located between Tenth Line and Black Ash Creek in the Town of Collingwood. The Taylor's Creek Rechannelization is proposed for 580 m starting on east side of 10th Line and connecting into Black Ash Creek. The rechannelization will convey flows from Mair Mills Village, Blue Mountain Golf Course and the proposed Linksview development lands and external areas.

In August 2011 CCTA prepared a final stormwater management (SWM) report for the Mair Mills Village development lands as part of an overall Site Plan application that proposed the use of Taylor's Creek as the outlet for stormwater. Comments were received on the report recommended consideration be given to improving the conveyance ability of Taylor's Creek channel downstream of the Tenth Line to prevent flood spill which has occurred from this tributary in the past.

Through consultation with the Town of Collingwood (Town) and Nottawasaga Valley Conservation Authority (NVCA) it was agreed to explore options for downstream improvements to eliminate or reduce the frequency and severity of a spill from the tributary onto lands located to the north and south. The improvement options discussed included repairing/extending the existing berm along the north bank of the tributary to prevent future spill to the north, constructing a shallow and wide overflow channel to the north to intercept spill flow from the existing channel, and partial or full channelization of the existing tributary. In the spring of 2012 the lands on which the tributary lies and adjacent lands to the south were purchased by Consar Development Inc. (Consar) and studies were undertaken in support of an application for Draft Plan Approval for development on these lands. Subsequent further consultation with Consar, the Town and NVCA then occurred and it was confirmed the preferred option was a full channelization via construction of a natural channel extending from Tenth Line to Black Ash Creek.

## 1.1 Objectives

The primary objective of this design report is to outline the design for the proposed Taylor's Creek rechannelization in support of the final design drawing approval submission.

## 1.2 Guidelines and Background Documents

This design brief was prepared recognizing the pertinent Conservation Authority, Municipal and Provincial guidelines on water resources and the environment.

Due to the extensive development that has recently occurred in the area, the following background documents have been prepared and information pertinent to the areas existing drainage has been reviewed:

- Mair Mills Village Preliminary Stormwater Management Report. C. C. Tatham & Associates Ltd., August 2012;
- Preliminary Natural Channel Design, Taylor's Creek. Aqua Logic Consulting, August 2012;
- Mair Mills Village Preliminary Design Report: External Drainage Improvements. C.C. Tatham & Associates Ltd. January 2012;
- Fisheries Habitat Characterization – Taylor's Creek. C&M Aquatic Management Group, October, 2012;
- Mair Mills Village Final Stormwater Management Report. C. C. Tatham & Associates Ltd., August 2011;
- Mair Mills Village Preliminary Stormwater Management Report. C. C. Tatham & Associates Ltd., May 2008; and
- Black Ash Creek Subwatershed Plan. NVCA, August 2000.

# 2 Existing Conditions Hydrology

The Taylor's Creek tributary traverses through the Blue Mountain Golf and Country Club property from west to east and is conveyed under Tenth Line via a 1900 mm x 1500 mm CSPA culvert that is partially submerged at the upstream and downstream ends. Downstream of Tenth Line, the channel is relatively straight and well defined at the west end of the former Alcoa industrial plant due to historic excavation and an earth berm running parallel to the tributary along its north bank. The south bank is also naturally well-defined at elevations similar to those of the constructed berm. As the tributary flows east, the berm and the high natural south bank taper out leaving only a meandering low flow channel and a wide floodplain. Historically, we have observed the floodplain east of the former Alcoa industrial plant being inundated by flood waters during spring freshet and high intensity storms.

Taylor's Creek has a drainage area upstream of the Tenth Line consisting of woodland, agricultural land and the majority of the Blue Mountain Golf and Country Club, the proposed Linksview development land and flow from the Mair Mills Village development land. There is also a potential flow split from the Mair Mills Estates subdivision and the TODCO property which can also contribute drainage to this tributary as described in detail in the Preliminary SWM Report prepared by CCTA in August 2012.

The drainage area to Taylor's Creek has been modeled by CCTA using Visual Otthymo and by C.F. Crozier & Associates (C.F. Crozier) using SWMHYMO. CCTA completed the hydrologic modeling for Mair Mills Village and areas to the north while C.F. Crozier completed the modeling for Linksview and the additional drainage area to the south. An Overall Drainage Plan (Drawing ODP-1) illustrating the catchment boundary from the Mair Mills Village development area is attached at the back of this report. An existing and proposed condition Visual Otthymo hydrologic model has been developed to quantify peak flows to Taylor's Creek at Tenth Line. The peak flows to this location from Mair Mills Village are summarized in Table 1 and the results of the modeling and model input parameter calculations are included in Appendix A.

A figure has been included in Appendix A showing the catchment boundaries used by C.F. Crozier for the Linksview development and the remaining external drainage area. To accurately combine the two different hydrologic models output hydrographs were taken from both models and added together to get a total peak flow. Hydrograph information is attached in Appendix D.

Table 1: Existing Condition Peak Flow Rates

| Design Storm | Peak Flows ($m^3/s$) To Taylor's Creek | | |
|---|---|---|---|
| | Mair Mills Village | Linksview, BMGC & External | Total Flow |
| 25mm | 0.050 | 0.329 | 0.377 |
| 2 Year | 0.069 | 0.925 | 1.028 |
| 5 Year | 0.101 | 1.678 | 1.890 |
| 10 Year | 0.123 | 2.185 | 2.474 |
| 25 year | 0.153 | 3.058 | 3.431 |
| 50 year | 0.178 | 3.688 | 4.131 |
| 100 Year | 0.199 | 4.537 | 5.049 |
| Timmins Storm | 2.212 | 8.333 | 9.238 |

# 3 Proposed Conditions Hydrology

Under the proposed condition scenario both the Mair Mills Village and the Linksview development have both been modelled. Output hydrographs were once again used to determine the total flow under the proposed condition as was used for the existing condition. Output hydrographs were taken from both the CCTA Otthymo model and from the C.F. Crozier SWMHYMO model to determine the total peak flow to Taylor's Creek under proposed conditions. The catchment areas for the proposed Mair Mills Village are attached on CCTA drawing called ODP-2 and the Figure attached in Appendix A shows the catchment areas used by C.F. Crozier for their modelling.

Strict quantity control is not required from the upstream development lands provided the proposed upgrades to Taylor's Creek are designed based on the proposed design release rates from the developments and the external drainage areas. The Taylor's Creek improvements continue from Tenth Line downstream until Taylor's Creek outlets into Black Ask Creek. Table 2 below shows the peak flow rates for the Mair Mills Village development as well as Linkview, BMGC and external drainage and the total flow to Taylor's Creek.

Table 2: Proposed Condition Peak Flow Rates

| Design Storm | Peak Flows ($m^3/s$) To Taylor's Creek | | |
|---|---|---|---|
| | Mair Mills Village | Linksview, BMGC & External | Total Flow |
| 25mm | 0.001 | 0.317 | 0.318 |
| 2 Year | 0.013 | 0.762 | 0.764 |
| 5 Year | 0.132 | 1.477 | 1.605 |
| 10 Year | 0.230 | 1.985 | 2.196 |
| 25 year | 0.380 | 2.771 | 3.074 |
| 50 year | 0.499 | 3.313 | 3.691 |
| 100 Year | 0.625 | 4.014 | 4.467 |
| Timmins Storm | 2.828 | 8.070 | 10.221 |

# 4 Natural Channel Design

The proposed rechannelization of Taylor's Creek is to function as a natural channel and has been designed with the input of fluvial geomorphologist Aqualogic. Attached in Appendix B is the Natural Channel Design Report by Aqualogic.

The proposed rechannelization must be designed as a natural channel with a stable low flow channel for the 25 mm – 2 year flows and floodplain that safely conveys flows up to and including the Regional Storm event (Timmins) with a minimum of 0.3 m of freeboard thereby eliminating the existing spill to the north. The design completed includes a low flow channel with a designed pool-riffle sequence and appropriate morphology for the expected flow regime.

A 800 mm diameter CSP storm pipe exists along the north property limit for the downstream half of the channel reach. It is our understanding that most of the former Alcoa industrial plant property outlets via this storm sewer directly to Black Ash Creek. The storm sewer is within a Town owned easement and the Town will continue to be responsible for its function and has requested that the design of the channel respect the location of the existing sewer/easement. A minimum separation of 0.3 m is required between the bottom of the channel and the top of the existing storm pipe where they cross. The channel corridor also includes a minimum 3.0 m wide maintenance access / gravel path extending the length of the storm pipe along the north property limit. In addition, a DICB is proposed over the existing storm sewer to allow for any potential surcharge of this sewer to discharge into the proposed channel should it occur.

The channel design also includes two trail culvert crossings that have been sized for flow conveyance purposes. The culverts were included in the hydraulic model included in Section 5.

# 5 Existing and Proposed Hydraulic Modelling

## 5.1 Existing Condition

An existing condition hydraulic model of Taylor's Creek was completed from Tenth Line to Black Ash Creek using the latest topographic survey information and recent modelling analysis completed on this reach.

The tributary water level immediately downstream of Tenth Line under the 2-year storm condition is approximately 192.07 m. Adjacent to the rear corner of the former Alcoa industrial plant, the tributary currently has an approximate capacity of 1.8 $m^3/s$ which is equivalent to the peak flow from the 10-year design storm. The modelling confirms flows above this magnitude can spill south-east and north-east potentially causing flooding of the existing adjacent Consar development lands and potential commercial buildings to the north along Mountain Road in this area.

## 5.2 Proposed Condition

The preliminary channel geometry was developed based on collaborative input from Aqua Logic Consulting from a natural channel design perspective, Hensel Design Group (C&M Aquatics) with respect to aquatic and natural environment considerations and CCTA specific to flood and flow conveyance. It includes a 3.0 m wide low flow channel section and a basic meander amplitude of 12.0 m. An additional 2.0 m on either side of the amplitude limits has also been incorporated as an additional erosion buffer to bring the total meander amplitude width to 16 m. The overbank areas on either side of the channel will match to existing grade from the extents of the total 16.0 m meander belt width at a maximum slope of 3H:1V. Both the major flow conveyance and low flow channel have been modelled in separate low flow HEC-RAS models to confirm flow depths and velocities. The Natural Channel Design Report prepared by Aqua Logic Consulting that documents the specifics of the design is attached in Appendix B for reference.

The channel alignment and total corridor width was also developed in consultation with the property owner to the south (Consar) and is shown on the attached Drawings PP-1 and PP-2. Specifically, the proposed channel section (including the proposed trail/maintenance access along the north limit) will occupy the area as shown on the proposed Consar Development lands and a small area along the south limit of the former Alcoa industrial site property where grading is required to removing berming and tie into existing grades. As requested by the Town a proposed maintenance access/gravel trail will be aligned along the north limit of the existing storm pipe and match into the existing trail immediately adjacent to Black Ash

A proposed condition hydraulic model of the natural channel was completed extending from Tenth Line to Black Ash Creek. Detailed topographic survey information including a combination of existing surveys of the channel and survey of the Consar Development lands was used to prepare a digital terrain model (DEM) in the vicinity of the channel and determine the grading limits of the proposed channel corridor. A total of 16 proposed channel cross sections using the dimensions and characteristics determined above were input into the geometry file including the culvert crossing at Tenth Line (which remained unchanged from the existing condition). The downstream boundary condition was determined to be 184.44 m based on the known Regional Storm water elevation in Black Ash Creek and is unchanged from the existing condition. A Regional Storm peak flow of 10.22 $m^3/s$, as shown in Table 2 was used as the peak design flow in the channel. The Mannings roughness coefficients "n" of 0.04 and 0.085 were selected for the natural low flow channel area and left and right overbank areas based on a natural rock low flow channel and overgrown meadow/treed overbank areas consistent with NVCA guidelines.

The maximum velocities observed during the Regional Storm event range between 1.03 and 2.63 m/s depending on the channel section. A maximum depth of flow of 1.30 m +/- is observed in the channel according to the HEC RAS model and based on the DEM this depth can be accommodated within the limits of grading shown on Drawings PP-1 and PP-2. The HEC RAS cross section locations are shown on the attached Drawings XS-1 and XS-2.

The tributary water level immediately downstream of Tenth Line under the 2-year storm condition is approximately 191.93 m.

A secondary HEC RAS model was created to determine the maximum velocity and flow in the proposed low flow channel as shown on Drawing PP-3. The 2 year design flow of 0.764 $m^3/s$ was used as the design flow in the channel. The maximum velocity in the low flow channel is calculated at 1.70 m/s.

The existing and proposed HEC RAS model output summaries are included in Appendix C.

# 6 Trail Crossing Culverts

The pedestrian walking trail crosses Taylor's Creek at two locations. It is proposed to use twin 1,200 mm dia. CSP's for the crossings. The CSP's will be sunk 0.3 m below the proposed channel invert to allow for a natural bottom in the culverts. As per the NVCA Natural Hazards Technical Guide, the safe access/egress criteria for these trails crossings are as follows:

1. Maximum flood depth of 0.30 m for vehicular access;
2. Maximum flood depth of 0.80 m for pedestrian access;
3. Maximum flow velocity of 1.7 m/s; and
4. Maximum depth velocity product of 0.4 $m^2/s$.

The HEC RAS model shows that the maximum flooding depth for either crossing location is 0.62m along the channel overbank. The maximum velocity requirement of 1.7 m/s was not exceeded and the maximum velocity product at either crossing location was 0.31 $m^2/s$. Supporting calculations are attached in Appendix C.

# 7 Construction Staging

It is intended that work will start at the downstream end of the rechannelization at the connection to Black Ash Creek. Weather permitting the channelization is to be completed in the dry as much as possible. The proposed channel alignment at the downstream end is different from the existing channel alignment allowing for construction to start at the downstream end without impacting the existing channel function. This will allow work to proceed upstream towards Tenth Line while flow to Black Ash Creek can continue in the existing channel. A drainage diversion will be required once the proposed channel alignment has progressed upstream past station 1+370 at the point where the new channel meets with the existing channel alignment. Upstream of station 1+370 construction of the new channel will disrupt the existing channel. For this stretch it is proposed to temporarily divert any channel flow around the active construction site to allow the works to be completed. The drainage diversion should be maintained until the drainage channel has been completely constructed and re-instated. Once the works are completed and the downstream channel is stabilized, drainage can be directed through the new channel and the drainage diversions can be removed and the disturbed areas re-instated.

It is expected the main access to Taylor's Creek for the rechannelization will be from the Consar construction site entrance off of Tenth Line for construction equipment to enter and exit the site.

# 8 Siltation & Erosion Control

Erosion and sediment control will be implemented for all construction activities within the development site, including vegetation clearing, topsoil stripping, road construction, and stockpiling of materials. The basic principles considered to minimize erosion and sedimentation and resultant negative environmental impacts include:

- minimize disturbance activities where possible;
- expose the smallest possible land area to erosion for the shortest possible time;
- institute erosion control measures as-required immediately;
- implement sediment control measures before the outset of construction activities; and
- Carry out regular inspections of erosion/sediment control measures and repair or maintain as necessary.

The proposed grading should be carried out in such a manner that a minimum amount of erosion occurs and such that sedimentation facilities control any erosion that does occur. Additional erosion, sediment, and pollution control measures should include the following:

- erecting of silt fences around all construction sites;
- providing sediment traps (e.g. berms, geotextile and straw bale barriers in swales);
- confining refuelling/servicing of equipment to areas well away from the minor/major system elements; and
- Bi-weekly inspections of control measures to be instituted through a monitoring and mitigation plan and repairs made as necessary.

The proposed Erosion and Sediment Control Plan for the site is illustrated on Drawing SC-1 included with this report.

# 9 Conclusions

The Design Brief has been prepared recognizing the site specific constraints and criteria. Improvements to Taylor's Creek will prevent flood spill which has occurred from this creek in the past. A fully natural channel is proposed from Tenth Line to Black Ask Creek which can convey the design flows from the upstream developments.

The two proposed trail crossing locations meet the NVCA requirements for safe access.

If you have any questions or concerns, please do not hesitate to contact the undersigned.

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Intern Engineer

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Vice President, Manager -
Water Resources Engineering

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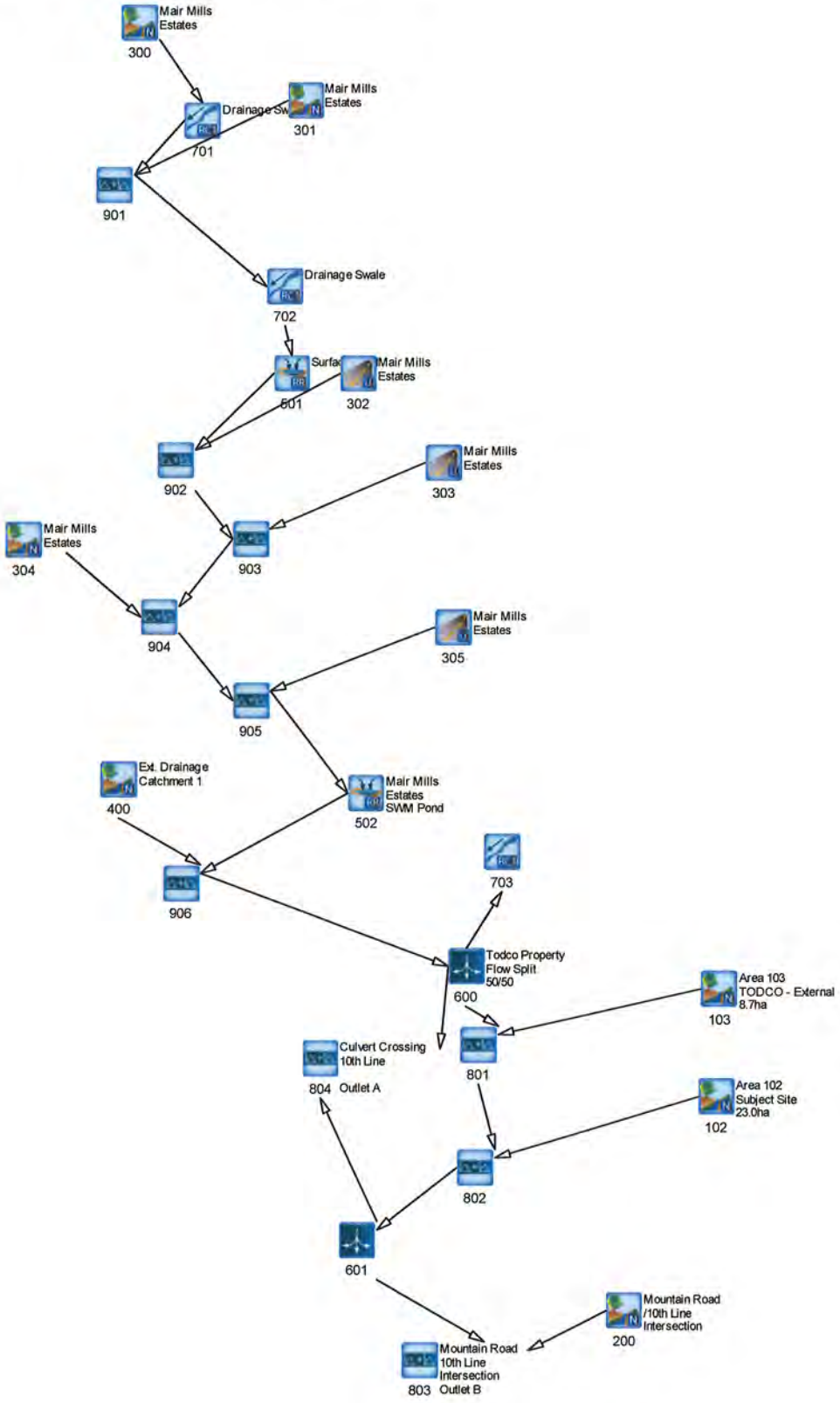
# APPENDIX A:
# EXISTING AND PROPOSED CONDITION PEAK FLOW RATES

## Existing Conditions OTTHYMO Model Schematic



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       V  V    I      SS   U   U  A   A  L
        VV     I    SSSSS  UUUUU  A   A  LLLLL

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      O   O     T      T    H   H   Y Y   MM MM  O   O
      O   O     T      T    H   H    Y    M M M  O   O
       OOO      T      T    H   H    Y    M   M   OOO

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                    *****  S U M M A R Y   O U T P U T  *****

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Works\Design\115224 VO2 model (Mar 2016)\Pre-Development - SCS.out
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Works\Design\115224 VO2 model (Mar 2016)\Pre-Development - SCS.sum

DATE: 22/04/2016                          TIME: 11:23:54 AM

USER:

COMMENTS: ____________________________________________________________

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                                    min     ha      cms    hrs     mm          cms

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      ---------------------
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| | Outflow | 0600 | 3 | 5.0 | 10.91 | .06 | 14.00 | 21.07 | n/a | .000 |
| | Outflow | 0600 | 4 | 5.0 | 16.34 | .02 | 14.00 | 21.07 | n/a | .000 |
| | CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 10.91 | .06 | 15.33 | 21.07 | n/a | .000 |
| | ADD [0103 + 0600] | 0801 | 3 | 5.0 | 19.61 | .16 | 12.25 | 16.93 | n/a | .000 |
| | ADD [0102 + 0801] | 0802 | 3 | 5.0 | 42.61 | .40 | 12.33 | 13.65 | n/a | .000 |
| | DIVERT HYD | 0601 | 1 | 5.0 | 42.61 | .40 | 12.33 | 13.65 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 18.28 | .04 | 12.33 | 13.65 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 24.33 | .35 | 12.33 | 13.65 | n/a | .000 |
| | ADD [0200 + 0601] | 0803 | 3 | 5.0 | 22.08 | .10 | 12.17 | 13.13 | n/a | .000 |
| | ADD [0600 + 0601] | 0804 | 3 | 5.0 | 29.19 | .10 | 14.00 | 16.42 | n/a | .000 |

**********
** SIMULATION NUMBER: 3 **
**********

| W/E | COMMAND | HYD | ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | | |
| | MASS STORM [ Ptot= 67.30 mm ] | | | 15.0 | | | | | | |
| ** | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .06 | 12.42 | 10.61 | .16 | .000 |
| ** | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .12 | 11.92 | 20.45 | .30 | .000 |
| ** | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .10 | 12.42 | 23.37 | .35 | .000 |
| ** | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .15 | 12.33 | 23.37 | .35 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | .94 | 11.83 | 32.71 | .49 | .000 |

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .19 | 11.75 | 36.33 | .54 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .02 | 11.75 | 28.77 | .43 | .000 |
| * | CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 5.0 | 3.80 | .07 | 12.17 | 14.08 | .21 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 5.0 | 23.00 | .31 | 12.42 | 14.09 | .21 | .000 |
| * | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 5.0 | 8.70 | .17 | 12.17 | 15.30 | .23 | .000 |
| | CHANNEL[ 2 : 0300] | 0701 | 1 5.0 | 4.55 | .08 | 12.83 | 23.28 | n/a | .000 |
| | ADD [0701 + 0301] | 0901 | 3 5.0 | 10.52 | .22 | 12.50 | 23.33 | n/a | .000 |
| | CHANNEL[ 2 : 0901] | 0702 | 1 5.0 | 10.52 | .19 | 12.67 | 23.31 | n/a | .000 |
| | RESRVR [ 2 : 0702] {ST= .01 ha.m } | 0501 | 1 5.0 | 10.52 | .17 | 13.17 | 23.30 | n/a | .000 |
| | ADD [0501 + 0302] | 0902 | 3 5.0 | 26.91 | .96 | 11.83 | 29.03 | n/a | .000 |
| | ADD [0902 + 0303] | 0903 | 3 5.0 | 29.25 | 1.11 | 11.83 | 29.62 | n/a | .000 |
| | ADD [0304 + 0903] | 0904 | 3 5.0 | 32.15 | 1.23 | 11.83 | 28.79 | n/a | .000 |
| | ADD [0904 + 0305] | 0905 | 3 5.0 | 32.46 | 1.23 | 11.83 | 28.79 | n/a | .000 |
| | RESRVR [ 2 : 0905] {ST= .53 ha.m } | 0502 | 1 5.0 | 32.46 | .15 | 15.08 | 28.74 | n/a | .000 |
| | ADD [0400 + 0502] | 0906 | 3 5.0 | 38.16 | .18 | 13.00 | 26.03 | n/a | .000 |
| | DIVERT HYD | 0600 | 1 5.0 | 38.16 | .18 | 13.00 | 26.03 | n/a | .000 |
| | Outflow | 0600 | 2 5.0 | 12.24 | .08 | 13.00 | 26.03 | n/a | .000 |
| | Outflow | 0600 | 3 5.0 | 12.24 | .08 | 13.00 | 26.03 | n/a | .000 |
| | Outflow | 0600 | 4 5.0 | 13.68 | .02 | 13.00 | 26.03 | n/a | .000 |
| | CHANNEL[ 2 : 0600] | 0703 | 1 5.0 | 12.24 | .07 | 14.42 | 26.03 | n/a | .000 |
| | ADD [0103 + 0600] | 0801 | 3 5.0 | 20.94 | .23 | 12.25 | 21.57 | n/a | .000 |
| | ADD [0102 + 0801] | 0802 | 3 5.0 | 43.94 | .53 | 12.33 | 17.66 | n/a | .000 |
| | DIVERT HYD | 0601 | 1 5.0 | 43.94 | .53 | 12.33 | 17.66 | n/a | .000 |
| | Outflow | 0601 | 2 5.0 | 15.37 | .04 | 12.33 | 17.66 | n/a | .000 |
| | Outflow | 0601 | 3 5.0 | 28.57 | .49 | 12.33 | 17.66 | n/a | .000 |
| | ADD [0200 + 0601] | 0803 | 3 5.0 | 19.17 | .11 | 12.17 | 16.95 | n/a | .000 |
| | ADD [0600 + 0601] | 0804 | 3 5.0 | 27.61 | .12 | 13.00 | 21.37 | n/a | .000 |

**********
** SIMULATION NUMBER: 4 **
**********





| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | MASS STORM [ Ptot= 77.87 mm ] | | 15.0 | | | | | | |
| ** | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 5.0 | 5.70 | .08 | 12.42 | 14.40 | .18 | .000 |
| ** | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 5.0 | 2.90 | .15 | 11.92 | 26.50 | .34 | .000 |
| ** | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 5.0 | 4.55 | .14 | 12.42 | 30.06 | .39 | .000 |
| ** | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 5.0 | 5.97 | .20 | 12.33 | 30.06 | .39 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 5.0 | 16.39 | 1.31 | 11.83 | 40.27 | .52 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .26 | 11.75 | 44.35 | .57 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .02 | 11.75 | 35.58 | .46 | .000 |
| * | CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 5.0 | 3.80 | .09 | 12.17 | 18.90 | .24 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 5.0 | 23.00 | .42 | 12.42 | 18.63 | .24 | .000 |
| * | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 5.0 | 8.70 | .23 | 12.17 | 20.26 | .26 | .000 |
| | CHANNEL[ 2 : 0300] | 0701 | 1 5.0 | 4.55 | .11 | 12.83 | 29.97 | n/a | .000 |
| | ADD [0701 + 0301] | 0901 | 3 5.0 | 10.52 | .29 | 12.50 | 30.02 | n/a | .000 |
| | CHANNEL[ 2 : 0901] | 0702 | 1 5.0 | 10.52 | .26 | 12.67 | 29.99 | n/a | .000 |
| | RESRVR [ 2 : 0702] {ST= .04 ha.m } | 0501 | 1 5.0 | 10.52 | .17 | 13.58 | 29.99 | n/a | .000 |
| | ADD [0501 + 0302] | 0902 | 3 5.0 | 26.91 | 1.34 | 11.83 | 36.25 | n/a | .000 |
| | ADD [0902 + 0303] | 0903 | 3 5.0 | 29.25 | 1.55 | 11.83 | 36.90 | n/a | .000 |
| | ADD [0304 + 0903] | 0904 | 3 5.0 | 32.15 | 1.70 | 11.83 | 35.96 | n/a | .000 |
| | ADD [0904 + 0305] | 0905 | 3 5.0 | 32.46 | 1.71 | 11.83 | 35.96 | n/a | .000 |
| | RESRVR [ 2 : 0905] | 0502 | 1 5.0 | 32.46 | .15 | 15.83 | 35.91 | n/a | .000 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | {ST= .69 ha.m } | | | | | | | | | |
| * | ADD [0400 + 0502] | 0906 | 3 | 5.0 | 38.16 | .22 | 12.58 | 32.69 | n/a | .000 |
| * | DIVERT HYD | 0600 | 1 | 5.0 | 38.16 | .22 | 12.58 | 32.69 | n/a | .000 |
| | Outflow | 0600 | 2 | 5.0 | 13.31 | .10 | 12.58 | 32.69 | n/a | .000 |
| | Outflow | 0600 | 3 | 5.0 | 13.31 | .10 | 12.58 | 32.69 | n/a | .000 |
| | Outflow | 0600 | 4 | 5.0 | 11.55 | .02 | 12.58 | 32.69 | n/a | .000 |
| * | CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 13.31 | .08 | 13.50 | 32.69 | n/a | .000 |
| * | ADD [0103 + 0600] | 0801 | 3 | 5.0 | 22.01 | .32 | 12.25 | 27.78 | n/a | .000 |
| * | ADD [0102 + 0801] | 0802 | 3 | 5.0 | 45.01 | .73 | 12.33 | 23.10 | n/a | .000 |
| * | DIVERT HYD | 0601 | 1 | 5.0 | 45.01 | .73 | 12.33 | 23.10 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 13.91 | .05 | 12.33 | 23.10 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 31.09 | .67 | 12.33 | 23.10 | n/a | .000 |
| * | ADD [0200 + 0601] | 0803 | 3 | 5.0 | 17.71 | .15 | 12.17 | 22.20 | n/a | .000 |
| * | ADD [0600 + 0601] | 0804 | 3 | 5.0 | 27.22 | .15 | 12.42 | 27.79 | n/a | .000 |

**********
** SIMULATION NUMBER: 5 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | MASS STORM | | 15.0 | | | | | | |
| | [ Ptot= 85.54 mm ] | | | | | | | | |
| ** | CALIB NASHYD | 0400 | 1 | 5.0 | 5.70 | .10 | 12.42 | 17.42 | .20 | .000 |
| | [CN=50.2 ] | | | | | | | | | |
| | [ N = 3.0:Tp .70] | | | | | | | | | |
| ** | CALIB NASHYD | 0304 | 1 | 5.0 | 2.90 | .18 | 11.92 | 31.18 | .36 | .000 |
| | [CN=66.6 ] | | | | | | | | | |
| | [ N = 3.0:Tp .28] | | | | | | | | | |
| ** | CALIB NASHYD | 0300 | 1 | 5.0 | 4.55 | .16 | 12.42 | 35.20 | .41 | .000 |
| | [CN=71.0 ] | | | | | | | | | |
| | [ N = 3.0:Tp .74] | | | | | | | | | |
| ** | CALIB NASHYD | 0301 | 1 | 5.0 | 5.97 | .24 | 12.33 | 35.20 | .41 | .000 |
| | [CN=71.0 ] | | | | | | | | | |
| | [ N = 3.0:Tp .63] | | | | | | | | | |
| * | CALIB STANDHYD | 0302 | 1 | 5.0 | 16.39 | 1.52 | 11.83 | 45.98 | .54 | .000 |
| | [I%=20.0:S%= 2.00] | | | | | | | | | |
| * | CALIB STANDHYD | 0303 | 1 | 5.0 | 2.34 | .30 | 11.75 | 50.38 | .59 | .000 |
| | [I%=25.0:S%= 2.00] | | | | | | | | | |
| * | CALIB STANDHYD | 0305 | 1 | 5.0 | .31 | .02 | 11.75 | 40.75 | .48 | .000 |
| | [I%=20.0:S%= .50] | | | | | | | | | |
| * | CALIB NASHYD | 0200 | 1 | 5.0 | 3.80 | .11 | 12.08 | 22.70 | .27 | .000 |
| | [CN=59.1 ] | | | | | | | | | |
| | [ N = 3.0:Tp .47] | | | | | | | | | |





| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| * | CALIB NASHYD | 0102 | 1 | 5.0 | 23.00 | .50 | 12.42 | 22.21 | .26 | .000 |
| | [CN=55.3 ] | | | | | | | | | |
| | [ N = 3.0:Tp .72] | | | | | | | | | |
| * | CALIB NASHYD | 0103 | 1 | 5.0 | 8.70 | .28 | 12.17 | 24.15 | .28 | .000 |
| | [CN=59.2 ] | | | | | | | | | |
| | [ N = 3.0:Tp .48] | | | | | | | | | |
| * | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .13 | 12.83 | 35.10 | n/a | .000 |
| * | ADD [0701 + 0301] | 0901 | 3 | 5.0 | 10.52 | .34 | 12.50 | 35.16 | n/a | .000 |
| * | CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .31 | 12.67 | 35.13 | n/a | .000 |
| * | RESRVR [ 2 : 0702] | 0501 | 1 | 5.0 | 10.52 | .17 | 13.83 | 35.13 | n/a | .000 |
| | {ST= .06 ha.m } | | | | | | | | | |
| * | ADD [0501 + 0302] | 0902 | 3 | 5.0 | 26.91 | 1.56 | 11.83 | 41.74 | n/a | .000 |
| * | ADD [0902 + 0303] | 0903 | 3 | 5.0 | 29.25 | 1.81 | 11.83 | 42.43 | n/a | .000 |
| * | ADD [0304 + 0903] | 0904 | 3 | 5.0 | 32.15 | 1.98 | 11.83 | 41.41 | n/a | .000 |
| * | ADD [0904 + 0305] | 0905 | 3 | 5.0 | 32.46 | 1.99 | 11.83 | 41.41 | n/a | .000 |
| * | RESRVR [ 2 : 0905] | 0502 | 1 | 5.0 | 32.46 | .15 | 16.25 | 41.35 | n/a | .000 |
| | {ST= .83 ha.m } | | | | | | | | | |
| * | ADD [0400 + 0502] | 0906 | 3 | 5.0 | 38.16 | .25 | 12.42 | 37.78 | n/a | .000 |
| * | DIVERT HYD | 0600 | 1 | 5.0 | 38.16 | .25 | 12.42 | 37.78 | n/a | .000 |
| | Outflow | 0600 | 2 | 5.0 | 13.80 | .11 | 12.42 | 37.78 | n/a | .000 |
| | Outflow | 0600 | 3 | 5.0 | 13.80 | .11 | 12.42 | 37.78 | n/a | .000 |
| | Outflow | 0600 | 4 | 5.0 | 10.56 | .02 | 12.42 | 37.78 | n/a | .000 |
| * | CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 13.80 | .09 | 13.25 | 37.78 | n/a | .000 |
| * | ADD [0103 + 0600] | 0801 | 3 | 5.0 | 22.50 | .38 | 12.17 | 32.51 | n/a | .000 |
| * | ADD [0102 + 0801] | 0802 | 3 | 5.0 | 45.50 | .87 | 12.33 | 27.30 | n/a | .000 |
| * | DIVERT HYD | 0601 | 1 | 5.0 | 45.50 | .87 | 12.33 | 27.30 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 13.79 | .06 | 12.33 | 27.30 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 31.71 | .80 | 12.33 | 27.30 | n/a | .000 |
| * | ADD [0200 + 0601] | 0803 | 3 | 5.0 | 17.59 | .18 | 12.17 | 26.31 | n/a | .000 |
| * | ADD [0600 + 0601] | 0804 | 3 | 5.0 | 27.59 | .18 | 12.42 | 32.54 | n/a | .000 |

**********
** SIMULATION NUMBER: 6 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | MASS STORM | | 15.0 | | | | | | |
| | [ Ptot= 93.32 mm ] | | | | | | | | |
| ** | CALIB NASHYD | 0400 | 1 | 5.0 | 5.70 | .12 | 12.42 | 20.70 | .22 | .000 |

```
      [CN=50.2          ]
      [ N = 3.0:Tp  .70]
*
   ** CALIB NASHYD       0304  1  5.0    2.90     .21 11.92  36.14  .39    .000
      [CN=66.6          ]
      [ N = 3.0:Tp  .28]
*
   ** CALIB NASHYD       0300  1  5.0    4.55     .19 12.42  40.61  .44    .000
      [CN=71.0          ]
      [ N = 3.0:Tp  .74]
*
   ** CALIB NASHYD       0301  1  5.0    5.97     .27 12.33  40.61  .44    .000
      [CN=71.0          ]
      [ N = 3.0:Tp  .63]
*
   *  CALIB STANDHYD     0302  1  5.0   16.39    1.74 11.83  51.92  .56    .000
      [I%=20.0:S%= 2.00]
*
   *  CALIB STANDHYD     0303  1  5.0    2.34     .34 11.75  56.62  .61    .000
      [I%=25.0:S%= 2.00]
*
   *  CALIB STANDHYD     0305  1  5.0     .31     .02 11.75  46.18  .49    .000
      [I%=20.0:S%=  .50]
*
   *  CALIB NASHYD       0200  1  5.0    3.80     .14 12.08  26.79  .29    .000
      [CN=59.1          ]
      [ N = 3.0:Tp  .47]
*
   *  CALIB NASHYD       0102  1  5.0   23.00     .59 12.42  26.06  .28    .000
      [CN=55.3          ]
      [ N = 3.0:Tp  .72]
*
   *  CALIB NASHYD       0103  1  5.0    8.70     .33 12.17  28.32  .30    .000
      [CN=59.2          ]
      [ N = 3.0:Tp  .48]
*
      CHANNEL[ 2 : 0300] 0701  1  5.0    4.55     .15 12.75  40.51  n/a    .000
*
      ADD [0701 + 0301]  0901  3  5.0   10.52     .40 12.42  40.57  n/a    .000
*
      CHANNEL[ 2 : 0901] 0702  1  5.0   10.52     .36 12.67  40.54  n/a    .000
*
      RESRVR [ 2 : 0702] 0501  1  5.0   10.52     .17 14.00  40.54  n/a    .000
      {ST=   .09 ha.m }
*
      ADD [0501 + 0302]  0902  3  5.0   26.91    1.80 11.83  47.47  n/a    .000
*
      ADD [0902 + 0303]  0903  3  5.0   29.25    2.08 11.83  48.21  n/a    .000
*
      ADD [0304 + 0903]  0904  3  5.0   32.15    2.28 11.83  47.12  n/a    .000
*
      ADD [0904 + 0305]  0905  3  5.0   32.46    2.29 11.83  47.11  n/a    .000
*
      RESRVR [ 2 : 0905] 0502  1  5.0   32.46     .28 15.92  47.05  n/a    .000
      {ST=   .88 ha.m }
*
      ADD [0400 + 0502]  0906  3  5.0   38.16     .30 15.92  43.12  n/a    .000
*
      DIVERT HYD         0600  1  5.0   38.16     .30 15.92  43.12  n/a    .000
         Outflow         0600  2  5.0   14.35     .14 15.92  43.12  n/a    .000
         Outflow         0600  3  5.0   14.35     .14 15.92  43.12  n/a    .000
         Outflow         0600  4  5.0    9.46     .02 15.92  43.12  n/a    .000
*
```





```
*
      CHANNEL[ 2 : 0600] 0703  1  5.0   14.35     .14 16.17  43.12  n/a    .000
*
      ADD [0103 + 0600]  0801  3  5.0   23.05     .45 12.17  37.53  n/a    .000
*
      ADD [0102 + 0801]  0802  3  5.0   46.05    1.01 12.33  31.80  n/a    .000
*
      DIVERT HYD         0601  1  5.0   46.05    1.01 12.33  31.80  n/a    .000
         Outflow         0601  2  5.0   12.66     .07 12.33  31.80  n/a    .000
         Outflow         0601  3  5.0   33.38     .94 12.33  31.80  n/a    .000
*
      ADD [0200 + 0601]  0803  3  5.0   16.46     .21 12.17  30.64  n/a    .000
*
      ADD [0600 + 0601]  0804  3  5.0   27.01     .20 12.33  37.81  n/a    .000
*
 FINISH
```

```
================================================================================
=========================

       V     V   I    SSSSS  U   U    A    L
       V     V   I    SS     U   U   A A   L
        V   V    I     SS    U   U  AAAAA  L
        V   V    I      SS   U   U  A   A  L
         VV      I    SSSSS  UUUUU  A   A  LLLLL

        OOO    TTTTT  TTTTT  H   H  Y   Y  M   M   OOO
       O   O     T      T    H   H   Y Y   MM MM  O   O
       O   O     T      T    H   H    Y    M M M  O   O
        OOO      T      T    H   H    Y    M   M   OOO

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                    ***** S U M M A R Y   O U T P U T *****

  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 2.3.2\voin.dat

  Output  filename: i:\2015 Projects\115224 - Mair Mills Village External
Works\Design\115224 VO2 model (Mar 2016)\Pre-Development - CHI.out
  Summary filename: i:\2015 Projects\115224 - Mair Mills Village External
Works\Design\115224 VO2 model (Mar 2016)\Pre-Development - CHI.sum

DATE: 22/04/2016                          TIME: 11:20:15 AM

USER:

COMMENTS: _____________________________________________________

  ******************************
  ** SIMULATION NUMBER:   1 **
  ******************************

  W/E COMMAND              HYD ID   DT    AREA    Qpeak  Tpeak   R.V.  R.C.    Qbase
                                   min     ha      cms    hrs     mm              cms

     START @   .00 hrs
     ---------------------
     READ STORM                    6.0
     [ Ptot= 24.97 mm ]
     fname : I:\2015 Projects\115224 - Mair Mills Village External
Works\Design\Owen Sound\CHIC25MM.4HR
     remark: OWEN SOUND 25 mm (from a 2 year-4hr storm)

*
  *  CALIB STANDHYD     0305  1  5.0     .31     .01  1.92   6.58  .26    .000
     [I%=20.0:S%=  .50]
*
  *  CALIB STANDHYD     0303  1  5.0    2.34     .07  2.00   9.00  .36    .000
     [I%=25.0:S%= 2.00]
*
```





```
*  CALIB STANDHYD     0302  1  5.0    16.39     .32  2.08   7.62  .31    .000
   [I%=20.0:S%= 2.00]
*
*  CALIB NASHYD       0301  1  5.0     5.97     .03  2.67   3.22  .13    .000
   [CN=71.0       ]
   [ N = 3.0:Tp  .63]
*
*  CALIB NASHYD       0300  1  5.0     4.55     .02  2.83   3.22  .13    .000
   [CN=71.0       ]
   [ N = 3.0:Tp  .74]
*
*  CALIB NASHYD       0304  1  5.0     2.90     .02  2.25   2.71  .11    .000
   [CN=66.6       ]
   [ N = 3.0:Tp  .28]
*
*  CALIB NASHYD       0400  1  5.0     5.70     .01  2.92    .84  .03    .000
   [CN=50.2       ]
   [ N = 3.0:Tp  .70]
*
*  CALIB NASHYD       0103  1  5.0     8.70     .03  2.50   1.61  .06    .000
   [CN=59.2       ]
   [ N = 3.0:Tp  .48]
*
*  CALIB NASHYD       0102  1  5.0    23.00     .05  2.83   1.60  .06    .000
   [CN=55.3       ]
   [ N = 3.0:Tp  .72]
*
*  CALIB NASHYD       0200  1  5.0     3.80     .01  2.58   1.17  .05    .000
   [CN=59.1       ]
   [ N = 3.0:Tp  .47]
*
   CHANNEL[ 2 : 0300] 0701  1  5.0     4.55     .01  3.67   3.13  n/a    .000
*
   ADD [0301 + 0701]  0901  3  5.0    10.52     .04  2.83   3.18  n/a    .000
*
   CHANNEL[ 2 : 0901] 0702  1  5.0    10.52     .03  3.42   3.16  n/a    .000
*
   RESRVR [ 2 : 0702] 0501  1  5.0    10.52     .03  3.58   3.15  n/a    .000
   {ST=    .00 ha.m }
*
   ADD [0302 + 0501]  0902  3  5.0    26.91     .32  2.08   5.88  n/a    .000
*
   ADD [0303 + 0902]  0903  3  5.0    29.25     .38  2.08   6.13  n/a    .000
*
   ADD [0903 + 0304]  0904  3  5.0    32.15     .40  2.08   5.82  n/a    .000
*
   ADD [0305 + 0904]  0905  3  5.0    32.46     .40  2.08   5.83  n/a    .000
*
   RESRVR [ 2 : 0905] 0502  1  5.0    32.46     .01  5.92   5.77  n/a    .000
   {ST=    .17 ha.m }
*
   ADD [0502 + 0400]  0906  3  5.0    38.16     .02  3.25   5.03  n/a    .000
*
   DIVERT HYD         0600  1  5.0    38.16     .02  3.25   5.03  n/a    .000
      Outflow         0600  2  5.0     1.91     .00  3.25   5.03  n/a    .000
      Outflow         0600  3  5.0     1.91     .00  3.25   5.03  n/a    .000
      Outflow         0600  4  5.0    34.34     .02  3.25   5.03  n/a    .000
*
   CHANNEL[ 2 : 0600] 0703  1  5.0     1.91     .00  5.08   5.03  n/a    .000
*
   ADD [0600 + 0103]  0801  3  5.0    10.61     .03  2.50   2.23  n/a    .000
*
   ADD [0801 + 0102]  0802  3  5.0    33.61     .08  2.75   1.80  n/a    .000
```

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| * | DIVERT HYD | 0601 | 1 5.0 | 33.61 | .08 | 2.75 | 1.80 | n/a | .000 |
| | Outflow | 0601 | 2 5.0 | 26.95 | .04 | 2.75 | 1.80 | n/a | .000 |
| | Outflow | 0601 | 3 5.0 | 6.66 | .04 | 2.75 | 1.80 | n/a | .000 |
| * | ADD [0601 + 0200] | 0803 | 3 5.0 | 30.75 | .05 | 2.58 | 1.72 | n/a | .000 |
| * | ADD [0601 + 0600] | 0804 | 3 5.0 | 41.00 | .05 | 2.75 | 4.51 | n/a | .000 |

**********
** SIMULATION NUMBER: 2 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 33.75 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\OSCHI2.4HR | | | | | | | | |
| | remark: OWEN SOUND 2 YEAR 4 HOUR DURATION CHICAGO STORM | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .01 | 1.92 | 10.35 | .31 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .12 | 1.92 | 13.81 | .41 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 5.0 | 16.39 | .52 | 2.00 | 11.92 | .35 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 5.0 | 5.97 | .06 | 2.67 | 6.24 | .18 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 5.0 | 4.55 | .04 | 2.75 | 6.24 | .18 | .000 |
| * | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 5.0 | 2.90 | .04 | 2.17 | 5.29 | .16 | .000 |
| * | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 5.0 | 5.70 | .02 | 2.83 | 2.05 | .06 | .000 |
| * | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 5.0 | 8.70 | .06 | 2.50 | 3.47 | .10 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 5.0 | 23.00 | .11 | 2.75 | 3.31 | .10 | .000 |
| * | CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 5.0 | 3.80 | .02 | 2.50 | 2.83 | .08 | .000 |
| | CHANNEL[ 2 : 0300] | 0701 | 1 5.0 | 4.55 | .03 | 3.42 | 6.14 | n/a | .000 |





| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| * | ADD [0301 + 0701] | 0901 | 3 5.0 | 10.52 | .08 | 2.83 | 6.20 | n/a | .000 |
| * | CHANNEL[ 2 : 0901] | 0702 | 1 5.0 | 10.52 | .07 | 3.25 | 6.17 | n/a | .000 |
| * | RESRVR [ 2 : 0702] {ST= .00 ha.m } | 0501 | 1 5.0 | 10.52 | .06 | 3.42 | 6.17 | n/a | .000 |
| * | ADD [0302 + 0501] | 0902 | 3 5.0 | 26.91 | .52 | 2.00 | 9.67 | n/a | .000 |
| * | ADD [0303 + 0902] | 0903 | 3 5.0 | 29.25 | .62 | 2.00 | 10.00 | n/a | .000 |
| * | ADD [0903 + 0304] | 0904 | 3 5.0 | 32.15 | .65 | 2.00 | 9.58 | n/a | .000 |
| * | ADD [0305 + 0904] | 0905 | 3 5.0 | 32.46 | .66 | 2.00 | 9.59 | n/a | .000 |
| * | RESRVR [ 2 : 0905] {ST= .27 ha.m } | 0502 | 1 5.0 | 32.46 | .04 | 5.08 | 9.53 | n/a | .000 |
| * | ADD [0502 + 0400] | 0906 | 3 5.0 | 38.16 | .04 | 4.42 | 8.41 | n/a | .000 |
| * | DIVERT HYD | 0600 | 1 5.0 | 38.16 | .04 | 4.42 | 8.41 | n/a | .000 |
| | Outflow | 0600 | 2 5.0 | 3.57 | .01 | 4.42 | 8.41 | n/a | .000 |
| | Outflow | 0600 | 3 5.0 | 3.57 | .01 | 4.42 | 8.41 | n/a | .000 |
| | Outflow | 0600 | 4 5.0 | 31.02 | .02 | 4.42 | 8.41 | n/a | .000 |
| * | CHANNEL[ 2 : 0600] | 0703 | 1 5.0 | 3.57 | .01 | 5.75 | 8.41 | n/a | .000 |
| * | ADD [0600 + 0103] | 0801 | 3 5.0 | 12.27 | .06 | 2.50 | 4.91 | n/a | .000 |
| * | ADD [0801 + 0102] | 0802 | 3 5.0 | 35.27 | .17 | 2.67 | 3.86 | n/a | .000 |
| * | DIVERT HYD | 0601 | 1 5.0 | 35.27 | .17 | 2.67 | 3.86 | n/a | .000 |
| | Outflow | 0601 | 2 5.0 | 18.67 | .04 | 2.67 | 3.86 | n/a | .000 |
| | Outflow | 0601 | 3 5.0 | 16.60 | .13 | 2.67 | 3.86 | n/a | .000 |
| * | ADD [0601 + 0200] | 0803 | 3 5.0 | 22.47 | .06 | 2.50 | 3.69 | n/a | .000 |
| * | ADD [0601 + 0600] | 0804 | 3 5.0 | 47.62 | .15 | 2.67 | 6.83 | n/a | .000 |

**********
** SIMULATION NUMBER: 3 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 44.07 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\OSCHI5.4HR | | | | | | | | |
| | remark: OWEN SOUND 5 YEAR 4 HOUR DURATION CHICAGO STORM | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .02 | 1.92 | 15.40 | .35 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .17 | 1.92 | 20.13 | .46 | .000 |
| * | CALIB STANDHYD | 0302 | 1 5.0 | 16.39 | .79 | 2.00 | 17.67 | .40 | .000 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | [I%=20.0:S%= 2.00] | | | | | | | | | |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .11 | 2.67 | 10.69 | .24 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .07 | 2.75 | 10.69 | .24 | .000 |
| * | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .08 | 2.17 | 9.16 | .21 | .000 |
| * | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .03 | 2.75 | 4.06 | .09 | .000 |
| * | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .11 | 2.50 | 6.37 | .14 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 | 5.0 | 23.00 | .21 | 2.75 | 5.95 | .14 | .000 |
| * | CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 | 5.0 | 3.80 | .04 | 2.50 | 5.53 | .13 | .000 |
| * | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .05 | 3.33 | 10.59 | n/a | .000 |
| * | ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .14 | 2.83 | 10.64 | n/a | .000 |
| * | CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .13 | 3.17 | 10.62 | n/a | .000 |
| * | RESRVR [ 2 : 0702] {ST= .01 ha.m } | 0501 | 1 | 5.0 | 10.52 | .12 | 3.42 | 10.61 | n/a | .000 |
| * | ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | .79 | 2.00 | 14.91 | n/a | .000 |
| * | ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | .94 | 2.00 | 15.33 | n/a | .000 |
| * | ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | .99 | 2.00 | 14.77 | n/a | .000 |
| * | ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 1.00 | 2.00 | 14.78 | n/a | .000 |
| * | RESRVR [ 2 : 0905] {ST= .38 ha.m } | 0502 | 1 | 5.0 | 32.46 | .09 | 4.50 | 14.73 | n/a | .000 |
| * | ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .11 | 4.08 | 13.13 | n/a | .000 |
| | DIVERT HYD | 0600 | 1 | 5.0 | 38.16 | .11 | 4.08 | 13.13 | n/a | .000 |
| | Outflow | 0600 | 2 | 5.0 | 8.00 | .04 | 4.08 | 13.13 | n/a | .000 |
| | Outflow | 0600 | 3 | 5.0 | 8.00 | .04 | 4.08 | 13.13 | n/a | .000 |
| | Outflow | 0600 | 4 | 5.0 | 22.15 | .02 | 4.08 | 13.13 | n/a | .000 |
| * | CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 8.00 | .04 | 4.83 | 13.13 | n/a | .000 |
| * | ADD [0600 + 0103] | 0801 | 3 | 5.0 | 16.70 | .13 | 2.58 | 9.61 | n/a | .000 |
| * | ADD [0801 + 0102] | 0802 | 3 | 5.0 | 39.70 | .34 | 2.67 | 7.49 | n/a | .000 |





| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | DIVERT HYD | 0601 | 1 | 5.0 | 39.70 | .34 | 2.67 | 7.49 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 15.98 | .04 | 2.67 | 7.49 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 23.73 | .29 | 2.67 | 7.49 | n/a | .000 |
| * | ADD [0601 + 0200] | 0803 | 3 | 5.0 | 19.78 | .09 | 2.50 | 7.12 | n/a | .000 |
| * | ADD [0601 + 0600] | 0804 | 3 | 5.0 | 45.88 | .31 | 2.67 | 10.22 | n/a | .000 |

```
*****************************
** SIMULATION NUMBER:   4 **
*****************************
```

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |

```
     [ Ptot= 50.59 mm ]
     fname : I:\2015 Projects\115224 - Mair Mills Village External
Works\Design\Owen Sound\OSchi10.4hr
     remark: OWEN SOUND 10 YEAR 4 HOUR DURATION CHICAGO STORM
```

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 | 5.0 | .31 | .02 | 1.92 | 18.91 | .37 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .22 | 1.92 | 24.44 | .48 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | 1.07 | 2.08 | 21.64 | .43 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .14 | 2.58 | 13.92 | .28 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .10 | 2.75 | 13.92 | .28 | .000 |
| * | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .11 | 2.17 | 12.01 | .24 | .000 |
| * | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .05 | 2.75 | 5.63 | .11 | .000 |
| * | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .15 | 2.42 | 8.57 | .17 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 | 5.0 | 23.00 | .28 | 2.75 | 7.96 | .16 | .000 |
| * | CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 | 5.0 | 3.80 | .06 | 2.50 | 7.61 | .15 | .000 |
| * | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .07 | 3.25 | 13.82 | n/a | .000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .20 | 2.83 | 13.88 | n/a | .000 |
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .17 | 3.08 | 13.85 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .01 ha.m } | 0501 | 1 | 5.0 | 10.52 | .16 | 3.33 | 13.85 | n/a | .000 |
| ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | 1.08 | 2.08 | 18.59 | n/a | .000 |
| ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 1.26 | 2.00 | 19.06 | n/a | .000 |
| ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | 1.35 | 2.08 | 18.42 | n/a | .000 |
| ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 1.36 | 2.08 | 18.43 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= .46 ha.m } | 0502 | 1 | 5.0 | 32.46 | .13 | 4.42 | 18.37 | n/a | .000 |
| ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .15 | 3.92 | 16.47 | n/a | .000 |
| DIVERT HYD | 0600 | 1 | 5.0 | 38.16 | .15 | 3.92 | 16.47 | n/a | .000 |
| Outflow | 0600 | 2 | 5.0 | 9.90 | .07 | 3.92 | 16.47 | n/a | .000 |
| Outflow | 0600 | 3 | 5.0 | 9.90 | .07 | 3.92 | 16.47 | n/a | .000 |
| Outflow | 0600 | 4 | 5.0 | 18.37 | .02 | 3.92 | 16.47 | n/a | .000 |
| CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 9.90 | .06 | 4.58 | 16.47 | n/a | .000 |
| ADD [0600 + 0103] | 0801 | 3 | 5.0 | 18.60 | .20 | 2.58 | 12.77 | n/a | .000 |
| ADD [0801 + 0102] | 0802 | 3 | 5.0 | 41.60 | .47 | 2.67 | 10.11 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 41.60 | .47 | 2.67 | 10.11 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 14.59 | .04 | 2.67 | 10.11 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 27.01 | .43 | 2.67 | 10.11 | n/a | .000 |
| ADD [0601 + 0200] | 0803 | 3 | 5.0 | 18.39 | .10 | 2.50 | 9.59 | n/a | .000 |
| ADD [0601 + 0600] | 0804 | 3 | 5.0 | 45.38 | .45 | 2.67 | 12.68 | n/a | .000 |

**********
** SIMULATION NUMBER: 5 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 59.08 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\OSCHI25.4HR | | | | | | | | |
| | remark: OWEN SOUND 25 YEAR 4 HOUR DURATION CHICAGO STORM | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 1 | 5.0 | .31 | .03 | 1.92 | 23.78 | .40 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 1 | 5.0 | 2.34 | .27 | 1.92 | 30.34 | .51 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 1 | 5.0 | 16.39 | 1.38 | 2.08 | 27.11 | .46 | .000 |





| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .19 | 2.58 | 18.53 | .31 | .000 |
| * CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .13 | 2.75 | 18.53 | .31 | .000 |
| * CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .15 | 2.17 | 16.11 | .27 | .000 |
| * CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .07 | 2.75 | 8.00 | .14 | .000 |
| * CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .22 | 2.42 | 11.81 | .20 | .000 |
| * CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 | 5.0 | 23.00 | .39 | 2.75 | 10.90 | .18 | .000 |
| * CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 | 5.0 | 3.80 | .09 | 2.42 | 10.71 | .18 | .000 |
| CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .10 | 3.17 | 18.43 | n/a | .000 |
| ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .27 | 2.75 | 18.49 | n/a | .000 |
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .24 | 3.00 | 18.46 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .03 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 3.83 | 18.46 | n/a | .000 |
| ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | 1.38 | 2.08 | 23.73 | n/a | .000 |
| ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 1.61 | 2.08 | 24.26 | n/a | .000 |
| ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | 1.75 | 2.08 | 23.52 | n/a | .000 |
| ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 1.76 | 2.08 | 23.52 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= .59 ha.m } | 0502 | 1 | 5.0 | 32.46 | .15 | 4.83 | 23.47 | n/a | .000 |
| ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .20 | 2.92 | 21.16 | n/a | .000 |
| DIVERT HYD | 0600 | 1 | 5.0 | 38.16 | .20 | 2.92 | 21.16 | n/a | .000 |
| Outflow | 0600 | 2 | 5.0 | 11.55 | .09 | 2.92 | 21.16 | n/a | .000 |
| Outflow | 0600 | 3 | 5.0 | 11.55 | .09 | 2.92 | 21.16 | n/a | .000 |
| Outflow | 0600 | 4 | 5.0 | 15.07 | .02 | 2.92 | 21.16 | n/a | .000 |
| CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 11.55 | .08 | 4.00 | 21.16 | n/a | .000 |
| ADD [0600 + 0103] | 0801 | 3 | 5.0 | 20.25 | .29 | 2.58 | 17.14 | n/a | .000 |
| ADD [0801 + 0102] | 0802 | 3 | 5.0 | 43.25 | .67 | 2.67 | 13.82 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 43.25 | .67 | 2.67 | 13.82 | n/a | .000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Outflow | 0601 | 2 | 5.0 | 13.61 | .05 | 2.67 | 13.82 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 29.63 | .62 | 2.67 | 13.82 | n/a | .000 |
| ADD [0601 + 0200] | 0803 | 3 | 5.0 | 17.41 | .13 | 2.50 | 13.14 | n/a | .000 |
| ADD [0601 + 0600] | 0804 | 3 | 5.0 | 44.70 | .64 | 2.67 | 16.30 | n/a | .000 |

**********
** SIMULATION NUMBER: 6 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 65.65 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\OSchi50.4hr | | | | | | | | |
| | remark: OWEN SOUND 50 YEAR 4 HOUR DURATION CHICAGO STORM | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .03 | 1.92 | 27.76 | .42 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .31 | 1.92 | 35.11 | .53 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 5.0 | 16.39 | 1.63 | 2.08 | 31.57 | .48 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 5.0 | 5.97 | .24 | 2.58 | 22.38 | .34 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 5.0 | 4.55 | .16 | 2.75 | 22.38 | .34 | .000 |
| * | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 5.0 | 2.90 | .18 | 2.17 | 19.55 | .30 | .000 |
| * | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 5.0 | 5.70 | .09 | 2.75 | 10.07 | .15 | .000 |
| * | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 5.0 | 8.70 | .27 | 2.42 | 14.57 | .22 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 5.0 | 23.00 | .49 | 2.75 | 13.43 | .20 | .000 |
| * | CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 5.0 | 3.80 | .11 | 2.42 | 13.38 | .20 | .000 |
| | CHANNEL[ 2 : 0300] | 0701 | 1 5.0 | 4.55 | .12 | 3.17 | 22.28 | n/a | .000 |
| | ADD [0301 + 0701] | 0901 | 3 5.0 | 10.52 | .33 | 2.75 | 22.34 | n/a | .000 |





| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .30 | 3.00 | 22.31 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .05 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 4.08 | 22.31 | n/a | .000 |
| ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | 1.64 | 2.08 | 27.95 | n/a | .000 |
| ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 1.92 | 2.08 | 28.52 | n/a | .000 |
| ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | 2.08 | 2.08 | 27.71 | n/a | .000 |
| ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 2.09 | 2.08 | 27.71 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= .68 ha.m } | 0502 | 1 | 5.0 | 32.46 | .15 | 5.67 | 27.66 | n/a | .000 |
| ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .24 | 2.92 | 25.03 | n/a | .000 |
| DIVERT HYD | 0600 | 1 | 5.0 | 38.16 | .24 | 2.92 | 25.03 | n/a | .000 |
| Outflow | 0600 | 2 | 5.0 | 12.41 | .11 | 2.92 | 25.03 | n/a | .000 |
| Outflow | 0600 | 3 | 5.0 | 12.41 | .11 | 2.92 | 25.03 | n/a | .000 |
| Outflow | 0600 | 4 | 5.0 | 13.34 | .02 | 2.92 | 25.03 | n/a | .000 |
| CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 12.41 | .09 | 3.58 | 25.03 | n/a | .000 |
| ADD [0600 + 0103] | 0801 | 3 | 5.0 | 21.11 | .37 | 2.50 | 20.72 | n/a | .000 |
| ADD [0801 + 0102] | 0802 | 3 | 5.0 | 44.11 | .83 | 2.67 | 16.92 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 44.11 | .83 | 2.67 | 16.92 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 13.46 | .06 | 2.67 | 16.92 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 30.65 | .77 | 2.67 | 16.92 | n/a | .000 |
| ADD [0601 + 0200] | 0803 | 3 | 5.0 | 17.26 | .17 | 2.50 | 16.14 | n/a | .000 |
| ADD [0601 + 0600] | 0804 | 3 | 5.0 | 43.99 | .79 | 2.67 | 19.38 | n/a | .000 |

**********
** SIMULATION NUMBER: 7 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 71.77 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\OSCHI100.4HR | | | | | | | | |
| | remark: OWEN SOUND 100 YEAR 4 HOUR DURATION CHICAGO STORM | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .03 | 1.92 | 31.62 | .44 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .36 | 1.92 | 39.68 | .55 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 5.0 | 16.39 | 1.89 | 2.08 | 35.86 | .50 | .000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .28 | 2.58 | 26.14 | .36 | .000 |
| CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .19 | 2.75 | 26.14 | .36 | .000 |
| CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .21 | 2.17 | 22.95 | .32 | .000 |
| CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .11 | 2.75 | 12.16 | .17 | .000 |
| CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .32 | 2.42 | 17.34 | .24 | .000 |
| CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 | 5.0 | 23.00 | .58 | 2.75 | 15.96 | .22 | .000 |
| CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 | 5.0 | 3.80 | .13 | 2.42 | 16.06 | .22 | .000 |
| CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .15 | 3.08 | 26.05 | n/a | .000 |
| ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .40 | 2.75 | 26.10 | n/a | .000 |
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .36 | 3.00 | 26.07 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .08 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 4.25 | 26.07 | n/a | .000 |
| ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | 1.91 | 2.08 | 32.04 | n/a | .000 |
| ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 2.22 | 2.08 | 32.65 | n/a | .000 |
| ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | 2.42 | 2.08 | 31.77 | n/a | .000 |
| ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 2.43 | 2.08 | 31.77 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= .78 ha.m } | 0502 | 1 | 5.0 | 32.46 | .15 | 6.33 | 31.72 | n/a | .000 |
| ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .26 | 2.75 | 28.80 | n/a | .000 |
| DIVERT HYD | 0600 | 1 | 5.0 | 38.16 | .26 | 2.75 | 28.80 | n/a | .000 |
| Outflow | 0600 | 2 | 5.0 | 13.01 | .12 | 2.75 | 28.80 | n/a | .000 |
| Outflow | 0600 | 3 | 5.0 | 13.01 | .12 | 2.75 | 28.80 | n/a | .000 |
| Outflow | 0600 | 4 | 5.0 | 12.13 | .02 | 2.75 | 28.80 | n/a | .000 |
| CHANNEL[ 2 : 0600] | 0703 | 1 | 5.0 | 13.01 | .09 | 3.42 | 28.80 | n/a | .000 |
| ADD [0600 + 0103] | 0801 | 3 | 5.0 | 21.71 | .44 | 2.50 | 24.21 | n/a | .000 |
| ADD [0801 + 0102] | 0802 | 3 | 5.0 | 44.71 | .99 | 2.58 | 19.96 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 44.71 | .99 | 2.58 | 19.96 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 13.46 | .07 | 2.58 | 19.96 | n/a | .000 |





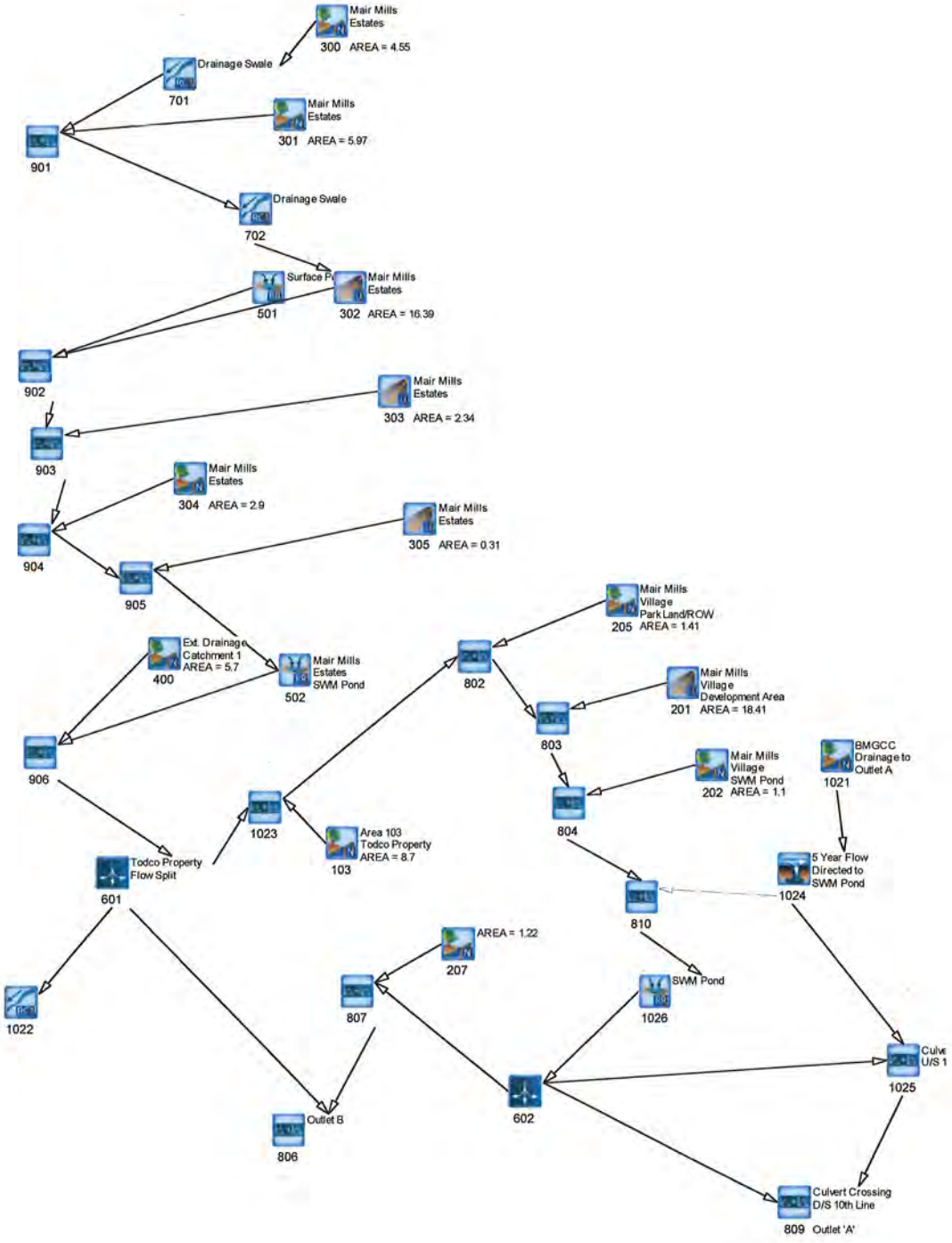
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Outflow | 0601 | 3 | 5.0 | 31.25 | .92 | 2.58 | 19.96 | n/a | .000 |
| ADD [0601 + 0200] | 0803 | 3 | 5.0 | 17.26 | .20 | 2.50 | 19.10 | n/a | .000 |
| ADD [0601 + 0600] | 0804 | 3 | 5.0 | 43.38 | .94 | 2.58 | 22.43 | n/a | .000 |

**********
** SIMULATION NUMBER: 8 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 12.0 | | | | | | |
| | [ Ptot=193.00 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\TIMMINS.12 | | | | | | | | |
| | remark: TIMMINS REGIONAL 12 HOUR DURATION STORM | | | | | | | | |
| | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 | 5.0 | .31 | .02 | 7.00 | 125.62 | .65 | .000 |
| | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .22 | 7.00 | 144.21 | .75 | .000 |
| | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | 1.42 | 7.00 | 136.79 | .71 | .000 |
| | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .42 | 7.25 | 121.14 | .63 | .000 |
| | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .30 | 7.42 | 121.14 | .63 | .000 |
| | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .23 | 7.00 | 112.01 | .58 | .000 |
| | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .24 | 7.42 | 76.99 | .40 | .000 |
| | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .52 | 7.17 | 95.56 | .50 | .000 |
| | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .72] | 0102 | 1 | 5.0 | 23.00 | 1.10 | 7.42 | 89.13 | .46 | .000 |
| | CALIB NASHYD [CN=59.1 ] [ N = 3.0:Tp .47] | 0200 | 1 | 5.0 | 3.80 | .23 | 7.17 | 93.33 | .48 | .000 |
| | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .27 | 7.75 | 121.04 | n/a | .000 |
| | ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .68 | 7.42 | 121.10 | n/a | .000 |

```
      CHANNEL[ 2 : 0901] 0702  1  5.0   10.52     .65  7.58 121.07  n/a    .000
*
      RESRVR [ 2 : 0702] 0501  1  5.0   10.52     .19 12.67 121.07  n/a    .000
      {ST=   .62 ha.m }
*
      ADD [0302 + 0501]  0902  3  5.0   26.91    1.59  7.00 130.64  n/a    .000
*
      ADD [0303 + 0902]  0903  3  5.0   29.25    1.82  7.00 131.73  n/a    .000
*
      ADD [0903 + 0304]  0904  3  5.0   32.15    2.05  7.00 129.95  n/a    .000
*
      ADD [0305 + 0904]  0905  3  5.0   32.46    2.07  7.00 129.91  n/a    .000
*
      RESRVR [ 2 : 0905] 0502  1  5.0   32.46    1.40  7.67 129.86  n/a    .000
      {ST=  1.19 ha.m }
*
      ADD [0502 + 0400]  0906  3  5.0   38.16    1.64  7.58 121.96  n/a    .000
*
      DIVERT HYD         0600  1  5.0   38.16    1.64  7.58 121.96  n/a    .000
         Outflow         0600  2  5.0   17.15     .81  7.58 121.96  n/a    .000
         Outflow         0600  3  5.0   17.15     .81  7.58 121.96  n/a    .000
         Outflow         0600  4  5.0    3.85     .02  7.58 121.96  n/a    .000
*
      CHANNEL[ 2 : 0600] 0703  1  5.0   17.15     .76  9.08 121.96  n/a    .000
*
      ADD [0600 + 0103]  0801  3  5.0   25.85    1.27  7.42 113.08  n/a    .000
*
      ADD [0801 + 0102]  0802  3  5.0   48.85    2.37  7.42 101.80  n/a    .000
*
      DIVERT HYD         0601  1  5.0   48.85    2.37  7.42 101.80  n/a    .000
         Outflow         0601  2  5.0    7.12     .17  7.42 101.80  n/a    .000
         Outflow         0601  3  5.0   41.74    2.19  7.42 101.80  n/a    .000
*
      ADD [0601 + 0200]  0803  3  5.0   10.92     .39  7.25  98.86  n/a    .000
*
      ADD [0601 + 0600]  0804  3  5.0   45.59    2.21  7.42 103.51  n/a    .000
*
 FINISH
```

## Proposed Conditions OTTHYMO Model Schematic



```
================================================================================
=========================

      V    V   I    SSSSS  U   U    A    L
      V    V   I    SS     U   U   A A   L
       V  V    I     SS    U   U  AAAAA  L
       V  V    I      SS   U   U  A   A  L
        VV     I    SSSSS  UUUUU  A   A  LLLLL

       OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO
      O   O    T      T    H   H   Y Y   MM MM  O   O
      O   O    T      T    H   H    Y    M   M  O   O

       OOO     T      T    H   H    Y    M   M   OOO

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                    *****  S U M M A R Y   O U T P U T  *****

  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 2.3.2\voin.dat

  Output  filename: i:\2015 Projects\115224 - Mair Mills Village External
Works\Design\115224 VO2 model (Mar 2016)\Post Development - SCS.ou
  Summary filename: i:\2015 Projects\115224 - Mair Mills Village External
Works\Design\115224 VO2 model (Mar 2016)\Post Development - SCS.su

DATE: 22/04/2016                          TIME: 11:23:03 AM

USER:

COMMENTS: _____________________________________________________

  ******************************
  ** SIMULATION NUMBER:   1 **
  ******************************

  W/E COMMAND              HYD ID  DT    AREA   Qpeak  Tpeak   R.V.  R.C.   Qbase
                                  min     ha     cms    hrs     mm             cms

     START @   .00 hrs
     ---------------------
     MASS STORM                   15.0
     [ Ptot= 46.56 mm ]
*
  **  CALIB NASHYD       0207  1  5.0    1.22     .03 11.75   6.62  .14     .000
      [CN=55.3         ]
      [ N = 3.0:Tp   .13]
*
  **  CALIB NASHYD       1021  1  5.0    4.66     .03 12.50   6.69  .14     .000
      [CN=55.3         ]
      [ N = 3.0:Tp   .78]
*
  **  CALIB NASHYD       0202  1  5.0    1.10     .01 11.92   4.64  .10     .000
      [CN=55.0         ]

                                  Page 1
```



```
      [ N = 3.0:Tp   .25]
*
  **  CALIB NASHYD       0103  1  5.0    8.70     .08 12.17   7.18  .15     .000
      [CN=59.2         ]
      [ N = 3.0:Tp   .48]
*
   *  CALIB STANDHYD     0305  1  5.0     .31     .01 11.75  16.69  .36     .000
      [I%=20.0:S%=   .50]
*
   *  CALIB STANDHYD     0302  1  5.0   16.39     .50 11.92  19.16  .41     .000
      [I%=20.0:S%= 2.00]
*
   *  CALIB NASHYD       0301  1  5.0    5.97     .08 12.33  11.89  .26     .000
      [CN=71.0         ]
      [ N = 3.0:Tp   .63]
*
   *  CALIB NASHYD       0300  1  5.0    4.55     .05 12.42  11.89  .26     .000
      [CN=71.0         ]
      [ N = 3.0:Tp   .74]
*
   *  CALIB STANDHYD     0303  1  5.0    2.34     .11 11.83  21.75  .47     .000
      [I%=25.0:S%= 2.00]
*
   *  CALIB NASHYD       0304  1  5.0    2.90     .06 11.92  10.22  .22     .000
      [CN=66.6         ]
      [ N = 3.0:Tp   .28]
*
   *  CALIB NASHYD       0400  1  5.0    5.70     .02 12.50   4.63  .10     .000
      [CN=50.2         ]
      [ N = 3.0:Tp   .70]
*
   *  CALIB NASHYD       0205  1  5.0    1.41     .02 11.83   5.45  .12     .000
      [CN=51.1         ]
      [ N = 3.0:Tp   .20]
*
   *  CALIB STANDHYD     0201  1  5.0   18.41    1.31 11.75  23.66  .51     .000
      [I%=43.0:S%= 2.00]
*
      DUHYD              1024  1  5.0    4.66     .03 12.50   6.69  n/a     .000
         MAJOR SYSTEM:   1024  2  5.0     .00     .00   .00    .00  n/a     .000
         MINOR SYSTEM:   1024  3  5.0    4.66     .03 12.50   6.69  n/a     .000
*
      CHANNEL[ 2 : 0300] 0701  1  5.0    4.55     .03 13.00  11.83  n/a     .000
*
      ADD [0301 + 0701]  0901  3  5.0   10.52     .10 12.50  11.86  n/a     .000
*
      CHANNEL[ 2 : 0901] 0702  1  5.0   10.52     .08 12.83  11.83  n/a     .000
*
      RESRVR [ 2 : 0702] 0501  1  5.0   10.52     .08 13.00  11.83  n/a     .000
      {ST=    .01 ha.m }
*
      ADD [0302 + 0501]  0902  3  5.0   26.91     .51 11.92  16.29  n/a     .000
*
      ADD [0902 + 0303]  0903  3  5.0   29.25     .61 11.83  16.73  n/a     .000
*
      ADD [0903 + 0304]  0904  3  5.0   32.15     .66 11.83  16.14  n/a     .000
*
      ADD [0305 + 0904]  0905  3  5.0   32.46     .66 11.83  16.15  n/a     .000
*
      RESRVR [ 2 : 0905] 0502  1  5.0   32.46     .07 16.08  16.10  n/a     .000
      {ST=    .33 ha.m }
*
      ADD [0502 + 0400]  0906  3  5.0   38.16     .07 16.00  14.39  n/a     .000

                                  Page 2
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| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .07 | 16.00 | 14.39 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 22.21 | .02 | 16.00 | 14.39 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 7.98 | .03 | 16.00 | 14.39 | n/a | .000 |
| Outflow | 0601 | 4 | 5.0 | 7.98 | .03 | 16.00 | 14.39 | n/a | .000 |
| CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 7.98 | .03 | 16.83 | 14.38 | n/a | .000 |
| ADD [0103 + 0601] | 1023 | 3 | 5.0 | 16.68 | .09 | 12.17 | 10.63 | n/a | .000 |
| ADD [1023 + 0205] | 0802 | 3 | 5.0 | 18.09 | .09 | 12.17 | 10.22 | n/a | .000 |
| ADD [0802 + 0201] | 0803 | 3 | 5.0 | 36.50 | 1.37 | 11.75 | 17.00 | n/a | .000 |
| ADD [0202 + 0803] | 0804 | 3 | 5.0 | 37.60 | 1.37 | 11.75 | 16.64 | n/a | .000 |
| ADD [1024 + 0804] | 0810 | 3 | 5.0 | 42.26 | 1.38 | 11.75 | 15.54 | n/a | .000 |
| RESRVR [ 2 : 0810] {ST= .43 ha.m } | 1026 | 1 | 5.0 | 42.26 | .06 | 19.67 | 15.49 | n/a | .000 |
| DIVERT HYD | 0602 | 1 | 5.0 | 42.26 | .06 | 19.67 | 15.49 | n/a | .000 |
| Outflow | 0602 | 2 | 5.0 | 39.57 | .04 | 19.67 | 15.49 | n/a | .000 |
| Outflow | 0602 | 3 | 5.0 | 1.77 | .01 | 19.67 | 15.49 | n/a | .000 |
| Outflow | 0602 | 4 | 5.0 | .92 | .00 | 19.67 | 15.49 | n/a | .000 |
| ADD [0207 + 0602] | 0807 | 3 | 5.0 | 40.79 | .05 | 11.75 | 15.22 | n/a | .000 |
| ADD [1024 + 0602] | 1025 | 3 | 5.0 | .92 | .00 | 22.67 | 15.49 | n/a | .000 |
| ADD [0807 + 0601] | 0806 | 3 | 5.0 | 62.99 | .06 | 11.83 | 14.93 | n/a | .000 |
| ADD [1025 + 0602] | 0809 | 3 | 5.0 | 2.69 | .01 | 19.67 | 15.49 | n/a | .000 |

**********
** SIMULATION NUMBER: 2 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | MASS STORM [ Ptot= 58.92 mm ] | | 15.0 | | | | | | |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .13] | 0207 | 1 | 5.0 | 1.22 | .04 | 11.75 | 10.74 | .18 | .000 |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .78] | 1021 | 1 | 5.0 | 4.66 | .05 | 12.50 | 10.85 | .18 | .000 |
| ** | CALIB NASHYD [CN=55.0 ] [ N = 3.0:Tp .25] | 0202 | 1 | 5.0 | 1.10 | .02 | 11.92 | 8.27 | .14 | .000 |
| ** | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .13 | 12.17 | 11.74 | .20 | .000 |
| * | CALIB STANDHYD | 0305 | 1 | 5.0 | .31 | .01 | 11.75 | 23.66 | .40 | .000 |





| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| [I%=20.0:S%= .50] | | | | | | | | | |
| * CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | .76 | 11.83 | 27.01 | .46 | .000 |
| * CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .12 | 12.33 | 18.44 | .31 | .000 |
| * CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .08 | 12.42 | 18.44 | .31 | .000 |
| * CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .16 | 11.75 | 30.23 | .51 | .000 |
| * CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .09 | 11.92 | 16.03 | .27 | .000 |
| * CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .04 | 12.42 | 7.95 | .13 | .000 |
| * CALIB NASHYD [CN=51.1 ] [ N = 3.0:Tp .20] | 0205 | 1 | 5.0 | 1.41 | .03 | 11.83 | 9.03 | .15 | .000 |
| * CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 | 5.0 | 18.41 | 1.78 | 11.75 | 31.41 | .53 | .000 |
| DUHYD | 1024 | 1 | 5.0 | 4.66 | .05 | 12.50 | 10.85 | n/a | .000 |
| MAJOR SYSTEM: | 1024 | 2 | 5.0 | .00 | .00 | .00 | .00 | n/a | .000 |
| MINOR SYSTEM: | 1024 | 3 | 5.0 | 4.66 | .05 | 12.50 | 10.85 | n/a | .000 |
| CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .06 | 12.92 | 18.36 | n/a | .000 |
| ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .16 | 12.50 | 18.41 | n/a | .000 |
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .15 | 12.75 | 18.38 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .01 ha.m } | 0501 | 1 | 5.0 | 10.52 | .14 | 13.00 | 18.38 | n/a | .000 |
| ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | .78 | 11.83 | 23.64 | n/a | .000 |
| ADD [0902 + 0303] | 0903 | 3 | 5.0 | 29.25 | .90 | 11.83 | 24.16 | n/a | .000 |
| ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | .99 | 11.83 | 23.43 | n/a | .000 |
| ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | .99 | 11.83 | 23.43 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= .44 ha.m } | 0502 | 1 | 5.0 | 32.46 | .12 | 14.92 | 23.38 | n/a | .000 |
| ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .13 | 14.08 | 21.08 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .13 | 14.08 | 21.08 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 16.05 | .02 | 14.08 | 21.08 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 11.06 | .06 | 14.08 | 21.08 | n/a | .000 |
| Outflow | 0601 | 4 | 5.0 | 11.06 | .06 | 14.08 | 21.08 | n/a | .000 |
| CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 11.06 | .06 | 15.33 | 21.08 | n/a | .000 |

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | ADD [0103 + 0601] | 1023 3 | 5.0 | 19.76 | .16 | 12.25 | 16.97 | n/a | .000 |
| | ADD [1023 + 0205] | 0802 3 | 5.0 | 21.17 | .17 | 12.25 | 16.44 | n/a | .000 |
| | ADD [0802 + 0201] | 0803 3 | 5.0 | 39.58 | 1.87 | 11.75 | 23.40 | n/a | .000 |
| | ADD [0202 + 0803] | 0804 3 | 5.0 | 40.68 | 1.89 | 11.75 | 22.99 | n/a | .000 |
| | ADD [1024 + 0804] | 0810 3 | 5.0 | 45.34 | 1.90 | 11.75 | 21.74 | n/a | .000 |
| | RESRVR [ 2 : 0810] {ST= .49 ha.m } | 1026 1 | 5.0 | 45.34 | .17 | 13.83 | 21.69 | n/a | .000 |
| | DIVERT HYD | 0602 1 | 5.0 | 45.34 | .17 | 13.83 | 21.69 | n/a | .000 |
| | Outflow | 0602 2 | 5.0 | 30.11 | .04 | 13.83 | 21.69 | n/a | .000 |
| | Outflow | 0602 3 | 5.0 | 14.55 | .13 | 13.83 | 21.69 | n/a | .000 |
| | Outflow | 0602 4 | 5.0 | .67 | .00 | 13.83 | 21.69 | n/a | .000 |
| | ADD [0207 + 0602] | 0807 3 | 5.0 | 31.33 | .07 | 11.75 | 21.27 | n/a | .000 |
| | ADD [1024 + 0602] | 1025 3 | 5.0 | .67 | .00 | 25.17 | 21.69 | n/a | .000 |
| | ADD [0807 + 0601] | 0806 3 | 5.0 | 47.38 | .09 | 11.75 | 21.20 | n/a | .000 |
| | ADD [1025 + 0602] | 0809 3 | 5.0 | 15.23 | .13 | 13.83 | 21.69 | n/a | .000 |

**********
** SIMULATION NUMBER: 3 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | MASS STORM [ Ptot= 67.30 mm ] | | 15.0 | | | | | | |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .13] | 0207 1 | 5.0 | 1.22 | .05 | 11.75 | 13.95 | .21 | .000 |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .78] | 1021 1 | 5.0 | 4.66 | .06 | 12.50 | 14.09 | .21 | .000 |
| ** | CALIB NASHYD [CN=55.0 ] [ N = 3.0:Tp .25] | 0202 1 | 5.0 | 1.10 | .02 | 11.92 | 11.20 | .17 | .000 |
| ** | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 1 | 5.0 | 8.70 | .17 | 12.17 | 15.30 | .23 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 1 | 5.0 | .31 | .02 | 11.75 | 28.77 | .43 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 1 | 5.0 | 16.39 | .94 | 11.83 | 32.71 | .49 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 1 | 5.0 | 5.97 | .15 | 12.33 | 23.37 | .35 | .000 |





| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 1 | 5.0 | 4.55 | .10 | 12.42 | 23.37 | .35 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 1 | 5.0 | 2.34 | .19 | 11.75 | 36.33 | .54 | .000 |
| * | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 1 | 5.0 | 2.90 | .12 | 11.92 | 20.45 | .30 | .000 |
| * | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 1 | 5.0 | 5.70 | .06 | 12.42 | 10.61 | .16 | .000 |
| * | CALIB NASHYD [CN=51.1 ] [ N = 3.0:Tp .20] | 0205 1 | 5.0 | 1.41 | .04 | 11.83 | 11.85 | .18 | .000 |
| * | CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 1 | 5.0 | 18.41 | 2.09 | 11.75 | 36.90 | .55 | .000 |
| | DUHYD | 1024 1 | 5.0 | 4.66 | .06 | 12.50 | 14.09 | n/a | .000 |
| | MAJOR SYSTEM: | 1024 2 | 5.0 | .24 | .01 | 12.50 | 14.09 | n/a | .000 |
| | MINOR SYSTEM: | 1024 3 | 5.0 | 4.42 | .05 | 12.08 | 14.09 | n/a | .000 |
| | CHANNEL[ 2 : 0300] | 0701 1 | 5.0 | 4.55 | .08 | 12.83 | 23.28 | n/a | .000 |
| | ADD [0301 + 0701] | 0901 3 | 5.0 | 10.52 | .22 | 12.50 | 23.33 | n/a | .000 |
| | CHANNEL[ 2 : 0901] | 0702 1 | 5.0 | 10.52 | .19 | 12.67 | 23.31 | n/a | .000 |
| | RESRVR [ 2 : 0702] {ST= .01 ha.m } | 0501 1 | 5.0 | 10.52 | .17 | 13.17 | 23.30 | n/a | .000 |
| | ADD [0302 + 0501] | 0902 3 | 5.0 | 26.91 | .96 | 11.83 | 29.03 | n/a | .000 |
| | ADD [0902 + 0303] | 0903 3 | 5.0 | 29.25 | 1.11 | 11.83 | 29.62 | n/a | .000 |
| | ADD [0903 + 0304] | 0904 3 | 5.0 | 32.15 | 1.23 | 11.83 | 28.79 | n/a | .000 |
| | ADD [0305 + 0904] | 0905 3 | 5.0 | 32.46 | 1.23 | 11.83 | 28.79 | n/a | .000 |
| | RESRVR [ 2 : 0905] {ST= .53 ha.m } | 0502 1 | 5.0 | 32.46 | .15 | 15.08 | 28.74 | n/a | .000 |
| | ADD [0502 + 0400] | 0906 3 | 5.0 | 38.16 | .18 | 13.00 | 26.03 | n/a | .000 |
| | DIVERT HYD | 0601 1 | 5.0 | 38.16 | .18 | 13.00 | 26.03 | n/a | .000 |
| | Outflow | 0601 2 | 5.0 | 13.45 | .02 | 13.00 | 26.03 | n/a | .000 |
| | Outflow | 0601 3 | 5.0 | 12.35 | .08 | 13.00 | 26.03 | n/a | .000 |
| | Outflow | 0601 4 | 5.0 | 12.35 | .08 | 13.00 | 26.03 | n/a | .000 |
| | CHANNEL[ 2 : 0601] | 1022 1 | 5.0 | 12.35 | .07 | 14.42 | 26.03 | n/a | .000 |
| | ADD [0103 + 0601] | 1023 3 | 5.0 | 21.05 | .23 | 12.25 | 21.60 | n/a | .000 |
| | ADD [1023 + 0205] | 0802 3 | 5.0 | 22.46 | .24 | 12.25 | 20.99 | n/a | .000 |
| | ADD [0802 + 0201] | 0803 3 | 5.0 | 40.87 | 2.22 | 11.75 | 28.15 | n/a | .000 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ADD [0202 + 0803] | 0804 | 3 | 5.0 | 41.97 | 2.24 | 11.75 | 27.71 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1024 + 0804] | 0810 | 3 | 5.0 | 46.39 | 2.25 | 11.75 | 26.41 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0810] | 1026 | 1 | 5.0 | 46.39 | .27 | 13.42 | 26.36 | n/a | .000 |
| | {ST= .54 ha.m } | | | | | | | | | |
| * | | | | | | | | | | |
| | DIVERT HYD | 0602 | 1 | 5.0 | 46.39 | .27 | 13.42 | 26.36 | n/a | .000 |
| | Outflow | 0602 | 2 | 5.0 | 25.65 | .04 | 13.42 | 26.36 | n/a | .000 |
| | Outflow | 0602 | 3 | 5.0 | 20.19 | .23 | 13.42 | 26.36 | n/a | .000 |
| | Outflow | 0602 | 4 | 5.0 | .56 | .00 | 13.42 | 26.36 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0207 + 0602] | 0807 | 3 | 5.0 | 26.87 | .09 | 11.75 | 25.80 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1024 + 0602] | 1025 | 3 | 5.0 | .80 | .01 | 12.50 | 22.69 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0807 + 0601] | 0806 | 3 | 5.0 | 40.32 | .10 | 11.75 | 25.88 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1025 + 0602] | 0809 | 3 | 5.0 | 20.99 | .23 | 13.42 | 26.22 | n/a | .000 |
| * | | | | | | | | | | |

```
*****************************
** SIMULATION NUMBER:   4 **
*****************************
```

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | MASS STORM | | 15.0 | | | | | | |
| | [ Ptot= 77.87 mm ] | | | | | | | | |
| * | | | | | | | | | |
| ** | CALIB NASHYD | 0207 | 1 | 5.0 | 1.22 | .07 | 11.75 | 18.45 | .24 | .000 |
| | [CN=55.3 ] | | | | | | | | | |
| | [ N = 3.0:Tp .13] | | | | | | | | | |
| * | | | | | | | | | | |
| ** | CALIB NASHYD | 1021 | 1 | 5.0 | 4.66 | .08 | 12.50 | 18.63 | .24 | .000 |
| | [CN=55.3 ] | | | | | | | | | |
| | [ N = 3.0:Tp .78] | | | | | | | | | |
| * | | | | | | | | | | |
| ** | CALIB NASHYD | 0202 | 1 | 5.0 | 1.10 | .03 | 11.92 | 15.38 | .20 | .000 |
| | [CN=55.0 ] | | | | | | | | | |
| | [ N = 3.0:Tp .25] | | | | | | | | | |
| * | | | | | | | | | | |
| ** | CALIB NASHYD | 0103 | 1 | 5.0 | 8.70 | .23 | 12.17 | 20.26 | .26 | .000 |
| | [CN=59.2 ] | | | | | | | | | |
| | [ N = 3.0:Tp .48] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB STANDHYD | 0305 | 1 | 5.0 | .31 | .02 | 11.75 | 35.58 | .46 | .000 |
| | [I%=20.0:S%= .50] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB STANDHYD | 0302 | 1 | 5.0 | 16.39 | 1.31 | 11.83 | 40.27 | .52 | .000 |
| | [I%=20.0:S%= 2.00] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD | 0301 | 1 | 5.0 | 5.97 | .20 | 12.33 | 30.06 | .39 | .000 |
| | [CN=71.0 ] | | | | | | | | | |
| | [ N = 3.0:Tp .63] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD | 0300 | 1 | 5.0 | 4.55 | .14 | 12.42 | 30.06 | .39 | .000 |
| | [CN=71.0 ] | | | | | | | | | |
| | [ N = 3.0:Tp .74] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB STANDHYD | 0303 | 1 | 5.0 | 2.34 | .26 | 11.75 | 44.35 | .57 | .000 |





| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | [I%=25.0:S%= 2.00] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD | 0304 | 1 | 5.0 | 2.90 | .15 | 11.92 | 26.50 | .34 | .000 |
| | [CN=66.6 ] | | | | | | | | | |
| | [ N = 3.0:Tp .28] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD | 0400 | 1 | 5.0 | 5.70 | .08 | 12.42 | 14.40 | .18 | .000 |
| | [CN=50.2 ] | | | | | | | | | |
| | [ N = 3.0:Tp .70] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD | 0205 | 1 | 5.0 | 1.41 | .05 | 11.83 | 15.85 | .20 | .000 |
| | [CN=51.1 ] | | | | | | | | | |
| | [ N = 3.0:Tp .20] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB STANDHYD | 0201 | 1 | 5.0 | 18.41 | 2.66 | 11.75 | 44.08 | .57 | .000 |
| | [I%=43.0:S%= 2.00] | | | | | | | | | |
| * | | | | | | | | | | |
| | DUHYD | 1024 | 1 | 5.0 | 4.66 | .08 | 12.50 | 18.63 | n/a | .000 |
| | MAJOR SYSTEM: | 1024 | 2 | 5.0 | .63 | .03 | 12.50 | 18.63 | n/a | .000 |
| | MINOR SYSTEM: | 1024 | 3 | 5.0 | 4.03 | .05 | 12.00 | 18.63 | n/a | .000 |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .11 | 12.83 | 29.97 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .29 | 12.50 | 30.02 | n/a | .000 |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .26 | 12.67 | 29.99 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0702] | 0501 | 1 | 5.0 | 10.52 | .17 | 13.58 | 29.99 | n/a | .000 |
| | {ST= .04 ha.m } | | | | | | | | | |
| * | | | | | | | | | | |
| | ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | 1.34 | 11.83 | 36.25 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0902 + 0303] | 0903 | 3 | 5.0 | 29.25 | 1.55 | 11.83 | 36.90 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | 1.70 | 11.83 | 35.96 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 1.71 | 11.83 | 35.96 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0905] | 0502 | 1 | 5.0 | 32.46 | .15 | 15.83 | 35.91 | n/a | .000 |
| | {ST= .69 ha.m } | | | | | | | | | |
| * | | | | | | | | | | |
| | ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .22 | 12.58 | 32.70 | n/a | .000 |
| * | | | | | | | | | | |
| | DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .22 | 12.58 | 32.70 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 11.37 | .02 | 12.58 | 32.70 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 13.40 | .10 | 12.58 | 32.70 | n/a | .000 |
| | Outflow | 0601 | 4 | 5.0 | 13.40 | .10 | 12.58 | 32.70 | n/a | .000 |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 13.40 | .08 | 13.50 | 32.70 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0103 + 0601] | 1023 | 3 | 5.0 | 22.10 | .32 | 12.25 | 27.80 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1023 + 0205] | 0802 | 3 | 5.0 | 23.51 | .34 | 12.17 | 27.08 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0802 + 0201] | 0803 | 3 | 5.0 | 41.92 | 2.83 | 11.75 | 34.55 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0202 + 0803] | 0804 | 3 | 5.0 | 43.02 | 2.86 | 11.75 | 34.06 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1024 + 0804] | 0810 | 3 | 5.0 | 47.05 | 2.88 | 11.75 | 32.73 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0810] | 1026 | 1 | 5.0 | 47.05 | .40 | 13.00 | 32.68 | n/a | .000 |
| | {ST= .61 ha.m } | | | | | | | | | |
| * | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | DIVERT HYD | 0602 | 1 | 5.0 | 47.05 | .40 | 13.00 | 32.68 | n/a | .000 |
| | Outflow | 0602 | 2 | 5.0 | 22.05 | .04 | 13.00 | 32.68 | n/a | .000 |
| | Outflow | 0602 | 3 | 5.0 | 24.53 | .36 | 13.00 | 32.68 | n/a | .000 |
| | Outflow | 0602 | 4 | 5.0 | .47 | .00 | 13.00 | 32.68 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0207 + 0602] | 0807 | 3 | 5.0 | 23.27 | .11 | 11.75 | 31.93 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1024 + 0602] | 1025 | 3 | 5.0 | 1.10 | .03 | 12.50 | 24.63 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0807 + 0601] | 0806 | 3 | 5.0 | 34.64 | .13 | 11.75 | 32.18 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1025 + 0602] | 0809 | 3 | 5.0 | 25.63 | .38 | 12.83 | 32.34 | n/a | .000 |
| * | | | | | | | | | | |

```
*****************************
** SIMULATION NUMBER:   5 **
*****************************
```

| W/E | COMMAND | HYD ID | | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | | |
| | MASS STORM [ Ptot= 85.54 mm ] | | | 15.0 | | | | | | |
| * | | | | | | | | | | |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .13] | 0207 | 1 | 5.0 | 1.22 | .09 | 11.75 | 21.99 | .26 | .000 |
| * | | | | | | | | | | |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .78] | 1021 | 1 | 5.0 | 4.66 | .10 | 12.50 | 22.21 | .26 | .000 |
| * | | | | | | | | | | |
| ** | CALIB NASHYD [CN=55.0 ] [ N = 3.0:Tp .25] | 0202 | 1 | 5.0 | 1.10 | .04 | 11.92 | 18.71 | .22 | .000 |
| * | | | | | | | | | | |
| ** | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .28 | 12.17 | 24.15 | .28 | .000 |
| * | | | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 | 5.0 | .31 | .02 | 11.75 | 40.75 | .48 | .000 |
| * | | | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | 1.52 | 11.83 | 45.98 | .54 | .000 |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .24 | 12.33 | 35.20 | .41 | .000 |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .16 | 12.42 | 35.20 | .41 | .000 |
| * | | | | | | | | | | |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .30 | 11.75 | 50.38 | .59 | .000 |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .18 | 11.92 | 31.18 | .36 | .000 |
| * | | | | | | | | | | |
| * | CALIB NASHYD | 0400 | 1 | 5.0 | 5.70 | .10 | 12.42 | 17.42 | .20 | .000 |





| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | [CN=50.2 ] [ N = 3.0:Tp .70] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=51.1 ] [ N = 3.0:Tp .20] | 0205 | 1 | 5.0 | 1.41 | .07 | 11.83 | 19.02 | .22 | .000 |
| * | | | | | | | | | | |
| * | CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 | 5.0 | 18.41 | 2.99 | 11.75 | 49.45 | .58 | .000 |
| * | | | | | | | | | | |
| | DUHYD | 1024 | 1 | 5.0 | 4.66 | .10 | 12.50 | 22.21 | n/a | .000 |
| | MAJOR SYSTEM: | 1024 | 2 | 5.0 | .89 | .05 | 12.50 | 22.21 | n/a | .000 |
| | MINOR SYSTEM: | 1024 | 3 | 5.0 | 3.77 | .05 | 11.92 | 22.21 | n/a | .000 |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .13 | 12.83 | 35.10 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .34 | 12.50 | 35.16 | n/a | .000 |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .31 | 12.67 | 35.13 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0702] {ST= .06 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 13.83 | 35.13 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | 1.56 | 11.83 | 41.74 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0902 + 0303] | 0903 | 3 | 5.0 | 29.25 | 1.81 | 11.83 | 42.43 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | 1.98 | 11.83 | 41.41 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 1.99 | 11.83 | 41.41 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0905] {ST= .83 ha.m } | 0502 | 1 | 5.0 | 32.46 | .15 | 16.25 | 41.36 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .25 | 12.42 | 37.78 | n/a | .000 |
| * | | | | | | | | | | |
| | DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .25 | 12.42 | 37.78 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 10.40 | .02 | 12.42 | 37.78 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 13.88 | .11 | 12.42 | 37.78 | n/a | .000 |
| | Outflow | 0601 | 4 | 5.0 | 13.88 | .11 | 12.42 | 37.78 | n/a | .000 |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 13.88 | .09 | 13.25 | 37.78 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0103 + 0601] | 1023 | 3 | 5.0 | 22.58 | .38 | 12.17 | 32.53 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1023 + 0205] | 0802 | 3 | 5.0 | 23.99 | .41 | 12.17 | 31.74 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0802 + 0201] | 0803 | 3 | 5.0 | 42.40 | 3.21 | 11.75 | 39.43 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0202 + 0803] | 0804 | 3 | 5.0 | 43.50 | 3.24 | 11.75 | 38.90 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [1024 + 0804] | 0810 | 3 | 5.0 | 47.28 | 3.27 | 11.75 | 37.57 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0810] {ST= .67 ha.m } | 1026 | 1 | 5.0 | 47.28 | .50 | 12.83 | 37.51 | n/a | .000 |
| * | | | | | | | | | | |
| | DIVERT HYD | 0602 | 1 | 5.0 | 47.28 | .50 | 12.83 | 37.51 | n/a | .000 |
| | Outflow | 0602 | 2 | 5.0 | 20.49 | .04 | 12.83 | 37.51 | n/a | .000 |
| | Outflow | 0602 | 3 | 5.0 | 26.36 | .46 | 12.83 | 37.51 | n/a | .000 |
| | Outflow | 0602 | 4 | 5.0 | .43 | .00 | 12.83 | 37.51 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0207 + 0602] | 0807 | 3 | 5.0 | 21.71 | .13 | 11.75 | 36.64 | n/a | .000 |
| * | | | | | | | | | | |

| W/E | COMMAND | HYD | ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|---|
| | ADD [1024 + 0602] | 1025 | 3 | 5.0 | 1.31 | .05 | 12.50 | 27.21 | n/a | .000 |
| | ADD [0807 + 0601] | 0806 | 3 | 5.0 | 32.11 | .15 | 11.75 | 37.01 | n/a | .000 |
| | ADD [1025 + 0602] | 0809 | 3 | 5.0 | 27.67 | .50 | 12.75 | 37.02 | n/a | .000 |

**********
** SIMULATION NUMBER: 6 **
**********

| W/E | COMMAND | HYD | ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | | |
| | MASS STORM [ Ptot= 93.32 mm ] | | | 15.0 | | | | | | |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .13] | 0207 | 1 | 5.0 | 1.22 | .10 | 11.75 | 25.80 | .28 | .000 |
| ** | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .78] | 1021 | 1 | 5.0 | 4.66 | .11 | 12.50 | 26.05 | .28 | .000 |
| ** | CALIB NASHYD [CN=55.0 ] [ N = 3.0:Tp .25] | 0202 | 1 | 5.0 | 1.10 | .05 | 11.92 | 22.32 | .24 | .000 |
| ** | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .33 | 12.17 | 28.32 | .30 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 | 5.0 | .31 | .02 | 11.75 | 46.18 | .49 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | 1.74 | 11.83 | 51.92 | .56 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .27 | 12.33 | 40.61 | .44 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .19 | 12.42 | 40.61 | .44 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .34 | 11.75 | 56.62 | .61 | .000 |
| * | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .21 | 11.92 | 36.14 | .39 | .000 |
| * | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .12 | 12.42 | 20.70 | .22 | .000 |
| * | CALIB NASHYD [CN=51.1 ] [ N = 3.0:Tp .20] | 0205 | 1 | 5.0 | 1.41 | .08 | 11.83 | 22.44 | .24 | .000 |





| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| * | CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 | 5.0 | 18.41 | 3.34 | 11.75 | 55.01 | .59 | .000 |
| | DUHYD | 1024 | 1 | 5.0 | 4.66 | .11 | 12.50 | 26.05 | n/a | .000 |
| | MAJOR SYSTEM: | 1024 | 2 | 5.0 | 1.11 | .07 | 12.50 | 26.05 | n/a | .000 |
| | MINOR SYSTEM: | 1024 | 3 | 5.0 | 3.55 | .05 | 11.83 | 26.05 | n/a | .000 |
| | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .15 | 12.75 | 40.51 | n/a | .000 |
| | ADD [0301 + 0701] | 0901 | 3 | 5.0 | 10.52 | .40 | 12.42 | 40.57 | n/a | .000 |
| | CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .36 | 12.67 | 40.54 | n/a | .000 |
| | RESRVR [ 2 : 0702] {ST= .09 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 14.00 | 40.54 | n/a | .000 |
| | ADD [0302 + 0501] | 0902 | 3 | 5.0 | 26.91 | 1.80 | 11.83 | 47.47 | n/a | .000 |
| | ADD [0902 + 0303] | 0903 | 3 | 5.0 | 29.25 | 2.08 | 11.83 | 48.21 | n/a | .000 |
| | ADD [0903 + 0304] | 0904 | 3 | 5.0 | 32.15 | 2.28 | 11.83 | 47.12 | n/a | .000 |
| | ADD [0305 + 0904] | 0905 | 3 | 5.0 | 32.46 | 2.29 | 11.83 | 47.11 | n/a | .000 |
| | RESRVR [ 2 : 0905] {ST= .88 ha.m } | 0502 | 1 | 5.0 | 32.46 | .28 | 16.00 | 47.06 | n/a | .000 |
| | ADD [0502 + 0400] | 0906 | 3 | 5.0 | 38.16 | .30 | 15.92 | 43.12 | n/a | .000 |
| | DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .30 | 15.92 | 43.12 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 9.33 | .02 | 15.92 | 43.12 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 14.42 | .14 | 15.92 | 43.12 | n/a | .000 |
| | Outflow | 0601 | 4 | 5.0 | 14.42 | .14 | 15.92 | 43.12 | n/a | .000 |
| | CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 14.42 | .14 | 16.17 | 43.12 | n/a | .000 |
| | ADD [0103 + 0601] | 1023 | 3 | 5.0 | 23.12 | .45 | 12.17 | 37.55 | n/a | .000 |
| | ADD [1023 + 0205] | 0802 | 3 | 5.0 | 24.55 | .48 | 12.08 | 36.68 | n/a | .000 |
| | ADD [0802 + 0201] | 0803 | 3 | 5.0 | 42.94 | 3.60 | 11.75 | 44.54 | n/a | .000 |
| | ADD [0202 + 0803] | 0804 | 3 | 5.0 | 44.04 | 3.64 | 11.75 | 43.99 | n/a | .000 |
| | ADD [1024 + 0804] | 0810 | 3 | 5.0 | 47.59 | 3.68 | 11.75 | 42.65 | n/a | .000 |
| | RESRVR [ 2 : 0810] {ST= .72 ha.m } | 1026 | 1 | 5.0 | 47.59 | .61 | 12.75 | 42.59 | n/a | .000 |
| | DIVERT HYD | 0602 | 1 | 5.0 | 47.59 | .61 | 12.75 | 42.59 | n/a | .000 |
| | Outflow | 0602 | 2 | 5.0 | 18.51 | .04 | 12.75 | 42.59 | n/a | .000 |
| | Outflow | 0602 | 3 | 5.0 | 28.70 | .56 | 12.75 | 42.59 | n/a | .000 |
| | Outflow | 0602 | 4 | 5.0 | .38 | .00 | 12.75 | 42.59 | n/a | .000 |
| | ADD [0207 + 0602] | 0807 | 3 | 5.0 | 19.73 | .15 | 11.75 | 41.55 | n/a | .000 |
| | ADD [1024 + 0602] | 1025 | 3 | 5.0 | 1.49 | .07 | 12.50 | 30.26 | n/a | .000 |
| | ADD [0807 + 0601] | 0806 | 3 | 5.0 | 29.05 | .16 | 11.75 | 42.05 | n/a | .000 |
| | ADD [1025 + 0602] | 0809 | 3 | 5.0 | 30.19 | .62 | 12.67 | 41.98 | n/a | .000 |

FINISH

```
 V     V   I    SSSSS  U   U    A    L
 V     V   I    SS     U   U   A A   L
  V   V    I     SS    U   U  AAAAA  L
  V   V    I      SS   U   U  A   A  L
   VV      I    SSSSS  UUUUU  A   A  LLLLL

  OOO    TTTTT  TTTTT  H   H  Y   Y  M   M   OOO
 O   O     T      T    H   H   Y Y   MM MM  O   O
 O   O     T      T    H   H    Y    M M M  O   O
  OOO      T      T    H   H    Y    M   M   OOO
```

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***** S U M M A R Y  O U T P U T *****

Input filename: C:\Program Files (x86)\Visual OTTHYMO 2.3.2\voin.dat

Output filename: i:\2015 Projects\115224 - Mair Mills Village External Works\Design\115224 VO2 model (Mar 2016)\Post Development - CHI.ou
Summary filename: i:\2015 Projects\115224 - Mair Mills Village External Works\Design\115224 VO2 model (Mar 2016)\Post Development - CHI.su

DATE: 22/04/2016 TIME: 11:21:22 AM

USER:

COMMENTS: _____

****************************
** SIMULATION NUMBER: 1 **
****************************

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 24.97 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\CHIC25MM.4HR | | | | | | | | |
| | remark: OWEN SOUND 25 mm (from a 2 year-4hr storm) | | | | | | | | |
| * | | | | | | | | | |
| ** | CALIB NASHYD [CN=50.2 ] | 0400 | 1 5.0 | 5.70 | .01 | 2.92 | .84 | .03 | .000 |
| | [ N = 3.0:Tp .70] | | | | | | | | |
| * | | | | | | | | | |
| ** | CALIB NASHYD [CN=66.6 ] | 0304 | 1 5.0 | 2.90 | .02 | 2.25 | 2.71 | .11 | .000 |





| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | [ N = 3.0:Tp .28] | | | | | | | | | |
| * | | | | | | | | | | |
| ** | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .07 | 2.00 | 9.00 | .36 | .000 |
| * | | | | | | | | | | |
| ** | CALIB NASHYD [CN=71.0 ] | 0300 | 1 5.0 | 4.55 | .02 | 2.83 | 3.22 | .13 | .000 |
| | [ N = 3.0:Tp .74] | | | | | | | | | |
| * | | | | | | | | | | |
| ** | CALIB NASHYD [CN=71.0 ] | 0301 | 1 5.0 | 5.97 | .03 | 2.67 | 3.22 | .13 | .000 |
| | [ N = 3.0:Tp .63] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 5.0 | 16.39 | .32 | 2.08 | 7.62 | .31 | .000 |
| * | | | | | | | | | | |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .01 | 1.92 | 6.58 | .26 | .000 |
| * | | | | | | | | | | |
| * | CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 5.0 | 18.41 | 1.21 | 1.92 | 11.36 | .45 | .000 |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=51.1 ] | 0205 | 1 5.0 | 1.41 | .01 | 2.17 | 1.19 | .05 | .000 |
| | [ N = 3.0:Tp .20] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=59.2 ] | 0103 | 1 5.0 | 8.70 | .03 | 2.50 | 1.61 | .06 | .000 |
| | [ N = 3.0:Tp .48] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=55.0 ] | 0202 | 1 5.0 | 1.10 | .00 | 2.33 | .64 | .03 | .000 |
| | [ N = 3.0:Tp .25] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=55.3 ] | 1021 | 1 5.0 | 4.66 | .01 | 2.92 | 1.60 | .06 | .000 |
| | [ N = 3.0:Tp .78] | | | | | | | | | |
| * | | | | | | | | | | |
| * | CALIB NASHYD [CN=55.3 ] | 0207 | 1 5.0 | 1.22 | .01 | 2.00 | 1.59 | .06 | .000 |
| | [ N = 3.0:Tp .13] | | | | | | | | | |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0300] | 0701 | 1 5.0 | 4.55 | .01 | 3.67 | 3.13 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0701 + 0301] | 0901 | 3 5.0 | 10.52 | .04 | 2.83 | 3.18 | n/a | .000 |
| * | | | | | | | | | | |
| | DUHYD | 1024 | 1 5.0 | 4.66 | .01 | 2.92 | 1.60 | n/a | .000 |
| | MAJOR SYSTEM: | 1024 | 2 5.0 | .00 | .00 | .00 | .00 | n/a | .000 |
| | MINOR SYSTEM: | 1024 | 3 5.0 | 4.66 | .01 | 2.92 | 1.60 | n/a | .000 |
| * | | | | | | | | | | |
| | CHANNEL[ 2 : 0901] | 0702 | 1 5.0 | 10.52 | .03 | 3.42 | 3.16 | n/a | .000 |
| * | | | | | | | | | | |
| | RESRVR [ 2 : 0702] {ST= .00 ha.m } | 0501 | 1 5.0 | 10.52 | .03 | 3.58 | 3.15 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0501 + 0302] | 0902 | 3 5.0 | 26.91 | .32 | 2.08 | 5.88 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0303 + 0902] | 0903 | 3 5.0 | 29.25 | .38 | 2.08 | 6.13 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0304 + 0903] | 0904 | 3 5.0 | 32.15 | .40 | 2.08 | 5.82 | n/a | .000 |
| * | | | | | | | | | | |
| | ADD [0904 + 0305] | 0905 | 3 5.0 | 32.46 | .40 | 2.08 | 5.83 | n/a | .000 |
| * | | | | | | | | | | |

```
      RESRVR [ 2 : 0905] 0502  1  5.0   32.46     .01  5.92   5.77  n/a    .000
      {ST=    .17 ha.m }
*
      ADD [0400 + 0502]  0906  3  5.0   38.16     .02  3.25   5.04  n/a    .000
*
      DIVERT HYD         0601  1  5.0   38.16     .02  3.25   5.04  n/a    .000
         Outflow         0601  2  5.0   34.14     .02  3.25   5.04  n/a    .000
         Outflow         0601  3  5.0    2.01     .00  3.25   5.04  n/a    .000
         Outflow         0601  4  5.0    2.01     .00  3.25   5.04  n/a    .000
*
      CHANNEL[ 2 : 0601] 1022  1  5.0    2.01     .00  5.17   5.03  n/a    .000
*
      ADD [0601 + 0103]  1023  3  5.0   10.71     .03  2.50   2.26  n/a    .000
*
      ADD [0205 + 1023]  0802  3  5.0   12.12     .03  2.50   2.13  n/a    .000
*
      ADD [0201 + 0802]  0803  3  5.0   30.53    1.22  1.92   7.70  n/a    .000
*
      ADD [0803 + 0202]  0804  3  5.0   31.63    1.22  1.92   7.45  n/a    .000
*
      ADD [0804 + 1024]  0810  3  5.0   36.29    1.22  1.92   6.70  n/a    .000
*
      RESRVR [ 2 : 0810] 1026  1  5.0   36.29     .02  4.17   6.63  n/a    .000
      {ST=    .21 ha.m }
*
      DIVERT HYD         0602  1  5.0   36.29     .02  4.17   6.63  n/a    .000
         Outflow         0602  2  5.0   34.68     .02  4.17   6.63  n/a    .000
         Outflow         0602  3  5.0     .81     .00  4.17   6.63  n/a    .000
         Outflow         0602  4  5.0     .81     .00  4.17   6.63  n/a    .000
*
      ADD [0602 + 0207]  0807  3  5.0   35.90     .02  4.00   6.46  n/a    .000
*
      ADD [1024 + 0602]  1025  3  5.0     .81     .00  4.17   6.63  n/a    .000
*
      ADD [0601 + 0807]  0806  3  5.0   70.04     .04  3.58   5.77  n/a    .000
*
      ADD [0602 + 1025]  0809  3  5.0    1.61     .00  4.17   6.63  n/a    .000
*
   ******************************
   ** SIMULATION NUMBER:   2 **
   ******************************

   W/E COMMAND              HYD ID   DT    AREA   Qpeak Tpeak   R.V. R.C.   Qbase
                                     min     ha     cms   hrs     mm          cms

      START @   .00 hrs
      ----  ------------
      READ STORM                     6.0
      [ Ptot= 33.75 mm ]
      fname : I:\2015 Projects\115224 - Mair Mills Village External
Works\Design\Owen Sound\OSCHI2.4HR
      remark: OWEN SOUND 2 YEAR 4 HOUR DURATION CHICAGO STORM

*
   **  CALIB NASHYD       0400  1  5.0    5.70     .02  2.83   2.05  .06    .000
      [CN=50.2       ]
      [ N = 3.0:Tp  .70]
*
   **  CALIB NASHYD       0304  1  5.0    2.90     .04  2.17   5.29  .16    .000
      [CN=66.6       ]
      [ N = 3.0:Tp  .28]
*
   **  CALIB STANDHYD     0303  1  5.0    2.34     .12  1.92  13.81  .41    .000
```





```
      [I%=25.0:S%= 2.00]
*
   **  CALIB NASHYD       0300  1  5.0    4.55     .04  2.75   6.24  .18    .000
      [CN=71.0       ]
      [ N = 3.0:Tp  .74]
*
   **  CALIB NASHYD       0301  1  5.0    5.97     .06  2.67   6.24  .18    .000
      [CN=71.0       ]
      [ N = 3.0:Tp  .63]
*
   *  CALIB STANDHYD     0302  1  5.0   16.39     .52  2.00  11.92  .35    .000
      [I%=20.0:S%= 2.00]
*
   *  CALIB STANDHYD     0305  1  5.0     .31     .01  1.92  10.35  .31    .000
      [I%=20.0:S%=  .50]
*
   *  CALIB STANDHYD     0201  1  5.0   18.41    1.78  1.92  16.16  .48    .000
      [I%=43.0:S%= 2.00]
*
   *  CALIB NASHYD       0205  1  5.0    1.41     .01  2.08   2.59  .08    .000
      [CN=51.1       ]
      [ N = 3.0:Tp  .20]
*
   *  CALIB NASHYD       0103  1  5.0    8.70     .06  2.50   3.47  .10    .000
      [CN=59.2       ]
      [ N = 3.0:Tp  .48]
*
   *  CALIB NASHYD       0202  1  5.0    1.10     .01  2.25   1.87  .06    .000
      [CN=55.0       ]
      [ N = 3.0:Tp  .25]
*
   *  CALIB NASHYD       1021  1  5.0    4.66     .02  2.83   3.30  .10    .000
      [CN=55.3       ]
      [ N = 3.0:Tp  .78]
*
   *  CALIB NASHYD       0207  1  5.0    1.22     .02  2.00   3.27  .10    .000
      [CN=55.3       ]
      [ N = 3.0:Tp  .13]
*
      CHANNEL[ 2 : 0300] 0701  1  5.0    4.55     .03  3.42   6.14  n/a    .000
*
      ADD [0701 + 0301]  0901  3  5.0   10.52     .08  2.83   6.20  n/a    .000
*
      DUHYD              1024  1  5.0    4.66     .02  2.83   3.30  n/a    .000
         MAJOR SYSTEM:   1024  2  5.0     .00     .00   .00    .00  n/a    .000
         MINOR SYSTEM:   1024  3  5.0    4.66     .02  2.83   3.30  n/a    .000
*
      CHANNEL[ 2 : 0901] 0702  1  5.0   10.52     .07  3.25   6.17  n/a    .000
*
      RESRVR [ 2 : 0702] 0501  1  5.0   10.52     .06  3.42   6.17  n/a    .000
      {ST=    .00 ha.m }
*
      ADD [0501 + 0302]  0902  3  5.0   26.91     .52  2.00   9.67  n/a    .000
*
      ADD [0303 + 0902]  0903  3  5.0   29.25     .62  2.00  10.00  n/a    .000
*
      ADD [0304 + 0903]  0904  3  5.0   32.15     .65  2.00   9.58  n/a    .000
*
      ADD [0904 + 0305]  0905  3  5.0   32.46     .66  2.00   9.59  n/a    .000
*
      RESRVR [ 2 : 0905] 0502  1  5.0   32.46     .04  5.08   9.53  n/a    .000
      {ST=    .27 ha.m }
*
```

```
*    ADD [0400 + 0502]   0906  3  5.0    38.16     .04  4.42   8.42  n/a    .000
*
     DIVERT HYD          0601  1  5.0    38.16     .04  4.42   8.42  n/a    .000
        Outflow          0601  2  5.0    30.51     .02  4.42   8.42  n/a    .000
        Outflow          0601  3  5.0     3.83     .01  4.42   8.42  n/a    .000
        Outflow          0601  4  5.0     3.83     .01  4.42   8.42  n/a    .000
*
*    CHANNEL[ 2 : 0601] 1022  1  5.0     3.83     .01  5.75   8.41  n/a    .000
*
*    ADD [0601 + 0103]   1023  3  5.0    12.53     .06  2.50   4.98  n/a    .000
*
*    ADD [0205 + 1023]   0802  3  5.0    13.94     .07  2.50   4.74  n/a    .000
*
*    ADD [0201 + 0802]   0803  3  5.0    32.35    1.79  1.92  11.24  n/a    .000
*
*    ADD [0803 + 0202]   0804  3  5.0    33.45    1.79  1.92  10.93  n/a    .000
*
*    ADD [0804 + 1024]   0810  3  5.0    38.11    1.79  1.92  10.00  n/a    .000
*
     RESRVR [ 2 : 0810] 1026  1  5.0    38.11     .03  4.33   9.93  n/a    .000
     {ST=   .32 ha.m }
*
     DIVERT HYD          0602  1  5.0    38.11     .03  4.33   9.93  n/a    .000
        Outflow          0602  2  5.0    36.41     .03  4.33   9.93  n/a    .000
        Outflow          0602  3  5.0      .85     .00  4.33   9.93  n/a    .000
        Outflow          0602  4  5.0      .85     .00  4.33   9.93  n/a    .000
*
*    ADD [0602 + 0207]   0807  3  5.0    37.63     .04  2.08   9.72  n/a    .000
*
*    ADD [1024 + 0602]   1025  3  5.0      .85     .00  4.33   9.93  n/a    .000
*
*    ADD [0601 + 0807]   0806  3  5.0    68.14     .05  4.00   9.14  n/a    .000
*
*    ADD [0602 + 1025]   0809  3  5.0     1.69     .00  4.33   9.93  n/a    .000
*
  ****************************
  ** SIMULATION NUMBER:   3 **
  ****************************

  W/E COMMAND              HYD ID   DT     AREA    Qpeak  Tpeak   R.V.  R.C.   Qbase
                                    min      ha      cms    hrs     mm             cms

     START @   .00 hrs
     ----   ------------
     READ STORM                    6.0
     [ Ptot= 44.07 mm ]
     fname : I:\2015 Projects\115224 - Mair Mills Village External
Works\Design\Owen Sound\OSCHI5.4HR
     remark: OWEN SOUND 5 YEAR 4 HOUR DURATION CHICAGO STORM

*
  **  CALIB NASHYD        0400  1  5.0     5.70     .03  2.75   4.06  .09    .000
     [CN=50.2       ]
     [ N = 3.0:Tp  .70]
*
  **  CALIB NASHYD        0304  1  5.0     2.90     .08  2.17   9.16  .21    .000
     [CN=66.6       ]
     [ N = 3.0:Tp  .28]
*
  **  CALIB STANDHYD      0303  1  5.0     2.34     .17  1.92  20.13  .46    .000
     [I%=25.0:S%= 2.00]
*
  **  CALIB NASHYD        0300  1  5.0     4.55     .07  2.75  10.69  .24    .000
```





```
     [CN=71.0       ]
     [ N = 3.0:Tp  .74]
*
  **  CALIB NASHYD        0301  1  5.0     5.97     .11  2.67  10.69  .24    .000
     [CN=71.0       ]
     [ N = 3.0:Tp  .63]
*
   *  CALIB STANDHYD      0302  1  5.0    16.39     .79  2.00  17.67  .40    .000
     [I%=20.0:S%= 2.00]
*
   *  CALIB STANDHYD      0305  1  5.0      .31     .02  1.92  15.40  .35    .000
     [I%=20.0:S%=  .50]
*
   *  CALIB STANDHYD      0201  1  5.0    18.41    2.43  1.92  22.16  .50    .000
     [I%=43.0:S%= 2.00]
*
   *  CALIB NASHYD        0205  1  5.0     1.41     .02  2.08   4.82  .11    .000
     [CN=51.1       ]
     [ N = 3.0:Tp  .20]
*
   *  CALIB NASHYD        0103  1  5.0     8.70     .11  2.50   6.37  .14    .000
     [CN=59.2       ]
     [ N = 3.0:Tp  .48]
*
   *  CALIB NASHYD        0202  1  5.0     1.10     .01  2.17   4.01  .09    .000
     [CN=55.0       ]
     [ N = 3.0:Tp  .25]
*
   *  CALIB NASHYD        1021  1  5.0     4.66     .04  2.83   5.95  .14    .000
     [CN=55.3       ]
     [ N = 3.0:Tp  .78]
*
   *  CALIB NASHYD        0207  1  5.0     1.22     .03  2.00   5.90  .13    .000
     [CN=55.3       ]
     [ N = 3.0:Tp  .13]
*
*    CHANNEL[ 2 : 0300] 0701  1  5.0     4.55     .05  3.33  10.59  n/a    .000
*
*    ADD [0701 + 0301]   0901  3  5.0    10.52     .14  2.83  10.64  n/a    .000
*
     DUHYD               1024  1  5.0     4.66     .04  2.83   5.95  n/a    .000
        MAJOR SYSTEM:    1024  2  5.0      .00     .00   .00    .00  n/a    .000
        MINOR SYSTEM:    1024  3  5.0     4.66     .04  2.83   5.95  n/a    .000
*
*    CHANNEL[ 2 : 0901] 0702  1  5.0    10.52     .13  3.17  10.62  n/a    .000
*
     RESRVR [ 2 : 0702] 0501  1  5.0    10.52     .12  3.42  10.61  n/a    .000
     {ST=   .01 ha.m }
*
*    ADD [0501 + 0302]   0902  3  5.0    26.91     .79  2.00  14.91  n/a    .000
*
*    ADD [0303 + 0902]   0903  3  5.0    29.25     .94  2.00  15.33  n/a    .000
*
*    ADD [0304 + 0903]   0904  3  5.0    32.15     .99  2.00  14.77  n/a    .000
*
*    ADD [0904 + 0305]   0905  3  5.0    32.46    1.00  2.00  14.78  n/a    .000
*
     RESRVR [ 2 : 0905] 0502  1  5.0    32.46     .10  4.50  14.73  n/a    .000
     {ST=   .38 ha.m }
*
*    ADD [0400 + 0502]   0906  3  5.0    38.16     .11  4.17  13.14  n/a    .000
*
     DIVERT HYD          0601  1  5.0    38.16     .11  4.17  13.14  n/a    .000
```

```
   Outflow          0601  2  5.0    21.76     .02  4.17  13.14  n/a    .000
   Outflow          0601  3  5.0     8.20     .04  4.17  13.14  n/a    .000
   Outflow          0601  4  5.0     8.20     .04  4.17  13.14  n/a    .000
*
   CHANNEL[ 2 : 0601] 1022  1  5.0     8.20     .04  4.83  13.13  n/a    .000
*
   ADD [0601 + 0103]  1023  3  5.0    16.90     .13  2.58   9.65  n/a    .000
*
   ADD [0205 + 1023]  0802  3  5.0    18.31     .14  2.58   9.28  n/a    .000
*
   ADD [0201 + 0802]  0803  3  5.0    36.72    2.46  1.92  15.74  n/a    .000
*
   ADD [0803 + 0202]  0804  3  5.0    37.82    2.46  1.92  15.40  n/a    .000
*
   ADD [0804 + 1024]  0810  3  5.0    42.48    2.47  1.92  14.36  n/a    .000
*
   RESRVR [ 2 : 0810] 1026  1  5.0    42.48     .12  4.08  14.31  n/a    .000
   {ST=    .46 ha.m }
*
   DIVERT HYD         0602  1  5.0    42.48     .12  4.08  14.31  n/a    .000
   Outflow            0602  2  5.0    36.53     .04  4.08  14.31  n/a    .000
   Outflow            0602  3  5.0     5.10     .08  4.08  14.31  n/a    .000
   Outflow            0602  4  5.0      .84     .00  4.08  14.31  n/a    .000
*
   ADD [0602 + 0207]  0807  3  5.0    37.75     .06  2.08  14.03  n/a    .000
*
   ADD [1024 + 0602]  1025  3  5.0     .84      .00  7.42  14.31  n/a    .000
*
   ADD [0601 + 0807]  0806  3  5.0    59.52     .08  2.08  13.71  n/a    .000
*
   ADD [0602 + 1025]  0809  3  5.0     5.95     .08  4.08  14.31  n/a    .000
*
 ****************************
 ** SIMULATION NUMBER:   4 **
 ****************************

 W/E COMMAND              HYD ID   DT     AREA   Qpeak Tpeak   R.V. R.C.   Qbase
                                  min      ha     cms   hrs     mm          cms

   START @   .00 hrs
   ----    -------------
   READ STORM                    6.0
   [ Ptot= 50.59 mm ]
   fname : I:\2015 Projects\115224 - Mair Mills Village External
Works\Design\Owen Sound\OSchi10.4hr
   remark: OWEN SOUND 10 YEAR 4 HOUR DURATION CHICAGO STORM

*
 **  CALIB NASHYD       0400  1  5.0     5.70     .05  2.75   5.63  .11    .000
   [CN=50.2       ]
   [ N = 3.0:Tp  .70]
*
 **  CALIB NASHYD       0304  1  5.0     2.90     .11  2.17  12.01  .24    .000
   [CN=66.6       ]
   [ N = 3.0:Tp  .28]
*
 **  CALIB STANDHYD     0303  1  5.0     2.34     .22  1.92  24.44  .48    .000
   [I%=25.0:S%= 2.00]
*
 **  CALIB NASHYD       0300  1  5.0     4.55     .10  2.75  13.92  .28    .000
   [CN=71.0       ]
   [ N = 3.0:Tp  .74]
*
```





```
 **  CALIB NASHYD       0301  1  5.0     5.97     .14  2.58  13.92  .28    .000
   [CN=71.0       ]
   [ N = 3.0:Tp  .63]
*
 *   CALIB STANDHYD     0302  1  5.0    16.39    1.07  2.08  21.64  .43    .000
   [I%=20.0:S%= 2.00]
*
 *   CALIB STANDHYD     0305  1  5.0      .31     .02  1.92  18.91  .37    .000
   [I%=20.0:S%=  .50]
*
 *   CALIB STANDHYD     0201  1  5.0    18.41    2.89  1.92  26.14  .52    .000
   [I%=43.0:S%= 2.00]
*
 *   CALIB NASHYD       0205  1  5.0     1.41     .03  2.08   6.53  .13    .000
   [CN=51.1       ]
   [ N = 3.0:Tp  .20]
*
 *   CALIB NASHYD       0103  1  5.0     8.70     .15  2.42   8.57  .17    .000
   [CN=59.2       ]
   [ N = 3.0:Tp  .48]
*
 *   CALIB NASHYD       0202  1  5.0     1.10     .02  2.17   5.72  .11    .000
   [CN=55.0       ]
   [ N = 3.0:Tp  .25]
*
 *   CALIB NASHYD       1021  1  5.0     4.66     .05  2.83   7.96  .16    .000
   [CN=55.3       ]
   [ N = 3.0:Tp  .78]
*
 *   CALIB NASHYD       0207  1  5.0     1.22     .05  2.00   7.88  .16    .000
   [CN=55.3       ]
   [ N = 3.0:Tp  .13]
*
   CHANNEL[ 2 : 0300] 0701  1  5.0     4.55     .07  3.25  13.82  n/a    .000
*
   ADD [0701 + 0301]  0901  3  5.0    10.52     .20  2.83  13.88  n/a    .000
*
   DUHYD              1024  1  5.0     4.66     .05  2.83   7.96  n/a    .000
   MAJOR SYSTEM:      1024  2  5.0      .19     .01  2.83   7.96  n/a    .000
   MINOR SYSTEM:      1024  3  5.0     4.47     .05  2.50   7.96  n/a    .000
*
   CHANNEL[ 2 : 0901] 0702  1  5.0    10.52     .17  3.08  13.85  n/a    .000
*
   RESRVR [ 2 : 0702] 0501  1  5.0    10.52     .16  3.33  13.85  n/a    .000
   {ST=    .01 ha.m }
*
   ADD [0501 + 0302]  0902  3  5.0    26.91    1.08  2.08  18.59  n/a    .000
*
   ADD [0303 + 0902]  0903  3  5.0    29.25    1.26  2.00  19.06  n/a    .000
*
   ADD [0304 + 0903]  0904  3  5.0    32.15    1.35  2.08  18.42  n/a    .000
*
   ADD [0904 + 0305]  0905  3  5.0    32.46    1.36  2.08  18.43  n/a    .000
*
   RESRVR [ 2 : 0905] 0502  1  5.0    32.46     .13  4.42  18.38  n/a    .000
   {ST=    .46 ha.m }
*
   ADD [0400 + 0502]  0906  3  5.0    38.16     .15  3.92  16.47  n/a    .000
*
   DIVERT HYD         0601  1  5.0    38.16     .15  3.92  16.47  n/a    .000
   Outflow            0601  2  5.0    18.05     .02  3.92  16.47  n/a    .000
   Outflow            0601  3  5.0    10.06     .07  3.92  16.47  n/a    .000
   Outflow            0601  4  5.0    10.06     .07  3.92  16.47  n/a    .000
```

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 10.06 | .06 | 4.58 | 16.47 | n/a | .000 |
| ADD [0601 + 0103] | 1023 | 3 | 5.0 | 18.76 | .20 | 2.58 | 12.81 | n/a | .000 |
| ADD [0205 + 1023] | 0802 | 3 | 5.0 | 20.17 | .21 | 2.50 | 12.37 | n/a | .000 |
| ADD [0201 + 0802] | 0803 | 3 | 5.0 | 38.58 | 2.93 | 1.92 | 18.94 | n/a | .000 |
| ADD [0803 + 0202] | 0804 | 3 | 5.0 | 39.68 | 2.94 | 1.92 | 18.57 | n/a | .000 |
| ADD [0804 + 1024] | 0810 | 3 | 5.0 | 44.15 | 2.94 | 1.92 | 17.50 | n/a | .000 |
| RESRVR [ 2 : 0810] {ST= .52 ha.m } | 1026 | 1 | 5.0 | 44.15 | .22 | 3.83 | 17.44 | n/a | .000 |
| DIVERT HYD | 0602 | 1 | 5.0 | 44.15 | .22 | 3.83 | 17.44 | n/a | .000 |
| Outflow | 0602 | 2 | 5.0 | 31.62 | .04 | 3.83 | 17.44 | n/a | .000 |
| Outflow | 0602 | 3 | 5.0 | 11.82 | .18 | 3.83 | 17.44 | n/a | .000 |
| Outflow | 0602 | 4 | 5.0 | .72 | .00 | 3.83 | 17.44 | n/a | .000 |
| ADD [0602 + 0207] | 0807 | 3 | 5.0 | 32.84 | .07 | 2.08 | 17.09 | n/a | .000 |
| ADD [1024 + 0602] | 1025 | 3 | 5.0 | .90 | .01 | 2.83 | 15.48 | n/a | .000 |
| ADD [0601 + 0807] | 0806 | 3 | 5.0 | 50.89 | .09 | 2.08 | 16.87 | n/a | .000 |
| ADD [0602 + 1025] | 0809 | 3 | 5.0 | 12.72 | .18 | 3.83 | 17.31 | n/a | .000 |

**********
** SIMULATION NUMBER: 5 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 59.08 mm ] | | | | | | | | |

fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\OSCHI25.4HR
remark: OWEN SOUND 25 YEAR 4 HOUR DURATION CHICAGO STORM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ** CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .07 | 2.75 | 8.00 | .14 | .000 |
| ** CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .15 | 2.17 | 16.11 | .27 | .000 |
| ** CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .27 | 1.92 | 30.34 | .51 | .000 |
| ** CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .13 | 2.75 | 18.53 | .31 | .000 |
| ** CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .19 | 2.58 | 18.53 | .31 | .000 |





| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | 1.38 | 2.08 | 27.11 | .46 | .000 |
| * CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 | 5.0 | .31 | .03 | 1.92 | 23.78 | .40 | .000 |
| * CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 | 5.0 | 18.41 | 3.48 | 1.92 | 31.51 | .53 | .000 |
| * CALIB NASHYD [CN=51.1 ] [ N = 3.0:Tp .20] | 0205 | 1 | 5.0 | 1.41 | .05 | 2.08 | 9.07 | .15 | .000 |
| * CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .22 | 2.42 | 11.81 | .20 | .000 |
| * CALIB NASHYD [CN=55.0 ] [ N = 3.0:Tp .25] | 0202 | 1 | 5.0 | 1.10 | .03 | 2.17 | 8.32 | .14 | .000 |
| * CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .78] | 1021 | 1 | 5.0 | 4.66 | .07 | 2.83 | 10.90 | .18 | .000 |
| * CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .13] | 0207 | 1 | 5.0 | 1.22 | .06 | 2.00 | 10.79 | .18 | .000 |
| CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .10 | 3.17 | 18.43 | n/a | .000 |
| ADD [0701 + 0301] | 0901 | 3 | 5.0 | 10.52 | .27 | 2.75 | 18.49 | n/a | .000 |
| DUHYD | 1024 | 1 | 5.0 | 4.66 | .07 | 2.83 | 10.90 | n/a | .000 |
| MAJOR SYSTEM: | 1024 | 2 | 5.0 | .84 | .03 | 2.83 | 10.90 | n/a | .000 |
| MINOR SYSTEM: | 1024 | 3 | 5.0 | 3.82 | .05 | 2.33 | 10.90 | n/a | .000 |
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .24 | 3.00 | 18.46 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .03 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 3.83 | 18.46 | n/a | .000 |
| ADD [0501 + 0302] | 0902 | 3 | 5.0 | 26.91 | 1.38 | 2.08 | 23.73 | n/a | .000 |
| ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 1.61 | 2.08 | 24.26 | n/a | .000 |
| ADD [0304 + 0903] | 0904 | 3 | 5.0 | 32.15 | 1.75 | 2.08 | 23.52 | n/a | .000 |
| ADD [0904 + 0305] | 0905 | 3 | 5.0 | 32.46 | 1.76 | 2.08 | 23.52 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= .59 ha.m } | 0502 | 1 | 5.0 | 32.46 | .15 | 4.83 | 23.47 | n/a | .000 |
| ADD [0400 + 0502] | 0906 | 3 | 5.0 | 38.16 | .20 | 2.92 | 21.16 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .20 | 2.92 | 21.16 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 14.82 | .02 | 2.92 | 21.16 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 11.67 | .09 | 2.92 | 21.16 | n/a | .000 |
| Outflow | 0601 | 4 | 5.0 | 11.67 | .09 | 2.92 | 21.16 | n/a | .000 |
| CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 11.67 | .08 | 4.00 | 21.16 | n/a | .000 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | ADD [0601 + 0103] | 1023 | 3 | 5.0 | 20.37 | .29 | 2.58 | 17.17 | n/a | .000 |
| | ADD [0205 + 1023] | 0802 | 3 | 5.0 | 21.78 | .31 | 2.50 | 16.64 | n/a | .000 |
| | ADD [0201 + 0802] | 0803 | 3 | 5.0 | 40.19 | 3.54 | 1.92 | 23.45 | n/a | .000 |
| | ADD [0803 + 0202] | 0804 | 3 | 5.0 | 41.29 | 3.55 | 1.92 | 23.05 | n/a | .000 |
| | ADD [0804 + 1024] | 0810 | 3 | 5.0 | 45.12 | 3.56 | 1.92 | 22.02 | n/a | .000 |
| | RESRVR [ 2 : 0810] {ST= .58 ha.m } | 1026 | 1 | 5.0 | 45.12 | .35 | 3.42 | 21.97 | n/a | .000 |
| | DIVERT HYD | 0602 | 1 | 5.0 | 45.12 | .35 | 3.42 | 21.97 | n/a | .000 |
| | Outflow | 0602 | 2 | 5.0 | 26.83 | .04 | 3.42 | 21.97 | n/a | .000 |
| | Outflow | 0602 | 3 | 5.0 | 17.69 | .30 | 3.42 | 21.97 | n/a | .000 |
| | Outflow | 0602 | 4 | 5.0 | .59 | .00 | 3.42 | 21.97 | n/a | .000 |
| | ADD [0602 + 0207] | 0807 | 3 | 5.0 | 28.05 | .10 | 2.00 | 21.48 | n/a | .000 |
| | ADD [1024 + 0602] | 1025 | 3 | 5.0 | 1.43 | .03 | 2.83 | 15.49 | n/a | .000 |
| | ADD [0601 + 0807] | 0806 | 3 | 5.0 | 42.87 | .12 | 2.00 | 21.37 | n/a | .000 |
| | ADD [0602 + 1025] | 0809 | 3 | 5.0 | 19.12 | .32 | 3.17 | 21.48 | n/a | .000 |

**********
** SIMULATION NUMBER: 6 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 65.65 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\OSchi50.4hr | | | | | | | | |
| | remark: OWEN SOUND 50 YEAR 4 HOUR DURATION CHICAGO STORM | | | | | | | | |
| ** | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .09 | 2.75 | 10.07 | .15 | .000 |
| ** | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .18 | 2.17 | 19.55 | .30 | .000 |
| * | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .31 | 1.92 | 35.11 | .53 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .16 | 2.75 | 22.38 | .34 | .000 |
| * | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .24 | 2.58 | 22.38 | .34 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | 1.63 | 2.08 | 31.57 | .48 | .000 |





| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 | 5.0 | .31 | .03 | 1.92 | 27.76 | .42 | .000 |
| * | CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 | 5.0 | 18.41 | 3.92 | 1.92 | 35.81 | .55 | .000 |
| * | CALIB NASHYD [CN=51.1 ] [ N = 3.0:Tp .20] | 0205 | 1 | 5.0 | 1.41 | .06 | 2.08 | 11.28 | .17 | .000 |
| * | CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .27 | 2.42 | 14.57 | .22 | .000 |
| * | CALIB NASHYD [CN=55.0 ] [ N = 3.0:Tp .25] | 0202 | 1 | 5.0 | 1.10 | .04 | 2.17 | 10.60 | .16 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .78] | 1021 | 1 | 5.0 | 4.66 | .09 | 2.83 | 13.43 | .20 | .000 |
| * | CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .13] | 0207 | 1 | 5.0 | 1.22 | .08 | 2.00 | 13.30 | .20 | .000 |
| | CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .12 | 3.17 | 22.28 | n/a | .000 |
| | ADD [0701 + 0301] | 0901 | 3 | 5.0 | 10.52 | .33 | 2.75 | 22.34 | n/a | .000 |
| | DUHYD | 1024 | 1 | 5.0 | 4.66 | .09 | 2.83 | 13.43 | n/a | .000 |
| | MAJOR SYSTEM: | 1024 | 2 | 5.0 | 1.31 | .05 | 2.83 | 13.43 | n/a | .000 |
| | MINOR SYSTEM: | 1024 | 3 | 5.0 | 3.35 | .05 | 2.25 | 13.43 | n/a | .000 |
| | CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .30 | 3.00 | 22.31 | n/a | .000 |
| | RESRVR [ 2 : 0702] {ST= .05 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 4.08 | 22.31 | n/a | .000 |
| | ADD [0501 + 0302] | 0902 | 3 | 5.0 | 26.91 | 1.64 | 2.08 | 27.95 | n/a | .000 |
| | ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 1.92 | 2.08 | 28.52 | n/a | .000 |
| | ADD [0304 + 0903] | 0904 | 3 | 5.0 | 32.15 | 2.08 | 2.08 | 27.71 | n/a | .000 |
| | ADD [0904 + 0305] | 0905 | 3 | 5.0 | 32.46 | 2.09 | 2.08 | 27.71 | n/a | .000 |
| | RESRVR [ 2 : 0905] {ST= .68 ha.m } | 0502 | 1 | 5.0 | 32.46 | .15 | 5.67 | 27.66 | n/a | .000 |
| | ADD [0400 + 0502] | 0906 | 3 | 5.0 | 38.16 | .24 | 2.92 | 25.04 | n/a | .000 |
| | DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .24 | 2.92 | 25.04 | n/a | .000 |
| | Outflow | 0601 | 2 | 5.0 | 13.12 | .02 | 2.92 | 25.04 | n/a | .000 |
| | Outflow | 0601 | 3 | 5.0 | 12.52 | .11 | 2.92 | 25.04 | n/a | .000 |
| | Outflow | 0601 | 4 | 5.0 | 12.52 | .11 | 2.92 | 25.04 | n/a | .000 |
| | CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 12.52 | .09 | 3.58 | 25.04 | n/a | .000 |
| | ADD [0601 + 0103] | 1023 | 3 | 5.0 | 21.22 | .37 | 2.50 | 20.75 | n/a | .000 |
| | ADD [0205 + 1023] | 0802 | 3 | 5.0 | 22.63 | .39 | 2.50 | 20.16 | n/a | .000 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| ADD [0201 + 0802] | 0803 | 3 | 5.0 | 41.04 | 4.01 | 1.92 | 27.18 | n/a | .000 |
| ADD [0803 + 0202] | 0804 | 3 | 5.0 | 42.14 | 4.02 | 1.92 | 26.74 | n/a | .000 |
| ADD [0804 + 1024] | 0810 | 3 | 5.0 | 45.49 | 4.03 | 1.92 | 25.76 | n/a | .000 |
| RESRVR [ 2 : 0810] {ST= .64 ha.m } | 1026 | 1 | 5.0 | 45.49 | .46 | 3.17 | 25.71 | n/a | .000 |
| DIVERT HYD | 0602 | 1 | 5.0 | 45.49 | .46 | 3.17 | 25.71 | n/a | .000 |
| Outflow | 0602 | 2 | 5.0 | 24.30 | .04 | 3.17 | 25.71 | n/a | .000 |
| Outflow | 0602 | 3 | 5.0 | 20.66 | .41 | 3.17 | 25.71 | n/a | .000 |
| Outflow | 0602 | 4 | 5.0 | .53 | .00 | 3.17 | 25.71 | n/a | .000 |
| ADD [0602 + 0207] | 0807 | 3 | 5.0 | 25.52 | .12 | 2.00 | 25.12 | n/a | .000 |
| ADD [1024 + 0602] | 1025 | 3 | 5.0 | 1.84 | .05 | 2.83 | 16.97 | n/a | .000 |
| ADD [0601 + 0807] | 0806 | 3 | 5.0 | 38.64 | .14 | 2.00 | 25.09 | n/a | .000 |
| ADD [0602 + 1025] | 0809 | 3 | 5.0 | 22.50 | .45 | 3.08 | 25.00 | n/a | .000 |

```
*****************************
** SIMULATION NUMBER:   7 **
*****************************
```

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 6.0 | | | | | | |
| | [ Ptot= 71.77 mm ] | | | | | | | | |

```
     fname : I:\2015 Projects\115224 - Mair Mills Village External
Works\Design\Owen Sound\OSCHI100.4HR
     remark: OWEN SOUND 100 YEAR 4 HOUR DURATION CHICAGO STORM
```

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ** CALIB NASHYD [CN=50.2 N = 3.0:Tp .70] | 0400 | 1 | 5.0 | 5.70 | .11 | 2.75 | 12.16 | .17 | .000 |
| ** CALIB NASHYD [CN=66.6 N = 3.0:Tp .28] | 0304 | 1 | 5.0 | 2.90 | .21 | 2.17 | 22.95 | .32 | .000 |
| * CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 | 5.0 | 2.34 | .36 | 1.92 | 39.68 | .55 | .000 |
| * CALIB NASHYD [CN=71.0 N = 3.0:Tp .74] | 0300 | 1 | 5.0 | 4.55 | .19 | 2.75 | 26.14 | .36 | .000 |
| * CALIB NASHYD [CN=71.0 N = 3.0:Tp .63] | 0301 | 1 | 5.0 | 5.97 | .28 | 2.58 | 26.14 | .36 | .000 |
| * CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 | 5.0 | 16.39 | 1.89 | 2.08 | 35.86 | .50 | .000 |
| * CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 | 5.0 | .31 | .03 | 1.92 | 31.62 | .44 | .000 |





| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 | 5.0 | 18.41 | 4.40 | 1.92 | 39.90 | .56 | .000 |
| * CALIB NASHYD [CN=51.1 N = 3.0:Tp .20] | 0205 | 1 | 5.0 | 1.41 | .07 | 2.08 | 13.49 | .19 | .000 |
| * CALIB NASHYD [CN=59.2 N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .32 | 2.42 | 17.34 | .24 | .000 |
| * CALIB NASHYD [CN=55.0 N = 3.0:Tp .25] | 0202 | 1 | 5.0 | 1.10 | .05 | 2.17 | 12.91 | .18 | .000 |
| * CALIB NASHYD [CN=55.3 N = 3.0:Tp .78] | 1021 | 1 | 5.0 | 4.66 | .11 | 2.83 | 15.96 | .22 | .000 |
| * CALIB NASHYD [CN=55.3 N = 3.0:Tp .13] | 0207 | 1 | 5.0 | 1.22 | .10 | 2.00 | 15.80 | .22 | .000 |
| CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .15 | 3.08 | 26.05 | n/a | .000 |
| ADD [0701 + 0301] | 0901 | 3 | 5.0 | 10.52 | .40 | 2.75 | 26.10 | n/a | .000 |
| DUHYD | 1024 | 1 | 5.0 | 4.66 | .11 | 2.83 | 15.96 | n/a | .000 |
| MAJOR SYSTEM: | 1024 | 2 | 5.0 | 1.68 | .06 | 2.83 | 15.96 | n/a | .000 |
| MINOR SYSTEM: | 1024 | 3 | 5.0 | 2.98 | .05 | 2.17 | 15.96 | n/a | .000 |
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .36 | 3.00 | 26.07 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .08 ha.m } | 0501 | 1 | 5.0 | 10.52 | .17 | 4.25 | 26.07 | n/a | .000 |
| ADD [0501 + 0302] | 0902 | 3 | 5.0 | 26.91 | 1.91 | 2.08 | 32.04 | n/a | .000 |
| ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 2.22 | 2.08 | 32.65 | n/a | .000 |
| ADD [0304 + 0903] | 0904 | 3 | 5.0 | 32.15 | 2.42 | 2.08 | 31.77 | n/a | .000 |
| ADD [0904 + 0305] | 0905 | 3 | 5.0 | 32.46 | 2.43 | 2.08 | 31.77 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= .78 ha.m } | 0502 | 1 | 5.0 | 32.46 | .15 | 6.33 | 31.72 | n/a | .000 |
| ADD [0400 + 0502] | 0906 | 3 | 5.0 | 38.16 | .26 | 2.75 | 28.80 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | .26 | 2.75 | 28.80 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 11.93 | .02 | 2.75 | 28.80 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 13.11 | .12 | 2.75 | 28.80 | n/a | .000 |
| Outflow | 0601 | 4 | 5.0 | 13.11 | .12 | 2.75 | 28.80 | n/a | .000 |
| CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 13.11 | .09 | 3.42 | 28.80 | n/a | .000 |
| ADD [0601 + 0103] | 1023 | 3 | 5.0 | 21.81 | .44 | 2.50 | 24.23 | n/a | .000 |
| ADD [0205 + 1023] | 0802 | 3 | 5.0 | 23.22 | .47 | 2.42 | 23.58 | n/a | .000 |
| ADD [0201 + 0802] | 0803 | 3 | 5.0 | 41.63 | 4.51 | 1.92 | 30.80 | n/a | .000 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ADD [0803 + 0202] | 0804 | 3 | 5.0 | 42.73 | 4.52 | 1.92 | 30.34 | n/a | .000 |
| ADD [0804 + 1024] | 0810 | 3 | 5.0 | 45.72 | 4.53 | 1.92 | 29.40 | n/a | .000 |
| RESRVR [ 2 : 0810] {ST= .70 ha.m } | 1026 | 1 | 5.0 | 45.72 | .56 | 3.08 | 29.35 | n/a | .000 |
| DIVERT HYD | 0602 | 1 | 5.0 | 45.72 | .56 | 3.08 | 29.35 | n/a | .000 |
| Outflow | 0602 | 2 | 5.0 | 22.54 | .04 | 3.08 | 29.35 | n/a | .000 |
| Outflow | 0602 | 3 | 5.0 | 22.69 | .52 | 3.08 | 29.35 | n/a | .000 |
| Outflow | 0602 | 4 | 5.0 | .48 | .00 | 3.08 | 29.35 | n/a | .000 |
| ADD [0602 + 0207] | 0807 | 3 | 5.0 | 23.76 | .14 | 2.00 | 28.65 | n/a | .000 |
| ADD [1024 + 0602] | 1025 | 3 | 5.0 | 2.16 | .06 | 2.83 | 18.95 | n/a | .000 |
| ADD [0601 + 0807] | 0806 | 3 | 5.0 | 35.69 | .16 | 2.00 | 28.70 | n/a | .000 |
| ADD [0602 + 1025] | 0809 | 3 | 5.0 | 24.85 | .58 | 3.00 | 28.44 | n/a | .000 |

**********
** SIMULATION NUMBER: 8 **
**********

| W/E | COMMAND | HYD ID | DT min | AREA ha | Qpeak cms | Tpeak hrs | R.V. mm | R.C. | Qbase cms |
|---|---|---|---|---|---|---|---|---|---|
| | START @ .00 hrs | | | | | | | | |
| | READ STORM | | 12.0 | | | | | | |
| | [ Ptot=193.00 mm ] | | | | | | | | |
| | fname : I:\2015 Projects\115224 - Mair Mills Village External Works\Design\Owen Sound\TIMMINS.12 | | | | | | | | |
| | remark: TIMMINS REGIONAL 12 HOUR DURATION STORM | | | | | | | | |
| ** | CALIB NASHYD [CN=50.2 ] [ N = 3.0:Tp .70] | 0400 | 1 5.0 | 5.70 | .24 | 7.42 | 76.99 | .40 | .000 |
| ** | CALIB NASHYD [CN=66.6 ] [ N = 3.0:Tp .28] | 0304 | 1 5.0 | 2.90 | .23 | 7.00 | 112.01 | .58 | .000 |
| ** | CALIB STANDHYD [I%=25.0:S%= 2.00] | 0303 | 1 5.0 | 2.34 | .22 | 7.00 | 144.21 | .75 | .000 |
| ** | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .74] | 0300 | 1 5.0 | 4.55 | .30 | 7.42 | 121.14 | .63 | .000 |
| ** | CALIB NASHYD [CN=71.0 ] [ N = 3.0:Tp .63] | 0301 | 1 5.0 | 5.97 | .42 | 7.25 | 121.14 | .63 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= 2.00] | 0302 | 1 5.0 | 16.39 | 1.42 | 7.00 | 136.79 | .71 | .000 |
| * | CALIB STANDHYD [I%=20.0:S%= .50] | 0305 | 1 5.0 | .31 | .02 | 7.00 | 125.62 | .65 | .000 |
| * | CALIB STANDHYD [I%=43.0:S%= 2.00] | 0201 | 1 5.0 | 18.41 | 1.62 | 7.00 | 134.10 | .69 | .000 |





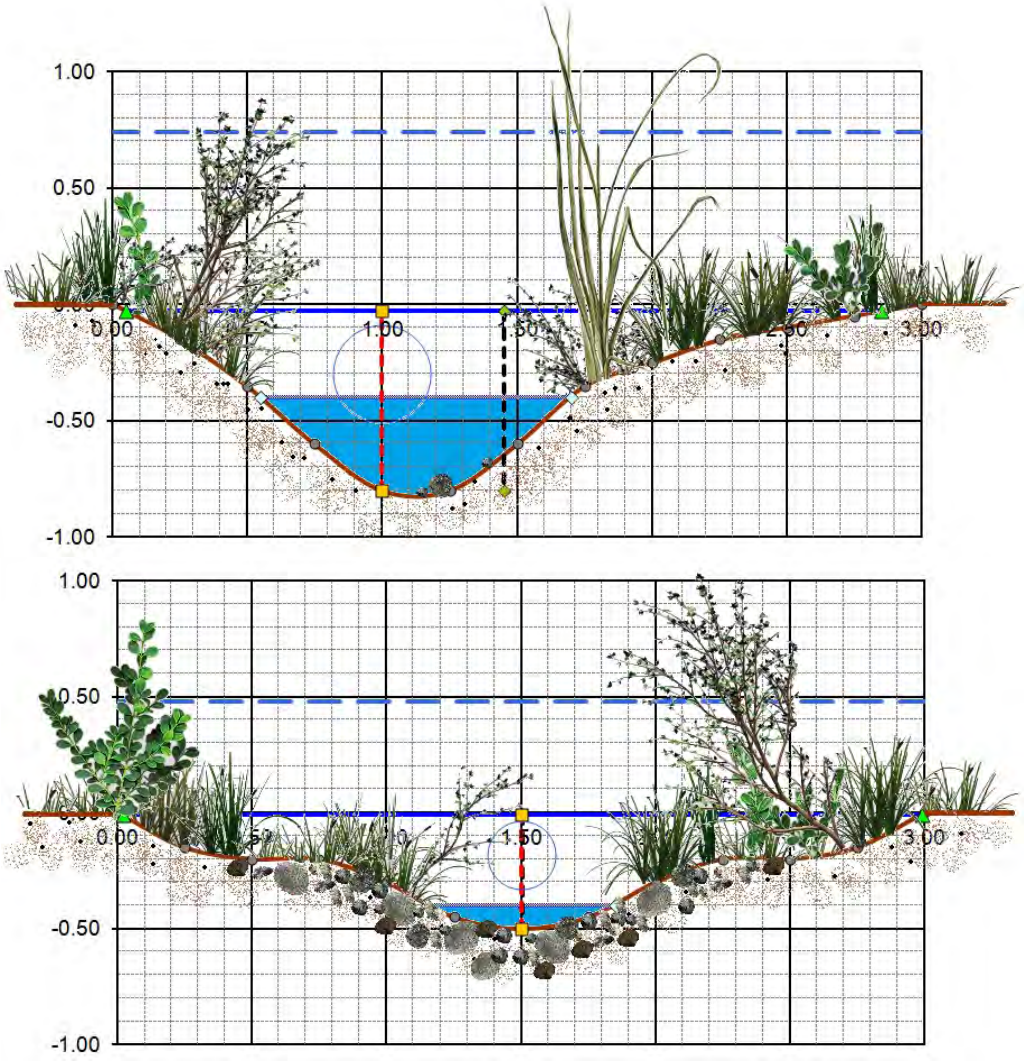
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| * CALIB NASHYD [CN=51.1 ] [ N = 3.0:Tp .20] | 0205 | 1 | 5.0 | 1.41 | .08 | 7.00 | 80.27 | .42 | .000 |
| * CALIB NASHYD [CN=59.2 ] [ N = 3.0:Tp .48] | 0103 | 1 | 5.0 | 8.70 | .52 | 7.17 | 95.56 | .50 | .000 |
| * CALIB NASHYD [CN=55.0 ] [ N = 3.0:Tp .25] | 0202 | 1 | 5.0 | 1.10 | .07 | 7.00 | 83.41 | .43 | .000 |
| * CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .78] | 1021 | 1 | 5.0 | 4.66 | .22 | 7.50 | 89.13 | .46 | .000 |
| * CALIB NASHYD [CN=55.3 ] [ N = 3.0:Tp .13] | 0207 | 1 | 5.0 | 1.22 | .08 | 7.00 | 88.25 | .46 | .000 |
| CHANNEL[ 2 : 0300] | 0701 | 1 | 5.0 | 4.55 | .27 | 7.75 | 121.04 | n/a | .000 |
| ADD [0701 + 0301] | 0901 | 3 | 5.0 | 10.52 | .68 | 7.42 | 121.10 | n/a | .000 |
| DUHYD | 1024 | 1 | 5.0 | 4.66 | .22 | 7.50 | 89.13 | n/a | .000 |
| MAJOR SYSTEM: | 1024 | 2 | 5.0 | 2.75 | .17 | 7.50 | 89.13 | n/a | .000 |
| MINOR SYSTEM: | 1024 | 3 | 5.0 | 1.91 | .05 | 5.83 | 89.13 | n/a | .000 |
| CHANNEL[ 2 : 0901] | 0702 | 1 | 5.0 | 10.52 | .65 | 7.58 | 121.07 | n/a | .000 |
| RESRVR [ 2 : 0702] {ST= .62 ha.m } | 0501 | 1 | 5.0 | 10.52 | .19 | 12.67 | 121.07 | n/a | .000 |
| ADD [0501 + 0302] | 0902 | 3 | 5.0 | 26.91 | 1.59 | 7.00 | 130.64 | n/a | .000 |
| ADD [0303 + 0902] | 0903 | 3 | 5.0 | 29.25 | 1.82 | 7.00 | 131.73 | n/a | .000 |
| ADD [0304 + 0903] | 0904 | 3 | 5.0 | 32.15 | 2.05 | 7.00 | 129.95 | n/a | .000 |
| ADD [0904 + 0305] | 0905 | 3 | 5.0 | 32.46 | 2.07 | 7.00 | 129.91 | n/a | .000 |
| RESRVR [ 2 : 0905] {ST= 1.19 ha.m } | 0502 | 1 | 5.0 | 32.46 | 1.40 | 7.67 | 129.86 | n/a | .000 |
| ADD [0400 + 0502] | 0906 | 3 | 5.0 | 38.16 | 1.63 | 7.58 | 121.96 | n/a | .000 |
| DIVERT HYD | 0601 | 1 | 5.0 | 38.16 | 1.63 | 7.58 | 121.96 | n/a | .000 |
| Outflow | 0601 | 2 | 5.0 | 3.80 | .02 | 7.58 | 121.96 | n/a | .000 |
| Outflow | 0601 | 3 | 5.0 | 17.18 | .81 | 7.58 | 121.96 | n/a | .000 |
| Outflow | 0601 | 4 | 5.0 | 17.18 | .81 | 7.58 | 121.96 | n/a | .000 |
| CHANNEL[ 2 : 0601] | 1022 | 1 | 5.0 | 17.18 | .76 | 9.08 | 121.96 | n/a | .000 |
| ADD [0601 + 0103] | 1023 | 3 | 5.0 | 25.88 | 1.27 | 7.42 | 113.09 | n/a | .000 |
| ADD [0205 + 1023] | 0802 | 3 | 5.0 | 27.29 | 1.31 | 7.42 | 111.39 | n/a | .000 |
| ADD [0201 + 0802] | 0803 | 3 | 5.0 | 45.70 | 2.77 | 7.00 | 120.54 | n/a | .000 |
| ADD [0803 + 0202] | 0804 | 3 | 5.0 | 46.80 | 2.84 | 7.00 | 119.66 | n/a | .000 |
| ADD [0804 + 1024] | 0810 | 3 | 5.0 | 48.71 | 2.88 | 7.00 | 118.47 | n/a | .000 |

Post Development - CHI

```
*
      RESRVR [ 2 : 0810] 1026  1  5.0   48.71    2.73  7.08 118.41  n/a    .000
      {ST=   .99 ha.m }
*
      DIVERT HYD         0602  1  5.0   48.71    2.73  7.08 118.41  n/a    .000
         Outflow         0602  2  5.0    7.95     .05  7.08 118.41  n/a    .000
         Outflow         0602  3  5.0   19.22     .56  7.08 118.41  n/a    .000
         Outflow         0602  4  5.0   21.54    2.12  7.08 118.41  n/a    .000
*
      ADD [0602 + 0207]  0807  3  5.0    9.17     .13  7.00 114.39  n/a    .000
*
      ADD [1024 + 0602]  1025  3  5.0   24.30    2.27  7.08 115.09  n/a    .000
*
      ADD [0601 + 0807]  0806  3  5.0   12.96     .14  7.00 116.61  n/a    .000
*
      ADD [0602 + 1025]  0809  3  5.0   43.51    2.83  7.08 116.55  n/a    .000
*
 FINISH
```

# APPENDIX B:
# PRELIMINARY NATURAL CHANNEL DESIGN REPORT - AQUALOGIC

# Natural Channel Detail Design
# Taylor's Creek
# Mair Mills Village
# Town of Collingwood




Submitted to:

**C.C. Tatham & Associates Ltd.**
**115 Sandford Fleming Drive, Suite 200**
**Collingwood, ON L9Y 5A6**

May 10, 2016

AquaLogic Consulting • 324 St. Paul Street, Burlington, ON L7R 3J9 • (905) 637-1862 • bill.degeus@sympatico.ca

# Natural Channel Detail Design
# Taylor's Creek
# Mair Mills Village
# Town of Collingwood

Natural channel detail design has been undertaken for Taylor's Creek in regard to proposed development of the Mair Mills Village subdivision in the Town of Collingwood. Previous reporting has provided characterization of the existing watercourse, design rationale, corridor footprint limits, and a summary of related background requirements (AquaLogic 2012). Confirmation of flow regime has been used with proposed corridor gradient to finalize cross-section geometry and proposed corridor bottom width has been used to plot planform limits. Based on preliminary design reporting and subsequent agency input, the proposed detail design form is based on two sub-reaches consisting of riffle-run-pool and step-pool channel types with complimentary flood plain pool features.

*Channel Gradient*

Gradient conditions defining the proposed channel have been confirmed and finalized based on engineering flood storage and conveyance requirements and the resultant tie-in elevations at upstream and downstream corridor limits. Flood plain gradient is proposed to have two changes at 1.2% and 2.4%, representing upper and lower sub-reaches respectively. Based on concurrent plotting of planform and profile, nominal adjustments were made to the preliminary design bankfull pool gradients and riffle and step face gradients. Moderately lower bankfull gradient was achieved for the upper sub-reach and moderately higher was used for the lower sub-reach.

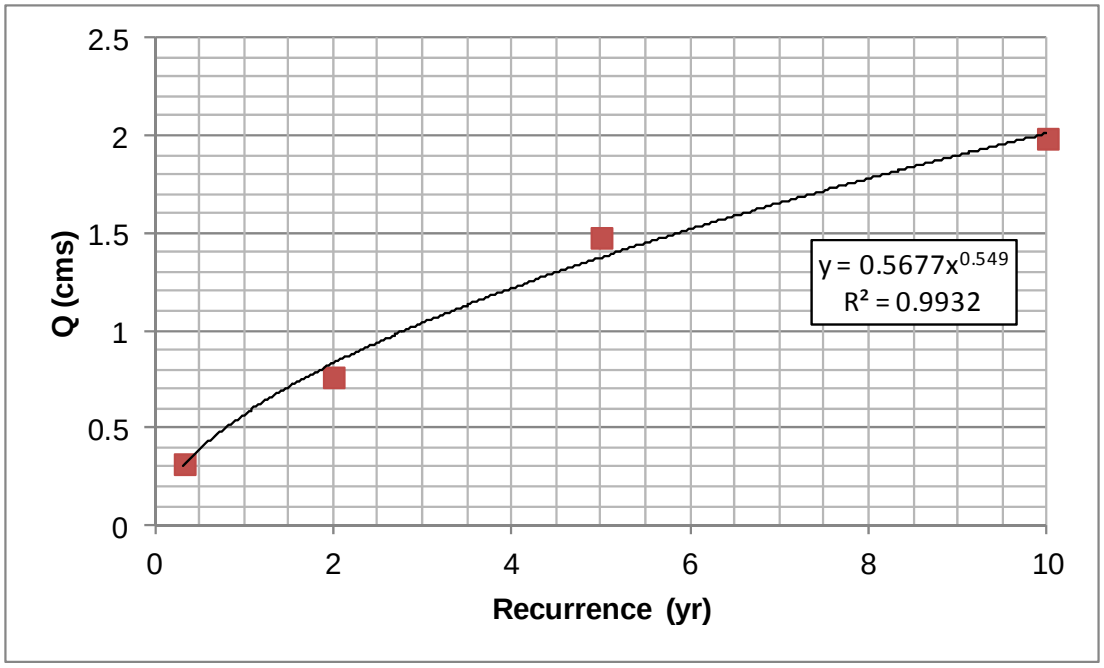
*Flow Regime*

Flow regime conditions for the preliminary channel design were based on reference reach survey of existing bankfull channel forming conditions which equalled a flow target of $0.76 m^3 s^{-1}$.

Proposed future condition flow conditions have been subsequently determined based on engineering design of upstream development (C.C. Tatham 2016). Proposed conditions are less than existing conditions for frequent events with the future 2yr event approximately equal to the existing bankfull event. The existing

bankfull event likely equates closer to the spring freshet condition of just over the 1yr event. A simple check was made of the future freshet estimate using the 25mm (assume 0.33yr recurrence) to 10yr frequent event flow range with results shown in **Figure 1**.

**Figure 1**: Power regression function for frequent flows.




The future freshet condition based on just over a 1yr recurrence would equal approximately 0.6$m^3$ $s^{-1}$.

*Cross-Section Design*

The preliminary design cross-section models were iteratively checked and updated based on finalized gradient conditions and further checked with regard to proposed condition flow revisions. Only minor adjustment in water level was needed with no change in section geometry to achieve the same bankfull flow target as preliminary design, using the minor gradient changes. Likewise, minor reductions in water level, in the order of 2-4cm with small concurrent increase in roughness coefficient, were determined based on the potential lower bankfull or freshet flow. No significant changes resulted in erosion thresholds and thus no changes are required in the proposed stability of vegetative and stone treatments in respective run-pools and riffles and steps. Vegetation control by biotechnical reinforcement was confirmed and construction requires a native groundcover mix adapted for riparian conditions, with biodegradable coir mat as an interim post-

construction reinforcement of the channel banks. Riverstone treatment was confirmed as medium gravel to medium cobble (25-100mm) for riffles and very coarse gravel to large cobble (50-150mm) for steps. Detailed results of the updated section models are appended using gradient revisions and the original bankfull flow target.

Detailed design has also produced additional cross-section information for flood plain pools based on NVCA input requesting a low density of offline features. Two pool types reflecting shallow and deep conditions, typical of lowland corridor conditions, were created. Variable depth zones reflecting semi-permanent to permanent surface water and wet meadow edges will result from the proposed features. The deepest feature points, at approximately 1.5m assuming full pool, may provide sufficient depth below potential ice cover for overwintering herptiles. Large woody debris and boulder installations are proposed as flood plain pool enhancements for additional cover, basking access, and edge diversity A schematic of typical installation is appended.

*Planform Design*

The channel planform pattern was plotted to reflect the amplitude and sinuosity targets established in preliminary design with modest adjustment based on detailed design gradient, i.e. slightly lower sinuosity ratio in the upper sub-reach and slightly higher in the lower sub-reach. Plotting and sinuosity layout was done concurrently with the previously noted adjustment in bankfull gradient to ensure a best fit of design parameters.

Riffles in the upper sub-reach were spaced to reflect the discontinuous sequencing expected as a reflection of reference conditions. The planform distances between riffles will result in the mix of run and pool surface flow types targeted from preliminary design. Riffle lengths were varied over a typical short range, being moderately longer than equivalent bankfull width.

Offline pool features of variable size were added to the planform with offsets from the main channel and the toe of slope. These features are simply designed to be fed by, and to adapt to, a combination of shallow groundwater response, surface drainage, and direct rainfall interception.

Additional detail design elements were added throughout the corridor in the form natural material structures. Terrestrial enhancements in the form of raptor poles and brush piles that re-use available site materials are proposed at a density

appropriate for the context and scale of the site. These enhancements are relatively easy to construct and provide value added physical habitat complexity. Schematics of typical installations are appended.

*Profile Design*

Using the planform sequencing, the central channel profile was concurrently developed and checked. All features were adjusted to show the respective depths and elevations at tie-in and feature change locations. In the upper sub-reach, low flow pool conditions will occur as backwater behind riffle crests and low flow run conditions will occur as tailwater below riffles. Runs will transition to pool conditions behind the next downstream riffle. The step-pool lower sub-reach was plotted with the backwater elevation behind each step crest intercepting the toe of the next upstream step to create a continuous sequence. Some natural profile variability will also be introduced due to the roughness of excavation in native materials.

Detailed channel bed profile plotting and layout grading for feature invert and maximum depth, is appended.

*Fish Habitat Integration*

The target fish community for the study area would include typical small stream cool and warmwater species. Habitat design integration and improvement consists of well defined run and run-pool features, some riffle and backwater pool sequencing, and a specific step-pool sub-reach that connects to Black Ash Creek. The low flow depth will be variable depending on time of year and period between rain events. Under moderate base flows depth will range in run-pools up to approximately 20cm, and in deeper pool definition behind riffle crests will be up to 40cm deep. Extended detention low flow duration increase improvement from upstream development may also help satisfy base flow performance for typical assemblages of small stream fish in headwater areas. Low flow and pool depths will also support a range of amphibian, avian, and mammal habitat and feeding opportunities. Disconnected flood plain pools will also provide specific amphibian habitat that is protected from predatory fish that may occupy the main channel.

A cross-section based velocity check was made to determine fish passage at the maximum bankfull flow velocity through steps and riffles. Detailed results of the velocity nomograph model are appended. The results show that fish as small as

approximately 2-3cm long can use burst speed to move up the channel boundary and fish as small as 3-4cm can use burst speed to move suspended through the water column. Burst speed distances are theoretically 95m or more before velocity shelter is required. Given the short lengths of steps and riffles, there are no constraints foreseen to the size range of typical fish that might in the future be able to access the channel design during high flows. These results are highly conservative. They represent the peak of freshet or infrequent storm events when fish are more likely to only be active during the rise of or upon the recession of flows to levels less than bankfull.

Based on the maintenance and potential improvement of overall fish habitat productivity and opportunity within the proposed design, the natural channel can be viewed as self-compensating or over-compensating in terms of direct and contributing fish habitat.

*Construction Implementation*

Based on site location and existing conditions, a relatively straightforward and unconstrained approach to construction access, staging, and phasing is anticipated. Primary access from either end of the corridor appears to be available, allowing use of full size construction equipment, uncomplicated installation of sediment controls and dewatering, and easy egress from the site upon completion. Work will be required to occur in dry dewatered conditions. At the time of flows being diverted for construction, fish rescue and transfer will need to be done from the existing channel. Preference would be given to having new corridor work completed at a time of year that allows a considerable amount of the growing season to occur before the subsequent winter. Flow connection to the new channel can occur anytime within the applicable fisheries window but would preferably be done under dry weather low flow conditions, and after a reasonable amount of greening up has occurred. Routine monitoring is recommended after construction, specifically after significant rain or snowmelt flow events, in the near term. Based on near term monitoring observations, the need to address any adjustments and remedial work should be determined.

*Conclusions*

Natural channel detail design has been undertaken for Taylor's Creek in regard to proposed development of the Mair Mills Village subdivision in the Town of Collingwood. Previous reporting has provided the benchmark elements required in detail design. The detail design form has been determined over two sub-

reaches consisting of riffle-run-pool and step-pool channel types, with complimentary flood plain pool features. Stable geomorphic design has been determined and aquatic habitat objectives have been addressed. Results and recommendations of this report have been transferred into the detail design drawings.

Prepared by,

**Bill de Geus, B.Sc., CET, CPESC, EP**
AquaLogic Consulting

## References

AquaLogic Consulting. 20012. Preliminary Natural Channel Design, Taylor's Creek, Mair Mills Village, Town of Collingwood. Report to C.C. Tatham & Associates, October 11, 2012.

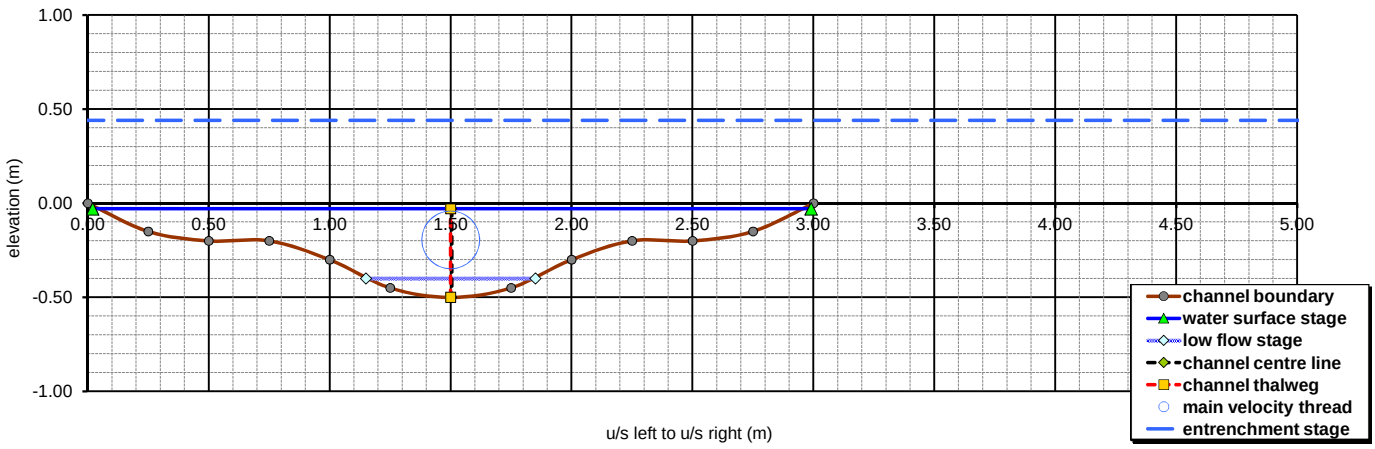
C.C. Tatham & Associates Ltd. 2016. Hydrology in Support of Taylor's Creek Rechannelization Design. Memo dated April 22, 2016.

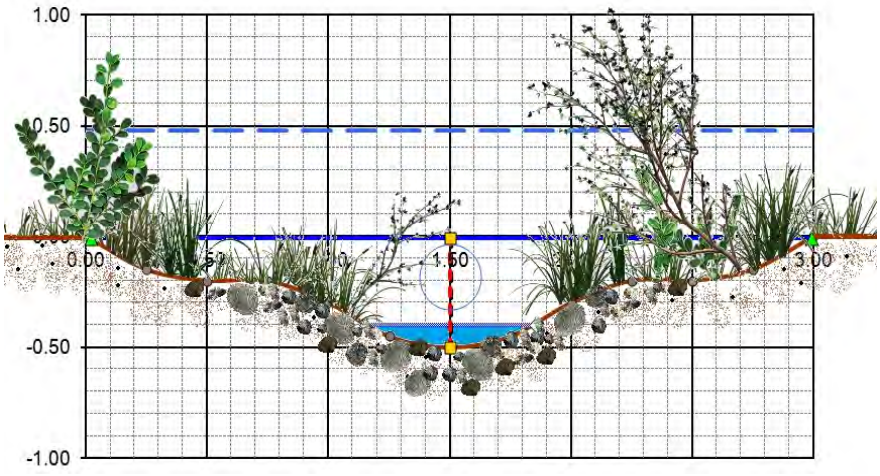
# GEO-X v.5.1 Geomorphic Cross-section Analysis Model

**Project:** Natural Channel Design
Taylor's Creek
Upper Sub-Reach, Riffle Cross-section

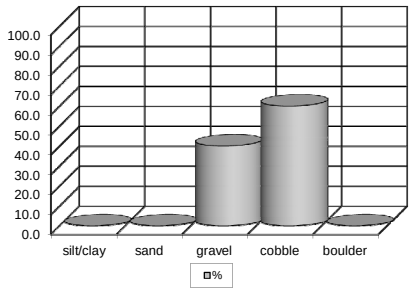
B. de Geus 05.11

## Cross Section Plot




### Substrate Type




| Morphology Type | |
|---|---|
| cascade | |
| step | |
| riffle | ● |
| run | |
| glide | |
| pool | |
| thalweg out of phase | |

| Hydraulic Roughness | |
|---|---|
| rr $R/D_{84}$ | 2.95 |
| ff V mean/V* | 5.22 |
| ff $D_{84}$ | 5.68 |
| ff mean | 5.45 |
| ROUGH BED | |

| Hydraulic Geometry | |
|---|---|
| A ($m^2$) | 0.69 |
| $R$ (m) | 0.22 |
| TW (m) | 2.90 |
| WP (m) | 3.11 |
| max d (m) | 0.47 |
| mean d (m) | 0.24 |
| $E_{s\ (Limerinos)}$ (m) [+] | |
| $E_{s\ (Strickler)}$ (m) [+] | |

| Hydraulic Ratios | |
|---|---|
| ER max d | 6.21 |
| $r_c$ / TW | |
| TW / $Lf_w$ | 4.14 |
| TW/max d | 6.2 |
| TW/mean d | 12.3 |

**Sediment Transport Mode**

| | | | $w_s$ (m $s^{-1}$) | P | wash load | high sus. load | low sus. load | bedload |
|---|---|---|---|---|---|---|---|---|
| $k$ | 0.41 | $D_{30}$ | 0.868 | 18.38 | NO | NO | NO | NO |
| $V_*$ (m $s^{-1}$) | 0.115 | $D_{50}$ | 1.038 | 21.98 | NO | NO | NO | NO |
| | | $D_{84}$ | 1.271 | 26.92 | NO | NO | NO | NO |

**Section Data**

| | | | | | |
|---|---|---|---|---|---|
| $ER_e$ (m) | 0.44 | ER stations L / R | -9.00 | 9.00 | TW ck |
| $WS_e$ (m) | -0.030 | WS stations L / R | 0.02 | 2.99 | 2.97 |
| $Lf_e$ (m) | -0.400 | Lf stations L / R | 1.15 | 1.85 | |
| $W_{fp}$ (m) | 18.00 | $E_s$ sta. (Limerinos) L / R | | | |
| $r_c$ (m) | | $E_s$ sta. (Strickler) L / R | | | |
| z | | $T_e$ (m) / $T_{o/s}$ (m) | -0.50 | 1.50 | |
| $E_g$ (m $m^{-1}$) | 0.0300 | | | | |

**Bedload Transport Data**

| Rosgen type | Strickler $Q_{sb}$ (kg $sec^{-1}$) | Limerinos $Q_{sb}$ (kg $sec^{-1}$) | $T_*$ | $D_{30}$ | $D_{50}$ | $D_{84}$ |
|---|---|---|---|---|---|---|
| B3 | 0.0018 | 0.0019 | saltation | NO | NO | NO |
| C3 | 0.0002 | 0.0003 | rolling | YES | YES | NO |
| C4 | 0.0058 | 0.0066 | Ø | NO | NO | YES |

**Substrate Gradation**

| | $D_{15}$ | $D_{30}$ | $D_{50}$ | $D_{84}$ | $D_{100}$ |
|---|---|---|---|---|---|
| Existing Conditions (mm) | | | | | |
| Stability Design Targets (mm) | 25 | 50 | 75 | 90 | 100 |
| $\tau_{cr}$ (N $m^{-2}$) | 24.25 | 33.95 | 48.50 | 72.75 | 97.00 |
| high turbulence - angular (mm) | | | | | |
| high turbulence - rounded (mm) | 25.0 | 35.0 | 75.0 | 90.0 | 100.0 |
| low turbulence - angular (mm) | | | | | |
| low turbulence - rounded (mm) | | | | | |

**Erosion Thresholds**

| | | $V_c$ / $V_b$ Strickler | $V_c$ / $V_b$ Limerinos |
|---|---|---|---|
| $\tau_{calc}$ (kg $m^{-2}$) | 6.63 | | |
| $\tau_{calc}$ (N $m^{-2}$) | 64.94 | | |
| $\tau$ $D_{crit}$ (gr-co) (mm) | 66.95 | | |
| $D_{50}$ $V_c$ (vcs +) (m $s^{-1}$) | 1.10 | 1.37 | |
| $D_{84}$ $V_c$ (vcs +) (m $s^{-1}$) | 1.34 | 1.67 | |

**Substrate Type (%)**

| silt/clay | sand | gravel | cobble | boulder |
|---|---|---|---|---|
| 0.0 | 0.0 | 40.0 | 60.0 | 0.0 |

**Bank Data** u/s L u/s R

| | | |
|---|---|---|
| $H_b$ (m) | | |
| $Bf_d$ (m) | | |
| RDp (m) | | |
| $H_b/Bf_d$ | | |
| RDp/$H_b$ | | |
| RDn (%) | | |
| BA (°) | | |
| BFP (%) | | |

**Flow Regime — Strickler method**

| | |
|---|---|
| Q (cms) | 0.786 |
| V (m $s^{-1}$) | 1.14 |
| n | 0.055 |
| *Fr* | 0.75 |
| $D_c$ rectangular (m) | 0.20 |
| $D_c$ trapezoidal (m) | 0.30 |
| $D_c$ triangular (m) | 0.43 |
| $D_c$ parabolic (m) | 0.27 |
| $D_c$ mean (m) | 0.30 |
| flow type | SUBCRITICAL |
| Ω (watts $m^{-1}$) | 231.09 |
| $\omega_a$ (watts $m^{-2}$) | 74.36 |
| $\omega_a$/TW (watts $m^{-1}$) | 25.64 |
| *Re** | 115.1 |
| *Re* | 221853 |
| turbulence | HIGH |

**Flow Regime — Limerinos method**

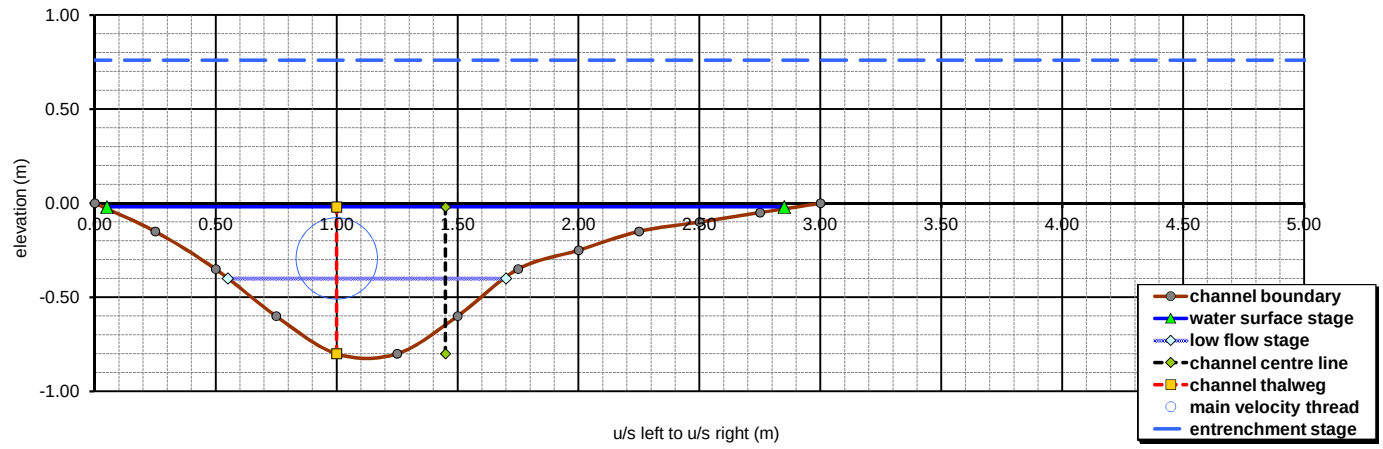
| | |
|---|---|
| Q (cms) | |
| V (m $s^{-1}$) | |
| n | |
| *Fr* | |
| $D_c$ rectangular (m) | |
| $D_c$ trapezoidal (m) | |
| $D_c$ triangular (m) | |
| $D_c$ parabolic (m) | |
| $D_c$ mean (m) | |
| flow type | |
| Ω (watts $m^{-1}$) | |
| $\omega_a$ (watts $m^{-2}$) | |
| $\omega_a$/TW (watts $m^{-1}$) | |
| *Re** | |
| *Re* | |
| turbulence | |

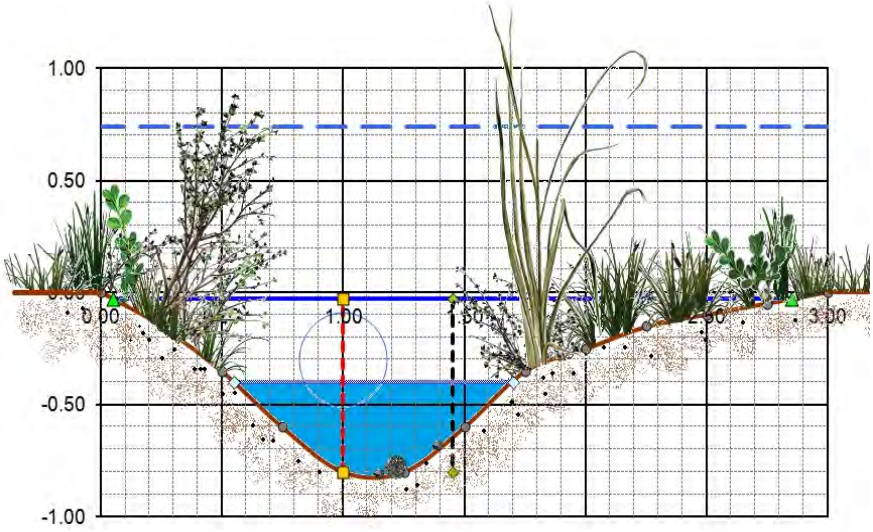
# GEO-X v.5.1 Geomorphic Cross-section Analysis Model

**Project:** Natural Channel Design
Taylor's Creek
Upper Sub-Reach, Run/Pool Cross-section

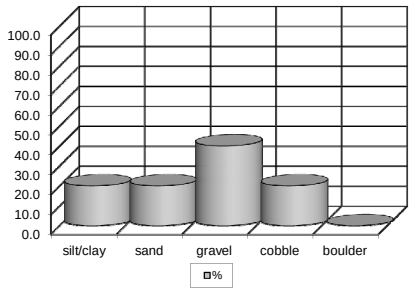
B. de Geus 05.11

## Cross Section Plot



### Substrate Type




| Morphology Type | |
|---|---|
| cascade | |
| step | |
| riffle | |
| run | ● |
| glide | |
| pool | ● |
| thalweg out of phase | |

| Hydraulic Geometry | |
|---|---|
| A ($m^2$) | 0.99 |
| $R$ (m) | 0.29 |
| TW (m) | 2.87 |
| WP (m) | 3.37 |
| max d (m) | 0.78 |
| mean d (m) | 0.35 |
| $E_{s\ (Limerinos)}$ (m) [+] | |
| $E_{s\ (Strickler)}$ (m) [+] | |

| Hydraulic Roughness | |
|---|---|
| rr $R/D_{84}$ | 4.20 |
| ff V mean/V* | 5.82 |
| ff $D_{84}$ | 6.78 |
| ff mean | 6.30 |
| ROUGH BED | |

| Hydraulic Ratios | |
|---|---|
| ER max d | 6.28 |
| $r_c$ / TW | |
| TW / $Lf_w$ | 2.49 |
| TW/max d | 3.7 |
| TW/mean d | 8.3 |

| Sediment Transport Mode | | | $w_s$ (m $s^{-1}$) | P | wash load | high sus. load | low sus. load | bedload |
|---|---|---|---|---|---|---|---|---|
| $k$ | 0.41 | $D_{30}$ | 0.126 | 4.14 | NO | NO | NO | YES |
| $V_*$ (m $s^{-1}$) | 0.074 | $D_{50}$ | 0.733 | 24.04 | NO | NO | NO | NO |
| | | $D_{84}$ | 1.228 | 40.27 | NO | NO | NO | NO |

| Section Data | | | | |
|---|---|---|---|---|
| $ER_e$ (m) | 0.76 | ER stations L / R | -9.00 | 9.00 | TW ck |
| $WS_e$ (m) | -0.020 | WS stations L / R | 0.05 | 2.85 | 2.80 |
| $Lf_e$ (m) | -0.400 | Lf stations L / R | 0.55 | 1.70 | |
| $W_{fp}$ (m) | 18.00 | $E_s$ sta. (Limerinos) L / R | | | |
| $r_c$ (m) | | $E_s$ sta. (Strickler) L / R | | | |
| z | | $T_e$ (m) $T_{o/s}$ (m) | -0.80 | 1.00 | |
| $E_g$ (m $m^{-1}$) | 0.0094 | | | | |

| Bedload Transport Data | Strickler Q | Limerinos Q | | $D_{30}$ | $D_{50}$ | $D_{84}$ |
|---|---|---|---|---|---|---|
| Rosgen type | $Q_{sb}$ (kg $sec^{-1}$) | $Q_{sb}$ (kg $sec^{-1}$) | $T_*$ | 27.9 | 1.1 | 0.4 |
| B3 | 0.0018 | 0.0020 | saltation | YES | NO | NO |
| C3 | 0.0002 | 0.0004 | rolling | YES | YES | NO |
| C4 | 0.0057 | 0.0069 | Ø | NO | NO | YES |

| Substrate Gradation | $D_{15}$ | $D_{30}$ | $D_{50}$ | $D_{84}$ | $D_{100}$ |
|---|---|---|---|---|---|
| Existing Conditions (mm) | 0.06 | 1.00 | 25.00 | 70.00 | 100.00 |
| Stability Design Targets (mm) | | | | | |
| $\tau_{cr}$ (N $m^{-2}$) | 0.06 | 0.97 | 24.25 | 67.90 | 97.00 |
| high turbulence - angular (mm) | | | | | |
| high turbulence - rounded (mm) | | | | | |
| low turbulence - angular (mm) | | | | | |
| low turbulence - rounded (mm) | | | | | |

| Erosion Thresholds | | $V_c$ / $V_b$ | |
|---|---|---|---|
| $\tau_{calc}$ (kg $m^{-2}$) | 2.76 | | |
| $\tau_{calc}$ (N $m^{-2}$) | 27.09 | Strickler | Limerinos |
| $\tau$ $D_{crit}$ (gr-co) (mm) | 27.92 | | |
| $D_{50}$ $V_c$ (vcs +) (m $s^{-1}$) | 0.78 | 1.43 | |
| $D_{84}$ $V_c$ (vcs +) (m $s^{-1}$) | 1.30 | 2.39 | |

| Substrate Type (%) | | | | |
|---|---|---|---|---|
| silt/clay | sand | gravel | cobble | boulder |
| 20.0 | 20.0 | 40.0 | 20.0 | 0.0 |

| Bank Data | u/s L | u/s R |
|---|---|---|
| $H_b$ (m) | | |
| $Bf_d$ (m) | | |
| RDp (m) | | |
| $H_b/Bf_d$ | | |
| RDp/$H_b$ | | |
| RDn (%) | | |
| BA (°) | | |
| BFP (%) | | |

| Flow Regime Strickler method | |
|---|---|
| Q (cms) | 0.770 |
| V (m $s^{-1}$) | 0.78 |
| n | 0.055 |
| $Fr$ | 0.42 |
| $D_c$ rectangular (m) | 0.20 |
| $D_c$ trapezoidal (m) | 0.29 |
| $D_c$ triangular (m) | 0.42 |
| $D_c$ parabolic (m) | 0.24 |
| $D_c$ mean (m) | 0.29 |
| flow type | SUBCRITICAL |
| $\Omega$ (watts $m^{-1}$) | 70.89 |
| $\omega_a$ (watts $m^{-2}$) | 21.03 |
| $\omega_a$/TW (watts $m^{-1}$) | 7.33 |
| $Re^*$ | 57.5 |
| $Re$ | 200211 |
| turbulence | HIGH |

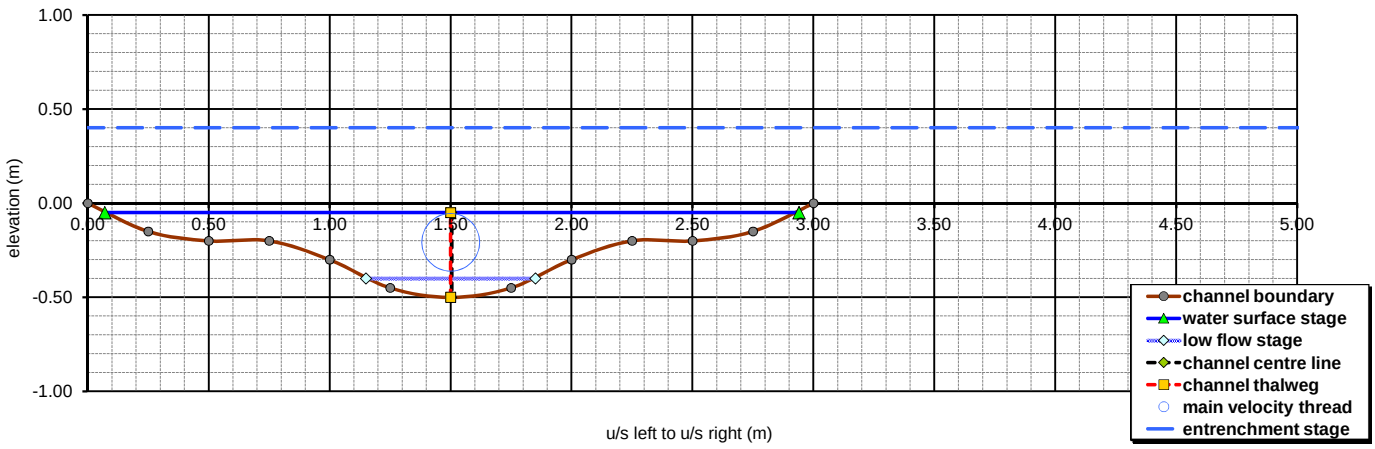
| Flow Regime Limerinos method | |
|---|---|
| Q (cms) | |
| V (m $s^{-1}$) | |
| n | |
| $Fr$ | |
| $D_c$ rectangular (m) | |
| $D_c$ trapezoidal (m) | |
| $D_c$ triangular (m) | |
| $D_c$ parabolic (m) | |
| $D_c$ mean (m) | |
| flow type | |
| $\Omega$ (watts $m^{-1}$) | |
| $\omega_a$ (watts $m^{-2}$) | |
| $\omega_a$/TW (watts $m^{-1}$) | |
| $Re^*$ | |
| $Re$ | |
| turbulence | |

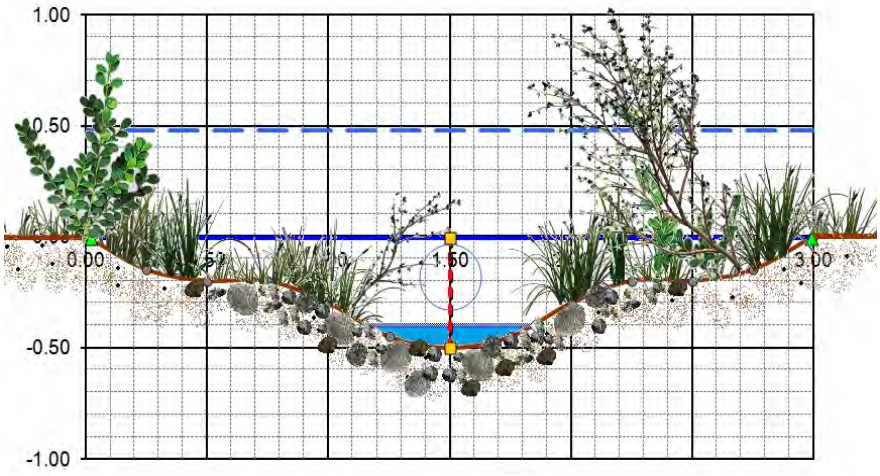
# GEO-X v.5.1 Geomorphic Cross-section Analysis Model

**Project:** Natural Channel Design
Taylor's Creek
Lower Sub-Reach, Step Cross-section

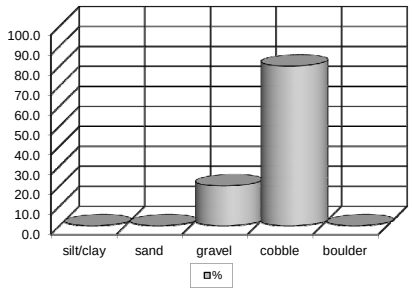
B. de Geus 05.11

## Cross Section Plot



## Substrate Type




| Morphology Type | |
|---|---|
| cascade | |
| step | ● |
| riffle | |
| run | |
| glide | |
| pool | |
| thalweg out of phase | |

| Hydraulic Roughness | |
|---|---|
| rr $R/D_{84}$ | 2.77 |
| ff V mean/V* | 5.11 |
| ff $D_{84}$ | 5.52 |
| ff mean | 5.32 |
| ROUGH BED | |

| Hydraulic Geometry | |
|---|---|
| A ($m^2$) | 0.63 |
| $R$ (m) | 0.21 |
| TW (m) | 2.83 |
| WP (m) | 3.03 |
| max d (m) | 0.45 |
| mean d (m) | 0.22 |
| $E_{s\ (Limerinos)}$ (m) [+] | |
| $E_{s\ (Strickler)}$ (m) [+] | |

| Hydraulic Ratios | |
|---|---|
| ER max d | 6.35 |
| $r_c$ / TW | |
| TW / $Lf_w$ | 4.05 |
| TW/max d | 6.3 |
| TW/mean d | 12.8 |

**Sediment Transport Mode**

| | | | $w_s$ (m $s^{-1}$) | P | wash load | high sus. load | low sus. load | bedload |
|---|---|---|---|---|---|---|---|---|
| $k$ | 0.41 | $D_{30}$ | 0.868 | 16.42 | NO | NO | NO | NO |
| $V_*$ (m $s^{-1}$) | 0.129 | $D_{50}$ | 1.038 | 19.63 | NO | NO | NO | NO |
| | | $D_{84}$ | 1.271 | 24.05 | NO | NO | NO | NO |

**Section Data**

| | | | | | |
|---|---|---|---|---|---|
| $ER_e$ (m) | 0.40 | ER stations L / R | -9.00 | 9.00 | TW ck |
| $WS_e$ (m) | -0.050 | WS stations L / R | 0.07 | 2.94 | 2.87 |
| $Lf_e$ (m) | -0.400 | Lf stations L / R | 1.15 | 1.85 | |
| $W_{fp}$ (m) | 18.00 | $E_s$ sta. (Limerinos) L / R | | | |
| $r_c$ (m) | | $E_s$ sta. (Strickler) L / R | | | |
| z | | $T_e$ (m) $T_{o/s}$ (m) | -0.50 | 1.50 | |
| $E_g$ (m $m^{-1}$) | 0.0400 | | | | |

**Bedload Transport Data**

| | Strickler Q | Limerinos Q | | | | |
|---|---|---|---|---|---|---|
| Rosgen type | $Q_{sb}$ (kg $sec^{-1}$) | $Q_{sb}$ (kg $sec^{-1}$) | $T_*$ | $D_{30}$ 2.4 | $D_{50}$ 1.7 | $D_{84}$ 1.1 |
| B3 | 0.0018 | 0.0019 | saltation | YES | NO | NO |
| C3 | 0.0002 | 0.0003 | rolling | YES | YES | YES |
| C4 | 0.0058 | 0.0066 | Ø | NO | NO | NO |

**Substrate Gradation**

| | $D_{15}$ | $D_{30}$ | $D_{50}$ | $D_{84}$ | $D_{100}$ |
|---|---|---|---|---|---|
| Existing Conditions (mm) | | | | | |
| Stability Design Targets (mm) | 50 | 75 | 100 | 125 | 150 |
| $\tau_{cr}$ (N $m^{-2}$) | 24.25 | 33.95 | 48.50 | 72.75 | 97.00 |
| high turbulence - angular (mm) | | | | | |
| high turbulence - rounded (mm) | 33.3 | 46.7 | 100.0 | 120.0 | 133.3 |
| low turbulence - angular (mm) | | | | | |
| low turbulence - rounded (mm) | | | | | |

**Flow Regime Strickler method**

| | |
|---|---|
| Q (cms) | 0.798 |
| V (m $s^{-1}$) | 1.27 |
| n | 0.055 |
| $Fr$ | 0.86 |
| $D_c$ rectangular (m) | 0.20 |
| $D_c$ trapezoidal (m) | 0.30 |
| $D_c$ triangular (m) | 0.43 |
| $D_c$ parabolic (m) | 0.28 |
| $D_c$ mean (m) | 0.30 |
| flow type | SUBCRITICAL |
| $\Omega$ (watts $m^{-1}$) | 312.83 |
| $\omega_a$ (watts $m^{-2}$) | 103.24 |
| $\omega_a$/TW (watts $m^{-1}$) | 36.44 |
| $Re^*$ | 116.2 |
| $Re$ | 231024 |
| turbulence | HIGH |

**Flow Regime Limerinos method**

| | |
|---|---|
| Q (cms) | |
| V (m $s^{-1}$) | |
| n | |
| $Fr$ | |
| $D_c$ rectangular (m) | |
| $D_c$ trapezoidal (m) | |
| $D_c$ triangular (m) | |
| $D_c$ parabolic (m) | |
| $D_c$ mean (m) | |
| flow type | |
| $\Omega$ (watts $m^{-1}$) | |
| $\omega_a$ (watts $m^{-2}$) | |
| $\omega_a$/TW (watts $m^{-1}$) | |
| $Re^*$ | |
| $Re$ | |
| turbulence | |

**Erosion Thresholds**

| | | $V_c$ / $V_b$ Strickler | Limerinos |
|---|---|---|---|
| $\tau_{calc}$ (kg $m^{-2}$) | 8.31 | | |
| $\tau_{calc}$ (N $m^{-2}$) | 81.39 | | |
| $\tau$ $D_{crit}$ (gr-co) (mm) | 83.91 | | |
| $D_{50}$ $V_c$ (vcs +) (m $s^{-1}$) | 1.10 | 1.23 | |
| $D_{84}$ $V_c$ (vcs +) (m $s^{-1}$) | 1.34 | 1.51 | |

**Bank Data** u/s L u/s R

| | |
|---|---|
| $H_b$ (m) | |
| $Bf_d$ (m) | |
| RDp (m) | |
| $H_b/Bf_d$ | |
| RDp/$H_b$ | |
| RDn (%) | |
| BA (°) | |
| BFP (%) | |

**Substrate Type (%)**

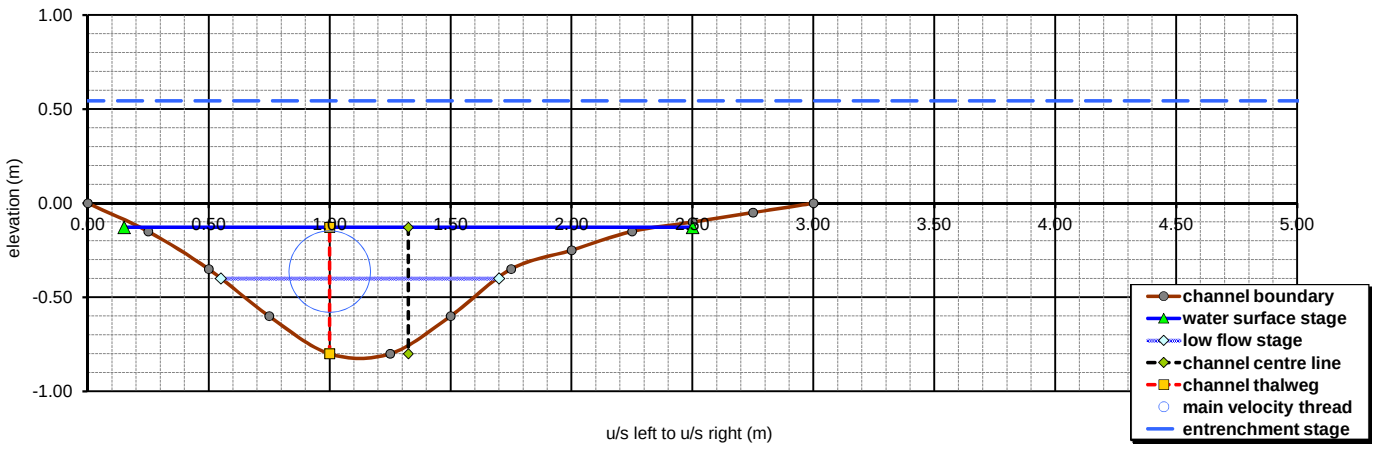
| silt/clay | sand | gravel | cobble | boulder |
|---|---|---|---|---|
| 0.0 | 0.0 | 20.0 | 80.0 | 0.0 |

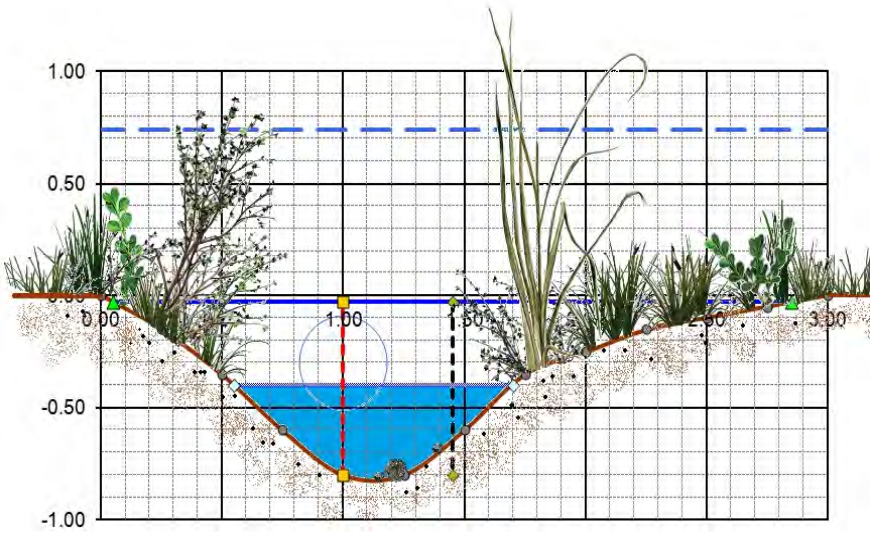
# GEO-X v.5.1 Geomorphic Cross-section Analysis Model

**Project:** Natural Channel Design
Taylor's Creek
Lower Sub-Reach, Pool Cross-section

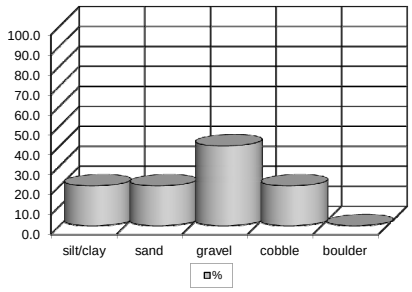
B. de Geus 05.11

## Cross Section Plot



## Substrate Type




| Morphology Type | |
|---|---|
| cascade | |
| step | |
| riffle | |
| run | |
| glide | |
| pool | ● |
| thalweg out of phase | |

| Hydraulic Geometry | |
|---|---|
| A ($m^2$) | 0.72 |
| *R* (m) | 0.28 |
| TW (m) | 2.15 |
| WP (m) | 2.61 |
| max d (m) | 0.67 |
| mean d (m) | 0.34 |
| $E_{s\ (Limerinos)}$ (m) [+] | |
| $E_{s\ (Strickler)}$ (m) [+] | |

| Hydraulic Roughness | |
|---|---|
| rr $R/D_{84}$ | 3.94 |
| ff V mean/V* | 5.74 |
| ff $D_{84}$ | 6.71 |
| ff mean | 6.23 |
| ROUGH BED | |

| Hydraulic Ratios | |
|---|---|
| ER max d | 8.39 |
| $r_c$ / TW | |
| TW / $Lf_w$ | 1.87 |
| TW/max d | 3.2 |
| TW/mean d | 6.4 |

| Sediment Transport Mode | | | $w_s$ (m $s^{-1}$) | P | wash load | high sus. load | low sus. load | bedload |
|---|---|---|---|---|---|---|---|---|
| *k* | 0.41 | $D_{30}$ | 0.126 | 2.97 | NO | NO | NO | YES |
| $V_*$ (m $s^{-1}$) | 0.104 | $D_{50}$ | 0.733 | 17.27 | NO | NO | NO | NO |
| | | $D_{84}$ | 1.228 | 28.93 | NO | NO | NO | NO |

| Section Data | | | | |
|---|---|---|---|---|
| $ER_e$ (m) | 0.54 | ER stations L / R | -9.00 | 9.00 | TW ck |
| $WS_e$ (m) | -0.128 | WS stations L / R | 0.15 | 2.50 | 2.35 |
| $Lf_e$ (m) | -0.400 | Lf stations L / R | 0.55 | 1.70 | |
| $W_{fp}$ (m) | 18.00 | $E_s$ sta. (Limerinos) L / R | | | |
| $r_c$ (m) | | $E_s$ sta. (Strickler) L / R | | | |
| z | | $T_e$ (m) $T_{o/s}$ (m) | -0.80 | 1.00 | |
| $E_g$ (m $m^{-1}$) | 0.0194 | | | | |

| Bedload Transport Data | Strickler Q | Limerinos Q | | $D_{30}$ | $D_{50}$ | $D_{84}$ |
|---|---|---|---|---|---|---|
| Rosgen type | $Q_{sb}$ (kg $sec^{-1}$) | $Q_{sb}$ (kg $sec^{-1}$) | $T_*$ | 54.1 | 2.2 | 0.8 |
| B3 | 0.0018 | 0.0020 | saltation | YES | YES | NO |
| C3 | 0.0002 | 0.0004 | rolling | YES | YES | NO |
| C4 | 0.0057 | 0.0069 | Ø | NO | NO | YES |

| Substrate Gradation | $D_{15}$ | $D_{30}$ | $D_{50}$ | $D_{84}$ | $D_{100}$ |
|---|---|---|---|---|---|
| Existing Conditions (mm) | 0.06 | 1.00 | 25.00 | 70.00 | 100.00 |
| Stability Design Targets (mm) | | | | | |
| $\tau_{cr}$ (N $m^{-2}$) | 0.06 | 0.97 | 24.25 | 67.90 | 97.00 |
| high turbulence - angular (mm) | | | | | |
| high turbulence - rounded (mm) | | | | | |
| low turbulence - angular (mm) | | | | | |
| low turbulence - rounded (mm) | | | | | |

| Erosion Thresholds | | $V_c$ / $V_b$ | |
|---|---|---|---|
| $\tau_{calc}$ (kg $m^{-2}$) | 5.35 | | |
| $\tau_{calc}$ (N $m^{-2}$) | 52.47 | | |
| $\tau$ $D_{crit}$ (gr-co) (mm) | 54.09 | Strickler | Limerinos |
| $D_{50}$ $V_c$ (vcs +) (m $s^{-1}$) | 0.78 | 1.04 | |
| $D_{84}$ $V_c$ (vcs +) (m $s^{-1}$) | 1.30 | 1.73 | |

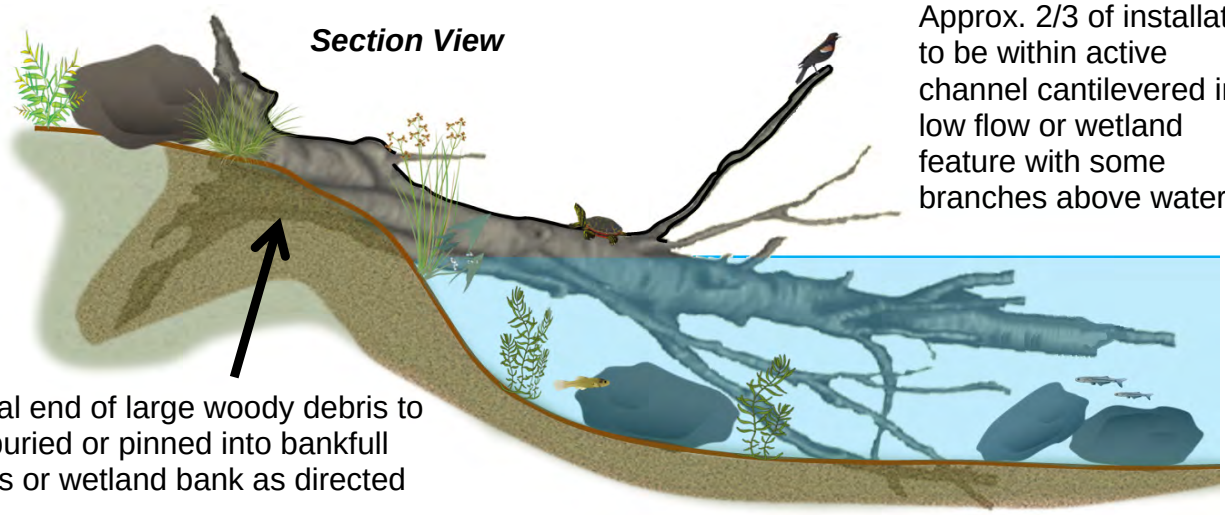
| Substrate Type (%) | | | | |
|---|---|---|---|---|
| silt/clay | sand | gravel | cobble | boulder |
| 20.0 | 20.0 | 40.0 | 20.0 | 0.0 |

| Bank Data | u/s L | u/s R |
|---|---|---|
| $H_b$ (m) | | |
| $Bf_d$ (m) | | |
| RDp (m) | | |
| $H_b/Bf_d$ | | |
| RDp/$H_b$ | | |
| RDn (%) | | |
| BA (°) | | |
| BFP (%) | | |

| Flow Regime Strickler method | |
|---|---|
| Q (cms) | 0.770 |
| V (m $s^{-1}$) | 1.07 |
| n | 0.055 |
| *Fr* | 0.59 |
| $D_c$ rectangular (m) | 0.24 |
| $D_c$ trapezoidal (m) | 0.30 |
| $D_c$ triangular (m) | 0.42 |
| $D_c$ parabolic (m) | 0.25 |
| $D_c$ mean (m) | 0.30 |
| flow type | SUBCRITICAL |
| Ω (watts $m^{-1}$) | 146.44 |
| $\omega_a$ (watts $m^{-2}$) | 56.09 |
| $\omega_a$/TW (watts $m^{-1}$) | 26.13 |
| *Re** | 59.1 |
| *Re* | 258774 |
| turbulence | HIGH |

| Flow Regime Limerinos method | |
|---|---|
| Q (cms) | |
| V (m $s^{-1}$) | |
| n | |
| *Fr* | |
| $D_c$ rectangular (m) | |
| $D_c$ trapezoidal (m) | |
| $D_c$ triangular (m) | |
| $D_c$ parabolic (m) | |
| $D_c$ mean (m) | |
| flow type | |
| Ω (watts $m^{-1}$) | |
| $\omega_a$ (watts $m^{-2}$) | |
| $\omega_a$/TW (watts $m^{-1}$) | |
| *Re** | |
| *Re* | |
| turbulence | |

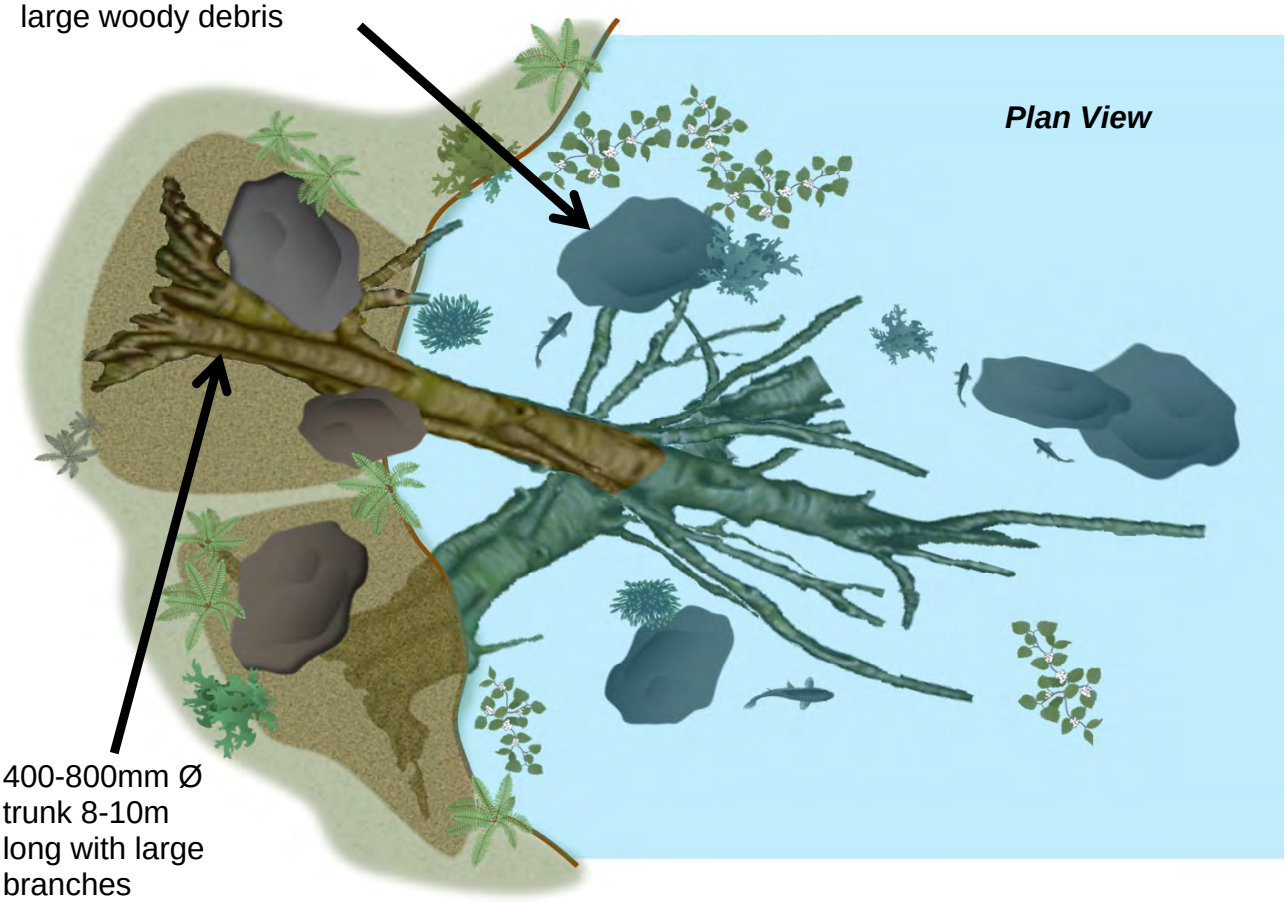
# LARGE WOODY DEBRIS & BOULDER PLACEMENT SCHEMATIC




Approx. 2/3 of installation to be within active channel cantilevered into low flow or wetland feature with some branches above water

Basal end of large woody debris to be buried or pinned into bankfull limits or wetland bank as directed

300-750mm Ø small to large boulder granite or dolomitic limestone (no sedimentary layers), 4-7 pieces per installation field fit as directed, some rock to be used as ballast on large woody debris

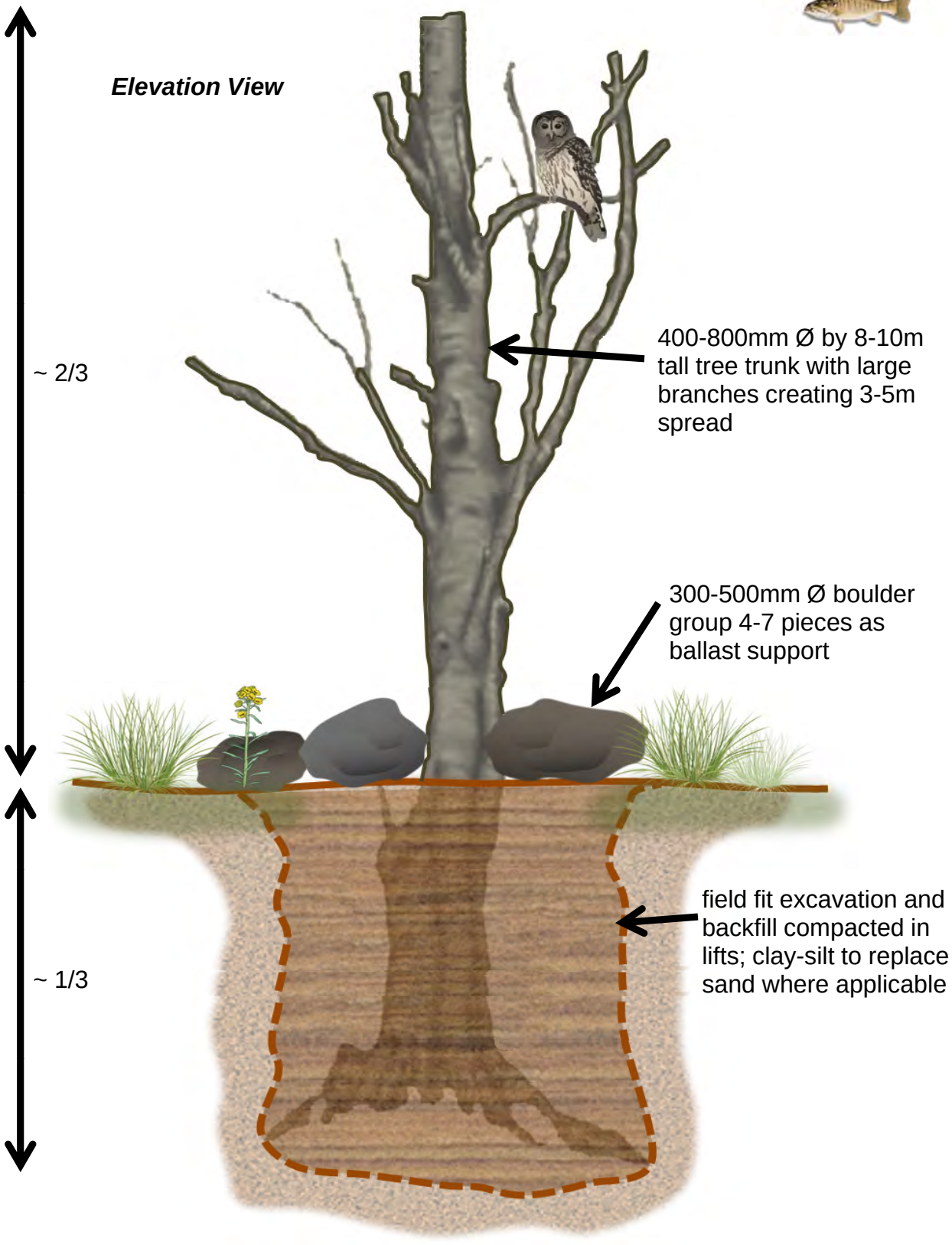



400-800mm Ø trunk 8-10m long with large branches

Notes

1) Re-used found onsite materials preferred
2) Disturbed areas to be seeded and restored per approved landscape plans

# RAPTOR POLE SCHEMATIC

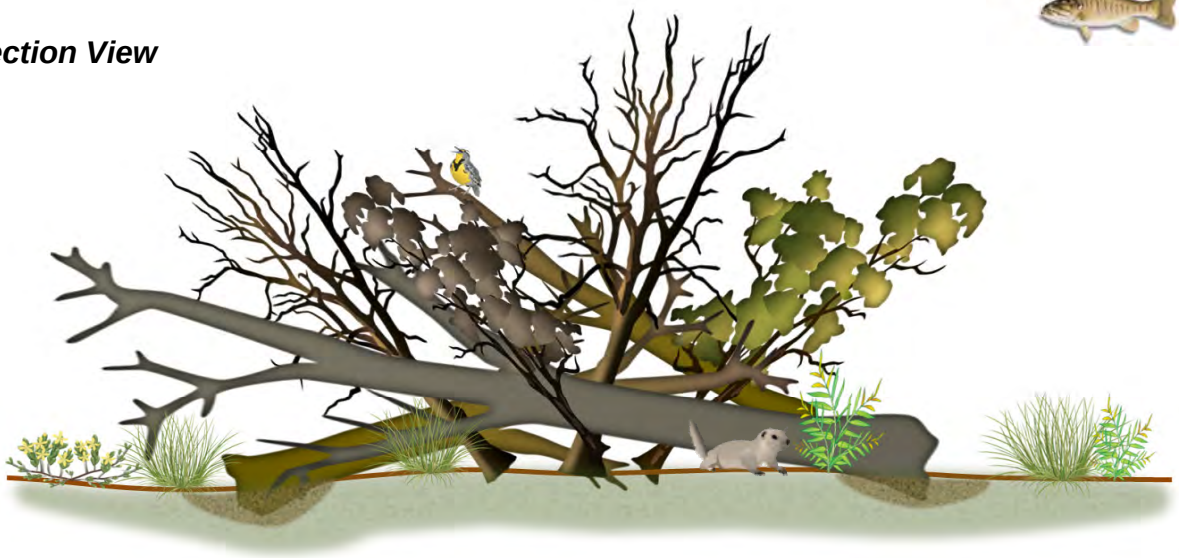



Notes

1) Re-used found onsite materials preferred (no shale)
2) Disturbed areas to be seeded and restored per approved landscape plans

## BRUSH PILE SCHEMATIC

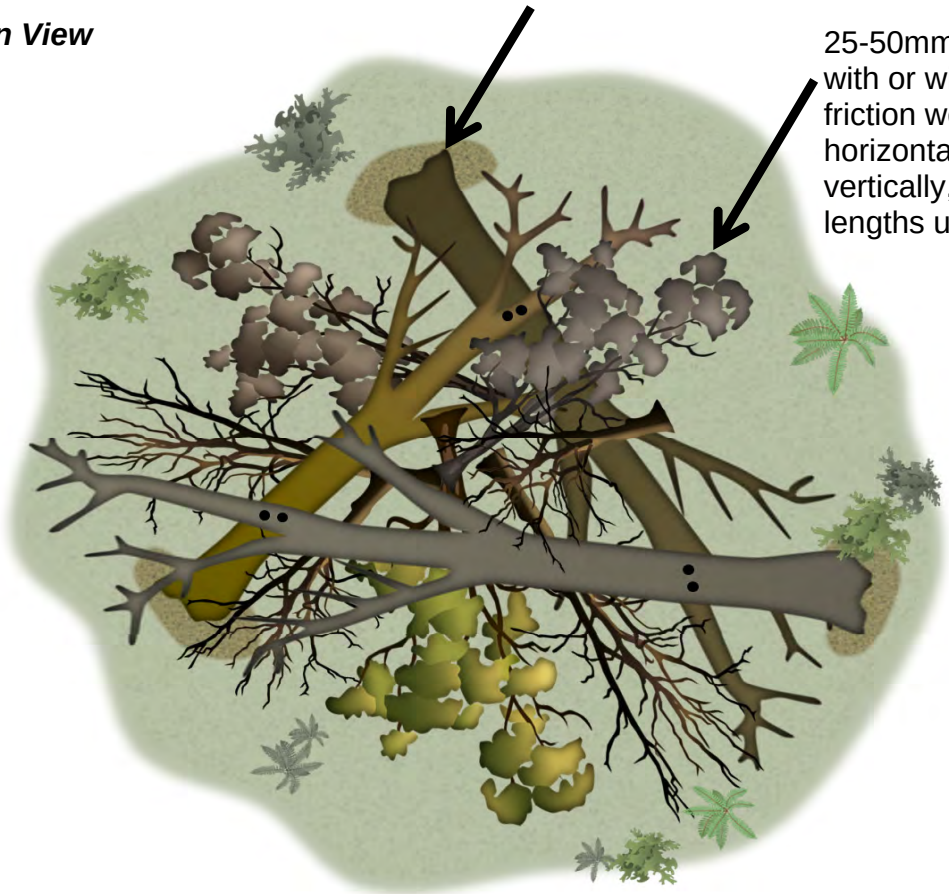
***Section View***



200-400mm Ø 3-5m long main pieces of large woody debris piled in crib structure with spikes/nails as needed to maintain shape

***Plan View***

25-50mm Ø branches with or without foliage, friction wedged horizontally and vertically, random lengths up to 3m

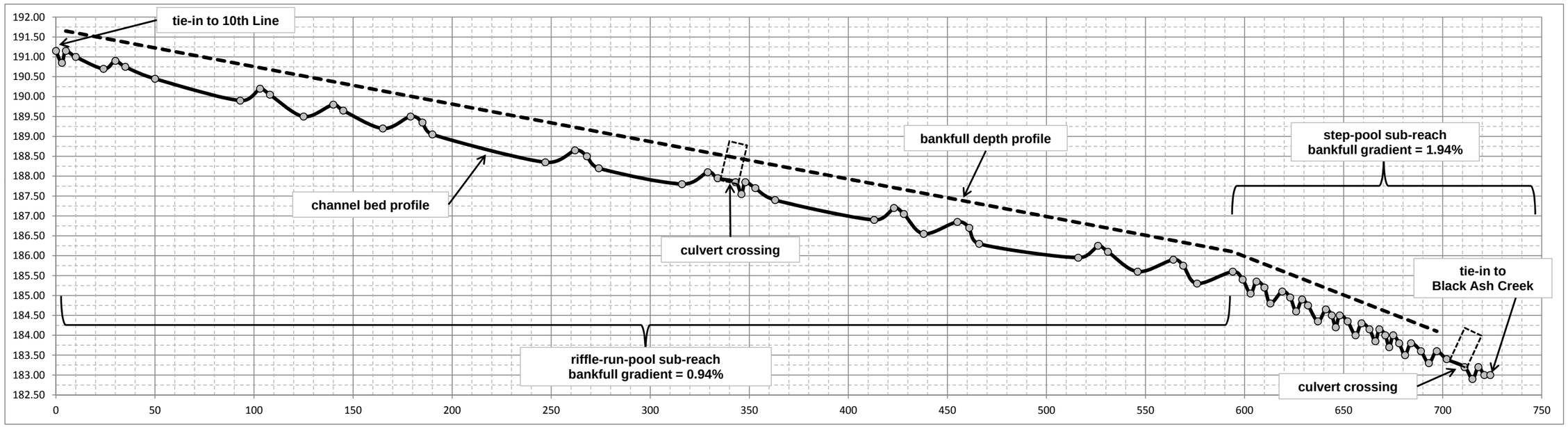


Notes

1) Typical 1-4 layers high field fit and variable shape/density depending on source material
2) Re-used found onsite materials preferred
3) Disturbed areas to be seeded and restored per approved landscape plans

# Channel Profile

| dist. (m) | elev. (m) | | station |
|---|---|---|---|
| 0 | 191.15 | | tie-in 10th Line culv inv |
| 3 | 190.85 | | max depth pool / ditch inv |
| 5 | 191.15 | r1 | top of riffle |
| 10 | 191.00 | | bottom of riffle |
| 24 | 190.70 | | max depth pool |
| 30 | 190.90 | r2 | top of riffle |
| 35 | 190.75 | | bottom of riffle |
| 50 | 190.45 | | max depth run-pool |
| 93 | 189.90 | | max depth run-pool |
| 103 | 190.20 | r3 | top of riffle |
| 108 | 190.05 | | bottom of riffle |
| 125 | 189.50 | | max depth pool |
| 140 | 189.80 | r4 | top of riffle |
| 145 | 189.65 | | bottom of riffle |
| 165 | 189.20 | | max depth pool |
| 179 | 189.50 | r5 | top of riffle |
| 185 | 189.35 | | bottom of riffle |
| 190 | 189.05 | | max depth run-pool |
| 247 | 188.35 | | max depth run-pool |
| 262 | 188.65 | r6 | top of riffle |
| 268 | 188.50 | | bottom of riffle |
| 274 | 188.20 | | max depth run-pool |
| 316 | 187.80 | | max depth run-pool |
| 329 | 188.10 | r7 | top of riffle |
| 334 | 187.95 | | culv u/s inv bottom of riffle |
| 343 | 187.85 | | culv d/s inv |
| 346 | 187.55 | | max depth pool |
| 348 | 187.85 | r8 | top of riffle |
| 353 | 187.70 | | bottom of riffle |
| 363 | 187.40 | | max depth run-pool |
| 413 | 186.90 | | max depth run-pool |
| 423 | 187.20 | r9 | top of riffle |
| 428 | 187.05 | | bottom of riffle |
| 438 | 186.55 | | max depth pool |
| 455 | 186.85 | r10 | top of riffle |
| 461 | 186.70 | | bottom of riffle |
| 466 | 186.30 | | max depth run-pool |
| 516 | 185.95 | | max depth run-pool |
| 526 | 186.25 | r11 | top of riffle |
| 531 | 186.10 | | bottom of riffle |
| 546 | 185.60 | | max depth pool |
| 564 | 185.90 | r12 | top of riffle |
| 569 | 185.75 | | bottom of riffle |
| 576 | 185.30 | | max depth pool |
| 594 | 185.60 | s1 | top of step |
| 599 | 185.40 | | bottom of step |
| 603 | 185.05 | | max depth pool |
| 606 | 185.35 | s2 | top of step |
| 610 | 185.20 | | bottom of step |
| 613 | 184.80 | | max depth pool |
| 619 | 185.10 | s3 | top of step |
| 623 | 184.95 | | bottom of step |
| 626 | 184.60 | | max depth pool |
| 629 | 184.90 | s4 | top of step |
| 632 | 184.75 | | bottom of step |
| 637 | 184.35 | | max depth pool |
| 641 | 184.65 | s5 | top of step |
| 644 | 184.50 | | bottom of step |
| 646 | 184.20 | | max depth pool |
| 648 | 184.50 | s6 | top of step |
| 652 | 184.35 | | bottom of step |
| 656 | 184.00 | | max depth pool |
| 659 | 184.30 | s7 | top of step |
| 663 | 184.15 | | bottom of step |
| 666 | 183.85 | | max depth pool |
| 668 | 184.15 | s8 | top of step |
| 671 | 184.00 | | bottom of step |
| 673 | 183.70 | | max depth pool |
| 675 | 184.00 | s9 | top of step |
| 678 | 183.80 | | bottom of step |
| 681 | 183.50 | | max depth pool |
| 684 | 183.80 | s10 | top of step |
| 689 | 183.60 | | bottom of step |
| 693 | 183.30 | | max depth pool |
| 697 | 183.60 | s11 | top of step |
| 702 | 183.40 | | culv u/s inv bottom of step |
| 711 | 183.20 | | culv d/s inv |
| 715 | 182.90 | | max depth pool |
| 718 | 183.20 | s12 | top of step |
| 721 | 183.00 | | bottom of step |
| 724 | 183.00 | | tie-in Black Ash Creek |



# FSH-PASS v.2.2 Fish Passage Channel Velocity Analysis Model

**Project:** Natural Channel Design, Mair Mills Village
Taylor's Creek
Proposed Bankfull Conditions

B. de Geus 07.12

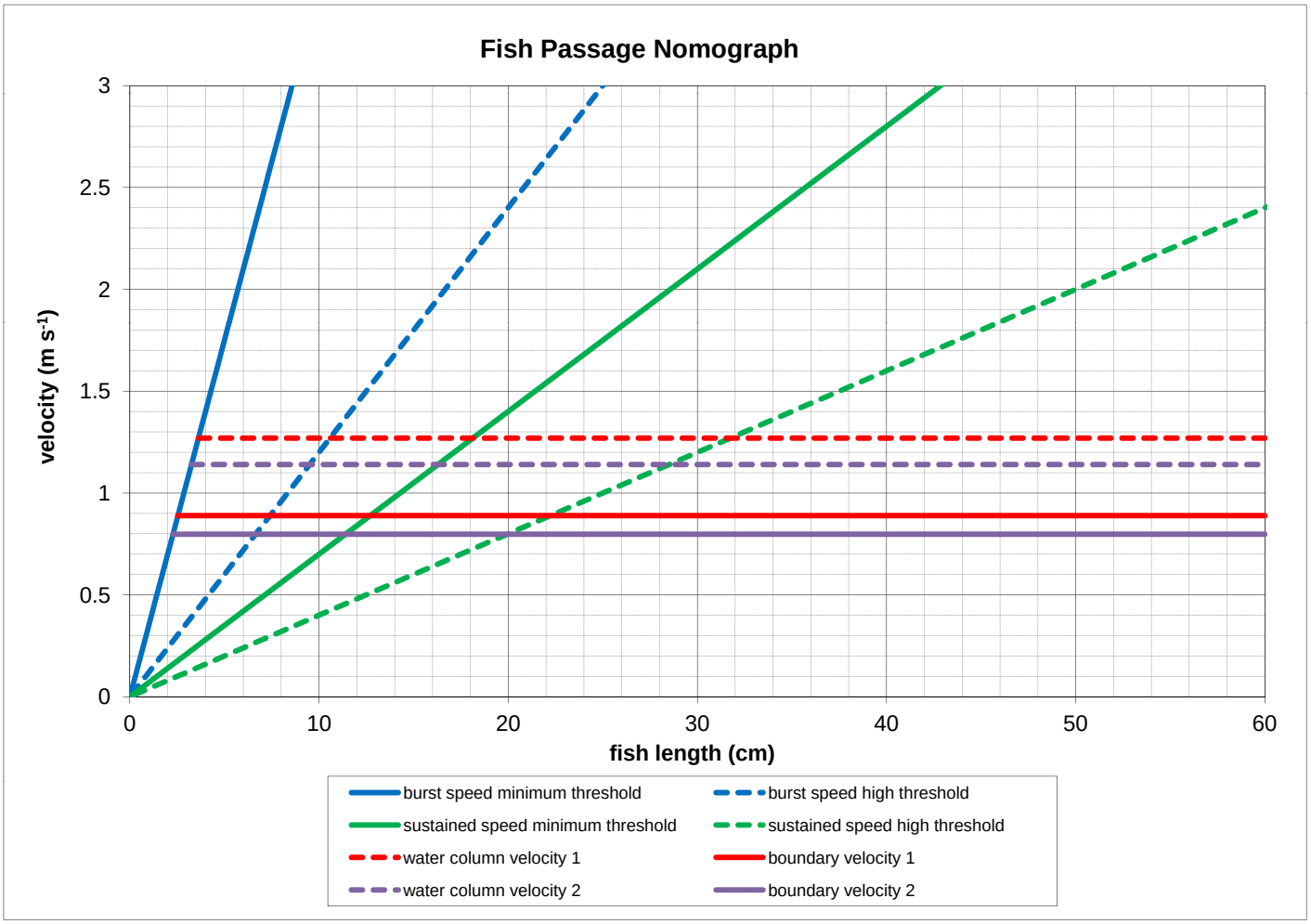
**Velocity 1** STEP
**Velocity 2** RIFFLE

| Velocity Data | 1 | 2 |
|---|---|---|
| water column velocity V (m $s^{-1}$) | 1.27 | 1.14 |
| boundary velocity $V_b$ (m $s^{-1}$) | 0.89 | 0.80 |

| $S_b$ $D_s$ burst speed swimming distance (m) | 1 | 2 |
|---|---|---|
| water column | 95.2 | 102.3 |
| boundary | 116.1 | 121.1 |

**Fish Length Data**

| | | sustained speed high threshold | sustained speed minimum threshold | burst speed high threshold | burst speed minimum threshold |
|---|---|---|---|---|---|
| 1 | fish length $L_f$ (cm) at V | 31.8 | 18.1 | 10.6 | 3.6 |
| | fish length $L_f$ (cm) at $V_b$ | 22.2 | 12.7 | 7.4 | 2.5 |
| 2 | fish length $L_f$ (cm) at V | 28.5 | 16.3 | 9.5 | 3.3 |
| | fish length $L_f$ (cm) at $V_b$ | 20.0 | 11.4 | 6.7 | 2.3 |

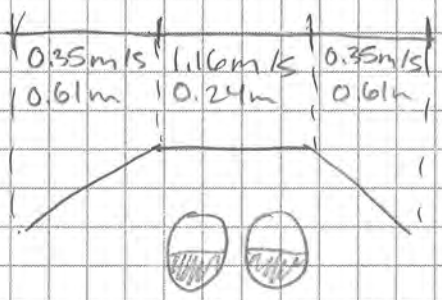


# APPENDIX C:
# EXISTING/PROPOSED HEC RAS

C.C. Tatham & Associates Ltd.
Consulting Engineers

Project Taylor's Creek | Sheet 1 of 1
File No. 115224 | Date June 16, 2016
Subject Safe Access Egress | Checked

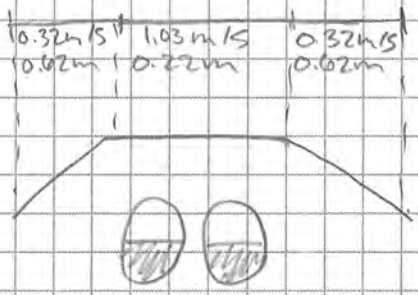
## Section 385




Center (Velocity Product)
= 1.16m/s x 0.24m
= 0.278m²/s

Overbank (Velocity Product)
= 0.35m/s x 0.61m
= 0.214m²/s

## Section 50




Center (Velocity Product)
= 1.03m/s x 0.22m
= 0.227m²/s

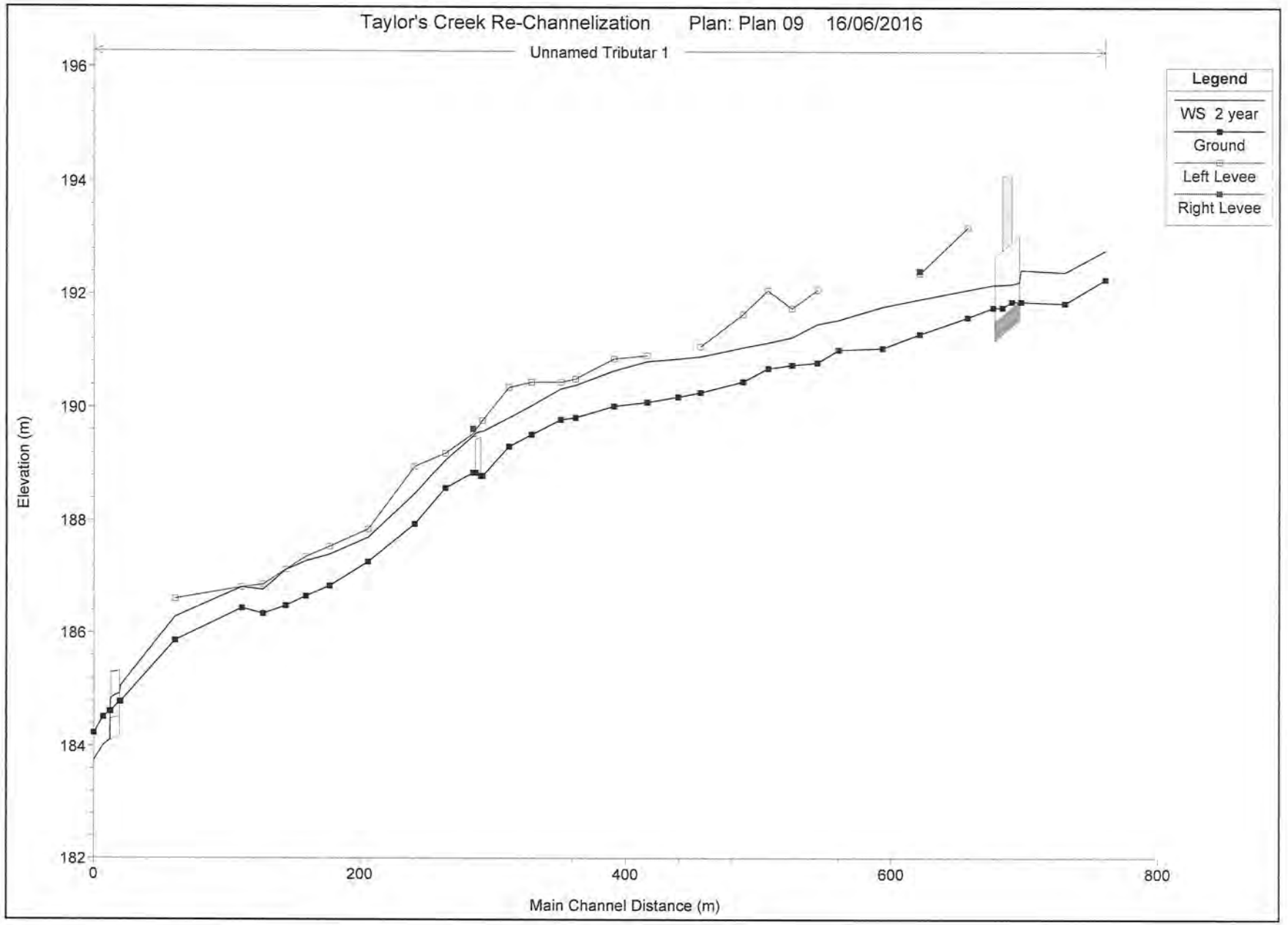
Overbank (Velocity Product
= 0.32m/s x 0.62m
= 0.198 m²/s

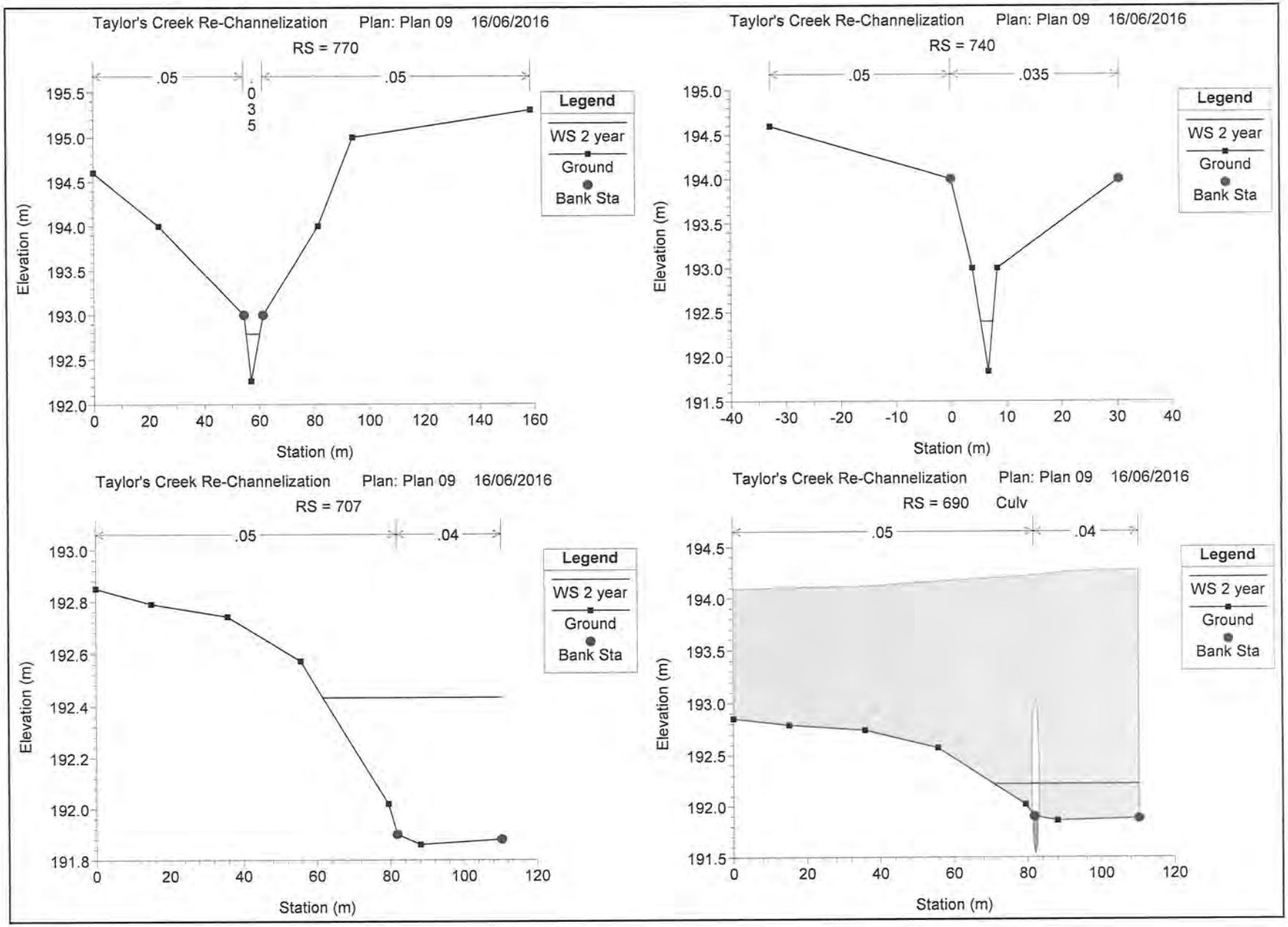
* Culverts are all 50% blocked

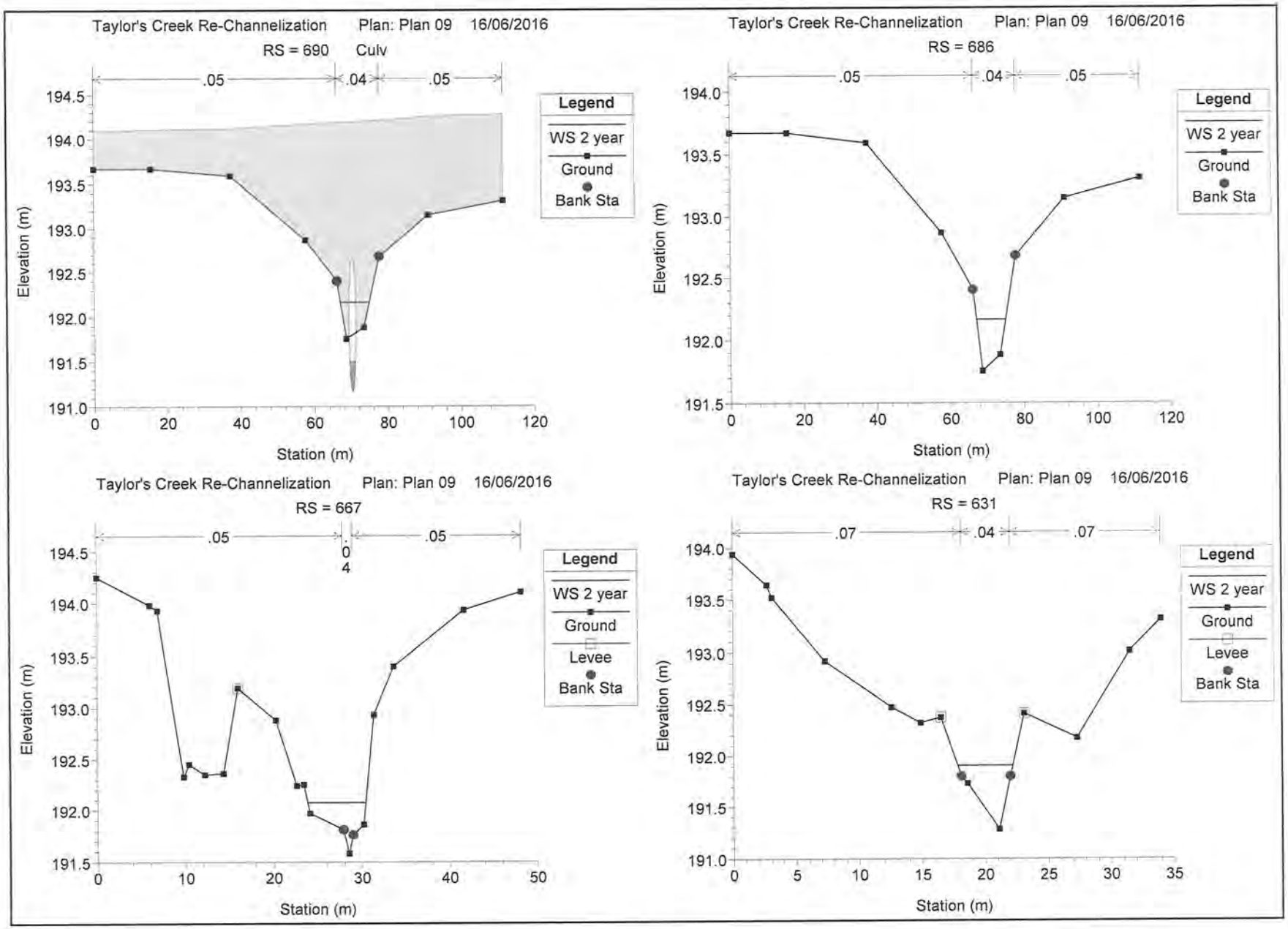
# Existing Condition

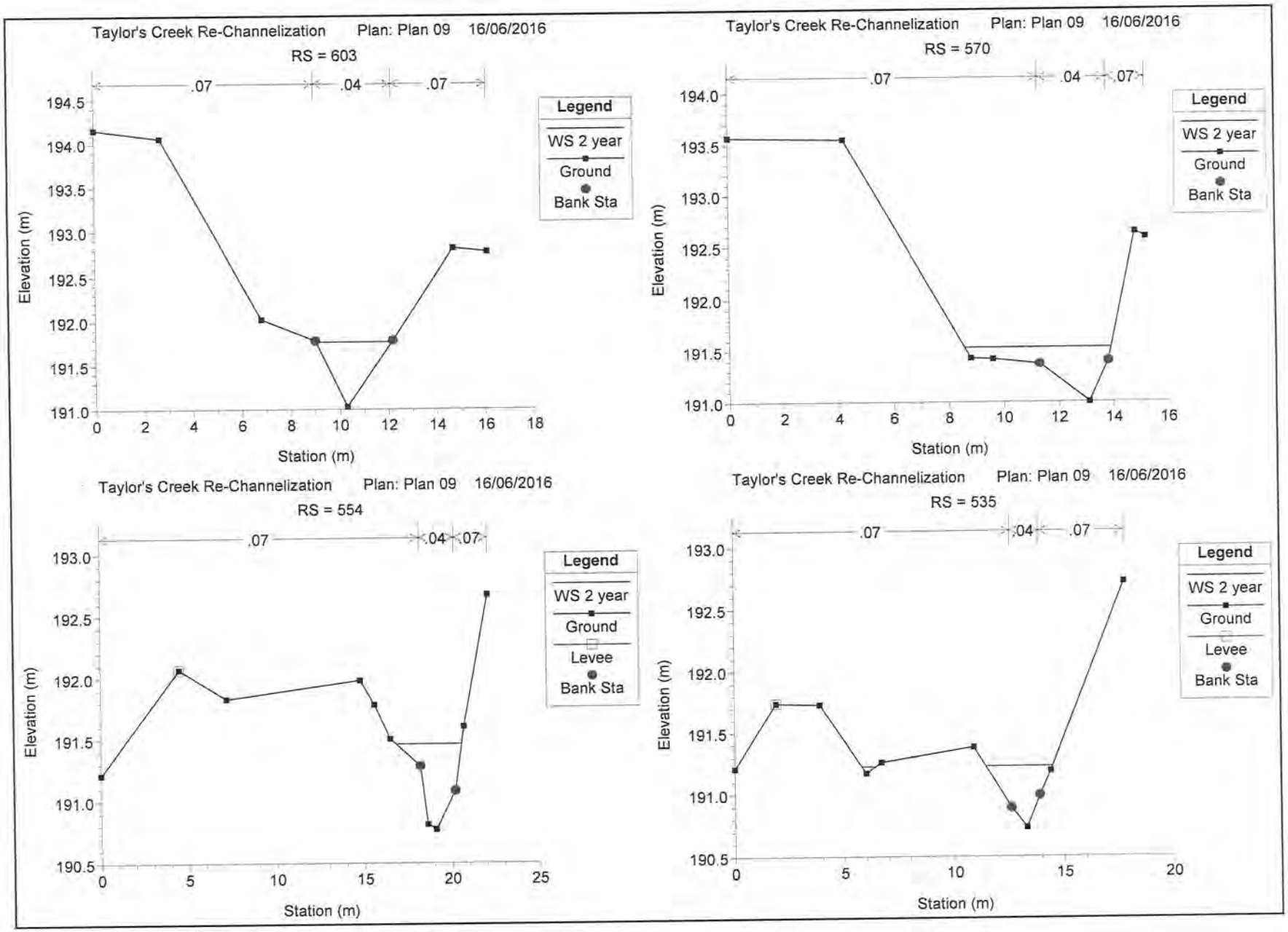
HEC-RAS Plan: Plan 09 River: Unnamed Tributar Reach: 1 Profile: 2 year

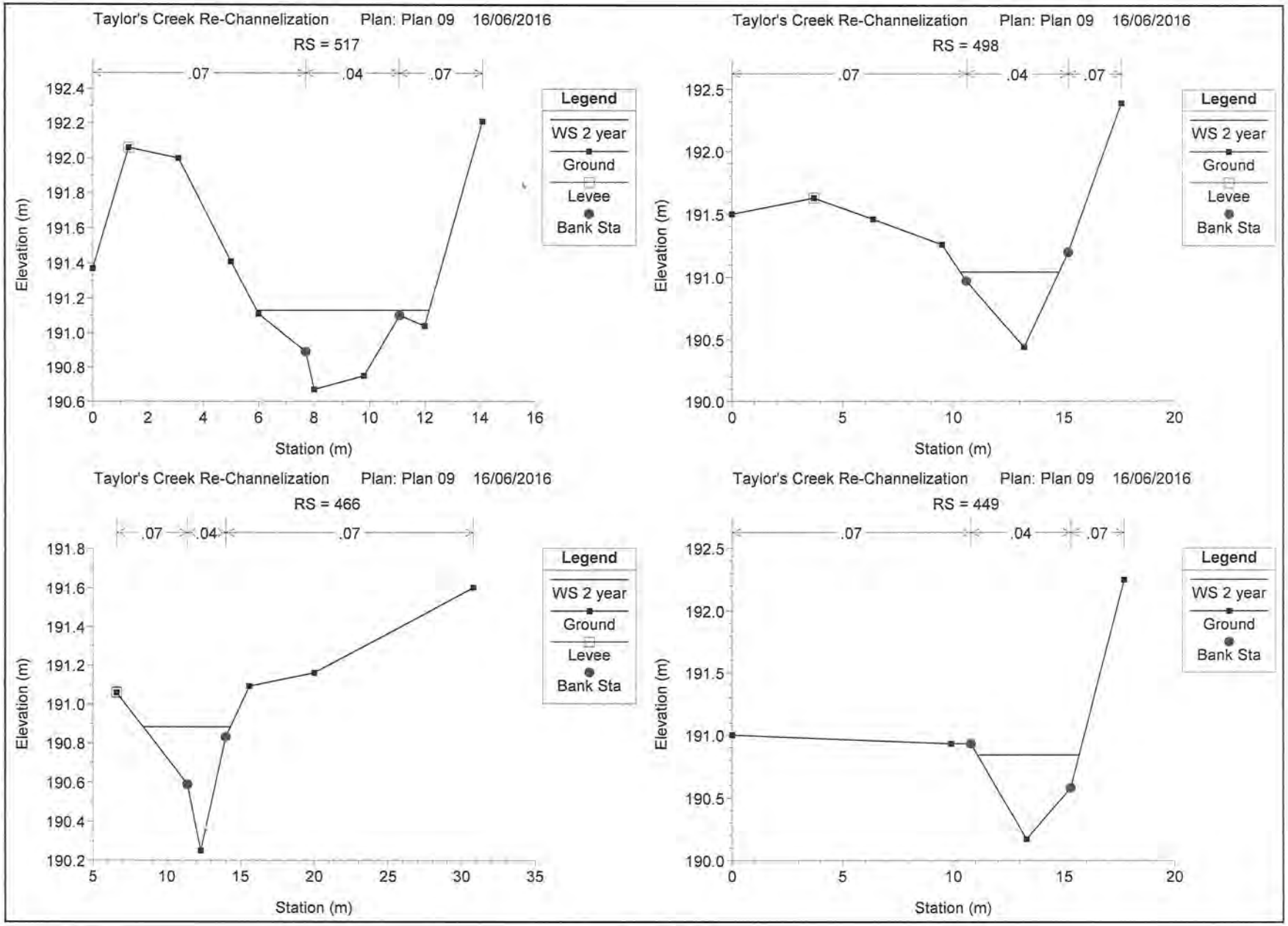
| Reach | River Sta | Profile | Q Total | Min Ch El | W.S. Elev | Crit W.S. | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (m3/s) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| 1 | 770 | 2 year | 1.03 | 192.26 | 192.78 | | 192.82 | 0.004867 | 0.80 | 1.28 | 4.89 | 0.50 |
| 1 | 740 | 2 year | 1.03 | 191.83 | 192.39 | 192.39 | 192.54 | 0.022141 | 1.68 | 0.61 | 2.18 | 1.01 |
| 1 | 707 | 2 year | 1.03 | 191.86 | 192.43 | 191.92 | 192.43 | 0.000012 | 0.06 | 20.67 | 48.60 | 0.02 |
| 1 | 690 | | Culvert | | | | | | | | | |
| 1 | 686 | 2 year | 1.03 | 191.75 | 192.16 | | 192.17 | 0.001961 | 0.47 | 2.19 | 7.89 | 0.28 |
| 1 | 667 | 2 year | 1.03 | 191.58 | 192.07 | 192.01 | 192.11 | 0.006716 | 1.05 | 1.49 | 6.60 | 0.54 |
| 1 | 631 | 2 year | 1.03 | 191.28 | 191.90 | 191.72 | 191.93 | 0.003612 | 0.73 | 1.42 | 4.38 | 0.39 |
| 1 | 603 | 2 year | 1.03 | 191.03 | 191.77 | | 191.81 | 0.005483 | 0.89 | 1.16 | 3.14 | 0.47 |
| 1 | 570 | 2 year | 1.03 | 191.00 | 191.53 | | 191.59 | 0.008320 | 1.08 | 1.19 | 5.33 | 0.59 |
| 1 | 554 | 2 year | 1.03 | 190.77 | 191.46 | 191.21 | 191.50 | 0.003590 | 0.92 | 1.27 | 3.73 | 0.40 |
| 1 | 535 | 2 year | 1.03 | 190.73 | 191.22 | 191.22 | 191.36 | 0.018206 | 1.74 | 0.79 | 3.66 | 0.89 |
| 1 | 517 | 2 year | 1.03 | 190.67 | 191.13 | 191.00 | 191.16 | 0.005314 | 0.85 | 1.41 | 6.23 | 0.47 |
| 1 | 498 | 2 year | 1.03 | 190.44 | 191.04 | 190.87 | 191.07 | 0.004323 | 0.76 | 1.37 | 4.46 | 0.42 |
| 1 | 466 | 2 year | 1.03 | 190.25 | 190.88 | 190.74 | 190.92 | 0.005115 | 0.91 | 1.44 | 5.91 | 0.47 |
| 1 | 449 | 2 year | 1.03 | 190.17 | 190.84 | | 190.86 | 0.002122 | 0.61 | 1.72 | 4.58 | 0.31 |
| 1 | 426 | 2 year | 1.03 | 190.08 | 190.79 | 190.52 | 190.81 | 0.002169 | 0.57 | 1.80 | 5.05 | 0.30 |
| 1 | 401 | 2 year | 1.03 | 190.01 | 190.63 | 190.54 | 190.70 | 0.011564 | 1.16 | 0.88 | 2.85 | 0.67 |
| 1 | 372 | 2 year | 1.03 | 189.81 | 190.38 | 190.26 | 190.42 | 0.007642 | 0.92 | 1.12 | 3.93 | 0.55 |
| 1 | 361 | 2 year | 1.03 | 189.77 | 190.31 | 190.15 | 190.35 | 0.005188 | 0.85 | 1.23 | 4.76 | 0.46 |
| 1 | 339 | 2 year | 1.03 | 189.51 | 190.02 | 190.01 | 190.13 | 0.024452 | 1.50 | 0.69 | 2.70 | 0.95 |
| 1 | 322 | 2 year | 1.03 | 189.30 | 189.80 | 189.80 | 189.86 | 0.010333 | 1.21 | 1.99 | 22.64 | 0.65 |
| 1 | 302 | 2 year | 1.03 | 188.78 | 189.57 | 189.45 | 189.65 | 0.008767 | 1.34 | 1.33 | 11.43 | 0.58 |
| 1 | 298.5 | | Culvert | | | | | | | | | |
| 1 | 295 | 2 year | 1.03 | 188.84 | 189.48 | 189.48 | 189.59 | 0.016794 | 1.48 | 1.00 | 7.47 | 0.77 |
| 1 | 274 | 2 year | 1.03 | 188.57 | 189.06 | 189.06 | 189.13 | 0.015265 | 1.43 | 1.74 | 15.16 | 0.78 |
| 1 | 251 | 2 year | 1.03 | 187.93 | 188.47 | 188.47 | 188.61 | 0.030352 | 1.62 | 0.63 | 2.34 | 0.99 |
| 1 | 216 | 2 year | 1.03 | 187.26 | 187.69 | 187.65 | 187.77 | 0.015845 | 1.28 | 0.87 | 5.81 | 0.78 |
| 1 | 187 | 2 year | 1.03 | 186.82 | 187.39 | 187.24 | 187.45 | 0.008027 | 1.07 | 0.96 | 2.53 | 0.56 |
| 1 | 159 | 2 year | 1.03 | 186.64 | 187.27 | 187.08 | 187.32 | 0.006077 | 0.97 | 1.06 | 2.97 | 0.49 |
| 1 | 144 | 2 year | 1.03 | 186.47 | 187.11 | 186.97 | 187.20 | 0.011197 | 1.27 | 0.81 | 1.89 | 0.62 |
| 1 | 127 | 2 year | 1.03 | 186.33 | 186.76 | 186.76 | 186.90 | 0.027979 | 1.70 | 0.60 | 2.06 | 1.01 |
| 1 | 111 | 2 year | 1.03 | 186.43 | 186.80 | 186.80 | 186.80 | 0.000015 | 0.03 | 29.33 | 68.19 | 0.02 |
| 1 | 61 | 2 year | 1.03 | 185.86 | 186.28 | 186.28 | 186.37 | 0.017927 | 1.44 | 0.98 | 7.39 | 0.83 |
| 1 | 20 | 2 year | 1.03 | 184.79 | 185.06 | 184.60 | 185.07 | 0.000424 | 0.17 | 2.77 | 12.17 | 0.12 |
| 1 | 16 | | Culvert | | | | | | | | | |
| 1 | 12 | 2 year | 1.03 | 184.62 | 184.11 | 184.11 | 184.23 | 0.019003 | | 0.69 | 2.84 | 0.00 |
| 1 | 7 | 2 year | 1.03 | 184.52 | 184.02 | 184.02 | 184.12 | 0.021337 | | 0.72 | 3.46 | 0.00 |
| 1 | 0 | 2 year | 1.03 | 184.24 | 183.75 | 183.75 | 183.85 | 0.022017 | | 0.73 | 3.74 | 0.00 |

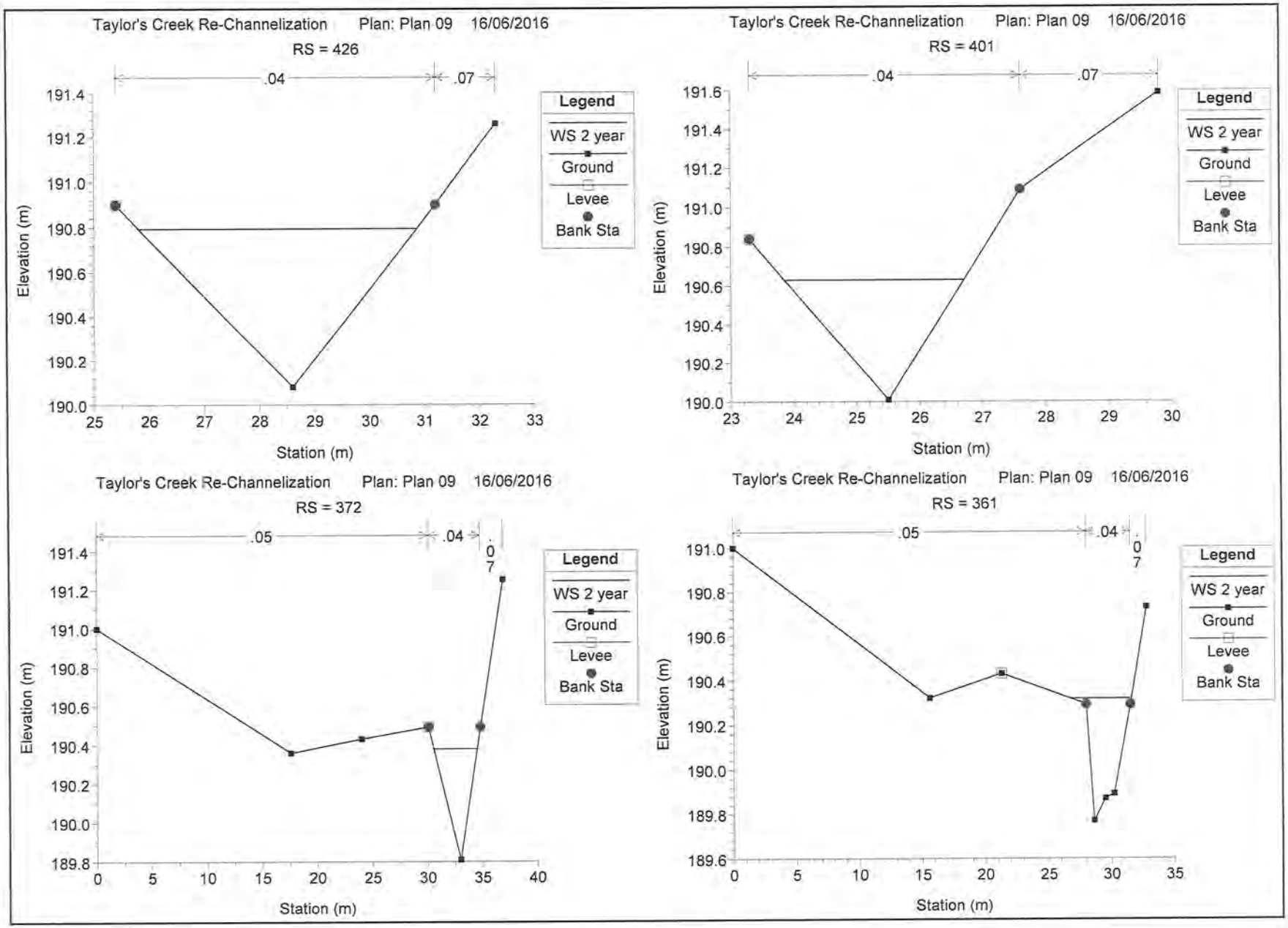

Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
Unnamed Tributar 1
Legend
WS 2 year
Ground
Left Levee
Right Levee
Elevation (m)
196
194
192
190
188
186
184
182
0
200
400
600
800
Main Channel Distance (m)

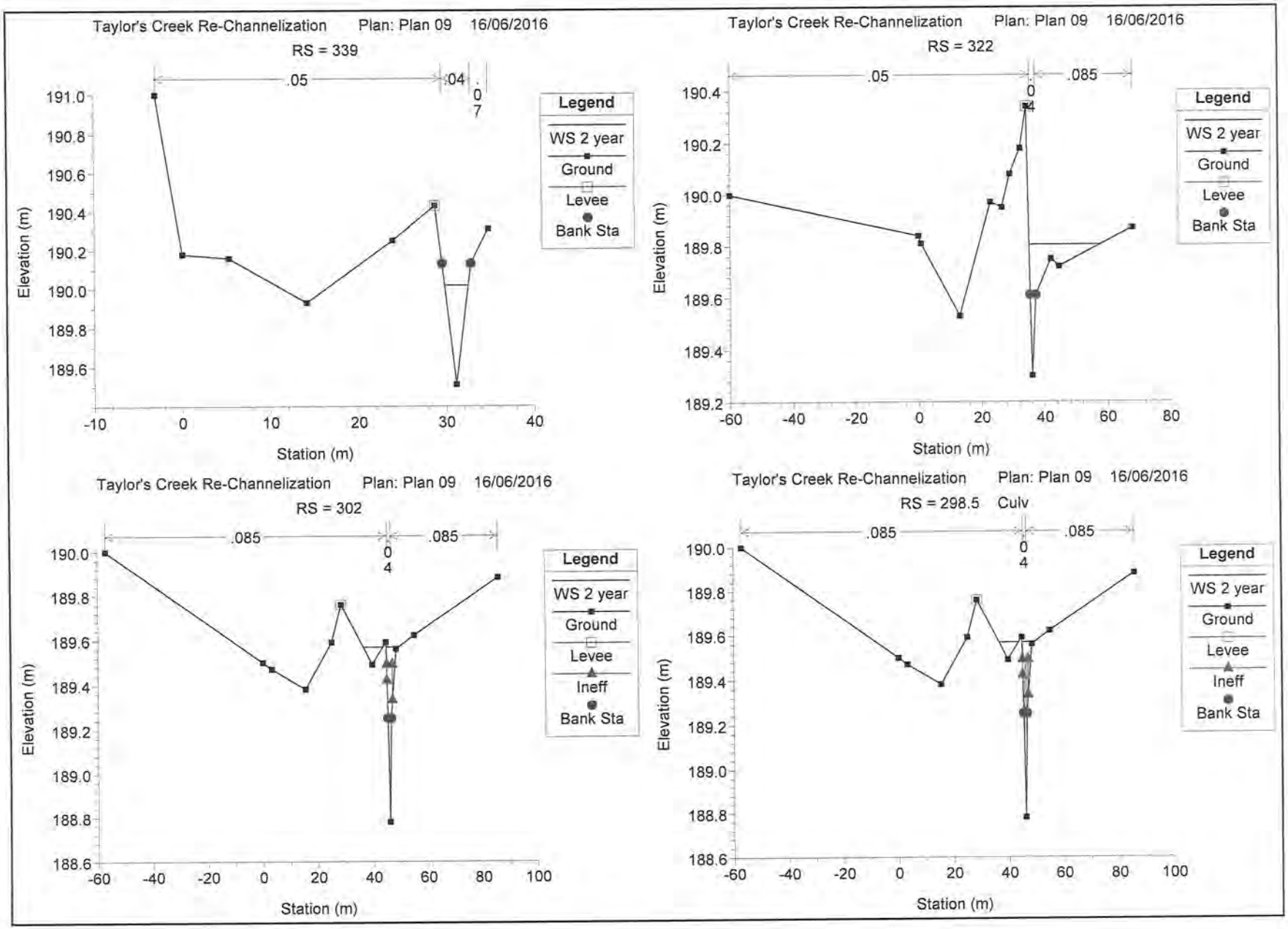

Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 770
.05
.035
.05
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 740
.05
.035
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 707
.05
.04
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 690 Culv
.05
.04
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)

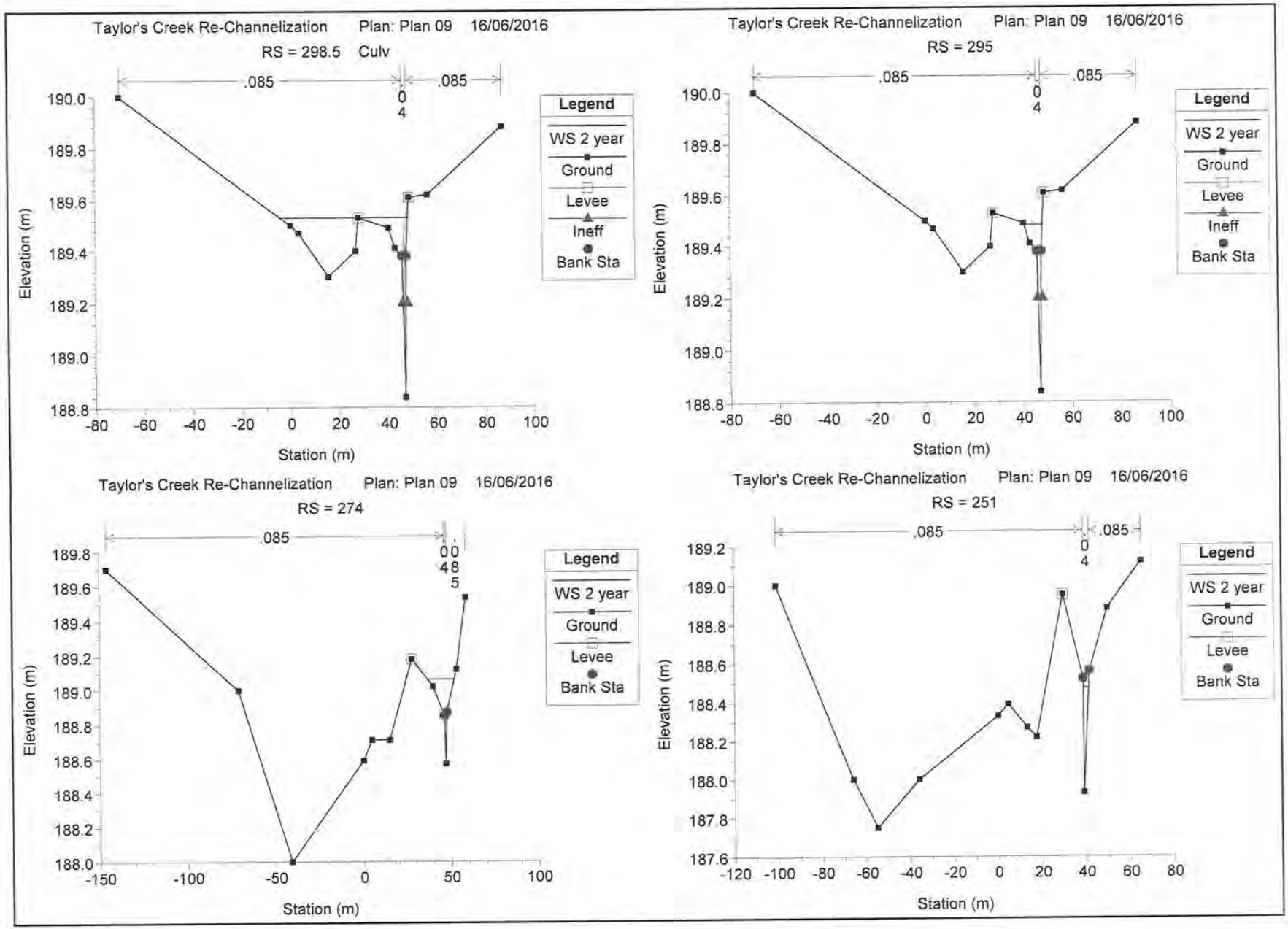

Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 690 Culv
.05
.04
.05
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 686
.05
.04
.05
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 667
.05
.05
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 631
.07
.04
.07
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

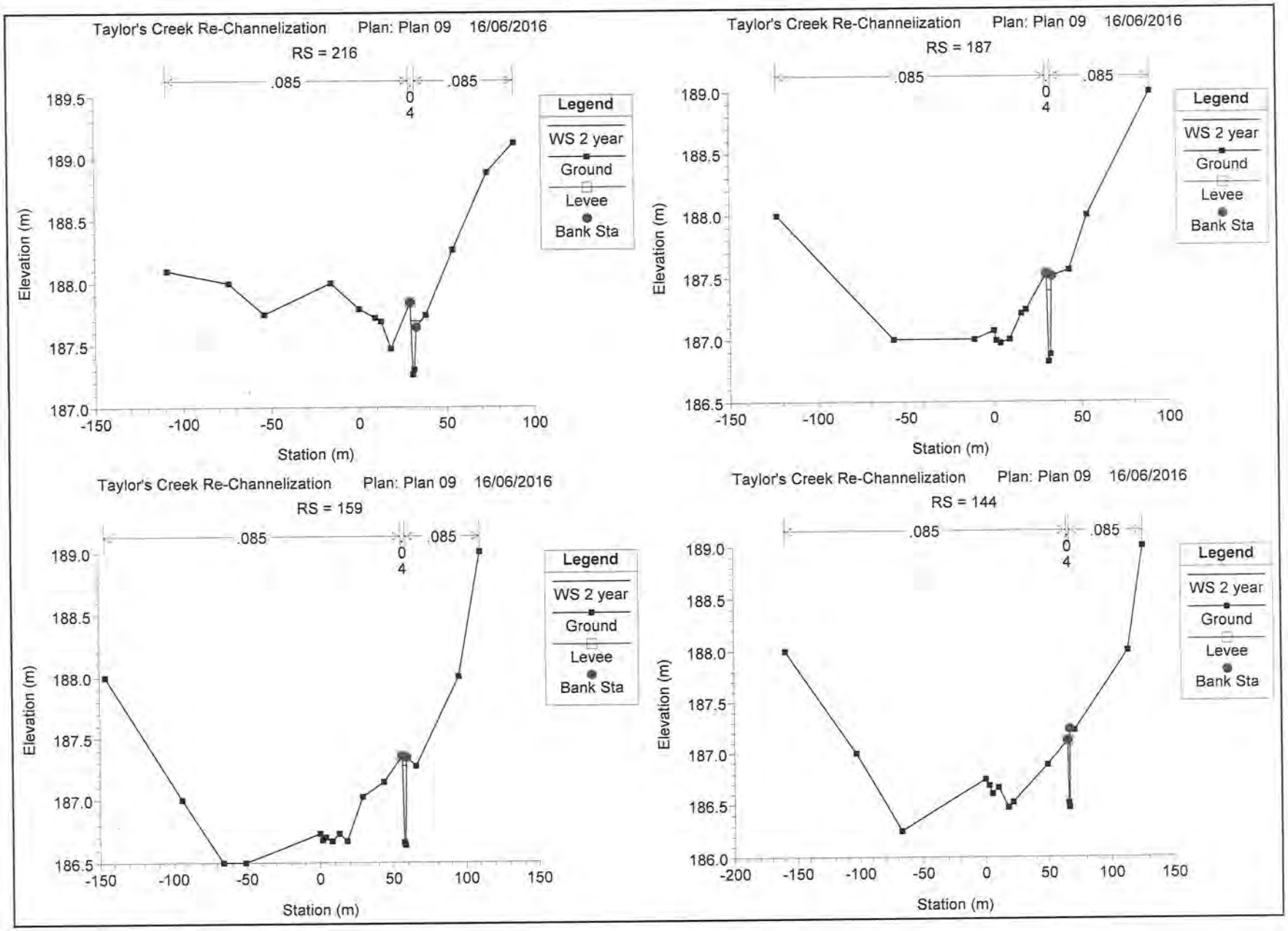

Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 603
.07
.04
.07
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 570
.07
.04
.07
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 554
.07
.04
.07
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 535
.07
.04
.07
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)

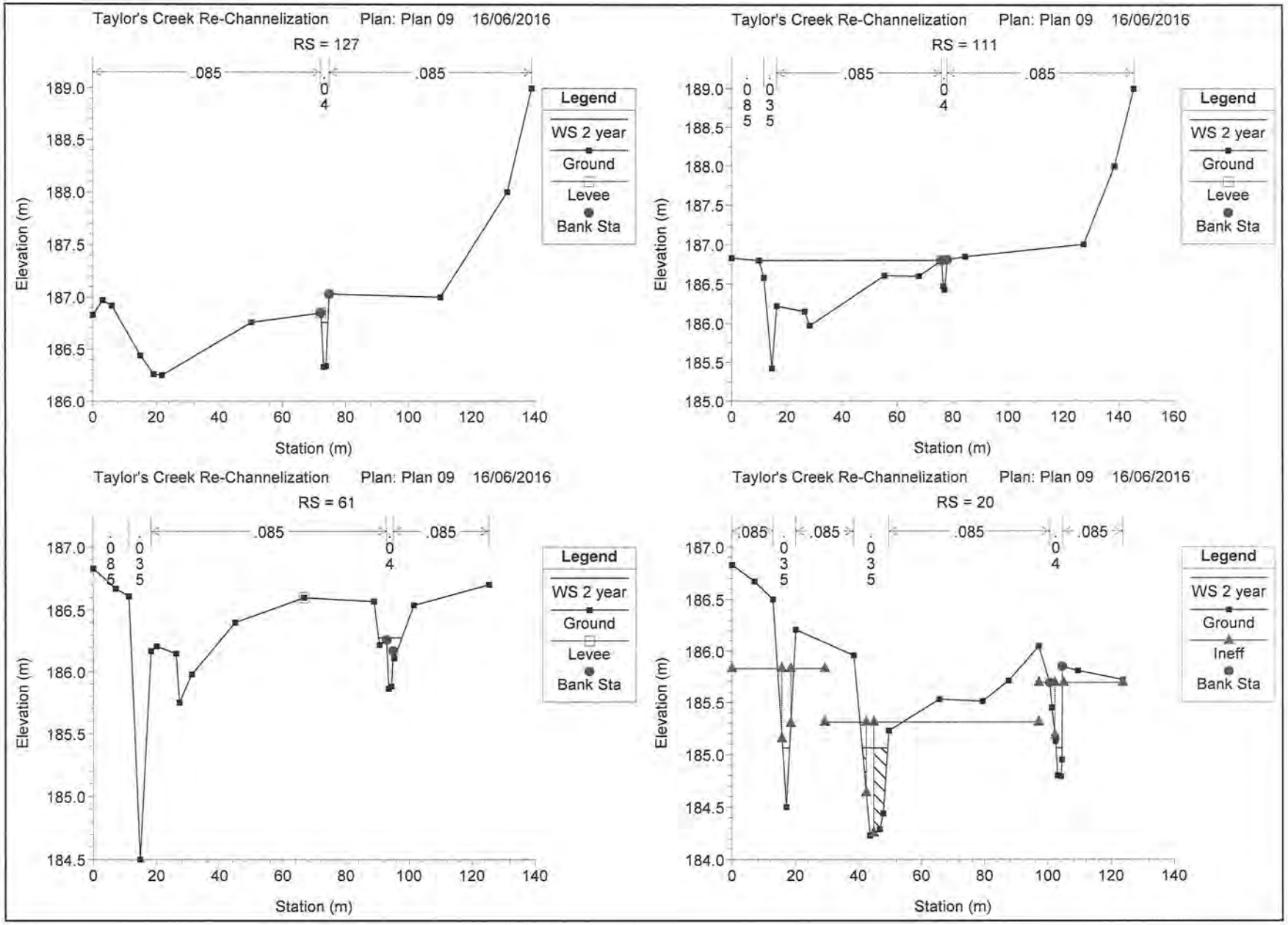

Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 517
.07
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Levee
Bank Sta
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 498
.07
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Levee
Bank Sta
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 466
.07
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Levee
Bank Sta
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 449
.07
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Bank Sta

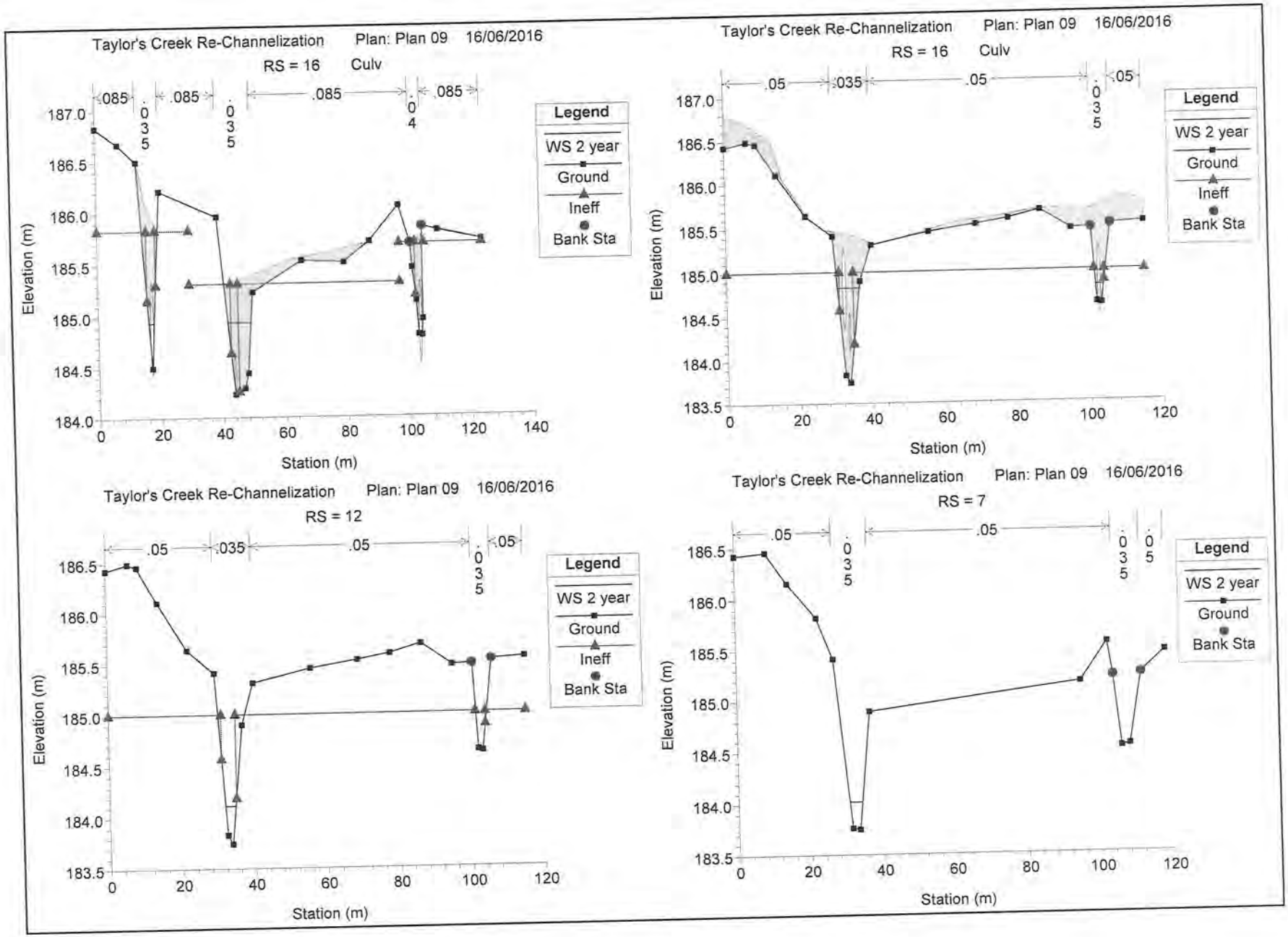

Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 426
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Levee
Bank Sta
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 401
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Levee
Bank Sta
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 372
.05
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Levee
Bank Sta
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 361
.05
.04
.07
Elevation (m)
Station (m)
Legend
WS 2 year
Ground
Levee
Bank Sta

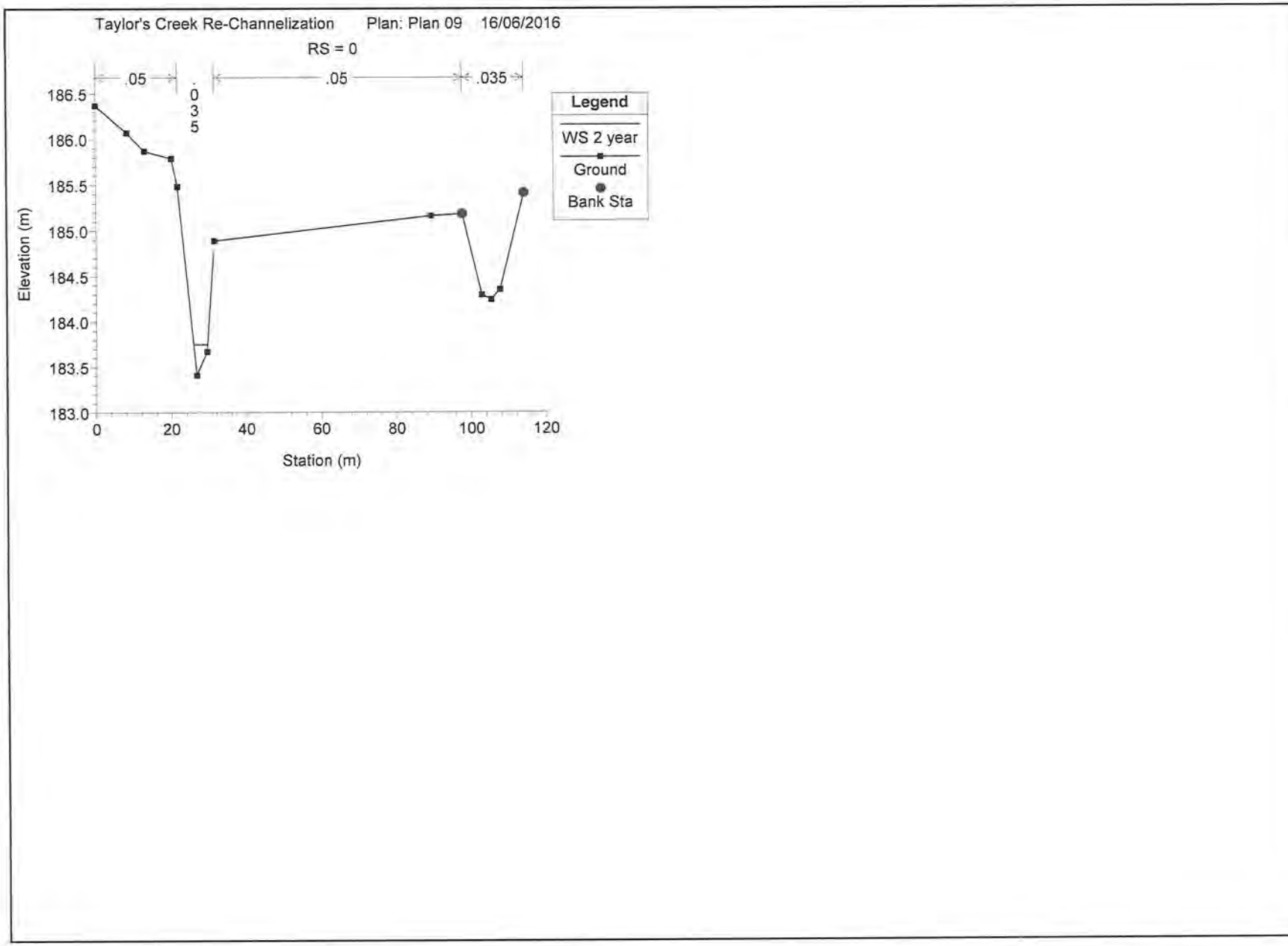

Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 339
.05
.04
.07
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 322
.05
.085
.04
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 302
.085
.085
.04
Legend
WS 2 year
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 298.5 Culv
.085
.085
.04
Legend
WS 2 year
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 298.5 Culv
.085
.085
0
4
Legend
WS 2 year
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 295
.085
.085
0
4
Legend
WS 2 year
Ground
Levee
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 274
.085
0
0
4
8
5
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 251
.085
.085
0
4
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 216
.085
.085
0
4
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 187
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 159
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 144


Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 127
.085
.085
.04
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 111
.085
.085
.085
.035
.04
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 61
.085
.085
.085
.035
.04
Legend
WS 2 year
Ground
Levee
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 20
.085
.085
.085
.085
.035
.035
.04
Legend
WS 2 year
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 16 Culv
.085
.035
.085
.035
.085
.04
.085
Legend
WS 2 year
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 16 Culv
.05
.035
.05
.035
.05
Legend
WS 2 year
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 12
.05
.035
.05
.035
.05
Legend
WS 2 year
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 7
.05
.035
.05
.035
.05
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization Plan: Plan 09 16/06/2016
RS = 0
.05
.035
.05
.035
Legend
WS 2 year
Ground
Bank Sta
Elevation (m)
186.5
186.0
185.5
185.0
184.5
184.0
183.5
183.0
0
20
40
60
80
100
120
Station (m)

# Proposed Condition

HEC-RAS Plan: Plan 08 River: Unnamed Tributar Reach: 1

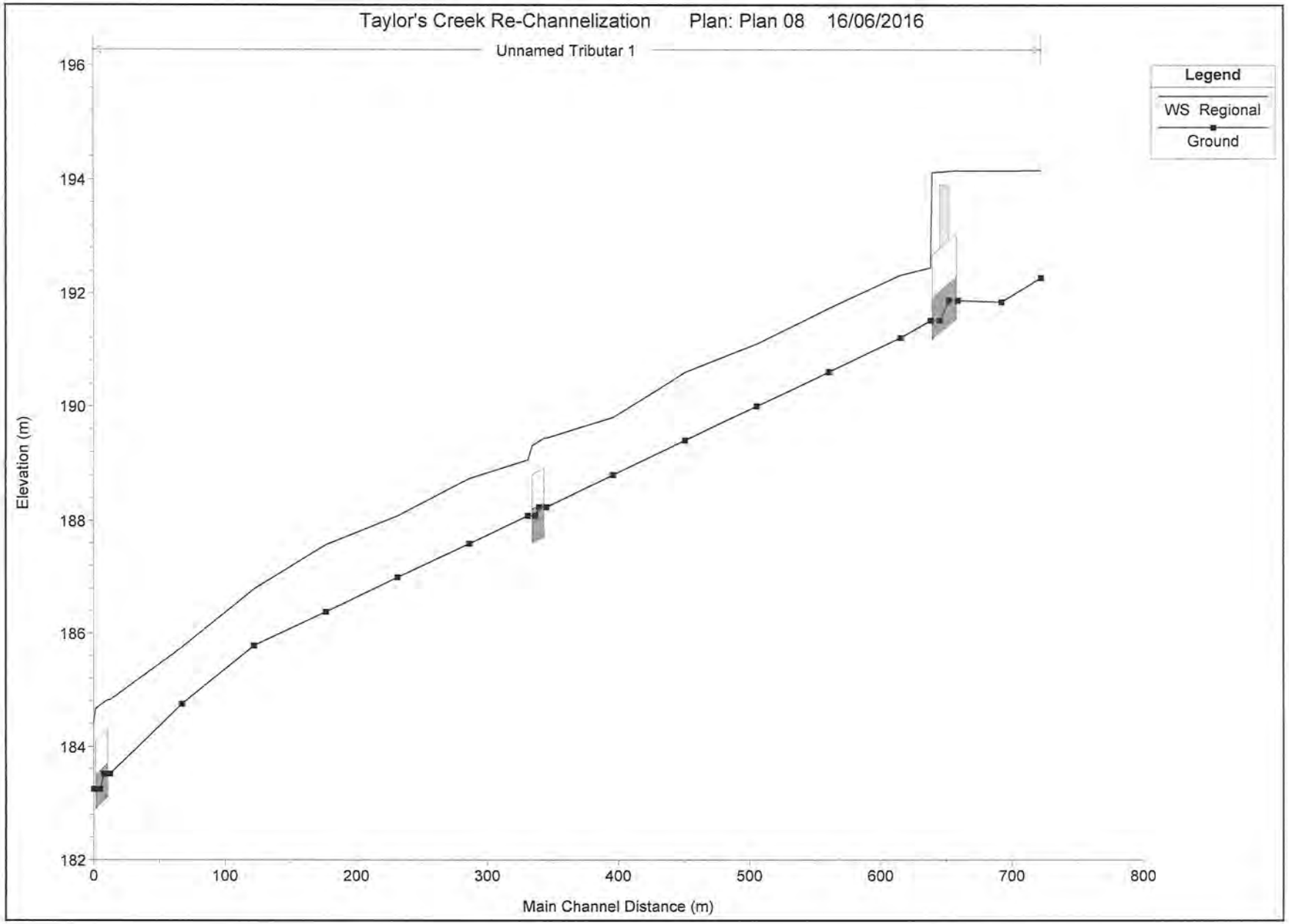
| Reach | River Sta | Profile | Q Total | Min Ch El | W.S. Elev | Crit W.S | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (m3/s) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| 1 | 770 | Regional | 10.22 | 192.26 | 194.15 | | 194.16 | 0.000159 | 0.41 | 44.36 | 65.74 | 0.11 |
| 1 | 770 | 100 year | 4.47 | 192.26 | 194.05 | | 194.05 | 0.000045 | 0.21 | 37.82 | 60.32 | 0.06 |
| 1 | 770 | 50 year | 3.69 | 192.26 | 194.03 | | 194.03 | 0.000033 | 0.18 | 36.43 | 59.11 | 0.05 |
| 1 | 770 | 25 year | 3.07 | 192.26 | 193.98 | | 193.99 | 0.000027 | 0.16 | 33.95 | 56.90 | 0.04 |
| 1 | 770 | 10 year | 2.20 | 192.26 | 193.37 | | 193.38 | 0.000302 | 0.35 | 8.66 | 25.84 | 0.13 |
| 1 | 770 | 5 year | 1.61 | 192.26 | 193.09 | | 193.10 | 0.001185 | 0.50 | 3.35 | 11.35 | 0.24 |
| 1 | 770 | 2 year | 0.76 | 192.26 | 192.78 | | 192.80 | 0.003494 | 0.60 | 1.28 | 4.89 | 0.37 |
| 1 | 770 | 25mm | 0.32 | 192.26 | 192.58 | | 192.60 | 0.008950 | 0.68 | 0.47 | 2.95 | 0.55 |
| | | | | | | | | | | | | |
| 1 | 740 | Regional | 10.22 | 191.83 | 194.14 | | 194.15 | 0.000385 | 0.42 | 25.03 | 38.22 | 0.15 |
| 1 | 740 | 100 year | 4.47 | 191.83 | 194.05 | | 194.05 | 0.000112 | 0.21 | 21.64 | 33.02 | 0.08 |
| 1 | 740 | 50 year | 3.69 | 191.83 | 194.02 | | 194.03 | 0.000085 | 0.18 | 20.92 | 31.79 | 0.07 |
| 1 | 740 | 25 year | 3.07 | 191.83 | 193.98 | | 193.98 | 0.000072 | 0.16 | 19.61 | 29.98 | 0.06 |
| 1 | 740 | 10 year | 2.20 | 191.83 | 193.36 | | 193.36 | 0.000717 | 0.37 | 5.93 | 13.80 | 0.18 |
| 1 | 740 | 5 year | 1.61 | 191.83 | 193.05 | | 193.06 | 0.001402 | 0.56 | 2.89 | 5.73 | 0.25 |
| 1 | 740 | 2 year | 0.76 | 191.83 | 192.73 | | 192.74 | 0.001306 | 0.49 | 1.57 | 3.49 | 0.23 |
| 1 | 740 | 25mm | 0.32 | 191.83 | 192.53 | | 192.53 | 0.000865 | 0.34 | 0.95 | 2.71 | 0.18 |
| | | | | | | | | | | | | |
| 1 | 707 | Regional | 10.22 | 191.86 | 194.15 | 192.82 | 194.15 | 0.000002 | 0.05 | 290.86 | 193.20 | 0.01 |
| 1 | 707 | 100 year | 4.47 | 191.86 | 194.05 | 192.44 | 194.05 | 0.000000 | 0.02 | 271.62 | 193.20 | 0.01 |
| 1 | 707 | 50 year | 3.69 | 191.86 | 194.03 | 192.37 | 194.03 | 0.000000 | 0.02 | 267.21 | 193.20 | 0.00 |
| 1 | 707 | 25 year | 3.07 | 191.86 | 193.98 | 192.32 | 193.98 | 0.000000 | 0.02 | 258.99 | 193.20 | 0.00 |
| 1 | 707 | 10 year | 2.20 | 191.86 | 193.36 | 192.24 | 193.36 | 0.000001 | 0.03 | 139.03 | 193.20 | 0.01 |
| 1 | 707 | 5 year | 1.61 | 191.86 | 193.04 | 192.18 | 193.05 | 0.000217 | 0.40 | 4.39 | 186.08 | 0.12 |
| 1 | 707 | 2 year | 0.76 | 191.86 | 192.72 | 192.08 | 192.73 | 0.000145 | 0.27 | 3.16 | 72.72 | 0.09 |
| 1 | 707 | 25mm | 0.32 | 191.86 | 192.53 | 192.01 | 192.53 | 0.000064 | 0.15 | 2.39 | 52.76 | 0.06 |
| | | | | | | | | | | | | |
| 1 | 690 | | Culvert | | | | | | | | | |
| | | | | | | | | | | | | |
| 1 | 686 | Regional | 10.22 | 191.50 | 192.44 | 192.39 | 192.84 | 0.013955 | 2.81 | 3.64 | 11.43 | 0.93 |
| 1 | 686 | 100 year | 4.47 | 191.50 | 192.23 | 192.02 | 192.36 | 0.006133 | 1.58 | 2.83 | 9.50 | 0.59 |
| 1 | 686 | 50 year | 3.69 | 191.50 | 192.19 | 191.96 | 192.29 | 0.005192 | 1.39 | 2.65 | 9.21 | 0.54 |
| 1 | 686 | 25 year | 3.07 | 191.50 | 192.15 | 191.91 | 192.22 | 0.004428 | 1.23 | 2.50 | 8.94 | 0.49 |
| 1 | 686 | 10 year | 2.20 | 191.50 | 192.09 | 191.83 | 192.13 | 0.003143 | 0.97 | 2.26 | 8.55 | 0.41 |
| 1 | 686 | 5 year | 1.61 | 191.50 | 192.04 | 191.76 | 192.07 | 0.002262 | 0.78 | 2.07 | 8.23 | 0.34 |
| 1 | 686 | 2 year | 0.76 | 191.50 | 191.93 | 191.66 | 191.94 | 0.001085 | 0.46 | 1.65 | 7.55 | 0.23 |
| 1 | 686 | 25mm | 0.32 | 191.50 | 191.79 | 191.59 | 191.79 | 0.000735 | 0.29 | 1.10 | 6.63 | 0.17 |
| | | | | | | | | | | | | |
| 1 | 663.3 | Regional | 10.22 | 191.19 | 192.31 | | 192.42 | 0.011948 | 2.05 | 9.70 | 19.11 | 0.77 |
| 1 | 663.3 | 100 year | 4.47 | 191.19 | 192.07 | | 192.15 | 0.012936 | 1.63 | 5.31 | 17.68 | 0.75 |
| 1 | 663.3 | 50 year | 3.69 | 191.19 | 192.03 | | 192.10 | 0.013174 | 1.55 | 4.60 | 17.44 | 0.75 |
| 1 | 663.3 | 25 year | 3.07 | 191.19 | 191.99 | | 192.06 | 0.013382 | 1.48 | 4.00 | 17.23 | 0.74 |
| 1 | 663.3 | 10 year | 2.20 | 191.19 | 191.94 | | 192.00 | 0.013530 | 1.35 | 3.09 | 16.91 | 0.73 |
| 1 | 663.3 | 5 year | 1.61 | 191.19 | 191.90 | 191.88 | 191.96 | 0.013887 | 1.26 | 2.36 | 16.65 | 0.72 |
| 1 | 663.3 | 2 year | 0.76 | 191.19 | 191.82 | 191.78 | 191.87 | 0.013327 | 1.02 | 1.11 | 16.19 | 0.67 |
| 1 | 663.3 | 25mm | 0.32 | 191.19 | 191.70 | | 191.74 | 0.014022 | 0.85 | 0.37 | 2.11 | 0.65 |
| | | | | | | | | | | | | |
| 1 | 608.49 | Regional | 10.22 | 190.59 | 191.72 | | 191.82 | 0.010814 | 1.98 | 10.17 | 19.91 | 0.74 |
| 1 | 608.49 | 100 year | 4.47 | 190.59 | 191.50 | | 191.56 | 0.009579 | 1.46 | 5.96 | 18.29 | 0.65 |
| 1 | 608.49 | 50 year | 3.69 | 190.59 | 191.46 | | 191.52 | 0.009403 | 1.37 | 5.23 | 18.00 | 0.64 |
| 1 | 608.49 | 25 year | 3.07 | 190.59 | 191.43 | | 191.48 | 0.009281 | 1.30 | 4.61 | 17.74 | 0.63 |
| 1 | 608.49 | 10 year | 2.20 | 190.59 | 191.37 | | 191.42 | 0.009142 | 1.17 | 3.61 | 17.32 | 0.61 |
| 1 | 608.49 | 5 year | 1.61 | 190.59 | 191.33 | | 191.37 | 0.008910 | 1.07 | 2.85 | 17.00 | 0.59 |
| 1 | 608.49 | 2 year | 0.76 | 190.59 | 191.24 | | 191.28 | 0.008974 | 0.88 | 1.42 | 16.37 | 0.56 |
| 1 | 608.49 | 25mm | 0.32 | 190.59 | 191.14 | | 191.17 | 0.007896 | 0.67 | 0.47 | 2.55 | 0.50 |
| | | | | | | | | | | | | |
| 1 | 553.69 | Regional | 10.22 | 189.99 | 191.08 | | 191.20 | 0.013353 | 2.12 | 9.56 | 20.20 | 0.81 |
| 1 | 553.69 | 100 year | 4.47 | 189.99 | 190.85 | | 190.94 | 0.014852 | 1.71 | 5.13 | 18.24 | 0.80 |
| 1 | 553.69 | 50 year | 3.69 | 189.99 | 190.82 | | 190.90 | 0.015122 | 1.63 | 4.43 | 17.91 | 0.80 |
| 1 | 553.69 | 25 year | 3.07 | 189.99 | 190.78 | | 190.86 | 0.015146 | 1.55 | 3.86 | 17.64 | 0.79 |
| 1 | 553.69 | 10 year | 2.20 | 189.99 | 190.73 | | 190.80 | 0.014994 | 1.40 | 2.99 | 17.22 | 0.76 |
| 1 | 553.69 | 5 year | 1.61 | 189.99 | 190.69 | 190.68 | 190.76 | 0.015122 | 1.30 | 2.29 | 16.87 | 0.75 |
| 1 | 553.69 | 2 year | 0.76 | 189.99 | 190.62 | 190.58 | 190.67 | 0.014223 | 1.04 | 1.06 | 16.24 | 0.70 |
| 1 | 553.69 | 25mm | 0.32 | 189.99 | 190.48 | | 190.53 | 0.018876 | 0.97 | 0.33 | 1.89 | 0.74 |
| | | | | | | | | | | | | |
| 1 | 498.88 | Regional | 10.22 | 189.39 | 190.58 | | 190.67 | 0.007892 | 1.78 | 11.17 | 19.56 | 0.64 |
| 1 | 498.88 | 100 year | 4.47 | 189.39 | 190.33 | | 190.38 | 0.007854 | 1.37 | 6.33 | 18.02 | 0.60 |
| 1 | 498.88 | 50 year | 3.69 | 189.39 | 190.28 | | 190.33 | 0.007826 | 1.29 | 5.54 | 17.75 | 0.59 |
| 1 | 498.88 | 25 year | 3.07 | 189.39 | 190.24 | | 190.29 | 0.007913 | 1.23 | 4.85 | 17.52 | 0.58 |
| 1 | 498.88 | 10 year | 2.20 | 189.39 | 190.18 | | 190.22 | 0.008198 | 1.13 | 3.74 | 17.13 | 0.58 |
| 1 | 498.88 | 5 year | 1.61 | 189.39 | 190.13 | | 190.17 | 0.008232 | 1.04 | 2.93 | 16.85 | 0.57 |
| 1 | 498.88 | 2 year | 0.76 | 189.39 | 190.04 | 189.97 | 190.08 | 0.008520 | 0.86 | 1.46 | 16.32 | 0.55 |
| 1 | 498.88 | 25mm | 0.32 | 189.39 | 189.97 | 189.82 | 189.98 | 0.005953 | 0.60 | 0.53 | 2.76 | 0.44 |
| | | | | | | | | | | | | |

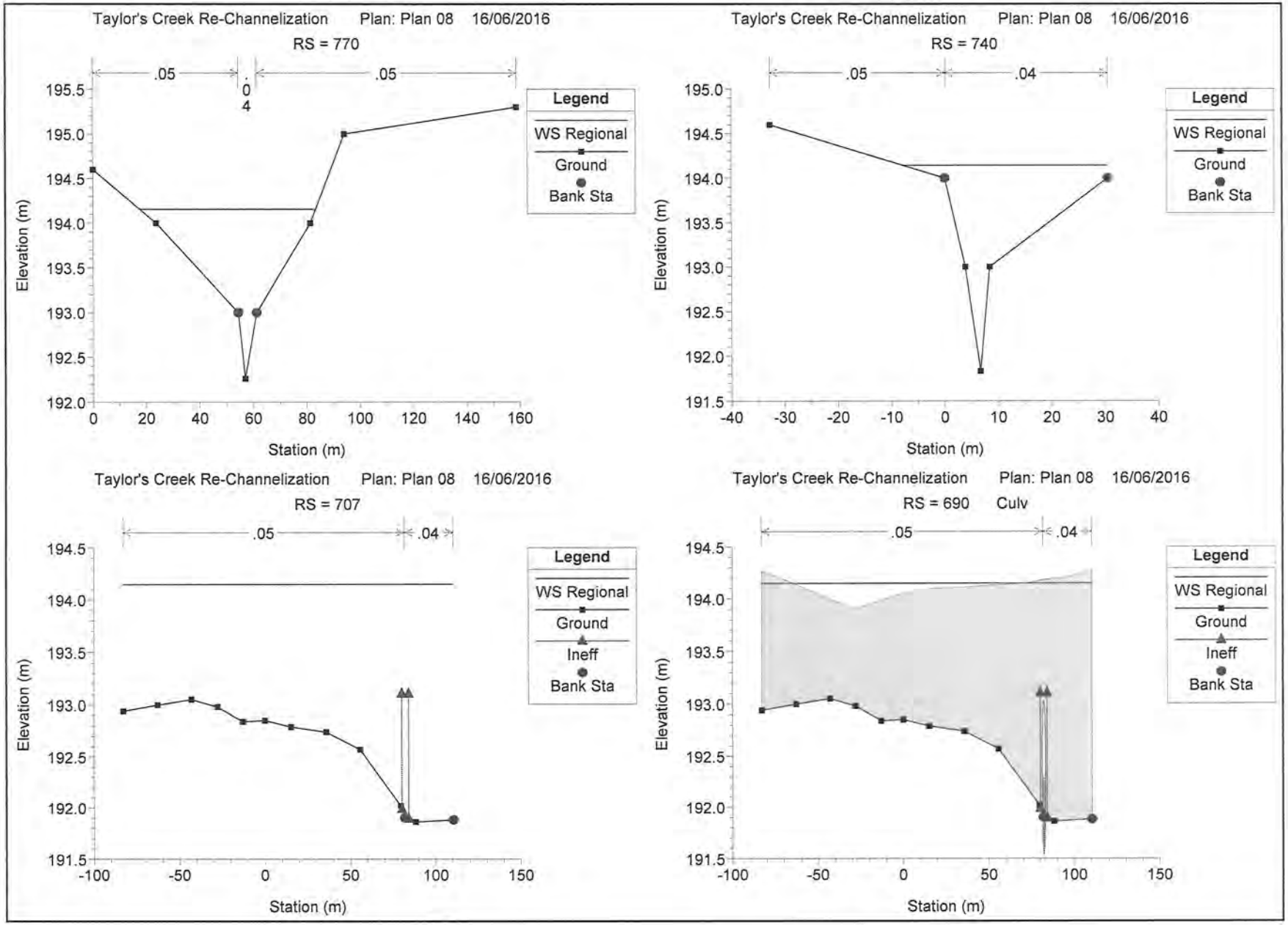
HEC-RAS Plan: Plan 08 River: Unnamed Tributar Reach: 1 (Continued)

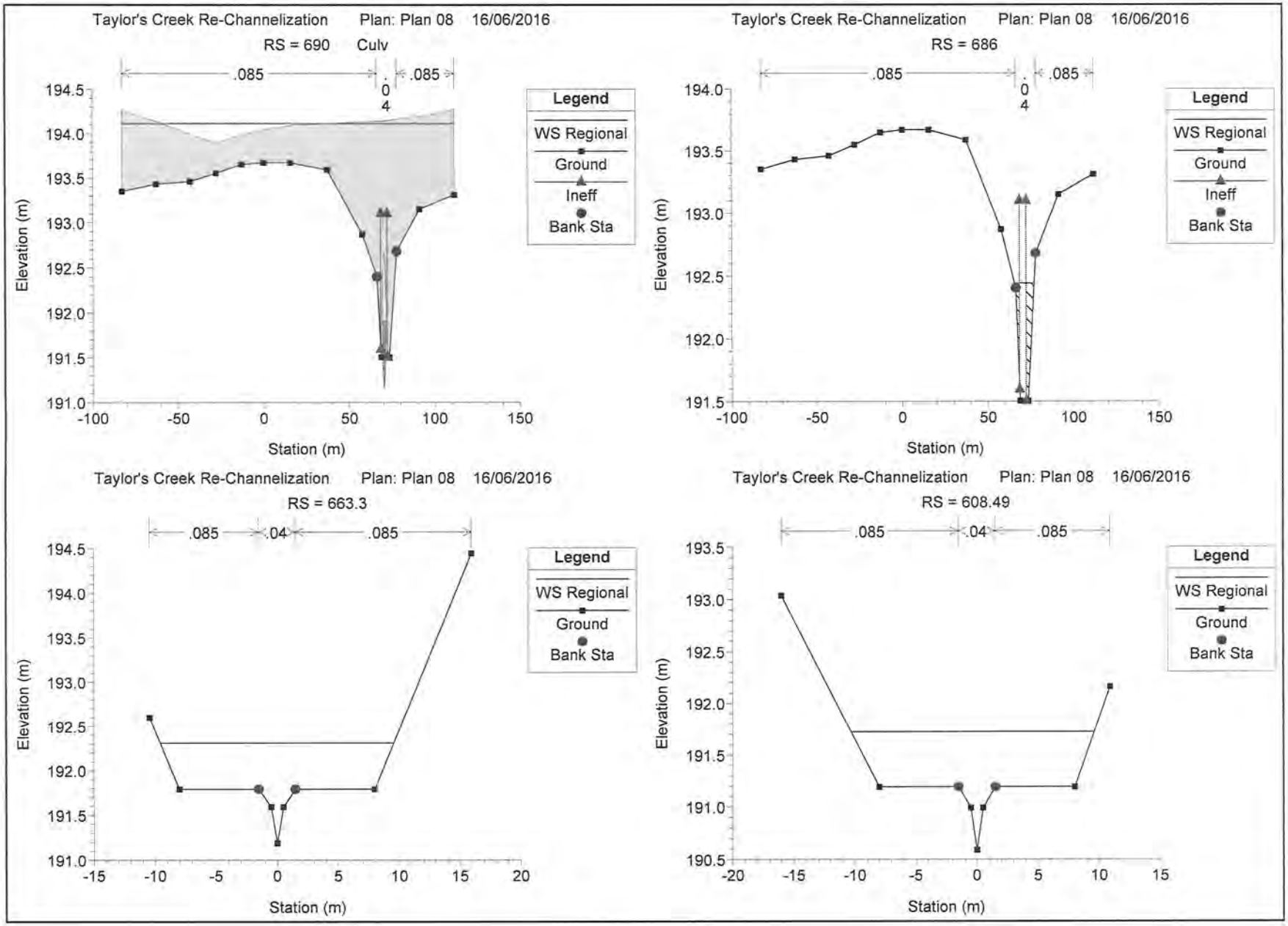
| Reach | River Sta | Profile | Q Total | Min Ch El | W.S. Elev | Crit W.S | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (m3/s) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| 1 | 444.08 | Regional | 10.22 | 188.79 | 189.79 | 189.79 | 189.98 | 0.024936 | 2.63 | 7.53 | 18.41 | 1.08 |
| 1 | 444.08 | 100 year | 4.47 | 188.79 | 189.62 | 189.62 | 189.74 | 0.021098 | 1.94 | 4.46 | 17.38 | 0.94 |
| 1 | 444.08 | 50 year | 3.69 | 188.79 | 189.59 | 189.59 | 189.70 | 0.020380 | 1.81 | 3.92 | 17.20 | 0.91 |
| 1 | 444.08 | 25 year | 3.07 | 188.79 | 189.56 | 189.56 | 189.66 | 0.019416 | 1.69 | 3.48 | 17.04 | 0.88 |
| 1 | 444.08 | 10 year | 2.20 | 188.79 | 189.52 | 189.52 | 189.60 | 0.017655 | 1.49 | 2.78 | 16.80 | 0.82 |
| 1 | 444.08 | 5 year | 1.61 | 188.79 | 189.49 | 189.49 | 189.56 | 0.016952 | 1.35 | 2.17 | 16.58 | 0.79 |
| 1 | 444.08 | 2 year | 0.76 | 188.79 | 189.42 | 189.42 | 189.47 | 0.015169 | 1.07 | 1.01 | 16.15 | 0.72 |
| 1 | 444.08 | 25mm | 0.32 | 188.79 | 189.22 | 189.22 | 189.31 | 0.036400 | 1.33 | 0.24 | 1.33 | 1.00 |
| | | | | | | | | | | | | |
| 1 | 393.33 | Regional | 10.22 | 188.23 | 189.44 | 189.05 | 189.49 | 0.002129 | 1.16 | 13.60 | 19.63 | 0.36 |
| 1 | 393.33 | 100 year | 4.47 | 188.23 | 189.23 | 188.83 | 189.25 | 0.000974 | 0.68 | 9.71 | 18.40 | 0.24 |
| 1 | 393.33 | 50 year | 3.69 | 188.23 | 189.17 | 188.78 | 189.19 | 0.000881 | 0.62 | 8.68 | 18.06 | 0.22 |
| 1 | 393.33 | 25 year | 3.07 | 188.23 | 189.13 | 188.72 | 189.14 | 0.000789 | 0.56 | 7.82 | 17.78 | 0.21 |
| 1 | 393.33 | 10 year | 2.20 | 188.23 | 189.04 | 188.61 | 189.05 | 0.000663 | 0.47 | 6.33 | 17.27 | 0.19 |
| 1 | 393.33 | 5 year | 1.61 | 188.23 | 188.96 | 188.54 | 188.97 | 0.000617 | 0.41 | 4.91 | 16.77 | 0.18 |
| 1 | 393.33 | 2 year | 0.76 | 188.23 | 188.70 | 188.42 | 188.72 | 0.001353 | 0.56 | 1.37 | 5.73 | 0.26 |
| 1 | 393.33 | 25mm | 0.32 | 188.23 | 188.52 | 188.33 | 188.53 | 0.001146 | 0.37 | 0.85 | 4.66 | 0.22 |
| | | | | | | | | | | | | |
| 1 | 385 | | Culvert | | | | | | | | | |
| | | | | | | | | | | | | |
| 1 | 379.08 | Regional | 10.22 | 188.08 | 189.05 | 188.90 | 189.17 | 0.005819 | 1.62 | 9.21 | 18.24 | 0.58 |
| 1 | 379.08 | 100 year | 4.47 | 188.08 | 188.80 | 188.68 | 188.87 | 0.005143 | 1.18 | 4.74 | 16.71 | 0.51 |
| 1 | 379.08 | 50 year | 3.69 | 188.08 | 188.75 | 188.63 | 188.81 | 0.004974 | 1.10 | 3.97 | 16.42 | 0.49 |
| 1 | 379.08 | 25 year | 3.07 | 188.08 | 188.71 | 188.57 | 188.76 | 0.004773 | 1.01 | 3.29 | 16.18 | 0.48 |
| 1 | 379.08 | 10 year | 2.20 | 188.08 | 188.66 | 188.46 | 188.75 | 0.005676 | 1.31 | 1.68 | 6.37 | 0.55 |
| 1 | 379.08 | 5 year | 1.61 | 188.08 | 188.59 | 188.39 | 188.65 | 0.004644 | 1.09 | 1.48 | 5.96 | 0.49 |
| 1 | 379.08 | 2 year | 0.76 | 188.08 | 188.46 | 188.27 | 188.48 | 0.002811 | 0.69 | 1.10 | 5.18 | 0.36 |
| 1 | 379.08 | 25mm | 0.32 | 188.08 | 188.33 | 188.18 | 188.34 | 0.002069 | 0.45 | 0.71 | 4.37 | 0.29 |
| | | | | | | | | | | | | |
| 1 | 334.46 | Regional | 10.22 | 187.59 | 188.73 | | 188.83 | 0.010386 | 1.95 | 10.17 | 19.26 | 0.72 |
| 1 | 334.46 | 100 year | 4.47 | 187.59 | 188.51 | | 188.57 | 0.009352 | 1.45 | 5.96 | 17.90 | 0.65 |
| 1 | 334.46 | 50 year | 3.69 | 187.59 | 188.47 | | 188.52 | 0.009104 | 1.36 | 5.26 | 17.66 | 0.63 |
| 1 | 334.46 | 25 year | 3.07 | 187.59 | 188.43 | | 188.48 | 0.009035 | 1.29 | 4.62 | 17.44 | 0.62 |
| 1 | 334.46 | 10 year | 2.20 | 187.59 | 188.37 | | 188.42 | 0.008861 | 1.16 | 3.63 | 17.10 | 0.60 |
| 1 | 334.46 | 5 year | 1.61 | 187.59 | 188.33 | | 188.37 | 0.008571 | 1.05 | 2.89 | 16.84 | 0.58 |
| 1 | 334.46 | 2 year | 0.76 | 187.59 | 188.24 | | 188.27 | 0.009365 | 0.89 | 1.39 | 16.29 | 0.57 |
| 1 | 334.46 | 25mm | 0.32 | 187.59 | 188.12 | | 188.15 | 0.010397 | 0.75 | 0.42 | 2.34 | 0.56 |
| | | | | | | | | | | | | |
| 1 | 279.66 | Regional | 10.22 | 186.99 | 188.08 | | 188.20 | 0.014020 | 2.16 | 9.18 | 18.95 | 0.83 |
| 1 | 279.66 | 100 year | 4.47 | 186.99 | 187.85 | | 187.94 | 0.015383 | 1.73 | 4.99 | 17.57 | 0.81 |
| 1 | 279.66 | 50 year | 3.69 | 186.99 | 187.81 | | 187.90 | 0.015864 | 1.66 | 4.30 | 17.33 | 0.81 |
| 1 | 279.66 | 25 year | 3.07 | 186.99 | 187.78 | | 187.86 | 0.015749 | 1.57 | 3.77 | 17.15 | 0.80 |
| 1 | 279.66 | 10 year | 2.20 | 186.99 | 187.73 | | 187.80 | 0.015674 | 1.43 | 2.91 | 16.85 | 0.78 |
| 1 | 279.66 | 5 year | 1.61 | 186.99 | 187.69 | 187.68 | 187.76 | 0.015973 | 1.32 | 2.22 | 16.60 | 0.77 |
| 1 | 279.66 | 2 year | 0.76 | 186.99 | 187.62 | 187.57 | 187.67 | 0.013258 | 1.02 | 1.12 | 16.19 | 0.67 |
| 1 | 279.66 | 25mm | 0.32 | 186.99 | 187.51 | | 187.55 | 0.011848 | 0.79 | 0.40 | 2.24 | 0.60 |
| | | | | | | | | | | | | |
| 1 | 224.85 | Regional | 10.22 | 186.38 | 187.57 | | 187.66 | 0.007885 | 1.78 | 11.18 | 19.58 | 0.64 |
| 1 | 224.85 | 100 year | 4.47 | 186.38 | 187.32 | 187.21 | 187.37 | 0.007824 | 1.37 | 6.34 | 18.03 | 0.59 |
| 1 | 224.85 | 50 year | 3.69 | 186.38 | 187.27 | 187.18 | 187.32 | 0.007779 | 1.29 | 5.56 | 17.77 | 0.58 |
| 1 | 224.85 | 25 year | 3.07 | 186.38 | 187.23 | 187.15 | 187.28 | 0.007926 | 1.23 | 4.85 | 17.52 | 0.58 |
| 1 | 224.85 | 10 year | 2.20 | 186.38 | 187.17 | 187.11 | 187.21 | 0.008156 | 1.13 | 3.75 | 17.14 | 0.58 |
| 1 | 224.85 | 5 year | 1.61 | 186.38 | 187.12 | 187.07 | 187.16 | 0.008083 | 1.03 | 2.95 | 16.86 | 0.56 |
| 1 | 224.85 | 2 year | 0.76 | 186.38 | 187.03 | 186.97 | 187.06 | 0.009493 | 0.90 | 1.38 | 16.29 | 0.58 |
| 1 | 224.85 | 25mm | 0.32 | 186.38 | 186.91 | | 186.94 | 0.010305 | 0.75 | 0.42 | 2.35 | 0.56 |
| | | | | | | | | | | | | |
| 1 | 170.05 | Regional | 10.22 | 185.78 | 186.78 | 186.78 | 186.97 | 0.024888 | 2.63 | 7.54 | 18.41 | 1.08 |
| 1 | 170.05 | 100 year | 4.47 | 185.78 | 186.61 | 186.61 | 186.73 | 0.021329 | 1.94 | 4.44 | 17.38 | 0.95 |
| 1 | 170.05 | 50 year | 3.69 | 185.78 | 186.58 | 186.58 | 186.69 | 0.020937 | 1.83 | 3.88 | 17.19 | 0.93 |
| 1 | 170.05 | 25 year | 3.07 | 185.78 | 186.55 | 186.55 | 186.65 | 0.019608 | 1.70 | 3.47 | 17.04 | 0.89 |
| 1 | 170.05 | 10 year | 2.20 | 185.78 | 186.51 | 186.51 | 186.59 | 0.017784 | 1.49 | 2.77 | 16.79 | 0.83 |
| 1 | 170.05 | 5 year | 1.61 | 185.78 | 186.47 | 186.47 | 186.55 | 0.017359 | 1.36 | 2.14 | 16.57 | 0.80 |
| 1 | 170.05 | 2 year | 0.76 | 185.78 | 186.41 | 186.37 | 186.46 | 0.013115 | 1.01 | 1.12 | 16.20 | 0.67 |
| 1 | 170.05 | 25mm | 0.32 | 185.78 | 186.30 | 186.21 | 186.34 | 0.011918 | 0.80 | 0.40 | 2.23 | 0.60 |
| | | | | | | | | | | | | |
| 1 | 115.24 | Regional | 10.22 | 184.75 | 185.75 | 185.75 | 185.94 | 0.025268 | 2.64 | 7.50 | 18.41 | 1.09 |
| 1 | 115.24 | 100 year | 4.47 | 184.75 | 185.58 | 185.58 | 185.70 | 0.021326 | 1.94 | 4.44 | 17.38 | 0.95 |
| 1 | 115.24 | 50 year | 3.69 | 184.75 | 185.55 | 185.55 | 185.66 | 0.020916 | 1.83 | 3.89 | 17.19 | 0.93 |
| 1 | 115.24 | 25 year | 3.07 | 184.75 | 185.52 | 185.52 | 185.62 | 0.019606 | 1.70 | 3.47 | 17.04 | 0.89 |
| 1 | 115.24 | 10 year | 2.20 | 184.75 | 185.48 | 185.48 | 185.56 | 0.017763 | 1.49 | 2.77 | 16.80 | 0.83 |
| 1 | 115.24 | 5 year | 1.61 | 184.75 | 185.44 | 185.44 | 185.52 | 0.017369 | 1.36 | 2.14 | 16.57 | 0.80 |
| 1 | 115.24 | 2 year | 0.76 | 184.75 | 185.33 | 185.33 | 185.43 | 0.030940 | 1.38 | 0.55 | 2.84 | 1.00 |
| 1 | 115.24 | 25mm | 0.32 | 184.75 | 185.18 | 185.18 | 185.27 | 0.036370 | 1.33 | 0.24 | 1.33 | 1.00 |

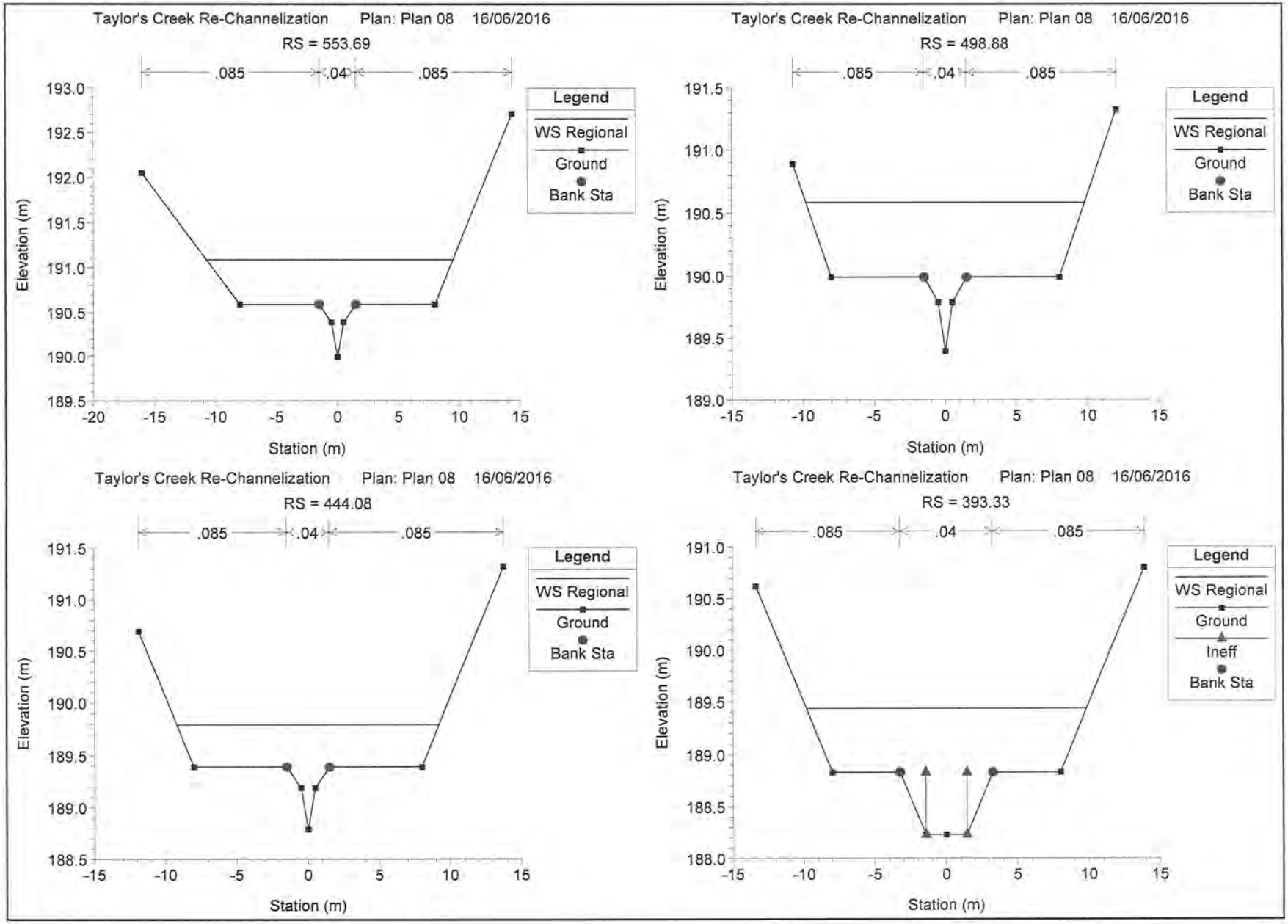
HEC-RAS Plan: Plan 08 River: Unnamed Tributar Reach: 1 (Continued)

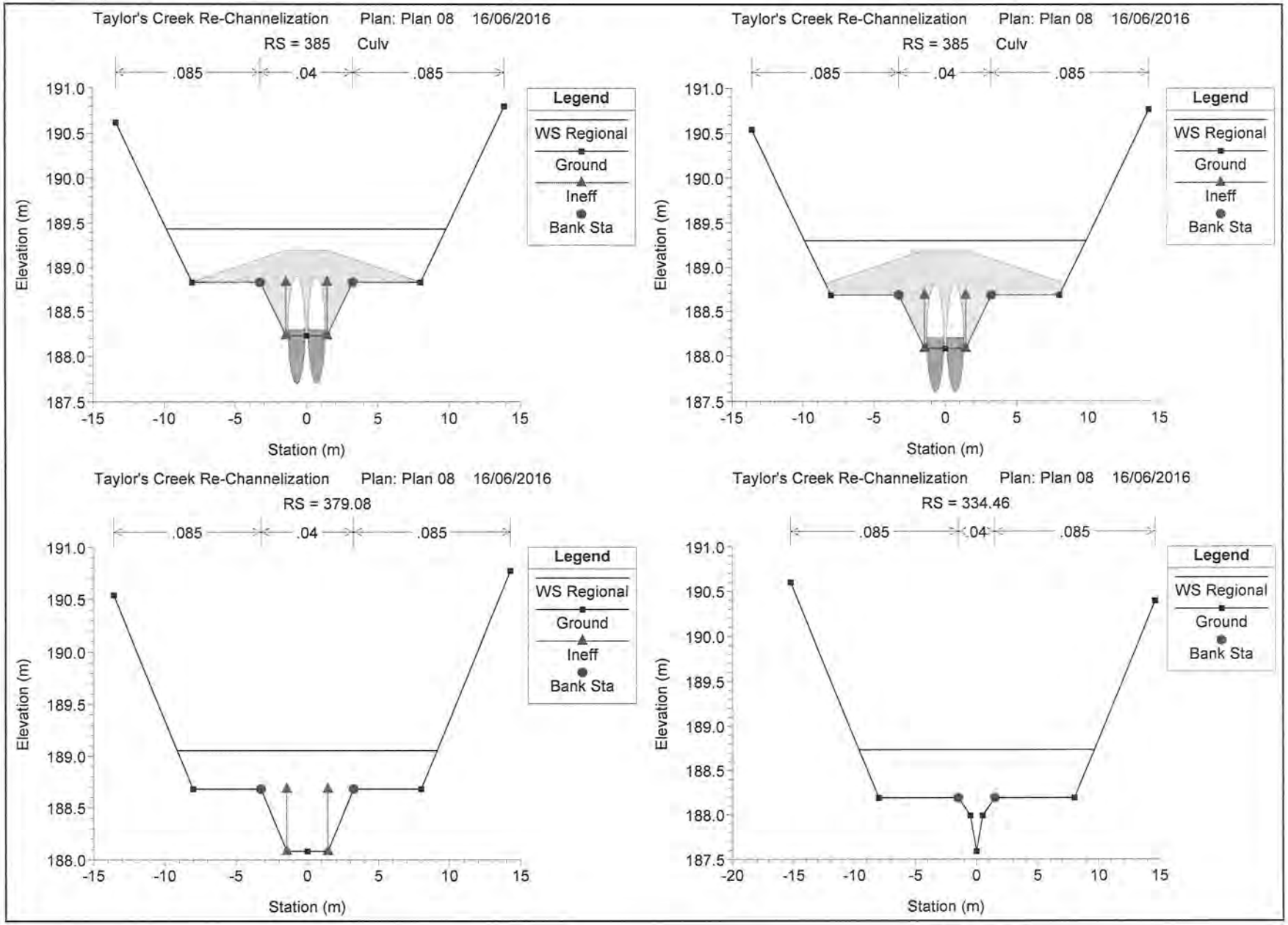
| Reach | River Sta | Profile | Q Total | Min Ch El | W.S. Elev | Crit W.S. | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (m3/s) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| 1 | 60.43 | Regional | 10.22 | 183.52 | 184.82 | 184.34 | 184.86 | 0.001497 | 1.03 | 15.54 | 20.22 | 0.31 |
| 1 | 60.43 | 100 year | 4.47 | 183.52 | 184.61 | 184.14 | 184.62 | 0.000658 | 0.59 | 11.32 | 18.92 | 0.20 |
| 1 | 60.43 | 50 year | 3.69 | 183.52 | 184.55 | 184.07 | 184.57 | 0.000568 | 0.53 | 10.33 | 18.61 | 0.18 |
| 1 | 60.43 | 25 year | 3.07 | 183.52 | 184.51 | 184.01 | 184.52 | 0.000483 | 0.47 | 9.54 | 18.35 | 0.17 |
| 1 | 60.43 | 10 year | 2.20 | 183.52 | 184.43 | 183.91 | 184.44 | 0.000368 | 0.39 | 8.12 | 17.88 | 0.14 |
| 1 | 60.43 | 5 year | 1.61 | 183.52 | 184.36 | 183.84 | 184.36 | 0.000303 | 0.33 | 6.78 | 17.42 | 0.13 |
| 1 | 60.43 | 2 year | 0.76 | 183.52 | 184.12 | 183.71 | 184.13 | 0.000594 | 0.44 | 1.75 | 16.03 | 0.18 |
| 1 | 60.43 | 25mm | 0.32 | 183.52 | 183.94 | 183.63 | 183.94 | 0.000361 | 0.26 | 1.20 | 5.39 | 0.13 |
| | | | | | | | | | | | | |
| 1 | 50 | | Culvert | | | | | | | | | |
| | | | | | | | | | | | | |
| 1 | 47.96 | Regional | 10.22 | 183.25 | 184.44 | 184.17 | 184.50 | 0.002256 | 1.18 | 13.31 | 19.54 | 0.37 |
| 1 | 47.96 | 100 year | 4.47 | 183.25 | 183.94 | 183.87 | 184.19 | 0.013074 | 2.23 | 2.00 | 16.54 | 0.86 |
| 1 | 47.96 | 50 year | 3.69 | 183.25 | 183.80 | 183.80 | 184.07 | 0.019518 | 2.33 | 1.58 | 6.18 | 1.01 |
| 1 | 47.96 | 25 year | 3.07 | 183.25 | 183.74 | 183.74 | 183.98 | 0.019927 | 2.18 | 1.41 | 5.82 | 1.00 |
| 1 | 47.96 | 10 year | 2.20 | 183.25 | 183.64 | 183.64 | 183.83 | 0.021781 | 1.96 | 1.12 | 5.22 | 1.01 |
| 1 | 47.96 | 5 year | 1.61 | 183.25 | 183.57 | 183.57 | 183.72 | 0.022765 | 1.75 | 0.92 | 4.80 | 0.99 |
| 1 | 47.96 | 2 year | 0.76 | 183.25 | 183.50 | 183.44 | 183.56 | 0.011292 | 1.05 | 0.72 | 4.40 | 0.67 |
| 1 | 47.96 | 25mm | 0.32 | 183.25 | 183.50 | 183.36 | 183.51 | 0.001956 | 0.44 | 0.72 | 4.40 | 0.28 |

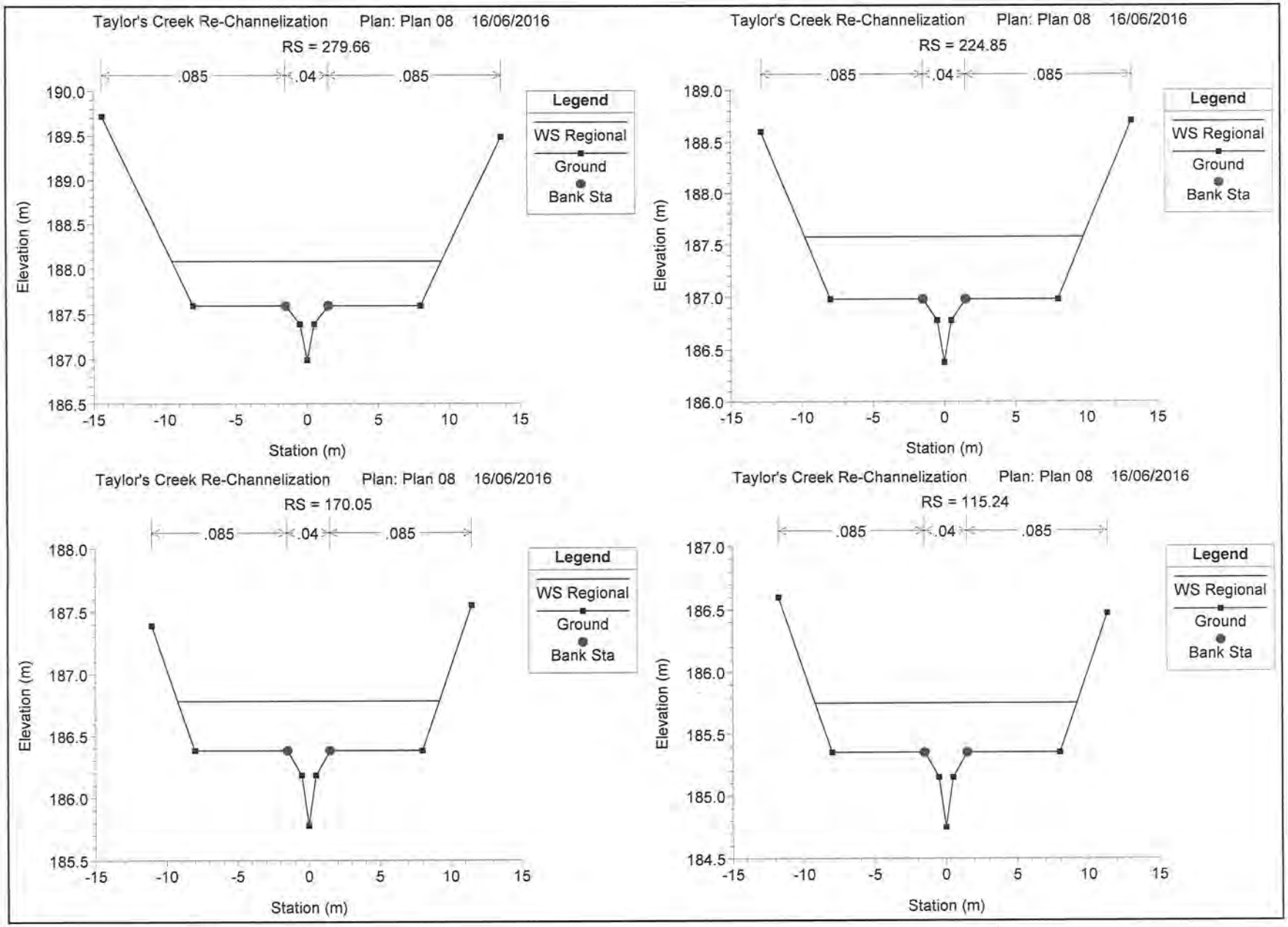

Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
Unnamed Tributar 1
Legend
WS Regional
Ground
Elevation (m)
196
194
192
190
188
186
184
182
0
100
200
300
400
500
600
700
800
Main Channel Distance (m)

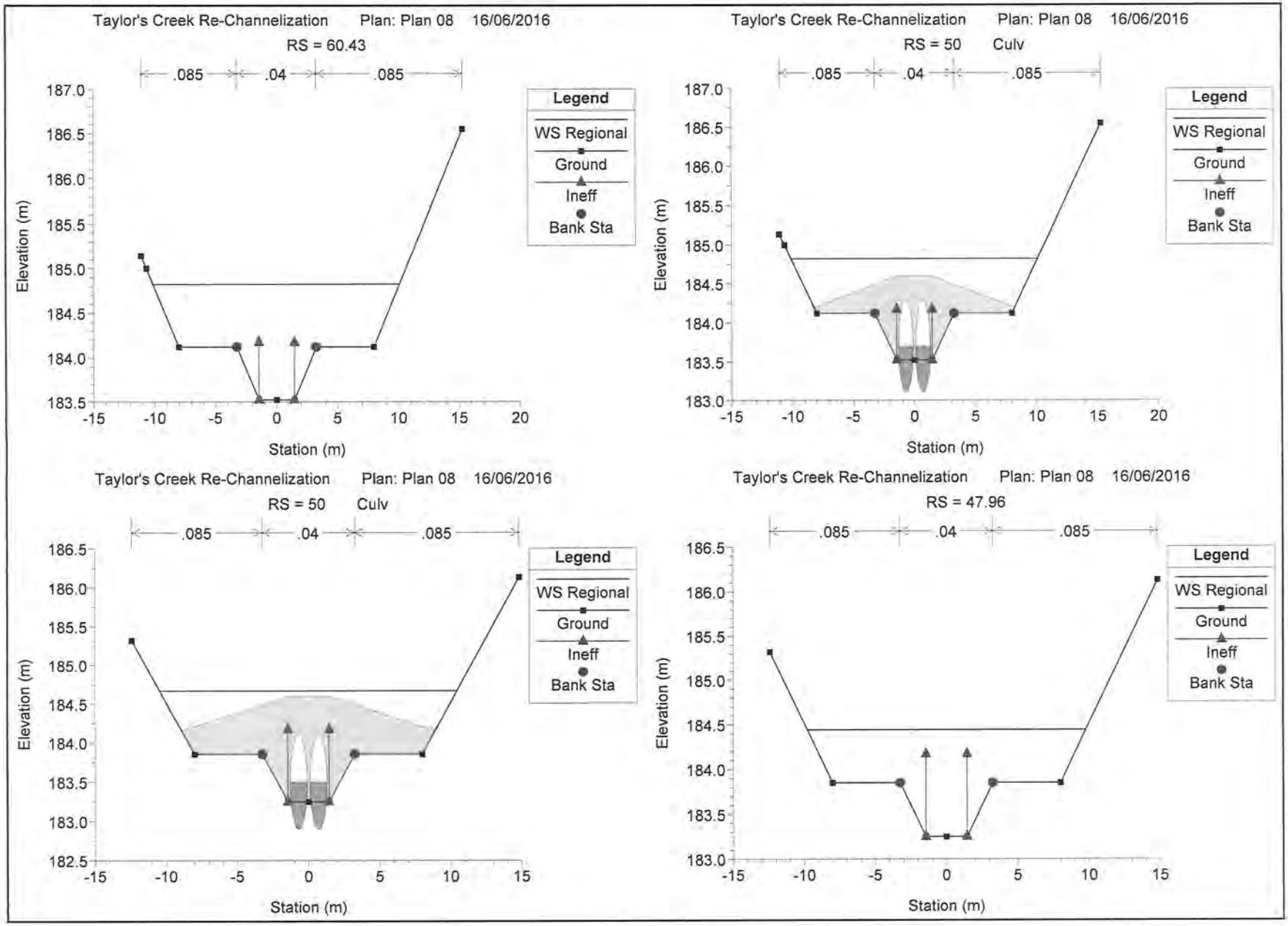

Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 770
.05
.0
4
.05
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 740
.05
.04
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 707
.05
.04
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 690 Culv
.05
.04
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 690 Culv
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 686
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 663.3
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 608.49
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

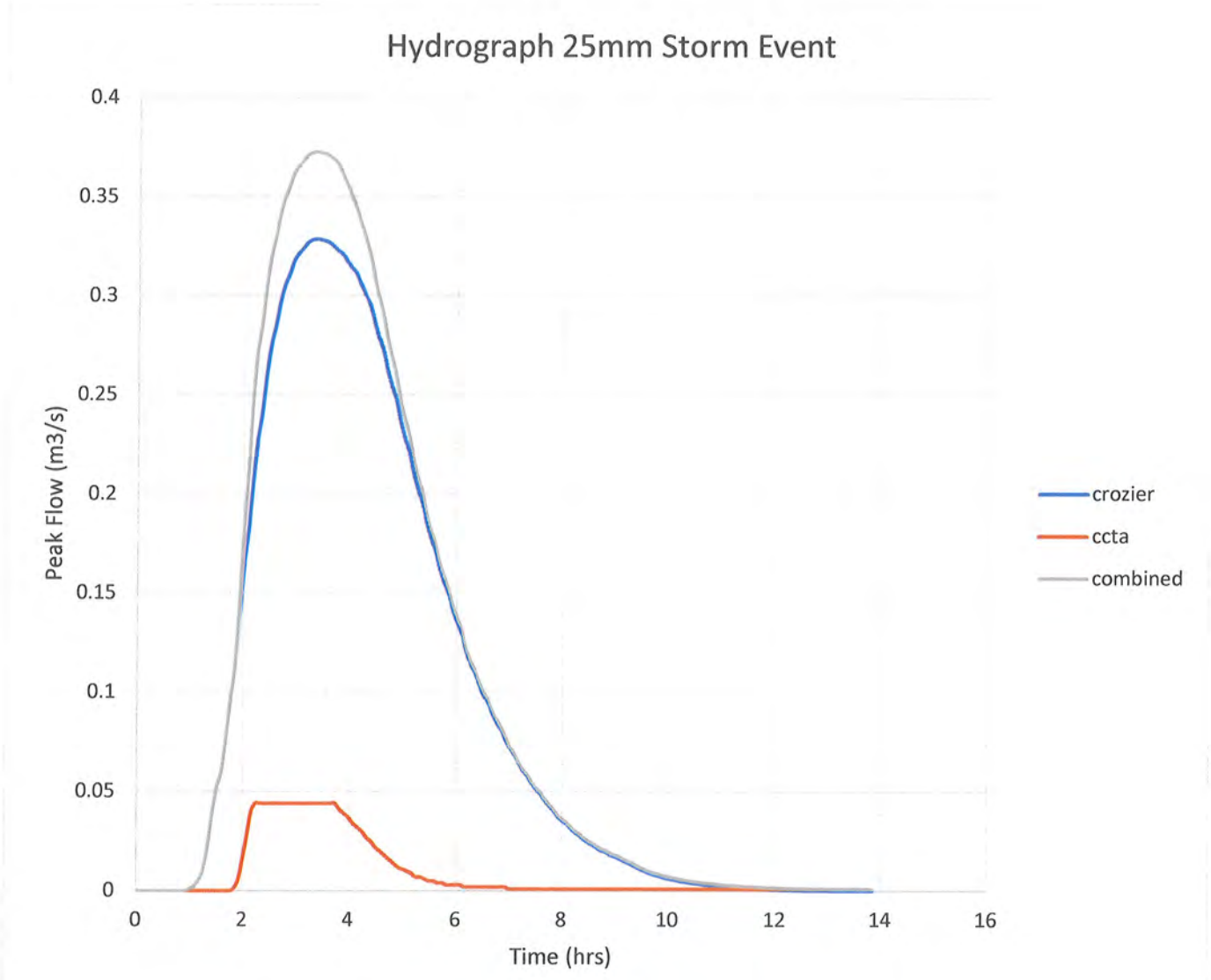

Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 553.69
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 498.88
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 444.08
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 393.33
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)

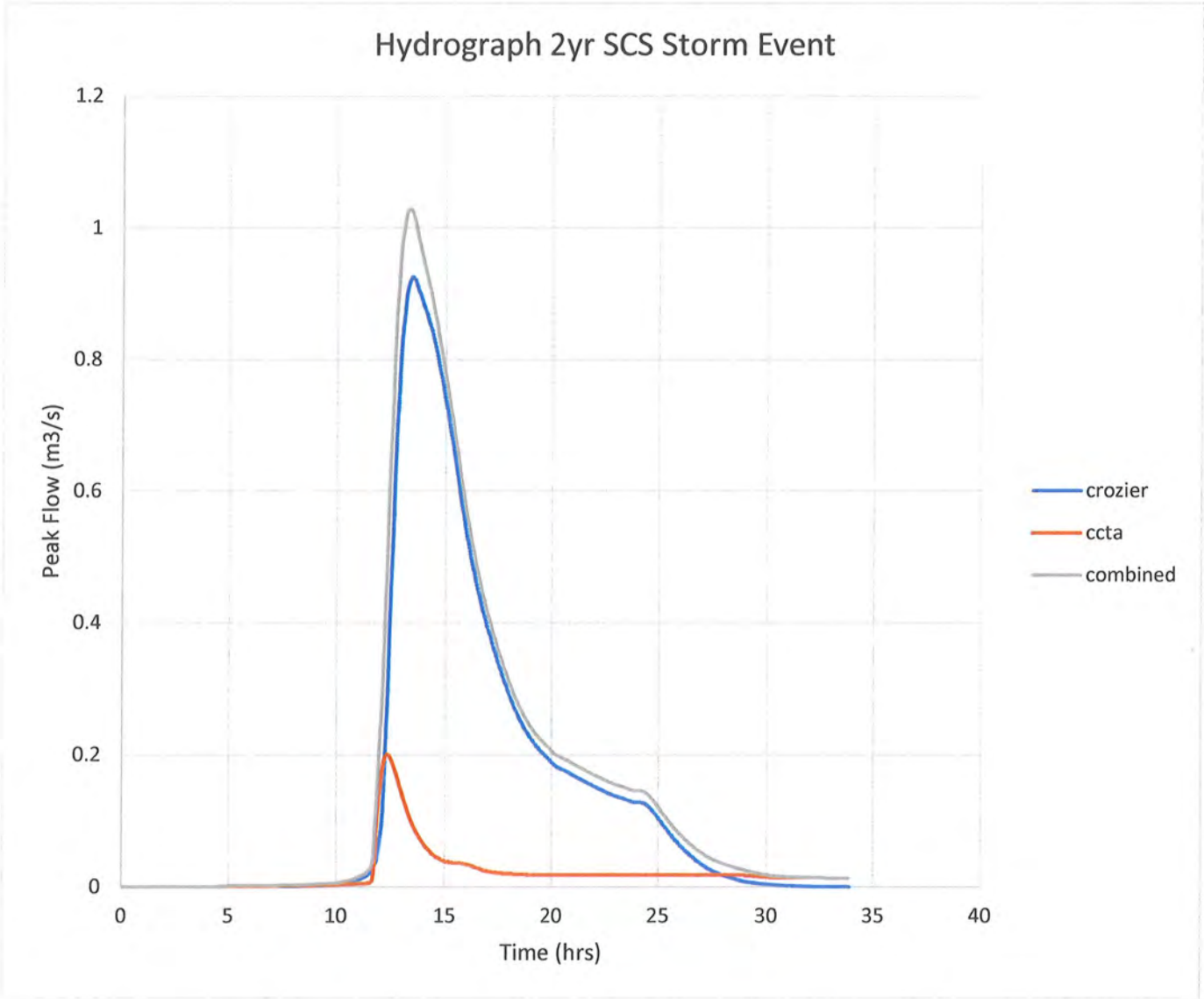

Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 385 Culv
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 385 Culv
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 379.08
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 334.46

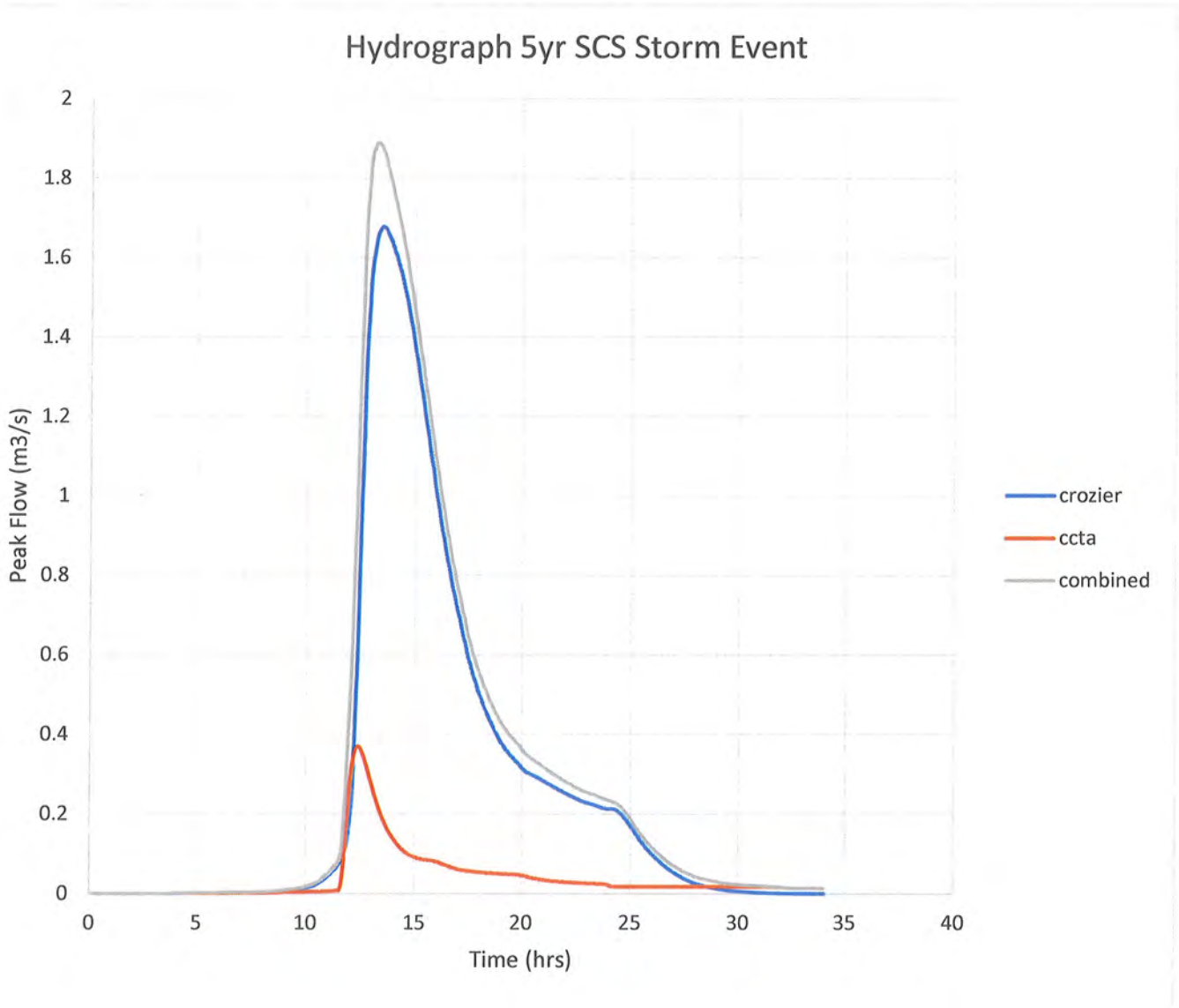

Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 279.66
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 224.85
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 170.05
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 115.24
.085
.04
.085
Legend
WS Regional
Ground
Bank Sta
Elevation (m)
Station (m)

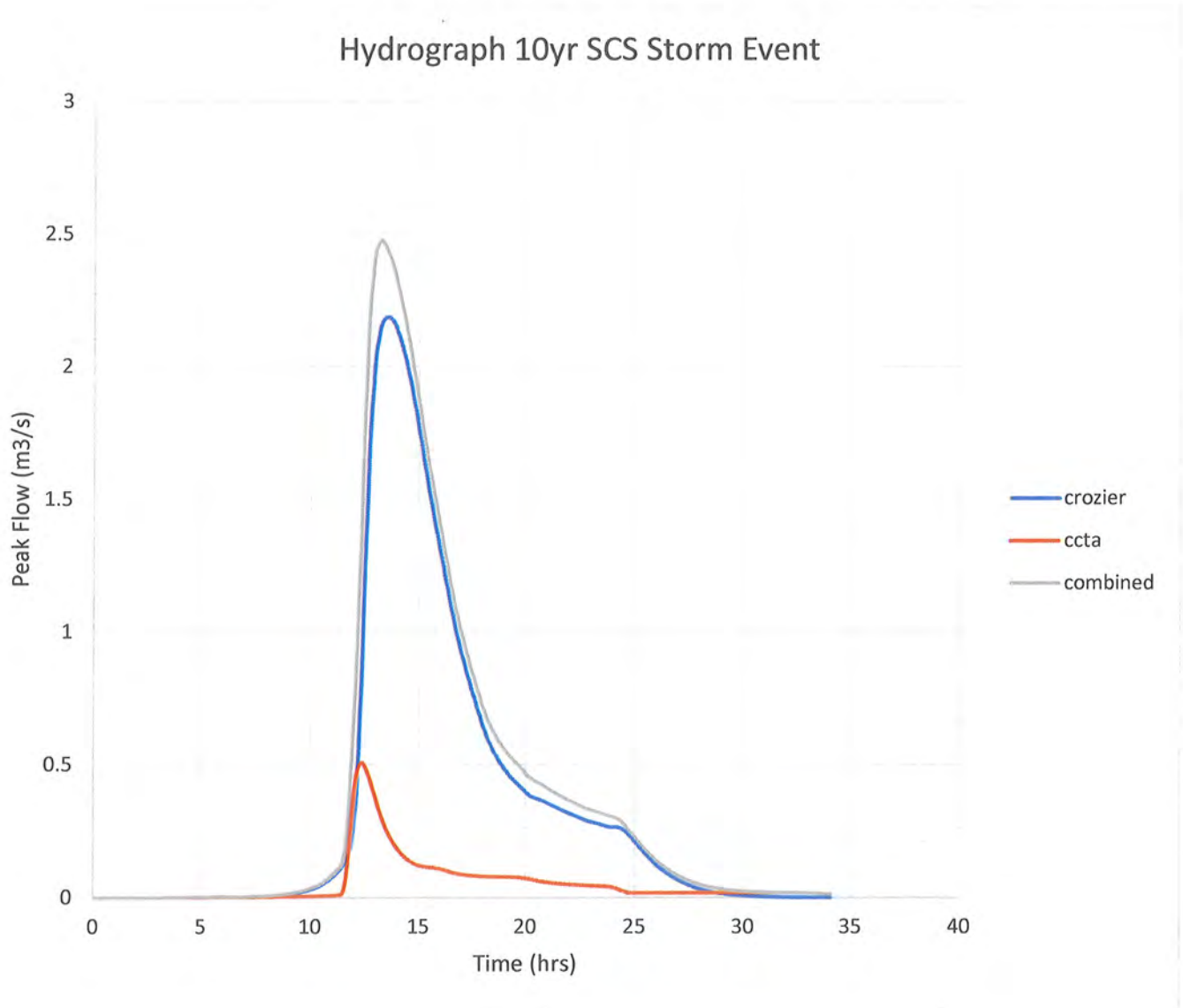

Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 60.43
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 50 Culv
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 50 Culv
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization Plan: Plan 08 16/06/2016
RS = 47.96
.085
.04
.085
Legend
WS Regional
Ground
Ineff
Bank Sta
Elevation (m)
Station (m)

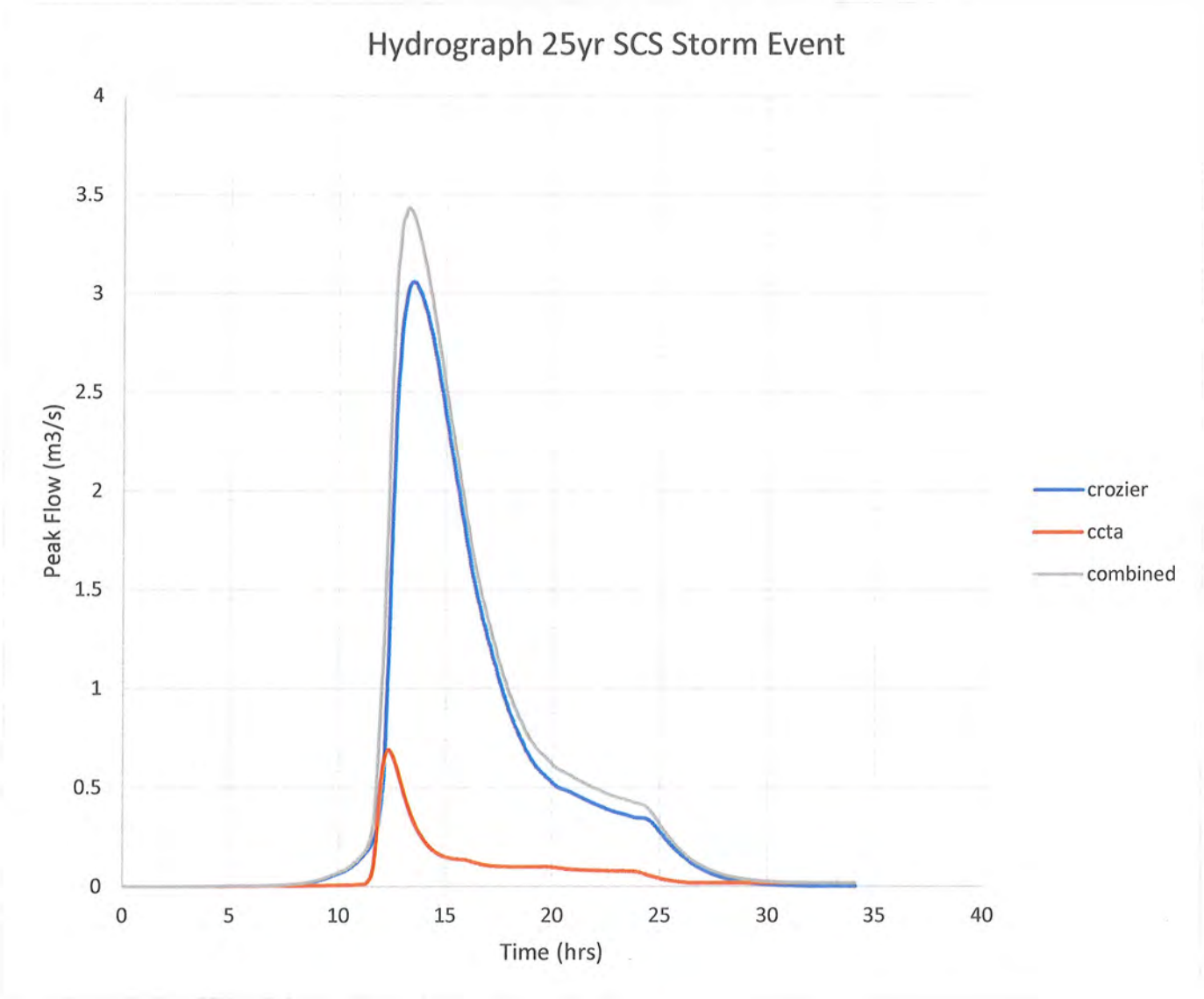
# APPENDIX D:
# HYDROGRAPHS

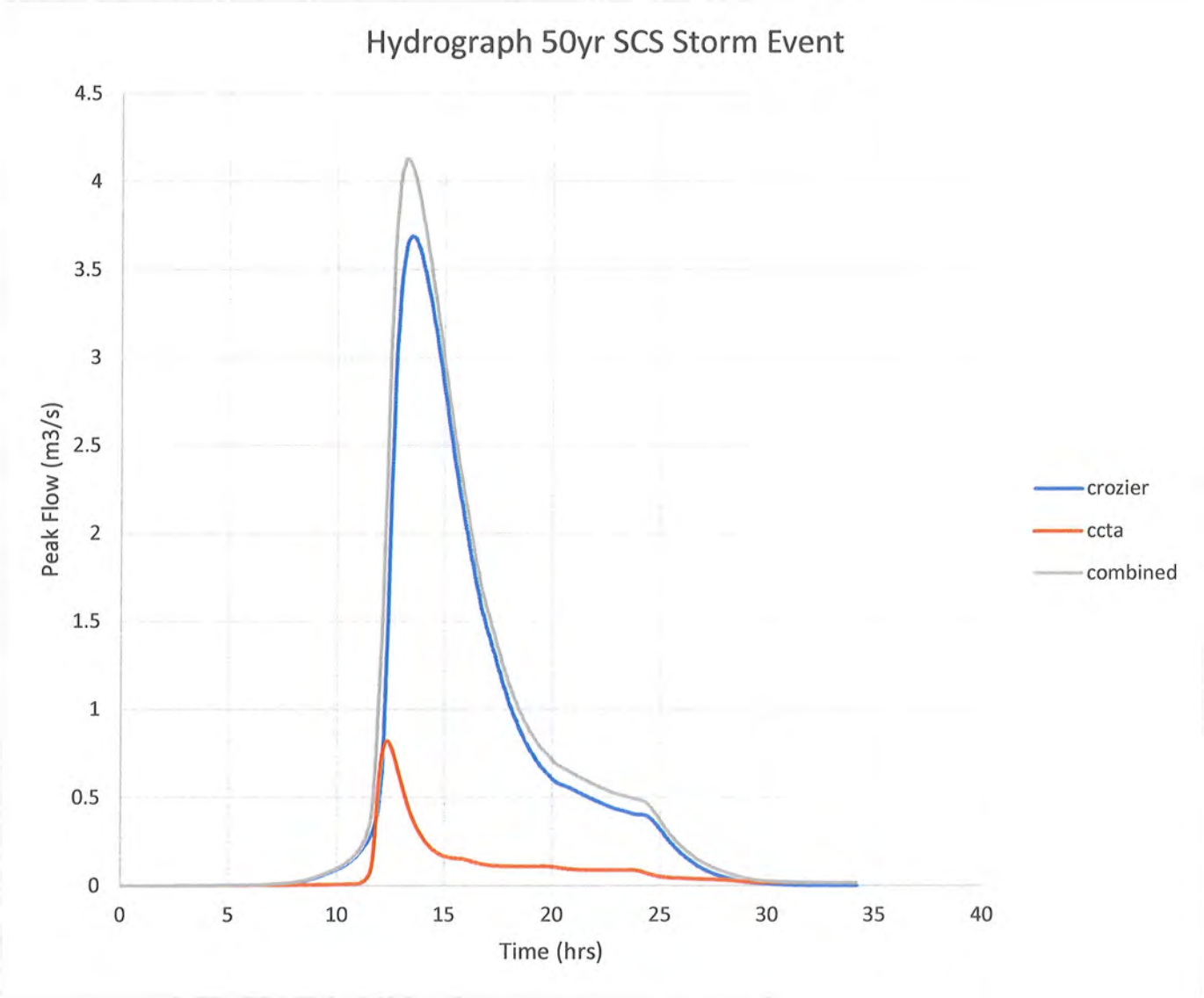

Hydrograph 25mm Storm Event
Peak Flow (m3/s)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
2
4
6
8
10
12
14
16
Time (hrs)
crozier
ccta
combined

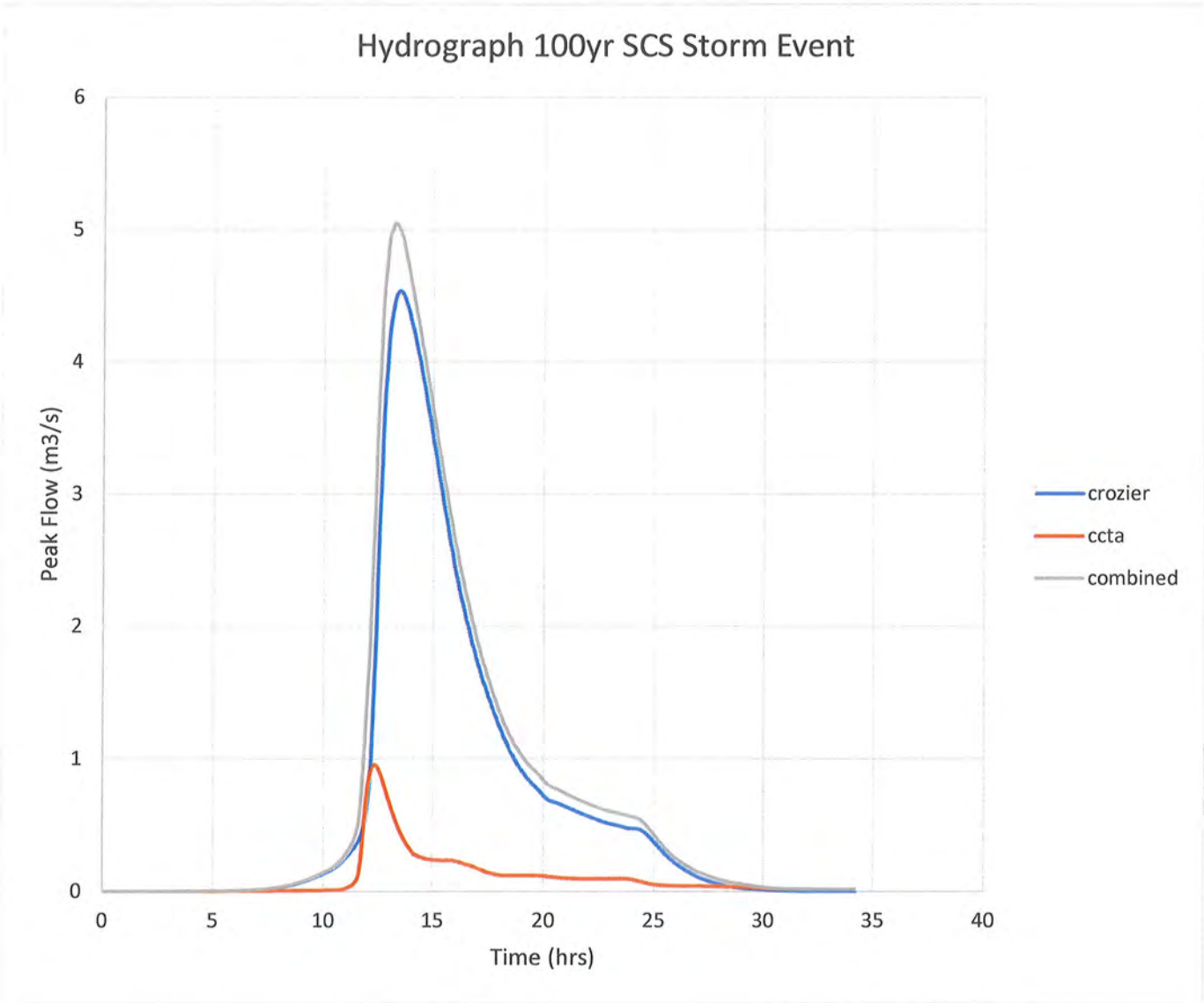

Hydrograph 2yr SCS Storm Event
Peak Flow (m3/s)
1.2
1
0.8
0.6
0.4
0.2
0
0
5
10
15
20
25
30
35
40
Time (hrs)
crozier
ccta
combined

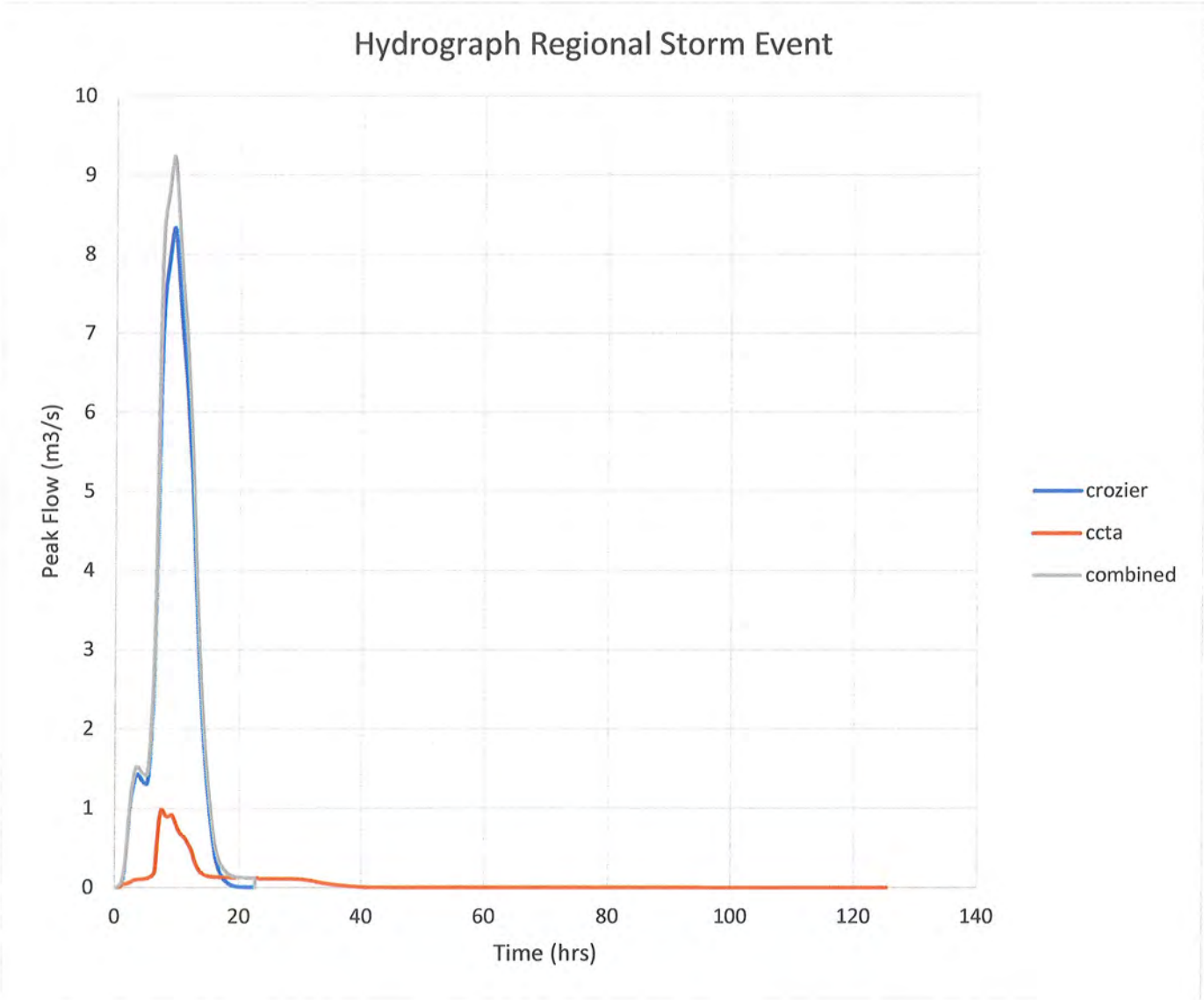

Hydrograph 5yr SCS Storm Event
Peak Flow (m3/s)
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
5
10
15
20
25
30
35
40
Time (hrs)
crozier
ccta
combined

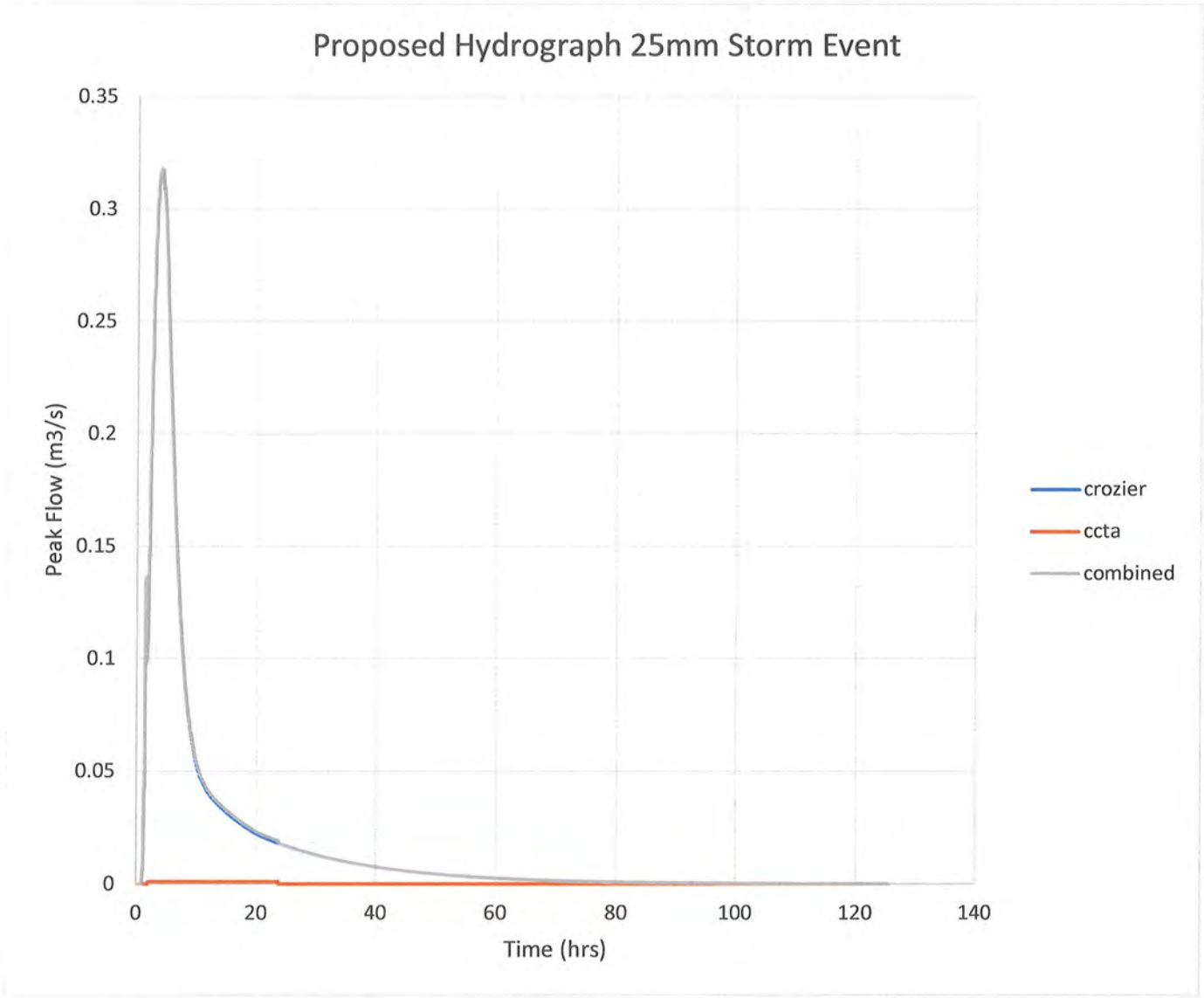

Hydrograph 10yr SCS Storm Event
Peak Flow (m3/s)
3
2.5
2
1.5
1
0.5
0
0
5
10
15
20
25
30
35
40
Time (hrs)
crozier
ccta
combined

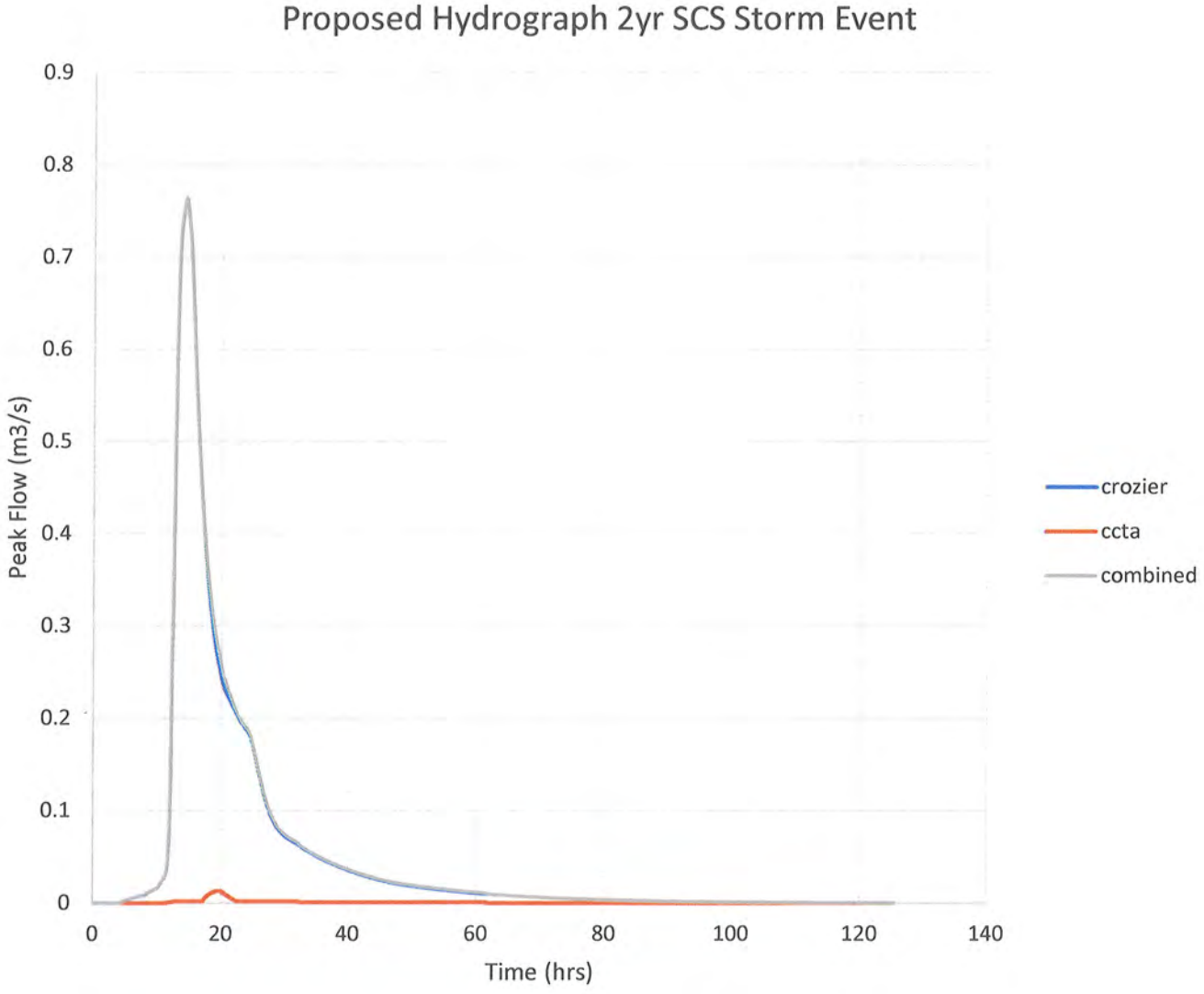

Hydrograph 25yr SCS Storm Event
Peak Flow (m3/s)
Time (hrs)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
5
10
15
20
25
30
35
40
crozier
ccta
combined

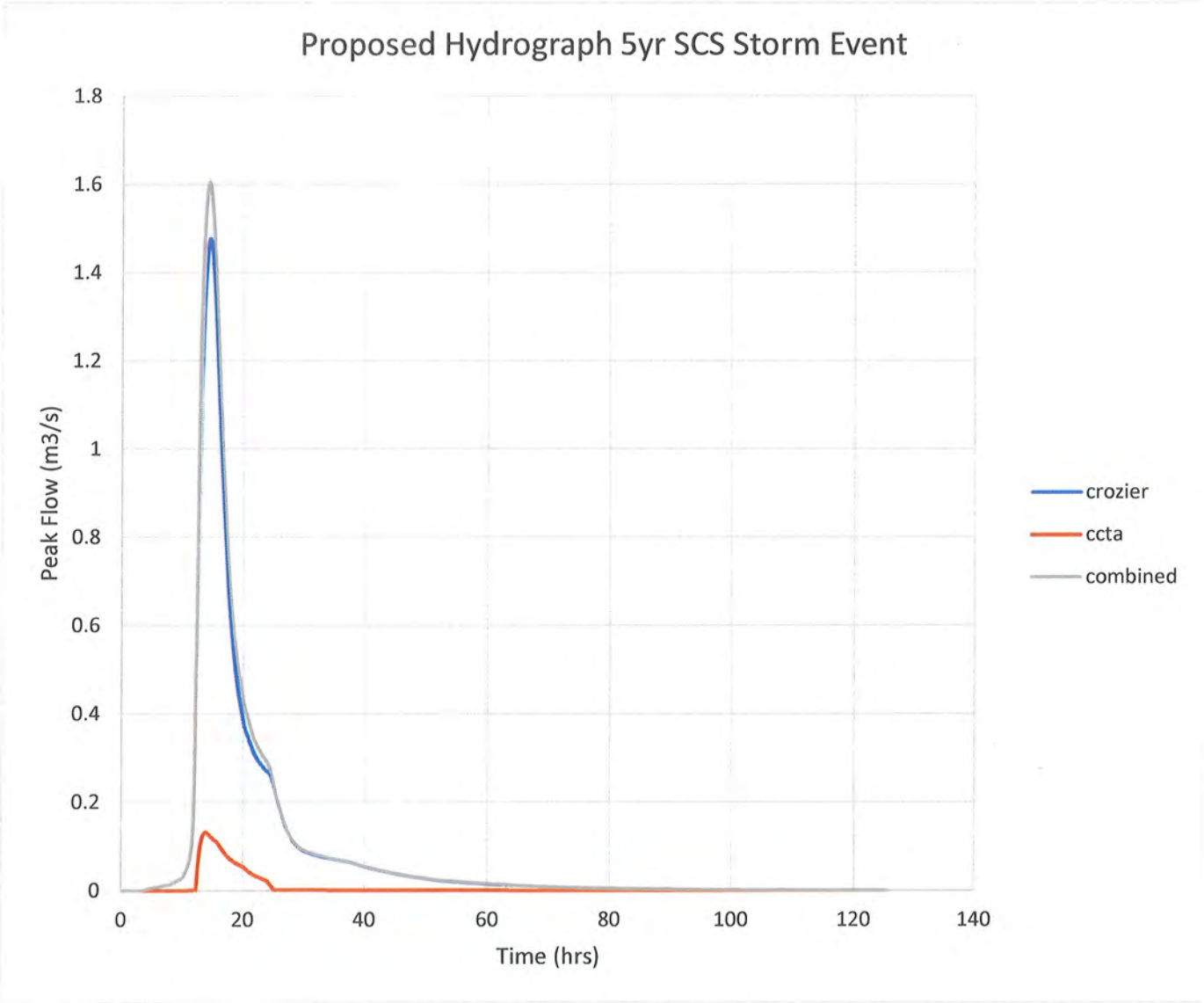

Hydrograph 50yr SCS Storm Event
Peak Flow (m3/s)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0
5
10
15
20
25
30
35
40
Time (hrs)
crozier
ccta
combined

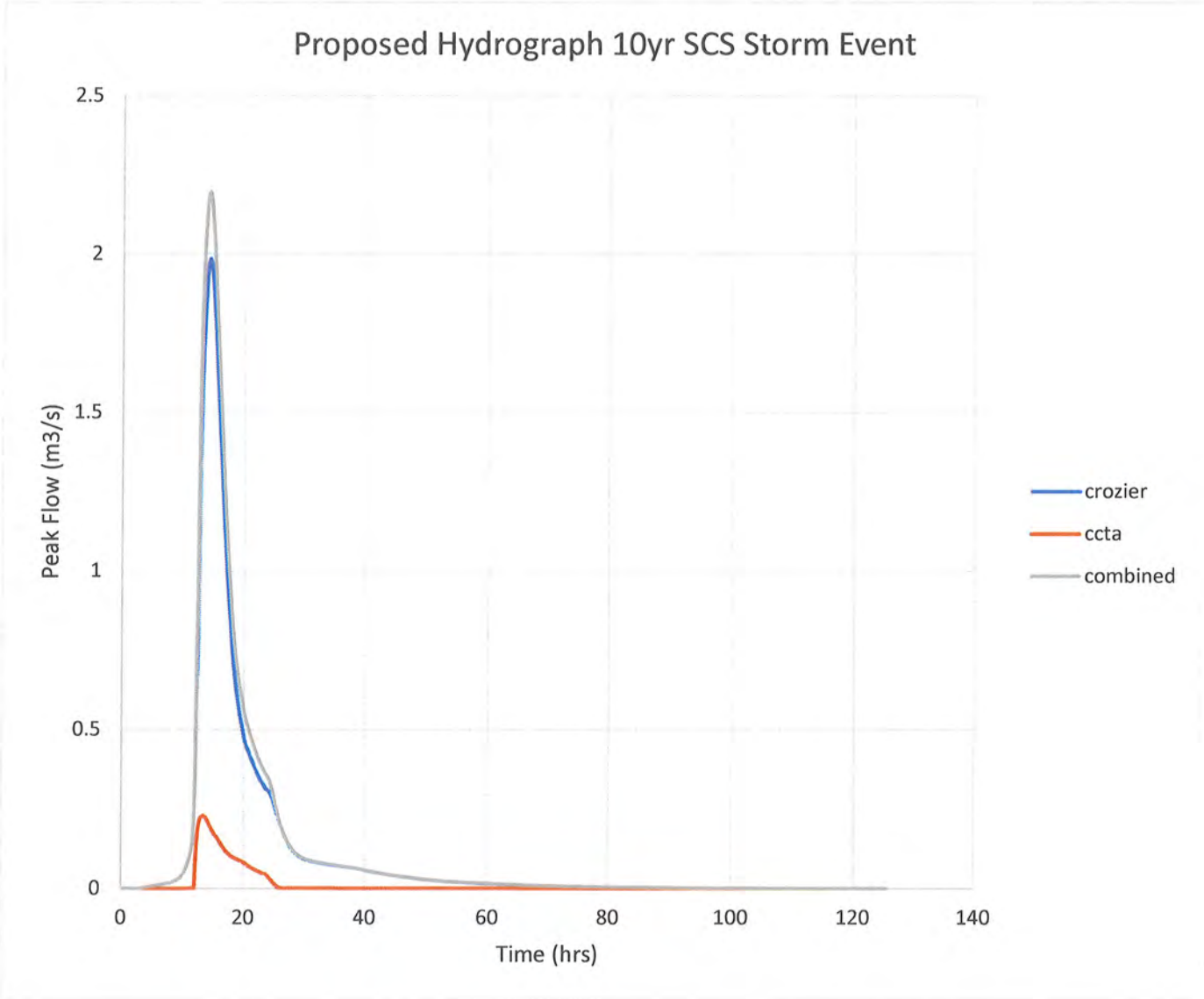

Hydrograph 100yr SCS Storm Event
Peak Flow (m3/s)
Time (hrs)
0
1
2
3
4
5
6
0
5
10
15
20
25
30
35
40
crozier
ccta
combined

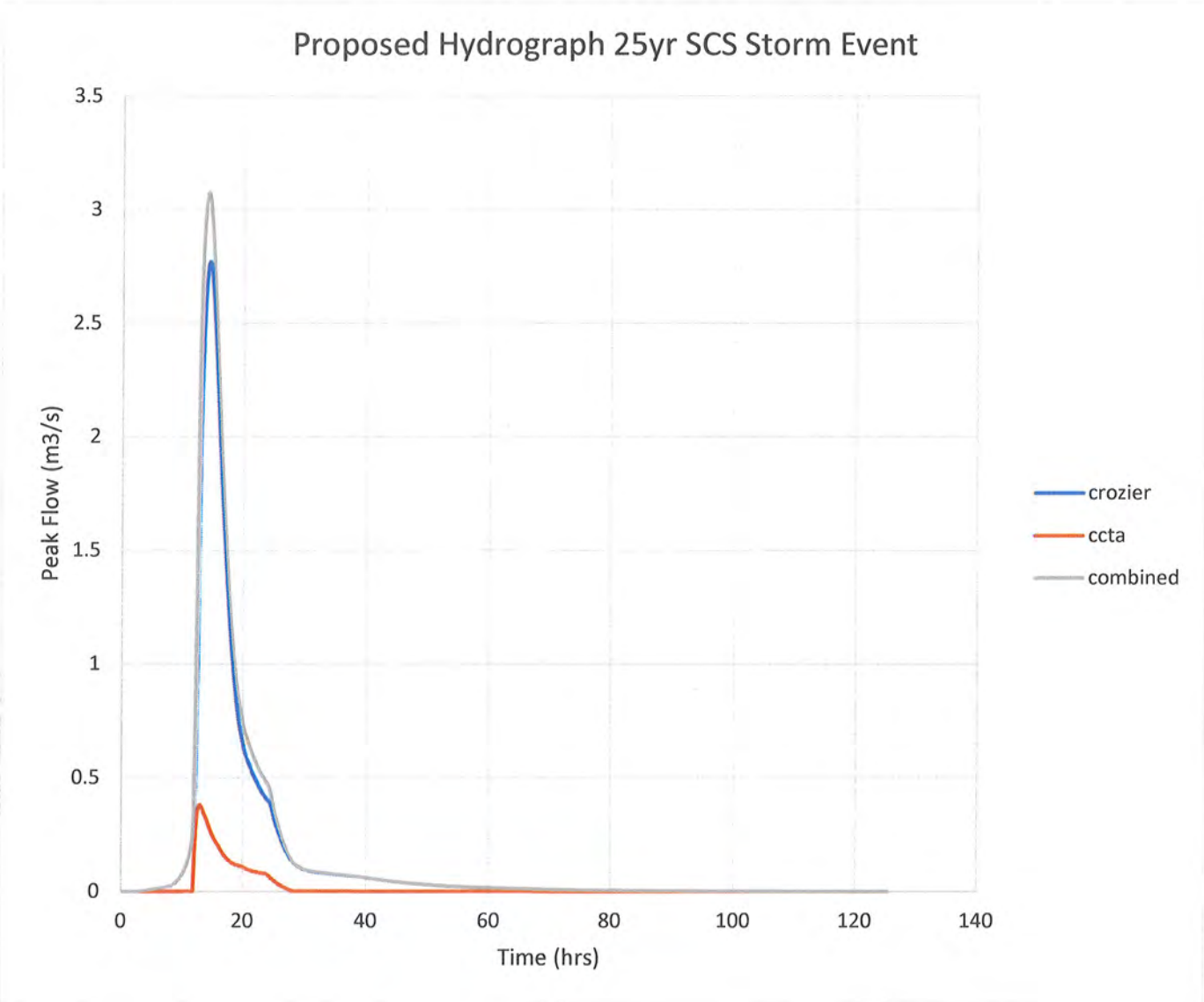

Hydrograph Regional Storm Event
Peak Flow (m3/s)
10
9
8
7
6
5
4
3
2
1
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined

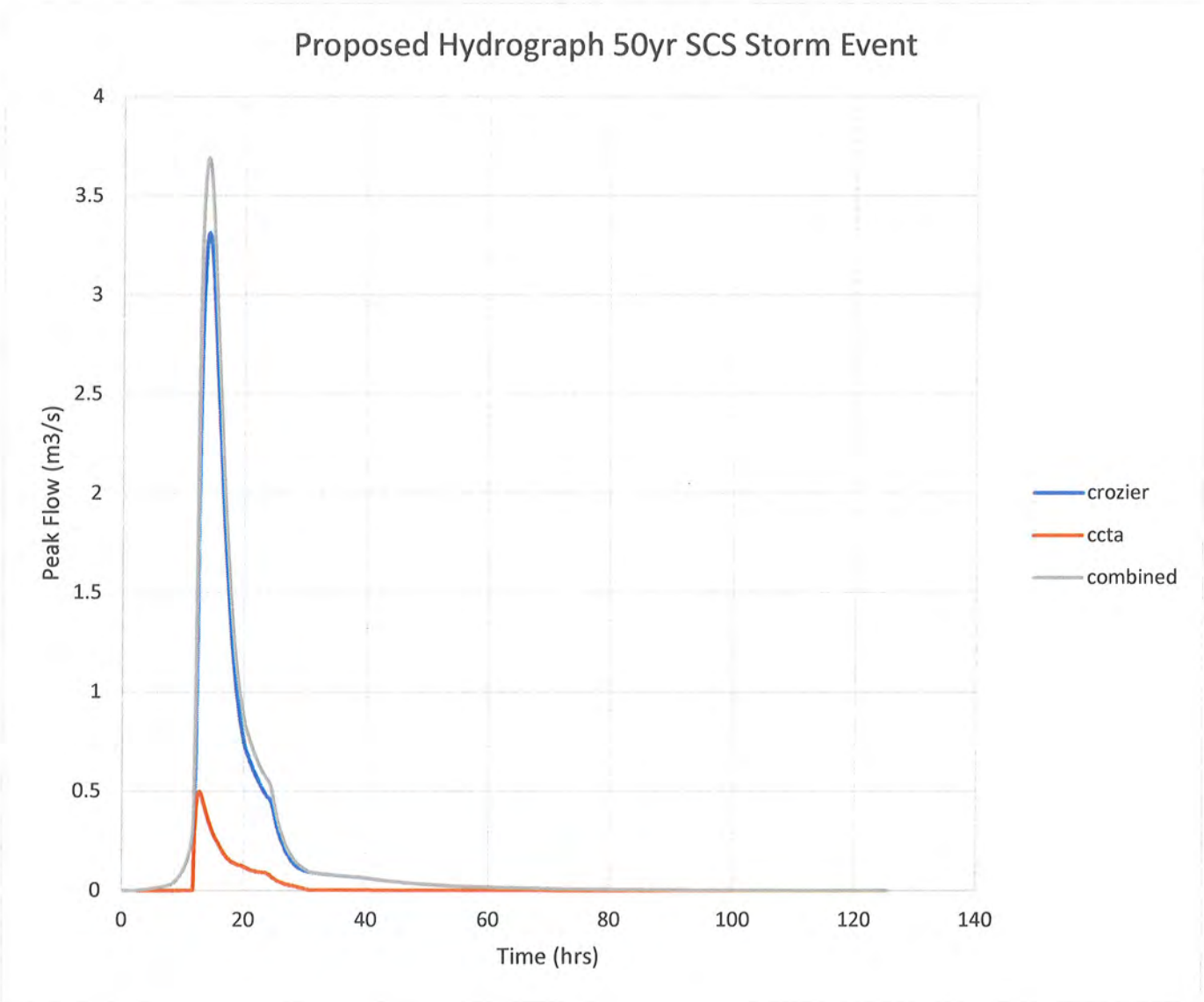

Proposed Hydrograph 25mm Storm Event
Peak Flow (m3/s)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined

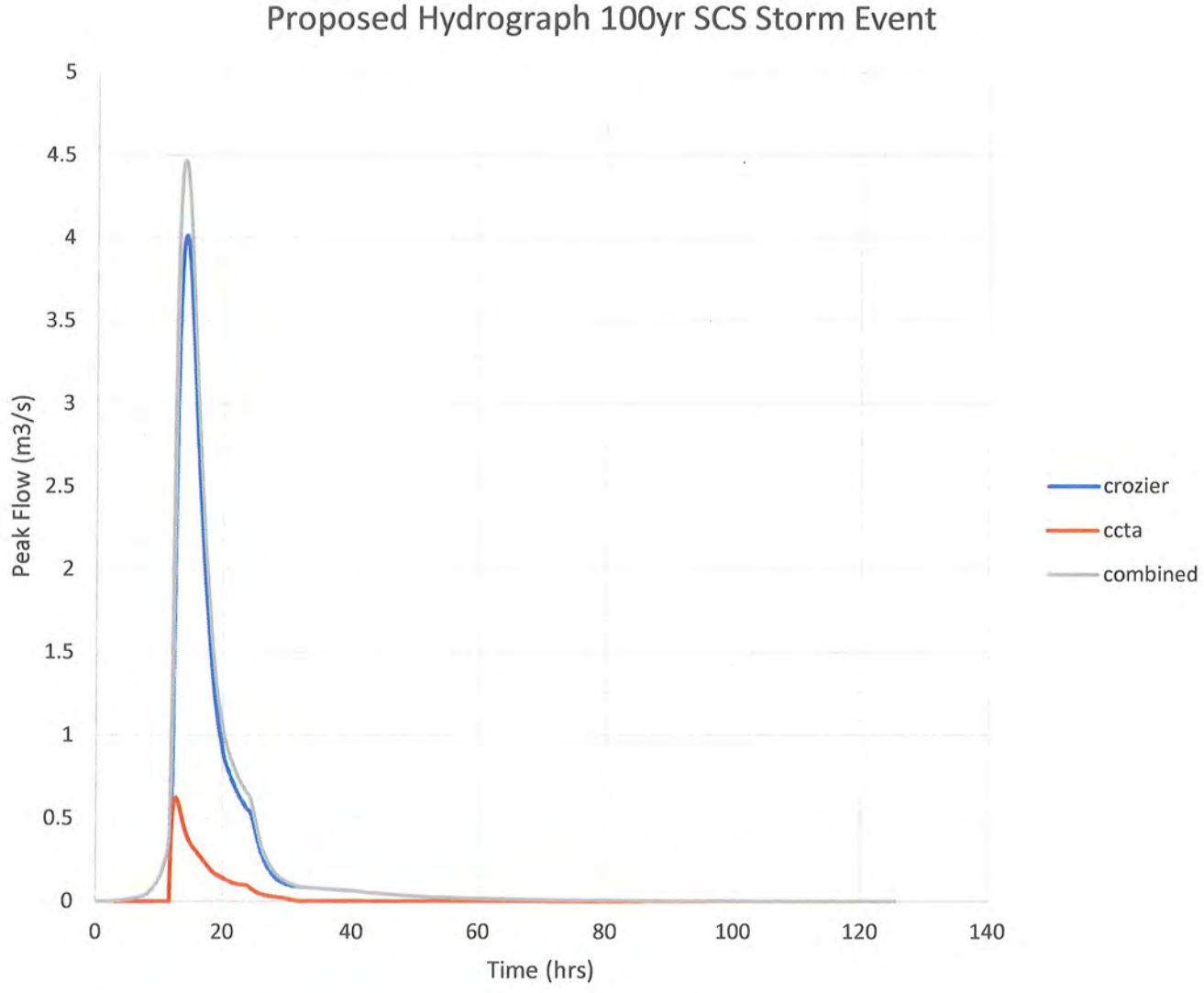

Proposed Hydrograph 2yr SCS Storm Event
Peak Flow (m3/s)
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined

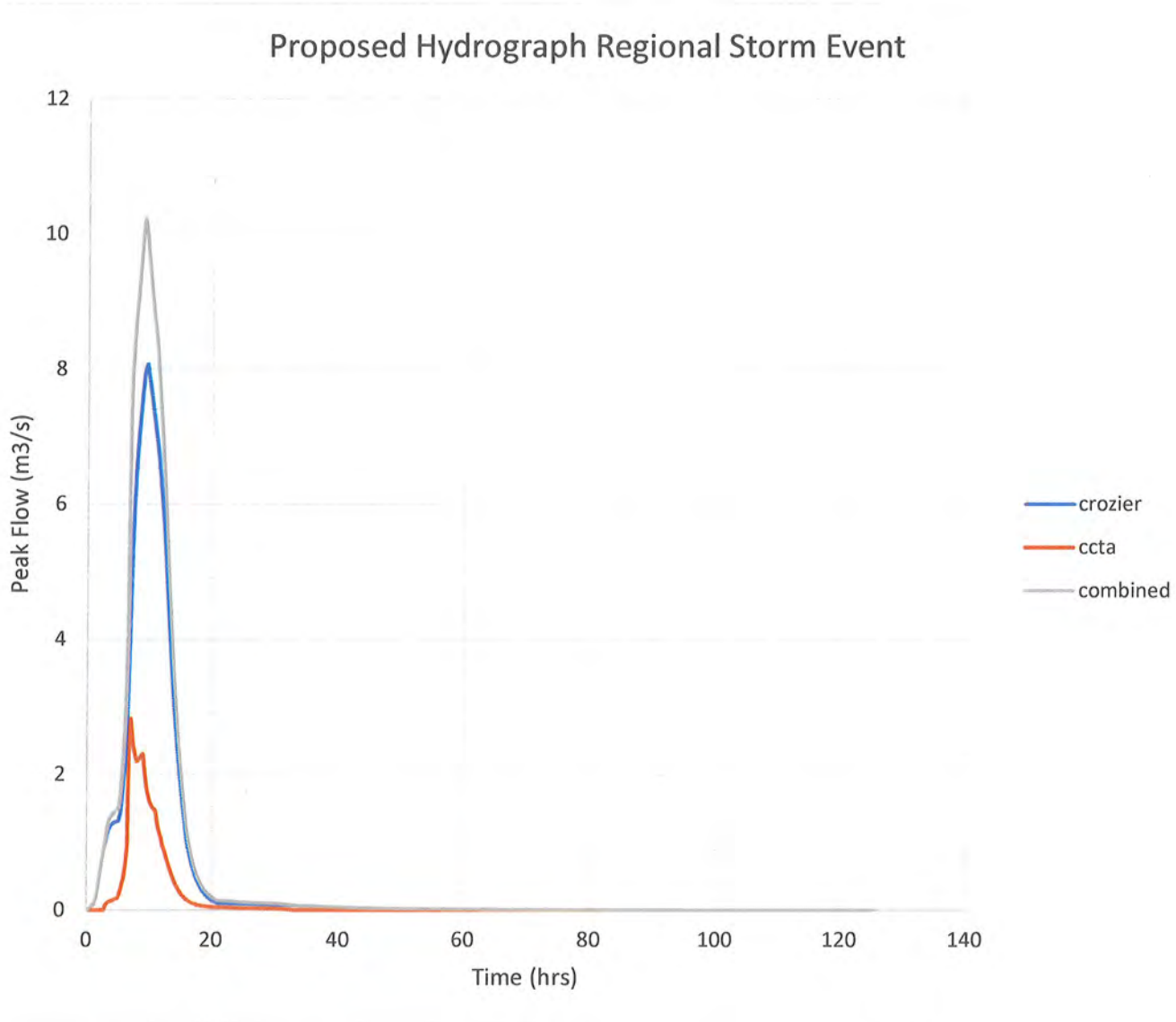

Proposed Hydrograph 5yr SCS Storm Event
Peak Flow (m3/s)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined


Proposed Hydrograph 10yr SCS Storm Event
Peak Flow (m3/s)
2.5
2
1.5
1
0.5
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined


Proposed Hydrograph 25yr SCS Storm Event
Peak Flow (m3/s)
3.5
3
2.5
2
1.5
1
0.5
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined


Proposed Hydrograph 50yr SCS Storm Event
Peak Flow (m3/s)
Time (hrs)
0
0.5
1
1.5
2
2.5
3
3.5
4
0
20
40
60
80
100
120
140
crozier
ccta
combined


Proposed Hydrograph 100yr SCS Storm Event
Peak Flow (m3/s)
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined


Proposed Hydrograph Regional Storm Event
Peak Flow (m3/s)
12
10
8
6
4
2
0
0
20
40
60
80
100
120
140
Time (hrs)
crozier
ccta
combined

HEC-RAS Plan: Plan 01 River: Taylors Creek Lo Reach: 1

| Reach | River Sta | Profile | Q Total | Min Ch El | W.S. Elev | Crit W.S. | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (m3/s) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| 1 | 1000 | 25mm | 0.32 | 191.15 | 191.57 | | 191.61 | 0.019547 | 0.97 | 0.33 | 1.33 | 0.62 |
| 1 | 1000 | 2 year | 0.76 | 191.15 | 191.69 | 191.65 | 191.80 | 0.034904 | 1.50 | 0.51 | 1.65 | 0.86 |
| 1 | 995 | 25mm | 0.32 | 191.15 | 191.47 | 191.45 | 191.53 | 0.037010 | 1.09 | 0.29 | 1.82 | 0.86 |
| 1 | 995 | 2 year | 0.76 | 191.15 | 191.62 | | 191.69 | 0.028193 | 1.20 | 0.64 | 2.81 | 0.80 |
| 1 | 990 | 25mm | 0.32 | 191.00 | 191.39 | | 191.42 | 0.013184 | 0.73 | 0.44 | 2.28 | 0.53 |
| 1 | 990 | 2 year | 0.76 | 191.00 | 191.58 | | 191.61 | 0.008347 | 0.80 | 0.96 | 3.00 | 0.45 |
| 1 | 976 | 25mm | 0.32 | 190.70 | 191.32 | | 191.33 | 0.003240 | 0.48 | 0.67 | 2.07 | 0.27 |
| 1 | 976 | 2 year | 0.76 | 190.70 | 191.49 | | 191.51 | 0.005712 | 0.70 | 1.09 | 2.94 | 0.37 |
| 1 | 970 | 25mm | 0.32 | 190.90 | 191.22 | 191.20 | 191.28 | 0.036821 | 1.09 | 0.29 | 1.82 | 0.86 |
| 1 | 970 | 2 year | 0.76 | 190.90 | 191.36 | | 191.44 | 0.030613 | 1.24 | 0.62 | 2.76 | 0.84 |
| 1 | 965 | 25mm | 0.32 | 190.75 | 191.16 | | 191.18 | 0.010027 | 0.66 | 0.48 | 2.42 | 0.47 |
| 1 | 965 | 2 year | 0.76 | 190.75 | 191.31 | | 191.35 | 0.009741 | 0.84 | 0.91 | 3.00 | 0.48 |
| 1 | 950 | 25mm | 0.32 | 190.45 | 190.78 | 190.78 | 190.88 | 0.054454 | 1.42 | 0.22 | 1.11 | 1.01 |
| 1 | 950 | 2 year | 0.76 | 190.45 | 191.01 | | 191.11 | 0.029933 | 1.41 | 0.54 | 1.72 | 0.80 |
| 1 | 907 | 25mm | 0.32 | 189.90 | 190.63 | | 190.64 | 0.001482 | 0.34 | 0.92 | 2.64 | 0.19 |
| 1 | 907 | 2 year | 0.76 | 189.90 | 190.80 | | 190.81 | 0.002595 | 0.54 | 1.42 | 3.00 | 0.25 |
| 1 | 897 | 25mm | 0.32 | 190.20 | 190.56 | 190.50 | 190.60 | 0.022137 | 0.89 | 0.36 | 2.04 | 0.68 |
| 1 | 897 | 2 year | 0.76 | 190.20 | 190.69 | 190.63 | 190.75 | 0.023282 | 1.12 | 0.69 | 2.92 | 0.74 |
| 1 | 892 | 25mm | 0.32 | 190.05 | 190.35 | 190.35 | 190.43 | 0.051590 | 1.24 | 0.26 | 1.68 | 1.01 |
| 1 | 892 | 2 year | 0.76 | 190.05 | 190.48 | 190.48 | 190.59 | 0.046377 | 1.45 | 0.53 | 2.54 | 1.02 |
| 1 | 875 | 25mm | 0.32 | 189.50 | 190.25 | | 190.25 | 0.001336 | 0.33 | 0.96 | 2.72 | 0.18 |
| 1 | 875 | 2 year | 0.76 | 189.50 | 190.42 | | 190.44 | 0.002265 | 0.51 | 1.48 | 3.00 | 0.23 |
| 1 | 860 | 25mm | 0.32 | 189.80 | 190.16 | 190.10 | 190.20 | 0.022146 | 0.89 | 0.36 | 2.04 | 0.68 |
| 1 | 860 | 2 year | 0.76 | 189.80 | 190.29 | 190.23 | 190.35 | 0.023347 | 1.12 | 0.68 | 2.92 | 0.74 |
| 1 | 855 | 25mm | 0.32 | 189.65 | 189.95 | 189.95 | 190.03 | 0.051669 | 1.24 | 0.26 | 1.68 | 1.01 |
| 1 | 855 | 2 year | 0.76 | 189.65 | 190.08 | 190.08 | 190.19 | 0.046221 | 1.45 | 0.53 | 2.54 | 1.01 |
| 1 | 835 | 25mm | 0.32 | 189.20 | 189.95 | | 189.95 | 0.001340 | 0.33 | 0.96 | 2.71 | 0.18 |
| 1 | 835 | 2 year | 0.76 | 189.20 | 190.12 | | 190.13 | 0.002325 | 0.52 | 1.47 | 3.00 | 0.24 |
| 1 | 821 | 25mm | 0.32 | 189.50 | 189.86 | | 189.90 | 0.019401 | 0.85 | 0.38 | 2.10 | 0.64 |
| 1 | 821 | 2 year | 0.76 | 189.50 | 189.99 | | 190.05 | 0.023111 | 1.11 | 0.69 | 2.92 | 0.73 |
| 1 | 815 | 25mm | 0.32 | 189.35 | 189.66 | 189.65 | 189.73 | 0.044315 | 1.17 | 0.27 | 1.74 | 0.94 |
| 1 | 815 | 2 year | 0.76 | 189.35 | 189.82 | | 189.89 | 0.029997 | 1.23 | 0.62 | 2.77 | 0.83 |
| 1 | 810 | 25mm | 0.32 | 189.05 | 189.38 | 189.38 | 189.48 | 0.054588 | 1.42 | 0.22 | 1.11 | 1.01 |
| 1 | 810 | 2 year | 0.76 | 189.05 | 189.55 | 189.55 | 189.70 | 0.049090 | 1.70 | 0.45 | 1.55 | 1.01 |
| 1 | 753 | 25mm | 0.32 | 188.35 | 189.09 | | 189.10 | 0.001375 | 0.33 | 0.95 | 2.69 | 0.18 |
| 1 | 753 | 2 year | 0.76 | 188.35 | 189.27 | | 189.29 | 0.002268 | 0.51 | 1.48 | 3.00 | 0.23 |
| 1 | 738 | 25mm | 0.32 | 188.65 | 188.99 | 188.95 | 189.04 | 0.029879 | 1.00 | 0.32 | 1.91 | 0.78 |
| 1 | 738 | 2 year | 0.76 | 188.65 | 189.09 | 189.08 | 189.19 | 0.041246 | 1.39 | 0.55 | 2.60 | 0.96 |
| 1 | 732 | 25mm | 0.32 | 188.50 | 188.80 | 188.80 | 188.88 | 0.051669 | 1.24 | 0.26 | 1.68 | 1.01 |
| 1 | 732 | 2 year | 0.76 | 188.50 | 188.97 | | 189.04 | 0.028668 | 1.21 | 0.63 | 2.80 | 0.81 |
| 1 | 726 | 25mm | 0.32 | 188.20 | 188.65 | | 188.69 | 0.013358 | 0.84 | 0.38 | 1.43 | 0.52 |
| 1 | 726 | 2 year | 0.76 | 188.20 | 188.88 | | 188.93 | 0.012049 | 0.95 | 0.80 | 2.39 | 0.52 |
| 1 | 684 | 25mm | 0.32 | 187.80 | 188.54 | | 188.54 | 0.001428 | 0.34 | 0.94 | 2.67 | 0.18 |
| 1 | 684 | 2 year | 0.76 | 187.80 | 188.71 | | 188.73 | 0.002367 | 0.52 | 1.46 | 3.00 | 0.24 |
| 1 | 671 | 25mm | 0.32 | 188.10 | 188.40 | 188.40 | 188.48 | 0.051590 | 1.24 | 0.26 | 1.68 | 1.01 |
| 1 | 671 | 2 year | 0.76 | 188.10 | 188.53 | 188.53 | 188.64 | 0.046322 | 1.45 | 0.53 | 2.54 | 1.01 |
| 1 | 654 | 25mm | 0.32 | 187.55 | 188.24 | | 188.25 | 0.001952 | 0.38 | 0.83 | 2.44 | 0.21 |
| 1 | 654 | 2 year | 0.76 | 187.55 | 188.39 | | 188.41 | 0.003768 | 0.61 | 1.25 | 3.00 | 0.30 |
| 1 | 652 | 25mm | 0.32 | 187.85 | 188.18 | | 188.24 | 0.032233 | 1.03 | 0.31 | 1.88 | 0.81 |
| 1 | 652 | 2 year | 0.76 | 187.85 | 188.31 | 188.28 | 188.39 | 0.033213 | 1.28 | 0.60 | 2.72 | 0.87 |

HEC-RAS Plan: Plan 01 River: Taylors Creek Lo Reach: 1 (Continued)

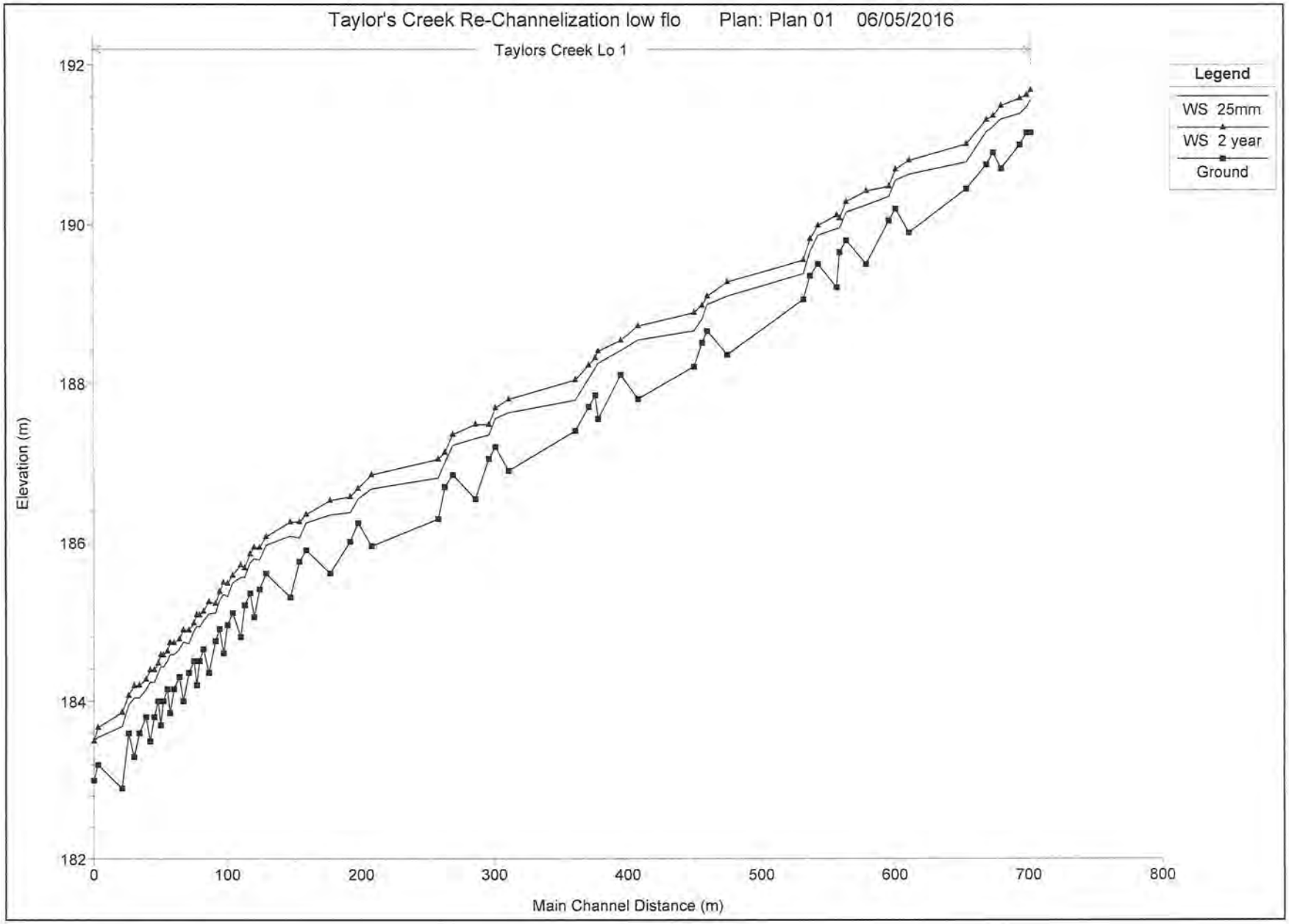
| Reach | River Sta | Profile | Q Total (m3/s) | Min Ch El (m) | W.S. Elev (m) | Crit W.S. (m) | E.G. Elev (m) | E.G. Slope (m/m) | Vel Chnl (m/s) | Flow Area (m2) | Top Width (m) | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 647 | 25mm | 0.32 | 187.70 | 188.05 | | 188.09 | 0.023190 | 0.91 | 0.35 | 2.02 | 0.69 |
| 1 | 647 | 2 year | 0.76 | 187.70 | 188.22 | | 188.27 | 0.016726 | 1.00 | 0.77 | 3.00 | 0.63 |
| 1 | 637 | 25mm | 0.32 | 187.40 | 187.79 | | 187.85 | 0.026586 | 1.09 | 0.29 | 1.26 | 0.72 |
| 1 | 637 | 2 year | 0.76 | 187.40 | 188.04 | | 188.10 | 0.016976 | 1.10 | 0.70 | 2.14 | 0.61 |
| 1 | 587 | 25mm | 0.32 | 186.90 | 187.63 | | 187.64 | 0.001483 | 0.34 | 0.92 | 2.64 | 0.19 |
| 1 | 587 | 2 year | 0.76 | 186.90 | 187.80 | | 187.81 | 0.002597 | 0.54 | 1.42 | 3.00 | 0.25 |
| 1 | 577 | 25mm | 0.32 | 187.20 | 187.56 | 187.50 | 187.60 | 0.022116 | 0.89 | 0.36 | 2.04 | 0.68 |
| 1 | 577 | 2 year | 0.76 | 187.20 | 187.69 | 187.63 | 187.75 | 0.023305 | 1.12 | 0.68 | 2.92 | 0.74 |
| 1 | 572 | 25mm | 0.32 | 187.05 | 187.35 | 187.35 | 187.43 | 0.051691 | 1.24 | 0.26 | 1.68 | 1.01 |
| 1 | 572 | 2 year | 0.76 | 187.05 | 187.48 | 187.48 | 187.59 | 0.046258 | 1.45 | 0.53 | 2.54 | 1.01 |
| 1 | 562 | 25mm | 0.32 | 186.55 | 187.31 | | 187.31 | 0.001249 | 0.32 | 0.99 | 2.77 | 0.17 |
| 1 | 562 | 2 year | 0.76 | 186.55 | 187.48 | | 187.50 | 0.002124 | 0.50 | 1.52 | 3.00 | 0.23 |
| 1 | 545 | 25mm | 0.32 | 186.85 | 187.22 | 187.15 | 187.25 | 0.017894 | 0.82 | 0.39 | 2.14 | 0.62 |
| 1 | 545 | 2 year | 0.76 | 186.85 | 187.36 | 187.28 | 187.41 | 0.018883 | 1.03 | 0.74 | 3.00 | 0.67 |
| 1 | 539 | 25mm | 0.32 | 186.70 | 187.00 | 187.00 | 187.08 | 0.051574 | 1.24 | 0.26 | 1.68 | 1.01 |
| 1 | 539 | 2 year | 0.76 | 186.70 | 187.13 | 187.13 | 187.24 | 0.046376 | 1.45 | 0.53 | 2.54 | 1.02 |
| 1 | 534 | 25mm | 0.32 | 186.30 | 186.81 | | 186.83 | 0.007614 | 0.68 | 0.47 | 1.58 | 0.40 |
| 1 | 534 | 2 year | 0.76 | 186.30 | 187.05 | | 187.08 | 0.007725 | 0.79 | 0.96 | 2.71 | 0.42 |
| 1 | 484 | 25mm | 0.32 | 185.95 | 186.68 | | 186.68 | 0.001538 | 0.35 | 0.91 | 2.61 | 0.19 |
| 1 | 484 | 2 year | 0.76 | 185.95 | 186.85 | | 186.86 | 0.002605 | 0.54 | 1.42 | 3.00 | 0.25 |
| 1 | 474 | 25mm | 0.32 | 186.25 | 186.55 | 186.55 | 186.63 | 0.051769 | 1.24 | 0.26 | 1.68 | 1.01 |
| 1 | 474 | 2 year | 0.76 | 186.25 | 186.68 | 186.68 | 186.79 | 0.046341 | 1.45 | 0.53 | 2.54 | 1.01 |
| 1 | 469 | 25mm | 0.32 | 186.01 | 186.38 | | 186.41 | 0.017947 | 0.82 | 0.39 | 2.14 | 0.62 |
| 1 | 469 | 2 year | 0.76 | 186.01 | 186.58 | | 186.61 | 0.009617 | 0.83 | 0.92 | 3.00 | 0.48 |
| 1 | 454 | 25mm | 0.32 | 185.60 | 186.35 | | 186.36 | 0.001272 | 0.32 | 0.98 | 2.75 | 0.17 |
| 1 | 454 | 2 year | 0.76 | 185.60 | 186.53 | | 186.55 | 0.002132 | 0.50 | 1.52 | 3.00 | 0.23 |
| 1 | 436 | 25mm | 0.32 | 185.90 | 186.25 | 186.20 | 186.29 | 0.023359 | 0.91 | 0.35 | 2.01 | 0.70 |
| 1 | 436 | 2 year | 0.76 | 185.90 | 186.36 | 186.33 | 186.44 | 0.033043 | 1.27 | 0.60 | 2.72 | 0.87 |
| 1 | 431 | 25mm | 0.32 | 185.75 | 186.06 | 186.05 | 186.13 | 0.047220 | 1.20 | 0.27 | 1.72 | 0.97 |
| 1 | 431 | 2 year | 0.76 | 185.75 | 186.26 | | 186.31 | 0.017692 | 1.01 | 0.75 | 3.00 | 0.65 |
| 1 | 424 | 25mm | 0.32 | 185.30 | 186.08 | | 186.09 | 0.001037 | 0.30 | 1.07 | 2.91 | 0.16 |
| 1 | 424 | 2 year | 0.76 | 185.30 | 186.26 | | 186.27 | 0.001816 | 0.48 | 1.60 | 3.00 | 0.21 |
| 1 | 406 | 25mm | 0.32 | 185.60 | 185.97 | 185.95 | 186.03 | 0.042313 | 1.09 | 0.29 | 1.98 | 0.91 |
| 1 | 406 | 2 year | 0.76 | 185.60 | 186.07 | 186.07 | 186.17 | 0.047429 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 401 | 25mm | 0.32 | 185.40 | 185.77 | | 185.83 | 0.036432 | 1.03 | 0.31 | 2.05 | 0.85 |
| 1 | 401 | 2 year | 0.76 | 185.40 | 185.93 | | 185.99 | 0.020626 | 1.06 | 0.72 | 3.00 | 0.69 |
| 1 | 397 | 25mm | 0.32 | 185.05 | 185.79 | | 185.80 | 0.001373 | 0.33 | 0.95 | 2.70 | 0.18 |
| 1 | 397 | 2 year | 0.76 | 185.05 | 185.94 | | 185.95 | 0.002830 | 0.55 | 1.38 | 3.00 | 0.26 |
| 1 | 394 | 25mm | 0.32 | 185.35 | 185.74 | 185.70 | 185.78 | 0.029103 | 0.95 | 0.34 | 2.15 | 0.76 |
| 1 | 394 | 2 year | 0.76 | 185.35 | 185.85 | 185.82 | 185.93 | 0.031243 | 1.20 | 0.63 | 3.00 | 0.84 |
| 1 | 390 | 25mm | 0.32 | 185.20 | 185.55 | 185.55 | 185.63 | 0.054152 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 390 | 2 year | 0.76 | 185.20 | 185.67 | 185.67 | 185.77 | 0.047429 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 387 | 25mm | 0.32 | 184.80 | 185.55 | | 185.56 | 0.001289 | 0.33 | 0.98 | 2.74 | 0.17 |
| 1 | 387 | 2 year | 0.76 | 184.80 | 185.71 | | 185.72 | 0.002512 | 0.53 | 1.43 | 3.00 | 0.25 |
| 1 | 381 | 25mm | 0.32 | 185.10 | 185.48 | 185.45 | 185.53 | 0.031523 | 0.98 | 0.33 | 2.11 | 0.79 |
| 1 | 381 | 2 year | 0.76 | 185.10 | 185.57 | 185.57 | 185.67 | 0.045594 | 1.39 | 0.55 | 2.80 | 1.00 |
| 1 | 377 | 25mm | 0.32 | 184.95 | 185.31 | 185.30 | 185.38 | 0.047908 | 1.15 | 0.28 | 1.93 | 0.96 |
| 1 | 377 | 2 year | 0.76 | 184.95 | 185.47 | | 185.53 | 0.022925 | 1.09 | 0.70 | 3.00 | 0.72 |
| 1 | 374 | 25mm | 0.32 | 184.60 | 185.34 | | 185.34 | 0.001416 | 0.34 | 0.94 | 2.67 | 0.18 |

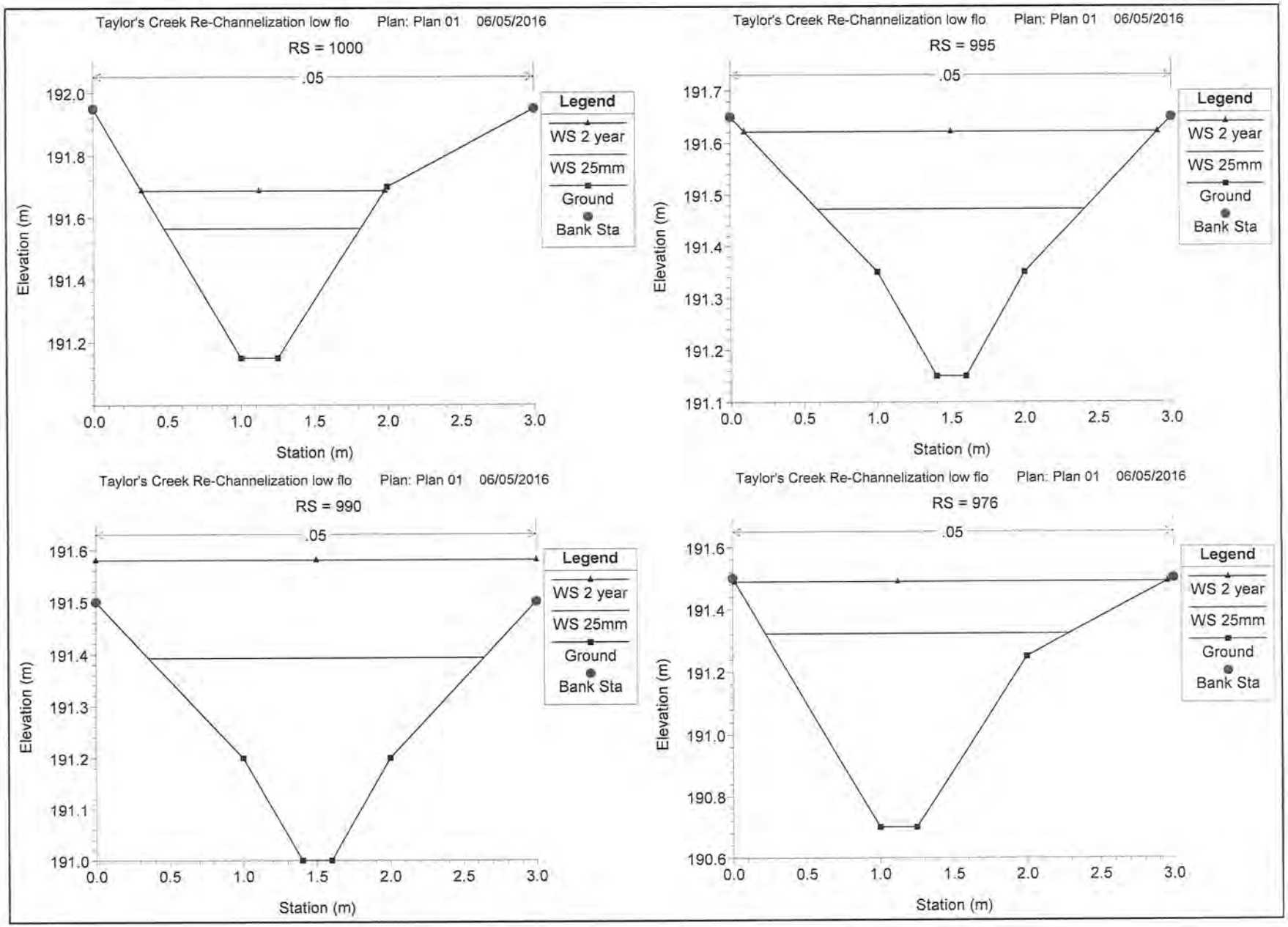
HEC-RAS Plan: Plan 01 River: Taylors Creek Lo Reach: 1 (Continued)

| Reach | River Sta | Profile | Q Total | Min Ch El | W.S. Elev | Crit W.S. | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (m3/s) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| 1 | 374 | 2 year | 0.76 | 184.60 | 185.49 | | 185.50 | 0.002831 | 0.55 | 1.38 | 3.00 | 0.26 |
| 1 | 371 | 25mm | 0.32 | 184.90 | 185.26 | 185.25 | 185.33 | 0.045877 | 1.13 | 0.28 | 1.94 | 0.94 |
| 1 | 371 | 2 year | 0.76 | 184.90 | 185.37 | 185.37 | 185.47 | 0.047393 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 368 | 25mm | 0.32 | 184.75 | 185.10 | 185.10 | 185.17 | 0.054237 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 368 | 2 year | 0.76 | 184.75 | 185.22 | 185.22 | 185.32 | 0.047341 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 363 | 25mm | 0.32 | 184.35 | 185.09 | | 185.10 | 0.001371 | 0.33 | 0.95 | 2.70 | 0.18 |
| 1 | 363 | 2 year | 0.76 | 184.35 | 185.24 | | 185.26 | 0.002711 | 0.55 | 1.40 | 3.00 | 0.26 |
| 1 | 359 | 25mm | 0.32 | 184.65 | 185.00 | 185.00 | 185.07 | 0.054281 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 359 | 2 year | 0.76 | 184.65 | 185.12 | 185.12 | 185.22 | 0.047413 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 356 | 25mm | 0.32 | 184.50 | 184.93 | | 184.95 | 0.015551 | 0.75 | 0.43 | 2.45 | 0.57 |
| 1 | 356 | 2 year | 0.76 | 184.50 | 185.07 | | 185.11 | 0.012805 | 0.91 | 0.84 | 3.00 | 0.55 |
| 1 | 354 | 25mm | 0.32 | 184.20 | 184.93 | | 184.94 | 0.001444 | 0.34 | 0.93 | 2.66 | 0.18 |
| 1 | 354 | 2 year | 0.76 | 184.20 | 185.08 | | 185.10 | 0.002974 | 0.56 | 1.36 | 3.00 | 0.27 |
| 1 | 352 | 25mm | 0.32 | 184.50 | 184.87 | | 184.93 | 0.035876 | 1.02 | 0.31 | 2.05 | 0.84 |
| 1 | 352 | 2 year | 0.76 | 184.50 | 184.97 | 184.97 | 185.07 | 0.046989 | 1.40 | 0.55 | 2.79 | 1.01 |
| 1 | 348 | 25mm | 0.32 | 184.35 | 184.72 | 184.70 | 184.78 | 0.040130 | 1.07 | 0.30 | 2.00 | 0.89 |
| 1 | 348 | 2 year | 0.76 | 184.35 | 184.88 | | 184.94 | 0.020771 | 1.06 | 0.72 | 3.00 | 0.69 |
| 1 | 344 | 25mm | 0.32 | 184.00 | 184.74 | | 184.74 | 0.001408 | 0.34 | 0.94 | 2.68 | 0.18 |
| 1 | 344 | 2 year | 0.76 | 184.00 | 184.89 | | 184.90 | 0.002841 | 0.56 | 1.38 | 3.00 | 0.26 |
| 1 | 341 | 25mm | 0.32 | 184.30 | 184.65 | 184.65 | 184.72 | 0.054152 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 341 | 2 year | 0.76 | 184.30 | 184.77 | 184.77 | 184.87 | 0.045548 | 1.39 | 0.55 | 2.80 | 1.00 |
| 1 | 337 | 25mm | 0.32 | 184.15 | 184.58 | | 184.61 | 0.014790 | 0.73 | 0.43 | 2.47 | 0.56 |
| 1 | 337 | 2 year | 0.76 | 184.15 | 184.73 | | 184.77 | 0.011943 | 0.89 | 0.86 | 3.00 | 0.53 |
| 1 | 334 | 25mm | 0.32 | 183.85 | 184.58 | | 184.59 | 0.001449 | 0.34 | 0.93 | 2.66 | 0.18 |
| 1 | 334 | 2 year | 0.76 | 183.85 | 184.73 | | 184.75 | 0.002969 | 0.56 | 1.36 | 3.00 | 0.27 |
| 1 | 332 | 25mm | 0.32 | 184.15 | 184.50 | 184.50 | 184.57 | 0.054281 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 332 | 2 year | 0.76 | 184.15 | 184.62 | 184.62 | 184.72 | 0.047429 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 329 | 25mm | 0.32 | 184.00 | 184.43 | | 184.45 | 0.015741 | 0.75 | 0.42 | 2.44 | 0.57 |
| 1 | 329 | 2 year | 0.76 | 184.00 | 184.57 | | 184.61 | 0.012787 | 0.91 | 0.84 | 3.00 | 0.54 |
| 1 | 327 | 25mm | 0.32 | 183.70 | 184.43 | | 184.44 | 0.001449 | 0.34 | 0.93 | 2.66 | 0.18 |
| 1 | 327 | 2 year | 0.76 | 183.70 | 184.58 | | 184.60 | 0.002969 | 0.56 | 1.36 | 3.00 | 0.27 |
| 1 | 325 | 25mm | 0.32 | 184.00 | 184.35 | 184.35 | 184.43 | 0.054170 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 325 | 2 year | 0.76 | 184.00 | 184.47 | 184.47 | 184.57 | 0.047429 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 322 | 25mm | 0.32 | 183.80 | 184.23 | | 184.26 | 0.013820 | 0.71 | 0.45 | 2.51 | 0.54 |
| 1 | 322 | 2 year | 0.76 | 183.80 | 184.39 | | 184.42 | 0.011036 | 0.86 | 0.88 | 3.00 | 0.51 |
| 1 | 319 | 25mm | 0.32 | 183.50 | 184.24 | | 184.24 | 0.001408 | 0.34 | 0.94 | 2.68 | 0.18 |
| 1 | 319 | 2 year | 0.76 | 183.50 | 184.39 | | 184.40 | 0.002831 | 0.55 | 1.38 | 3.00 | 0.26 |
| 1 | 316 | 25mm | 0.32 | 183.80 | 184.15 | 184.15 | 184.22 | 0.054183 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 316 | 2 year | 0.76 | 183.80 | 184.27 | 184.27 | 184.37 | 0.047393 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 311 | 25mm | 0.32 | 183.60 | 184.04 | | 184.07 | 0.012298 | 0.68 | 0.47 | 2.56 | 0.51 |
| 1 | 311 | 2 year | 0.76 | 183.60 | 184.20 | | 184.23 | 0.009710 | 0.83 | 0.92 | 3.00 | 0.48 |
| 1 | 307 | 25mm | 0.32 | 183.30 | 184.04 | | 184.05 | 0.001370 | 0.33 | 0.95 | 2.70 | 0.18 |
| 1 | 307 | 2 year | 0.76 | 183.30 | 184.19 | | 184.21 | 0.002708 | 0.55 | 1.40 | 3.00 | 0.26 |
| 1 | 303 | 25mm | 0.32 | 183.60 | 183.95 | 183.95 | 184.02 | 0.054108 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 303 | 2 year | 0.76 | 183.60 | 184.07 | 184.07 | 184.17 | 0.047341 | 1.41 | 0.54 | 2.78 | 1.02 |
| 1 | 285 | 25mm | 0.32 | 182.90 | 183.68 | | 183.69 | 0.001025 | 0.30 | 1.07 | 2.92 | 0.16 |
| 1 | 285 | 2 year | 0.76 | 182.90 | 183.86 | | 183.87 | 0.001817 | 0.48 | 1.60 | 3.00 | 0.21 |
| 1 | 282 | 25mm | 0.32 | 183.20 | 183.55 | 183.55 | 183.62 | 0.054466 | 1.20 | 0.26 | 1.87 | 1.02 |
| 1 | 282 | 2 year | 0.76 | 183.20 | 183.67 | 183.67 | 183.77 | 0.047429 | 1.41 | 0.54 | 2.78 | 1.02 |

HEC-RAS Plan: Plan 01 River: Taylors Creek Lo Reach: 1 (Continued)

| Reach | River Sta | Profile | Q Total | Min Ch El | W.S. Elev | Crit W.S. | E.G. Elev | E.G. Slope | Vel Chnl | Flow Area | Top Width | Froude # Chl |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (m3/s) | (m) | (m) | (m) | (m) | (m/m) | (m/s) | (m2) | (m) | |
| 1 | 279 | 25mm | 0.32 | 183.00 | 183.50 | 183.35 | 183.51 | 0.005610 | 0.51 | 0.63 | 3.00 | 0.35 |
| 1 | 279 | 2 year | 0.76 | 183.00 | 183.50 | 183.47 | 183.58 | 0.032380 | 1.22 | 0.63 | 3.00 | 0.85 |


Taylor's Creek Re-Channelization low flo
Plan: Plan 01
06/05/2016
Taylors Creek Lo 1
Legend
WS 25mm
WS 2 year
Ground
Elevation (m)
192
190
188
186
184
182
0
100
200
300
400
500
600
700
800
Main Channel Distance (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 1000
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 995
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 990
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 976
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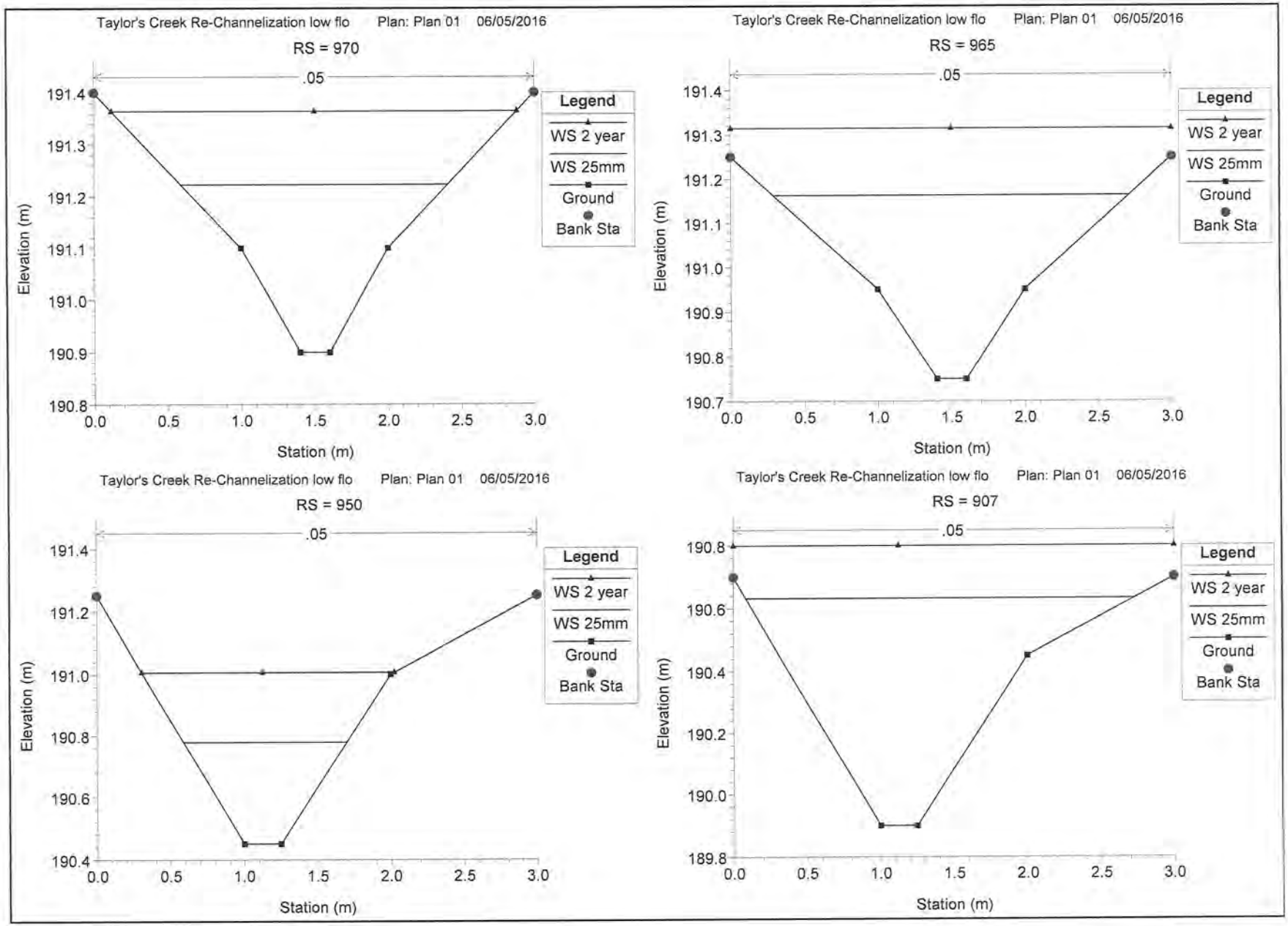
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 970
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Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 965
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 950
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Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 907
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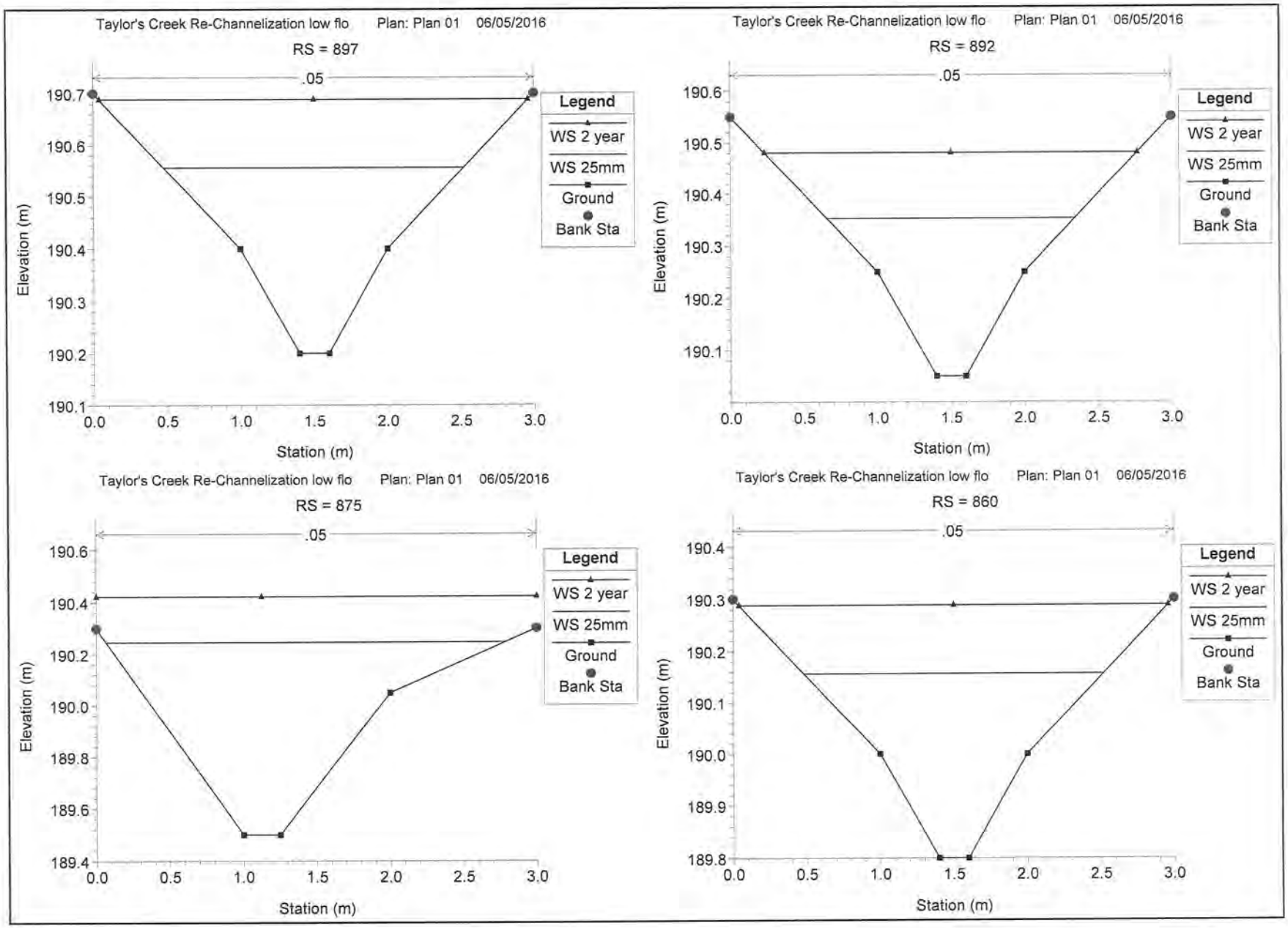
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 897
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Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 892
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 875
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 860
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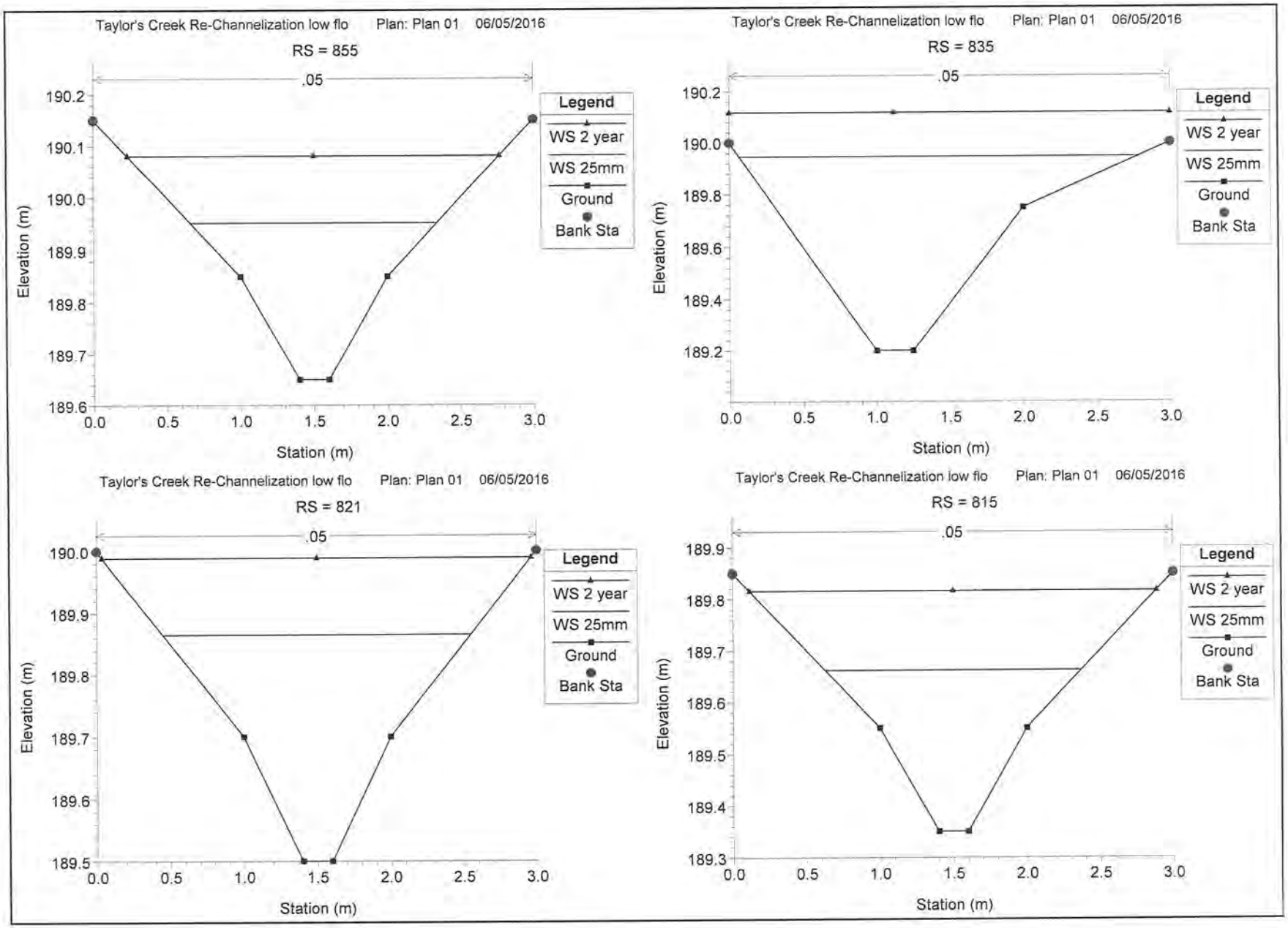
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 855
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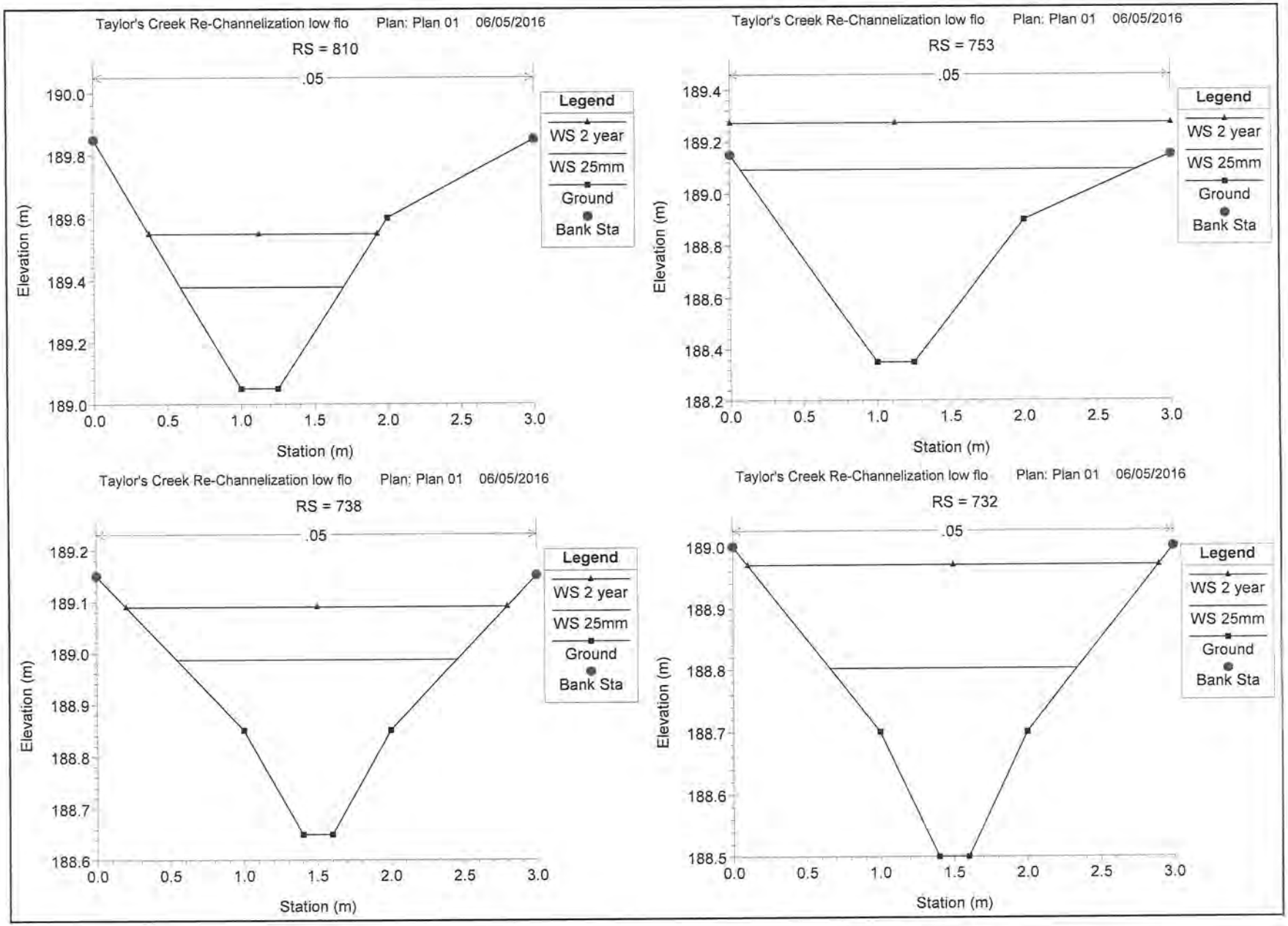
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 835
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 821
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 815
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)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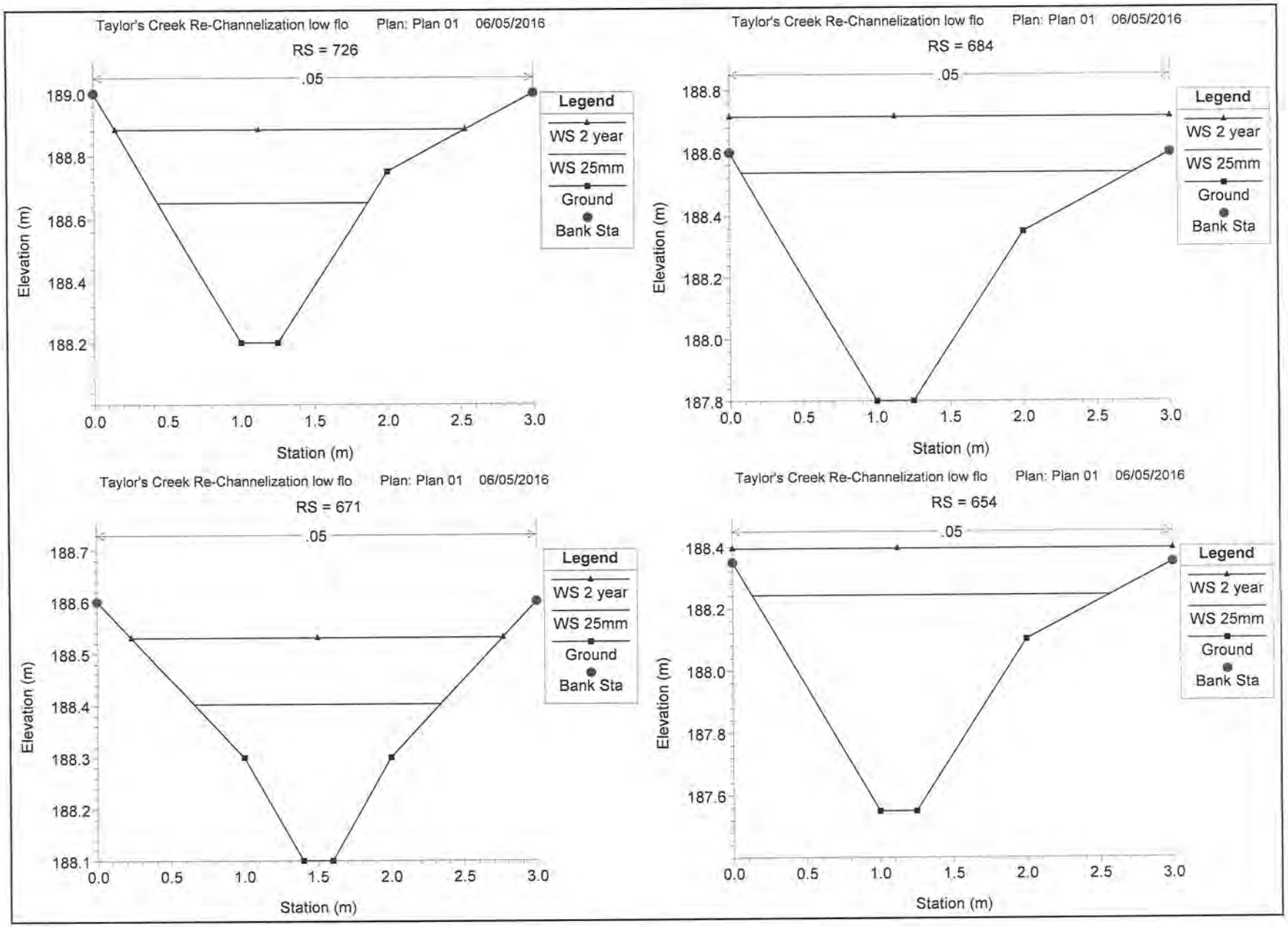
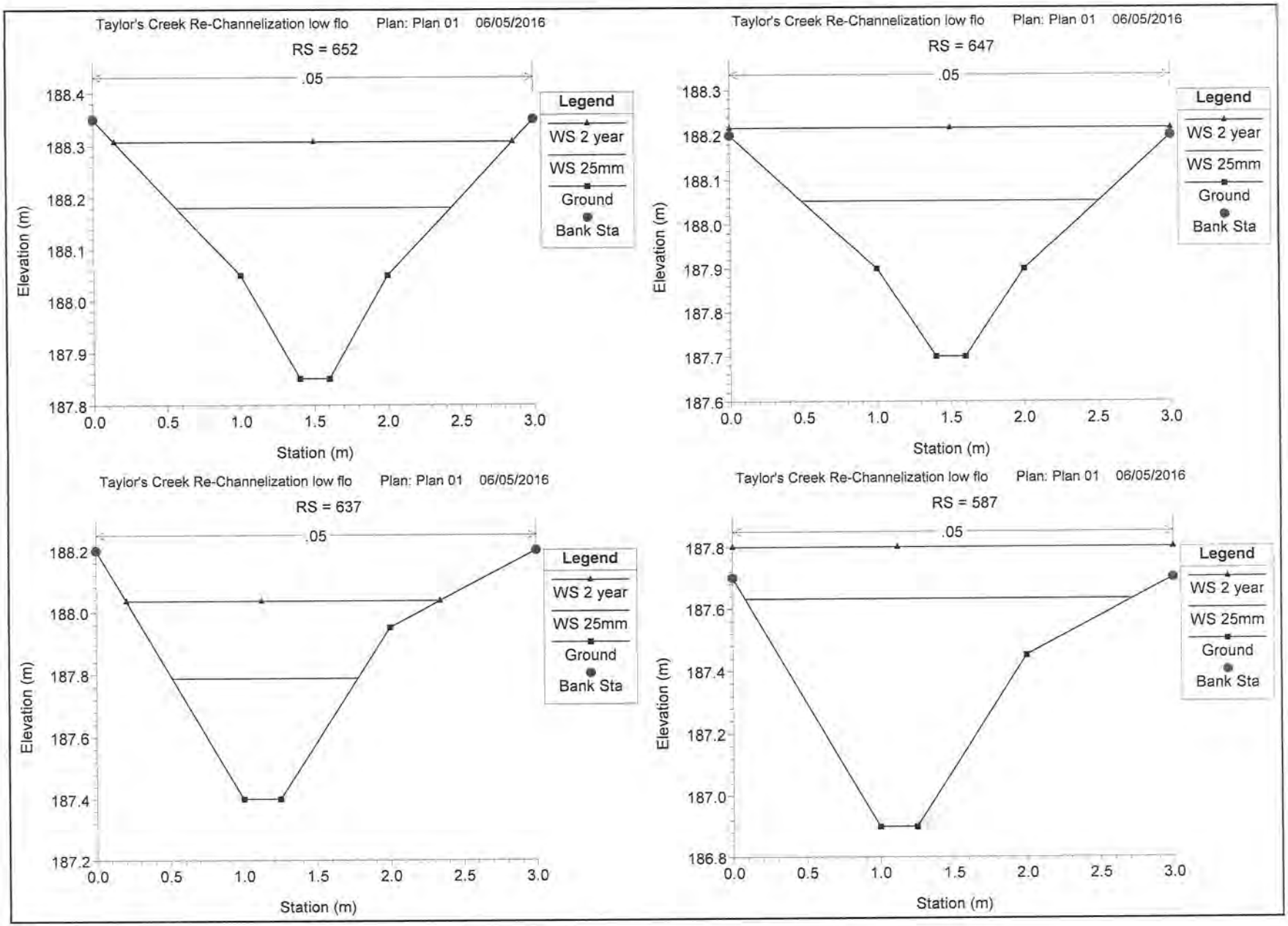
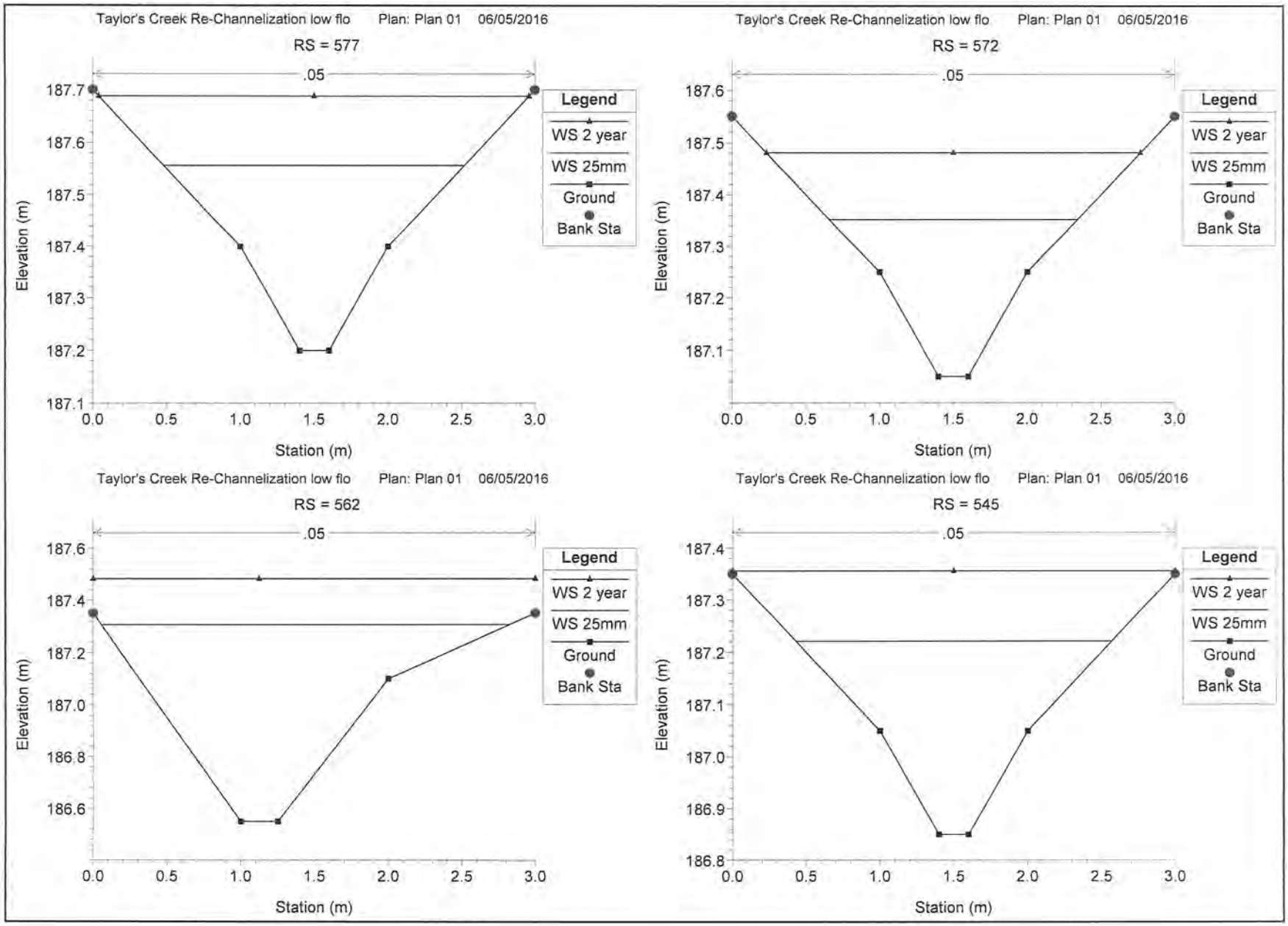
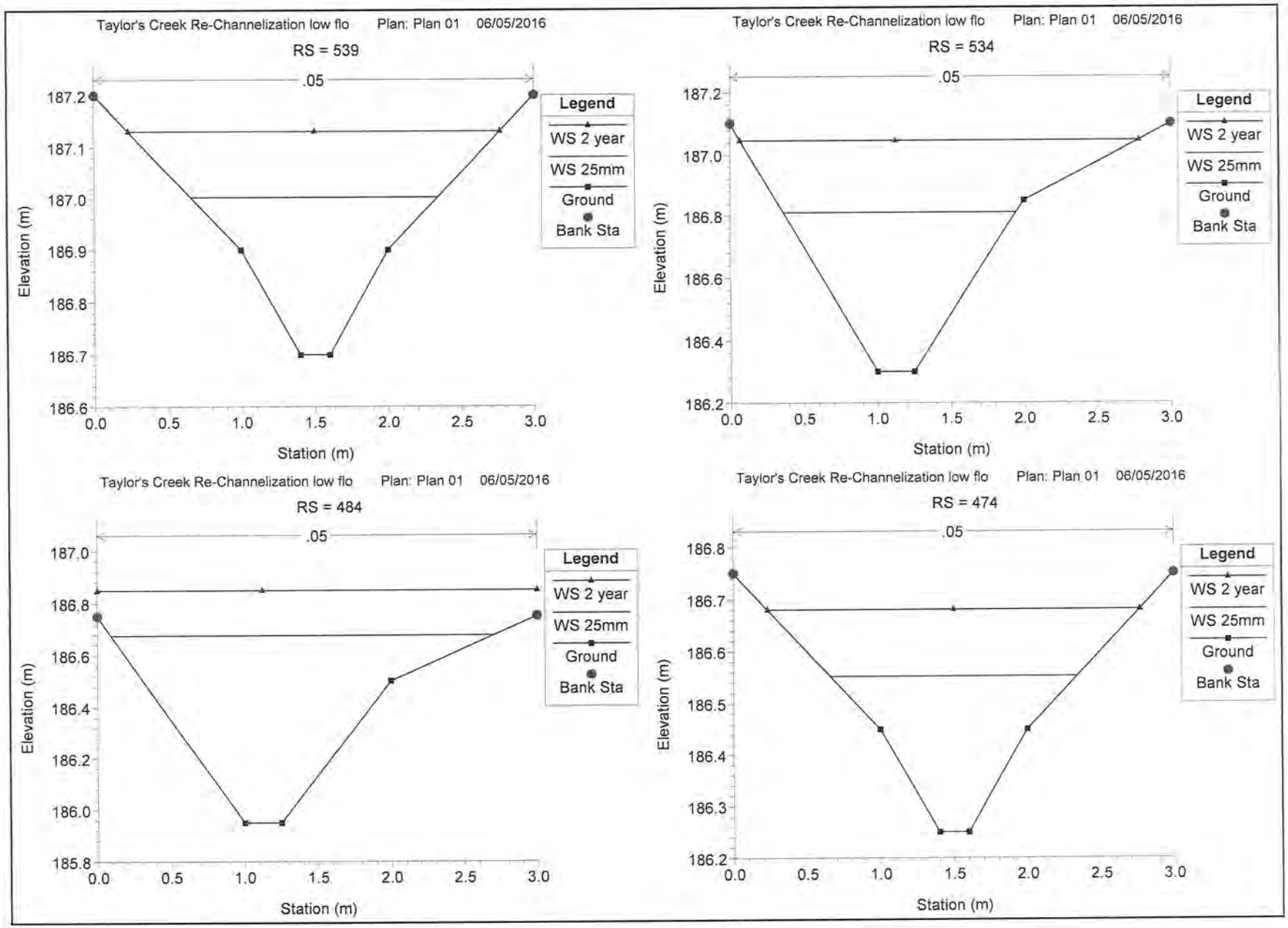
RS = 810
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 753
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 738
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 732
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 726
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
189.0
188.8
188.6
188.4
188.2
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 684
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
188.8
188.6
188.4
188.2
188.0
187.8
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 671
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
188.7
188.6
188.5
188.4
188.3
188.2
188.1
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 654
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
188.4
188.2
188.0
187.8
187.6
0.0
0.5
1.0
1.5
2.0
2.5
3.0
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 652
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 647
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 637
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 587
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 577
.05
Elevation (m)
Station (m)
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 572
.05
Elevation (m)
Station (m)
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 562
.05
Elevation (m)
Station (m)
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 545
.05
Elevation (m)
Station (m)
Legend
WS 2 year
WS 25mm
Ground
Bank Sta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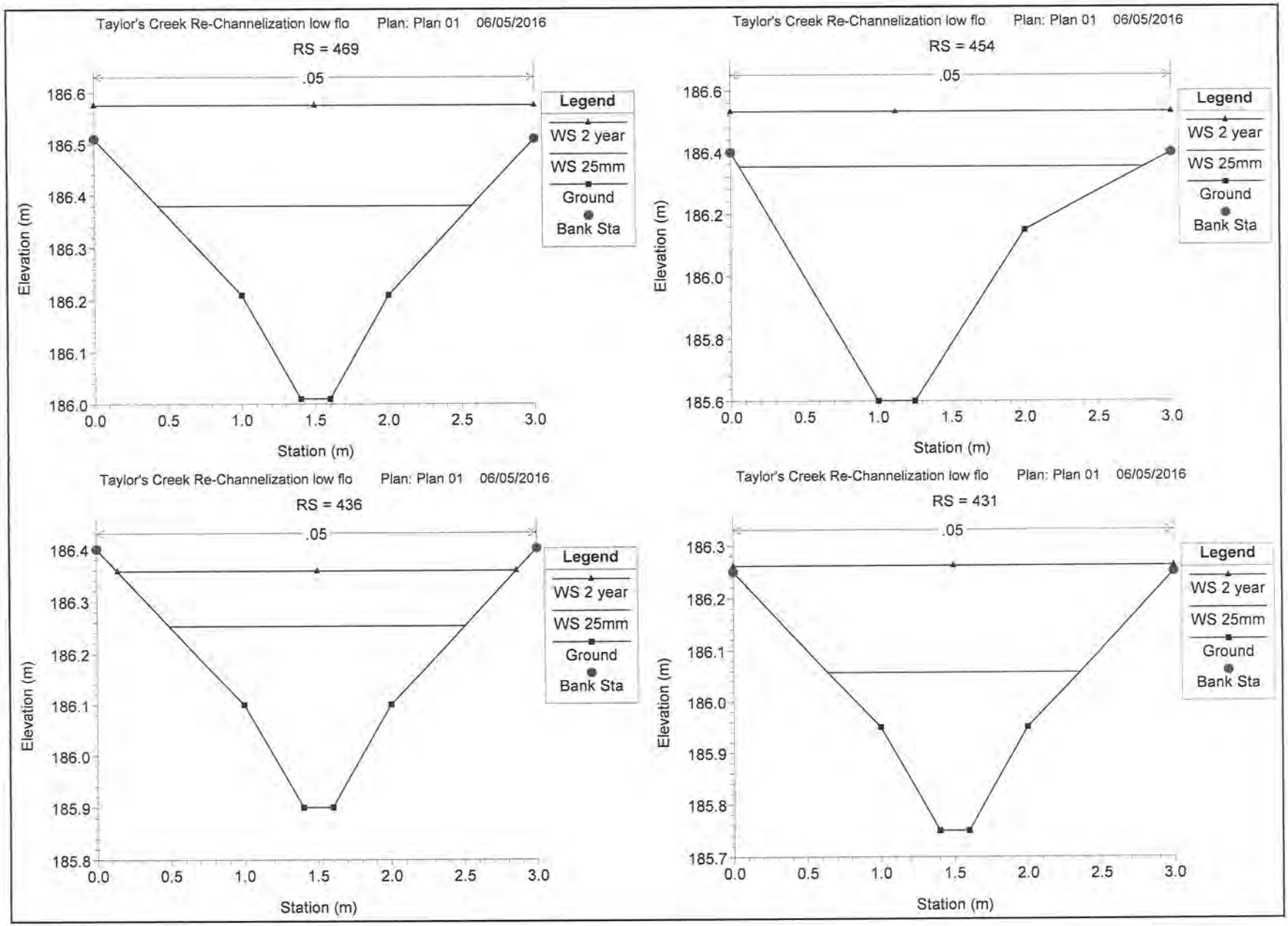
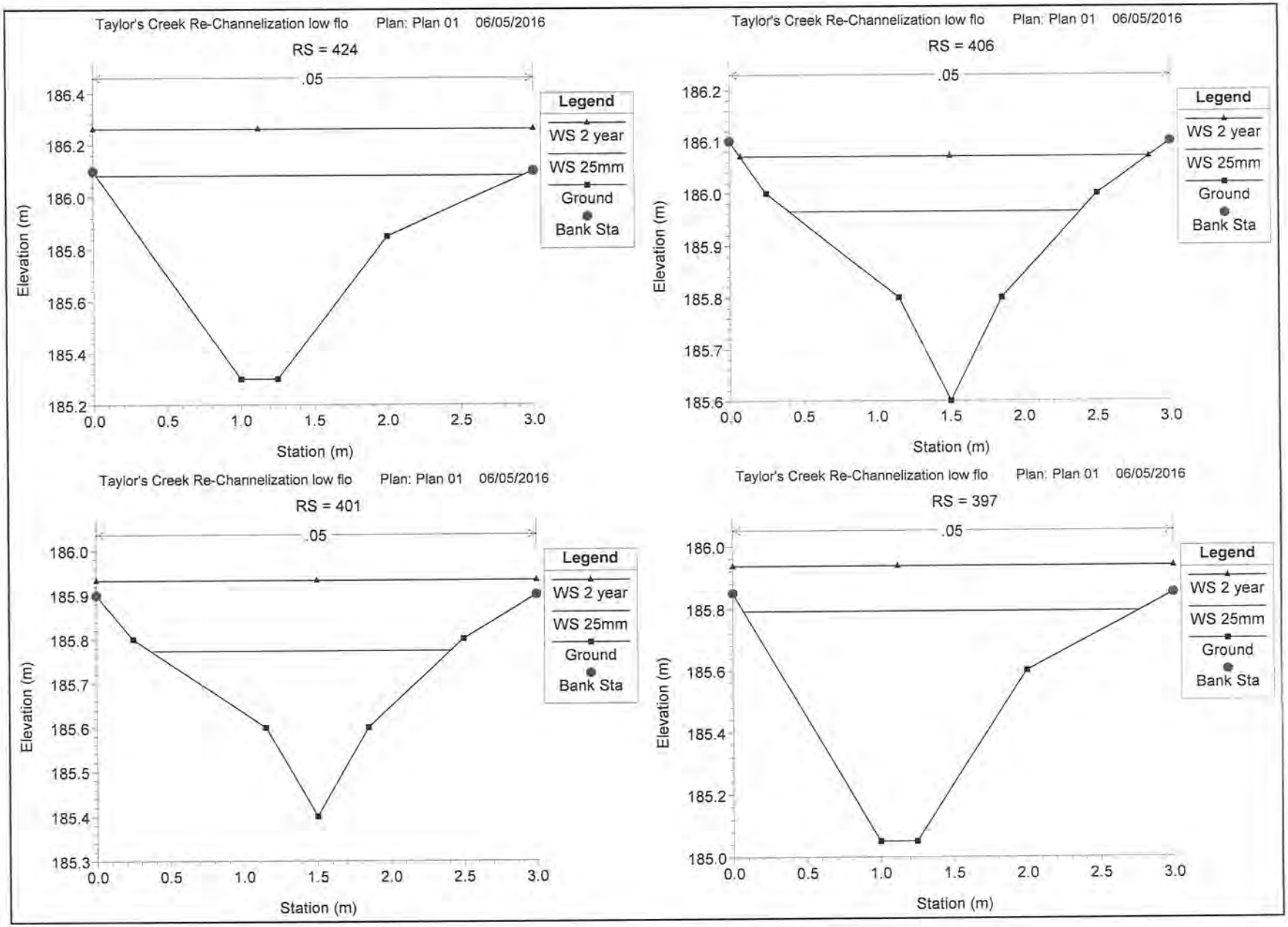
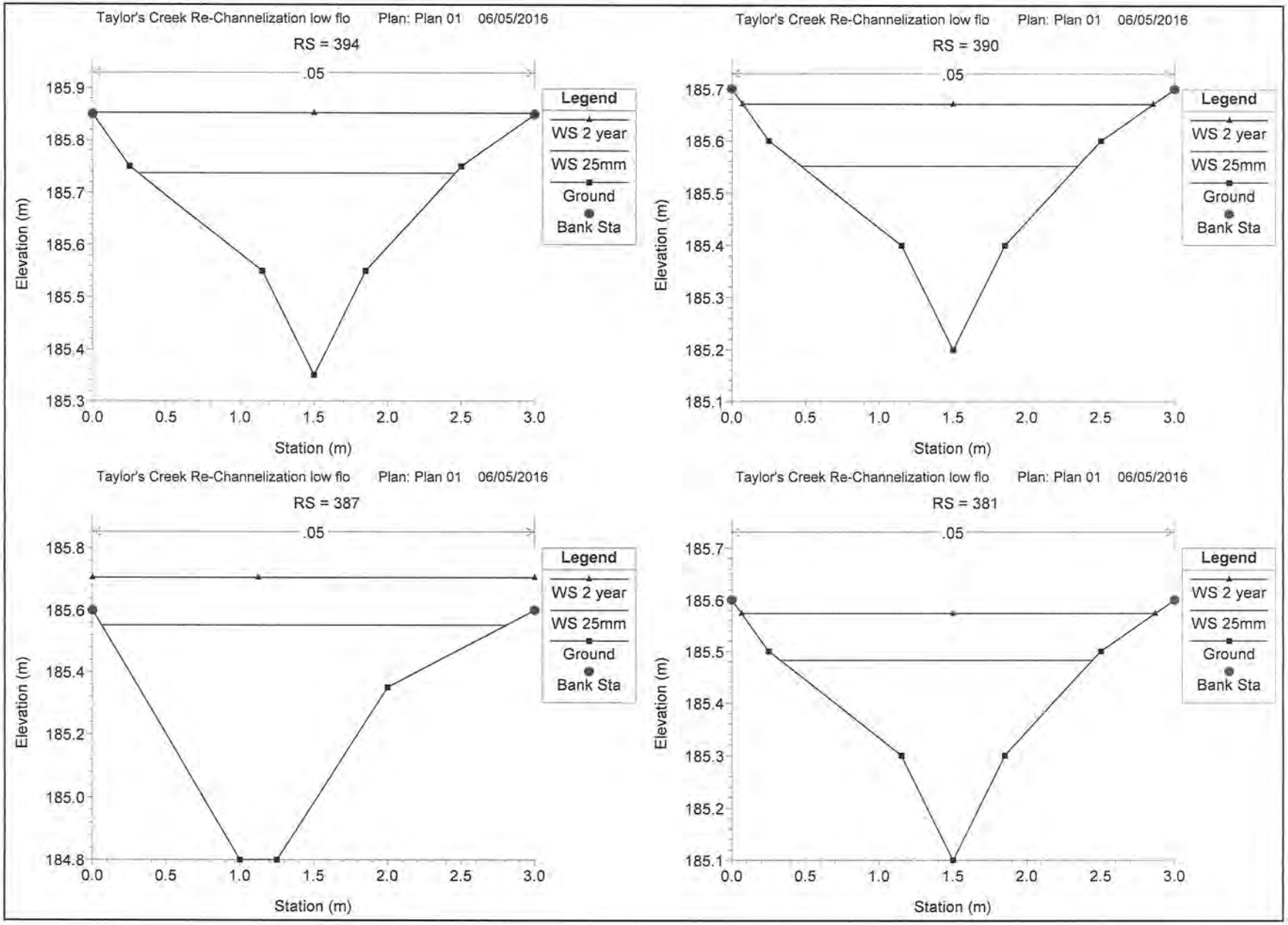
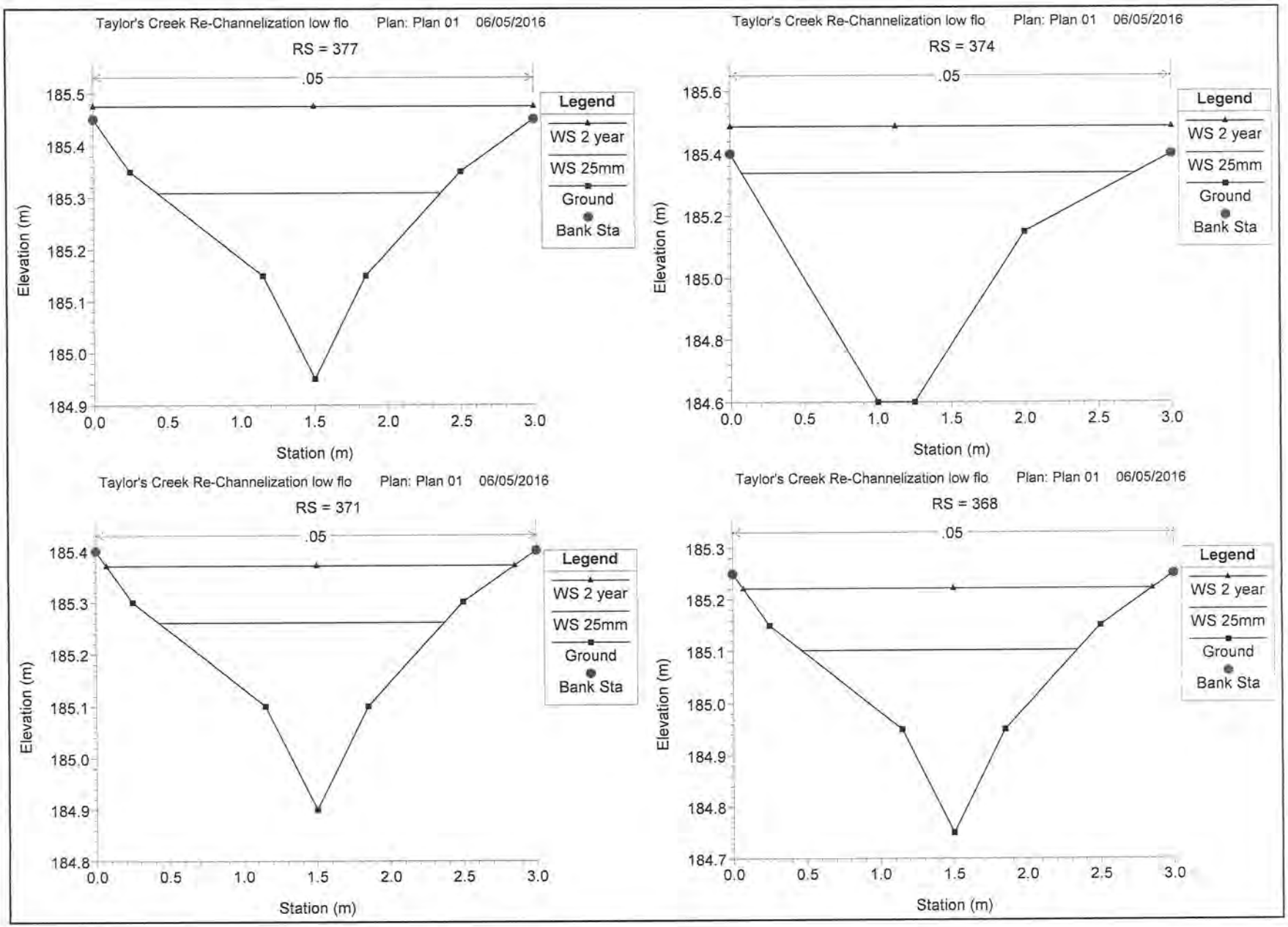
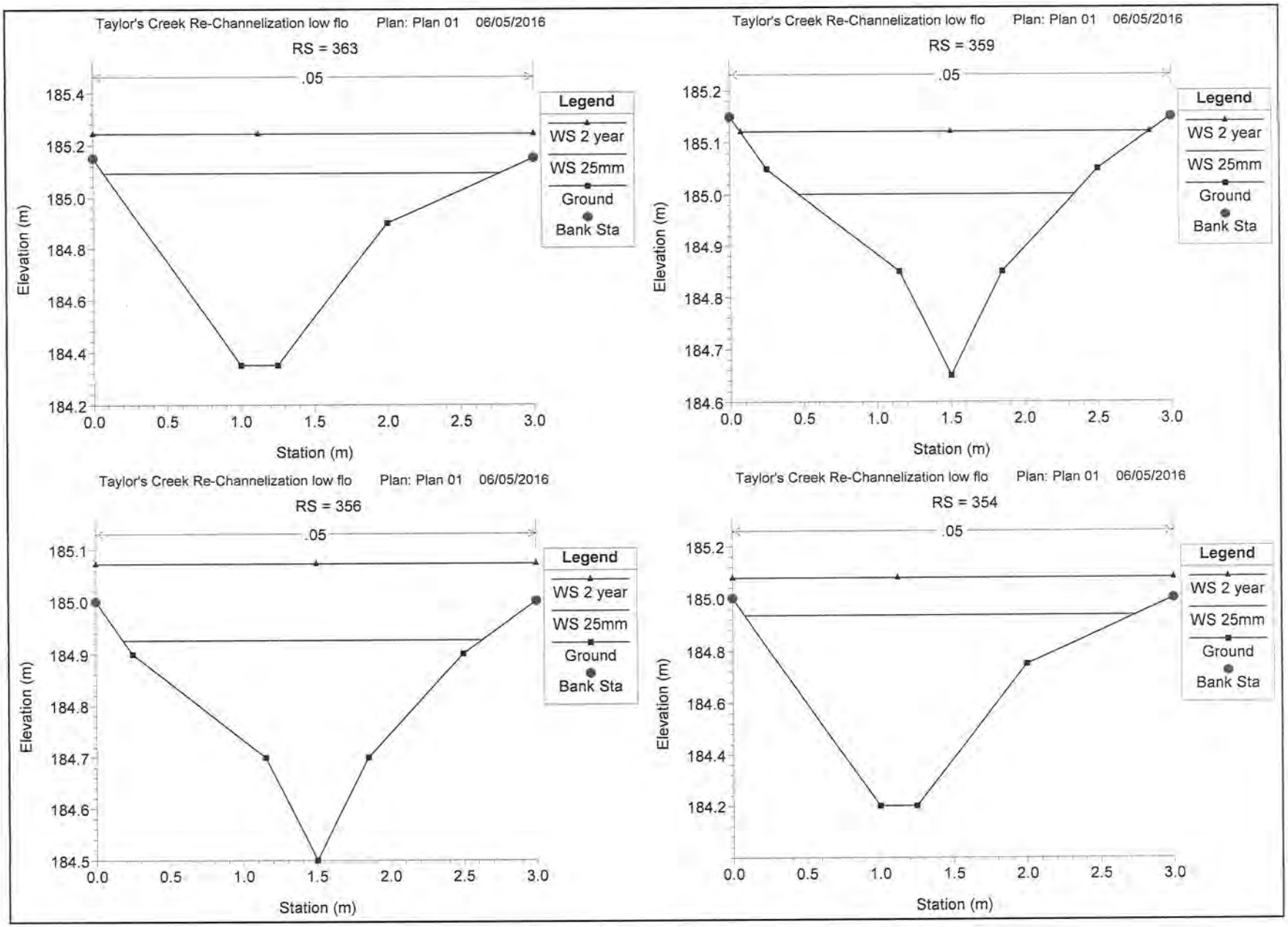
RS = 539
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 534
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 484
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 474
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)

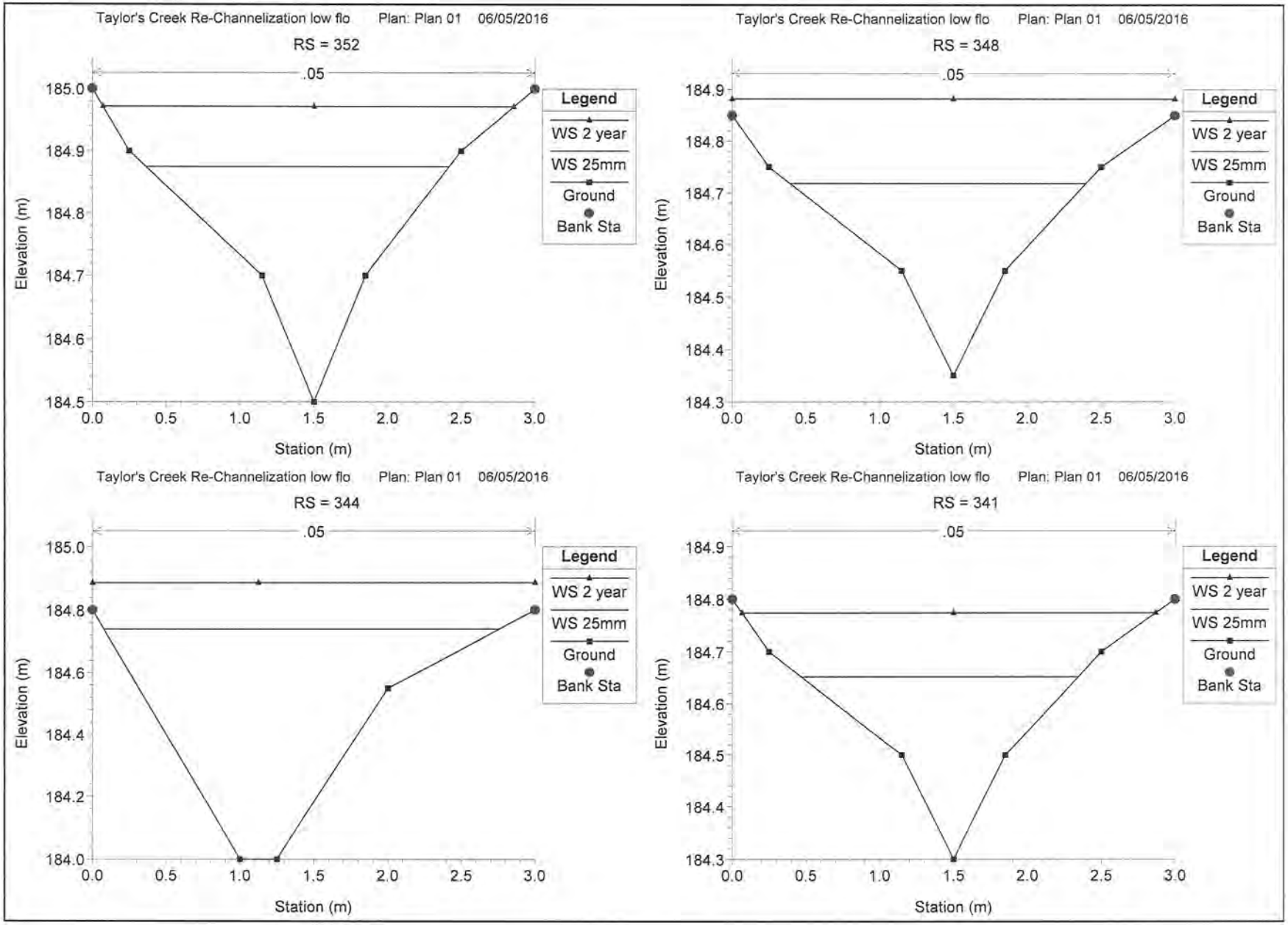

Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 469
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 454
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 436
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 431
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)

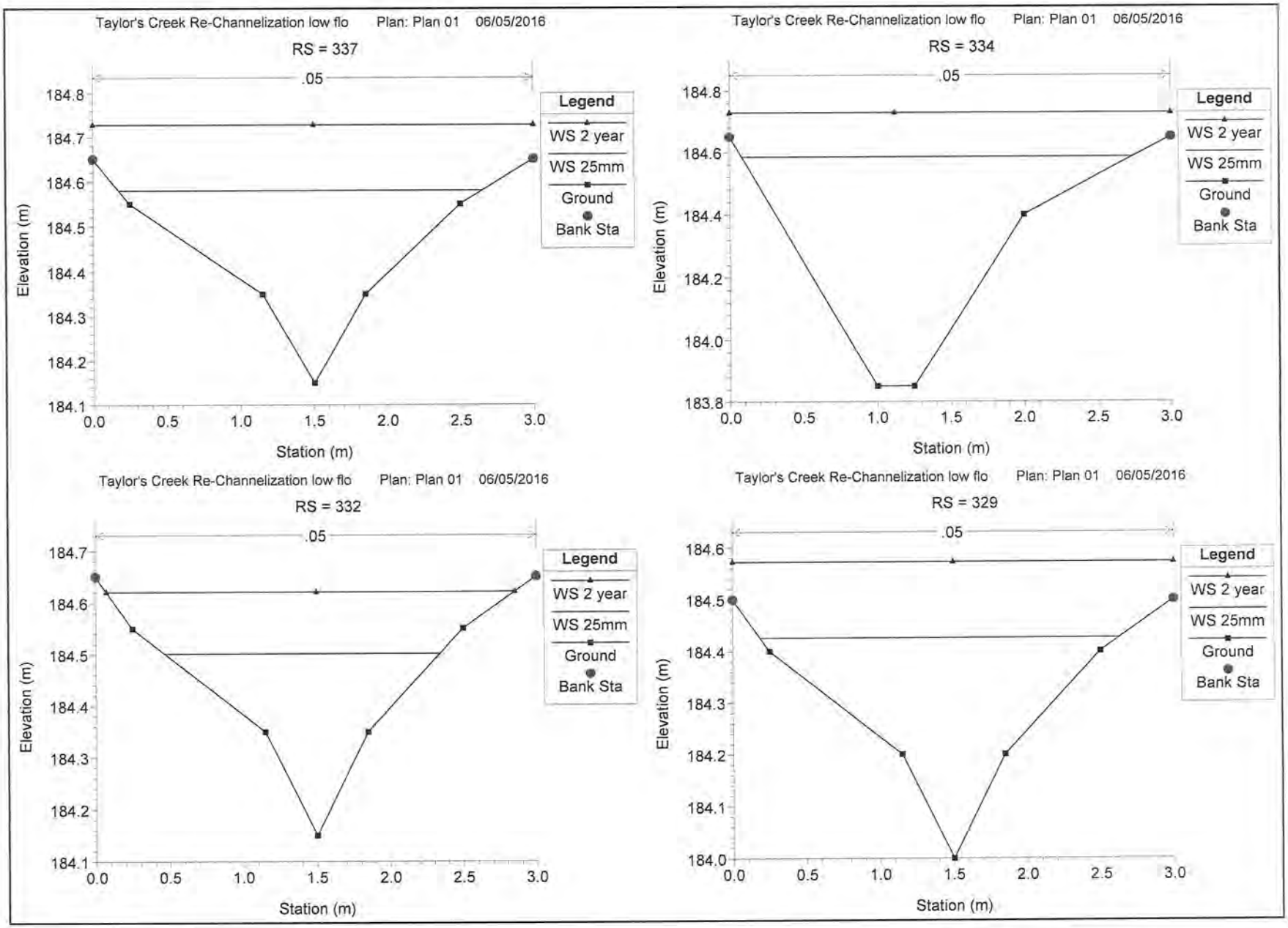

Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 424
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 406
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 401
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 397
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)

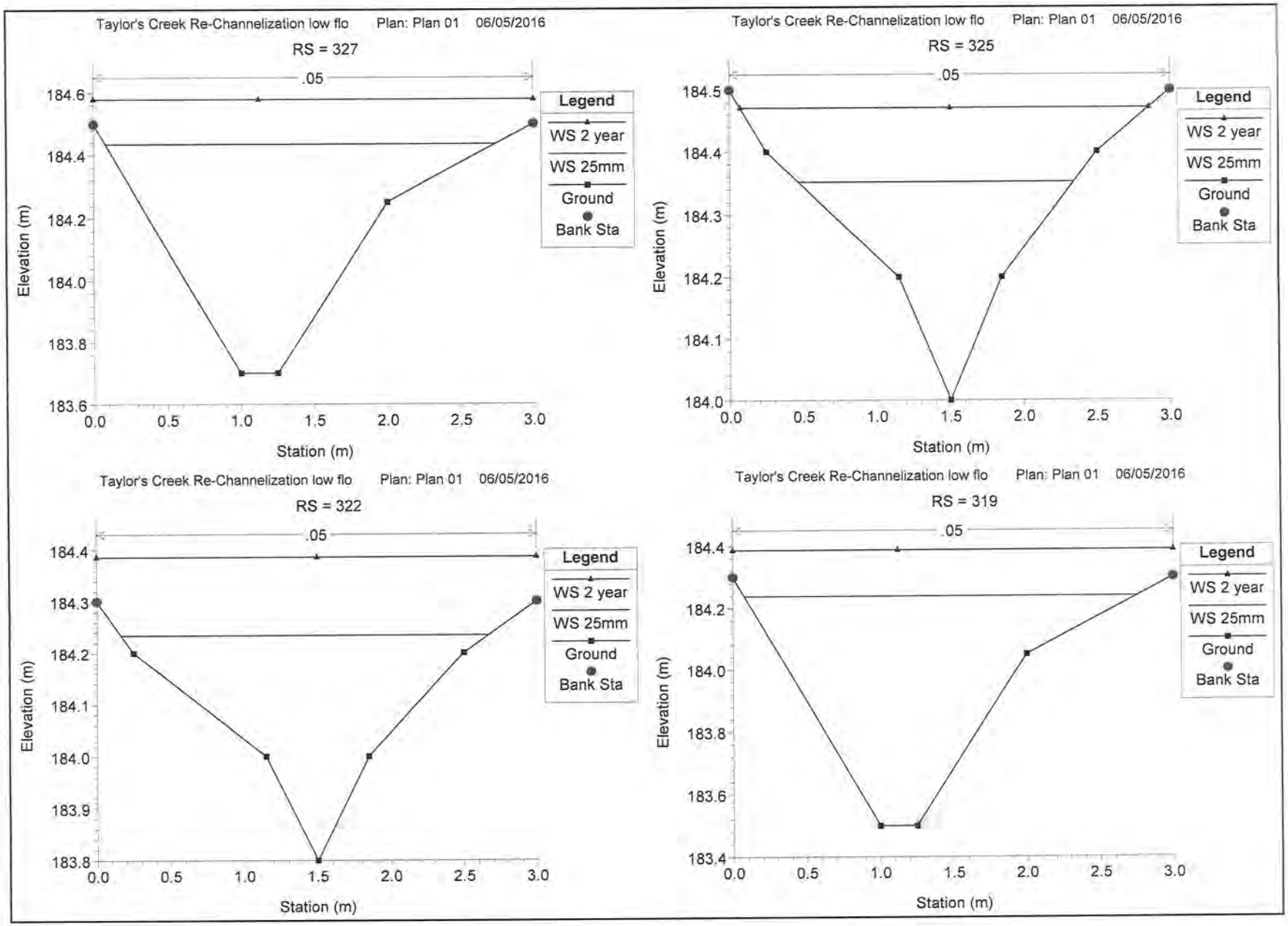

Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 394
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 390
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 387
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 381
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)

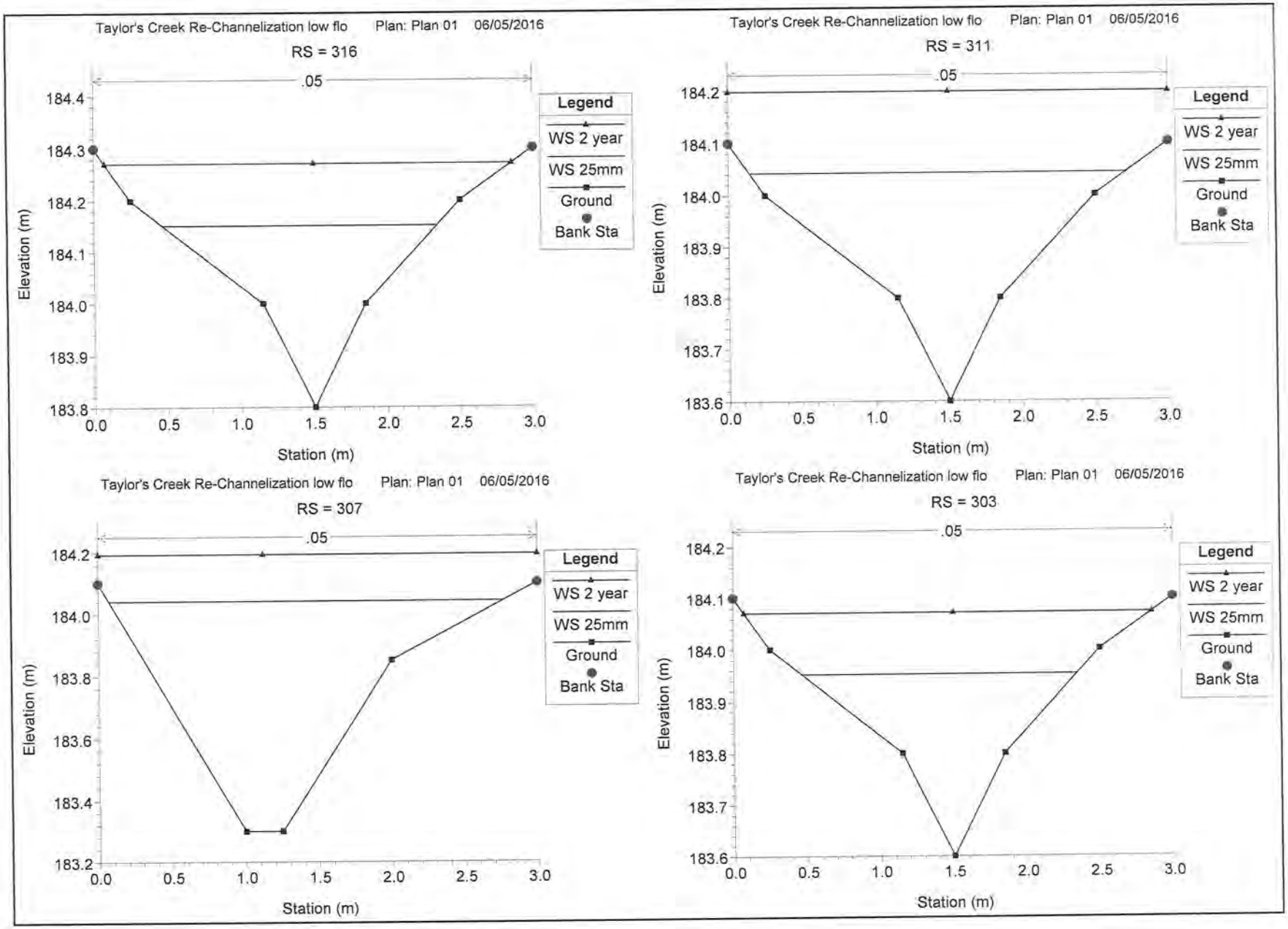

Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 377
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 374
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 371
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 368
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)

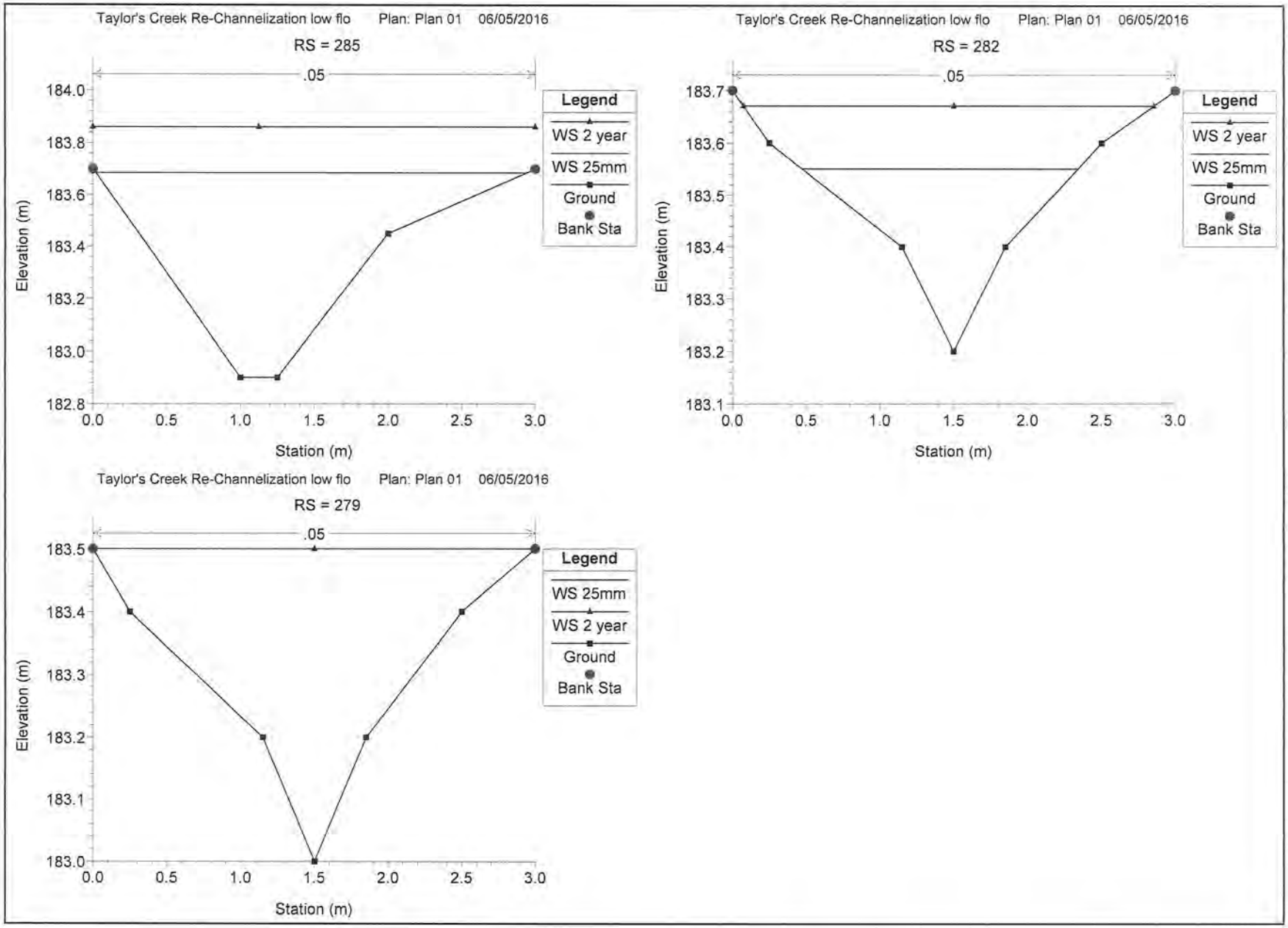

Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 363
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 359
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 356
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 354
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 352
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 348
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 344
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 341
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 337
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 334
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 332
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 329
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 327
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 325
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 322
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 319
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 316
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 311
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 307
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 303
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)


Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 285
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 282
.05
Legend
WS 2 year
WS 25mm
Ground
Bank Sta
Elevation (m)
Station (m)
Taylor's Creek Re-Channelization low flo Plan: Plan 01 06/05/2016
RS = 279
.05
Legend
WS 25mm
WS 2 year
Ground
Bank Sta
Elevation (m)
Station (m)

# Appendix C:
# Post Development Hydrology

TATHAM ENGINEERING

# Impervious Area & Runoff Coefficient Calculations with Devonleigh Homes

**Project Details**

| | |
|---|---|
| Linksview Subdivisions | 117071 |

**Prepared By**

| | |
|---|---|
| KB | July 10, 2025 |

| | |
|---|---|
| Data Sources | MTO Drainage Management Manual Design Chart 1.07 (1997) |

**Watershed:** NVCA

**Impervious Area and Runoff Coefficient (C) for Catchment**

| **Catchment ID** | | **201** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Catchment Area | | 38.20 | | | | | | | | | | | |
| **Land Cover Category** | **C** | **Area (ha)** | **TIMP (ha)** | **XIMP (ha)** | **Area (ha)** | **TIMP (ha)** | **XIMP (ha)** | **Area (ha)** | **TIMP (ha)** | **XIMP (ha)** | **Area (ha)** | **TIMP (ha)** | **XIMP (ha)** |
| Single Residential | 0.40 | 13.08 | 6.15 | 2.62 | | | | | | | | | |
| Multi - Residential | 0.55 | 5.44 | 3.0 | 1.63 | | | | | | | | | |
| Apartment | 0.65 | 2.10 | 1.58 | 1.16 | | | | | | | | | |
| School | 0.85 | 2.13 | 1.17 | 1.17 | | | | | | | | | |
| Industrial | 0.85 | | | | | | | | | | | | |
| Right-of-Ways | 0.70 | 10.10 | 7.07 | 7.07 | | | | | | | | | |
| Paved | 0.90 | 0.74 | 0.74 | 0.70 | | | | | | | | | |
| Roof | 0.90 | | | | | | | | | | | | |
| Gravel | 0.75 | | | | | | | | | | | | |
| Woodland | 0.28 | | | | | | | | | | | | |
| Pasture/Lawns | 0.17 | 2.40 | | | | | | | | | | | |
| Meadows | 0.32 | | | | | | | | | | | | |
| Cultivated | 0.47 | | | | | | | | | | | | |
| Waterbody | 0.50 | 2.13 | 1.07 | 1.07 | | | | | | | | | |
| Runoff Coefficient (C) | | 0.54 | | | | | | | | | | | |
| Catchment TIMP (%) | | 54.3% | | | | | | | | | | | |
| Catchment XIMP (%) | | 40.3% | | | | | | | | | | | |
| Hydrograph Type | | STANDHYD | | | | | | | | | | | |

**Notes:**

TIMP - Total Impervious Area
XIMP - Directly Connected Impervious Area
TIMP, XIMP & C values averaged/estimated & should be adjusted to reflect site-specific parameters

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (StandHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| KB | July 10, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 201 |
| Catchment Area (ha) | 38.20 |
| Impervious % | 55% |
| Pervious Area (ha) | 17.19 |

**Average Curve Number (CN) & Initial Abstraction (IA) for Pervious Area**

| **Soil Symbol** | **Tif** | **Stsl** | | |
|---|---|---|---|---|
| Soil Series | Tioga | Sargent | | |
| Hydrologic Soils Group | A | A | | |
| Soil Texture | Sand Loam | Sand Loam | | |
| Runoff Coefficient Type | 1 | 1 | | |
| Area (ha) | 6.88 | 10.31 | | |
| Percentage of Catchment | 40% | 60% | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **A (ha)** | **CN** | **A (ha)** | **CN** | **A (ha)** | **CN** |
|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | | 100 | | | | |
| Gravel | 3 | | 89 | | 89 | | | | |
| Woodland | 10 | | 32 | | 32 | | | | |
| Pasture/Lawns | 5 | 6.88 | 49 | 10.31 | 49 | | | | |
| Meadows | 8 | | 38 | | 38 | | | | |
| Cultivated | 7 | | 62 | | 62 | | | | |
| Waterbody | 12 | | 50 | | 50 | | | | |
| Average CN | | 49.00 | | 49.00 | | | | | |
| Average IA | | 5.00 | | 5.00 | | | | | |

**Summary**

| | |
|---|---|
| Catchment CN: | 49.0 |

| | |
|---|---|
| Catchment IA (mm): | 5.00 |

**Notes**

CN and IA values have been calculated for the pervious area of the catchment only.

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (StandHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| KB | July 10, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 322 |
| Catchment Area (ha) | 0.25 |
| Impervious % | 35% |
| Pervious Area (ha) | 0.16 |

**Average Curve Number (CN) & Initial Abstraction (IA) for Pervious Area**

| **Soil Symbol** | **Tif** | | | |
|---|---|---|---|---|
| Soil Series | Tioga | | | |
| Hydrologic Soils Group | A | | | |
| Soil Texture | Sand Loam | | | |
| Runoff Coefficient Type | 1 | | | |
| Area (ha) | 0.16 | | | |
| Percentage of Catchment | 100% | | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **A (ha)** | **CN** | **A (ha)** | **CN** | **A (ha)** | **CN** |
|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | | | | | | |
| Gravel | 3 | | 89 | | | | | | |
| Woodland | 10 | | 32 | | | | | | |
| Pasture/Lawns | 5 | 0.16 | 49 | | | | | | |
| Meadows | 8 | | 38 | | | | | | |
| Cultivated | 7 | | 62 | | | | | | |
| Waterbody | 12 | | 50 | | | | | | |
| Average CN | | 49.00 | | | | | | | |
| Average IA | | 5.00 | | | | | | | |

**Summary**

| | |
|---|---|
| Catchment CN: | 49.0 |

| | |
|---|---|
| Catchment IA (mm): | 5.00 |

**Notes**

CN and IA values have been calculated for the pervious area of the catchment only.

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (StandHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| KB | July 10, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 323 |
| Catchment Area (ha) | 1.30 |
| Impervious % | 35% |
| Pervious Area (ha) | 0.85 |

**Average Curve Number (CN) & Initial Abstraction (IA) for Pervious Area**

| **Soil Symbol** | **Tif** | | | |
|---|---|---|---|---|
| Soil Series | Tioga | | | |
| Hydrologic Soils Group | A | | | |
| Soil Texture | Sand Loam | | | |
| Runoff Coefficient Type | 1 | | | |
| Area (ha) | 0.85 | | | |
| Percentage of Catchment | 100% | | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **A (ha)** | **CN** | **A (ha)** | **CN** | **A (ha)** | **CN** |
|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | | | | | | |
| Gravel | 3 | | 89 | | | | | | |
| Woodland | 10 | | 32 | | | | | | |
| Pasture/Lawns | 5 | 0.85 | 49 | | | | | | |
| Meadows | 8 | | 38 | | | | | | |
| Cultivated | 7 | | 62 | | | | | | |
| Waterbody | 12 | | 50 | | | | | | |
| Average CN | | 49.00 | | | | | | | |
| Average IA | | 5.00 | | | | | | | |

**Summary**

| | |
|---|---|
| Catchment CN: | 49.0 |

| | |
|---|---|
| Catchment IA (mm): | 5.00 |

**Notes**

CN and IA values have been calculated for the pervious area of the catchment only.

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 301 |
| Catchment Area (ha) | 5.30 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Stsl** | | | |
|---|---|---|---|---|
| Soil Series | Sargent | | | |
| Hydrologic Soils Group | AB | | | |
| Soil Texture | Sand Loam | | | |
| Runoff Coefficient Type | 1 | | | |
| Area (ha) | 5.30 | | | |
| Percentage of Catchment | 100% | | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | | | | | | | | |
| Gravel | 3 | | 89 | 0.40 | | | | | | | | | |
| Woodland | 10 | | 46 | 0.08 | | | | | | | | | |
| Pasture/Lawns | 5 | | 59 | 0.10 | | | | | | | | | |
| Meadows | 8 | | 51 | 0.09 | | | | | | | | | |
| Cultivated | 7 | 5.30 | 68 | 0.22 | | | | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | | | | | | | | |
| Average CN | | 68.00 | | | | | | | | | | | |
| Average C | | 0.22 | | | | | | | | | | | |
| Average IA | | 7.00 | | | | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 217.00 |
| Min Catchment Elevation (m) | 212.00 |
| Catchment Length (m) | 200 |
| Catchment Slope (%) | 2.50% |
| Method Airport Method | |
| Time of Concentration (mins) | 29.98 |

**Summary**

| | |
|---|---|
| Catchment CN | 68.0 |
| Catchment C | 0.22 |
| Catchment IA (mm) | 7.00 |
| Time of Concentration (hrs) | 0.50 |
| Catchment Time to Peak (hrs) | 0.33 |
| Catchment Time Step (mins) | 4.00 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 302 |
| Catchment Area (ha) | 5.52 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Stsl** | | | |
|---|---|---|---|---|
| Soil Series | Sargent | | | |
| Hydrologic Soils Group | AB | | | |
| Soil Texture | Sand Loam | | | |
| Runoff Coefficient Type | 1 | | | |
| Area (ha) | 5.52 | | | |
| Percentage of Catchment | 100% | | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | | | | | | | | |
| Gravel | 3 | | 89 | 0.40 | | | | | | | | | |
| Woodland | 10 | 1.93 | 46 | 0.08 | | | | | | | | | |
| Pasture/Lawns | 5 | | 59 | 0.10 | | | | | | | | | |
| Meadows | 8 | | 51 | 0.09 | | | | | | | | | |
| Cultivated | 7 | 3.59 | 68 | 0.22 | | | | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | | | | | | | | |
| Average CN | | 60.31 | | | | | | | | | | | |
| Average C | | 0.17 | | | | | | | | | | | |
| Average IA | | 8.05 | | | | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 218.40 |
| Min Catchment Elevation (m) | 213.20 |
| Catchment Length (m) | 250 |
| Catchment Slope (%) | 2.08% |
| Method Airport Method | |
| Time of Concentration (mins) | 37.60 |

**Summary**

| | |
|---|---|
| Catchment CN | 60.3 |
| Catchment C | 0.17 |
| Catchment IA (mm) | 8.05 |
| Time of Concentration (hrs) | 0.63 |
| Catchment Time to Peak (hrs) | 0.42 |
| Catchment Time Step (mins) | 5.01 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 303 |
| Catchment Area (ha) | 85.82 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Kc** | **Stsl** | | |
|---|---|---|---|---|
| Soil Series | Kemble | Sargent | | |
| Hydrologic Soils Group | C | AB | | |
| Soil Texture | Clay Loam or Clay | Sand Loam | | |
| Runoff Coefficient Type | 3 | 1 | | |
| Area (ha) | 72.95 | 12.87 | | |
| Percentage of Catchment | 85% | 15% | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | 100 | 0.95 | | | | | | |
| Gravel | 3 | | 89 | 0.60 | | 89 | 0.40 | | | | | | |
| Woodland | 10 | 25.53 | 73 | 0.35 | | 46 | 0.08 | | | | | | |
| Pasture/Lawns | 5 | | 79 | 0.40 | 12.87 | 59 | 0.10 | | | | | | |
| Meadows | 8 | | 76 | 0.38 | | 51 | 0.09 | | | | | | |
| Cultivated | 7 | 47.42 | 82 | 0.55 | | 68 | 0.22 | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | 50 | 0.05 | | | | | | |
| Average CN | | 78.85 | | | 59.00 | | | | | | | | |
| Average C | | 0.48 | | | 0.10 | | | | | | | | |
| Average IA | | 8.05 | | | 5.00 | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 235.00 |
| Min Catchment Elevation (m) | 212.00 |
| Catchment Length (m) | 1490 |
| Average Catchment Slope (%) | 1.54% |
| Method Uplands Method | |
| Time of Concentration (mins) | 73.82 |

**Summary**

| | |
|---|---|
| Catchment CN | 75.9 |
| Catchment C | 0.42 |
| Catchment IA (mm) | 7.59 |
| Time of Concentration (hrs) | 2.55 |
| Catchment Time to Peak (hrs) | 1.70 |
| Catchment Time Step (mins) | 20.40 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 304 |
| Catchment Area (ha) | 7.94 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| Soil Symbol | TisI | StsI | | |
|---|---|---|---|---|
| Soil Series | Tioga | Sargent | | |
| Hydrologic Soils Group | A | AB | | |
| Soil Texture | Sand Loam | Sand Loam | | |
| Runoff Coefficient Type | 1 | 1 | | |
| Area (ha) | 0.79 | 7.15 | | |
| Percentage of Catchment | 10% | 90% | | |

| Land Cover Category | IA | A (ha) | CN | C | A (ha) | CN | C | A (ha) | CN | C | A (ha) | CN | C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | 100 | 0.95 | | | | | | |
| Gravel | 3 | | 89 | 0.40 | | 89 | 0.40 | | | | | | |
| Woodland | 10 | 0.79 | 32 | 0.08 | 2.86 | 46 | 0.08 | | | | | | |
| Pasture/Lawns | 5 | | 49 | 0.10 | 2.50 | 59 | 0.10 | | | | | | |
| Meadows | 8 | | 38 | 0.09 | | 51 | 0.09 | | | | | | |
| Cultivated | 7 | | 62 | 0.22 | 1.79 | 68 | 0.22 | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | 50 | 0.05 | | | | | | |
| Average CN | | 32.00 | | | 56.05 | | | | | | | | |
| Average C | | 0.08 | | | 0.12 | | | | | | | | |
| Average IA | | 10.00 | | | 7.50 | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 212.00 |
| Min Catchment Elevation (m) | 204.00 |
| Catchment Length (m) | 350 |
| Catchment Slope (%) | 2.29% |
| Method Airport Method | |
| Time of Concentration (mins) | 45.60 |

**Summary**

| | |
|---|---|
| Catchment CN | 53.7 |
| Catchment C | 0.12 |
| Catchment IA (mm) | 7.75 |
| Time of Concentration (hrs) | 0.76 |
| Catchment Time to Peak (hrs) | 0.51 |
| Catchment Time Step (mins) | 6.08 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 305 |
| Catchment Area (ha) | 7.76 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Hal** | **Stsl** | | |
|---|---|---|---|---|
| Soil Series | Harkaway | Sargent | | |
| Hydrologic Soils Group | B | AB | | |
| Soil Texture | Loam | Sand Loam | | |
| Runoff Coefficient Type | 2 | 1 | | |
| Area (ha) | 4.66 | 3.10 | | |
| Percentage of Catchment | 60% | 40% | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | 100 | 0.95 | | | | | | |
| Gravel | 3 | | 89 | 0.50 | | 89 | 0.40 | | | | | | |
| Woodland | 10 | 2.33 | 60 | 0.25 | | 46 | 0.08 | | | | | | |
| Pasture/Lawns | 5 | 2.33 | 69 | 0.28 | 3.10 | 59 | 0.10 | | | | | | |
| Meadows | 8 | | 65 | 0.27 | | 51 | 0.09 | | | | | | |
| Cultivated | 7 | | 74 | 0.35 | | 68 | 0.22 | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | 50 | 0.05 | | | | | | |
| Average CN | | 64.50 | | | 59.00 | | | | | | | | |
| Average C | | 0.27 | | | 0.10 | | | | | | | | |
| Average IA | | 7.50 | | | 5.00 | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 210.40 |
| Min Catchment Elevation (m) | 203.00 |
| Catchment Length (m) | 612 |
| Catchment Slope (%) | 1.21% |
| Method Airport Method | |
| Time of Concentration (mins) | 68.24 |

**Summary**

| | |
|---|---|
| Catchment CN | 62.3 |
| Catchment C | 0.20 |
| Catchment IA (mm) | 6.50 |
| Time of Concentration (hrs) | 1.14 |
| Catchment Time to Peak (hrs) | 0.76 |
| Catchment Time Step (mins) | 9.10 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 306 |
| Catchment Area (ha) | 6.99 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Hal** | **Tisl** | | |
|---|---|---|---|---|
| Soil Series | Harkaway | Tioga | | |
| Hydrologic Soils Group | B | A | | |
| Soil Texture | Loam | Sand Loam | | |
| Runoff Coefficient Type | 2 | 1 | | |
| Area (ha) | 1.75 | 5.24 | | |
| Percentage of Catchment | 25% | 75% | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | 100 | 0.95 | | | | | | |
| Gravel | 3 | | 89 | 0.50 | | 89 | 0.40 | | | | | | |
| Woodland | 10 | | 60 | 0.25 | | 32 | 0.08 | | | | | | |
| Pasture/Lawns | 5 | 1.75 | 69 | 0.28 | 5.24 | 49 | 0.10 | | | | | | |
| Meadows | 8 | | 65 | 0.27 | | 38 | 0.09 | | | | | | |
| Cultivated | 7 | | 74 | 0.35 | | 62 | 0.22 | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | 50 | 0.05 | | | | | | |
| Average CN | | 69.00 | | | 49.00 | | | | | | | | |
| Average C | | 0.28 | | | 0.10 | | | | | | | | |
| Average IA | | 5.00 | | | 5.00 | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 205.00 |
| Min Catchment Elevation (m) | 200.00 |
| Catchment Length (m) | 410 |
| Catchment Slope (%) | 1.22% |
| Method Airport Method | |
| Time of Concentration (mins) | 59.04 |

**Summary**

| | |
|---|---|
| Catchment CN | 54.0 |
| Catchment C | 0.15 |
| Catchment IA (mm) | 5.00 |
| Time of Concentration (hrs) | 0.98 |
| Catchment Time to Peak (hrs) | 0.66 |
| Catchment Time Step (mins) | 7.87 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 307 |
| Catchment Area (ha) | 2.50 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Tif** | | | |
|---|---|---|---|---|
| Soil Series | Tioga | | | |
| Hydrologic Soils Group | A | | | |
| Soil Texture | Sand Loam | | | |
| Runoff Coefficient Type | 1 | | | |
| Area (ha) | 2.50 | | | |
| Percentage of Catchment | 100% | | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | | | | | | | | |
| Gravel | 3 | | 89 | 0.40 | | | | | | | | | |
| Woodland | 10 | | 32 | 0.08 | | | | | | | | | |
| Pasture/Lawns | 5 | 2.50 | 49 | 0.10 | | | | | | | | | |
| Meadows | 8 | | 38 | 0.09 | | | | | | | | | |
| Cultivated | 7 | | 62 | 0.22 | | | | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | | | | | | | | |
| Average CN | | 49.00 | | | | | | | | | | | |
| Average C | | 0.10 | | | | | | | | | | | |
| Average IA | | 5.00 | | | | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 204.00 |
| Min Catchment Elevation (m) | 199.00 |
| Catchment Length (m) | 210 |
| Catchment Slope (%) | 2.38% |
| Method Airport Method | |
| Time of Concentration (mins) | 35.48 |

**Summary**

| | |
|---|---|
| Catchment CN | 49.0 |
| Catchment C | 0.10 |
| Catchment IA (mm) | 5.00 |
| Time of Concentration (hrs) | 0.59 |
| Catchment Time to Peak (hrs) | 0.39 |
| Catchment Time Step (mins) | 4.73 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 308 |
| Catchment Area (ha) | 5.22 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Tif** | | | |
|---|---|---|---|---|
| Soil Series | Tioga | | | |
| Hydrologic Soils Group | A | | | |
| Soil Texture | Sand Loam | | | |
| Runoff Coefficient Type | 1 | | | |
| Area (ha) | 5.22 | | | |
| Percentage of Catchment | 100% | | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | | | | | | | | |
| Gravel | 3 | | 89 | 0.40 | | | | | | | | | |
| Woodland | 10 | | 32 | 0.08 | | | | | | | | | |
| Pasture/Lawns | 5 | 5.22 | 49 | 0.10 | | | | | | | | | |
| Meadows | 8 | | 38 | 0.09 | | | | | | | | | |
| Cultivated | 7 | | 62 | 0.22 | | | | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | | | | | | | | |
| Average CN | | 49.00 | | | | | | | | | | | |
| Average C | | 0.10 | | | | | | | | | | | |
| Average IA | | 5.00 | | | | | | | | | | | |

**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 203.00 |
| Min Catchment Elevation (m) | 195.00 |
| Catchment Length (m) | 350 |
| Catchment Slope (%) | 2.29% |
| Method Airport Method | |
| Time of Concentration (mins) | 46.43 |

**Summary**

| | |
|---|---|
| Catchment CN | 49.0 |
| Catchment C | 0.10 |
| Catchment IA (mm) | 5.00 |
| Time of Concentration (hrs) | 0.77 |
| Catchment Time to Peak (hrs) | 0.52 |
| Catchment Time Step (mins) | 6.19 |

TATHAM ENGINEERING

# Visual OTTHYMO Model Parameter Calculations (NasHYD)

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | June 11, 2025 |

**Data Sources**

Detailed Soil Survey Reports for Ontario, NVCA Stormwater Technical Guide (2013), MTO Drainage Management Manual (1997)

**Pre-Development Condition**

| | |
|---|---|
| Watershed | NVCA |
| Catchment ID | 309 |
| Catchment Area (ha) | 7.46 |
| Impervious % | |

**Average Curve Number (CN), Runoff Coefficient (C) & Initial Abstraction (IA)**

| **Soil Symbol** | **Tif** | **Pfs** | | |
|---|---|---|---|---|
| Soil Series | Tioga | Percy | | |
| Hydrologic Soils Group | A | B | | |
| Soil Texture | Sand Loam | Sand Loam | | |
| Runoff Coefficient Type | 1 | 2 | | |
| Area (ha) | 6.71 | 0.75 | | |
| Percentage of Catchment | 90% | 10% | | |

| **Land Cover Category** | **IA** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** | **A (ha)** | **CN** | **C** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Impervious | 2 | | 100 | 0.95 | | 100 | 0.95 | | | | | | |
| Gravel | 3 | | 89 | 0.40 | | 89 | 0.50 | | | | | | |
| Woodland | 10 | | 32 | 0.08 | | 60 | 0.25 | | | | | | |
| Pasture/Lawns | 5 | 6.71 | 49 | 0.10 | 0.75 | 69 | 0.28 | | | | | | |
| Meadows | 8 | | 38 | 0.09 | | 65 | 0.27 | | | | | | |
| Cultivated | 7 | | 62 | 0.22 | | 74 | 0.35 | | | | | | |
| Waterbody | 12 | | 50 | 0.05 | | 50 | 0.05 | | | | | | |
| Average CN | | 49.00 | | | 69.00 | | | | | | | | |
| Average C | | 0.10 | | | 0.28 | | | | | | | | |
| Average IA | | 5.00 | | | 5.00 | | | | | | | | |

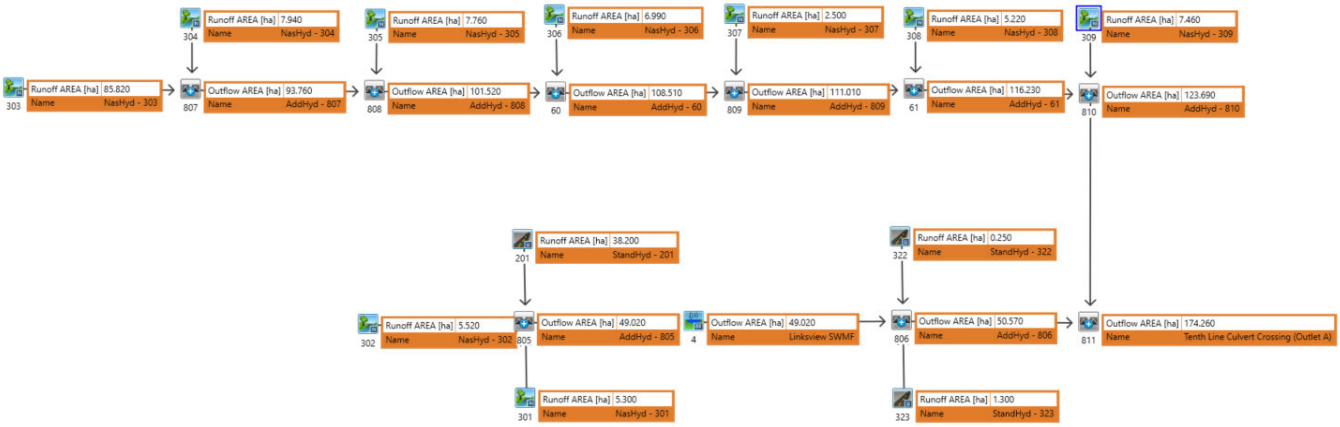
**Time to Peak Calculations**

| | |
|---|---|
| Max Catchment Elevation (m) | 199.00 |
| Min Catchment Elevation (m) | 194.00 |
| Catchment Length (m) | 350 |
| Catchment Slope (%) | 1.43% |
| Method Airport Method | |
| Time of Concentration (mins) | 53.24 |

**Summary**

| | |
|---|---|
| Catchment CN | 51.0 |
| Catchment C | 0.12 |
| Catchment IA (mm) | 5.00 |
| Time of Concentration (hrs) | 0.89 |
| Catchment Time to Peak (hrs) | 0.59 |
| Catchment Time Step (mins) | 7.10 |

| | | | |
|---|---|---|---|
| PROJECT | Linksview Subdivision<br>Town of Collingwood | FILE | 125027 |
| | | DATE | May 2025 |
| SUBJECT | Visual OTTHYMO Schematic<br>Post Development | NAME | K Belanger |
| | | PAGE | 1 OF 1 |




NASHYD

ROUTE PIPE

DUHYD

STANDHYD

ROUTE CHANNEL

DIVERT HYD

ADDHYD

ROUTE RESERVOIR

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================================================================================
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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                *****  D E T A I L E D   O U T P U T *****


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  Output  filename:
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3ac-b364-4b12-9785-06d3bae11969\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\aa7a2
3ac-b364-4b12-9785-06d3bae11969\scen


DATE: 07/10/2025                          TIME: 02:08:04

USER:



COMMENTS: _____________________________________________________


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  ************************************************
  ** SIMULATION : A - 25mm                      **
  ************************************************


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|    READ STORM    |    Filename: C:\Users\dmartin\AppD
|                  |              ata\Local\Temp\
|                  |              129e2800-35e2-4355-8d2d-35ce722b1427\bd384377
| Ptotal= 24.97 mm |    Comments: OWEN SOUND 25 mm (from a 2 year-4hr stor
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    1.29 |  1.00    2.81 |  2.00   13.05 |  3.00    2.04
                0.10    1.36 |  1.10    3.22 |  2.10    8.44 |  3.10    1.89
                0.20    1.44 |  1.20    3.77 |  2.20    6.21 |  3.20    1.76
                0.30    1.53 |  1.30    4.55 |  2.30    4.91 |  3.30    1.65
                0.40    1.63 |  1.40    5.77 |  2.40    4.06 |  3.40    1.55
                0.50    1.75 |  1.50    7.86 |  2.50    3.47 |  3.50    1.46
                0.60    1.89 |  1.60   12.27 |  2.60    3.03 |  3.60    1.39
                0.70    2.06 |  1.70   26.17 |  2.70    2.70 |  3.70    1.32
                0.80    2.26 |  1.80   72.58 |  2.80    2.43 |  3.80    1.26
                0.90    2.50 |  1.90   26.96 |  2.90    2.22 |  3.90    1.20

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--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                 TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.083    1.29 | 1.083    2.81 | 2.083   13.05 |  3.08    2.04
                0.167    1.35 | 1.167    3.14 | 2.167    9.36 |  3.17    1.92
                0.250    1.41 | 1.250    3.55 | 2.250    7.10 |  3.25    1.81
                0.333    1.48 | 1.333    4.08 | 2.333    5.69 |  3.33    1.72
                0.417    1.55 | 1.417    4.79 | 2.417    4.74 |  3.42    1.63
                0.500    1.63 | 1.500    5.77 | 2.500    4.06 |  3.50    1.55
                0.583    1.75 | 1.583    7.86 | 2.583    3.47 |  3.58    1.46
                0.667    1.86 | 1.667   11.39 | 2.667    3.12 |  3.67    1.40
                0.750    1.99 | 1.750   20.61 | 2.750    2.83 |  3.75    1.35
                0.833    2.14 | 1.833   44.73 | 2.833    2.59 |  3.83    1.30
                0.917    2.31 | 1.917   63.46 | 2.917    2.39 |  3.92    1.25
                1.000    2.50 | 2.000   26.96 | 3.000    2.22 |  4.00    1.20

     Unit Hyd Qpeak  (cms)=   1.906

     PEAK FLOW       (cms)=   0.204 (i)
     TIME TO PEAK    (hrs)=   4.167
     RUNOFF VOLUME    (mm)=   3.082
     TOTAL RAINFALL   (mm)=  24.971
     RUNOFF COEFFICIENT   =   0.123
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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0304) | Area (ha)= | 7.94 | Curve Number (CN)= | 53.7 |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.51 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.018 (i)
TIME TO PEAK (hrs)= 2.583
RUNOFF VOLUME (mm)= 1.255
TOTAL RAINFALL (mm)= 24.971
RUNOFF COEFFICIENT = 0.050

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD (0807) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 (0303): | 85.82 | 0.204 | 4.17 | 3.08 |
| | + ID2= 2 (0304): | 7.94 | 0.018 | 2.58 | 1.26 |
| | ID = 3 (0807): | 93.76 | 0.209 | 4.08 | 2.93 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0305) | Area (ha)= | 7.76 | Curve Number (CN)= | 62.3 |
| ID= 1 DT= 5.0 min | Ia (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.76 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.021 (i)
TIME TO PEAK (hrs)= 2.917
RUNOFF VOLUME (mm)= 1.981
TOTAL RAINFALL (mm)= 24.971
RUNOFF COEFFICIENT = 0.079

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD (0808) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 (0305): | 7.76 | 0.021 | 2.92 | 1.98 |
| | + ID2= 2 (0807): | 93.76 | 0.209 | 4.08 | 2.93 |
| | ID = 3 (0808): | 101.52 | 0.220 | 4.00 | 2.85 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| CALIB            |
| NASHYD   (  0306)|   Area    (ha)=   6.99   Curve Number   (CN)= 54.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.66
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

```
     Unit Hyd Qpeak  (cms)=   0.405

     PEAK FLOW       (cms)=   0.018 (i)
     TIME TO PEAK    (hrs)=   2.750
     RUNOFF VOLUME    (mm)=   1.687
     TOTAL RAINFALL   (mm)=  24.971
     RUNOFF COEFFICIENT   =   0.068

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0060)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0306):     6.99   0.018     2.75     1.69
      + ID2= 2 (  0808):   101.52   0.220     4.00     2.85
        ================================================
        ID = 3 (  0060):   108.51   0.228     3.92     2.78

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0307)|   Area    (ha)=   2.50   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

```
     Unit Hyd Qpeak  (cms)=   0.245

     PEAK FLOW       (cms)=   0.008 (i)
     TIME TO PEAK    (hrs)=   2.333
     RUNOFF VOLUME    (mm)=   1.402
     TOTAL RAINFALL   (mm)=  24.971
     RUNOFF COEFFICIENT   =   0.056

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0307):     2.50   0.008     2.33     1.40
      + ID2= 2 (  0060):   108.51   0.228     3.92     2.78
        ================================================
        ID = 3 (  0809):   111.01   0.230     3.92     2.75

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0308)|   Area    (ha)=   5.22   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
```

---------- U.H. Tp(hrs)= 0.52

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.014 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 1.402
TOTAL RAINFALL (mm)= 24.971
RUNOFF COEFFICIENT = 0.056

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0061) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0308): | 5.22 | 0.014 | 2.50 | 1.40 |
| | + ID2= 2 ( 0809): | 111.01 | 0.230 | 3.92 | 2.75 |
| | ID = 3 ( 0061): | 116.23 | 0.234 | 3.83 | 2.69 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB NASHYD ( 0309) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 7.46 | Curve Number (CN)= | 51.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.019 (i)
TIME TO PEAK (hrs)= 2.667
RUNOFF VOLUME (mm)= 1.510
TOTAL RAINFALL (mm)= 24.971
RUNOFF COEFFICIENT = 0.060

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0309): | 7.46 | 0.019 | 2.67 | 1.51 |
| | + ID2= 2 ( 0061): | 116.23 | 0.234 | 3.83 | 2.69 |
| | ID = 3 ( 0810): | 123.69 | 0.242 | 3.75 | 2.62 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB NASHYD ( 0302) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 5.52 | Curve Number (CN)= | 60.3 |
| | Ia (mm)= | 8.05 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.42 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.017 (i)
TIME TO PEAK (hrs)= 2.500
RUNOFF VOLUME (mm)= 1.555
TOTAL RAINFALL (mm)= 24.971
RUNOFF COEFFICIENT = 0.062

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| NASHYD ( 0301) | Area (ha)= 5.30 Curve Number (CN)= 68.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.33 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.030 (i)
TIME TO PEAK (hrs)= 2.333
RUNOFF VOLUME (mm)= 2.348
TOTAL RAINFALL (mm)= 24.971
RUNOFF COEFFICIENT = 0.094

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.29 | 1.083 | 2.81 | 2.083 | 13.05 | 3.08 | 2.04 |
| 0.167 | 1.35 | 1.167 | 3.14 | 2.167 | 9.36 | 3.17 | 1.92 |
| 0.250 | 1.41 | 1.250 | 3.55 | 2.250 | 7.10 | 3.25 | 1.81 |
| 0.333 | 1.48 | 1.333 | 4.08 | 2.333 | 5.69 | 3.33 | 1.72 |
| 0.417 | 1.55 | 1.417 | 4.79 | 2.417 | 4.74 | 3.42 | 1.63 |
| 0.500 | 1.63 | 1.500 | 5.77 | 2.500 | 4.06 | 3.50 | 1.55 |
| 0.583 | 1.75 | 1.583 | 7.86 | 2.583 | 3.47 | 3.58 | 1.46 |
| 0.667 | 1.86 | 1.667 | 11.39 | 2.667 | 3.12 | 3.67 | 1.40 |
| 0.750 | 1.99 | 1.750 | 20.61 | 2.750 | 2.83 | 3.75 | 1.35 |
| 0.833 | 2.14 | 1.833 | 44.73 | 2.833 | 2.59 | 3.83 | 1.30 |
| 0.917 | 2.31 | 1.917 | 63.46 | 2.917 | 2.39 | 3.92 | 1.25 |
| 1.000 | 2.50 | 2.000 | 26.96 | 3.000 | 2.22 | 4.00 | 1.20 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 54.09 | 3.46 | |
| over (min) | 10.00 | 40.00 | |
| Storage Coeff. (min)= | 8.63 (ii) | 35.72 (ii) | |
| Unit Hyd. Tpeak (min)= | 10.00 | 40.00 | |
| Unit Hyd. peak (cms)= | 0.12 | 0.03 | |

```
                                                    *TOTALS*
     PEAK FLOW       (cms)=       1.71         0.08          1.729 (iii)
     TIME TO PEAK    (hrs)=       2.00         2.58           2.00
     RUNOFF VOLUME    (mm)=      23.97         2.05          10.82
     TOTAL RAINFALL   (mm)=      24.97        24.97          24.97
     RUNOFF COEFFICIENT   =       0.96         0.08           0.43


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0805)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0201):    38.20   1.729     2.00    10.82
      + ID2= 2 (  0301):     5.30   0.030     2.33     2.35
        ================================================
        ID = 3 (  0805):    43.50   1.743     2.00     9.79

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0805)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0805):    43.50   1.743     2.00     9.79
      + ID2= 2 (  0302):     5.52   0.017     2.50     1.55
        ================================================
        ID = 1 (  0805):    49.02   1.748     2.00     8.86

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000      0.0000   |    1.3440      2.5548
                         0.0590      0.2449   |    1.4160      2.8868
                         0.0830      0.5009   |    1.4850      3.2289
                         0.1020      0.7662   |    3.6580      3.4038
                         0.1180      1.0406   |    7.7500      3.5812
                         0.1310      1.3244   |   13.2420      3.7611
                         0.5720      1.6176   |   19.9810      3.9437
                         1.1850      1.9203   |   27.8970      4.1289
                         1.2670      2.2326   |    0.0000      0.0000

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0805)     49.020      1.748      2.00       8.86
   OUTFLOW: ID= 1 (  0004)     49.020      0.071      4.08       8.84

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  4.05
                  TIME SHIFT OF PEAK FLOW         (min)=125.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.3706

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0323)|   Area    (ha)=   1.30
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.83         0.47
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      93.09        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    1.29 | 1.083    2.81 | 2.083   13.05 |  3.08    2.04
               0.167    1.35 | 1.167    3.14 | 2.167    9.36 |  3.17    1.92
               0.250    1.41 | 1.250    3.55 | 2.250    7.10 |  3.25    1.81
               0.333    1.48 | 1.333    4.08 | 2.333    5.69 |  3.33    1.72
               0.417    1.55 | 1.417    4.79 | 2.417    4.74 |  3.42    1.63
               0.500    1.63 | 1.500    5.77 | 2.500    4.06 |  3.50    1.55
               0.583    1.75 | 1.583    7.86 | 2.583    3.47 |  3.58    1.46
               0.667    1.86 | 1.667   11.39 | 2.667    3.12 |  3.67    1.40
               0.750    1.99 | 1.750   20.61 | 2.750    2.83 |  3.75    1.35
               0.833    2.14 | 1.833   44.73 | 2.833    2.59 |  3.83    1.30
               0.917    2.31 | 1.917   63.46 | 2.917    2.39 |  3.92    1.25
               1.000    2.50 | 2.000   26.96 | 3.000    2.22 |  4.00    1.20

     Max.Eff.Inten.(mm/hr)=      63.46         8.57
               over (min)        5.00        25.00
     Storage Coeff.  (min)=       2.94 (ii)   21.79 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.28         0.05
```

```
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.07         0.01          0.076 (iii)
     TIME TO PEAK    (hrs)=       1.92         2.25           1.92
     RUNOFF VOLUME    (mm)=      23.97         2.92          10.28
     TOTAL RAINFALL   (mm)=      24.97        24.97          24.97
     RUNOFF COEFFICIENT   =       0.96         0.12           0.41

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0322)|   Area    (ha)=   0.25
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      40.82        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    1.29 | 1.083    2.81 | 2.083   13.05 |  3.08    2.04
              0.167    1.35 | 1.167    3.14 | 2.167    9.36 |  3.17    1.92
              0.250    1.41 | 1.250    3.55 | 2.250    7.10 |  3.25    1.81
              0.333    1.48 | 1.333    4.08 | 2.333    5.69 |  3.33    1.72
              0.417    1.55 | 1.417    4.79 | 2.417    4.74 |  3.42    1.63
              0.500    1.63 | 1.500    5.77 | 2.500    4.06 |  3.50    1.55
              0.583    1.75 | 1.583    7.86 | 2.583    3.47 |  3.58    1.46
              0.667    1.86 | 1.667   11.39 | 2.667    3.12 |  3.67    1.40
              0.750    1.99 | 1.750   20.61 | 2.750    2.83 |  3.75    1.35
              0.833    2.14 | 1.833   44.73 | 2.833    2.59 |  3.83    1.30
              0.917    2.31 | 1.917   63.46 | 2.917    2.39 |  3.92    1.25
              1.000    2.50 | 2.000   26.96 | 3.000    2.22 |  4.00    1.20

     Max.Eff.Inten.(mm/hr)=      63.46         8.57
               over (min)        5.00        25.00
     Storage Coeff.  (min)=       1.79 (ii)   20.65 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.32         0.05
                                                    *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.00          0.015 (iii)
     TIME TO PEAK    (hrs)=       1.92         2.25           1.92
     RUNOFF VOLUME    (mm)=      23.97         2.92          10.24
     TOTAL RAINFALL   (mm)=      24.97        24.97          24.97
     RUNOFF COEFFICIENT   =       0.96         0.12           0.41

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0322):     0.25   0.015     1.92    10.24
     + ID2= 2 (  0323):     1.30   0.076     1.92    10.28
       ================================================
       ID = 3 (  0806):     1.55   0.092     1.92    10.27

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0806):     1.55   0.092     1.92    10.27
     + ID2= 2 (  0004):    49.02   0.071     4.08     8.84
       ================================================
       ID = 1 (  0806):    50.57   0.117     1.92     8.88

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0806):    50.57   0.117     1.92     8.88
     + ID2= 2 (  0810):   123.69   0.242     3.75     2.62
       ================================================
```

```
       ID = 3 (  0811):   174.26   0.316     3.75     4.44

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
======================

       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
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  Summary filename:
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e4d-4cfd-4310-866e-eb2711e77038\scen


DATE: 07/10/2025                          TIME: 02:08:02

USER:



COMMENTS: _____________________________________________________________


--------------------------------------------------------------------------------
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  ***********************************************
  ** SIMULATION : B - 2 - 2yr 4hr 10min Chicago **
  ***********************************************


--------------------
| CHICAGO STORM    |    IDF curve parameters: A= 807.440
| Ptotal= 33.75 mm |                          B=   6.750
--------------------                          C=   0.828
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    1.90 |  1.00   18.51 |  2.00    4.92 |  3.00    2.30
                0.17    2.21 |  1.17   78.28 |  2.17    4.11 |  3.17    2.12
                0.33    2.64 |  1.33   24.65 |  2.33    3.53 |  3.33    1.97
                0.50    3.32 |  1.50   12.40 |  2.50    3.11 |  3.50    1.84
                0.67    4.51 |  1.67    8.22 |  2.67    2.78 |  3.67    1.73
                0.83    7.17 |  1.83    6.14 |  2.83    2.51 |  3.83    1.63


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    1.90 | 1.083   18.51 | 2.083    4.92 |  3.08    2.30
               0.167    1.90 | 1.167   18.51 | 2.167    4.92 |  3.17    2.30
               0.250    2.21 | 1.250   78.28 | 2.250    4.11 |  3.25    2.12
               0.333    2.21 | 1.333   78.28 | 2.333    4.11 |  3.33    2.12
               0.417    2.64 | 1.417   24.65 | 2.417    3.53 |  3.42    1.97
               0.500    2.64 | 1.500   24.65 | 2.500    3.53 |  3.50    1.97
               0.583    3.32 | 1.583   12.40 | 2.583    3.11 |  3.58    1.84
               0.667    3.32 | 1.667   12.40 | 2.667    3.11 |  3.67    1.84
               0.750    4.51 | 1.750    8.22 | 2.750    2.78 |  3.75    1.73
               0.833    4.51 | 1.833    8.22 | 2.833    2.78 |  3.83    1.73
               0.917    7.17 | 1.917    6.14 | 2.917    2.51 |  3.92    1.63
               1.000    7.17 | 2.000    6.14 | 3.000    2.51 |  4.00    1.63

    Unit Hyd Qpeak  (cms)=   1.906

    PEAK FLOW       (cms)=   0.393 (i)
    TIME TO PEAK    (hrs)=   3.667
```

RUNOFF VOLUME (mm)= 6.406
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.190

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0304) | Area (ha)= | 7.94 | Curve Number (CN)= | 53.7 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.51 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.034 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 2.758
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.082

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD (0807) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0303): | 85.82 | 0.393 | 3.67 | 6.41 |
| + ID2= 2 ( 0304): | 7.94 | 0.034 | 2.00 | 2.76 |
| ID = 3 ( 0807): | 93.76 | 0.404 | 3.67 | 6.10 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0305) | Area (ha)= | 7.76 | Curve Number (CN)= | 62.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.76 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.040 (i)
TIME TO PEAK (hrs)= 2.333
RUNOFF VOLUME (mm)= 4.103
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.122

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD (0808) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0305): | 7.76 | 0.040 | 2.33 | 4.10 |
| + ID2= 2 ( 0807): | 93.76 | 0.404 | 3.67 | 6.10 |
| ID = 3 ( 0808): | 101.52 | 0.426 | 3.50 | 5.94 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0306) | Area | (ha)= | 6.99 | Curve Number (CN)= | 54.0 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.66 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.033 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 3.371
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.100

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0060) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0306): | | 6.99 | 0.033 | 2.17 | 3.37 |
| + ID2= 2 ( 0808): | | 101.52 | 0.426 | 3.50 | 5.94 |
| ID = 3 ( 0060): | | 108.51 | 0.441 | 3.42 | 5.78 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0307) | Area | (ha)= | 2.50 | Curve Number (CN)= | 49.0 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.39 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.245

PEAK FLOW (cms)= 0.014 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 2.819
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.084

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0809) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0307): | | 2.50 | 0.014 | 1.83 | 2.82 |
| + ID2= 2 ( 0060): | | 108.51 | 0.441 | 3.42 | 5.78 |
| ID = 3 ( 0809): | | 111.01 | 0.445 | 3.42 | 5.71 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | |
|---|---|
| NASHYD ( 0308) | Area (ha)= 5.22 Curve Number (CN)= 49.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.52 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.024 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 2.819
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.084

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0061) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0308): | 5.22 | 0.024 | 2.00 | 2.82 |
| | + ID2= 2 ( 0809): | 111.01 | 0.445 | 3.42 | 5.71 |
| | ID = 3 ( 0061): | 116.23 | 0.453 | 3.42 | 5.58 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | |
|---|---|
| NASHYD ( 0309) | Area (ha)= 7.46 Curve Number (CN)= 51.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.59 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.034 (i)
TIME TO PEAK (hrs)= 2.083
RUNOFF VOLUME (mm)= 3.029
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.090

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0309): | 7.46 | 0.034 | 2.08 | 3.03 |
| | + ID2= 2 ( 0061): | 116.23 | 0.453 | 3.42 | 5.58 |
| | ID = 3 ( 0810): | 123.69 | 0.468 | 3.33 | 5.43 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | |
|---|---|
| NASHYD ( 0302) | Area (ha)= 5.52 Curve Number (CN)= 60.3 |
| ID= 1 DT= 5.0 min | Ia (mm)= 8.05 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.42 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.033 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 3.422
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.101

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| NASHYD ( 0301) | Area (ha)= 5.30 Curve Number (CN)= 68.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.33 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.054 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 4.890
TOTAL RAINFALL (mm)= 33.748
RUNOFF COEFFICIENT = 0.145

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 1.90 | 1.083 | 18.51 | 2.083 | 4.92 | 3.08 | 2.30 |
| 0.167 | 1.90 | 1.167 | 18.51 | 2.167 | 4.92 | 3.17 | 2.30 |
| 0.250 | 2.21 | 1.250 | 78.28 | 2.250 | 4.11 | 3.25 | 2.12 |
| 0.333 | 2.21 | 1.333 | 78.28 | 2.333 | 4.11 | 3.33 | 2.12 |
| 0.417 | 2.64 | 1.417 | 24.65 | 2.417 | 3.53 | 3.42 | 1.97 |
| 0.500 | 2.64 | 1.500 | 24.65 | 2.500 | 3.53 | 3.50 | 1.97 |
| 0.583 | 3.32 | 1.583 | 12.40 | 2.583 | 3.11 | 3.58 | 1.84 |
| 0.667 | 3.32 | 1.667 | 12.40 | 2.667 | 3.11 | 3.67 | 1.84 |
| 0.750 | 4.51 | 1.750 | 8.22 | 2.750 | 2.78 | 3.75 | 1.73 |
| 0.833 | 4.51 | 1.833 | 8.22 | 2.833 | 2.78 | 3.83 | 1.73 |
| 0.917 | 7.17 | 1.917 | 6.14 | 2.917 | 2.51 | 3.92 | 1.63 |
| 1.000 | 7.17 | 2.000 | 6.14 | 3.000 | 2.51 | 4.00 | 1.63 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 78.28 | 6.38 | |
| over (min) | 5.00 | 30.00 | |

```
     Storage Coeff.  (min)=       7.44 (ii)   28.66 (ii)
     Unit Hyd. Tpeak (min)=       5.00        30.00
     Unit Hyd. peak  (cms)=       0.17         0.04
                                                      *TOTALS*
     PEAK FLOW       (cms)=       2.63         0.16          2.650 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.83           1.33
     RUNOFF VOLUME    (mm)=      32.75         3.94          15.46
     TOTAL RAINFALL   (mm)=      33.75        33.75          33.75
     RUNOFF COEFFICIENT   =       0.97         0.12           0.46


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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```
--------------------
| ADD HYD  (  0805)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0201):    38.20   2.650     1.33    15.46
     + ID2= 2 (  0301):     5.30   0.054     1.75     4.89
       ================================================
       ID = 3 (  0805):    43.50   2.661     1.33    14.18

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

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```
--------------------
| ADD HYD  (  0805)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0805):    43.50   2.661     1.33    14.18
     + ID2= 2 (  0302):     5.52   0.033     1.92     3.42
       ================================================
       ID = 1 (  0805):    49.02   2.665     1.33    12.96

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------       (cms)     (ha.m.)   |   (cms)     (ha.m.)
                           0.0000      0.0000   |    1.3440      2.5548
                           0.0590      0.2449   |    1.4160      2.8868
                           0.0830      0.5009   |    1.4850      3.2289
                           0.1020      0.7662   |    3.6580      3.4038
                           0.1180      1.0406   |    7.7500      3.5812
                           0.1310      1.3244   |   13.2420      3.7611
                           0.5720      1.6176   |   19.9810      3.9437
                           1.1850      1.9203   |   27.8970      4.1289
                           1.2670      2.2326   |    0.0000      0.0000

                                AREA     QPEAK     TPEAK       R.V.
                                (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0805)     49.020     2.665      1.33      12.96
   OUTFLOW: ID= 1 (  0004)     49.020     0.086      4.08      12.94

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  3.23
                  TIME SHIFT OF PEAK FLOW         (min)=165.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  0.5434
```

---

```
--------------------
| CALIB            |
| STANDHYD (  0323)|   Area    (ha)=   1.30
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.83         0.47
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      93.09        40.00
     Mannings n             =     0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---

```
                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    1.90 | 1.083   18.51 | 2.083    4.92 |  3.08    2.30
               0.167    1.90 | 1.167   18.51 | 2.167    4.92 |  3.17    2.30
               0.250    2.21 | 1.250   78.28 | 2.250    4.11 |  3.25    2.12
               0.333    2.21 | 1.333   78.28 | 2.333    4.11 |  3.33    2.12
               0.417    2.64 | 1.417   24.65 | 2.417    3.53 |  3.42    1.97
               0.500    2.64 | 1.500   24.65 | 2.500    3.53 |  3.50    1.97
               0.583    3.32 | 1.583   12.40 | 2.583    3.11 |  3.58    1.84
               0.667    3.32 | 1.667   12.40 | 2.667    3.11 |  3.67    1.84
               0.750    4.51 | 1.750    8.22 | 2.750    2.78 |  3.75    1.73
               0.833    4.51 | 1.833    8.22 | 2.833    2.78 |  3.83    1.73
               0.917    7.17 | 1.917    6.14 | 2.917    2.51 |  3.92    1.63
               1.000    7.17 | 2.000    6.14 | 3.000    2.51 |  4.00    1.63

   Max.Eff.Inten.(mm/hr)=      78.28        13.83
              over (min)        5.00        20.00
```

```
     Storage Coeff.  (min)=       2.70 (ii)   18.27 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.29         0.06
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.10         0.01          0.100 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.58           1.33
     RUNOFF VOLUME    (mm)=      32.75         5.41          14.97
     TOTAL RAINFALL   (mm)=      33.75        33.75          33.75
     RUNOFF COEFFICIENT   =       0.97         0.16           0.44

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0322)|   Area    (ha)=   0.25
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      40.82        40.00
     Mannings n           =      0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    1.90 | 1.083   18.51 | 2.083    4.92 |  3.08    2.30
 0.167    1.90 | 1.167   18.51 | 2.167    4.92 |  3.17    2.30
 0.250    2.21 | 1.250   78.28 | 2.250    4.11 |  3.25    2.12
 0.333    2.21 | 1.333   78.28 | 2.333    4.11 |  3.33    2.12
 0.417    2.64 | 1.417   24.65 | 2.417    3.53 |  3.42    1.97
 0.500    2.64 | 1.500   24.65 | 2.500    3.53 |  3.50    1.97
 0.583    3.32 | 1.583   12.40 | 2.583    3.11 |  3.58    1.84
 0.667    3.32 | 1.667   12.40 | 2.667    3.11 |  3.67    1.84
 0.750    4.51 | 1.750    8.22 | 2.750    2.78 |  3.75    1.73
 0.833    4.51 | 1.833    8.22 | 2.833    2.78 |  3.83    1.73
 0.917    7.17 | 1.917    6.14 | 2.917    2.51 |  3.92    1.63
 1.000    7.17 | 2.000    6.14 | 3.000    2.51 |  4.00    1.63
```

```
     Max.Eff.Inten.(mm/hr)=      78.28        13.83
               over (min)        5.00        20.00
     Storage Coeff.  (min)=       1.65 (ii)   17.22 (ii)
     Unit Hyd. Tpeak (min)=       5.00        20.00
     Unit Hyd. peak  (cms)=       0.32         0.06
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.00          0.020 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.58           1.33
     RUNOFF VOLUME    (mm)=      32.75         5.41          14.94
     TOTAL RAINFALL   (mm)=      33.75        33.75          33.75
     RUNOFF COEFFICIENT   =       0.97         0.16           0.44

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0322):     0.25   0.020     1.33    14.94
     + ID2= 2 (  0323):     1.30   0.100     1.33    14.97
       ================================================
       ID = 3 (  0806):     1.55   0.120     1.33    14.97

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0806):     1.55   0.120     1.33    14.97
     + ID2= 2 (  0004):    49.02   0.086     4.08    12.94
       ================================================
       ID = 1 (  0806):    50.57   0.159     1.33    13.01

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
        ID1= 1 (  0806):    50.57   0.159     1.33    13.01
      + ID2= 2 (  0810):   123.69   0.468     3.33     5.43
        ================================================
        ID = 3 (  0811):   174.26   0.558     3.33     7.63

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
=======================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\7337c
254-4cd2-403d-9d9c-f426190303ac\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\7337c
254-4cd2-403d-9d9c-f426190303ac\scen


DATE: 07/10/2025                          TIME: 02:08:02

USER:



COMMENTS: _____________________________________________________________


--------------------------------------------------------------------------------
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  ***********************************************
```

```
  ** SIMULATION : C - 5yr 4hr 10min Chicago     **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A=1135.400
| Ptotal= 44.06 mm |                          B=   7.500
--------------------                          C=   0.841
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    2.37 |  1.00   24.78 |  2.00    6.34 |  3.00    2.88
                0.17    2.76 |  1.17  102.27 |  2.17    5.26 |  3.17    2.65
                0.33    3.33 |  1.33   33.10 |  2.33    4.50 |  3.33    2.45
                0.50    4.21 |  1.50   16.50 |  2.50    3.94 |  3.50    2.29
                0.67    5.79 |  1.67   10.79 |  2.67    3.50 |  3.67    2.14
                0.83    9.38 |  1.83    7.99 |  2.83    3.16 |  3.83    2.01


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    2.37 | 1.083   24.78 | 2.083    6.34 |  3.08    2.88
               0.167    2.37 | 1.167   24.78 | 2.167    6.34 |  3.17    2.88
               0.250    2.76 | 1.250  102.27 | 2.250    5.26 |  3.25    2.65
               0.333    2.76 | 1.333  102.27 | 2.333    5.26 |  3.33    2.65
               0.417    3.33 | 1.417   33.10 | 2.417    4.50 |  3.42    2.45
               0.500    3.33 | 1.500   33.10 | 2.500    4.50 |  3.50    2.45
               0.583    4.21 | 1.583   16.50 | 2.583    3.94 |  3.58    2.29
               0.667    4.21 | 1.667   16.50 | 2.667    3.94 |  3.67    2.29
               0.750    5.79 | 1.750   10.79 | 2.750    3.50 |  3.75    2.14
               0.833    5.79 | 1.833   10.79 | 2.833    3.50 |  3.83    2.14
               0.917    9.38 | 1.917    7.99 | 2.917    3.16 |  3.92    2.01
               1.000    9.38 | 2.000    7.99 | 3.000    3.16 |  4.00    2.01

    Unit Hyd Qpeak  (cms)=   1.906
```

PEAK FLOW (cms)= 0.707 (i)
TIME TO PEAK (hrs)= 3.583
RUNOFF VOLUME (mm)= 11.358
TOTAL RAINFALL (mm)= 44.063
RUNOFF COEFFICIENT = 0.258

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| NASHYD ( 0304) | Area (ha)= 7.94 Curve Number (CN)= 53.7 |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.75 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.51 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.068 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 5.165
TOTAL RAINFALL (mm)= 44.063
RUNOFF COEFFICIENT = 0.117

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0807) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0303): | 85.82 | 0.707 | 3.58 | 11.36 |
| | + ID2= 2 ( 0304): | 7.94 | 0.068 | 2.00 | 5.16 |
| | ID = 3 ( 0807): | 93.76 | 0.727 | 3.50 | 10.83 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | |
|---|---|
| NASHYD ( 0305) | Area (ha)= 7.76 Curve Number (CN)= 62.3 |
| ID= 1 DT= 5.0 min | Ia (mm)= 6.50 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.76 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.074 (i)
TIME TO PEAK (hrs)= 2.333
RUNOFF VOLUME (mm)= 7.377
TOTAL RAINFALL (mm)= 44.063
RUNOFF COEFFICIENT = 0.167

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0808) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0305): | 7.76 | 0.074 | 2.33 | 7.38 |

```
      + ID2= 2 (  0807):    93.76   0.727     3.50    10.83
        ================================================
        ID = 3 (  0808):   101.52   0.768     3.42    10.57

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0306)|   Area    (ha)=   6.99   Curve Number   (CN)= 54.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.66

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    2.37 | 1.083   24.78 | 2.083    6.34 |  3.08    2.88
              0.167    2.37 | 1.167   24.78 | 2.167    6.34 |  3.17    2.88
              0.250    2.76 | 1.250  102.27 | 2.250    5.26 |  3.25    2.65
              0.333    2.76 | 1.333  102.27 | 2.333    5.26 |  3.33    2.65
              0.417    3.33 | 1.417   33.10 | 2.417    4.50 |  3.42    2.45
              0.500    3.33 | 1.500   33.10 | 2.500    4.50 |  3.50    2.45
              0.583    4.21 | 1.583   16.50 | 2.583    3.94 |  3.58    2.29
              0.667    4.21 | 1.667   16.50 | 2.667    3.94 |  3.67    2.29
              0.750    5.79 | 1.750   10.79 | 2.750    3.50 |  3.75    2.14
              0.833    5.79 | 1.833   10.79 | 2.833    3.50 |  3.83    2.14
              0.917    9.38 | 1.917    7.99 | 2.917    3.16 |  3.92    2.01
              1.000    9.38 | 2.000    7.99 | 3.000    3.16 |  4.00    2.01

     Unit Hyd Qpeak  (cms)=   0.405

     PEAK FLOW       (cms)=   0.060 (i)
     TIME TO PEAK    (hrs)=   2.167
     RUNOFF VOLUME    (mm)=   5.974
     TOTAL RAINFALL   (mm)=  44.063
     RUNOFF COEFFICIENT   =   0.136

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0060)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0306):     6.99   0.060     2.17     5.97
      + ID2= 2 (  0808):   101.52   0.768     3.42    10.57
        ================================================
        ID = 3 (  0060):   108.51   0.797     3.33    10.27

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0307)|   Area    (ha)=   2.50   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    2.37 | 1.083   24.78 | 2.083    6.34 |  3.08    2.88
              0.167    2.37 | 1.167   24.78 | 2.167    6.34 |  3.17    2.88
              0.250    2.76 | 1.250  102.27 | 2.250    5.26 |  3.25    2.65
              0.333    2.76 | 1.333  102.27 | 2.333    5.26 |  3.33    2.65
              0.417    3.33 | 1.417   33.10 | 2.417    4.50 |  3.42    2.45
              0.500    3.33 | 1.500   33.10 | 2.500    4.50 |  3.50    2.45
              0.583    4.21 | 1.583   16.50 | 2.583    3.94 |  3.58    2.29
              0.667    4.21 | 1.667   16.50 | 2.667    3.94 |  3.67    2.29
              0.750    5.79 | 1.750   10.79 | 2.750    3.50 |  3.75    2.14
              0.833    5.79 | 1.833   10.79 | 2.833    3.50 |  3.83    2.14
              0.917    9.38 | 1.917    7.99 | 2.917    3.16 |  3.92    2.01
              1.000    9.38 | 2.000    7.99 | 3.000    3.16 |  4.00    2.01

     Unit Hyd Qpeak  (cms)=   0.245

     PEAK FLOW       (cms)=   0.025 (i)
     TIME TO PEAK    (hrs)=   1.833
     RUNOFF VOLUME    (mm)=   5.028
     TOTAL RAINFALL   (mm)=  44.063
     RUNOFF COEFFICIENT   =   0.114

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0307):     2.50   0.025     1.83     5.03
      + ID2= 2 (  0060):   108.51   0.797     3.33    10.27
        ================================================
        ID = 3 (  0809):   111.01   0.803     3.33    10.16
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0308) | Area | (ha)= | 5.22 | Curve Number (CN)= | 49.0 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.52 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.044 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 5.029
TOTAL RAINFALL (mm)= 44.063
RUNOFF COEFFICIENT = 0.114

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0061) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0308): | | 5.22 | 0.044 | 2.00 | 5.03 |
| + ID2= 2 ( 0809): | | 111.01 | 0.803 | 3.33 | 10.16 |
| ID = 3 ( 0061): | | 116.23 | 0.818 | 3.25 | 9.92 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0309) | Area | (ha)= | 7.46 | Curve Number (CN)= | 51.0 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.062 (i)
TIME TO PEAK (hrs)= 2.083
RUNOFF VOLUME (mm)= 5.390
TOTAL RAINFALL (mm)= 44.063
RUNOFF COEFFICIENT = 0.122

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0309): | | 7.46 | 0.062 | 2.08 | 5.39 |
| + ID2= 2 ( 0061): | | 116.23 | 0.818 | 3.25 | 9.92 |
| ID = 3 ( 0810): | | 123.69 | 0.846 | 3.17 | 9.65 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB |
|---|

| NASHYD ( 0302)| Area (ha)= 5.52 Curve Number (CN)= 60.3
|ID= 1 DT= 5.0 min | Ia (mm)= 8.05 # of Linear Res.(N)= 3.00
--- U.H. Tp(hrs)= 0.42

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.066 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 6.381
TOTAL RAINFALL (mm)= 44.063
RUNOFF COEFFICIENT = 0.145

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB |
| NASHYD ( 0301)| Area (ha)= 5.30 Curve Number (CN)= 68.0
|ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00
--- U.H. Tp(hrs)= 0.33

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.104 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 8.770
TOTAL RAINFALL (mm)= 44.063
RUNOFF COEFFICIENT = 0.199

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB |
| STANDHYD ( 0201)| Area (ha)= 38.20
|ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00
---

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 102.27 | 12.98 | | |
| over (min) | 5.00 | 25.00 | | |
| Storage Coeff. (min)= | 6.69 (ii) | 22.66 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 25.00 | | |
| Unit Hyd. peak (cms)= | 0.18 | 0.05 | | |
| | | | *TOTALS* | |
| PEAK FLOW (cms)= | 3.57 | 0.33 | 3.639 (iii) | |
| TIME TO PEAK (hrs)= | 1.33 | 1.75 | 1.33 | |
| RUNOFF VOLUME (mm)= | 43.06 | 6.81 | 21.31 | |
| TOTAL RAINFALL (mm)= | 44.06 | 44.06 | 44.06 | |
| RUNOFF COEFFICIENT = | 0.98 | 0.15 | 0.48 | |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0805) | | | | | |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | AREA | QPEAK | TPEAK | R.V. |
| | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0201): | | 38.20 | 3.639 | 1.33 | 21.31 |
| + ID2= 2 ( 0301): | | 5.30 | 0.104 | 1.75 | 8.77 |
| ID = 3 ( 0805): | | 43.50 | 3.665 | 1.33 | 19.78 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0805) | | | | | |
|---|---|---|---|---|---|
| 3 + 2 = 1 | | AREA | QPEAK | TPEAK | R.V. |
| | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 3 ( 0805): | | 43.50 | 3.665 | 1.33 | 19.78 |
| + ID2= 2 ( 0302): | | 5.52 | 0.066 | 1.83 | 6.38 |
| ID = 1 ( 0805): | | 49.02 | 3.675 | 1.33 | 18.27 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| RESERVOIR( 0004) | OVERFLOW IS OFF | | | |
|---|---|---|---|---|
| IN= 2---> OUT= 1 | | | | |
| DT= 5.0 min | OUTFLOW | STORAGE | OUTFLOW | STORAGE |
| | (cms) | (ha.m.) | (cms) | (ha.m.) |
| | 0.0000 | 0.0000 | 1.3440 | 2.5548 |
| | 0.0590 | 0.2449 | 1.4160 | 2.8868 |
| | 0.0830 | 0.5009 | 1.4850 | 3.2289 |
| | 0.1020 | 0.7662 | 3.6580 | 3.4038 |
| | 0.1180 | 1.0406 | 7.7500 | 3.5812 |
| | 0.1310 | 1.3244 | 13.2420 | 3.7611 |
| | 0.5720 | 1.6176 | 19.9810 | 3.9437 |
| | 1.1850 | 1.9203 | 27.8970 | 4.1289 |
| | 1.2670 | 2.2326 | 0.0000 | 0.0000 |

| | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|
| | (ha) | (cms) | (hrs) | (mm) |
| INFLOW : ID= 2 ( 0805) | 49.020 | 3.675 | 1.33 | 18.27 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 0.103 | 4.08 | 18.25 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.81
TIME SHIFT OF PEAK FLOW (min)=165.00
MAXIMUM STORAGE USED (ha.m.)= 0.7850

---

| CALIB | | | |
|---|---|---|---|
| STANDHYD ( 0323) | Area (ha)= | 1.30 | |
| ID= 1 DT= 5.0 min | Total Imp(%)= | 64.00 | Dir. Conn.(%)= 35.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.83 | 0.47 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 93.09 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.37 | 1.083 | 24.78 | 2.083 | 6.34 | 3.08 | 2.88 |
| 0.167 | 2.37 | 1.167 | 24.78 | 2.167 | 6.34 | 3.17 | 2.88 |
| 0.250 | 2.76 | 1.250 | 102.27 | 2.250 | 5.26 | 3.25 | 2.65 |
| 0.333 | 2.76 | 1.333 | 102.27 | 2.333 | 5.26 | 3.33 | 2.65 |
| 0.417 | 3.33 | 1.417 | 33.10 | 2.417 | 4.50 | 3.42 | 2.45 |
| 0.500 | 3.33 | 1.500 | 33.10 | 2.500 | 4.50 | 3.50 | 2.45 |
| 0.583 | 4.21 | 1.583 | 16.50 | 2.583 | 3.94 | 3.58 | 2.29 |
| 0.667 | 4.21 | 1.667 | 16.50 | 2.667 | 3.94 | 3.67 | 2.29 |
| 0.750 | 5.79 | 1.750 | 10.79 | 2.750 | 3.50 | 3.75 | 2.14 |
| 0.833 | 5.79 | 1.833 | 10.79 | 2.833 | 3.50 | 3.83 | 2.14 |
| 0.917 | 9.38 | 1.917 | 7.99 | 2.917 | 3.16 | 3.92 | 2.01 |
| 1.000 | 9.38 | 2.000 | 7.99 | 3.000 | 3.16 | 4.00 | 2.01 |

```
     Max.Eff.Inten.(mm/hr)=     102.27        26.22
                over (min)        5.00        15.00
     Storage Coeff.  (min)=       2.43 (ii)   14.48 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.30         0.08
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.13         0.02          0.137 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.50           1.33
     RUNOFF VOLUME    (mm)=      43.06         9.08          20.97
     TOTAL RAINFALL   (mm)=      44.06        44.06          44.06
     RUNOFF COEFFICIENT   =       0.98         0.21           0.48

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0322)|   Area    (ha)=   0.25
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                          IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      40.82        40.00
     Mannings n             =    0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                        ---- TRANSFORMED HYETOGRAPH ----
      TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
       hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.083    2.37 | 1.083   24.78 | 2.083    6.34 |  3.08    2.88
     0.167    2.37 | 1.167   24.78 | 2.167    6.34 |  3.17    2.88
     0.250    2.76 | 1.250  102.27 | 2.250    5.26 |  3.25    2.65
     0.333    2.76 | 1.333  102.27 | 2.333    5.26 |  3.33    2.65
     0.417    3.33 | 1.417   33.10 | 2.417    4.50 |  3.42    2.45
     0.500    3.33 | 1.500   33.10 | 2.500    4.50 |  3.50    2.45
     0.583    4.21 | 1.583   16.50 | 2.583    3.94 |  3.58    2.29
     0.667    4.21 | 1.667   16.50 | 2.667    3.94 |  3.67    2.29
     0.750    5.79 | 1.750   10.79 | 2.750    3.50 |  3.75    2.14
     0.833    5.79 | 1.833   10.79 | 2.833    3.50 |  3.83    2.14
     0.917    9.38 | 1.917    7.99 | 2.917    3.16 |  3.92    2.01
     1.000    9.38 | 2.000    7.99 | 3.000    3.16 |  4.00    2.01

     Max.Eff.Inten.(mm/hr)=     102.27        26.22
                over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.48 (ii)   13.54 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.33         0.08
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.00          0.027 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.50           1.33
     RUNOFF VOLUME    (mm)=      43.06         9.08          20.94
     TOTAL RAINFALL   (mm)=      44.06        44.06          44.06
     RUNOFF COEFFICIENT   =       0.98         0.21           0.48

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0322):     0.25   0.027     1.33    20.94
     + ID2= 2 (  0323):     1.30   0.137     1.33    20.97
       ================================================
       ID = 3 (  0806):     1.55   0.164     1.33    20.96

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0806):     1.55   0.164     1.33    20.96
     + ID2= 2 (  0004):    49.02   0.103     4.08    18.25
       ================================================
       ID = 1 (  0806):    50.57   0.219     1.33    18.34

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0806):    50.57   0.219     1.33    18.34
     + ID2= 2 (  0810):   123.69   0.846     3.17     9.65
       ================================================
       ID = 3 (  0811):   174.26   0.955     3.17    12.17

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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================================================================================
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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                *****  D E T A I L E D   O U T P U T *****


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  Output  filename:
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3bf-d9ef-462e-901c-0e40d2c0e035\scen


DATE: 07/10/2025                          TIME: 02:08:01

USER:



COMMENTS: _____________________________________________________________
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  ********************************************
  ** SIMULATION : D - 10yr 4hr 10min Chicago    **
  ********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A=1387.000
| Ptotal= 50.58 mm |                          B=   7.970
--------------------                          C=   0.852
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

     TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
      hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.00    2.59 |  1.00   28.90 |  2.00    7.16 |  3.00    3.17
     0.17    3.04 |  1.17  118.36 |  2.17    5.91 |  3.17    2.91
     0.33    3.68 |  1.33   38.72 |  2.33    5.03 |  3.33    2.69
     0.50    4.70 |  1.50   19.11 |  2.50    4.38 |  3.50    2.50
     0.67    6.52 |  1.67   12.38 |  2.67    3.89 |  3.67    2.34
     0.83   10.72 |  1.83    9.08 |  2.83    3.49 |  3.83    2.20


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--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
     TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
      hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
    0.083    2.59 | 1.083   28.90 | 2.083    7.16 |  3.08    3.17
    0.167    2.59 | 1.167   28.90 | 2.167    7.16 |  3.17    3.17
    0.250    3.04 | 1.250  118.36 | 2.250    5.91 |  3.25    2.91
    0.333    3.04 | 1.333  118.36 | 2.333    5.91 |  3.33    2.91
    0.417    3.68 | 1.417   38.72 | 2.417    5.03 |  3.42    2.69
    0.500    3.68 | 1.500   38.72 | 2.500    5.03 |  3.50    2.69
    0.583    4.70 | 1.583   19.11 | 2.583    4.38 |  3.58    2.50
    0.667    4.70 | 1.667   19.11 | 2.667    4.38 |  3.67    2.50
    0.750    6.52 | 1.750   12.38 | 2.750    3.89 |  3.75    2.34
    0.833    6.52 | 1.833   12.38 | 2.833    3.89 |  3.83    2.34
    0.917   10.72 | 1.917    9.08 | 2.917    3.49 |  3.92    2.20
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 0.939 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 14.948
TOTAL RAINFALL (mm)= 50.580
RUNOFF COEFFICIENT = 0.296

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0304) | Area (ha)= | 7.94 | Curve Number (CN)= | 53.7 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.51 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.094 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 7.006
TOTAL RAINFALL (mm)= 50.580
RUNOFF COEFFICIENT = 0.139

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD (0807) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 (0303): | | 85.82 | 0.939 | 3.50 | 14.95 |
| + ID2= 2 (0304): | | 7.94 | 0.094 | 2.00 | 7.01 |
| ID = 3 (0807): | | 93.76 | 0.966 | 3.50 | 14.28 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0305) | Area (ha)= | 7.76 | Curve Number (CN)= | 62.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.76 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.101 (i)
TIME TO PEAK (hrs)= 2.333
RUNOFF VOLUME (mm)= 9.824
TOTAL RAINFALL (mm)= 50.580
RUNOFF COEFFICIENT = 0.194

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD (0808) |
|---|

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|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0305):     7.76   0.101     2.33     9.82
     + ID2= 2 (  0807):    93.76   0.966     3.50    14.28
       ================================================
       ID = 3 (  0808):   101.52   1.023     3.33    13.93
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-------------------
| CALIB           |
| NASHYD   (  0306)|   Area    (ha)=   6.99   Curve Number   (CN)= 54.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.66
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.081 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 7.931
TOTAL RAINFALL (mm)= 50.580
RUNOFF COEFFICIENT = 0.157

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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-------------------
| ADD HYD  (  0060)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0306):     6.99   0.081     2.17     7.93
     + ID2= 2 (  0808):   101.52   1.023     3.33    13.93
       ================================================
       ID = 3 (  0060):   108.51   1.061     3.25    13.55
```

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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-------------------
| CALIB           |
| NASHYD   (  0307)|   Area    (ha)=   2.50   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
-------------------   U.H. Tp(hrs)=   0.39
```

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

Unit Hyd Qpeak (cms)= 0.245

PEAK FLOW (cms)= 0.034 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 6.702
TOTAL RAINFALL (mm)= 50.580
RUNOFF COEFFICIENT = 0.132

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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```
-------------------
| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0307):     2.50   0.034     1.83     6.70
     + ID2= 2 (  0060):   108.51   1.061     3.25    13.55
```

```
       ================================================
       ID = 3 (  0809):   111.01   1.069     3.25    13.39

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0308)|   Area    (ha)=   5.22   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.52

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                            ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    2.59 | 1.083   28.90 | 2.083    7.16 |  3.08    3.17
              0.167    2.59 | 1.167   28.90 | 2.167    7.16 |  3.17    3.17
              0.250    3.04 | 1.250  118.36 | 2.250    5.91 |  3.25    2.91
              0.333    3.04 | 1.333  118.36 | 2.333    5.91 |  3.33    2.91
              0.417    3.68 | 1.417   38.72 | 2.417    5.03 |  3.42    2.69
              0.500    3.68 | 1.500   38.72 | 2.500    5.03 |  3.50    2.69
              0.583    4.70 | 1.583   19.11 | 2.583    4.38 |  3.58    2.50
              0.667    4.70 | 1.667   19.11 | 2.667    4.38 |  3.67    2.50
              0.750    6.52 | 1.750   12.38 | 2.750    3.89 |  3.75    2.34
              0.833    6.52 | 1.833   12.38 | 2.833    3.89 |  3.83    2.34
              0.917   10.72 | 1.917    9.08 | 2.917    3.49 |  3.92    2.20
              1.000   10.72 | 2.000    9.08 | 3.000    3.49 |  4.00    2.20

     Unit Hyd Qpeak  (cms)=   0.383

     PEAK FLOW       (cms)=   0.060 (i)
     TIME TO PEAK    (hrs)=   2.000
     RUNOFF VOLUME    (mm)=   6.702
     TOTAL RAINFALL   (mm)=  50.580
     RUNOFF COEFFICIENT   =   0.133

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0061)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0308):     5.22   0.060     2.00     6.70
      + ID2= 2 (  0809):   111.01   1.069     3.25    13.39
        ================================================
        ID = 3 (  0061):   116.23   1.090     3.17    13.09

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0309)|   Area    (ha)=   7.46   Curve Number   (CN)= 51.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.59

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                            ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    2.59 | 1.083   28.90 | 2.083    7.16 |  3.08    3.17
              0.167    2.59 | 1.167   28.90 | 2.167    7.16 |  3.17    3.17
              0.250    3.04 | 1.250  118.36 | 2.250    5.91 |  3.25    2.91
              0.333    3.04 | 1.333  118.36 | 2.333    5.91 |  3.33    2.91
              0.417    3.68 | 1.417   38.72 | 2.417    5.03 |  3.42    2.69
              0.500    3.68 | 1.500   38.72 | 2.500    5.03 |  3.50    2.69
              0.583    4.70 | 1.583   19.11 | 2.583    4.38 |  3.58    2.50
              0.667    4.70 | 1.667   19.11 | 2.667    4.38 |  3.67    2.50
              0.750    6.52 | 1.750   12.38 | 2.750    3.89 |  3.75    2.34
              0.833    6.52 | 1.833   12.38 | 2.833    3.89 |  3.83    2.34
              0.917   10.72 | 1.917    9.08 | 2.917    3.49 |  3.92    2.20
              1.000   10.72 | 2.000    9.08 | 3.000    3.49 |  4.00    2.20

     Unit Hyd Qpeak  (cms)=   0.483

     PEAK FLOW       (cms)=   0.084 (i)
     TIME TO PEAK    (hrs)=   2.083
     RUNOFF VOLUME    (mm)=   7.173
     TOTAL RAINFALL   (mm)=  50.580
     RUNOFF COEFFICIENT   =   0.142

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0810)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0309):     7.46   0.084     2.08     7.17
      + ID2= 2 (  0061):   116.23   1.090     3.17    13.09
        ================================================
        ID = 3 (  0810):   123.69   1.129     3.08    12.74

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

| CALIB | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NASHYD ( 0302) | Area (ha)= 5.52 | Curve Number (CN)= 60.3 | | | | | | | | | |
| ID= 1 DT= 5.0 min | Ia (mm)= 8.05 | # of Linear Res.(N)= 3.00 | | | | | | | | | |
| | U.H. Tp(hrs)= 0.42 | | | | | | | | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.092 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 8.622
TOTAL RAINFALL (mm)= 50.580
RUNOFF COEFFICIENT = 0.170

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| NASHYD ( 0301) | Area (ha)= 5.30 | Curve Number (CN)= 68.0 | | | | | | | | | |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 | # of Linear Res.(N)= 3.00 | | | | | | | | | |
| | U.H. Tp(hrs)= 0.33 | | | | | | | | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.142 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 11.641
TOTAL RAINFALL (mm)= 50.580
RUNOFF COEFFICIENT = 0.230

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| CALIB | | | |
|---|---|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 | | |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 | Dir. Conn.(%)= 40.00 | |
| | | IMPERVIOUS | PERVIOUS (i) |
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |

```
            0.833    6.52 | 1.833   12.38 | 2.833    3.89 |  3.83    2.34
            0.917   10.72 | 1.917    9.08 | 2.917    3.49 |  3.92    2.20
            1.000   10.72 | 2.000    9.08 | 3.000    3.49 |  4.00    2.20

     Max.Eff.Inten.(mm/hr)=     118.36        19.00
               over (min)        5.00        25.00
     Storage Coeff.  (min)=       6.31 (ii)   20.02 (ii)
     Unit Hyd. Tpeak (min)=       5.00        25.00
     Unit Hyd. peak  (cms)=       0.19         0.05
                                                          *TOTALS*
     PEAK FLOW       (cms)=       4.21         0.47          4.317 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.67           1.33
     RUNOFF VOLUME    (mm)=      49.58         8.95          25.20
     TOTAL RAINFALL   (mm)=      50.58        50.58          50.58
     RUNOFF COEFFICIENT   =       0.98         0.18           0.50


       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0805)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0201):    38.20   4.317     1.33    25.20
     + ID2= 2 (  0301):     5.30   0.142     1.75    11.64
       ================================================
       ID = 3 (  0805):    43.50   4.355     1.33    23.55

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0805)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0805):    43.50   4.355     1.33    23.55
     + ID2= 2 (  0302):     5.52   0.092     1.83     8.62
       ================================================
       ID = 1 (  0805):    49.02   4.370     1.33    21.87

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF

| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                           0.0000      0.0000   |    1.3440      2.5548
                           0.0590      0.2449   |    1.4160      2.8868
                           0.0830      0.5009   |    1.4850      3.2289
                           0.1020      0.7662   |    3.6580      3.4038
                           0.1180      1.0406   |    7.7500      3.5812
                           0.1310      1.3244   |   13.2420      3.7611
                           0.5720      1.6176   |   19.9810      3.9437
                           1.1850      1.9203   |   27.8970      4.1289
                           1.2670      2.2326   |    0.0000      0.0000

                                  AREA     QPEAK     TPEAK       R.V.
                                  (ha)     (cms)     (hrs)       (mm)
     INFLOW : ID= 2 (  0805)     49.020     4.370      1.33      21.87
     OUTFLOW: ID= 1 (  0004)     49.020     0.113      4.17      21.85

                    PEAK   FLOW   REDUCTION [Qout/Qin](%)=  2.58
                    TIME SHIFT OF PEAK FLOW         (min)=170.00
                    MAXIMUM  STORAGE   USED       (ha.m.)=  0.9501

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0323)|   Area    (ha)=   1.30
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                               IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.83         0.47
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      93.09        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
      TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
       hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.083    2.59 | 1.083   28.90 | 2.083    7.16 |  3.08    3.17
     0.167    2.59 | 1.167   28.90 | 2.167    7.16 |  3.17    3.17
     0.250    3.04 | 1.250  118.36 | 2.250    5.91 |  3.25    2.91
     0.333    3.04 | 1.333  118.36 | 2.333    5.91 |  3.33    2.91
     0.417    3.68 | 1.417   38.72 | 2.417    5.03 |  3.42    2.69
     0.500    3.68 | 1.500   38.72 | 2.500    5.03 |  3.50    2.69
     0.583    4.70 | 1.583   19.11 | 2.583    4.38 |  3.58    2.50
     0.667    4.70 | 1.667   19.11 | 2.667    4.38 |  3.67    2.50
     0.750    6.52 | 1.750   12.38 | 2.750    3.89 |  3.75    2.34
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 118.36 | 34.84 | |
| over (min) | 5.00 | 15.00 | |
| Storage Coeff. (min)= | 2.29 (ii) | 13.05 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak (cms)= | 0.30 | 0.08 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.15 | 0.03 | 0.162 (iii) |
| TIME TO PEAK (hrs)= | 1.33 | 1.50 | 1.33 |
| RUNOFF VOLUME (mm)= | 49.58 | 11.77 | 25.00 |
| TOTAL RAINFALL (mm)= | 50.58 | 50.58 | 50.58 |
| RUNOFF COEFFICIENT = | 0.98 | 0.23 | 0.49 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | |
|---|---|---|---|
| STANDHYD ( 0322) | Area (ha)= | 0.25 | |
| ID= 1 DT= 5.0 min | Total Imp(%)= | 64.00 | Dir. Conn.(%)= 35.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.59 | 1.083 | 28.90 | 2.083 | 7.16 | 3.08 | 3.17 |
| 0.167 | 2.59 | 1.167 | 28.90 | 2.167 | 7.16 | 3.17 | 3.17 |
| 0.250 | 3.04 | 1.250 | 118.36 | 2.250 | 5.91 | 3.25 | 2.91 |
| 0.333 | 3.04 | 1.333 | 118.36 | 2.333 | 5.91 | 3.33 | 2.91 |
| 0.417 | 3.68 | 1.417 | 38.72 | 2.417 | 5.03 | 3.42 | 2.69 |
| 0.500 | 3.68 | 1.500 | 38.72 | 2.500 | 5.03 | 3.50 | 2.69 |
| 0.583 | 4.70 | 1.583 | 19.11 | 2.583 | 4.38 | 3.58 | 2.50 |
| 0.667 | 4.70 | 1.667 | 19.11 | 2.667 | 4.38 | 3.67 | 2.50 |
| 0.750 | 6.52 | 1.750 | 12.38 | 2.750 | 3.89 | 3.75 | 2.34 |
| 0.833 | 6.52 | 1.833 | 12.38 | 2.833 | 3.89 | 3.83 | 2.34 |
| 0.917 | 10.72 | 1.917 | 9.08 | 2.917 | 3.49 | 3.92 | 2.20 |
| 1.000 | 10.72 | 2.000 | 9.08 | 3.000 | 3.49 | 4.00 | 2.20 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 118.36 | 34.84 | |
| over (min) | 5.00 | 15.00 | |
| Storage Coeff. (min)= | 1.40 (ii) | 12.16 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak (cms)= | 0.33 | 0.09 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.03 | 0.01 | 0.032 (iii) |
| TIME TO PEAK (hrs)= | 1.33 | 1.50 | 1.33 |
| RUNOFF VOLUME (mm)= | 49.58 | 11.77 | 24.97 |
| TOTAL RAINFALL (mm)= | 50.58 | 50.58 | 50.58 |
| RUNOFF COEFFICIENT = | 0.98 | 0.23 | 0.49 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0806) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0322): | 0.25 | 0.032 | 1.33 | 24.97 |
| + ID2= 2 ( 0323): | 1.30 | 0.162 | 1.33 | 25.00 |
| ID = 3 ( 0806): | 1.55 | 0.194 | 1.33 | 24.99 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0806) | | | | |
|---|---|---|---|---|
| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 3 ( 0806): | 1.55 | 0.194 | 1.33 | 24.99 |
| + ID2= 2 ( 0004): | 49.02 | 0.113 | 4.17 | 21.85 |
| ID = 1 ( 0806): | 50.57 | 0.255 | 1.33 | 21.94 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0806):    50.57   0.255     1.33    21.94
      + ID2= 2 (  0810):   123.69   1.129     3.08    12.74
        ====================================================
        ID = 3 (  0811):   174.26   1.249     3.08    15.41

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\925fb
baa-7380-45ae-8662-ced4d4c09af9\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\925fb
baa-7380-45ae-8662-ced4d4c09af9\scen


DATE: 07/10/2025                          TIME: 02:08:04

USER:
```

COMMENTS: _____

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----------------------
  ***********************************************
  ** SIMULATION : E - 25yr 4hr 10min Chicago    **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A=1676.200
| Ptotal= 59.07 mm |                          B=   8.300
--------------------                          C=   0.858
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    2.95 |  1.00   34.10 |  2.00    8.31 |  3.00    3.63
                0.17    3.47 |  1.17  138.40 |  2.17    6.83 |  3.17    3.32
                0.33    4.22 |  1.33   45.75 |  2.33    5.80 |  3.33    3.07
                0.50    5.41 |  1.50   22.49 |  2.50    5.04 |  3.50    2.85
                0.67    7.56 |  1.67   14.49 |  2.67    4.46 |  3.67    2.66
                0.83   12.52 |  1.83   10.58 |  2.83    4.00 |  3.83    2.50


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    2.95 | 1.083   34.10 | 2.083    8.31 |  3.08    3.63
               0.167    2.95 | 1.167   34.10 | 2.167    8.31 |  3.17    3.63
               0.250    3.47 | 1.250  138.40 | 2.250    6.83 |  3.25    3.32
               0.333    3.47 | 1.333  138.40 | 2.333    6.83 |  3.33    3.32
               0.417    4.22 | 1.417   45.75 | 2.417    5.80 |  3.42    3.07
               0.500    4.22 | 1.500   45.75 | 2.500    5.80 |  3.50    3.07
               0.583    5.41 | 1.583   22.49 | 2.583    5.04 |  3.58    2.85
               0.667    5.41 | 1.667   22.49 | 2.667    5.04 |  3.67    2.85
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 1.269 (i)
TIME TO PEAK (hrs)= 3.500
RUNOFF VOLUME (mm)= 20.057
TOTAL RAINFALL (mm)= 59.070
RUNOFF COEFFICIENT = 0.340

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0304) | Area (ha)= | 7.94 | Curve Number (CN)= | 53.7 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.51 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |
| 0.583 | 5.41 | 1.583 | 22.49 | 2.583 | 5.04 | 3.58 | 2.85 |
| 0.667 | 5.41 | 1.667 | 22.49 | 2.667 | 5.04 | 3.67 | 2.85 |
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.134 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 9.743
TOTAL RAINFALL (mm)= 59.070
RUNOFF COEFFICIENT = 0.165

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD (0807) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 (0303): | 85.82 | 1.269 | 3.50 | 20.06 |
| | + ID2= 2 (0304): | 7.94 | 0.134 | 2.00 | 9.74 |
| | ID = 3 (0807): | 93.76 | 1.308 | 3.42 | 19.18 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0305) | Area (ha)= | 7.76 | Curve Number (CN)= | 62.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.76 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |
| 0.583 | 5.41 | 1.583 | 22.49 | 2.583 | 5.04 | 3.58 | 2.85 |
| 0.667 | 5.41 | 1.667 | 22.49 | 2.667 | 5.04 | 3.67 | 2.85 |
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 13.397
TOTAL RAINFALL (mm)= 59.070
RUNOFF COEFFICIENT = 0.227

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0808)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0305):     7.76   0.139     2.25    13.40
     + ID2= 2 (  0807):    93.76   1.308     3.42    19.18
       ================================================
       ID = 3 (  0808):   101.52   1.385     3.33    18.74

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0306)|   Area    (ha)=   6.99   Curve Number   (CN)= 54.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.66

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |    hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    2.95 | 1.083   34.10 | 2.083    8.31 |  3.08    3.63
               0.167    2.95 | 1.167   34.10 | 2.167    8.31 |  3.17    3.63
               0.250    3.47 | 1.250  138.40 | 2.250    6.83 |  3.25    3.32
               0.333    3.47 | 1.333  138.40 | 2.333    6.83 |  3.33    3.32
               0.417    4.22 | 1.417   45.75 | 2.417    5.80 |  3.42    3.07
               0.500    4.22 | 1.500   45.75 | 2.500    5.80 |  3.50    3.07
               0.583    5.41 | 1.583   22.49 | 2.583    5.04 |  3.58    2.85
               0.667    5.41 | 1.667   22.49 | 2.667    5.04 |  3.67    2.85
               0.750    7.56 | 1.750   14.49 | 2.750    4.46 |  3.75    2.66
               0.833    7.56 | 1.833   14.49 | 2.833    4.46 |  3.83    2.66
               0.917   12.52 | 1.917   10.58 | 2.917    4.00 |  3.92    2.50
               1.000   12.52 | 2.000   10.58 | 3.000    4.00 |  4.00    2.50

     Unit Hyd Qpeak  (cms)=   0.405

     PEAK FLOW       (cms)=   0.112 (i)
     TIME TO PEAK    (hrs)=   2.167
     RUNOFF VOLUME    (mm)=  10.810
     TOTAL RAINFALL   (mm)=  59.070
     RUNOFF COEFFICIENT   =   0.183

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD  (  0060)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0306):     6.99   0.112     2.17    10.81
     + ID2= 2 (  0808):   101.52   1.385     3.33    18.74
       ================================================
       ID = 3 (  0060):   108.51   1.439     3.25    18.23

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0307)|   Area    (ha)=   2.50   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |    hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    2.95 | 1.083   34.10 | 2.083    8.31 |  3.08    3.63
               0.167    2.95 | 1.167   34.10 | 2.167    8.31 |  3.17    3.63
               0.250    3.47 | 1.250  138.40 | 2.250    6.83 |  3.25    3.32
               0.333    3.47 | 1.333  138.40 | 2.333    6.83 |  3.33    3.32
               0.417    4.22 | 1.417   45.75 | 2.417    5.80 |  3.42    3.07
               0.500    4.22 | 1.500   45.75 | 2.500    5.80 |  3.50    3.07
               0.583    5.41 | 1.583   22.49 | 2.583    5.04 |  3.58    2.85
               0.667    5.41 | 1.667   22.49 | 2.667    5.04 |  3.67    2.85
               0.750    7.56 | 1.750   14.49 | 2.750    4.46 |  3.75    2.66
               0.833    7.56 | 1.833   14.49 | 2.833    4.46 |  3.83    2.66
               0.917   12.52 | 1.917   10.58 | 2.917    4.00 |  3.92    2.50
               1.000   12.52 | 2.000   10.58 | 3.000    4.00 |  4.00    2.50

     Unit Hyd Qpeak  (cms)=   0.245

     PEAK FLOW       (cms)=   0.048 (i)
     TIME TO PEAK    (hrs)=   1.750
     RUNOFF VOLUME    (mm)=   9.179
     TOTAL RAINFALL   (mm)=  59.070
     RUNOFF COEFFICIENT   =   0.155

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
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| | (ha) | (cms) | (hrs) | (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0307): | 2.50 | 0.048 | 1.75 | 9.18 |
| + ID2= 2 ( 0060): | 108.51 | 1.439 | 3.25 | 18.23 |
| ID = 3 ( 0809): | 111.01 | 1.450 | 3.17 | 18.03 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0308) | Area (ha)= 5.22 | Curve Number (CN)= 49.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.52 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |
| 0.583 | 5.41 | 1.583 | 22.49 | 2.583 | 5.04 | 3.58 | 2.85 |
| 0.667 | 5.41 | 1.667 | 22.49 | 2.667 | 5.04 | 3.67 | 2.85 |
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.083 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 9.180
TOTAL RAINFALL (mm)= 59.070
RUNOFF COEFFICIENT = 0.155

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0061) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0308): | 5.22 | 0.083 | 2.00 | 9.18 |
| + ID2= 2 ( 0809): | 111.01 | 1.450 | 3.17 | 18.03 |
| ID = 3 ( 0061): | 116.23 | 1.480 | 3.17 | 17.63 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0309) | Area (ha)= 7.46 | Curve Number (CN)= 51.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |
| 0.583 | 5.41 | 1.583 | 22.49 | 2.583 | 5.04 | 3.58 | 2.85 |
| 0.667 | 5.41 | 1.667 | 22.49 | 2.667 | 5.04 | 3.67 | 2.85 |
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.117 (i)
TIME TO PEAK (hrs)= 2.083
RUNOFF VOLUME (mm)= 9.807
TOTAL RAINFALL (mm)= 59.070
RUNOFF COEFFICIENT = 0.166

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0309): | 7.46 | 0.117 | 2.08 | 9.81 |
| + ID2= 2 ( 0061): | 116.23 | 1.480 | 3.17 | 17.63 |

ID = 3 ( 0810): 123.69 1.535 3.00 17.16

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0302) | Area (ha)= | 5.52 | Curve Number (CN)= | 60.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 8.05 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.42 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |
| 0.583 | 5.41 | 1.583 | 22.49 | 2.583 | 5.04 | 3.58 | 2.85 |
| 0.667 | 5.41 | 1.667 | 22.49 | 2.667 | 5.04 | 3.67 | 2.85 |
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.131 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 11.926
TOTAL RAINFALL (mm)= 59.070
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0301) | Area (ha)= | 5.30 | Curve Number (CN)= | 68.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.00 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.33 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |
| 0.583 | 5.41 | 1.583 | 22.49 | 2.583 | 5.04 | 3.58 | 2.85 |
| 0.667 | 5.41 | 1.667 | 22.49 | 2.667 | 5.04 | 3.67 | 2.85 |
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.197 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 15.796
TOTAL RAINFALL (mm)= 59.070
RUNOFF COEFFICIENT = 0.267

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| STANDHYD ( 0201) | Area (ha)= | 38.20 | | | |
| ID= 1 DT= 5.0 min | Total Imp(%)= | 55.00 | Dir. Conn.(%)= | 40.00 | |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.583 | 5.41 | 1.583 | 22.49 | 2.583 | 5.04 | 3.58 | 2.85 |
| 0.667 | 5.41 | 1.667 | 22.49 | 2.667 | 5.04 | 3.67 | 2.85 |
| 0.750 | 7.56 | 1.750 | 14.49 | 2.750 | 4.46 | 3.75 | 2.66 |
| 0.833 | 7.56 | 1.833 | 14.49 | 2.833 | 4.46 | 3.83 | 2.66 |
| 0.917 | 12.52 | 1.917 | 10.58 | 2.917 | 4.00 | 3.92 | 2.50 |
| 1.000 | 12.52 | 2.000 | 10.58 | 3.000 | 4.00 | 4.00 | 2.50 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 138.40 | 26.13 | |
| over (min) | 5.00 | 20.00 | |
| Storage Coeff. (min)= | 5.92 (ii) | 18.00 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 20.00 | |
| Unit Hyd. peak (cms)= | 0.19 | 0.06 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 5.02 | 0.70 | 5.239 (iii) |
| TIME TO PEAK (hrs)= | 1.33 | 1.58 | 1.33 |
| RUNOFF VOLUME (mm)= | 58.07 | 12.07 | 30.47 |
| TOTAL RAINFALL (mm)= | 59.07 | 59.07 | 59.07 |
| RUNOFF COEFFICIENT = | 0.98 | 0.20 | 0.52 |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0805) | | | | | |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | AREA | QPEAK | TPEAK | R.V. |
| | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0201): | | 38.20 | 5.239 | 1.33 | 30.47 |
| + ID2= 2 ( 0301): | | 5.30 | 0.197 | 1.67 | 15.80 |
| ID = 3 ( 0805): | | 43.50 | 5.295 | 1.33 | 28.68 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0805) | | | | | |
|---|---|---|---|---|---|
| 3 + 2 = 1 | | AREA | QPEAK | TPEAK | R.V. |
| | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 3 ( 0805): | | 43.50 | 5.295 | 1.33 | 28.68 |
| + ID2= 2 ( 0302): | | 5.52 | 0.131 | 1.83 | 11.93 |
| ID = 1 ( 0805): | | 49.02 | 5.317 | 1.33 | 26.79 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| RESERVOIR( 0004) | OVERFLOW IS OFF | | | |
|---|---|---|---|---|
| IN= 2---> OUT= 1 | | | | |
| DT= 5.0 min | OUTFLOW (cms) | STORAGE (ha.m.) | OUTFLOW (cms) | STORAGE (ha.m.) |
| | 0.0000 | 0.0000 | 1.3440 | 2.5548 |
| | 0.0590 | 0.2449 | 1.4160 | 2.8868 |
| | 0.0830 | 0.5009 | 1.4850 | 3.2289 |
| | 0.1020 | 0.7662 | 3.6580 | 3.4038 |
| | 0.1180 | 1.0406 | 7.7500 | 3.5812 |
| | 0.1310 | 1.3244 | 13.2420 | 3.7611 |
| | 0.5720 | 1.6176 | 19.9810 | 3.9437 |
| | 1.1850 | 1.9203 | 27.8970 | 4.1289 |
| | 1.2670 | 2.2326 | 0.0000 | 0.0000 |

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| INFLOW : ID= 2 ( 0805) | 49.020 | 5.317 | 1.33 | 26.79 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 0.124 | 4.17 | 26.77 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.34
TIME SHIFT OF PEAK FLOW (min)=170.00
MAXIMUM STORAGE USED (ha.m.)= 1.1785

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| CALIB | | | |
|---|---|---|---|
| STANDHYD ( 0323) | Area (ha)= 1.30 | | |
| ID= 1 DT= 5.0 min | Total Imp(%)= 64.00 | Dir. Conn.(%)= 35.00 | |
| | IMPERVIOUS | PERVIOUS (i) | |
| Surface Area (ha)= | 0.83 | 0.47 | |
| Dep. Storage (mm)= | 1.00 | 5.00 | |
| Average Slope (%)= | 1.00 | 2.00 | |
| Length (m)= | 93.09 | 40.00 | |
| Mannings n = | 0.013 | 0.250 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 2.95 | 1.083 | 34.10 | 2.083 | 8.31 | 3.08 | 3.63 |
| 0.167 | 2.95 | 1.167 | 34.10 | 2.167 | 8.31 | 3.17 | 3.63 |
| 0.250 | 3.47 | 1.250 | 138.40 | 2.250 | 6.83 | 3.25 | 3.32 |
| 0.333 | 3.47 | 1.333 | 138.40 | 2.333 | 6.83 | 3.33 | 3.32 |
| 0.417 | 4.22 | 1.417 | 45.75 | 2.417 | 5.80 | 3.42 | 3.07 |
| 0.500 | 4.22 | 1.500 | 45.75 | 2.500 | 5.80 | 3.50 | 3.07 |

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              0.583    5.41 | 1.583   22.49 | 2.583    5.04 |  3.58    2.85
              0.667    5.41 | 1.667   22.49 | 2.667    5.04 |  3.67    2.85
              0.750    7.56 | 1.750   14.49 | 2.750    4.46 |  3.75    2.66
              0.833    7.56 | 1.833   14.49 | 2.833    4.46 |  3.83    2.66
              0.917   12.52 | 1.917   10.58 | 2.917    4.00 |  3.92    2.50
              1.000   12.52 | 2.000   10.58 | 3.000    4.00 |  4.00    2.50

     Max.Eff.Inten.(mm/hr)=     138.40        56.62
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       2.15 (ii)   11.01 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.31         0.09
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.17         0.05          0.195 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.50           1.33
     RUNOFF VOLUME    (mm)=      58.07        15.64          30.48
     TOTAL RAINFALL   (mm)=      59.07        59.07          59.07
     RUNOFF COEFFICIENT   =       0.98         0.26           0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0322)|   Area    (ha)=   0.25
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      40.82        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    2.95 | 1.083   34.10 | 2.083    8.31 |  3.08    3.63
               0.167    2.95 | 1.167   34.10 | 2.167    8.31 |  3.17    3.63
               0.250    3.47 | 1.250  138.40 | 2.250    6.83 |  3.25    3.32
               0.333    3.47 | 1.333  138.40 | 2.333    6.83 |  3.33    3.32
               0.417    4.22 | 1.417   45.75 | 2.417    5.80 |  3.42    3.07
               0.500    4.22 | 1.500   45.75 | 2.500    5.80 |  3.50    3.07
               0.583    5.41 | 1.583   22.49 | 2.583    5.04 |  3.58    2.85
               0.667    5.41 | 1.667   22.49 | 2.667    5.04 |  3.67    2.85
               0.750    7.56 | 1.750   14.49 | 2.750    4.46 |  3.75    2.66
               0.833    7.56 | 1.833   14.49 | 2.833    4.46 |  3.83    2.66
               0.917   12.52 | 1.917   10.58 | 2.917    4.00 |  3.92    2.50
               1.000   12.52 | 2.000   10.58 | 3.000    4.00 |  4.00    2.50

     Max.Eff.Inten.(mm/hr)=     138.40        56.62
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.31 (ii)   10.17 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.33         0.10
                                                      *TOTALS*
     PEAK FLOW       (cms)=       0.03         0.01          0.038 (iii)
     TIME TO PEAK    (hrs)=       1.33         1.50           1.33
     RUNOFF VOLUME    (mm)=      58.07        15.64          30.46
     TOTAL RAINFALL   (mm)=      59.07        59.07          59.07
     RUNOFF COEFFICIENT   =       0.98         0.26           0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0322):     0.25   0.038     1.33    30.46
     + ID2= 2 (  0323):     1.30   0.195     1.33    30.48
       ================================================
       ID = 3 (  0806):     1.55   0.233     1.33    30.48

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0806):     1.55   0.233     1.33    30.48
     + ID2= 2 (  0004):    49.02   0.124     4.17    26.77
       ================================================
```

```
       ID = 1 (  0806):    50.57   0.300     1.33    26.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0806):    50.57   0.300     1.33    26.89
     + ID2= 2 (  0810):   123.69   1.535     3.00    17.16
       ================================================
       ID = 3 (  0811):   174.26   1.669     3.00    19.98

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
======================


       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\3988c
497-8f52-4d9f-9d0d-cb1f6947cd12\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\3988c
497-8f52-4d9f-9d0d-cb1f6947cd12\scen


DATE: 07/10/2025                          TIME: 02:08:01

USER:

COMMENTS: _____________________________________________________

--------------------------------------------------------------------------------
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  ***********************************************
  ** SIMULATION : F- 50yr 4hr 10min Chicago     **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A=1973.100
| Ptotal= 65.64 mm |                          B=   9.000
--------------------                          C=   0.868
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

      TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
       hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
      0.00    3.16 |  1.00   38.66 |  2.00    9.18 |  3.00    3.91
      0.17    3.73 |  1.17  153.18 |  2.17    7.50 |  3.17    3.57
      0.33    4.57 |  1.33   51.95 |  2.33    6.33 |  3.33    3.28
      0.50    5.90 |  1.50   25.44 |  2.50    5.48 |  3.50    3.04
      0.67    8.33 |  1.67   16.25 |  2.67    4.83 |  3.67    2.84
      0.83   13.99 |  1.83   11.77 |  2.83    4.32 |  3.83    2.66

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
      TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
       hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
     0.083    3.16 | 1.083   38.66 | 2.083    9.18 |  3.08    3.91
     0.167    3.16 | 1.167   38.66 | 2.167    9.18 |  3.17    3.91
     0.250    3.73 | 1.250  153.18 | 2.250    7.50 |  3.25    3.57
     0.333    3.73 | 1.333  153.18 | 2.333    7.50 |  3.33    3.57
     0.417    4.57 | 1.417   51.95 | 2.417    6.33 |  3.42    3.28
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 1.549 (i)
TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 24.297
TOTAL RAINFALL (mm)= 65.642
RUNOFF COEFFICIENT = 0.370

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0304) | Area (ha)= | 7.94 | Curve Number (CN)= | 53.7 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.51 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.169 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 12.103
TOTAL RAINFALL (mm)= 65.642
RUNOFF COEFFICIENT = 0.184

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD (0807) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 (0303): | 85.82 | 1.549 | 3.42 | 24.30 |
| | + ID2= 2 (0304): | 7.94 | 0.169 | 2.00 | 12.10 |
| | ID = 3 (0807): | 93.76 | 1.596 | 3.42 | 23.26 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0305) | Area (ha)= | 7.76 | Curve Number (CN)= | 62.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.76 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.174 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 16.433
TOTAL RAINFALL (mm)= 65.642
RUNOFF COEFFICIENT = 0.250

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0808) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0305): | | 7.76 | 0.174 | 2.25 | 16.43 |
| + ID2= 2 ( 0807): | | 93.76 | 1.596 | 3.42 | 23.26 |
| ID = 3 ( 0808): | | 101.52 | 1.693 | 3.25 | 22.74 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB NASHYD ( 0306) | | | | |
|---|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 6.99 | Curve Number (CN)= | 54.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.66 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 13.275
TOTAL RAINFALL (mm)= 65.642
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0060) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0306): | | 6.99 | 0.139 | 2.17 | 13.27 |
| + ID2= 2 ( 0808): | | 101.52 | 1.693 | 3.25 | 22.74 |
| ID = 3 ( 0060): | | 108.51 | 1.762 | 3.17 | 22.13 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB NASHYD ( 0307) | | | | |
|---|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 2.50 | Curve Number (CN)= | 49.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.39 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

Unit Hyd Qpeak (cms)= 0.245

PEAK FLOW (cms)= 0.060 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 11.313
TOTAL RAINFALL (mm)= 65.642
RUNOFF COEFFICIENT = 0.172

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0307):     2.50   0.060     1.75    11.31
      + ID2= 2 (  0060):   108.51   1.762     3.17    22.13
        ================================================
        ID = 3 (  0809):   111.01   1.775     3.17    21.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0308)|   Area    (ha)=   5.22   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.52

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.16 | 1.083   38.66 | 2.083    9.18 |  3.08    3.91
               0.167    3.16 | 1.167   38.66 | 2.167    9.18 |  3.17    3.91
               0.250    3.73 | 1.250  153.18 | 2.250    7.50 |  3.25    3.57
               0.333    3.73 | 1.333  153.18 | 2.333    7.50 |  3.33    3.57
               0.417    4.57 | 1.417   51.95 | 2.417    6.33 |  3.42    3.28
               0.500    4.57 | 1.500   51.95 | 2.500    6.33 |  3.50    3.28
               0.583    5.90 | 1.583   25.44 | 2.583    5.48 |  3.58    3.04
               0.667    5.90 | 1.667   25.44 | 2.667    5.48 |  3.67    3.04
               0.750    8.33 | 1.750   16.25 | 2.750    4.83 |  3.75    2.84
               0.833    8.33 | 1.833   16.25 | 2.833    4.83 |  3.83    2.84
               0.917   13.99 | 1.917   11.77 | 2.917    4.32 |  3.92    2.66
               1.000   13.99 | 2.000   11.77 | 3.000    4.32 |  4.00    2.66

     Unit Hyd Qpeak  (cms)=   0.383

     PEAK FLOW       (cms)=   0.104 (i)
     TIME TO PEAK    (hrs)=   2.000
     RUNOFF VOLUME    (mm)=  11.314
     TOTAL RAINFALL   (mm)=  65.642
     RUNOFF COEFFICIENT   =   0.172

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0061)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0308):     5.22   0.104     2.00    11.31
      + ID2= 2 (  0809):   111.01   1.775     3.17    21.89
        ================================================
        ID = 3 (  0061):   116.23   1.812     3.08    21.41

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0309)|   Area    (ha)=   7.46   Curve Number   (CN)= 51.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.59

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.16 | 1.083   38.66 | 2.083    9.18 |  3.08    3.91
               0.167    3.16 | 1.167   38.66 | 2.167    9.18 |  3.17    3.91
               0.250    3.73 | 1.250  153.18 | 2.250    7.50 |  3.25    3.57
               0.333    3.73 | 1.333  153.18 | 2.333    7.50 |  3.33    3.57
               0.417    4.57 | 1.417   51.95 | 2.417    6.33 |  3.42    3.28
               0.500    4.57 | 1.500   51.95 | 2.500    6.33 |  3.50    3.28
               0.583    5.90 | 1.583   25.44 | 2.583    5.48 |  3.58    3.04
               0.667    5.90 | 1.667   25.44 | 2.667    5.48 |  3.67    3.04
               0.750    8.33 | 1.750   16.25 | 2.750    4.83 |  3.75    2.84
               0.833    8.33 | 1.833   16.25 | 2.833    4.83 |  3.83    2.84
               0.917   13.99 | 1.917   11.77 | 2.917    4.32 |  3.92    2.66
               1.000   13.99 | 2.000   11.77 | 3.000    4.32 |  4.00    2.66

     Unit Hyd Qpeak  (cms)=   0.483

     PEAK FLOW       (cms)=   0.146 (i)
     TIME TO PEAK    (hrs)=   2.083
     RUNOFF VOLUME    (mm)=  12.069
     TOTAL RAINFALL   (mm)=  65.642
     RUNOFF COEFFICIENT   =   0.184

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0810)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
       ID1= 1 (  0309):     7.46   0.146     2.08    12.07
     + ID2= 2 (  0061):   116.23   1.812     3.08    21.41
       ================================================
       ID = 3 (  0810):   123.69   1.883     3.00    20.85

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0302) | Area (ha)= | 5.52 | Curve Number (CN)= | 60.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 8.05 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.42 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

| | | |
|---|---|---|
| Unit Hyd Qpeak (cms)= | | 0.502 |
| PEAK FLOW (cms)= | | 0.165 (i) |
| TIME TO PEAK (hrs)= | | 1.833 |
| RUNOFF VOLUME (mm)= | | 14.752 |
| TOTAL RAINFALL (mm)= | | 65.642 |
| RUNOFF COEFFICIENT = | | 0.225 |

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0301) | Area (ha)= | 5.30 | Curve Number (CN)= | 68.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.00 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.33 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

| | | |
|---|---|---|
| Unit Hyd Qpeak (cms)= | | 0.613 |
| PEAK FLOW (cms)= | | 0.246 (i) |
| TIME TO PEAK (hrs)= | | 1.667 |
| RUNOFF VOLUME (mm)= | | 19.296 |
| TOTAL RAINFALL (mm)= | | 65.642 |
| RUNOFF COEFFICIENT = | | 0.294 |

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| STANDHYD ( 0201) | Area (ha)= | 38.20 | | | |
| ID= 1 DT= 5.0 min | Total Imp(%)= | 55.00 | Dir. Conn.(%)= | 40.00 | |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 153.18 | 32.23 | | |
| over (min) | 5.00 | 20.00 | | |
| Storage Coeff. (min)= | 5.69 (ii) | 16.79 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 20.00 | | |
| Unit Hyd. peak (cms)= | 0.20 | 0.06 | | |
| | | | *TOTALS* | |
| PEAK FLOW (cms)= | 5.63 | 0.90 | 5.913 (iii) | |
| TIME TO PEAK (hrs)= | 1.33 | 1.58 | 1.33 | |
| RUNOFF VOLUME (mm)= | 64.64 | 14.72 | 34.69 | |
| TOTAL RAINFALL (mm)= | 65.64 | 65.64 | 65.64 | |
| RUNOFF COEFFICIENT = | 0.98 | 0.22 | 0.53 | |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0805) \| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0201): | 38.20 | 5.913 | 1.33 | 34.69 |
| + ID2= 2 ( 0301): | 5.30 | 0.246 | 1.67 | 19.30 |
| ID = 3 ( 0805): | 43.50 | 5.985 | 1.33 | 32.81 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0805) \| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 3 ( 0805): | 43.50 | 5.985 | 1.33 | 32.81 |
| + ID2= 2 ( 0302): | 5.52 | 0.165 | 1.83 | 14.75 |
| ID = 1 ( 0805): | 49.02 | 6.016 | 1.33 | 30.78 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

RESERVOIR( 0004) \| IN= 2---> OUT= 1 \| DT= 5.0 min

OVERFLOW IS OFF

| OUTFLOW (cms) | STORAGE (ha.m.) | OUTFLOW (cms) | STORAGE (ha.m.) |
|---|---|---|---|
| 0.0000 | 0.0000 | 1.3440 | 2.5548 |
| 0.0590 | 0.2449 | 1.4160 | 2.8868 |
| 0.0830 | 0.5009 | 1.4850 | 3.2289 |
| 0.1020 | 0.7662 | 3.6580 | 3.4038 |
| 0.1180 | 1.0406 | 7.7500 | 3.5812 |
| 0.1310 | 1.3244 | 13.2420 | 3.7611 |
| 0.5720 | 1.6176 | 19.9810 | 3.9437 |
| 1.1850 | 1.9203 | 27.8970 | 4.1289 |
| 1.2670 | 2.2326 | 0.0000 | 0.0000 |

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| INFLOW : ID= 2 ( 0805) | 49.020 | 6.016 | 1.33 | 30.78 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 0.179 | 4.08 | 30.76 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 2.97
TIME SHIFT OF PEAK FLOW (min)=165.00
MAXIMUM STORAGE USED (ha.m.)= 1.3562

---

CALIB \| STANDHYD ( 0323) \| ID= 1 DT= 5.0 min

Area (ha)= 1.30
Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.83 | 0.47 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 93.09 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 153.18 | 68.94 | | |
| over (min) | 5.00 | 15.00 | | |
| Storage Coeff. (min)= | 2.06 (ii) | 10.25 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | | |
| Unit Hyd. peak (cms)= | 0.31 | 0.09 | | |
| | | | *TOTALS* | |
| PEAK FLOW (cms)= | 0.19 | 0.06 | 0.220 (iii) | |
| TIME TO PEAK (hrs)= | 1.33 | 1.50 | 1.33 | |
| RUNOFF VOLUME (mm)= | 64.64 | 18.89 | 34.90 | |
| TOTAL RAINFALL (mm)= | 65.64 | 65.64 | 65.64 | |
| RUNOFF COEFFICIENT = | 0.98 | 0.29 | 0.53 | |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB |
|---|
| STANDHYD ( 0322) |
| ID= 1 DT= 5.0 min |

Area (ha)= 0.25
Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.16 | 1.083 | 38.66 | 2.083 | 9.18 | 3.08 | 3.91 |
| 0.167 | 3.16 | 1.167 | 38.66 | 2.167 | 9.18 | 3.17 | 3.91 |
| 0.250 | 3.73 | 1.250 | 153.18 | 2.250 | 7.50 | 3.25 | 3.57 |
| 0.333 | 3.73 | 1.333 | 153.18 | 2.333 | 7.50 | 3.33 | 3.57 |
| 0.417 | 4.57 | 1.417 | 51.95 | 2.417 | 6.33 | 3.42 | 3.28 |
| 0.500 | 4.57 | 1.500 | 51.95 | 2.500 | 6.33 | 3.50 | 3.28 |
| 0.583 | 5.90 | 1.583 | 25.44 | 2.583 | 5.48 | 3.58 | 3.04 |
| 0.667 | 5.90 | 1.667 | 25.44 | 2.667 | 5.48 | 3.67 | 3.04 |
| 0.750 | 8.33 | 1.750 | 16.25 | 2.750 | 4.83 | 3.75 | 2.84 |
| 0.833 | 8.33 | 1.833 | 16.25 | 2.833 | 4.83 | 3.83 | 2.84 |
| 0.917 | 13.99 | 1.917 | 11.77 | 2.917 | 4.32 | 3.92 | 2.66 |
| 1.000 | 13.99 | 2.000 | 11.77 | 3.000 | 4.32 | 4.00 | 2.66 |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 153.18 | 68.94 | | |
| over (min) | 5.00 | 10.00 | | |
| Storage Coeff. (min)= | 1.26 (ii) | 9.45 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 10.00 | | |
| Unit Hyd. peak (cms)= | 0.33 | 0.12 | | |
| | | | *TOTALS* | |
| PEAK FLOW (cms)= | 0.04 | 0.01 | 0.046 (iii) | |
| TIME TO PEAK (hrs)= | 1.33 | 1.42 | 1.33 | |
| RUNOFF VOLUME (mm)= | 64.64 | 18.89 | 34.88 | |
| TOTAL RAINFALL (mm)= | 65.64 | 65.64 | 65.64 | |
| RUNOFF COEFFICIENT = | 0.98 | 0.29 | 0.53 | |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0806) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0322): | 0.25 | 0.046 | 1.33 | 34.88 |
| + ID2= 2 ( 0323): | 1.30 | 0.220 | 1.33 | 34.90 |
| ID = 3 ( 0806): | 1.55 | 0.266 | 1.33 | 34.89 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0806) | | | | |
|---|---|---|---|---|
| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |

```
        ID1= 3 (  0806):     1.55   0.266     1.33    34.89
      + ID2= 2 (  0004):    49.02   0.179     4.08    30.76
        ================================================
        ID = 1 (  0806):    50.57   0.337     1.33    30.89

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0806):    50.57   0.337     1.33    30.89
      + ID2= 2 (  0810):   123.69   1.883     3.00    20.85
        ================================================
        ID = 3 (  0811):   174.26   2.026     3.00    23.76

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
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       V    V   I    SSSSS  U   U    A    L              (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\8afbb
25d-4ca9-4d2a-9694-4afc21fe2040\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\8afbb
25d-4ca9-4d2a-9694-4afc21fe2040\scen

DATE: 07/10/2025                          TIME: 02:08:03

USER:


COMMENTS: _____________________________________________________________

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  ***********************************************
  ** SIMULATION : G - 100yr 4hr 10min Chicago   **
  ***********************************************

--------------------
| CHICAGO STORM    |    IDF curve parameters: A=2193.100
| Ptotal= 71.75 mm |                          B=   9.040
--------------------                          C=   0.871
                       used in:   INTENSITY =  A / (t + B)^C

                       Duration of storm  =  4.00 hrs
                       Storm time step    = 10.00 min
                       Time to peak ratio =  0.33

               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.00    3.40 |  1.00   42.35 |  2.00    9.96 |  3.00    4.21
               0.17    4.02 |  1.17  168.45 |  2.17    8.12 |  3.17    3.84
               0.33    4.93 |  1.33   56.97 |  2.33    6.85 |  3.33    3.53
               0.50    6.38 |  1.50   27.80 |  2.50    5.92 |  3.50    3.27
               0.67    9.03 |  1.67   17.71 |  2.67    5.21 |  3.67    3.05
               0.83   15.23 |  1.83   12.80 |  2.83    4.66 |  3.83    2.85


--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
               TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
              0.083    3.40 | 1.083   42.35 | 2.083    9.96 |  3.08    4.21
              0.167    3.40 | 1.167   42.35 | 2.167    9.96 |  3.17    4.21
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 1.820 (i)
TIME TO PEAK (hrs)= 3.417
RUNOFF VOLUME (mm)= 28.429
TOTAL RAINFALL (mm)= 71.753
RUNOFF COEFFICIENT = 0.396

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB NASHYD (0304) ID= 1 DT= 5.0 min | Area (ha)= 7.94 | Curve Number (CN)= 53.7 |
|---|---|---|
| | Ia (mm)= 7.75 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.51 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.205 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 14.474
TOTAL RAINFALL (mm)= 71.753
RUNOFF COEFFICIENT = 0.202

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD (0807) 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0303): | 85.82 | 1.820 | 3.42 | 28.43 |
| + ID2= 2 ( 0304): | 7.94 | 0.205 | 1.92 | 14.47 |
| ID = 3 ( 0807): | 93.76 | 1.876 | 3.33 | 27.25 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD (0305) ID= 1 DT= 5.0 min | Area (ha)= 7.76 | Curve Number (CN)= 62.3 |
|---|---|---|
| | Ia (mm)= 6.50 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.76 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.207 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 19.446

TOTAL RAINFALL (mm)= 71.753
RUNOFF COEFFICIENT = 0.271

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0808) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0305): | 7.76 | 0.207 | 2.25 | 19.45 |
| | + ID2= 2 ( 0807): | 93.76 | 1.876 | 3.33 | 27.25 |
| | ID = 3 ( 0808): | 101.52 | 1.992 | 3.25 | 26.65 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0306) \| ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area | (ha)= 6.99 | Curve Number | (CN)= 54.0 |
| | Ia | (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= | 0.66 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.166 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 15.738
TOTAL RAINFALL (mm)= 71.753
RUNOFF COEFFICIENT = 0.219

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0060) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0306): | 6.99 | 0.166 | 2.17 | 15.74 |
| | + ID2= 2 ( 0808): | 101.52 | 1.992 | 3.25 | 26.65 |
| | ID = 3 ( 0060): | 108.51 | 2.074 | 3.17 | 25.95 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0307) \| ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area | (ha)= 2.50 | Curve Number | (CN)= 49.0 |
| | Ia | (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= | 0.39 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

Unit Hyd Qpeak (cms)= 0.245

PEAK FLOW (cms)= 0.072 (i)
TIME TO PEAK (hrs)= 1.750
RUNOFF VOLUME (mm)= 13.455
TOTAL RAINFALL (mm)= 71.753
RUNOFF COEFFICIENT = 0.188

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| ADD HYD (0809) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0307): | | 2.50 | 0.072 | 1.75 | 13.46 |
| + ID2= 2 ( 0060): | | 108.51 | 2.074 | 3.17 | 25.95 |
| ID = 3 ( 0809): | | 111.01 | 2.090 | 3.17 | 25.67 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB | | | | |
|---|---|---|---|---|
| NASHYD (0308) | Area (ha)= | 5.22 | Curve Number (CN)= | 49.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.52 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

| ---- TRANSFORMED HYETOGRAPH ---- | | | | | | | |
|---|---|---|---|---|---|---|---|
| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.125 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 13.457
TOTAL RAINFALL (mm)= 71.753
RUNOFF COEFFICIENT = 0.188

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| ADD HYD (0061) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0308): | | 5.22 | 0.125 | 1.92 | 13.46 |
| + ID2= 2 ( 0809): | | 111.01 | 2.090 | 3.17 | 25.67 |
| ID = 3 ( 0061): | | 116.23 | 2.136 | 3.08 | 25.12 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

| CALIB | | | | |
|---|---|---|---|---|
| NASHYD (0309) | Area (ha)= | 7.46 | Curve Number (CN)= | 51.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

| ---- TRANSFORMED HYETOGRAPH ---- | | | | | | | |
|---|---|---|---|---|---|---|---|
| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.174 (i)
TIME TO PEAK (hrs)= 2.083
RUNOFF VOLUME (mm)= 14.337
TOTAL RAINFALL (mm)= 71.753
RUNOFF COEFFICIENT = 0.200

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

```
| ADD HYD  (  0810)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0309):     7.46   0.174     2.08    14.34
     + ID2= 2 (  0061):   116.23   2.136     3.08    25.12
       ================================================
       ID = 3 (  0810):   123.69   2.221     2.92    24.47

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0302)|   Area    (ha)=   5.52   Curve Number   (CN)= 60.3
|ID= 1 DT= 5.0 min |   Ia      (mm)=   8.05   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.42

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.40 | 1.083   42.35 | 2.083    9.96 |  3.08    4.21
               0.167    3.40 | 1.167   42.35 | 2.167    9.96 |  3.17    4.21
               0.250    4.02 | 1.250  168.45 | 2.250    8.12 |  3.25    3.84
               0.333    4.02 | 1.333  168.45 | 2.333    8.12 |  3.33    3.84
               0.417    4.93 | 1.417   56.97 | 2.417    6.85 |  3.42    3.53
               0.500    4.93 | 1.500   56.97 | 2.500    6.85 |  3.50    3.53
               0.583    6.38 | 1.583   27.80 | 2.583    5.92 |  3.58    3.27
               0.667    6.38 | 1.667   27.80 | 2.667    5.92 |  3.67    3.27
               0.750    9.03 | 1.750   17.71 | 2.750    5.21 |  3.75    3.05
               0.833    9.03 | 1.833   17.71 | 2.833    5.21 |  3.83    3.05
               0.917   15.23 | 1.917   12.80 | 2.917    4.66 |  3.92    2.85
               1.000   15.23 | 2.000   12.80 | 3.000    4.66 |  4.00    2.85

     Unit Hyd Qpeak  (cms)=   0.502

     PEAK FLOW       (cms)=   0.199 (i)
     TIME TO PEAK    (hrs)=   1.833
     RUNOFF VOLUME    (mm)=  17.571
     TOTAL RAINFALL   (mm)=  71.753
     RUNOFF COEFFICIENT   =   0.245

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0301)|   Area    (ha)=   5.30   Curve Number   (CN)= 68.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.33

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    3.40 | 1.083   42.35 | 2.083    9.96 |  3.08    4.21
               0.167    3.40 | 1.167   42.35 | 2.167    9.96 |  3.17    4.21
               0.250    4.02 | 1.250  168.45 | 2.250    8.12 |  3.25    3.84
               0.333    4.02 | 1.333  168.45 | 2.333    8.12 |  3.33    3.84
               0.417    4.93 | 1.417   56.97 | 2.417    6.85 |  3.42    3.53
               0.500    4.93 | 1.500   56.97 | 2.500    6.85 |  3.50    3.53
               0.583    6.38 | 1.583   27.80 | 2.583    5.92 |  3.58    3.27
               0.667    6.38 | 1.667   27.80 | 2.667    5.92 |  3.67    3.27
               0.750    9.03 | 1.750   17.71 | 2.750    5.21 |  3.75    3.05
               0.833    9.03 | 1.833   17.71 | 2.833    5.21 |  3.83    3.05
               0.917   15.23 | 1.917   12.80 | 2.917    4.66 |  3.92    2.85
               1.000   15.23 | 2.000   12.80 | 3.000    4.66 |  4.00    2.85

     Unit Hyd Qpeak  (cms)=   0.613

     PEAK FLOW       (cms)=   0.295 (i)
     TIME TO PEAK    (hrs)=   1.667
     RUNOFF VOLUME    (mm)=  22.747
     TOTAL RAINFALL   (mm)=  71.753
     RUNOFF COEFFICIENT   =   0.317

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------
--------------------
| CALIB            |
| STANDHYD (  0201)|   Area    (ha)=  38.20
|ID= 1 DT= 5.0 min |   Total Imp(%)=  55.00   Dir. Conn.(%)=  40.00
--------------------

                             IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=      21.01         17.19
     Dep. Storage     (mm)=       1.00          5.00
     Average Slope     (%)=       1.00          2.00
     Length            (m)=     504.65         40.00
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
```

```
              0.083    3.40 | 1.083   42.35 | 2.083    9.96 |  3.08    4.21
              0.167    3.40 | 1.167   42.35 | 2.167    9.96 |  3.17    4.21
              0.250    4.02 | 1.250  168.45 | 2.250    8.12 |  3.25    3.84
              0.333    4.02 | 1.333  168.45 | 2.333    8.12 |  3.33    3.84
              0.417    4.93 | 1.417   56.97 | 2.417    6.85 |  3.42    3.53
              0.500    4.93 | 1.500   56.97 | 2.500    6.85 |  3.50    3.53
              0.583    6.38 | 1.583   27.80 | 2.583    5.92 |  3.58    3.27
              0.667    6.38 | 1.667   27.80 | 2.667    5.92 |  3.67    3.27
              0.750    9.03 | 1.750   17.71 | 2.750    5.21 |  3.75    3.05
              0.833    9.03 | 1.833   17.71 | 2.833    5.21 |  3.83    3.05
              0.917   15.23 | 1.917   12.80 | 2.917    4.66 |  3.92    2.85
              1.000   15.23 | 2.000   12.80 | 3.000    4.66 |  4.00    2.85

    Max.Eff.Inten.(mm/hr)=     168.45        45.99
              over (min)         5.00        20.00
    Storage Coeff.  (min)=       5.48 (ii)   15.11 (ii)
    Unit Hyd. Tpeak (min)=       5.00        20.00
    Unit Hyd. peak  (cms)=       0.20         0.07
                                                        *TOTALS*
    PEAK FLOW       (cms)=       6.26         1.13          6.621 (iii)
    TIME TO PEAK    (hrs)=       1.33         1.58           1.33
    RUNOFF VOLUME    (mm)=      70.75        17.37          38.72
    TOTAL RAINFALL   (mm)=      71.75        71.75          71.75
    RUNOFF COEFFICIENT   =       0.99         0.24           0.54


      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  49.0    Ia = Dep. Storage  (Above)
     (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
          THAN THE STORAGE COEFFICIENT.
    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0805)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0201):    38.20   6.621     1.33    38.72
     + ID2= 2 (  0301):     5.30   0.295     1.67    22.75
       ================================================
       ID = 3 (  0805):    43.50   6.710     1.33    36.77

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0805)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0805):    43.50   6.710     1.33    36.77
     + ID2= 2 (  0302):     5.52   0.199     1.83    17.57
       ================================================
       ID = 1 (  0805):    49.02   6.748     1.33    34.61

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
-------------------------------------------------------------------------------

--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                           0.0000      0.0000  |    1.3440      2.5548
                           0.0590      0.2449  |    1.4160      2.8868
                           0.0830      0.5009  |    1.4850      3.2289
                           0.1020      0.7662  |    3.6580      3.4038
                           0.1180      1.0406  |    7.7500      3.5812
                           0.1310      1.3244  |   13.2420      3.7611
                           0.5720      1.6176  |   19.9810      3.9437
                           1.1850      1.9203  |   27.8970      4.1289
                           1.2670      2.2326  |    0.0000      0.0000

                                 AREA     QPEAK     TPEAK       R.V.
                                 (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0805)     49.020      6.748      1.33      34.61
   OUTFLOW: ID= 1 (  0004)     49.020      0.325      3.58      34.59

                PEAK   FLOW   REDUCTION [Qout/Qin](%)=  4.82
                TIME SHIFT OF PEAK FLOW         (min)=135.00
                MAXIMUM  STORAGE   USED       (ha.m.)=  1.4535

-------------------------------------------------------------------------------

--------------------
| CALIB            |
| STANDHYD (  0323)|   Area    (ha)=   1.30
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------

                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.83         0.47
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      93.09        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                              ---- TRANSFORMED HYETOGRAPH ----
          TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
           hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 168.45 | 82.02 | |
| over (min) | 5.00 | 10.00 | |
| Storage Coeff. (min)= | 1.99 (ii) | 9.63 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 10.00 | |
| Unit Hyd. peak (cms)= | 0.31 | 0.11 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.21 | 0.07 | 0.265 (iii) |
| TIME TO PEAK (hrs)= | 1.33 | 1.42 | 1.33 |
| RUNOFF VOLUME (mm)= | 70.75 | 22.09 | 39.12 |
| TOTAL RAINFALL (mm)= | 71.75 | 71.75 | 71.75 |
| RUNOFF COEFFICIENT = | 0.99 | 0.31 | 0.55 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | |
|---|---|---|---|
| STANDHYD ( 0322) | Area (ha)= | 0.25 | |
| ID= 1 DT= 5.0 min | Total Imp(%)= | 64.00 | Dir. Conn.(%)= 35.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 3.40 | 1.083 | 42.35 | 2.083 | 9.96 | 3.08 | 4.21 |
| 0.167 | 3.40 | 1.167 | 42.35 | 2.167 | 9.96 | 3.17 | 4.21 |
| 0.250 | 4.02 | 1.250 | 168.45 | 2.250 | 8.12 | 3.25 | 3.84 |
| 0.333 | 4.02 | 1.333 | 168.45 | 2.333 | 8.12 | 3.33 | 3.84 |
| 0.417 | 4.93 | 1.417 | 56.97 | 2.417 | 6.85 | 3.42 | 3.53 |
| 0.500 | 4.93 | 1.500 | 56.97 | 2.500 | 6.85 | 3.50 | 3.53 |
| 0.583 | 6.38 | 1.583 | 27.80 | 2.583 | 5.92 | 3.58 | 3.27 |
| 0.667 | 6.38 | 1.667 | 27.80 | 2.667 | 5.92 | 3.67 | 3.27 |
| 0.750 | 9.03 | 1.750 | 17.71 | 2.750 | 5.21 | 3.75 | 3.05 |
| 0.833 | 9.03 | 1.833 | 17.71 | 2.833 | 5.21 | 3.83 | 3.05 |
| 0.917 | 15.23 | 1.917 | 12.80 | 2.917 | 4.66 | 3.92 | 2.85 |
| 1.000 | 15.23 | 2.000 | 12.80 | 3.000 | 4.66 | 4.00 | 2.85 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 168.45 | 82.02 | |
| over (min) | 5.00 | 10.00 | |
| Storage Coeff. (min)= | 1.21 (ii) | 8.85 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 10.00 | |
| Unit Hyd. peak (cms)= | 0.33 | 0.12 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.04 | 0.01 | 0.052 (iii) |
| TIME TO PEAK (hrs)= | 1.33 | 1.42 | 1.33 |
| RUNOFF VOLUME (mm)= | 70.75 | 22.09 | 39.11 |
| TOTAL RAINFALL (mm)= | 71.75 | 71.75 | 71.75 |
| RUNOFF COEFFICIENT = | 0.99 | 0.31 | 0.55 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

ADD HYD ( 0806)
1 + 2 = 3

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0322): | 0.25 | 0.052 | 1.33 | 39.11 |
| + ID2= 2 ( 0323): | 1.30 | 0.265 | 1.33 | 39.12 |
| ID = 3 ( 0806): | 1.55 | 0.317 | 1.33 | 39.12 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

```
| ADD HYD  (  0806)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0806):     1.55   0.317     1.33    39.12
      + ID2= 2 (  0004):    49.02   0.325     3.58    34.59
        ================================================
        ID = 1 (  0806):    50.57   0.392     1.33    34.73

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

-------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
-------------------           (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0806):    50.57   0.392     1.33    34.73
      + ID2= 2 (  0810):   123.69   2.221     2.92    24.47
        ================================================
        ID = 3 (  0811):   174.26   2.537     3.08    27.45

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\7347e
e91-edeb-4d99-b1e3-f6a15ed0db20\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\7347e
e91-edeb-4d99-b1e3-f6a15ed0db20\scen


DATE: 07/10/2025                          TIME: 02:08:03

USER:



COMMENTS: _____________________________________________________________


--------------------------------------------------------------------------------
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  ***********************************************
  ** SIMULATION : H - Timmins                  **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\dmartin\AppD
|                  |              ata\Local\Temp\
|                  |              129e2800-35e2-4355-8d2d-35ce722b1427\7875034e
| Ptotal=193.00 mm |    Comments: TIMMINS REGIONAL 12 HOUR DURATION STORM
--------------------
```

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.00 | 15.00 | 3.00 | 3.00 | 6.00 | 43.00 | 9.00 | 13.00 |
| 0.20 | 15.00 | 3.20 | 3.00 | 6.20 | 43.00 | 9.20 | 13.00 |
| 0.40 | 15.00 | 3.40 | 3.00 | 6.40 | 43.00 | 9.40 | 13.00 |
| 0.60 | 15.00 | 3.60 | 3.00 | 6.60 | 43.00 | 9.60 | 13.00 |
| 0.80 | 15.00 | 3.80 | 3.00 | 6.80 | 43.00 | 9.80 | 13.00 |
| 1.00 | 20.00 | 4.00 | 5.00 | 7.00 | 20.00 | 10.00 | 13.00 |
| 1.20 | 20.00 | 4.20 | 5.00 | 7.20 | 20.00 | 10.20 | 13.00 |
| 1.40 | 20.00 | 4.40 | 5.00 | 7.40 | 20.00 | 10.40 | 13.00 |
| 1.60 | 20.00 | 4.60 | 5.00 | 7.60 | 20.00 | 10.60 | 13.00 |
| 1.80 | 20.00 | 4.80 | 5.00 | 7.80 | 20.00 | 10.80 | 13.00 |
| 2.00 | 10.00 | 5.00 | 20.00 | 8.00 | 23.00 | 11.00 | 8.00 |
| 2.20 | 10.00 | 5.20 | 20.00 | 8.20 | 23.00 | 11.20 | 8.00 |
| 2.40 | 10.00 | 5.40 | 20.00 | 8.40 | 23.00 | 11.40 | 8.00 |
| 2.60 | 10.00 | 5.60 | 20.00 | 8.60 | 23.00 | 11.60 | 8.00 |
| 2.80 | 10.00 | 5.80 | 20.00 | 8.80 | 23.00 | 11.80 | 8.00 |

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--------------------------------------------------------------------------------

--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                              ---- TRANSFORMED HYETOGRAPH ----
```

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 4.521 (i)
TIME TO PEAK (hrs)= 9.417
RUNOFF VOLUME (mm)= 129.207
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.669

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0304) | Area (ha)= | 7.94 | Curve Number (CN)= | 53.7 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.51 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.411 (i)
TIME TO PEAK (hrs)= 7.167
RUNOFF VOLUME (mm)= 84.888
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.440

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0807) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0303): | 85.82 | 4.521 | 9.42 | 129.21 |
| + ID2= 2 ( 0304): | 7.94 | 0.411 | 7.17 | 84.89 |

```
       ================================================
       ID = 3 (  0807):    93.76   4.810     9.33   125.45

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0305)|   Area    (ha)=   7.76   Curve Number   (CN)= 62.3
|ID= 1 DT= 5.0 min |   Ia      (mm)=   6.50   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.76

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

```
     Unit Hyd Qpeak  (cms)=   0.390

     PEAK FLOW       (cms)=   0.423 (i)
     TIME TO PEAK    (hrs)=   7.500
     RUNOFF VOLUME    (mm)= 102.238
     TOTAL RAINFALL   (mm)= 193.000
     RUNOFF COEFFICIENT   =   0.530

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0808)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0305):     7.76   0.423     7.50   102.24
     + ID2= 2 (  0807):    93.76   4.810     9.33   125.45
       ================================================
       ID = 3 (  0808):   101.52   5.155     9.25   123.68

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0306)|   Area    (ha)=   6.99   Curve Number   (CN)= 54.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.66

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.338 (i)
TIME TO PEAK (hrs)= 7.333
RUNOFF VOLUME (mm)= 87.403
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.453

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0060) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0306): | | 6.99 | 0.338 | 7.33 | 87.40 |
| + ID2= 2 ( 0808): | | 101.52 | 5.155 | 9.25 | 123.68 |
| ID = 3 ( 0060): | | 108.51 | 5.424 | 9.25 | 121.34 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0307) | Area (ha)= | 2.50 | Curve Number (CN)= | 49.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.39 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME | RAIN | TIME | RAIN | TIME | RAIN | TIME | RAIN |
|---|---|---|---|---|---|---|---|
| hrs | mm/hr | hrs | mm/hr | hrs | mm/hr | hrs | mm/hr |
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

Unit Hyd Qpeak (cms)= 0.245

```
     PEAK FLOW       (cms)=   0.127 (i)
     TIME TO PEAK    (hrs)=   7.083
     RUNOFF VOLUME    (mm)=  78.120
     TOTAL RAINFALL   (mm)= 193.000
     RUNOFF COEFFICIENT   =   0.405

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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--------------------
| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0307):     2.50   0.127     7.08    78.12
     + ID2= 2 (  0060):   108.51   5.424     9.25   121.34
       ================================================
       ID = 3 (  0809):   111.01   5.510     9.25   120.37

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0308)|   Area    (ha)=   5.22   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.52

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

```
     Unit Hyd Qpeak  (cms)=   0.383

     PEAK FLOW       (cms)=   0.244 (i)
     TIME TO PEAK    (hrs)=   7.250
     RUNOFF VOLUME    (mm)=  78.127
     TOTAL RAINFALL   (mm)= 193.000
     RUNOFF COEFFICIENT   =   0.405

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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--------------------
| ADD HYD  (  0061)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0308):     5.22   0.244     7.25    78.13
     + ID2= 2 (  0809):   111.01   5.510     9.25   120.37
       ================================================
       ID = 3 (  0061):   116.23   5.695     9.17   118.47

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB            |
| NASHYD   (  0309)|   Area    (ha)=   7.46   Curve Number   (CN)= 51.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.59

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.350 (i)
TIME TO PEAK (hrs)= 7.250
RUNOFF VOLUME (mm)= 81.805
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.424

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0309): | 7.46 | 0.350 | 7.25 | 81.80 |
| | + ID2= 2 ( 0061): | 116.23 | 5.695 | 9.17 | 118.47 |
| | ID = 3 ( 0810): | 123.69 | 5.969 | 9.17 | 116.26 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0302) | Area (ha)= 5.52 | Curve Number (CN)= 60.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 8.05 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.42 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.350 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 97.118
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.503

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0301) | Area | (ha)= | 5.30 | Curve Number (CN)= | 68.0 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 7.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.33 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.415 (i)
TIME TO PEAK (hrs)= 7.083
RUNOFF VOLUME (mm)= 113.203
TOTAL RAINFALL (mm)= 193.000
RUNOFF COEFFICIENT = 0.587

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| STANDHYD ( 0201) | Area | (ha)= | 38.20 | | |
| ID= 1 DT= 5.0 min | Total Imp(%)= | | 55.00 | Dir. Conn.(%)= | 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 43.00 | 33.12 | | |
| over (min) | 10.00 | 25.00 | | |
| Storage Coeff. (min)= | 9.46 (ii) | 20.44 (ii) | | |
| Unit Hyd. Tpeak (min)= | 10.00 | 25.00 | | |
| Unit Hyd. peak (cms)= | 0.12 | 0.05 | | |
| | | | *TOTALS* | |
| PEAK FLOW (cms)= | 1.82 | 1.39 | 3.195 (iii) | |
| TIME TO PEAK (hrs)= | 7.00 | 7.08 | 7.00 | |
| RUNOFF VOLUME (mm)= | 192.00 | 92.42 | 132.25 | |
| TOTAL RAINFALL (mm)= | 193.00 | 193.00 | 193.00 | |
| RUNOFF COEFFICIENT = | 0.99 | 0.48 | 0.69 | |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0805) \| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0201): | 38.20 | 3.195 | 7.00 | 132.25 |
| + ID2= 2 ( 0301): | 5.30 | 0.415 | 7.08 | 113.20 |
| ID = 3 ( 0805): | 43.50 | 3.610 | 7.00 | 129.93 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0805) \| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 3 ( 0805): | 43.50 | 3.610 | 7.00 | 129.93 |
| + ID2= 2 ( 0302): | 5.52 | 0.350 | 7.08 | 97.12 |
| ID = 1 ( 0805): | 49.02 | 3.953 | 7.00 | 126.24 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

RESERVOIR( 0004) \| IN= 2---> OUT= 1 \| DT= 5.0 min — OVERFLOW IS OFF

| OUTFLOW (cms) | STORAGE (ha.m.) | OUTFLOW (cms) | STORAGE (ha.m.) |
|---|---|---|---|
| 0.0000 | 0.0000 | 1.3440 | 2.5548 |
| 0.0590 | 0.2449 | 1.4160 | 2.8868 |
| 0.0830 | 0.5009 | 1.4850 | 3.2289 |
| 0.1020 | 0.7662 | 3.6580 | 3.4038 |
| 0.1180 | 1.0406 | 7.7500 | 3.5812 |
| 0.1310 | 1.3244 | 13.2420 | 3.7611 |
| 0.5720 | 1.6176 | 19.9810 | 3.9437 |
| 1.1850 | 1.9203 | 27.8970 | 4.1289 |
| 1.2670 | 2.2326 | 0.0000 | 0.0000 |

| AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|

| | (ha) | (cms) | (hrs) | (mm) |
|---|---|---|---|---|
| INFLOW : ID= 2 ( 0805) | 49.020 | 3.953 | 7.00 | 126.24 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 1.470 | 10.17 | 126.21 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 37.19
TIME SHIFT OF PEAK FLOW (min)=190.00
MAXIMUM STORAGE USED (ha.m.)= 3.1536

---

| CALIB STANDHYD ( 0323) ID= 1 DT= 5.0 min | Area (ha)= 1.30 Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00 |
|---|---|

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.83 | 0.47 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 93.09 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

| | | | | *TOTALS* |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 43.00 | 52.25 | | |
| over (min) | 5.00 | 15.00 | | |
| Storage Coeff. (min)= | 3.43 (ii) | 12.58 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | | |
| Unit Hyd. peak (cms)= | 0.26 | 0.08 | | |
| PEAK FLOW (cms)= | 0.05 | 0.06 | | 0.119 (iii) |
| TIME TO PEAK (hrs)= | 6.83 | 7.00 | | 7.00 |
| RUNOFF VOLUME (mm)= | 192.00 | 107.49 | | 137.06 |
| TOTAL RAINFALL (mm)= | 193.00 | 193.00 | | 193.00 |
| RUNOFF COEFFICIENT = | 0.99 | 0.56 | | 0.71 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB STANDHYD ( 0322) ID= 1 DT= 5.0 min | Area (ha)= 0.25 Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00 |
|---|---|

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 15.00 | 3.083 | 3.00 | 6.083 | 43.00 | 9.08 | 13.00 |
| 0.167 | 15.00 | 3.167 | 3.00 | 6.167 | 43.00 | 9.17 | 13.00 |
| 0.250 | 15.00 | 3.250 | 3.00 | 6.250 | 43.00 | 9.25 | 13.00 |
| 0.333 | 15.00 | 3.333 | 3.00 | 6.333 | 43.00 | 9.33 | 13.00 |
| 0.417 | 15.00 | 3.417 | 3.00 | 6.417 | 43.00 | 9.42 | 13.00 |
| 0.500 | 15.00 | 3.500 | 3.00 | 6.500 | 43.00 | 9.50 | 13.00 |
| 0.583 | 15.00 | 3.583 | 3.00 | 6.583 | 43.00 | 9.58 | 13.00 |
| 0.667 | 15.00 | 3.667 | 3.00 | 6.667 | 43.00 | 9.67 | 13.00 |
| 0.750 | 15.00 | 3.750 | 3.00 | 6.750 | 43.00 | 9.75 | 13.00 |
| 0.833 | 15.00 | 3.833 | 3.00 | 6.833 | 43.00 | 9.83 | 13.00 |
| 0.917 | 15.00 | 3.917 | 3.00 | 6.917 | 43.00 | 9.92 | 13.00 |
| 1.000 | 15.00 | 4.000 | 3.00 | 7.000 | 43.00 | 10.00 | 13.00 |
| 1.083 | 20.00 | 4.083 | 5.00 | 7.083 | 20.00 | 10.08 | 13.00 |
| 1.167 | 20.00 | 4.167 | 5.00 | 7.167 | 20.00 | 10.17 | 13.00 |
| 1.250 | 20.00 | 4.250 | 5.00 | 7.250 | 20.00 | 10.25 | 13.00 |
| 1.333 | 20.00 | 4.333 | 5.00 | 7.333 | 20.00 | 10.33 | 13.00 |
| 1.417 | 20.00 | 4.417 | 5.00 | 7.417 | 20.00 | 10.42 | 13.00 |
| 1.500 | 20.00 | 4.500 | 5.00 | 7.500 | 20.00 | 10.50 | 13.00 |
| 1.583 | 20.00 | 4.583 | 5.00 | 7.583 | 20.00 | 10.58 | 13.00 |
| 1.667 | 20.00 | 4.667 | 5.00 | 7.667 | 20.00 | 10.67 | 13.00 |
| 1.750 | 20.00 | 4.750 | 5.00 | 7.750 | 20.00 | 10.75 | 13.00 |
| 1.833 | 20.00 | 4.833 | 5.00 | 7.833 | 20.00 | 10.83 | 13.00 |
| 1.917 | 20.00 | 4.917 | 5.00 | 7.917 | 20.00 | 10.92 | 13.00 |
| 2.000 | 20.00 | 5.000 | 5.00 | 8.000 | 20.00 | 11.00 | 13.00 |
| 2.083 | 10.00 | 5.083 | 20.00 | 8.083 | 23.00 | 11.08 | 8.00 |
| 2.167 | 10.00 | 5.167 | 20.00 | 8.167 | 23.00 | 11.17 | 8.00 |
| 2.250 | 10.00 | 5.250 | 20.00 | 8.250 | 23.00 | 11.25 | 8.00 |
| 2.333 | 10.00 | 5.333 | 20.00 | 8.333 | 23.00 | 11.33 | 8.00 |
| 2.417 | 10.00 | 5.417 | 20.00 | 8.417 | 23.00 | 11.42 | 8.00 |
| 2.500 | 10.00 | 5.500 | 20.00 | 8.500 | 23.00 | 11.50 | 8.00 |
| 2.583 | 10.00 | 5.583 | 20.00 | 8.583 | 23.00 | 11.58 | 8.00 |
| 2.667 | 10.00 | 5.667 | 20.00 | 8.667 | 23.00 | 11.67 | 8.00 |
| 2.750 | 10.00 | 5.750 | 20.00 | 8.750 | 23.00 | 11.75 | 8.00 |
| 2.833 | 10.00 | 5.833 | 20.00 | 8.833 | 23.00 | 11.83 | 8.00 |
| 2.917 | 10.00 | 5.917 | 20.00 | 8.917 | 23.00 | 11.92 | 8.00 |
| 3.000 | 10.00 | 6.000 | 20.00 | 9.000 | 23.00 | 12.00 | 8.00 |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 43.00 | 52.25 | |
| over (min) | 5.00 | 15.00 | |
| Storage Coeff. (min)= | 2.09 (ii) | 11.24 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak (cms)= | 0.31 | 0.09 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.01 | 0.01 | 0.023 (iii) |
| TIME TO PEAK (hrs)= | 6.67 | 7.00 | 7.00 |
| RUNOFF VOLUME (mm)= | 192.00 | 107.49 | 137.04 |
| TOTAL RAINFALL (mm)= | 193.00 | 193.00 | 193.00 |

RUNOFF COEFFICIENT = 0.99 0.56 0.71

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0806)<br>1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0322): | 0.25 | 0.023 | 7.00 | 137.04 |
| + ID2= 2 ( 0323): | 1.30 | 0.119 | 7.00 | 137.06 |
| ID = 3 ( 0806): | 1.55 | 0.142 | 7.00 | 137.06 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0806)<br>3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 3 ( 0806): | 1.55 | 0.142 | 7.00 | 137.06 |
| + ID2= 2 ( 0004): | 49.02 | 1.470 | 10.17 | 126.21 |
| ID = 1 ( 0806): | 50.57 | 1.527 | 9.00 | 126.55 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0811)<br>1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0806): | 50.57 | 1.527 | 9.00 | 126.55 |
| + ID2= 2 ( 0810): | 123.69 | 5.969 | 9.17 | 116.26 |
| ID = 3 ( 0811): | 174.26 | 7.487 | 9.17 | 119.25 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\f85c1
cee-7a05-4921-b751-9fe27b7907b8\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\f85c1
cee-7a05-4921-b751-9fe27b7907b8\scen


DATE: 07/10/2025                          TIME: 02:08:07

USER:



COMMENTS: _____________________________________________________________


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  ***********************************************
  ** SIMULATION : I - 2yr 24hr 15min SCS Type I **
  ***********************************************


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|    READ STORM    |    Filename: C:\Users\dmartin\AppD
|                  |              ata\Local\Temp\
|                  |              129e2800-35e2-4355-8d2d-35ce722b1427\b15aa659
| Ptotal= 46.83 mm |    Comments: 2yr 24hr 15min SCS Type II (MTO)
--------------------
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| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 6.25 | 0.84 | 12.50 | 6.74 | 18.75 | 0.84 |
| 0.25 | 0.52 | 6.50 | 0.84 | 12.75 | 3.47 | 19.00 | 0.84 |
| 0.50 | 0.52 | 6.75 | 0.84 | 13.00 | 3.47 | 19.25 | 0.84 |
| 0.75 | 0.52 | 7.00 | 0.84 | 13.25 | 2.53 | 19.50 | 0.84 |
| 1.00 | 0.52 | 7.25 | 1.03 | 13.50 | 2.53 | 19.75 | 0.84 |
| 1.25 | 0.52 | 7.50 | 1.03 | 13.75 | 1.97 | 20.00 | 0.84 |
| 1.50 | 0.52 | 7.75 | 1.03 | 14.00 | 1.97 | 20.25 | 0.56 |
| 1.75 | 0.52 | 8.00 | 1.03 | 14.25 | 1.40 | 20.50 | 0.56 |
| 2.00 | 0.52 | 8.25 | 1.22 | 14.50 | 1.40 | 20.75 | 0.56 |
| 2.25 | 0.61 | 8.50 | 1.22 | 14.75 | 1.40 | 21.00 | 0.56 |
| 2.50 | 0.61 | 8.75 | 1.31 | 15.00 | 1.40 | 21.25 | 0.56 |
| 2.75 | 0.61 | 9.00 | 1.31 | 15.25 | 1.40 | 21.50 | 0.56 |
| 3.00 | 0.61 | 9.25 | 1.50 | 15.50 | 1.40 | 21.75 | 0.56 |
| 3.25 | 0.61 | 9.50 | 1.50 | 15.75 | 1.40 | 22.00 | 0.56 |
| 3.50 | 0.61 | 9.75 | 1.69 | 16.00 | 1.40 | 22.25 | 0.56 |
| 3.75 | 0.61 | 10.00 | 1.69 | 16.25 | 0.84 | 22.50 | 0.56 |
| 4.00 | 0.61 | 10.25 | 2.15 | 16.50 | 0.84 | 22.75 | 0.56 |
| 4.25 | 0.75 | 10.50 | 2.15 | 16.75 | 0.84 | 23.00 | 0.56 |
| 4.50 | 0.75 | 10.75 | 2.90 | 17.00 | 0.84 | 23.25 | 0.56 |
| 4.75 | 0.75 | 11.00 | 2.90 | 17.25 | 0.84 | 23.50 | 0.56 |
| 5.00 | 0.75 | 11.25 | 4.50 | 17.50 | 0.84 | 23.75 | 0.56 |
| 5.25 | 0.75 | 11.50 | 4.50 | 17.75 | 0.84 | 24.00 | 0.56 |
| 5.50 | 0.75 | 11.75 | 13.86 | 18.00 | 0.84 | | |
| 5.75 | 0.75 | 12.00 | 57.32 | 18.25 | 0.84 | | |
| 6.00 | 0.75 | 12.25 | 6.74 | 18.50 | 0.84 | | |

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| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 0.556 (i)
TIME TO PEAK (hrs)= 14.167
RUNOFF VOLUME (mm)= 12.843
TOTAL RAINFALL (mm)= 46.830
RUNOFF COEFFICIENT = 0.274

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0304) | Area | (ha)= | 7.94 | Curve Number (CN)= | 53.7 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.51 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |

```
0.750    0.52 | 6.833    0.84 |12.917    3.47 | 19.00    0.84
0.833    0.52 | 6.917    0.84 |13.000    3.47 | 19.08    0.84
0.917    0.52 | 7.000    0.84 |13.083    3.47 | 19.17    0.84
1.000    0.52 | 7.083    0.84 |13.167    3.47 | 19.25    0.84
1.083    0.52 | 7.167    0.84 |13.250    3.47 | 19.33    0.84
1.167    0.52 | 7.250    0.84 |13.333    2.53 | 19.42    0.84
1.250    0.52 | 7.333    1.03 |13.417    2.53 | 19.50    0.84
1.333    0.52 | 7.417    1.03 |13.500    2.53 | 19.58    0.84
1.417    0.52 | 7.500    1.03 |13.583    2.53 | 19.67    0.84
1.500    0.52 | 7.583    1.03 |13.667    2.53 | 19.75    0.84
1.583    0.52 | 7.667    1.03 |13.750    2.53 | 19.83    0.84
1.667    0.52 | 7.750    1.03 |13.833    1.97 | 19.92    0.84
1.750    0.52 | 7.833    1.03 |13.917    1.97 | 20.00    0.84
1.833    0.52 | 7.917    1.03 |14.000    1.97 | 20.08    0.84
1.917    0.52 | 8.000    1.03 |14.083    1.97 | 20.17    0.84
2.000    0.52 | 8.083    1.03 |14.167    1.97 | 20.25    0.84
2.083    0.52 | 8.167    1.03 |14.250    1.97 | 20.33    0.56
2.167    0.52 | 8.250    1.03 |14.333    1.41 | 20.42    0.56
2.250    0.52 | 8.333    1.22 |14.417    1.40 | 20.50    0.56
2.333    0.61 | 8.417    1.22 |14.500    1.40 | 20.58    0.56
2.417    0.61 | 8.500    1.22 |14.583    1.40 | 20.67    0.56
2.500    0.61 | 8.583    1.22 |14.667    1.40 | 20.75    0.56
2.583    0.61 | 8.667    1.22 |14.750    1.40 | 20.83    0.56
2.667    0.61 | 8.750    1.22 |14.833    1.40 | 20.92    0.56
2.750    0.61 | 8.833    1.31 |14.917    1.40 | 21.00    0.56
2.833    0.61 | 8.917    1.31 |15.000    1.40 | 21.08    0.56
2.917    0.61 | 9.000    1.31 |15.083    1.40 | 21.17    0.56
3.000    0.61 | 9.083    1.31 |15.167    1.40 | 21.25    0.56
3.083    0.61 | 9.167    1.31 |15.250    1.40 | 21.33    0.56
3.167    0.61 | 9.250    1.31 |15.333    1.40 | 21.42    0.56
3.250    0.61 | 9.333    1.50 |15.417    1.40 | 21.50    0.56
3.333    0.61 | 9.417    1.50 |15.500    1.40 | 21.58    0.56
3.417    0.61 | 9.500    1.50 |15.583    1.40 | 21.67    0.56
3.500    0.61 | 9.583    1.50 |15.667    1.40 | 21.75    0.56
3.583    0.61 | 9.667    1.50 |15.750    1.40 | 21.83    0.56
3.667    0.61 | 9.750    1.50 |15.833    1.40 | 21.92    0.56
3.750    0.61 | 9.833    1.69 |15.917    1.40 | 22.00    0.56
3.833    0.61 | 9.917    1.69 |16.000    1.40 | 22.08    0.56
3.917    0.61 |10.000    1.69 |16.083    1.40 | 22.17    0.56
4.000    0.61 |10.083    1.69 |16.167    1.40 | 22.25    0.56
4.083    0.61 |10.167    1.69 |16.250    1.40 | 22.33    0.56
4.167    0.61 |10.250    1.69 |16.333    0.84 | 22.42    0.56
4.250    0.61 |10.333    2.15 |16.417    0.84 | 22.50    0.56
4.333    0.75 |10.417    2.15 |16.500    0.84 | 22.58    0.56
4.417    0.75 |10.500    2.15 |16.583    0.84 | 22.67    0.56
4.500    0.75 |10.583    2.15 |16.667    0.84 | 22.75    0.56
4.583    0.75 |10.667    2.15 |16.750    0.84 | 22.83    0.56
4.667    0.75 |10.750    2.15 |16.833    0.84 | 22.92    0.56
4.750    0.75 |10.833    2.90 |16.917    0.84 | 23.00    0.56
4.833    0.75 |10.917    2.90 |17.000    0.84 | 23.08    0.56
4.917    0.75 |11.000    2.90 |17.083    0.84 | 23.17    0.56
5.000    0.75 |11.083    2.90 |17.167    0.84 | 23.25    0.56
5.083    0.75 |11.167    2.90 |17.250    0.84 | 23.33    0.56
5.167    0.75 |11.250    2.90 |17.333    0.84 | 23.42    0.56
5.250    0.75 |11.333    4.50 |17.417    0.84 | 23.50    0.56
5.333    0.75 |11.417    4.50 |17.500    0.84 | 23.58    0.56
5.417    0.75 |11.500    4.50 |17.583    0.84 | 23.67    0.56
5.500    0.75 |11.583    4.50 |17.667    0.84 | 23.75    0.56
5.583    0.75 |11.667    4.50 |17.750    0.84 | 23.83    0.56
5.667    0.75 |11.750    4.50 |17.833    0.84 | 23.92    0.56
5.750    0.75 |11.833   13.86 |17.917    0.84 | 24.00    0.56
5.833    0.75 |11.917   13.86 |18.000    0.84 | 24.08    0.56
5.917    0.75 |12.000   13.86 |18.083    0.84 | 24.17    0.56
6.000    0.75 |12.083   57.31 |18.167    0.84 | 24.25    0.56
6.083    0.75 |12.167   57.32 |18.250    0.84 |
```

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.055 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 5.917
TOTAL RAINFALL (mm)= 46.830
RUNOFF COEFFICIENT = 0.126

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0807)| | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0303): | | 85.82 | 0.556 | 14.17 | 12.84 |
| | + ID2= 2 ( 0304): | | 7.94 | 0.055 | 12.67 | 5.92 |
| | ID = 3 ( 0807): | | 93.76 | 0.571 | 14.17 | 12.26 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0305) | Area (ha)= | 7.76 | Curve Number (CN)= | 62.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.76 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME | RAIN | TIME | RAIN | TIME | RAIN | TIME | RAIN |
|---|---|---|---|---|---|---|---|

| hrs | mm/hr | hrs | mm/hr | hrs | mm/hr | hrs | mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 8.382
TOTAL RAINFALL (mm)= 46.830
RUNOFF COEFFICIENT = 0.179

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD (0808) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0305): | 7.76 | 0.059 | 13.00 | 8.38 |
| | + ID2= 2 ( 0807): | 93.76 | 0.571 | 14.17 | 12.26 |
| | ID = 3 ( 0808): | 101.52 | 0.603 | 14.00 | 11.96 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB |
|---|

| NASHYD ( 0306)| Area (ha)= 6.99 Curve Number (CN)= 54.0
|ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
---------- U.H. Tp(hrs)= 0.66

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.048 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 6.776
TOTAL RAINFALL (mm)= 46.830
RUNOFF COEFFICIENT = 0.145

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0060)| | | | | |
|---|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) | |

```
       ID1= 1 (  0306):     6.99   0.048    12.83     6.78
     + ID2= 2 (  0808):   101.52   0.603    14.00    11.96
       ================================================
       ID = 3 (  0060):   108.51   0.625    13.92    11.63

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB           |
| NASHYD   (  0307)|   Area    (ha)=   2.50   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

```
Unit Hyd Qpeak  (cms)=   0.245

PEAK FLOW       (cms)=   0.021 (i)
TIME TO PEAK    (hrs)=  12.500
RUNOFF VOLUME    (mm)=   5.713
TOTAL RAINFALL   (mm)=  46.830
RUNOFF COEFFICIENT   =   0.122
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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0809) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0307): | 2.50 | 0.021 | 12.50 | 5.71 |
| | + ID2= 2 ( 0060): | 108.51 | 0.625 | 13.92 | 11.63 |
| | ID = 3 ( 0809): | 111.01 | 0.629 | 13.92 | 11.49 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0308) | | | |
|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= 5.22 | Curve Number (CN)= 49.0 | |
| | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.52 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |

```
              6.083    0.75 |12.167   57.32 |18.250    0.84 |

     Unit Hyd Qpeak  (cms)=   0.383

     PEAK FLOW       (cms)=   0.035 (i)
     TIME TO PEAK    (hrs)=  12.667
     RUNOFF VOLUME    (mm)=   5.714
     TOTAL RAINFALL   (mm)=  46.830
     RUNOFF COEFFICIENT   =   0.122

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0061)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0308):     5.22   0.035    12.67     5.71
     + ID2= 2 (  0809):   111.01   0.629    13.92    11.49
       ================================================
       ID = 3 (  0061):   116.23   0.641    13.92    11.23

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0309)|   Area    (ha)=   7.46   Curve Number   (CN)= 51.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.59

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                          ---- TRANSFORMED HYETOGRAPH ----
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
               0.083    0.00 | 6.167    0.75 |12.250   57.32 | 18.33    0.84
               0.167    0.00 | 6.250    0.75 |12.333    6.75 | 18.42    0.84
               0.250    0.00 | 6.333    0.84 |12.417    6.74 | 18.50    0.84
               0.333    0.52 | 6.417    0.84 |12.500    6.74 | 18.58    0.84
               0.417    0.52 | 6.500    0.84 |12.583    6.74 | 18.67    0.84
               0.500    0.52 | 6.583    0.84 |12.667    6.74 | 18.75    0.84
               0.583    0.52 | 6.667    0.84 |12.750    6.74 | 18.83    0.84
               0.667    0.52 | 6.750    0.84 |12.833    3.47 | 18.92    0.84
               0.750    0.52 | 6.833    0.84 |12.917    3.47 | 19.00    0.84
               0.833    0.52 | 6.917    0.84 |13.000    3.47 | 19.08    0.84
               0.917    0.52 | 7.000    0.84 |13.083    3.47 | 19.17    0.84
               1.000    0.52 | 7.083    0.84 |13.167    3.47 | 19.25    0.84
               1.083    0.52 | 7.167    0.84 |13.250    3.47 | 19.33    0.84
               1.167    0.52 | 7.250    0.84 |13.333    2.53 | 19.42    0.84
               1.250    0.52 | 7.333    1.03 |13.417    2.53 | 19.50    0.84
               1.333    0.52 | 7.417    1.03 |13.500    2.53 | 19.58    0.84
               1.417    0.52 | 7.500    1.03 |13.583    2.53 | 19.67    0.84
               1.500    0.52 | 7.583    1.03 |13.667    2.53 | 19.75    0.84
               1.583    0.52 | 7.667    1.03 |13.750    2.53 | 19.83    0.84
               1.667    0.52 | 7.750    1.03 |13.833    1.97 | 19.92    0.84
               1.750    0.52 | 7.833    1.03 |13.917    1.97 | 20.00    0.84
               1.833    0.52 | 7.917    1.03 |14.000    1.97 | 20.08    0.84
               1.917    0.52 | 8.000    1.03 |14.083    1.97 | 20.17    0.84
               2.000    0.52 | 8.083    1.03 |14.167    1.97 | 20.25    0.84
               2.083    0.52 | 8.167    1.03 |14.250    1.97 | 20.33    0.56
               2.167    0.52 | 8.250    1.03 |14.333    1.41 | 20.42    0.56
               2.250    0.52 | 8.333    1.22 |14.417    1.40 | 20.50    0.56
               2.333    0.61 | 8.417    1.22 |14.500    1.40 | 20.58    0.56
               2.417    0.61 | 8.500    1.22 |14.583    1.40 | 20.67    0.56
               2.500    0.61 | 8.583    1.22 |14.667    1.40 | 20.75    0.56
               2.583    0.61 | 8.667    1.22 |14.750    1.40 | 20.83    0.56
               2.667    0.61 | 8.750    1.22 |14.833    1.40 | 20.92    0.56
               2.750    0.61 | 8.833    1.31 |14.917    1.40 | 21.00    0.56
               2.833    0.61 | 8.917    1.31 |15.000    1.40 | 21.08    0.56
               2.917    0.61 | 9.000    1.31 |15.083    1.40 | 21.17    0.56
               3.000    0.61 | 9.083    1.31 |15.167    1.40 | 21.25    0.56
               3.083    0.61 | 9.167    1.31 |15.250    1.40 | 21.33    0.56
               3.167    0.61 | 9.250    1.31 |15.333    1.40 | 21.42    0.56
               3.250    0.61 | 9.333    1.50 |15.417    1.40 | 21.50    0.56
               3.333    0.61 | 9.417    1.50 |15.500    1.40 | 21.58    0.56
               3.417    0.61 | 9.500    1.50 |15.583    1.40 | 21.67    0.56
               3.500    0.61 | 9.583    1.50 |15.667    1.40 | 21.75    0.56
               3.583    0.61 | 9.667    1.50 |15.750    1.40 | 21.83    0.56
               3.667    0.61 | 9.750    1.50 |15.833    1.40 | 21.92    0.56
               3.750    0.61 | 9.833    1.69 |15.917    1.40 | 22.00    0.56
               3.833    0.61 | 9.917    1.69 |16.000    1.40 | 22.08    0.56
               3.917    0.61 |10.000    1.69 |16.083    1.40 | 22.17    0.56
               4.000    0.61 |10.083    1.69 |16.167    1.40 | 22.25    0.56
               4.083    0.61 |10.167    1.69 |16.250    1.40 | 22.33    0.56
               4.167    0.61 |10.250    1.69 |16.333    0.84 | 22.42    0.56
               4.250    0.61 |10.333    2.15 |16.417    0.84 | 22.50    0.56
               4.333    0.75 |10.417    2.15 |16.500    0.84 | 22.58    0.56
               4.417    0.75 |10.500    2.15 |16.583    0.84 | 22.67    0.56
               4.500    0.75 |10.583    2.15 |16.667    0.84 | 22.75    0.56
               4.583    0.75 |10.667    2.15 |16.750    0.84 | 22.83    0.56
               4.667    0.75 |10.750    2.15 |16.833    0.84 | 22.92    0.56
               4.750    0.75 |10.833    2.90 |16.917    0.84 | 23.00    0.56
               4.833    0.75 |10.917    2.90 |17.000    0.84 | 23.08    0.56
               4.917    0.75 |11.000    2.90 |17.083    0.84 | 23.17    0.56
               5.000    0.75 |11.083    2.90 |17.167    0.84 | 23.25    0.56
               5.083    0.75 |11.167    2.90 |17.250    0.84 | 23.33    0.56
               5.167    0.75 |11.250    2.90 |17.333    0.84 | 23.42    0.56
               5.250    0.75 |11.333    4.50 |17.417    0.84 | 23.50    0.56
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.050 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 6.120
TOTAL RAINFALL (mm)= 46.830
RUNOFF COEFFICIENT = 0.131

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0309): | 7.46 | 0.050 | 12.75 | 6.12 |
| + ID2= 2 ( 0061): | 116.23 | 0.641 | 13.92 | 11.23 |
| ID = 3 ( 0810): | 123.69 | 0.663 | 13.75 | 10.93 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB NASHYD ( 0302) | | | | |
|---|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= 5.52 | Curve Number (CN)= 60.3 | | |
| | Ia (mm)= 8.05 | # of Linear Res.(N)= 3.00 | | |
| | U.H. Tp(hrs)= 0.42 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.055 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 7.299
TOTAL RAINFALL (mm)= 46.830
RUNOFF COEFFICIENT = 0.156

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0301) | Area (ha)= | 5.30 | Curve Number (CN)= | 68.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.00 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.33 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.089 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 9.952
TOTAL RAINFALL (mm)= 46.830
RUNOFF COEFFICIENT = 0.213

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | |
|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 57.32 | 10.56 | | |
| over (min) | 10.00 | 30.00 | | |
| Storage Coeff. (min)= | 8.43 (ii) | 25.78 (ii) | | |
| Unit Hyd. Tpeak (min)= | 10.00 | 30.00 | | |
| Unit Hyd. peak (cms)= | 0.12 | 0.04 | | |
| | | | *TOTALS* | |
| PEAK FLOW (cms)= | 1.96 | 0.25 | 2.067 (iii) | |
| TIME TO PEAK (hrs)= | 12.25 | 12.58 | 12.25 | |
| RUNOFF VOLUME (mm)= | 45.83 | 7.69 | 22.95 | |
| TOTAL RAINFALL (mm)= | 46.83 | 46.83 | 46.83 | |
| RUNOFF COEFFICIENT = | 0.98 | 0.16 | 0.49 | |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0805) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0201): | 38.20 | 2.067 | 12.25 | 22.95 |
| + ID2= 2 ( 0301): | 5.30 | 0.089 | 12.50 | 9.95 |
| ID = 3 ( 0805): | 43.50 | 2.125 | 12.25 | 21.36 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0805) | | | | |
|---|---|---|---|---|
| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 3 ( 0805): | 43.50 | 2.125 | 12.25 | 21.36 |
| + ID2= 2 ( 0302): | 5.52 | 0.055 | 12.58 | 7.30 |
| ID = 1 ( 0805): | 49.02 | 2.153 | 12.25 | 19.78 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

RESERVOIR( 0004) | OVERFLOW IS OFF
IN= 2---> OUT= 1
DT= 5.0 min

| OUTFLOW (cms) | STORAGE (ha.m.) | OUTFLOW (cms) | STORAGE (ha.m.) |
|---|---|---|---|
| 0.0000 | 0.0000 | 1.3440 | 2.5548 |
| 0.0590 | 0.2449 | 1.4160 | 2.8868 |
| 0.0830 | 0.5009 | 1.4850 | 3.2289 |
| 0.1020 | 0.7662 | 3.6580 | 3.4038 |
| 0.1180 | 1.0406 | 7.7500 | 3.5812 |
| 0.1310 | 1.3244 | 13.2420 | 3.7611 |
| 0.5720 | 1.6176 | 19.9810 | 3.9437 |
| 1.1850 | 1.9203 | 27.8970 | 4.1289 |
| 1.2670 | 2.2326 | 0.0000 | 0.0000 |

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| INFLOW : ID= 2 ( 0805) | 49.020 | 2.153 | 12.25 | 19.78 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 0.092 | 16.33 | 19.76 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.30
TIME SHIFT OF PEAK FLOW (min)=245.00
MAXIMUM STORAGE USED (ha.m.)= 0.6334

---

CALIB
STANDHYD ( 0323) | Area (ha)= 1.30
ID= 1 DT= 5.0 min | Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.83 | 0.47 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 93.09 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 57.32 | 24.30 | | |
| over (min) | 5.00 | 20.00 | | |
| Storage Coeff. (min)= | 3.06 (ii) | 15.49 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 20.00 | | |
| Unit Hyd. peak (cms)= | 0.27 | 0.07 | | |
| | | | *TOTALS* | |
| PEAK FLOW (cms)= | 0.07 | 0.02 | 0.083 (iii) | |
| TIME TO PEAK (hrs)= | 12.25 | 12.42 | 12.25 | |
| RUNOFF VOLUME (mm)= | 45.83 | 10.19 | 22.66 | |
| TOTAL RAINFALL (mm)= | 46.83 | 46.83 | 46.83 | |
| RUNOFF COEFFICIENT = | 0.98 | 0.22 | 0.48 | |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| CALIB            |
| STANDHYD (  0322)|   Area    (ha)=   0.25
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------
                           IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.16         0.09
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      40.82        40.00
     Mannings n             =     0.013        0.250

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.75 | 12.250 | 57.32 | 18.33 | 0.84 |
| 0.167 | 0.00 | 6.250 | 0.75 | 12.333 | 6.75 | 18.42 | 0.84 |
| 0.250 | 0.00 | 6.333 | 0.84 | 12.417 | 6.74 | 18.50 | 0.84 |
| 0.333 | 0.52 | 6.417 | 0.84 | 12.500 | 6.74 | 18.58 | 0.84 |
| 0.417 | 0.52 | 6.500 | 0.84 | 12.583 | 6.74 | 18.67 | 0.84 |
| 0.500 | 0.52 | 6.583 | 0.84 | 12.667 | 6.74 | 18.75 | 0.84 |
| 0.583 | 0.52 | 6.667 | 0.84 | 12.750 | 6.74 | 18.83 | 0.84 |
| 0.667 | 0.52 | 6.750 | 0.84 | 12.833 | 3.47 | 18.92 | 0.84 |
| 0.750 | 0.52 | 6.833 | 0.84 | 12.917 | 3.47 | 19.00 | 0.84 |
| 0.833 | 0.52 | 6.917 | 0.84 | 13.000 | 3.47 | 19.08 | 0.84 |
| 0.917 | 0.52 | 7.000 | 0.84 | 13.083 | 3.47 | 19.17 | 0.84 |
| 1.000 | 0.52 | 7.083 | 0.84 | 13.167 | 3.47 | 19.25 | 0.84 |
| 1.083 | 0.52 | 7.167 | 0.84 | 13.250 | 3.47 | 19.33 | 0.84 |
| 1.167 | 0.52 | 7.250 | 0.84 | 13.333 | 2.53 | 19.42 | 0.84 |
| 1.250 | 0.52 | 7.333 | 1.03 | 13.417 | 2.53 | 19.50 | 0.84 |
| 1.333 | 0.52 | 7.417 | 1.03 | 13.500 | 2.53 | 19.58 | 0.84 |
| 1.417 | 0.52 | 7.500 | 1.03 | 13.583 | 2.53 | 19.67 | 0.84 |
| 1.500 | 0.52 | 7.583 | 1.03 | 13.667 | 2.53 | 19.75 | 0.84 |
| 1.583 | 0.52 | 7.667 | 1.03 | 13.750 | 2.53 | 19.83 | 0.84 |
| 1.667 | 0.52 | 7.750 | 1.03 | 13.833 | 1.97 | 19.92 | 0.84 |
| 1.750 | 0.52 | 7.833 | 1.03 | 13.917 | 1.97 | 20.00 | 0.84 |
| 1.833 | 0.52 | 7.917 | 1.03 | 14.000 | 1.97 | 20.08 | 0.84 |
| 1.917 | 0.52 | 8.000 | 1.03 | 14.083 | 1.97 | 20.17 | 0.84 |
| 2.000 | 0.52 | 8.083 | 1.03 | 14.167 | 1.97 | 20.25 | 0.84 |
| 2.083 | 0.52 | 8.167 | 1.03 | 14.250 | 1.97 | 20.33 | 0.56 |
| 2.167 | 0.52 | 8.250 | 1.03 | 14.333 | 1.41 | 20.42 | 0.56 |
| 2.250 | 0.52 | 8.333 | 1.22 | 14.417 | 1.40 | 20.50 | 0.56 |
| 2.333 | 0.61 | 8.417 | 1.22 | 14.500 | 1.40 | 20.58 | 0.56 |
| 2.417 | 0.61 | 8.500 | 1.22 | 14.583 | 1.40 | 20.67 | 0.56 |
| 2.500 | 0.61 | 8.583 | 1.22 | 14.667 | 1.40 | 20.75 | 0.56 |
| 2.583 | 0.61 | 8.667 | 1.22 | 14.750 | 1.40 | 20.83 | 0.56 |
| 2.667 | 0.61 | 8.750 | 1.22 | 14.833 | 1.40 | 20.92 | 0.56 |
| 2.750 | 0.61 | 8.833 | 1.31 | 14.917 | 1.40 | 21.00 | 0.56 |
| 2.833 | 0.61 | 8.917 | 1.31 | 15.000 | 1.40 | 21.08 | 0.56 |
| 2.917 | 0.61 | 9.000 | 1.31 | 15.083 | 1.40 | 21.17 | 0.56 |
| 3.000 | 0.61 | 9.083 | 1.31 | 15.167 | 1.40 | 21.25 | 0.56 |
| 3.083 | 0.61 | 9.167 | 1.31 | 15.250 | 1.40 | 21.33 | 0.56 |
| 3.167 | 0.61 | 9.250 | 1.31 | 15.333 | 1.40 | 21.42 | 0.56 |
| 3.250 | 0.61 | 9.333 | 1.50 | 15.417 | 1.40 | 21.50 | 0.56 |
| 3.333 | 0.61 | 9.417 | 1.50 | 15.500 | 1.40 | 21.58 | 0.56 |
| 3.417 | 0.61 | 9.500 | 1.50 | 15.583 | 1.40 | 21.67 | 0.56 |
| 3.500 | 0.61 | 9.583 | 1.50 | 15.667 | 1.40 | 21.75 | 0.56 |
| 3.583 | 0.61 | 9.667 | 1.50 | 15.750 | 1.40 | 21.83 | 0.56 |
| 3.667 | 0.61 | 9.750 | 1.50 | 15.833 | 1.40 | 21.92 | 0.56 |
| 3.750 | 0.61 | 9.833 | 1.69 | 15.917 | 1.40 | 22.00 | 0.56 |
| 3.833 | 0.61 | 9.917 | 1.69 | 16.000 | 1.40 | 22.08 | 0.56 |
| 3.917 | 0.61 | 10.000 | 1.69 | 16.083 | 1.40 | 22.17 | 0.56 |
| 4.000 | 0.61 | 10.083 | 1.69 | 16.167 | 1.40 | 22.25 | 0.56 |
| 4.083 | 0.61 | 10.167 | 1.69 | 16.250 | 1.40 | 22.33 | 0.56 |
| 4.167 | 0.61 | 10.250 | 1.69 | 16.333 | 0.84 | 22.42 | 0.56 |
| 4.250 | 0.61 | 10.333 | 2.15 | 16.417 | 0.84 | 22.50 | 0.56 |
| 4.333 | 0.75 | 10.417 | 2.15 | 16.500 | 0.84 | 22.58 | 0.56 |
| 4.417 | 0.75 | 10.500 | 2.15 | 16.583 | 0.84 | 22.67 | 0.56 |
| 4.500 | 0.75 | 10.583 | 2.15 | 16.667 | 0.84 | 22.75 | 0.56 |
| 4.583 | 0.75 | 10.667 | 2.15 | 16.750 | 0.84 | 22.83 | 0.56 |
| 4.667 | 0.75 | 10.750 | 2.15 | 16.833 | 0.84 | 22.92 | 0.56 |
| 4.750 | 0.75 | 10.833 | 2.90 | 16.917 | 0.84 | 23.00 | 0.56 |
| 4.833 | 0.75 | 10.917 | 2.90 | 17.000 | 0.84 | 23.08 | 0.56 |
| 4.917 | 0.75 | 11.000 | 2.90 | 17.083 | 0.84 | 23.17 | 0.56 |
| 5.000 | 0.75 | 11.083 | 2.90 | 17.167 | 0.84 | 23.25 | 0.56 |
| 5.083 | 0.75 | 11.167 | 2.90 | 17.250 | 0.84 | 23.33 | 0.56 |
| 5.167 | 0.75 | 11.250 | 2.90 | 17.333 | 0.84 | 23.42 | 0.56 |
| 5.250 | 0.75 | 11.333 | 4.50 | 17.417 | 0.84 | 23.50 | 0.56 |
| 5.333 | 0.75 | 11.417 | 4.50 | 17.500 | 0.84 | 23.58 | 0.56 |
| 5.417 | 0.75 | 11.500 | 4.50 | 17.583 | 0.84 | 23.67 | 0.56 |
| 5.500 | 0.75 | 11.583 | 4.50 | 17.667 | 0.84 | 23.75 | 0.56 |
| 5.583 | 0.75 | 11.667 | 4.50 | 17.750 | 0.84 | 23.83 | 0.56 |
| 5.667 | 0.75 | 11.750 | 4.50 | 17.833 | 0.84 | 23.92 | 0.56 |
| 5.750 | 0.75 | 11.833 | 13.86 | 17.917 | 0.84 | 24.00 | 0.56 |
| 5.833 | 0.75 | 11.917 | 13.86 | 18.000 | 0.84 | 24.08 | 0.56 |
| 5.917 | 0.75 | 12.000 | 13.86 | 18.083 | 0.84 | 24.17 | 0.56 |
| 6.000 | 0.75 | 12.083 | 57.31 | 18.167 | 0.84 | 24.25 | 0.56 |
| 6.083 | 0.75 | 12.167 | 57.32 | 18.250 | 0.84 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 57.32 | 24.30 | |
| over (min) | 5.00 | 15.00 | |
| Storage Coeff. (min)= | 1.86 (ii) | 14.29 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak (cms)= | 0.32 | 0.08 | |
| | | | *TOTALS* |

```
     PEAK FLOW      (cms)=       0.01         0.00          0.017 (iii)
     TIME TO PEAK   (hrs)=      12.25        12.33          12.25
     RUNOFF VOLUME   (mm)=      45.83        10.19          22.63
     TOTAL RAINFALL  (mm)=      46.83        46.83          46.83
     RUNOFF COEFFICIENT  =       0.98         0.22           0.48

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0322):     0.25   0.017    12.25    22.63
      + ID2= 2 (  0323):     1.30   0.083    12.25    22.66
        ==================================================
        ID = 3 (  0806):     1.55   0.100    12.25    22.65

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0806):     1.55   0.100    12.25    22.65
      + ID2= 2 (  0004):    49.02   0.092    16.33    19.76
        ==================================================
        ID = 1 (  0806):    50.57   0.163    12.25    19.85

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0806):    50.57   0.163    12.25    19.85
      + ID2= 2 (  0810):   123.69   0.663    13.75    10.93
        ==================================================
        ID = 3 (  0811):   174.26   0.760    13.75    13.51

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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 FINISH
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       V    V   I    SSSSS  U   U    A    L              (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\ab52a
226-b2f4-4944-ab7b-5f5a0fe24b2d\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\ab52a
226-b2f4-4944-ab7b-5f5a0fe24b2d\scen


DATE: 07/10/2025                          TIME: 02:08:05

USER:



COMMENTS: _____________________________________________________________


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  **********************************************
  ** SIMULATION : J - 5yr 24hr 15min SCS Type I **
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  ***********************************************
```

| READ STORM | Filename: C:\Users\dmartin\AppData\Local\Temp\129e2800-35e2-4355-8d2d-35ce722b1427\46602b96 |
|---|---|
| Ptotal= 59.88 mm | Comments: 5yr 24hr 15min SCS Type II (MTO) |

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 6.25 | 1.08 | 12.50 | 8.62 | 18.75 | 1.08 |
| 0.25 | 0.66 | 6.50 | 1.08 | 12.75 | 4.43 | 19.00 | 1.08 |
| 0.50 | 0.66 | 6.75 | 1.08 | 13.00 | 4.43 | 19.25 | 1.08 |
| 0.75 | 0.66 | 7.00 | 1.08 | 13.25 | 3.23 | 19.50 | 1.08 |
| 1.00 | 0.66 | 7.25 | 1.32 | 13.50 | 3.23 | 19.75 | 1.08 |
| 1.25 | 0.66 | 7.50 | 1.32 | 13.75 | 2.51 | 20.00 | 1.08 |
| 1.50 | 0.66 | 7.75 | 1.32 | 14.00 | 2.51 | 20.25 | 0.72 |
| 1.75 | 0.66 | 8.00 | 1.32 | 14.25 | 1.80 | 20.50 | 0.72 |
| 2.00 | 0.66 | 8.25 | 1.56 | 14.50 | 1.80 | 20.75 | 0.72 |
| 2.25 | 0.78 | 8.50 | 1.56 | 14.75 | 1.80 | 21.00 | 0.72 |
| 2.50 | 0.78 | 8.75 | 1.68 | 15.00 | 1.80 | 21.25 | 0.72 |
| 2.75 | 0.78 | 9.00 | 1.68 | 15.25 | 1.80 | 21.50 | 0.72 |
| 3.00 | 0.78 | 9.25 | 1.92 | 15.50 | 1.80 | 21.75 | 0.72 |
| 3.25 | 0.78 | 9.50 | 1.92 | 15.75 | 1.80 | 22.00 | 0.72 |
| 3.50 | 0.78 | 9.75 | 2.16 | 16.00 | 1.80 | 22.25 | 0.72 |
| 3.75 | 0.78 | 10.00 | 2.16 | 16.25 | 1.08 | 22.50 | 0.72 |
| 4.00 | 0.78 | 10.25 | 2.75 | 16.50 | 1.08 | 22.75 | 0.72 |
| 4.25 | 0.96 | 10.50 | 2.75 | 16.75 | 1.08 | 23.00 | 0.72 |
| 4.50 | 0.96 | 10.75 | 3.71 | 17.00 | 1.08 | 23.25 | 0.72 |
| 4.75 | 0.96 | 11.00 | 3.71 | 17.25 | 1.08 | 23.50 | 0.72 |
| 5.00 | 0.96 | 11.25 | 5.75 | 17.50 | 1.08 | 23.75 | 0.72 |
| 5.25 | 0.96 | 11.50 | 5.75 | 17.75 | 1.08 | 24.00 | 0.72 |
| 5.50 | 0.96 | 11.75 | 17.72 | 18.00 | 1.08 | | |
| 5.75 | 0.96 | 12.00 | 73.29 | 18.25 | 1.08 | | |
| 6.00 | 0.96 | 12.25 | 8.62 | 18.50 | 1.08 | | |

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| CALIB | |
|---|---|
| NASHYD ( 0303) | Area (ha)= 85.82 Curve Number (CN)= 75.9 |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.59 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 1.72 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 0.916 (i)
TIME TO PEAK (hrs)= 14.167
RUNOFF VOLUME (mm)= 20.567
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.343

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | |
|---|---|
| NASHYD ( 0304) | Area (ha)= 7.94 Curve Number (CN)= 53.7 |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.75 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.51 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.097 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 10.022
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.167

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0807) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0303): | 85.82 | 0.916 | 14.17 | 20.57 |
| | + ID2= 2 ( 0304): | 7.94 | 0.097 | 12.67 | 10.02 |
| | ID = 3 ( 0807): | 93.76 | 0.941 | 14.08 | 19.67 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0305) | | | | |
|---|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 7.76 | Curve Number (CN)= | 62.3 |
| | Ia (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.76 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.100 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 13.759
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.230

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0808) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0305): | | 7.76 | 0.100 | 13.00 | 13.76 |
| + ID2= 2 ( 0807): | | 93.76 | 0.941 | 14.08 | 19.67 |
| ID = 3 ( 0808): | | 101.52 | 0.996 | 14.00 | 19.22 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0306) | | | |
|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 6.99 | Curve Number (CN)= 54.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= | 0.66 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.079 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 11.103
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.185

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0060) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0306): | 6.99 | 0.079 | 12.83 | 11.10 |
| | + ID2= 2 ( 0808): | 101.52 | 0.996 | 14.00 | 19.22 |
| | ID = 3 ( 0060): | 108.51 | 1.034 | 13.92 | 18.70 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0307) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 2.50 | Curve Number (CN)= | 49.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.39 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.245

PEAK FLOW (cms)= 0.035 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 9.433
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0809) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0307): | 2.50 | 0.035 | 12.50 | 9.43 |
| | + ID2= 2 ( 0060): | 108.51 | 1.034 | 13.92 | 18.70 |
| | ID = 3 ( 0809): | 111.01 | 1.041 | 13.83 | 18.49 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB NASHYD ( 0308) | | | | |
|---|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 5.22 | Curve Number (CN)= | 49.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.52 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.059 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 9.434
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.158

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0061) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0308): | 5.22 | 0.059 | 12.67 | 9.43 |
| | + ID2= 2 ( 0809): | 111.01 | 1.041 | 13.83 | 18.49 |
| | ID = 3 ( 0061): | 116.23 | 1.062 | 13.83 | 18.08 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0309) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 7.46 | Curve Number (CN)= | 51.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.083 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 10.075
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.168

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0810) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0309): | | 7.46 | 0.083 | 12.75 | 10.08 |
| + ID2= 2 ( 0061): | | 116.23 | 1.062 | 13.83 | 18.08 |
| ID = 3 ( 0810): | | 123.69 | 1.101 | 13.67 | 17.60 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0302) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 5.52 | Curve Number (CN)= | 60.3 |
| | Ia (mm)= | 8.05 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.42 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.096 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 12.262
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.205

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | |
|---|---|---|---|---|
| NASHYD ( 0301) | Area (ha)= | 5.30 | Curve Number (CN)= | 68.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.33 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.148 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 16.215
TOTAL RAINFALL (mm)= 59.880
RUNOFF COEFFICIENT = 0.271

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | |
|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 73.29 | 21.75 | |
| over (min) | 10.00 | 25.00 | |
| Storage Coeff. (min)= | 7.64 (ii) | 20.63 (ii) | |
| Unit Hyd. Tpeak (min)= | 10.00 | 25.00 | |
| Unit Hyd. peak (cms)= | 0.13 | 0.05 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 2.58 | 0.48 | 2.834 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.50 | 12.25 |
| RUNOFF VOLUME (mm)= | 58.88 | 12.38 | 30.98 |
| TOTAL RAINFALL (mm)= | 59.88 | 59.88 | 59.88 |
| RUNOFF COEFFICIENT = | 0.98 | 0.21 | 0.52 |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0805) | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|
| 1 + 2 = 3 | | | | |

| | (ha) | (cms) | (hrs) | (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0201): | 38.20 | 2.834 | 12.25 | 30.98 |
| + ID2= 2 ( 0301): | 5.30 | 0.148 | 12.42 | 16.21 |
| ID = 3 ( 0805): | 43.50 | 2.933 | 12.25 | 29.18 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

ADD HYD ( 0805)
3 + 2 = 1

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 3 ( 0805): | 43.50 | 2.933 | 12.25 | 29.18 |
| + ID2= 2 ( 0302): | 5.52 | 0.096 | 12.58 | 12.26 |
| ID = 1 ( 0805): | 49.02 | 2.984 | 12.25 | 27.28 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

RESERVOIR( 0004)
IN= 2---> OUT= 1
DT= 5.0 min

OVERFLOW IS OFF

| OUTFLOW (cms) | STORAGE (ha.m.) | OUTFLOW (cms) | STORAGE (ha.m.) |
|---|---|---|---|
| 0.0000 | 0.0000 | 1.3440 | 2.5548 |
| 0.0590 | 0.2449 | 1.4160 | 2.8868 |
| 0.0830 | 0.5009 | 1.4850 | 3.2289 |
| 0.1020 | 0.7662 | 3.6580 | 3.4038 |
| 0.1180 | 1.0406 | 7.7500 | 3.5812 |
| 0.1310 | 1.3244 | 13.2420 | 3.7611 |
| 0.5720 | 1.6176 | 19.9810 | 3.9437 |
| 1.1850 | 1.9203 | 27.8970 | 4.1289 |
| 1.2670 | 2.2326 | 0.0000 | 0.0000 |

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| INFLOW : ID= 2 ( 0805) | 49.020 | 2.984 | 12.25 | 27.28 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 0.110 | 16.50 | 27.26 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.68
TIME SHIFT OF PEAK FLOW (min)=255.00
MAXIMUM STORAGE USED (ha.m.)= 0.9006

---

CALIB
STANDHYD ( 0323)
ID= 1 DT= 5.0 min

Area (ha)= 1.30
Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00

| | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|
| Surface Area (ha)= | 0.83 | 0.47 |
| Dep. Storage (mm)= | 1.00 | 5.00 |
| Average Slope (%)= | 1.00 | 2.00 |
| Length (m)= | 93.09 | 40.00 |
| Mannings n = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 73.29 | 41.92 | |
| over (min) | 5.00 | 15.00 | |
| Storage Coeff. (min)= | 2.77 (ii) | 12.76 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak (cms)= | 0.28 | 0.08 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.09 | 0.03 | 0.119 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.33 | 12.25 |
| RUNOFF VOLUME (mm)= | 58.88 | 16.03 | 31.02 |
| TOTAL RAINFALL (mm)= | 59.88 | 59.88 | 59.88 |
| RUNOFF COEFFICIENT = | 0.98 | 0.27 | 0.52 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| STANDHYD ( 0322) | Area (ha)= 0.25 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 0.96 | 12.250 | 73.29 | 18.33 | 1.08 |
| 0.167 | 0.00 | 6.250 | 0.96 | 12.333 | 8.63 | 18.42 | 1.08 |
| 0.250 | 0.00 | 6.333 | 1.08 | 12.417 | 8.62 | 18.50 | 1.08 |
| 0.333 | 0.66 | 6.417 | 1.08 | 12.500 | 8.62 | 18.58 | 1.08 |
| 0.417 | 0.66 | 6.500 | 1.08 | 12.583 | 8.62 | 18.67 | 1.08 |
| 0.500 | 0.66 | 6.583 | 1.08 | 12.667 | 8.62 | 18.75 | 1.08 |
| 0.583 | 0.66 | 6.667 | 1.08 | 12.750 | 8.62 | 18.83 | 1.08 |
| 0.667 | 0.66 | 6.750 | 1.08 | 12.833 | 4.43 | 18.92 | 1.08 |
| 0.750 | 0.66 | 6.833 | 1.08 | 12.917 | 4.43 | 19.00 | 1.08 |
| 0.833 | 0.66 | 6.917 | 1.08 | 13.000 | 4.43 | 19.08 | 1.08 |
| 0.917 | 0.66 | 7.000 | 1.08 | 13.083 | 4.43 | 19.17 | 1.08 |
| 1.000 | 0.66 | 7.083 | 1.08 | 13.167 | 4.43 | 19.25 | 1.08 |
| 1.083 | 0.66 | 7.167 | 1.08 | 13.250 | 4.43 | 19.33 | 1.08 |
| 1.167 | 0.66 | 7.250 | 1.08 | 13.333 | 3.23 | 19.42 | 1.08 |
| 1.250 | 0.66 | 7.333 | 1.32 | 13.417 | 3.23 | 19.50 | 1.08 |
| 1.333 | 0.66 | 7.417 | 1.32 | 13.500 | 3.23 | 19.58 | 1.08 |
| 1.417 | 0.66 | 7.500 | 1.32 | 13.583 | 3.23 | 19.67 | 1.08 |
| 1.500 | 0.66 | 7.583 | 1.32 | 13.667 | 3.23 | 19.75 | 1.08 |
| 1.583 | 0.66 | 7.667 | 1.32 | 13.750 | 3.23 | 19.83 | 1.08 |
| 1.667 | 0.66 | 7.750 | 1.32 | 13.833 | 2.52 | 19.92 | 1.08 |
| 1.750 | 0.66 | 7.833 | 1.32 | 13.917 | 2.51 | 20.00 | 1.08 |
| 1.833 | 0.66 | 7.917 | 1.32 | 14.000 | 2.51 | 20.08 | 1.08 |
| 1.917 | 0.66 | 8.000 | 1.32 | 14.083 | 2.51 | 20.17 | 1.08 |
| 2.000 | 0.66 | 8.083 | 1.32 | 14.167 | 2.51 | 20.25 | 1.08 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.083 | 0.66 | 8.167 | 1.32 | 14.250 | 2.51 | 20.33 | 0.72 |
| 2.167 | 0.66 | 8.250 | 1.32 | 14.333 | 1.80 | 20.42 | 0.72 |
| 2.250 | 0.66 | 8.333 | 1.56 | 14.417 | 1.80 | 20.50 | 0.72 |
| 2.333 | 0.78 | 8.417 | 1.56 | 14.500 | 1.80 | 20.58 | 0.72 |
| 2.417 | 0.78 | 8.500 | 1.56 | 14.583 | 1.80 | 20.67 | 0.72 |
| 2.500 | 0.78 | 8.583 | 1.56 | 14.667 | 1.80 | 20.75 | 0.72 |
| 2.583 | 0.78 | 8.667 | 1.56 | 14.750 | 1.80 | 20.83 | 0.72 |
| 2.667 | 0.78 | 8.750 | 1.56 | 14.833 | 1.80 | 20.92 | 0.72 |
| 2.750 | 0.78 | 8.833 | 1.68 | 14.917 | 1.80 | 21.00 | 0.72 |
| 2.833 | 0.78 | 8.917 | 1.68 | 15.000 | 1.80 | 21.08 | 0.72 |
| 2.917 | 0.78 | 9.000 | 1.68 | 15.083 | 1.80 | 21.17 | 0.72 |
| 3.000 | 0.78 | 9.083 | 1.68 | 15.167 | 1.80 | 21.25 | 0.72 |
| 3.083 | 0.78 | 9.167 | 1.68 | 15.250 | 1.80 | 21.33 | 0.72 |
| 3.167 | 0.78 | 9.250 | 1.68 | 15.333 | 1.80 | 21.42 | 0.72 |
| 3.250 | 0.78 | 9.333 | 1.92 | 15.417 | 1.80 | 21.50 | 0.72 |
| 3.333 | 0.78 | 9.417 | 1.92 | 15.500 | 1.80 | 21.58 | 0.72 |
| 3.417 | 0.78 | 9.500 | 1.92 | 15.583 | 1.80 | 21.67 | 0.72 |
| 3.500 | 0.78 | 9.583 | 1.92 | 15.667 | 1.80 | 21.75 | 0.72 |
| 3.583 | 0.78 | 9.667 | 1.92 | 15.750 | 1.80 | 21.83 | 0.72 |
| 3.667 | 0.78 | 9.750 | 1.92 | 15.833 | 1.80 | 21.92 | 0.72 |
| 3.750 | 0.78 | 9.833 | 2.16 | 15.917 | 1.80 | 22.00 | 0.72 |
| 3.833 | 0.78 | 9.917 | 2.16 | 16.000 | 1.80 | 22.08 | 0.72 |
| 3.917 | 0.78 | 10.000 | 2.16 | 16.083 | 1.80 | 22.17 | 0.72 |
| 4.000 | 0.78 | 10.083 | 2.16 | 16.167 | 1.80 | 22.25 | 0.72 |
| 4.083 | 0.78 | 10.167 | 2.16 | 16.250 | 1.80 | 22.33 | 0.72 |
| 4.167 | 0.78 | 10.250 | 2.16 | 16.333 | 1.08 | 22.42 | 0.72 |
| 4.250 | 0.78 | 10.333 | 2.75 | 16.417 | 1.08 | 22.50 | 0.72 |
| 4.333 | 0.96 | 10.417 | 2.75 | 16.500 | 1.08 | 22.58 | 0.72 |
| 4.417 | 0.96 | 10.500 | 2.75 | 16.583 | 1.08 | 22.67 | 0.72 |
| 4.500 | 0.96 | 10.583 | 2.75 | 16.667 | 1.08 | 22.75 | 0.72 |
| 4.583 | 0.96 | 10.667 | 2.75 | 16.750 | 1.08 | 22.83 | 0.72 |
| 4.667 | 0.96 | 10.750 | 2.75 | 16.833 | 1.08 | 22.92 | 0.72 |
| 4.750 | 0.96 | 10.833 | 3.71 | 16.917 | 1.08 | 23.00 | 0.72 |
| 4.833 | 0.96 | 10.917 | 3.71 | 17.000 | 1.08 | 23.08 | 0.72 |
| 4.917 | 0.96 | 11.000 | 3.71 | 17.083 | 1.08 | 23.17 | 0.72 |
| 5.000 | 0.96 | 11.083 | 3.71 | 17.167 | 1.08 | 23.25 | 0.72 |
| 5.083 | 0.96 | 11.167 | 3.71 | 17.250 | 1.08 | 23.33 | 0.72 |
| 5.167 | 0.96 | 11.250 | 3.71 | 17.333 | 1.08 | 23.42 | 0.72 |
| 5.250 | 0.96 | 11.333 | 5.75 | 17.417 | 1.08 | 23.50 | 0.72 |
| 5.333 | 0.96 | 11.417 | 5.75 | 17.500 | 1.08 | 23.58 | 0.72 |
| 5.417 | 0.96 | 11.500 | 5.75 | 17.583 | 1.08 | 23.67 | 0.72 |
| 5.500 | 0.96 | 11.583 | 5.75 | 17.667 | 1.08 | 23.75 | 0.72 |
| 5.583 | 0.96 | 11.667 | 5.75 | 17.750 | 1.08 | 23.83 | 0.72 |
| 5.667 | 0.96 | 11.750 | 5.75 | 17.833 | 1.08 | 23.92 | 0.72 |
| 5.750 | 0.96 | 11.833 | 17.72 | 17.917 | 1.08 | 24.00 | 0.72 |
| 5.833 | 0.96 | 11.917 | 17.72 | 18.000 | 1.08 | 24.08 | 0.72 |
| 5.917 | 0.96 | 12.000 | 17.72 | 18.083 | 1.08 | 24.17 | 0.72 |
| 6.000 | 0.96 | 12.083 | 73.29 | 18.167 | 1.08 | 24.25 | 0.72 |
| 6.083 | 0.96 | 12.167 | 73.29 | 18.250 | 1.08 | | |

```
     Max.Eff.Inten.(mm/hr)=      73.29        41.92
               over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.69 (ii)   11.68 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.32         0.09
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.01          0.023 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.33         12.25
     RUNOFF VOLUME    (mm)=      58.88        16.03         31.00
     TOTAL RAINFALL   (mm)=      59.88        59.88         59.88
     RUNOFF COEFFICIENT   =       0.98         0.27          0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0322):     0.25   0.023    12.25    31.00
      + ID2= 2 (  0323):     1.30   0.119    12.25    31.02
        ================================================
        ID = 3 (  0806):     1.55   0.142    12.25    31.02

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0806):     1.55   0.142    12.25    31.02
      + ID2= 2 (  0004):    49.02   0.110    16.50    27.26
        ================================================
        ID = 1 (  0806):    50.57   0.214    12.25    27.37

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
```

```
       ID1= 1 (  0806):    50.57   0.214    12.25    27.37
     + ID2= 2 (  0810):   123.69   1.101    13.67    17.60
       ================================================
       ID = 3 (  0811):   174.26   1.216    13.67    20.44

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
=======================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\08de5
c3e-75df-4050-bbc6-ce651f93b5b1\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\08de5
c3e-75df-4050-bbc6-ce651f93b5b1\scen


DATE: 07/10/2025                          TIME: 02:08:00

USER:



COMMENTS: _____________________________________________________________


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  ***********************************************
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```
  ** SIMULATION : K- 10yr 24hr 15min SCS Type I **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\dmartin\AppD
|                  |              ata\Local\Temp\
|                  |              129e2800-35e2-4355-8d2d-35ce722b1427\8da32745
| Ptotal= 67.50 mm |    Comments: 10yr 24hr 15min SCS Type II (MTO)
--------------------
```

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 6.25 | 1.22 | 12.50 | 9.72 | 18.75 | 1.22 |
| 0.25 | 0.74 | 6.50 | 1.22 | 12.75 | 4.99 | 19.00 | 1.22 |
| 0.50 | 0.74 | 6.75 | 1.22 | 13.00 | 4.99 | 19.25 | 1.22 |
| 0.75 | 0.74 | 7.00 | 1.22 | 13.25 | 3.64 | 19.50 | 1.22 |
| 1.00 | 0.74 | 7.25 | 1.49 | 13.50 | 3.64 | 19.75 | 1.22 |
| 1.25 | 0.74 | 7.50 | 1.49 | 13.75 | 2.84 | 20.00 | 1.22 |
| 1.50 | 0.74 | 7.75 | 1.49 | 14.00 | 2.84 | 20.25 | 0.81 |
| 1.75 | 0.74 | 8.00 | 1.49 | 14.25 | 2.03 | 20.50 | 0.81 |
| 2.00 | 0.74 | 8.25 | 1.75 | 14.50 | 2.03 | 20.75 | 0.81 |
| 2.25 | 0.88 | 8.50 | 1.75 | 14.75 | 2.03 | 21.00 | 0.81 |
| 2.50 | 0.88 | 8.75 | 1.89 | 15.00 | 2.03 | 21.25 | 0.81 |
| 2.75 | 0.88 | 9.00 | 1.89 | 15.25 | 2.03 | 21.50 | 0.81 |
| 3.00 | 0.88 | 9.25 | 2.16 | 15.50 | 2.03 | 21.75 | 0.81 |
| 3.25 | 0.88 | 9.50 | 2.16 | 15.75 | 2.03 | 22.00 | 0.81 |
| 3.50 | 0.88 | 9.75 | 2.43 | 16.00 | 2.03 | 22.25 | 0.81 |
| 3.75 | 0.88 | 10.00 | 2.43 | 16.25 | 1.22 | 22.50 | 0.81 |
| 4.00 | 0.88 | 10.25 | 3.11 | 16.50 | 1.22 | 22.75 | 0.81 |
| 4.25 | 1.08 | 10.50 | 3.11 | 16.75 | 1.22 | 23.00 | 0.81 |
| 4.50 | 1.08 | 10.75 | 4.18 | 17.00 | 1.22 | 23.25 | 0.81 |
| 4.75 | 1.08 | 11.00 | 4.18 | 17.25 | 1.22 | 23.50 | 0.81 |
| 5.00 | 1.08 | 11.25 | 6.48 | 17.50 | 1.22 | 23.75 | 0.81 |
| 5.25 | 1.08 | 11.50 | 6.48 | 17.75 | 1.22 | 24.00 | 0.81 |
| 5.50 | 1.08 | 11.75 | 19.98 | 18.00 | 1.22 | | |
| 5.75 | 1.08 | 12.00 | 82.62 | 18.25 | 1.22 | | |
| 6.00 | 1.08 | 12.25 | 9.72 | 18.50 | 1.22 | | |

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--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                                  ---- TRANSFORMED HYETOGRAPH ----
```

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 1.149 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 25.535
TOTAL RAINFALL (mm)= 67.500
RUNOFF COEFFICIENT = 0.378

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| | | | |
|---|---|---|---|
| CALIB NASHYD ( 0304) ID= 1 DT= 5.0 min | Area (ha)= | 7.94 | Curve Number (CN)= 53.7 |
| | Ia (mm)= | 7.75 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= | 0.51 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.125 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 12.807
TOTAL RAINFALL (mm)= 67.500
RUNOFF COEFFICIENT = 0.190

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0807) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0303): | 85.82 | 1.149 | 14.08 | 25.53 |
| + ID2= 2 ( 0304): | 7.94 | 0.125 | 12.67 | 12.81 |
| ID = 3 ( 0807): | 93.76 | 1.182 | 14.08 | 24.46 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0305) | Area (ha)= 7.76 | Curve Number (CN)= 62.3 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 6.50 | # of Linear Res.(N)= 3.00 | |

--------------------  U.H. Tp(hrs)=  0.76

NOTE:  RAINFALL WAS TRANSFORMED TO  5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

Unit Hyd Qpeak  (cms)=  0.390

PEAK FLOW  (cms)=  0.127 (i)
TIME TO PEAK  (hrs)=  13.000
RUNOFF VOLUME  (mm)=  17.330
TOTAL RAINFALL  (mm)=  67.500
RUNOFF COEFFICIENT  =  0.257

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0808) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0305): | 7.76 | 0.127 | 13.00 | 17.33 |
| | + ID2= 2 ( 0807): | 93.76 | 1.182 | 14.08 | 24.46 |

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       ================================================
       ID = 3 (  0808):   101.52   1.252    13.92    23.91

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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| CALIB           |
| NASHYD   (  0306)|   Area    (ha)=   6.99   Curve Number   (CN)= 54.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.66

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

```
Unit Hyd Qpeak  (cms)=   0.405

PEAK FLOW       (cms)=   0.101 (i)
TIME TO PEAK    (hrs)=  12.833
RUNOFF VOLUME    (mm)=  14.007
TOTAL RAINFALL   (mm)=  67.500
RUNOFF COEFFICIENT   =   0.208

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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| ADD HYD  (  0060)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0306):     6.99   0.101    12.83    14.01
     + ID2= 2 (  0808):   101.52   1.252    13.92    23.91
       ================================================
       ID = 3 (  0060):   108.51   1.301    13.83    23.27

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0307)|   Area    (ha)=   2.50   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.39

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

                        ---- TRANSFORMED HYETOGRAPH ----
 TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
  hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
0.083    0.00 | 6.167    1.08 |12.250   82.62 | 18.33    1.22
0.167    0.00 | 6.250    1.08 |12.333    9.73 | 18.42    1.22
0.250    0.00 | 6.333    1.22 |12.417    9.72 | 18.50    1.22
0.333    0.74 | 6.417    1.22 |12.500    9.72 | 18.58    1.22
0.417    0.74 | 6.500    1.22 |12.583    9.72 | 18.67    1.22
0.500    0.74 | 6.583    1.22 |12.667    9.72 | 18.75    1.22
0.583    0.74 | 6.667    1.22 |12.750    9.72 | 18.83    1.22
0.667    0.74 | 6.750    1.22 |12.833    5.00 | 18.92    1.22
0.750    0.74 | 6.833    1.22 |12.917    4.99 | 19.00    1.22
0.833    0.74 | 6.917    1.22 |13.000    4.99 | 19.08    1.22
0.917    0.74 | 7.000    1.22 |13.083    4.99 | 19.17    1.22
1.000    0.74 | 7.083    1.22 |13.167    4.99 | 19.25    1.22
1.083    0.74 | 7.167    1.22 |13.250    4.99 | 19.33    1.22
1.167    0.74 | 7.250    1.22 |13.333    3.65 | 19.42    1.22
1.250    0.74 | 7.333    1.49 |13.417    3.64 | 19.50    1.22
1.333    0.74 | 7.417    1.49 |13.500    3.64 | 19.58    1.22
1.417    0.74 | 7.500    1.49 |13.583    3.64 | 19.67    1.22
1.500    0.74 | 7.583    1.49 |13.667    3.64 | 19.75    1.22
1.583    0.74 | 7.667    1.49 |13.750    3.64 | 19.83    1.22
1.667    0.74 | 7.750    1.49 |13.833    2.84 | 19.92    1.22
1.750    0.74 | 7.833    1.49 |13.917    2.84 | 20.00    1.22
1.833    0.74 | 7.917    1.49 |14.000    2.84 | 20.08    1.22
1.917    0.74 | 8.000    1.49 |14.083    2.83 | 20.17    1.22
2.000    0.74 | 8.083    1.49 |14.167    2.84 | 20.25    1.21
2.083    0.74 | 8.167    1.49 |14.250    2.84 | 20.33    0.81
2.167    0.74 | 8.250    1.49 |14.333    2.03 | 20.42    0.81
2.250    0.74 | 8.333    1.75 |14.417    2.03 | 20.50    0.81
2.333    0.88 | 8.417    1.75 |14.500    2.03 | 20.58    0.81
2.417    0.88 | 8.500    1.75 |14.583    2.02 | 20.67    0.81
2.500    0.88 | 8.583    1.75 |14.667    2.03 | 20.75    0.81
2.583    0.88 | 8.667    1.75 |14.750    2.03 | 20.83    0.81
2.667    0.88 | 8.750    1.75 |14.833    2.02 | 20.92    0.81
2.750    0.88 | 8.833    1.89 |14.917    2.03 | 21.00    0.81
2.833    0.88 | 8.917    1.89 |15.000    2.03 | 21.08    0.81
2.917    0.88 | 9.000    1.89 |15.083    2.02 | 21.17    0.81
3.000    0.88 | 9.083    1.89 |15.167    2.03 | 21.25    0.81
3.083    0.88 | 9.167    1.89 |15.250    2.03 | 21.33    0.81
3.167    0.88 | 9.250    1.89 |15.333    2.02 | 21.42    0.81
3.250    0.88 | 9.333    2.16 |15.417    2.03 | 21.50    0.81
3.333    0.88 | 9.417    2.16 |15.500    2.03 | 21.58    0.81
3.417    0.88 | 9.500    2.16 |15.583    2.02 | 21.67    0.81
3.500    0.88 | 9.583    2.16 |15.667    2.03 | 21.75    0.81
3.583    0.88 | 9.667    2.16 |15.750    2.03 | 21.83    0.81
3.667    0.88 | 9.750    2.16 |15.833    2.02 | 21.92    0.81
3.750    0.88 | 9.833    2.43 |15.917    2.03 | 22.00    0.81
3.833    0.88 | 9.917    2.43 |16.000    2.03 | 22.08    0.81
3.917    0.88 |10.000    2.43 |16.083    2.02 | 22.17    0.81
4.000    0.88 |10.083    2.43 |16.167    2.03 | 22.25    0.81
4.083    0.88 |10.167    2.43 |16.250    2.03 | 22.33    0.81
4.167    0.88 |10.250    2.43 |16.333    1.22 | 22.42    0.81
4.250    0.88 |10.333    3.10 |16.417    1.22 | 22.50    0.81
4.333    1.08 |10.417    3.11 |16.500    1.22 | 22.58    0.81
4.417    1.08 |10.500    3.11 |16.583    1.22 | 22.67    0.81
4.500    1.08 |10.583    3.10 |16.667    1.22 | 22.75    0.81
4.583    1.08 |10.667    3.11 |16.750    1.22 | 22.83    0.81
4.667    1.08 |10.750    3.11 |16.833    1.22 | 22.92    0.81
4.750    1.08 |10.833    4.18 |16.917    1.22 | 23.00    0.81
4.833    1.08 |10.917    4.18 |17.000    1.22 | 23.08    0.81
4.917    1.08 |11.000    4.18 |17.083    1.22 | 23.17    0.81
5.000    1.08 |11.083    4.18 |17.167    1.22 | 23.25    0.81
5.083    1.08 |11.167    4.18 |17.250    1.22 | 23.33    0.81
5.167    1.08 |11.250    4.18 |17.333    1.22 | 23.42    0.81
5.250    1.08 |11.333    6.48 |17.417    1.22 | 23.50    0.81
5.333    1.08 |11.417    6.48 |17.500    1.22 | 23.58    0.81
5.417    1.08 |11.500    6.48 |17.583    1.22 | 23.67    0.81
5.500    1.08 |11.583    6.48 |17.667    1.22 | 23.75    0.81
5.583    1.08 |11.667    6.48 |17.750    1.22 | 23.83    0.81
5.667    1.08 |11.750    6.48 |17.833    1.22 | 23.92    0.81
5.750    1.08 |11.833   19.98 |17.917    1.22 | 24.00    0.81
5.833    1.08 |11.917   19.98 |18.000    1.22 | 24.08    0.81
5.917    1.08 |12.000   19.98 |18.083    1.22 | 24.17    0.81
6.000    1.08 |12.083   82.61 |18.167    1.22 | 24.25    0.81
6.083    1.08 |12.167   82.62 |18.250    1.22 |
```

Unit Hyd Qpeak (cms)= 0.245

PEAK FLOW (cms)= 0.045 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 11.949
TOTAL RAINFALL (mm)= 67.500
RUNOFF COEFFICIENT = 0.177

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD (0809) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0307): | 2.50 | 0.045 | 12.50 | 11.95 |
| | + ID2= 2 ( 0060): | 108.51 | 1.301 | 13.83 | 23.27 |
| | ID = 3 ( 0809): | 111.01 | 1.311 | 13.83 | 23.02 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD (0308) | Area (ha)= | 5.22 | Curve Number (CN)= | 49.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.52 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.076 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 11.950
TOTAL RAINFALL (mm)= 67.500
RUNOFF COEFFICIENT = 0.177

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0061) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0308): | 5.22 | 0.076 | 12.67 | 11.95 |
| + ID2= 2 ( 0809): | 111.01 | 1.311 | 13.83 | 23.02 |
| ID = 3 ( 0061): | 116.23 | 1.337 | 13.75 | 22.52 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0309) | Area (ha)= 7.46 | Curve Number (CN)= 51.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.106 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 12.743
TOTAL RAINFALL (mm)= 67.500
RUNOFF COEFFICIENT = 0.189

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0309): | 7.46 | 0.106 | 12.75 | 12.74 |
| + | ID2= 2 ( 0061): | 116.23 | 1.337 | 13.75 | 22.52 |
| | ID = 3 ( 0810): | 123.69 | 1.388 | 13.67 | 21.93 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0302) | | | |
|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 5.52 | Curve Number (CN)= 60.3 |
| | Ia (mm)= | 8.05 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= | 0.42 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.123 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 15.590
TOTAL RAINFALL (mm)= 67.500
RUNOFF COEFFICIENT = 0.231

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0301) | Area | (ha)= | 5.30 | Curve Number (CN)= | 68.0 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 7.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.33 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.188 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 20.326
TOTAL RAINFALL (mm)= 67.500
RUNOFF COEFFICIENT = 0.301

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | |
|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 82.62 | 27.37 | |
| over (min) | 5.00 | 20.00 | |
| Storage Coeff. (min)= | 7.28 (ii) | 19.13 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 20.00 | |
| Unit Hyd. peak (cms)= | 0.17 | 0.06 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 3.16 | 0.65 | 3.572 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.42 | 12.25 |
| RUNOFF VOLUME (mm)= | 66.50 | 15.51 | 35.91 |
| TOTAL RAINFALL (mm)= | 67.50 | 67.50 | 67.50 |
| RUNOFF COEFFICIENT = | 0.99 | 0.23 | 0.53 |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0805)|
|---|

| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 1 ( 0201): | 38.20 | 3.572 | 12.25 | 35.91 |
| + ID2= 2 ( 0301): | 5.30 | 0.188 | 12.42 | 20.33 |
| ID = 3 ( 0805): | 43.50 | 3.699 | 12.25 | 34.01 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| ADD HYD ( 0805)| |
|---|---|

| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| ID1= 3 ( 0805): | 43.50 | 3.699 | 12.25 | 34.01 |
| + ID2= 2 ( 0302): | 5.52 | 0.123 | 12.58 | 15.59 |
| ID = 1 ( 0805): | 49.02 | 3.766 | 12.25 | 31.93 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| RESERVOIR( 0004)| | OVERFLOW IS OFF | | | |
|---|---|---|---|---|---|
| IN= 2---> OUT= 1 | | | | | |
| DT= 5.0 min | OUTFLOW (cms) | STORAGE (ha.m.) | OUTFLOW (cms) | STORAGE (ha.m.) | |
| | 0.0000 | 0.0000 | 1.3440 | 2.5548 | |
| | 0.0590 | 0.2449 | 1.4160 | 2.8868 | |
| | 0.0830 | 0.5009 | 1.4850 | 3.2289 | |
| | 0.1020 | 0.7662 | 3.6580 | 3.4038 | |
| | 0.1180 | 1.0406 | 7.7500 | 3.5812 | |
| | 0.1310 | 1.3244 | 13.2420 | 3.7611 | |
| | 0.5720 | 1.6176 | 19.9810 | 3.9437 | |
| | 1.1850 | 1.9203 | 27.8970 | 4.1289 | |
| | 1.2670 | 2.2326 | 0.0000 | 0.0000 | |

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| INFLOW : ID= 2 ( 0805) | 49.020 | 3.766 | 12.25 | 31.93 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 0.119 | 16.58 | 31.91 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 3.17
TIME SHIFT OF PEAK FLOW (min)=260.00
MAXIMUM STORAGE USED (ha.m.)= 1.0690

---

| CALIB | |
|---|---|
| STANDHYD ( 0323)| Area (ha)= 1.30 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00 |

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| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.83 | 0.47 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 93.09 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten. | (mm/hr)= | 82.62 | 51.97 | |
| over | (min) | 5.00 | 15.00 | |
| Storage Coeff. | (min)= | 2.64 (ii) | 11.81 (ii) | |
| Unit Hyd. Tpeak | (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak | (cms)= | 0.29 | 0.09 | |
| | | | | *TOTALS* |
| PEAK FLOW | (cms)= | 0.10 | 0.04 | 0.138 (iii) |
| TIME TO PEAK | (hrs)= | 12.25 | 12.33 | 12.25 |
| RUNOFF VOLUME | (mm)= | 66.50 | 19.84 | 36.17 |
| TOTAL RAINFALL | (mm)= | 67.50 | 67.50 | 67.50 |
| RUNOFF COEFFICIENT | = | 0.99 | 0.29 | 0.54 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| STANDHYD ( 0322) | Area (ha)= 0.25 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.08 | 12.250 | 82.62 | 18.33 | 1.22 |
| 0.167 | 0.00 | 6.250 | 1.08 | 12.333 | 9.73 | 18.42 | 1.22 |
| 0.250 | 0.00 | 6.333 | 1.22 | 12.417 | 9.72 | 18.50 | 1.22 |
| 0.333 | 0.74 | 6.417 | 1.22 | 12.500 | 9.72 | 18.58 | 1.22 |
| 0.417 | 0.74 | 6.500 | 1.22 | 12.583 | 9.72 | 18.67 | 1.22 |
| 0.500 | 0.74 | 6.583 | 1.22 | 12.667 | 9.72 | 18.75 | 1.22 |
| 0.583 | 0.74 | 6.667 | 1.22 | 12.750 | 9.72 | 18.83 | 1.22 |
| 0.667 | 0.74 | 6.750 | 1.22 | 12.833 | 5.00 | 18.92 | 1.22 |
| 0.750 | 0.74 | 6.833 | 1.22 | 12.917 | 4.99 | 19.00 | 1.22 |
| 0.833 | 0.74 | 6.917 | 1.22 | 13.000 | 4.99 | 19.08 | 1.22 |
| 0.917 | 0.74 | 7.000 | 1.22 | 13.083 | 4.99 | 19.17 | 1.22 |
| 1.000 | 0.74 | 7.083 | 1.22 | 13.167 | 4.99 | 19.25 | 1.22 |
| 1.083 | 0.74 | 7.167 | 1.22 | 13.250 | 4.99 | 19.33 | 1.22 |
| 1.167 | 0.74 | 7.250 | 1.22 | 13.333 | 3.65 | 19.42 | 1.22 |
| 1.250 | 0.74 | 7.333 | 1.49 | 13.417 | 3.64 | 19.50 | 1.22 |
| 1.333 | 0.74 | 7.417 | 1.49 | 13.500 | 3.64 | 19.58 | 1.22 |
| 1.417 | 0.74 | 7.500 | 1.49 | 13.583 | 3.64 | 19.67 | 1.22 |
| 1.500 | 0.74 | 7.583 | 1.49 | 13.667 | 3.64 | 19.75 | 1.22 |
| 1.583 | 0.74 | 7.667 | 1.49 | 13.750 | 3.64 | 19.83 | 1.22 |
| 1.667 | 0.74 | 7.750 | 1.49 | 13.833 | 2.84 | 19.92 | 1.22 |
| 1.750 | 0.74 | 7.833 | 1.49 | 13.917 | 2.84 | 20.00 | 1.22 |
| 1.833 | 0.74 | 7.917 | 1.49 | 14.000 | 2.84 | 20.08 | 1.22 |
| 1.917 | 0.74 | 8.000 | 1.49 | 14.083 | 2.83 | 20.17 | 1.22 |
| 2.000 | 0.74 | 8.083 | 1.49 | 14.167 | 2.84 | 20.25 | 1.21 |
| 2.083 | 0.74 | 8.167 | 1.49 | 14.250 | 2.84 | 20.33 | 0.81 |
| 2.167 | 0.74 | 8.250 | 1.49 | 14.333 | 2.03 | 20.42 | 0.81 |
| 2.250 | 0.74 | 8.333 | 1.75 | 14.417 | 2.03 | 20.50 | 0.81 |
| 2.333 | 0.88 | 8.417 | 1.75 | 14.500 | 2.03 | 20.58 | 0.81 |
| 2.417 | 0.88 | 8.500 | 1.75 | 14.583 | 2.02 | 20.67 | 0.81 |
| 2.500 | 0.88 | 8.583 | 1.75 | 14.667 | 2.03 | 20.75 | 0.81 |
| 2.583 | 0.88 | 8.667 | 1.75 | 14.750 | 2.03 | 20.83 | 0.81 |
| 2.667 | 0.88 | 8.750 | 1.75 | 14.833 | 2.02 | 20.92 | 0.81 |
| 2.750 | 0.88 | 8.833 | 1.89 | 14.917 | 2.03 | 21.00 | 0.81 |
| 2.833 | 0.88 | 8.917 | 1.89 | 15.000 | 2.03 | 21.08 | 0.81 |
| 2.917 | 0.88 | 9.000 | 1.89 | 15.083 | 2.02 | 21.17 | 0.81 |
| 3.000 | 0.88 | 9.083 | 1.89 | 15.167 | 2.03 | 21.25 | 0.81 |
| 3.083 | 0.88 | 9.167 | 1.89 | 15.250 | 2.03 | 21.33 | 0.81 |
| 3.167 | 0.88 | 9.250 | 1.89 | 15.333 | 2.02 | 21.42 | 0.81 |
| 3.250 | 0.88 | 9.333 | 2.16 | 15.417 | 2.03 | 21.50 | 0.81 |
| 3.333 | 0.88 | 9.417 | 2.16 | 15.500 | 2.03 | 21.58 | 0.81 |
| 3.417 | 0.88 | 9.500 | 2.16 | 15.583 | 2.02 | 21.67 | 0.81 |
| 3.500 | 0.88 | 9.583 | 2.16 | 15.667 | 2.03 | 21.75 | 0.81 |
| 3.583 | 0.88 | 9.667 | 2.16 | 15.750 | 2.03 | 21.83 | 0.81 |
| 3.667 | 0.88 | 9.750 | 2.16 | 15.833 | 2.02 | 21.92 | 0.81 |
| 3.750 | 0.88 | 9.833 | 2.43 | 15.917 | 2.03 | 22.00 | 0.81 |
| 3.833 | 0.88 | 9.917 | 2.43 | 16.000 | 2.03 | 22.08 | 0.81 |
| 3.917 | 0.88 | 10.000 | 2.43 | 16.083 | 2.02 | 22.17 | 0.81 |
| 4.000 | 0.88 | 10.083 | 2.43 | 16.167 | 2.03 | 22.25 | 0.81 |
| 4.083 | 0.88 | 10.167 | 2.43 | 16.250 | 2.03 | 22.33 | 0.81 |
| 4.167 | 0.88 | 10.250 | 2.43 | 16.333 | 1.22 | 22.42 | 0.81 |
| 4.250 | 0.88 | 10.333 | 3.10 | 16.417 | 1.22 | 22.50 | 0.81 |
| 4.333 | 1.08 | 10.417 | 3.11 | 16.500 | 1.22 | 22.58 | 0.81 |
| 4.417 | 1.08 | 10.500 | 3.11 | 16.583 | 1.22 | 22.67 | 0.81 |
| 4.500 | 1.08 | 10.583 | 3.10 | 16.667 | 1.22 | 22.75 | 0.81 |
| 4.583 | 1.08 | 10.667 | 3.11 | 16.750 | 1.22 | 22.83 | 0.81 |
| 4.667 | 1.08 | 10.750 | 3.11 | 16.833 | 1.22 | 22.92 | 0.81 |
| 4.750 | 1.08 | 10.833 | 4.18 | 16.917 | 1.22 | 23.00 | 0.81 |
| 4.833 | 1.08 | 10.917 | 4.18 | 17.000 | 1.22 | 23.08 | 0.81 |
| 4.917 | 1.08 | 11.000 | 4.18 | 17.083 | 1.22 | 23.17 | 0.81 |
| 5.000 | 1.08 | 11.083 | 4.18 | 17.167 | 1.22 | 23.25 | 0.81 |
| 5.083 | 1.08 | 11.167 | 4.18 | 17.250 | 1.22 | 23.33 | 0.81 |
| 5.167 | 1.08 | 11.250 | 4.18 | 17.333 | 1.22 | 23.42 | 0.81 |
| 5.250 | 1.08 | 11.333 | 6.48 | 17.417 | 1.22 | 23.50 | 0.81 |
| 5.333 | 1.08 | 11.417 | 6.48 | 17.500 | 1.22 | 23.58 | 0.81 |
| 5.417 | 1.08 | 11.500 | 6.48 | 17.583 | 1.22 | 23.67 | 0.81 |
| 5.500 | 1.08 | 11.583 | 6.48 | 17.667 | 1.22 | 23.75 | 0.81 |
| 5.583 | 1.08 | 11.667 | 6.48 | 17.750 | 1.22 | 23.83 | 0.81 |
| 5.667 | 1.08 | 11.750 | 6.48 | 17.833 | 1.22 | 23.92 | 0.81 |
| 5.750 | 1.08 | 11.833 | 19.98 | 17.917 | 1.22 | 24.00 | 0.81 |
| 5.833 | 1.08 | 11.917 | 19.98 | 18.000 | 1.22 | 24.08 | 0.81 |
| 5.917 | 1.08 | 12.000 | 19.98 | 18.083 | 1.22 | 24.17 | 0.81 |
| 6.000 | 1.08 | 12.083 | 82.61 | 18.167 | 1.22 | 24.25 | 0.81 |
| 6.083 | 1.08 | 12.167 | 82.62 | 18.250 | 1.22 | | |

```
     Max.Eff.Inten.(mm/hr)=      82.62        51.97
                  over (min)        5.00        15.00
     Storage Coeff.  (min)=       1.61 (ii)   10.78 (ii)
     Unit Hyd. Tpeak (min)=       5.00        15.00
     Unit Hyd. peak  (cms)=       0.32         0.09
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.01          0.027 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.33          12.25
     RUNOFF VOLUME    (mm)=      66.50        19.84          36.15
     TOTAL RAINFALL   (mm)=      67.50        67.50          67.50
     RUNOFF COEFFICIENT   =       0.99         0.29           0.54

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0322):     0.25   0.027    12.25    36.15
     + ID2= 2 (  0323):     1.30   0.138    12.25    36.17
       ================================================
       ID = 3 (  0806):     1.55   0.165    12.25    36.16

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0806):     1.55   0.165    12.25    36.16
     + ID2= 2 (  0004):    49.02   0.119    16.58    31.91
       ================================================
       ID = 1 (  0806):    50.57   0.249    12.25    32.04

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0806):     50.57   0.249    12.25    32.04
     + ID2= 2 (  0810):    123.69   1.388    13.67    21.93
       ================================================
       ID = 3 (  0811):    174.26   1.514    13.67    24.87

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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================================================================================
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       V    V   I    SSSSS  U   U    A    L              (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


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  Output  filename:
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3ec-a437-4b06-a7ea-ea7be0909860\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\c5b0b
3ec-a437-4b06-a7ea-ea7be0909860\scen


DATE: 07/10/2025                          TIME: 02:08:05

USER:


COMMENTS: _____________________________________________________________

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```
  ***********************************************
  ** SIMULATION : L - 25yr 24hr 15min SCS Type  **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\dmartin\AppD
|                  |              ata\Local\Temp\
|                  |              129e2800-35e2-4355-8d2d-35ce722b1427\4931b8b6
| Ptotal= 78.08 mm |    Comments: 25yr 24hr 15min SCS Type II (MTO)
--------------------
```

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 6.25 | 1.41 | 12.50 | 11.24 | 18.75 | 1.41 |
| 0.25 | 0.86 | 6.50 | 1.41 | 12.75 | 5.78 | 19.00 | 1.41 |
| 0.50 | 0.86 | 6.75 | 1.41 | 13.00 | 5.78 | 19.25 | 1.41 |
| 0.75 | 0.86 | 7.00 | 1.41 | 13.25 | 4.22 | 19.50 | 1.41 |
| 1.00 | 0.86 | 7.25 | 1.72 | 13.50 | 4.22 | 19.75 | 1.41 |
| 1.25 | 0.86 | 7.50 | 1.72 | 13.75 | 3.28 | 20.00 | 1.41 |
| 1.50 | 0.86 | 7.75 | 1.72 | 14.00 | 3.28 | 20.25 | 0.94 |
| 1.75 | 0.86 | 8.00 | 1.72 | 14.25 | 2.34 | 20.50 | 0.94 |
| 2.00 | 0.86 | 8.25 | 2.03 | 14.50 | 2.34 | 20.75 | 0.94 |
| 2.25 | 1.02 | 8.50 | 2.03 | 14.75 | 2.34 | 21.00 | 0.94 |
| 2.50 | 1.02 | 8.75 | 2.19 | 15.00 | 2.34 | 21.25 | 0.94 |
| 2.75 | 1.02 | 9.00 | 2.19 | 15.25 | 2.34 | 21.50 | 0.94 |
| 3.00 | 1.02 | 9.25 | 2.50 | 15.50 | 2.34 | 21.75 | 0.94 |
| 3.25 | 1.02 | 9.50 | 2.50 | 15.75 | 2.34 | 22.00 | 0.94 |
| 3.50 | 1.02 | 9.75 | 2.81 | 16.00 | 2.34 | 22.25 | 0.94 |
| 3.75 | 1.02 | 10.00 | 2.81 | 16.25 | 1.41 | 22.50 | 0.94 |
| 4.00 | 1.02 | 10.25 | 3.59 | 16.50 | 1.41 | 22.75 | 0.94 |
| 4.25 | 1.25 | 10.50 | 3.59 | 16.75 | 1.41 | 23.00 | 0.94 |
| 4.50 | 1.25 | 10.75 | 4.84 | 17.00 | 1.41 | 23.25 | 0.94 |
| 4.75 | 1.25 | 11.00 | 4.84 | 17.25 | 1.41 | 23.50 | 0.94 |
| 5.00 | 1.25 | 11.25 | 7.50 | 17.50 | 1.41 | 23.75 | 0.94 |
| 5.25 | 1.25 | 11.50 | 7.50 | 17.75 | 1.41 | 24.00 | 0.94 |
| 5.50 | 1.25 | 11.75 | 23.11 | 18.00 | 1.41 | | |
| 5.75 | 1.25 | 12.00 | 95.57 | 18.25 | 1.41 | | |
| 6.00 | 1.25 | 12.25 | 11.24 | 18.50 | 1.41 | | |

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| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 1.495 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 32.875
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.421

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0304) | Area | (ha)= | 7.94 | Curve Number (CN)= | 53.7 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 7.75 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.51 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.169 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 17.095
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.219

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0807) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0303): | 85.82 | 1.495 | 14.08 | 32.88 |
| | + ID2= 2 ( 0304): | 7.94 | 0.169 | 12.67 | 17.09 |
| | ID = 3 ( 0807): | 93.76 | 1.539 | 14.00 | 31.54 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0305) | Area (ha)= 7.76 | Curve Number (CN)= 62.3 |
|---|---|---|
| ID= 1 DT= 5.0 min | Ia (mm)= 6.50 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.76 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.168 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 22.743
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.291

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0808) \| 1 + 2 = 3 | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| ID1= 1 ( 0305): | | 7.76 | 0.168 | 13.00 | 22.74 |
| + ID2= 2 ( 0807): | | 93.76 | 1.539 | 14.00 | 31.54 |
| ID = 3 ( 0808): | | 101.52 | 1.634 | 13.92 | 30.87 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB \| NASHYD ( 0306) \| ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 6.99 | Curve Number (CN)= | 54.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.66 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.134 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 18.451
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.236

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0060) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0306): | 6.99 | 0.134 | 12.83 | 18.45 |
| | + ID2= 2 ( 0808): | 101.52 | 1.634 | 13.92 | 30.87 |
| | ID = 3 ( 0060): | 108.51 | 1.700 | 13.83 | 30.07 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0307) ID= 1 DT= 5.0 min | Area (ha)= 2.50 | Curve Number (CN)= 49.0 |
|---|---|---|
| | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.39 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

```
     Unit Hyd Qpeak  (cms)=   0.245

     PEAK FLOW       (cms)=   0.060 (i)
     TIME TO PEAK    (hrs)=  12.500
     RUNOFF VOLUME    (mm)=  15.824
     TOTAL RAINFALL   (mm)=  78.080
     RUNOFF COEFFICIENT   =   0.203

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0307):     2.50   0.060    12.50    15.82
      + ID2= 2 (  0060):   108.51   1.700    13.83    30.07
        ================================================
        ID = 3 (  0809):   111.01   1.712    13.83    29.75

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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--------------------
| CALIB            |
| NASHYD   (  0308)|   Area    (ha)=   5.22   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.52

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.101 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 15.826
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.203

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0061) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0308): | 5.22 | 0.101 | 12.67 | 15.83 |
| | + ID2= 2 ( 0809): | 111.01 | 1.712 | 13.83 | 29.75 |
| | ID = 3 ( 0061): | 116.23 | 1.749 | 13.75 | 29.12 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0309) | Area | (ha)= | 7.46 | Curve Number | (CN)= 51.0 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.141 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 16.841
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.216

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0810) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0309): | 7.46 | 0.141 | 12.75 | 16.84 |
| | + ID2= 2 ( 0061): | 116.23 | 1.749 | 13.75 | 29.12 |
| | ID = 3 ( 0810): | 123.69 | 1.819 | 13.58 | 28.38 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0302) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 5.52 | Curve Number (CN)= | 60.3 |
| | Ia (mm)= | 8.05 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.42 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.166 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 20.668
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.265

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | |
|---|---|
| NASHYD ( 0301) | Area (ha)= 5.30 Curve Number (CN)= 68.0 |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.33 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME | RAIN | TIME | RAIN | TIME | RAIN | TIME | RAIN |
|---|---|---|---|---|---|---|---|

| hrs | mm/hr | hrs | mm/hr | hrs | mm/hr | hrs | mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.248 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 26.499
TOTAL RAINFALL (mm)= 78.080
RUNOFF COEFFICIENT = 0.339

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | |
|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 95.57 | 35.97 | | |
| over (min) | 5.00 | 20.00 | | |
| Storage Coeff. (min)= | 6.87 (ii) | 17.49 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 20.00 | | |
| Unit Hyd. peak (cms)= | 0.18 | 0.06 | | |
| | | | | *TOTALS* |
| PEAK FLOW (cms)= | 3.70 | 0.89 | | 4.277 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.42 | | 12.25 |
| RUNOFF VOLUME (mm)= | 77.08 | 20.27 | | 42.99 |
| TOTAL RAINFALL (mm)= | 78.08 | 78.08 | | 78.08 |
| RUNOFF COEFFICIENT = | 0.99 | 0.26 | | 0.55 |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD  (  0805)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0201):    38.20   4.277    12.25    42.99
     + ID2= 2 (  0301):     5.30   0.248    12.42    26.50
       ================================================
       ID = 3 (  0805):    43.50   4.447    12.25    40.98

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
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-------------------
| ADD HYD  (  0805)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
-------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0805):    43.50   4.447    12.25    40.98
     + ID2= 2 (  0302):     5.52   0.166    12.58    20.67
       ================================================
       ID = 1 (  0805):    49.02   4.537    12.25    38.70

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
-------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
-------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                          0.0000      0.0000   |    1.3440      2.5548
                          0.0590      0.2449   |    1.4160      2.8868
                          0.0830      0.5009   |    1.4850      3.2289
                          0.1020      0.7662   |    3.6580      3.4038
                          0.1180      1.0406   |    7.7500      3.5812
                          0.1310      1.3244   |   13.2420      3.7611
                          0.5720      1.6176   |   19.9810      3.9437
                          1.1850      1.9203   |   27.8970      4.1289
                          1.2670      2.2326   |    0.0000      0.0000

                              AREA     QPEAK     TPEAK       R.V.
                              (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0805)     49.020      4.537     12.25      38.70
   OUTFLOW: ID= 1 (  0004)     49.020      0.131     16.83      38.67

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  2.88
                  TIME SHIFT OF PEAK FLOW         (min)=275.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  1.3190

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-------------------
| CALIB            |
| STANDHYD (  0323)|   Area    (ha)=   1.30
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|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
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                                IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.83          0.47
     Dep. Storage     (mm)=       1.00          5.00
     Average Slope     (%)=       1.00          2.00
     Length            (m)=      93.09         40.00
     Mannings n           =      0.013         0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
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---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 95.57 | 67.09 | |
| over (min) | 5.00 | 15.00 | |
| Storage Coeff. (min)= | 2.49 (ii) | 10.77 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak (cms)= | 0.29 | 0.09 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.12 | 0.05 | 0.167 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.33 | 12.25 |
| RUNOFF VOLUME (mm)= | 77.08 | 25.58 | 43.60 |
| TOTAL RAINFALL (mm)= | 78.08 | 78.08 | 78.08 |
| RUNOFF COEFFICIENT = | 0.99 | 0.33 | 0.56 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | | | |
|---|---|---|---|
| STANDHYD ( 0322) | Area (ha)= | 0.25 | |
| ID= 1 DT= 5.0 min | Total Imp(%)= | 64.00 | Dir. Conn.(%)= 35.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.25 | 12.250 | 95.57 | 18.33 | 1.41 |
| 0.167 | 0.00 | 6.250 | 1.25 | 12.333 | 11.25 | 18.42 | 1.41 |
| 0.250 | 0.00 | 6.333 | 1.41 | 12.417 | 11.24 | 18.50 | 1.41 |
| 0.333 | 0.86 | 6.417 | 1.41 | 12.500 | 11.24 | 18.58 | 1.41 |
| 0.417 | 0.86 | 6.500 | 1.41 | 12.583 | 11.24 | 18.67 | 1.41 |
| 0.500 | 0.86 | 6.583 | 1.41 | 12.667 | 11.24 | 18.75 | 1.41 |
| 0.583 | 0.86 | 6.667 | 1.41 | 12.750 | 11.24 | 18.83 | 1.41 |
| 0.667 | 0.86 | 6.750 | 1.41 | 12.833 | 5.78 | 18.92 | 1.41 |
| 0.750 | 0.86 | 6.833 | 1.41 | 12.917 | 5.78 | 19.00 | 1.41 |
| 0.833 | 0.86 | 6.917 | 1.41 | 13.000 | 5.78 | 19.08 | 1.41 |
| 0.917 | 0.86 | 7.000 | 1.41 | 13.083 | 5.78 | 19.17 | 1.41 |
| 1.000 | 0.86 | 7.083 | 1.41 | 13.167 | 5.78 | 19.25 | 1.41 |
| 1.083 | 0.86 | 7.167 | 1.41 | 13.250 | 5.78 | 19.33 | 1.41 |
| 1.167 | 0.86 | 7.250 | 1.41 | 13.333 | 4.22 | 19.42 | 1.41 |
| 1.250 | 0.86 | 7.333 | 1.72 | 13.417 | 4.22 | 19.50 | 1.41 |
| 1.333 | 0.86 | 7.417 | 1.72 | 13.500 | 4.22 | 19.58 | 1.41 |
| 1.417 | 0.86 | 7.500 | 1.72 | 13.583 | 4.22 | 19.67 | 1.41 |
| 1.500 | 0.86 | 7.583 | 1.72 | 13.667 | 4.22 | 19.75 | 1.41 |
| 1.583 | 0.86 | 7.667 | 1.72 | 13.750 | 4.22 | 19.83 | 1.41 |
| 1.667 | 0.86 | 7.750 | 1.72 | 13.833 | 3.28 | 19.92 | 1.41 |
| 1.750 | 0.86 | 7.833 | 1.72 | 13.917 | 3.28 | 20.00 | 1.41 |
| 1.833 | 0.86 | 7.917 | 1.72 | 14.000 | 3.28 | 20.08 | 1.41 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.917 | 0.86 | 8.000 | 1.72 | 14.083 | 3.28 | 20.17 | 1.41 |
| 2.000 | 0.86 | 8.083 | 1.72 | 14.167 | 3.28 | 20.25 | 1.41 |
| 2.083 | 0.86 | 8.167 | 1.72 | 14.250 | 3.28 | 20.33 | 0.94 |
| 2.167 | 0.86 | 8.250 | 1.72 | 14.333 | 2.34 | 20.42 | 0.94 |
| 2.250 | 0.86 | 8.333 | 2.03 | 14.417 | 2.34 | 20.50 | 0.94 |
| 2.333 | 1.02 | 8.417 | 2.03 | 14.500 | 2.34 | 20.58 | 0.94 |
| 2.417 | 1.02 | 8.500 | 2.03 | 14.583 | 2.34 | 20.67 | 0.94 |
| 2.500 | 1.02 | 8.583 | 2.03 | 14.667 | 2.34 | 20.75 | 0.94 |
| 2.583 | 1.02 | 8.667 | 2.03 | 14.750 | 2.34 | 20.83 | 0.94 |
| 2.667 | 1.02 | 8.750 | 2.03 | 14.833 | 2.34 | 20.92 | 0.94 |
| 2.750 | 1.02 | 8.833 | 2.19 | 14.917 | 2.34 | 21.00 | 0.94 |
| 2.833 | 1.02 | 8.917 | 2.19 | 15.000 | 2.34 | 21.08 | 0.94 |
| 2.917 | 1.02 | 9.000 | 2.19 | 15.083 | 2.34 | 21.17 | 0.94 |
| 3.000 | 1.02 | 9.083 | 2.19 | 15.167 | 2.34 | 21.25 | 0.94 |
| 3.083 | 1.02 | 9.167 | 2.19 | 15.250 | 2.34 | 21.33 | 0.94 |
| 3.167 | 1.02 | 9.250 | 2.19 | 15.333 | 2.34 | 21.42 | 0.94 |
| 3.250 | 1.02 | 9.333 | 2.50 | 15.417 | 2.34 | 21.50 | 0.94 |
| 3.333 | 1.02 | 9.417 | 2.50 | 15.500 | 2.34 | 21.58 | 0.94 |
| 3.417 | 1.02 | 9.500 | 2.50 | 15.583 | 2.34 | 21.67 | 0.94 |
| 3.500 | 1.02 | 9.583 | 2.50 | 15.667 | 2.34 | 21.75 | 0.94 |
| 3.583 | 1.02 | 9.667 | 2.50 | 15.750 | 2.34 | 21.83 | 0.94 |
| 3.667 | 1.02 | 9.750 | 2.50 | 15.833 | 2.34 | 21.92 | 0.94 |
| 3.750 | 1.02 | 9.833 | 2.81 | 15.917 | 2.34 | 22.00 | 0.94 |
| 3.833 | 1.02 | 9.917 | 2.81 | 16.000 | 2.34 | 22.08 | 0.94 |
| 3.917 | 1.02 | 10.000 | 2.81 | 16.083 | 2.34 | 22.17 | 0.94 |
| 4.000 | 1.02 | 10.083 | 2.81 | 16.167 | 2.34 | 22.25 | 0.94 |
| 4.083 | 1.02 | 10.167 | 2.81 | 16.250 | 2.34 | 22.33 | 0.94 |
| 4.167 | 1.02 | 10.250 | 2.81 | 16.333 | 1.41 | 22.42 | 0.94 |
| 4.250 | 1.02 | 10.333 | 3.59 | 16.417 | 1.41 | 22.50 | 0.94 |
| 4.333 | 1.25 | 10.417 | 3.59 | 16.500 | 1.41 | 22.58 | 0.94 |
| 4.417 | 1.25 | 10.500 | 3.59 | 16.583 | 1.41 | 22.67 | 0.94 |
| 4.500 | 1.25 | 10.583 | 3.59 | 16.667 | 1.41 | 22.75 | 0.94 |
| 4.583 | 1.25 | 10.667 | 3.59 | 16.750 | 1.41 | 22.83 | 0.94 |
| 4.667 | 1.25 | 10.750 | 3.59 | 16.833 | 1.41 | 22.92 | 0.94 |
| 4.750 | 1.25 | 10.833 | 4.84 | 16.917 | 1.41 | 23.00 | 0.94 |
| 4.833 | 1.25 | 10.917 | 4.84 | 17.000 | 1.41 | 23.08 | 0.94 |
| 4.917 | 1.25 | 11.000 | 4.84 | 17.083 | 1.41 | 23.17 | 0.94 |
| 5.000 | 1.25 | 11.083 | 4.84 | 17.167 | 1.41 | 23.25 | 0.94 |
| 5.083 | 1.25 | 11.167 | 4.84 | 17.250 | 1.41 | 23.33 | 0.94 |
| 5.167 | 1.25 | 11.250 | 4.84 | 17.333 | 1.41 | 23.42 | 0.94 |
| 5.250 | 1.25 | 11.333 | 7.50 | 17.417 | 1.41 | 23.50 | 0.94 |
| 5.333 | 1.25 | 11.417 | 7.50 | 17.500 | 1.41 | 23.58 | 0.94 |
| 5.417 | 1.25 | 11.500 | 7.50 | 17.583 | 1.41 | 23.67 | 0.94 |
| 5.500 | 1.25 | 11.583 | 7.50 | 17.667 | 1.41 | 23.75 | 0.94 |
| 5.583 | 1.25 | 11.667 | 7.50 | 17.750 | 1.41 | 23.83 | 0.94 |
| 5.667 | 1.25 | 11.750 | 7.50 | 17.833 | 1.41 | 23.92 | 0.94 |
| 5.750 | 1.25 | 11.833 | 23.11 | 17.917 | 1.41 | 24.00 | 0.94 |
| 5.833 | 1.25 | 11.917 | 23.11 | 18.000 | 1.41 | 24.08 | 0.94 |
| 5.917 | 1.25 | 12.000 | 23.11 | 18.083 | 1.41 | 24.17 | 0.94 |
| 6.000 | 1.25 | 12.083 | 95.56 | 18.167 | 1.41 | 24.25 | 0.94 |
| 6.083 | 1.25 | 12.167 | 95.57 | 18.250 | 1.41 | | |

```
     Max.Eff.Inten.(mm/hr)=      95.57        67.09
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.52 (ii)    9.80 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.11
                                                          *TOTALS*
     PEAK FLOW       (cms)=       0.02         0.01          0.035 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25          12.25
     RUNOFF VOLUME    (mm)=      77.08        25.58          43.58
     TOTAL RAINFALL   (mm)=      78.08        78.08          78.08
     RUNOFF COEFFICIENT   =       0.99         0.33           0.56

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0322):     0.25   0.035    12.25    43.58
      + ID2= 2 (  0323):     1.30   0.167    12.25    43.60
        ================================================
        ID = 3 (  0806):     1.55   0.202    12.25    43.60

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
        ID1= 3 (  0806):     1.55   0.202    12.25    43.60
      + ID2= 2 (  0004):    49.02   0.131    16.83    38.67
        ================================================
        ID = 1 (  0806):    50.57   0.293    12.25    38.82

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
```

```
|   1 +  2 =  3    |        AREA    QPEAK    TPEAK     R.V.
-------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0806):    50.57   0.293    12.25    38.82
     + ID2= 2 (  0810):   123.69   1.819    13.58    28.38
       ================================================
       ID = 3 (  0811):   174.26   1.957    13.58    31.41

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
------------------------------------------------------------------------------
==============================================================================
======================

       V    V   I    SSSSS  U   U    A    L             (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                 *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\cd9ce
d3d-e8a0-4635-99aa-ccc74f0d2c85\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\cd9ce
d3d-e8a0-4635-99aa-ccc74f0d2c85\scen


DATE: 07/10/2025                          TIME: 02:08:06

USER:



COMMENTS: _____________________________________________________________


------------------------------------------------------------------------------
----------------------
  ********************************************
  ** SIMULATION : M - 50yr 24hr 15min SCS Type  **
  ********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\dmartin\AppD
|                  |              ata\Local\Temp\
|                  |              129e2800-35e2-4355-8d2d-35ce722b1427\4a36c069
| Ptotal= 85.42 mm |    Comments: 50yr 24hr 15min SCS Type II (MTO)
--------------------
                TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
                 hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
                0.00    0.00 |  6.25    1.54 | 12.50   12.30 | 18.75    1.54
                0.25    0.94 |  6.50    1.54 | 12.75    6.32 | 19.00    1.54
                0.50    0.94 |  6.75    1.54 | 13.00    6.32 | 19.25    1.54
                0.75    0.94 |  7.00    1.54 | 13.25    4.61 | 19.50    1.54
                1.00    0.94 |  7.25    1.88 | 13.50    4.61 | 19.75    1.54
                1.25    0.94 |  7.50    1.88 | 13.75    3.59 | 20.00    1.54
                1.50    0.94 |  7.75    1.88 | 14.00    3.59 | 20.25    1.03
                1.75    0.94 |  8.00    1.88 | 14.25    2.56 | 20.50    1.03
                2.00    0.94 |  8.25    2.22 | 14.50    2.56 | 20.75    1.03
                2.25    1.11 |  8.50    2.22 | 14.75    2.56 | 21.00    1.03
                2.50    1.11 |  8.75    2.39 | 15.00    2.56 | 21.25    1.03
                2.75    1.11 |  9.00    2.39 | 15.25    2.56 | 21.50    1.03
                3.00    1.11 |  9.25    2.73 | 15.50    2.56 | 21.75    1.03
                3.25    1.11 |  9.50    2.73 | 15.75    2.56 | 22.00    1.03
                3.50    1.11 |  9.75    3.08 | 16.00    2.56 | 22.25    1.03
                3.75    1.11 | 10.00    3.08 | 16.25    1.54 | 22.50    1.03
                4.00    1.11 | 10.25    3.93 | 16.50    1.54 | 22.75    1.03
                4.25    1.37 | 10.50    3.93 | 16.75    1.54 | 23.00    1.03
                4.50    1.37 | 10.75    5.30 | 17.00    1.54 | 23.25    1.03
                4.75    1.37 | 11.00    5.30 | 17.25    1.54 | 23.50    1.03
                5.00    1.37 | 11.25    8.20 | 17.50    1.54 | 23.75    1.03
                5.25    1.37 | 11.50    8.20 | 17.75    1.54 | 24.00    1.03
                5.50    1.37 | 11.75   25.28 | 18.00    1.54 |
                5.75    1.37 | 12.00  104.55 | 18.25    1.54 |
                6.00    1.37 | 12.25   12.30 | 18.50    1.54 |

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--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 1.747 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 38.222
TOTAL RAINFALL (mm)= 85.420
RUNOFF COEFFICIENT = 0.447

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB NASHYD ( 0304) ID= 1 DT= 5.0 min | Area (ha)= 7.94 | Curve Number (CN)= 53.7 |
|---|---|---|
| | Ia (mm)= 7.75 | # of Linear Res.(N)= 3.00 |
| | U.H. Tp(hrs)= 0.51 | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME | RAIN | TIME | RAIN | TIME | RAIN | TIME | RAIN |
|---|---|---|---|---|---|---|---|

| hrs | mm/hr | hrs | mm/hr | hrs | mm/hr | hrs | mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.202 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 20.334
TOTAL RAINFALL (mm)= 85.420
RUNOFF COEFFICIENT = 0.238

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0807) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA | QPEAK | TPEAK | R.V. |
| | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0303): | 85.82 | 1.747 | 14.08 | 38.22 |
| + ID2= 2 ( 0304): | 7.94 | 0.202 | 12.67 | 20.33 |
| ID = 3 ( 0807): | 93.76 | 1.801 | 14.00 | 36.71 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB |
|---|

| NASHYD ( 0305)| Area (ha)= 7.76 Curve Number (CN)= 62.3
|ID= 1 DT= 5.0 min | Ia (mm)= 6.50 # of Linear Res.(N)= 3.00
--- U.H. Tp(hrs)= 0.76

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.199 (i)
TIME TO PEAK (hrs)= 13.000
RUNOFF VOLUME (mm)= 26.774
TOTAL RAINFALL (mm)= 85.420
RUNOFF COEFFICIENT = 0.313

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0808)| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| 1 + 2 = 3 | | | | | |

```
       ID1= 1 (  0305):     7.76   0.199    13.00    26.77
     + ID2= 2 (  0807):    93.76   1.801    14.00    36.71
       ================================================
       ID = 3 (  0808):   101.52   1.913    13.92    35.95

    NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB           |
| NASHYD   (  0306)|   Area    (ha)=   6.99   Curve Number   (CN)= 54.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.66

        NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

```
Unit Hyd Qpeak  (cms)=   0.405

PEAK FLOW       (cms)=   0.159 (i)
TIME TO PEAK    (hrs)=  12.833
RUNOFF VOLUME    (mm)=  21.791
TOTAL RAINFALL   (mm)=  85.420
RUNOFF COEFFICIENT   =   0.255
```

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0060) | | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0306): | 6.99 | 0.159 | 12.83 | 21.79 |
| | + ID2= 2 ( 0808): | 101.52 | 1.913 | 13.92 | 35.95 |
| | ID = 3 ( 0060): | 108.51 | 1.992 | 13.83 | 35.04 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB NASHYD ( 0307) | | | |
|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= 2.50 | Curve Number (CN)= 49.0 | |
| | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.39 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |

```
              6.083    1.37 |12.167  104.55 |18.250    1.54 |

     Unit Hyd Qpeak  (cms)=   0.245

     PEAK FLOW       (cms)=   0.071 (i)
     TIME TO PEAK    (hrs)=  12.500
     RUNOFF VOLUME    (mm)=  18.755
     TOTAL RAINFALL   (mm)=  85.420
     RUNOFF COEFFICIENT   =   0.220

     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0809)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0307):     2.50   0.071    12.50    18.75
     + ID2= 2 (  0060):   108.51   1.992    13.83    35.04
       ================================================
       ID = 3 (  0809):   111.01   2.007    13.75    34.67

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| CALIB            |
| NASHYD   (  0308)|   Area    (ha)=   5.22   Curve Number   (CN)= 49.0
|ID= 1 DT= 5.0 min |   Ia      (mm)=   5.00   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   0.52

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.


                        ---- TRANSFORMED HYETOGRAPH ----
  TIME    RAIN |  TIME    RAIN |'  TIME    RAIN |  TIME    RAIN
   hrs   mm/hr |   hrs   mm/hr |'   hrs   mm/hr |   hrs   mm/hr
 0.083    0.00 | 6.167    1.37 |12.250  104.55 | 18.33    1.54
 0.167    0.00 | 6.250    1.37 |12.333   12.31 | 18.42    1.54
 0.250    0.00 | 6.333    1.54 |12.417   12.30 | 18.50    1.54
 0.333    0.94 | 6.417    1.54 |12.500   12.30 | 18.58    1.54
 0.417    0.94 | 6.500    1.54 |12.583   12.30 | 18.67    1.54
 0.500    0.94 | 6.583    1.54 |12.667   12.30 | 18.75    1.54
 0.583    0.94 | 6.667    1.54 |12.750   12.30 | 18.83    1.54
 0.667    0.94 | 6.750    1.54 |12.833    6.32 | 18.92    1.54
 0.750    0.94 | 6.833    1.54 |12.917    6.32 | 19.00    1.54
 0.833    0.94 | 6.917    1.54 |13.000    6.32 | 19.08    1.54
 0.917    0.94 | 7.000    1.54 |13.083    6.32 | 19.17    1.54
 1.000    0.94 | 7.083    1.54 |13.167    6.32 | 19.25    1.54
 1.083    0.94 | 7.167    1.54 |13.250    6.32 | 19.33    1.54
 1.167    0.94 | 7.250    1.54 |13.333    4.61 | 19.42    1.54
 1.250    0.94 | 7.333    1.88 |13.417    4.61 | 19.50    1.54
 1.333    0.94 | 7.417    1.88 |13.500    4.61 | 19.58    1.54
 1.417    0.94 | 7.500    1.88 |13.583    4.61 | 19.67    1.54
 1.500    0.94 | 7.583    1.88 |13.667    4.61 | 19.75    1.54
 1.583    0.94 | 7.667    1.88 |13.750    4.61 | 19.83    1.54
 1.667    0.94 | 7.750    1.88 |13.833    3.59 | 19.92    1.54
 1.750    0.94 | 7.833    1.88 |13.917    3.59 | 20.00    1.54
 1.833    0.94 | 7.917    1.88 |14.000    3.59 | 20.08    1.54
 1.917    0.94 | 8.000    1.88 |14.083    3.59 | 20.17    1.54
 2.000    0.94 | 8.083    1.88 |14.167    3.59 | 20.25    1.54
 2.083    0.94 | 8.167    1.88 |14.250    3.59 | 20.33    1.03
 2.167    0.94 | 8.250    1.88 |14.333    2.56 | 20.42    1.03
 2.250    0.94 | 8.333    2.22 |14.417    2.56 | 20.50    1.03
 2.333    1.11 | 8.417    2.22 |14.500    2.56 | 20.58    1.03
 2.417    1.11 | 8.500    2.22 |14.583    2.56 | 20.67    1.03
 2.500    1.11 | 8.583    2.22 |14.667    2.56 | 20.75    1.03
 2.583    1.11 | 8.667    2.22 |14.750    2.56 | 20.83    1.03
 2.667    1.11 | 8.750    2.22 |14.833    2.56 | 20.92    1.03
 2.750    1.11 | 8.833    2.39 |14.917    2.56 | 21.00    1.03
 2.833    1.11 | 8.917    2.39 |15.000    2.56 | 21.08    1.03
 2.917    1.11 | 9.000    2.39 |15.083    2.56 | 21.17    1.03
 3.000    1.11 | 9.083    2.39 |15.167    2.56 | 21.25    1.03
 3.083    1.11 | 9.167    2.39 |15.250    2.56 | 21.33    1.03
 3.167    1.11 | 9.250    2.39 |15.333    2.56 | 21.42    1.03
 3.250    1.11 | 9.333    2.73 |15.417    2.56 | 21.50    1.03
 3.333    1.11 | 9.417    2.73 |15.500    2.56 | 21.58    1.03
 3.417    1.11 | 9.500    2.73 |15.583    2.56 | 21.67    1.03
 3.500    1.11 | 9.583    2.73 |15.667    2.56 | 21.75    1.03
 3.583    1.11 | 9.667    2.73 |15.750    2.56 | 21.83    1.03
 3.667    1.11 | 9.750    2.73 |15.833    2.56 | 21.92    1.03
 3.750    1.11 | 9.833    3.08 |15.917    2.56 | 22.00    1.03
 3.833    1.11 | 9.917    3.08 |16.000    2.56 | 22.08    1.03
 3.917    1.11 |10.000    3.08 |16.083    2.56 | 22.17    1.03
 4.000    1.11 |10.083    3.08 |16.167    2.56 | 22.25    1.03
 4.083    1.11 |10.167    3.08 |16.250    2.56 | 22.33    1.03
 4.167    1.11 |10.250    3.08 |16.333    1.54 | 22.42    1.03
 4.250    1.11 |10.333    3.93 |16.417    1.54 | 22.50    1.03
 4.333    1.37 |10.417    3.93 |16.500    1.54 | 22.58    1.03
 4.417    1.37 |10.500    3.93 |16.583    1.54 | 22.67    1.03
 4.500    1.37 |10.583    3.93 |16.667    1.54 | 22.75    1.03
 4.583    1.37 |10.667    3.93 |16.750    1.54 | 22.83    1.03
 4.667    1.37 |10.750    3.93 |16.833    1.54 | 22.92    1.03
 4.750    1.37 |10.833    5.30 |16.917    1.54 | 23.00    1.03
 4.833    1.37 |10.917    5.30 |17.000    1.54 | 23.08    1.03
 4.917    1.37 |11.000    5.30 |17.083    1.54 | 23.17    1.03
 5.000    1.37 |11.083    5.30 |17.167    1.54 | 23.25    1.03
 5.083    1.37 |11.167    5.30 |17.250    1.54 | 23.33    1.03
 5.167    1.37 |11.250    5.30 |17.333    1.54 | 23.42    1.03
 5.250    1.37 |11.333    8.20 |17.417    1.54 | 23.50    1.03
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.120 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 18.757
TOTAL RAINFALL (mm)= 85.420
RUNOFF COEFFICIENT = 0.220

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0061) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0308): | 5.22 | 0.120 | 12.67 | 18.76 |
| + ID2= 2 ( 0809): | 111.01 | 2.007 | 13.75 | 34.67 |
| ID = 3 ( 0061): | 116.23 | 2.051 | 13.67 | 33.95 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0309) | Area (ha)= 7.46 | Curve Number (CN)= 51.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.167 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 19.932
TOTAL RAINFALL (mm)= 85.420
RUNOFF COEFFICIENT = 0.233

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0810) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0309): | 7.46 | 0.167 | 12.75 | 19.93 |
| | + ID2= 2 ( 0061): | 116.23 | 2.051 | 13.67 | 33.95 |
| | ========== | | | | |
| | ID = 3 ( 0810): | 123.69 | 2.138 | 13.58 | 33.11 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0302) | | | | |
|---|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 5.52 | Curve Number (CN)= | 60.3 |
| | Ia (mm)= | 8.05 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.42 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

Unit Hyd Qpeak (cms)= 0.502

PEAK FLOW (cms)= 0.197 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 24.471
TOTAL RAINFALL (mm)= 85.420
RUNOFF COEFFICIENT = 0.286

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0301) | Area (ha)= | 5.30 | Curve Number (CN)= | 68.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= | 7.00 | # of Linear Res.(N)= | 3.00 | |
| | U.H. Tp(hrs)= | 0.33 | | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.293 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 31.059
TOTAL RAINFALL (mm)= 85.420
RUNOFF COEFFICIENT = 0.364

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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CALIB
STANDHYD ( 0201)
ID= 1 DT= 5.0 min

Area (ha)= 38.20
Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 104.55 | 46.05 | |
| over (min) | 5.00 | 20.00 | |
| Storage Coeff. (min)= | 6.63 (ii) | 16.25 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 20.00 | |
| Unit Hyd. peak (cms)= | 0.18 | 0.06 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 4.08 | 1.09 | 4.788 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.42 | 12.25 |
| RUNOFF VOLUME (mm)= | 84.42 | 23.83 | 48.06 |
| TOTAL RAINFALL (mm)= | 85.42 | 85.42 | 85.42 |
| RUNOFF COEFFICIENT = | 0.99 | 0.28 | 0.56 |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0805) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0201): | 38.20 | 4.788 | 12.25 | 48.06 |
| + ID2= 2 ( 0301): | 5.30 | 0.293 | 12.42 | 31.06 |
| ID = 3 ( 0805): | 43.50 | 4.990 | 12.25 | 45.99 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| ADD HYD ( 0805) | | | | |
|---|---|---|---|---|
| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 3 ( 0805): | 43.50 | 4.990 | 12.25 | 45.99 |
| + ID2= 2 ( 0302): | 5.52 | 0.197 | 12.58 | 24.47 |
| ID = 1 ( 0805): | 49.02 | 5.100 | 12.25 | 43.57 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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RESERVOIR( 0004) | OVERFLOW IS OFF
IN= 2---> OUT= 1
DT= 5.0 min

| OUTFLOW (cms) | STORAGE (ha.m.) | OUTFLOW (cms) | STORAGE (ha.m.) |
|---|---|---|---|
| 0.0000 | 0.0000 | 1.3440 | 2.5548 |
| 0.0590 | 0.2449 | 1.4160 | 2.8868 |
| 0.0830 | 0.5009 | 1.4850 | 3.2289 |
| 0.1020 | 0.7662 | 3.6580 | 3.4038 |
| 0.1180 | 1.0406 | 7.7500 | 3.5812 |
| 0.1310 | 1.3244 | 13.2420 | 3.7611 |
| 0.5720 | 1.6176 | 19.9810 | 3.9437 |
| 1.1850 | 1.9203 | 27.8970 | 4.1289 |
| 1.2670 | 2.2326 | 0.0000 | 0.0000 |

| | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
|---|---|---|---|---|
| INFLOW : ID= 2 ( 0805) | 49.020 | 5.100 | 12.25 | 43.57 |
| OUTFLOW: ID= 1 ( 0004) | 49.020 | 0.250 | 14.67 | 43.55 |

PEAK FLOW REDUCTION [Qout/Qin](%)= 4.90
TIME SHIFT OF PEAK FLOW (min)=145.00
MAXIMUM STORAGE USED (ha.m.)= 1.4035

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CALIB

| STANDHYD ( 0323)| Area (ha)= 1.30
|ID= 1 DT= 5.0 min | Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.83 | 0.47 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 93.09 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |
| 6.000 | 1.37 | 12.083 | 104.54 | 18.167 | 1.54 | 24.25 | 1.02 |
| 6.083 | 1.37 | 12.167 | 104.55 | 18.250 | 1.54 | | |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | | 104.55 | 78.27 | |
| over (min) | | 5.00 | 15.00 | |
| Storage Coeff. | (min)= | 2.40 (ii) | 10.19 (ii) | |
| Unit Hyd. Tpeak | (min)= | 5.00 | 15.00 | |
| Unit Hyd. peak | (cms)= | 0.30 | 0.09 | |
| | | | | *TOTALS* |
| PEAK FLOW | (cms)= | 0.13 | 0.07 | 0.188 (iii) |
| TIME TO PEAK | (hrs)= | 12.25 | 12.33 | 12.25 |
| RUNOFF VOLUME | (mm)= | 84.42 | 29.82 | 48.93 |
| TOTAL RAINFALL | (mm)= | 85.42 | 85.42 | 85.42 |

RUNOFF COEFFICIENT = 0.99 0.35 0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB | |
|---|---|
| STANDHYD ( 0322) | Area (ha)= 0.25 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 64.00 Dir. Conn.(%)= 35.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.37 | 12.250 | 104.55 | 18.33 | 1.54 |
| 0.167 | 0.00 | 6.250 | 1.37 | 12.333 | 12.31 | 18.42 | 1.54 |
| 0.250 | 0.00 | 6.333 | 1.54 | 12.417 | 12.30 | 18.50 | 1.54 |
| 0.333 | 0.94 | 6.417 | 1.54 | 12.500 | 12.30 | 18.58 | 1.54 |
| 0.417 | 0.94 | 6.500 | 1.54 | 12.583 | 12.30 | 18.67 | 1.54 |
| 0.500 | 0.94 | 6.583 | 1.54 | 12.667 | 12.30 | 18.75 | 1.54 |
| 0.583 | 0.94 | 6.667 | 1.54 | 12.750 | 12.30 | 18.83 | 1.54 |
| 0.667 | 0.94 | 6.750 | 1.54 | 12.833 | 6.32 | 18.92 | 1.54 |
| 0.750 | 0.94 | 6.833 | 1.54 | 12.917 | 6.32 | 19.00 | 1.54 |
| 0.833 | 0.94 | 6.917 | 1.54 | 13.000 | 6.32 | 19.08 | 1.54 |
| 0.917 | 0.94 | 7.000 | 1.54 | 13.083 | 6.32 | 19.17 | 1.54 |
| 1.000 | 0.94 | 7.083 | 1.54 | 13.167 | 6.32 | 19.25 | 1.54 |
| 1.083 | 0.94 | 7.167 | 1.54 | 13.250 | 6.32 | 19.33 | 1.54 |
| 1.167 | 0.94 | 7.250 | 1.54 | 13.333 | 4.61 | 19.42 | 1.54 |
| 1.250 | 0.94 | 7.333 | 1.88 | 13.417 | 4.61 | 19.50 | 1.54 |
| 1.333 | 0.94 | 7.417 | 1.88 | 13.500 | 4.61 | 19.58 | 1.54 |
| 1.417 | 0.94 | 7.500 | 1.88 | 13.583 | 4.61 | 19.67 | 1.54 |
| 1.500 | 0.94 | 7.583 | 1.88 | 13.667 | 4.61 | 19.75 | 1.54 |
| 1.583 | 0.94 | 7.667 | 1.88 | 13.750 | 4.61 | 19.83 | 1.54 |
| 1.667 | 0.94 | 7.750 | 1.88 | 13.833 | 3.59 | 19.92 | 1.54 |
| 1.750 | 0.94 | 7.833 | 1.88 | 13.917 | 3.59 | 20.00 | 1.54 |
| 1.833 | 0.94 | 7.917 | 1.88 | 14.000 | 3.59 | 20.08 | 1.54 |
| 1.917 | 0.94 | 8.000 | 1.88 | 14.083 | 3.59 | 20.17 | 1.54 |
| 2.000 | 0.94 | 8.083 | 1.88 | 14.167 | 3.59 | 20.25 | 1.54 |
| 2.083 | 0.94 | 8.167 | 1.88 | 14.250 | 3.59 | 20.33 | 1.03 |
| 2.167 | 0.94 | 8.250 | 1.88 | 14.333 | 2.56 | 20.42 | 1.03 |
| 2.250 | 0.94 | 8.333 | 2.22 | 14.417 | 2.56 | 20.50 | 1.03 |
| 2.333 | 1.11 | 8.417 | 2.22 | 14.500 | 2.56 | 20.58 | 1.03 |
| 2.417 | 1.11 | 8.500 | 2.22 | 14.583 | 2.56 | 20.67 | 1.03 |
| 2.500 | 1.11 | 8.583 | 2.22 | 14.667 | 2.56 | 20.75 | 1.03 |
| 2.583 | 1.11 | 8.667 | 2.22 | 14.750 | 2.56 | 20.83 | 1.03 |
| 2.667 | 1.11 | 8.750 | 2.22 | 14.833 | 2.56 | 20.92 | 1.03 |
| 2.750 | 1.11 | 8.833 | 2.39 | 14.917 | 2.56 | 21.00 | 1.03 |
| 2.833 | 1.11 | 8.917 | 2.39 | 15.000 | 2.56 | 21.08 | 1.03 |
| 2.917 | 1.11 | 9.000 | 2.39 | 15.083 | 2.56 | 21.17 | 1.03 |
| 3.000 | 1.11 | 9.083 | 2.39 | 15.167 | 2.56 | 21.25 | 1.03 |
| 3.083 | 1.11 | 9.167 | 2.39 | 15.250 | 2.56 | 21.33 | 1.03 |
| 3.167 | 1.11 | 9.250 | 2.39 | 15.333 | 2.56 | 21.42 | 1.03 |
| 3.250 | 1.11 | 9.333 | 2.73 | 15.417 | 2.56 | 21.50 | 1.03 |
| 3.333 | 1.11 | 9.417 | 2.73 | 15.500 | 2.56 | 21.58 | 1.03 |
| 3.417 | 1.11 | 9.500 | 2.73 | 15.583 | 2.56 | 21.67 | 1.03 |
| 3.500 | 1.11 | 9.583 | 2.73 | 15.667 | 2.56 | 21.75 | 1.03 |
| 3.583 | 1.11 | 9.667 | 2.73 | 15.750 | 2.56 | 21.83 | 1.03 |
| 3.667 | 1.11 | 9.750 | 2.73 | 15.833 | 2.56 | 21.92 | 1.03 |
| 3.750 | 1.11 | 9.833 | 3.08 | 15.917 | 2.56 | 22.00 | 1.03 |
| 3.833 | 1.11 | 9.917 | 3.08 | 16.000 | 2.56 | 22.08 | 1.03 |
| 3.917 | 1.11 | 10.000 | 3.08 | 16.083 | 2.56 | 22.17 | 1.03 |
| 4.000 | 1.11 | 10.083 | 3.08 | 16.167 | 2.56 | 22.25 | 1.03 |
| 4.083 | 1.11 | 10.167 | 3.08 | 16.250 | 2.56 | 22.33 | 1.03 |
| 4.167 | 1.11 | 10.250 | 3.08 | 16.333 | 1.54 | 22.42 | 1.03 |
| 4.250 | 1.11 | 10.333 | 3.93 | 16.417 | 1.54 | 22.50 | 1.03 |
| 4.333 | 1.37 | 10.417 | 3.93 | 16.500 | 1.54 | 22.58 | 1.03 |
| 4.417 | 1.37 | 10.500 | 3.93 | 16.583 | 1.54 | 22.67 | 1.03 |
| 4.500 | 1.37 | 10.583 | 3.93 | 16.667 | 1.54 | 22.75 | 1.03 |
| 4.583 | 1.37 | 10.667 | 3.93 | 16.750 | 1.54 | 22.83 | 1.03 |
| 4.667 | 1.37 | 10.750 | 3.93 | 16.833 | 1.54 | 22.92 | 1.03 |
| 4.750 | 1.37 | 10.833 | 5.30 | 16.917 | 1.54 | 23.00 | 1.03 |
| 4.833 | 1.37 | 10.917 | 5.30 | 17.000 | 1.54 | 23.08 | 1.03 |
| 4.917 | 1.37 | 11.000 | 5.30 | 17.083 | 1.54 | 23.17 | 1.03 |
| 5.000 | 1.37 | 11.083 | 5.30 | 17.167 | 1.54 | 23.25 | 1.03 |
| 5.083 | 1.37 | 11.167 | 5.30 | 17.250 | 1.54 | 23.33 | 1.03 |
| 5.167 | 1.37 | 11.250 | 5.30 | 17.333 | 1.54 | 23.42 | 1.03 |
| 5.250 | 1.37 | 11.333 | 8.20 | 17.417 | 1.54 | 23.50 | 1.03 |
| 5.333 | 1.37 | 11.417 | 8.20 | 17.500 | 1.54 | 23.58 | 1.03 |
| 5.417 | 1.37 | 11.500 | 8.20 | 17.583 | 1.54 | 23.67 | 1.03 |
| 5.500 | 1.37 | 11.583 | 8.20 | 17.667 | 1.54 | 23.75 | 1.03 |
| 5.583 | 1.37 | 11.667 | 8.20 | 17.750 | 1.54 | 23.83 | 1.03 |
| 5.667 | 1.37 | 11.750 | 8.20 | 17.833 | 1.54 | 23.92 | 1.03 |
| 5.750 | 1.37 | 11.833 | 25.28 | 17.917 | 1.54 | 24.00 | 1.03 |
| 5.833 | 1.37 | 11.917 | 25.28 | 18.000 | 1.54 | 24.08 | 1.03 |
| 5.917 | 1.37 | 12.000 | 25.28 | 18.083 | 1.54 | 24.17 | 1.03 |

```
              6.000    1.37 |12.083  104.54 |18.167    1.54 | 24.25    1.02
              6.083    1.37 |12.167  104.55 |18.250    1.54 |

     Max.Eff.Inten.(mm/hr)=     104.55        78.27
               over (min)        5.00        10.00
     Storage Coeff.  (min)=       1.47 (ii)    9.25 (ii)
     Unit Hyd. Tpeak (min)=       5.00        10.00
     Unit Hyd. peak  (cms)=       0.33         0.12
                                                        *TOTALS*
     PEAK FLOW       (cms)=       0.03         0.01          0.039 (iii)
     TIME TO PEAK    (hrs)=      12.25        12.25          12.25
     RUNOFF VOLUME    (mm)=      84.42        29.82          48.91
     TOTAL RAINFALL   (mm)=      85.42        85.42          85.42
     RUNOFF COEFFICIENT   =       0.99         0.35           0.57

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN*  =  49.0    Ia = Dep. Storage  (Above)
      (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0322):     0.25   0.039    12.25    48.91
     + ID2= 2 (  0323):     1.30   0.188    12.25    48.93
       ================================================
       ID = 3 (  0806):     1.55   0.227    12.25    48.92

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0806)|
|   3 +  2 =  1    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0806):     1.55   0.227    12.25    48.92
     + ID2= 2 (  0004):    49.02   0.250    14.67    43.55
       ================================================
       ID = 1 (  0806):    50.57   0.324    12.25    43.71

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |         AREA    QPEAK    TPEAK     R.V.
--------------------         (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0806):    50.57   0.324    12.25    43.71
     + ID2= 2 (  0810):   123.69   2.138    13.58    33.11
       ================================================
       ID = 3 (  0811):   174.26   2.346    13.75    36.19

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
================================================================================
======================

       V    V   I    SSSSS  U   U    A    L              (v 6.2.2021)
       V    V   I    SS     U   U   A A   L
        V  V    I     SS    U   U  AAAAA  L
        V  V    I      SS   U   U  A   A  L
         VV     I    SSSSS  UUUUU  A   A  LLLLL

        OOO   TTTTT  TTTTT  H   H  Y   Y  M   M   OOO    TM
       O   O    T      T    H   H   Y Y   MM MM  O   O
       O   O    T      T    H   H    Y    M   M  O   O
        OOO     T      T    H   H    Y    M   M   OOO
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                  *****  D E T A I L E D   O U T P U T *****


  Input   filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

  Output  filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\ecebe
ea4-0e06-4097-be52-4eeb2555817a\scen
  Summary filename:
C:\Users\dmartin\AppData\Local\Civica\VH5\782b1c19-f875-4e41-a698-270c09901e28\ecebe
ea4-0e06-4097-be52-4eeb2555817a\scen


DATE: 07/10/2025                          TIME: 02:08:06

USER:



COMMENTS: _____________________________________________________________
```

```
--------------------------------------------------------------------------------
-----------------------
  ***********************************************
  ** SIMULATION : N - 100yr 24hr 15min SCS Type **
  ***********************************************


--------------------
|    READ STORM    |    Filename: C:\Users\dmartin\AppD
|                  |              ata\Local\Temp\
|                  |              129e2800-35e2-4355-8d2d-35ce722b1427\cb8638ce
| Ptotal= 92.89 mm |    Comments: 100yr 24hr 15min SCS Type II (MTO)
--------------------
```

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 6.25 | 1.67 | 12.50 | 13.38 | 18.75 | 1.67 |
| 0.25 | 1.02 | 6.50 | 1.67 | 12.75 | 6.87 | 19.00 | 1.67 |
| 0.50 | 1.02 | 6.75 | 1.67 | 13.00 | 6.87 | 19.25 | 1.67 |
| 0.75 | 1.02 | 7.00 | 1.67 | 13.25 | 5.02 | 19.50 | 1.67 |
| 1.00 | 1.02 | 7.25 | 2.04 | 13.50 | 5.02 | 19.75 | 1.67 |
| 1.25 | 1.02 | 7.50 | 2.04 | 13.75 | 3.90 | 20.00 | 1.67 |
| 1.50 | 1.02 | 7.75 | 2.04 | 14.00 | 3.90 | 20.25 | 1.11 |
| 1.75 | 1.02 | 8.00 | 2.04 | 14.25 | 2.79 | 20.50 | 1.11 |
| 2.00 | 1.02 | 8.25 | 2.42 | 14.50 | 2.79 | 20.75 | 1.11 |
| 2.25 | 1.21 | 8.50 | 2.42 | 14.75 | 2.79 | 21.00 | 1.11 |
| 2.50 | 1.21 | 8.75 | 2.60 | 15.00 | 2.79 | 21.25 | 1.11 |
| 2.75 | 1.21 | 9.00 | 2.60 | 15.25 | 2.79 | 21.50 | 1.11 |
| 3.00 | 1.21 | 9.25 | 2.97 | 15.50 | 2.79 | 21.75 | 1.11 |
| 3.25 | 1.21 | 9.50 | 2.97 | 15.75 | 2.79 | 22.00 | 1.11 |
| 3.50 | 1.21 | 9.75 | 3.34 | 16.00 | 2.79 | 22.25 | 1.11 |
| 3.75 | 1.21 | 10.00 | 3.34 | 16.25 | 1.67 | 22.50 | 1.11 |
| 4.00 | 1.21 | 10.25 | 4.27 | 16.50 | 1.67 | 22.75 | 1.11 |
| 4.25 | 1.49 | 10.50 | 4.27 | 16.75 | 1.67 | 23.00 | 1.11 |
| 4.50 | 1.49 | 10.75 | 5.76 | 17.00 | 1.67 | 23.25 | 1.11 |
| 4.75 | 1.49 | 11.00 | 5.76 | 17.25 | 1.67 | 23.50 | 1.11 |
| 5.00 | 1.49 | 11.25 | 8.92 | 17.50 | 1.67 | 23.75 | 1.11 |
| 5.25 | 1.49 | 11.50 | 8.92 | 17.75 | 1.67 | 24.00 | 1.11 |
| 5.50 | 1.49 | 11.75 | 27.50 | 18.00 | 1.67 | | |
| 5.75 | 1.49 | 12.00 | 113.70 | 18.25 | 1.67 | | |
| 6.00 | 1.49 | 12.25 | 13.38 | 18.50 | 1.67 | | |

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--------------------
| CALIB            |
| NASHYD   (  0303)|   Area    (ha)=  85.82   Curve Number   (CN)= 75.9
|ID= 1 DT= 5.0 min |   Ia      (mm)=   7.59   # of Linear Res.(N)= 3.00
--------------------   U.H. Tp(hrs)=   1.72

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 1.906

PEAK FLOW (cms)= 2.014 (i)
TIME TO PEAK (hrs)= 14.083
RUNOFF VOLUME (mm)= 43.845
TOTAL RAINFALL (mm)= 92.890
RUNOFF COEFFICIENT = 0.472

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0304) | Area (ha)= 7.94 | Curve Number (CN)= 53.7 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.75 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.51 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 0.595

PEAK FLOW (cms)= 0.238 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 23.833
TOTAL RAINFALL (mm)= 92.890
RUNOFF COEFFICIENT = 0.257

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0807) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| ID1= 1 ( 0303): | | 85.82 | 2.014 | 14.08 | 43.84 |
| + ID2= 2 ( 0304): | | 7.94 | 0.238 | 12.67 | 23.83 |
| ID = 3 ( 0807): | | 93.76 | 2.076 | 14.00 | 42.15 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB | | | | | |
|---|---|---|---|---|---|
| NASHYD ( 0305) | Area | (ha)= | 7.76 | Curve Number | (CN)= 62.3 |
| ID= 1 DT= 5.0 min | Ia | (mm)= | 6.50 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | | 0.76 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME | RAIN | TIME | RAIN | TIME | RAIN | TIME | RAIN |
|---|---|---|---|---|---|---|---|
| hrs | mm/hr | hrs | mm/hr | hrs | mm/hr | hrs | mm/hr |
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 0.390

PEAK FLOW (cms)= 0.232 (i)
TIME TO PEAK (hrs)= 12.917
RUNOFF VOLUME (mm)= 31.084
TOTAL RAINFALL (mm)= 92.890
RUNOFF COEFFICIENT = 0.335

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0808) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | ID1= 1 ( 0305): | 7.76 | 0.232 | 12.92 | 31.08 |
| | + ID2= 2 ( 0807): | 93.76 | 2.076 | 14.00 | 42.15 |
| | ID = 3 ( 0808): | 101.52 | 2.208 | 13.83 | 41.30 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0306) | ID= 1 DT= 5.0 min | Area (ha)= 6.99 | Curve Number (CN)= 54.0 | Ia (mm)= 5.00 | # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.66 |
|---|---|---|---|---|---|---|

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 0.405

PEAK FLOW (cms)= 0.186 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 25.388
TOTAL RAINFALL (mm)= 92.890

RUNOFF COEFFICIENT = 0.273

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0060) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0306): | 6.99 | 0.186 | 12.83 | 25.39 |
| | + ID2= 2 ( 0808): | 101.52 | 2.208 | 13.83 | 41.30 |
| | ID = 3 ( 0060): | 108.51 | 2.302 | 13.75 | 40.28 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0307) \| ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 2.50 | Curve Number (CN)= | 49.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.39 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 0.245

PEAK FLOW (cms)= 0.083 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 21.926
TOTAL RAINFALL (mm)= 92.890
RUNOFF COEFFICIENT = 0.236

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| ADD HYD ( 0809) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0307): | 2.50 | 0.083 | 12.50 | 21.93 |
| | + ID2= 2 ( 0060): | 108.51 | 2.302 | 13.75 | 40.28 |
| | ID = 3 ( 0809): | 111.01 | 2.320 | 13.75 | 39.87 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0308) | | | | |
|---|---|---|---|---|
| ID= 1 DT= 5.0 min | Area (ha)= | 5.22 | Curve Number (CN)= | 49.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.52 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 0.383

PEAK FLOW (cms)= 0.141 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 21.928
TOTAL RAINFALL (mm)= 92.890
RUNOFF COEFFICIENT = 0.236

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0061) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0308): | 5.22 | 0.141 | 12.67 | 21.93 |
| | + ID2= 2 ( 0809): | 111.01 | 2.320 | 13.75 | 39.87 |
| | ID = 3 ( 0061): | 116.23 | 2.373 | 13.67 | 39.06 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0309) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 7.46 | Curve Number (CN)= | 51.0 |
| | Ia (mm)= | 5.00 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.59 | | |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 0.483

PEAK FLOW (cms)= 0.196 (i)
TIME TO PEAK (hrs)= 12.750
RUNOFF VOLUME (mm)= 23.271
TOTAL RAINFALL (mm)= 92.890
RUNOFF COEFFICIENT = 0.251

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0810) | | AREA | QPEAK | TPEAK | R.V. |
|---|---|---|---|---|---|
| 1 + 2 = 3 | | (ha) | (cms) | (hrs) | (mm) |
| | ID1= 1 ( 0309): | 7.46 | 0.196 | 12.75 | 23.27 |
| | + ID2= 2 ( 0061): | 116.23 | 2.373 | 13.67 | 39.06 |
| | ID = 3 ( 0810): | 123.69 | 2.476 | 13.50 | 38.11 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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| CALIB NASHYD ( 0302) ID= 1 DT= 5.0 min | | | | |
|---|---|---|---|---|
| | Area (ha)= | 5.52 | Curve Number (CN)= | 60.3 |
| | Ia (mm)= | 8.05 | # of Linear Res.(N)= | 3.00 |
| | U.H. Tp(hrs)= | 0.42 | | |

NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak  (cms)=   0.502

PEAK FLOW       (cms)=   0.232 (i)
TIME TO PEAK    (hrs)=  12.583
RUNOFF VOLUME    (mm)=  28.552
TOTAL RAINFALL   (mm)=  92.890
RUNOFF COEFFICIENT   =   0.307

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | | | |
|---|---|---|---|
| NASHYD ( 0301) | Area (ha)= 5.30 | Curve Number (CN)= 68.0 | |
| ID= 1 DT= 5.0 min | Ia (mm)= 7.00 | # of Linear Res.(N)= 3.00 | |
| | U.H. Tp(hrs)= 0.33 | | |

NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

Unit Hyd Qpeak (cms)= 0.613

PEAK FLOW (cms)= 0.340 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 35.903
TOTAL RAINFALL (mm)= 92.890
RUNOFF COEFFICIENT = 0.387

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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| CALIB | |
|---|---|
| STANDHYD ( 0201) | Area (ha)= 38.20 |
| ID= 1 DT= 5.0 min | Total Imp(%)= 55.00 Dir. Conn.(%)= 40.00 |

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 21.01 | 17.19 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 504.65 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

| | | | | |
|---|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 113.70 | 53.48 | | |
| over (min) | 5.00 | 20.00 | | |
| Storage Coeff. (min)= | 6.41 (ii) | 15.48 (ii) | | |
| Unit Hyd. Tpeak (min)= | 5.00 | 20.00 | | |
| Unit Hyd. peak (cms)= | 0.18 | 0.07 | | |
| | | | | *TOTALS* |
| PEAK FLOW (cms)= | 4.47 | 1.30 | | 5.315 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.42 | | 12.25 |
| RUNOFF VOLUME (mm)= | 91.89 | 27.65 | | 53.34 |
| TOTAL RAINFALL (mm)= | 92.89 | 92.89 | | 92.89 |
| RUNOFF COEFFICIENT = | 0.99 | 0.30 | | 0.57 |

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

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--------------------
| ADD HYD  (  0805)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 1 (  0201):    38.20   5.315    12.25    53.34
     + ID2= 2 (  0301):     5.30   0.340    12.42    35.90
       ================================================
       ID = 3 (  0805):    43.50   5.551    12.25    51.22

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------

--------------------
| ADD HYD  (  0805)|
|   3 +  2 =  1    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
       ID1= 3 (  0805):    43.50   5.551    12.25    51.22
     + ID2= 2 (  0302):     5.52   0.232    12.58    28.55
       ================================================
       ID = 1 (  0805):    49.02   5.681    12.25    48.67

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
--------------------
| RESERVOIR(  0004)|     OVERFLOW IS OFF
| IN= 2---> OUT= 1 |
| DT=  5.0 min     |     OUTFLOW    STORAGE   |  OUTFLOW    STORAGE
--------------------      (cms)     (ha.m.)   |   (cms)     (ha.m.)
                         0.0000      0.0000   |    1.3440      2.5548
                         0.0590      0.2449   |    1.4160      2.8868
                         0.0830      0.5009   |    1.4850      3.2289
                         0.1020      0.7662   |    3.6580      3.4038
                         0.1180      1.0406   |    7.7500      3.5812
                         0.1310      1.3244   |   13.2420      3.7611
                         0.5720      1.6176   |   19.9810      3.9437
                         1.1850      1.9203   |   27.8970      4.1289
                         1.2670      2.2326   |    0.0000      0.0000

                             AREA     QPEAK     TPEAK       R.V.
                             (ha)     (cms)     (hrs)       (mm)
   INFLOW : ID= 2 (  0805)     49.020      5.681     12.25      48.67
   OUTFLOW: ID= 1 (  0004)     49.020      0.390     14.08      48.64

                  PEAK   FLOW   REDUCTION [Qout/Qin](%)=  6.87
                  TIME SHIFT OF PEAK FLOW         (min)=110.00
                  MAXIMUM  STORAGE   USED       (ha.m.)=  1.4968

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```
| CALIB            |
| STANDHYD (  0323)|   Area    (ha)=   1.30
|ID= 1 DT= 5.0 min |   Total Imp(%)=  64.00   Dir. Conn.(%)=  35.00
--------------------

                              IMPERVIOUS    PERVIOUS (i)
     Surface Area     (ha)=       0.83         0.47
     Dep. Storage     (mm)=       1.00         5.00
     Average Slope     (%)=       1.00         2.00
     Length            (m)=      93.09        40.00
     Mannings n           =      0.013        0.250

         NOTE:  RAINFALL WAS TRANSFORMED TO   5.0 MIN. TIME STEP.
```

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 113.70 | 90.17 | |
| over (min) | 5.00 | 10.00 | |
| Storage Coeff. (min)= | 2.32 (ii) | 9.68 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 10.00 | |
| Unit Hyd. peak (cms)= | 0.30 | 0.11 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.14 | 0.08 | 0.225 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.25 | 12.25 |
| RUNOFF VOLUME (mm)= | 91.89 | 34.34 | 54.48 |

| | | | |
|---|---|---|---|
| TOTAL RAINFALL (mm)= | 92.89 | 92.89 | 92.89 |
| RUNOFF COEFFICIENT = | 0.99 | 0.37 | 0.59 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| CALIB / STANDHYD ( 0322) / ID= 1 DT= 5.0 min | Area (ha)= 0.25 | Total Imp(%)= 64.00 | Dir. Conn.(%)= 35.00 |
|---|---|---|---|

| | | IMPERVIOUS | PERVIOUS (i) |
|---|---|---|---|
| Surface Area | (ha)= | 0.16 | 0.09 |
| Dep. Storage | (mm)= | 1.00 | 5.00 |
| Average Slope | (%)= | 1.00 | 2.00 |
| Length | (m)= | 40.82 | 40.00 |
| Mannings n | = | 0.013 | 0.250 |

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ----

| TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr | TIME hrs | RAIN mm/hr |
|---|---|---|---|---|---|---|---|
| 0.083 | 0.00 | 6.167 | 1.49 | 12.250 | 113.70 | 18.33 | 1.67 |
| 0.167 | 0.00 | 6.250 | 1.49 | 12.333 | 13.39 | 18.42 | 1.67 |
| 0.250 | 0.00 | 6.333 | 1.67 | 12.417 | 13.38 | 18.50 | 1.67 |
| 0.333 | 1.02 | 6.417 | 1.67 | 12.500 | 13.38 | 18.58 | 1.67 |
| 0.417 | 1.02 | 6.500 | 1.67 | 12.583 | 13.38 | 18.67 | 1.67 |
| 0.500 | 1.02 | 6.583 | 1.67 | 12.667 | 13.38 | 18.75 | 1.67 |
| 0.583 | 1.02 | 6.667 | 1.67 | 12.750 | 13.38 | 18.83 | 1.67 |
| 0.667 | 1.02 | 6.750 | 1.67 | 12.833 | 6.87 | 18.92 | 1.67 |
| 0.750 | 1.02 | 6.833 | 1.67 | 12.917 | 6.87 | 19.00 | 1.67 |
| 0.833 | 1.02 | 6.917 | 1.67 | 13.000 | 6.87 | 19.08 | 1.67 |
| 0.917 | 1.02 | 7.000 | 1.67 | 13.083 | 6.87 | 19.17 | 1.67 |
| 1.000 | 1.02 | 7.083 | 1.67 | 13.167 | 6.87 | 19.25 | 1.67 |
| 1.083 | 1.02 | 7.167 | 1.67 | 13.250 | 6.87 | 19.33 | 1.67 |
| 1.167 | 1.02 | 7.250 | 1.67 | 13.333 | 5.02 | 19.42 | 1.67 |
| 1.250 | 1.02 | 7.333 | 2.04 | 13.417 | 5.02 | 19.50 | 1.67 |
| 1.333 | 1.02 | 7.417 | 2.04 | 13.500 | 5.02 | 19.58 | 1.67 |
| 1.417 | 1.02 | 7.500 | 2.04 | 13.583 | 5.02 | 19.67 | 1.67 |
| 1.500 | 1.02 | 7.583 | 2.04 | 13.667 | 5.02 | 19.75 | 1.67 |
| 1.583 | 1.02 | 7.667 | 2.04 | 13.750 | 5.02 | 19.83 | 1.67 |
| 1.667 | 1.02 | 7.750 | 2.04 | 13.833 | 3.90 | 19.92 | 1.67 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1.750 | 1.02 | 7.833 | 2.04 | 13.917 | 3.90 | 20.00 | 1.67 |
| 1.833 | 1.02 | 7.917 | 2.04 | 14.000 | 3.90 | 20.08 | 1.67 |
| 1.917 | 1.02 | 8.000 | 2.04 | 14.083 | 3.90 | 20.17 | 1.67 |
| 2.000 | 1.02 | 8.083 | 2.04 | 14.167 | 3.90 | 20.25 | 1.67 |
| 2.083 | 1.02 | 8.167 | 2.04 | 14.250 | 3.90 | 20.33 | 1.11 |
| 2.167 | 1.02 | 8.250 | 2.04 | 14.333 | 2.79 | 20.42 | 1.11 |
| 2.250 | 1.02 | 8.333 | 2.42 | 14.417 | 2.79 | 20.50 | 1.11 |
| 2.333 | 1.21 | 8.417 | 2.42 | 14.500 | 2.79 | 20.58 | 1.11 |
| 2.417 | 1.21 | 8.500 | 2.42 | 14.583 | 2.79 | 20.67 | 1.11 |
| 2.500 | 1.21 | 8.583 | 2.42 | 14.667 | 2.79 | 20.75 | 1.11 |
| 2.583 | 1.21 | 8.667 | 2.42 | 14.750 | 2.79 | 20.83 | 1.11 |
| 2.667 | 1.21 | 8.750 | 2.42 | 14.833 | 2.79 | 20.92 | 1.11 |
| 2.750 | 1.21 | 8.833 | 2.60 | 14.917 | 2.79 | 21.00 | 1.11 |
| 2.833 | 1.21 | 8.917 | 2.60 | 15.000 | 2.79 | 21.08 | 1.11 |
| 2.917 | 1.21 | 9.000 | 2.60 | 15.083 | 2.79 | 21.17 | 1.11 |
| 3.000 | 1.21 | 9.083 | 2.60 | 15.167 | 2.79 | 21.25 | 1.11 |
| 3.083 | 1.21 | 9.167 | 2.60 | 15.250 | 2.79 | 21.33 | 1.11 |
| 3.167 | 1.21 | 9.250 | 2.60 | 15.333 | 2.79 | 21.42 | 1.11 |
| 3.250 | 1.21 | 9.333 | 2.97 | 15.417 | 2.79 | 21.50 | 1.11 |
| 3.333 | 1.21 | 9.417 | 2.97 | 15.500 | 2.79 | 21.58 | 1.11 |
| 3.417 | 1.21 | 9.500 | 2.97 | 15.583 | 2.79 | 21.67 | 1.11 |
| 3.500 | 1.21 | 9.583 | 2.97 | 15.667 | 2.79 | 21.75 | 1.11 |
| 3.583 | 1.21 | 9.667 | 2.97 | 15.750 | 2.79 | 21.83 | 1.11 |
| 3.667 | 1.21 | 9.750 | 2.97 | 15.833 | 2.79 | 21.92 | 1.11 |
| 3.750 | 1.21 | 9.833 | 3.34 | 15.917 | 2.79 | 22.00 | 1.11 |
| 3.833 | 1.21 | 9.917 | 3.34 | 16.000 | 2.79 | 22.08 | 1.11 |
| 3.917 | 1.21 | 10.000 | 3.34 | 16.083 | 2.79 | 22.17 | 1.11 |
| 4.000 | 1.21 | 10.083 | 3.34 | 16.167 | 2.79 | 22.25 | 1.11 |
| 4.083 | 1.21 | 10.167 | 3.34 | 16.250 | 2.79 | 22.33 | 1.11 |
| 4.167 | 1.21 | 10.250 | 3.34 | 16.333 | 1.67 | 22.42 | 1.11 |
| 4.250 | 1.21 | 10.333 | 4.27 | 16.417 | 1.67 | 22.50 | 1.11 |
| 4.333 | 1.49 | 10.417 | 4.27 | 16.500 | 1.67 | 22.58 | 1.11 |
| 4.417 | 1.49 | 10.500 | 4.27 | 16.583 | 1.67 | 22.67 | 1.11 |
| 4.500 | 1.49 | 10.583 | 4.27 | 16.667 | 1.67 | 22.75 | 1.11 |
| 4.583 | 1.49 | 10.667 | 4.27 | 16.750 | 1.67 | 22.83 | 1.11 |
| 4.667 | 1.49 | 10.750 | 4.27 | 16.833 | 1.67 | 22.92 | 1.11 |
| 4.750 | 1.49 | 10.833 | 5.76 | 16.917 | 1.67 | 23.00 | 1.11 |
| 4.833 | 1.49 | 10.917 | 5.76 | 17.000 | 1.67 | 23.08 | 1.11 |
| 4.917 | 1.49 | 11.000 | 5.76 | 17.083 | 1.67 | 23.17 | 1.11 |
| 5.000 | 1.49 | 11.083 | 5.76 | 17.167 | 1.67 | 23.25 | 1.11 |
| 5.083 | 1.49 | 11.167 | 5.76 | 17.250 | 1.67 | 23.33 | 1.11 |
| 5.167 | 1.49 | 11.250 | 5.76 | 17.333 | 1.67 | 23.42 | 1.11 |
| 5.250 | 1.49 | 11.333 | 8.92 | 17.417 | 1.67 | 23.50 | 1.11 |
| 5.333 | 1.49 | 11.417 | 8.92 | 17.500 | 1.67 | 23.58 | 1.11 |
| 5.417 | 1.49 | 11.500 | 8.92 | 17.583 | 1.67 | 23.67 | 1.11 |
| 5.500 | 1.49 | 11.583 | 8.92 | 17.667 | 1.67 | 23.75 | 1.11 |
| 5.583 | 1.49 | 11.667 | 8.92 | 17.750 | 1.67 | 23.83 | 1.11 |
| 5.667 | 1.49 | 11.750 | 8.92 | 17.833 | 1.67 | 23.92 | 1.11 |
| 5.750 | 1.49 | 11.833 | 27.49 | 17.917 | 1.67 | 24.00 | 1.11 |
| 5.833 | 1.49 | 11.917 | 27.50 | 18.000 | 1.67 | 24.08 | 1.11 |
| 5.917 | 1.49 | 12.000 | 27.50 | 18.083 | 1.67 | 24.17 | 1.11 |
| 6.000 | 1.49 | 12.083 | 113.69 | 18.167 | 1.67 | 24.25 | 1.11 |
| 6.083 | 1.49 | 12.167 | 113.70 | 18.250 | 1.67 | | |

| | | | |
|---|---|---|---|
| Max.Eff.Inten.(mm/hr)= | 113.70 | 90.17 | |
| over (min) | 5.00 | 10.00 | |
| Storage Coeff. (min)= | 1.42 (ii) | 8.77 (ii) | |
| Unit Hyd. Tpeak (min)= | 5.00 | 10.00 | |
| Unit Hyd. peak (cms)= | 0.33 | 0.12 | |
| | | | *TOTALS* |
| PEAK FLOW (cms)= | 0.03 | 0.02 | 0.044 (iii) |
| TIME TO PEAK (hrs)= | 12.25 | 12.25 | 12.25 |
| RUNOFF VOLUME (mm)= | 91.89 | 34.34 | 54.46 |
| TOTAL RAINFALL (mm)= | 92.89 | 92.89 | 92.89 |
| RUNOFF COEFFICIENT = | 0.99 | 0.37 | 0.59 |

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 49.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

---

| ADD HYD ( 0806) | | | | |
|---|---|---|---|---|
| 1 + 2 = 3 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 1 ( 0322): | 0.25 | 0.044 | 12.25 | 54.46 |
| + ID2= 2 ( 0323): | 1.30 | 0.225 | 12.25 | 54.48 |
| ID = 3 ( 0806): | 1.55 | 0.269 | 12.25 | 54.47 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

---

| ADD HYD ( 0806) | | | | |
|---|---|---|---|---|
| 3 + 2 = 1 | AREA (ha) | QPEAK (cms) | TPEAK (hrs) | R.V. (mm) |
| ID1= 3 ( 0806): | 1.55 | 0.269 | 12.25 | 54.47 |
| + ID2= 2 ( 0004): | 49.02 | 0.390 | 14.08 | 48.64 |
| ID = 1 ( 0806): | 50.57 | 0.402 | 14.08 | 48.82 |

NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

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```
--------------------
| ADD HYD  (  0811)|
|   1 +  2 =  3    |          AREA    QPEAK    TPEAK     R.V.
--------------------          (ha)    (cms)    (hrs)     (mm)
        ID1= 1 (  0806):    50.57   0.402    14.08    48.82
      + ID2= 2 (  0810):   123.69   2.476    13.50    38.11
        ================================================
        ID = 3 (  0811):   174.26   2.862    13.67    41.22

     NOTE:  PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
--------------------------------------------------------------------------------
```

# Appendix D:
# SWMF Design Calculations

TATHAM ENGINEERING

| | | | |
|---|---|---|---|
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**Stage - Storage Table**

| Elevation | Main Cell | | | | | Total | |
|---|---|---|---|---|---|---|---|
| | Depth | Area | Avg. Area | Dead Vol. | Live Vol. | Dead Accum. | Live Accum. |
| m | m | $m^2$ | $m^2$ | $m^3$ | $m^3$ | $m^3$ | $m^3$ |
| **193.50** | 0.00 | 9151 | 0 | 0 | | 0 | |
| 193.60 | 0.10 | 9326 | 9239 | 924 | | 924 | |
| 193.70 | 0.20 | 9501 | 9413 | 941 | | 1865 | |
| 193.80 | 0.30 | 9675 | 9588 | 959 | | 2824 | |
| 193.90 | 0.40 | 9850 | 9763 | 976 | | 3800 | |
| 194.00 | 0.50 | 10025 | 9938 | 994 | | 4794 | |
| 194.10 | 0.60 | 10201 | 10113 | 1011 | | 5805 | |
| 194.20 | 0.70 | 10376 | 10289 | 1029 | | 6834 | |
| 194.30 | 0.80 | 10639 | 10508 | 1051 | | 7885 | |
| 194.40 | 0.90 | 10903 | 10771 | 1077 | | 8962 | |
| 194.50 | 1.00 | 11168 | 11036 | 1104 | | 10066 | |
| 194.60 | 1.10 | 11434 | 11301 | 1130 | | 11196 | |
| 194.70 | 1.20 | 11702 | 11568 | 1157 | | 12353 | |
| **194.80** | 1.30 | 11970 | 11836 | 1184 | | 13536 | |
| 194.90 | 1.40 | 12246 | 12108 | | 1211 | 13536 | 1211 |
| 195.00 | 1.50 | 12523 | 12385 | | 1238 | 13536 | 2449 |
| 195.10 | 1.60 | 12813 | 12668 | | 1267 | 13536 | 3716 |
| 195.20 | 1.70 | 13038 | 12925 | | 1293 | 13536 | 5009 |
| 195.30 | 1.80 | 13265 | 13151 | | 1315 | 13536 | 6324 |
| 195.40 | 1.90 | 13493 | 13379 | | 1338 | 13536 | 7662 |
| 195.50 | 2.00 | 13723 | 13608 | | 1361 | 13536 | 9022 |
| 195.60 | 2.10 | 13954 | 13839 | | 1384 | 13536 | 10406 |
| 195.70 | 2.20 | 14187 | 14071 | | 1407 | 13536 | 11813 |
| 195.80 | 2.30 | 14422 | 14305 | | 1430 | 13536 | 13244 |
| 195.90 | 2.40 | 14658 | 14540 | | 1454 | 13536 | 14698 |
| 196.00 | 2.50 | 14896 | 14777 | | 1478 | 13536 | 16175 |
| 196.10 | 2.60 | 15135 | 15015 | | 1502 | 13536 | 17677 |
| 196.20 | 2.70 | 15376 | 15255 | | 1526 | 13536 | 19203 |
| 196.30 | 2.80 | 15618 | 15497 | | 1550 | 13536 | 20752 |
| 196.40 | 2.90 | 15862 | 15740 | | 1574 | 13536 | 22326 |
| 196.50 | 3.00 | 16107 | 15984 | | 1598 | 13536 | 23925 |
| 196.60 | 3.10 | 16354 | 16231 | | 1623 | 13536 | 25548 |
| 196.70 | 3.20 | 16603 | 16478 | | 1648 | 13536 | 27196 |
| 196.80 | 3.30 | 16853 | 16728 | | 1673 | 13536 | 28868 |
| 196.90 | 3.40 | 17104 | 16978 | | 1698 | 13536 | 30566 |
| 197.00 | 3.50 | 17357 | 17231 | | 1723 | 13536 | 32289 |
| 197.10 | 3.60 | 17612 | 17485 | | 1748 | 13536 | 34038 |
| 197.20 | 3.70 | 17868 | 17740 | | 1774 | 13536 | 35812 |
| 197.30 | 3.80 | 18126 | 17997 | | 1800 | 13536 | 37611 |
| 197.40 | 3.90 | 18385 | 18256 | | 1826 | 13536 | 39437 |
| 197.50 | 4.00 | 18646 | 18516 | | 1852 | 13536 | 41289 |

Areas derrived from CAD DWG

| | | |
|---|---|---|
| Stage | = | 0.10 |
| Top of Perm Pool | = | 194.80 |
| Top of bank | = | 197.50 |
| Bottom Elev. | = | 193.50 |
| Top of Extended Detention | = | 195.80 |

TATHAM ENGINEERING

| | | | |
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**Stage - Discharge Table**

| Orifice Control | Primary Outlet | Secondary Outlet | Ditch Inlet Catchbasin | DICB | Weir Control | Emergency Weir |
|---|---|---|---|---|---|---|
| Orifice/Pipe Dia. (mm) | 245 | 600 | Grate Size | 1200x600 | Weir Width (m) | 40 |
| Cross Sectional Area ($m^2$) | 0.0471 | 0.2827 | Grate Slope (H:V) | 5:1 | Sill Elevation (m) | 197.00 |
| Orifice Coefficient | 0.63 | 0.8 | Sill Elevation (m) | 195.80 | Weir Coefficient | 1.65 |
| Inv. Elevation (m) | 194.80 | 194.80 | | | Weir Side Slopes (H:V | 10 |

| Water Level | Primary Orifice | | DICB | | Outlet Pipe | | Emergency Weir | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | Head | Discharge | Head | Discharge | Head | Discharge | Head | Discharge | Discharge |
| m | m | $m^3/s$ | m | $m^3/s$ | m | $m^3/s$ | m | $m^3/s$ | $m^3/s$ |
| | | | | | | | | | |
| 194.80 | 0.00 | 0.000 | 0.00 | 0.000 | 0.00 | 0.000 | 0.00 | 0.000 | 0.000 |
| 194.90 | 0.10 | 0.042 | 0.00 | 0.000 | 0.10 | 0.016 | 0.00 | 0.000 | 0.016 |
| 195.00 | 0.20 | 0.059 | 0.00 | 0.000 | 0.20 | 0.061 | 0.00 | 0.000 | 0.059 |
| 195.10 | 0.30 | 0.072 | 0.00 | 0.000 | 0.30 | 0.128 | 0.00 | 0.000 | 0.072 |
| 195.20 | 0.40 | 0.083 | 0.00 | 0.000 | 0.40 | 0.633 | 0.00 | 0.000 | 0.083 |
| 195.30 | 0.50 | 0.093 | 0.00 | 0.000 | 0.50 | 0.708 | 0.00 | 0.000 | 0.093 |
| 195.40 | 0.60 | 0.102 | 0.00 | 0.000 | 0.60 | 0.776 | 0.00 | 0.000 | 0.102 |
| 195.50 | 0.70 | 0.110 | 0.00 | 0.000 | 0.70 | 0.838 | 0.00 | 0.000 | 0.110 |
| 195.60 | 0.80 | 0.118 | 0.00 | 0.000 | 0.80 | 0.896 | 0.00 | 0.000 | 0.118 |
| 195.70 | 0.90 | 0.125 | 0.00 | 0.000 | 0.90 | 0.950 | 0.00 | 0.000 | 0.125 |
| 195.80 | 1.00 | 0.131 | 0.00 | 0.000 | 1.00 | 1.001 | 0.00 | 0.000 | 0.131 |
| 195.90 | 1.10 | 0.138 | 0.10 | 0.136 | 1.10 | 1.050 | 0.00 | 0.000 | 0.274 |
| 196.00 | 1.20 | 0.144 | 0.20 | 0.428 | 1.20 | 1.097 | 0.00 | 0.000 | 0.572 |
| 196.10 | 1.30 | 0.150 | 0.30 | 0.886 | 1.30 | 1.142 | 0.00 | 0.000 | 1.036 |
| 196.20 | 1.40 | 0.156 | 0.40 | 1.510 | 1.40 | 1.185 | 0.00 | 0.000 | 1.185 |
| 196.30 | 1.50 | 0.161 | 0.50 | 2.299 | 1.50 | 1.226 | 0.00 | 0.000 | 1.226 |
| 196.40 | 1.60 | 0.166 | 0.60 | 3.255 | 1.60 | 1.267 | 0.00 | 0.000 | 1.267 |
| 196.50 | 1.70 | 0.171 | 0.70 | 4.376 | 1.70 | 1.306 | 0.00 | 0.000 | 1.306 |
| 196.60 | 1.80 | 0.176 | 0.80 | 5.663 | 1.80 | 1.344 | 0.00 | 0.000 | 1.344 |
| 196.70 | 1.90 | 0.181 | 0.90 | 7.116 | 1.90 | 1.380 | 0.00 | 0.000 | 1.380 |
| 196.80 | 2.00 | 0.186 | 1.00 | 8.735 | 2.00 | 1.416 | 0.00 | 0.000 | 1.416 |
| 196.90 | 2.10 | 0.191 | 1.10 | 10.520 | 2.10 | 1.451 | 0.00 | 0.000 | 1.451 |
| 197.00 | 2.20 | 0.195 | 1.20 | 12.470 | 2.20 | 1.485 | 0.00 | 0.000 | 1.485 |
| 197.10 | 2.30 | 0.199 | 1.30 | 14.587 | 2.30 | 1.519 | 0.10 | 2.139 | 3.658 |
| 197.20 | 2.40 | 0.204 | 1.40 | 16.869 | 2.40 | 1.551 | 0.20 | 6.198 | 7.750 |
| 197.30 | 2.50 | 0.208 | 1.50 | 19.317 | 2.50 | 1.583 | 0.30 | 11.658 | 13.242 |
| 197.40 | 2.60 | 0.212 | 1.60 | 21.932 | 2.60 | 1.615 | 0.40 | 18.367 | 19.981 |
| 197.50 | 2.70 | 0.216 | 1.70 | 24.711 | 2.70 | 1.645 | 0.50 | 26.251 | 27.897 |

TATHAM ENGINEERING

| | | | |
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**Stage-Storage-Discharge Table**

| Stage | Discharge | | | | | Volume |
|---|---|---|---|---|---|---|
| Water Level | Primary | DICB | Secondary | Emergency Weir | Total | Live Total |
| m | $m^3/s$ | $m^3/s$ | $m^3/s$ | $m^3/s$ | $m^3/s$ | $m^3$ |
| 194.80 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0 |
| 194.90 | 0.042 | 0.000 | 0.016 | 0.000 | 0.016 | 1211 |
| 195.00 | 0.059 | 0.000 | 0.061 | 0.000 | 0.059 | 2449 |
| 195.10 | 0.072 | 0.000 | 0.128 | 0.000 | 0.072 | 3716 |
| 195.20 | 0.083 | 0.000 | 0.633 | 0.000 | 0.083 | 5009 |
| 195.30 | 0.093 | 0.000 | 0.708 | 0.000 | 0.093 | 6324 |
| 195.40 | 0.102 | 0.000 | 0.776 | 0.000 | 0.102 | 7662 |
| 195.50 | 0.110 | 0.000 | 0.838 | 0.000 | 0.110 | 9022 |
| 195.60 | 0.118 | 0.000 | 0.896 | 0.000 | 0.118 | 10406 |
| 195.70 | 0.125 | 0.000 | 0.950 | 0.000 | 0.125 | 11813 |
| 195.80 | 0.131 | 0.000 | 1.001 | 0.000 | 0.131 | 13244 |
| 195.90 | 0.138 | 0.136 | 1.050 | 0.000 | 0.274 | 14698 |
| 196.00 | 0.144 | 0.428 | 1.097 | 0.000 | 0.572 | 16175 |
| 196.10 | 0.150 | 0.886 | 1.142 | 0.000 | 1.036 | 17677 |
| 196.20 | 0.156 | 1.510 | 1.185 | 0.000 | 1.185 | 19203 |
| 196.30 | 0.161 | 2.299 | 1.226 | 0.000 | 1.226 | 20752 |
| 196.40 | 0.166 | 3.255 | 1.267 | 0.000 | 1.267 | 22326 |
| 196.50 | 0.171 | 4.376 | 1.306 | 0.000 | 1.306 | 23925 |
| 196.60 | 0.176 | 5.663 | 1.344 | 0.000 | 1.344 | 25548 |
| 196.70 | 0.181 | 7.116 | 1.380 | 0.000 | 1.380 | 27196 |
| 196.80 | 0.186 | 8.735 | 1.416 | 0.000 | 1.416 | 28868 |
| 196.90 | 0.191 | 10.520 | 1.451 | 0.000 | 1.451 | 30566 |
| 197.00 | 0.195 | 12.470 | 1.485 | 0.000 | 1.485 | 32289 |
| 197.10 | 0.199 | 14.587 | 1.519 | 2.139 | 3.658 | 34038 |
| 197.20 | 0.204 | 16.869 | 1.551 | 6.198 | 7.750 | 35812 |
| 197.30 | 0.208 | 19.317 | 1.583 | 11.658 | 13.242 | 37611 |
| 197.40 | 0.212 | 21.932 | 1.615 | 18.367 | 19.981 | 39437 |
| 197.50 | 0.216 | 24.711 | 1.645 | 26.251 | 27.897 | 41289 |

TATHAM ENGINEERING

| | | | |
|---|---|---|---|
| PROJECT | Linksview Subdivision | FILE | 125027 |
| | | DATE | July 10, 2025 |
| SUBJECT | Stage- Storage- Discharge Tables | NAME | EL |
| | | PAGE | 4 OF 4 |

**SWMF Operating Characteristics**

| Storm Event | Storage ($m^3$) | | Discharge ($m^3/s$) | | Water Level (m) | |
|---|---|---|---|---|---|---|
| | Chicago | SCS | Chicago | SCS | Chicago | SCS |
| 25 mm | 3710 | - | 0.071 | - | 195.09 | - |
| 1:2-Year | 5430 | 6330 | 0.086 | 0.092 | 195.23 | 195.29 |
| 1:5-Year | 7850 | 9010 | 0.103 | 0.110 | 195.41 | 195.50 |
| 1:10-Year | 9500 | 10690 | 0.113 | 0.119 | 195.54 | 195.62 |
| 1:25-Year | 11790 | 13190 | 0.124 | 0.131 | 195.69 | 195.79 |
| 1:50-Year | 13560 | 14030 | 0.179 | 0.250 | 195.83 | 195.88 |
| 1:100-Year | 14530 | 14970 | 0.325 | 0.390 | 195.92 | 195.94 |
| Regional | 31540 | - | 1.470 | - | 196.96 | - |
| Uncontrolled | - | - | - | 6.748 | - | 197.21 |

TATHAM ENGINEERING

# Pond Drawdown Time

| Project Details | | Prepared By | |
|---|---|---|---|
| Linksview Subdivision | 125027 | EL | July 10, 2025 |

## Pond Drawdown Time Calculation

| | |
|---|---|
| Methodology & Data Source | Falling head orifice equation which assumes a constant pond surface area, per Equation 4.10 of Ministry of Environment, Conservation and Parks (MECP) Stormwater Management Planning & Design Manual (SWMPDM) March 2003. |

Drawdown Time (t) = $$\frac{2 \times A_p}{C \times A_o \times 2g^{0.5}}(h_1^{0.5} - h_2^{0.5})$$

## Pond Operation Characteristics

| | | | |
|---|---|---|---|
| Orifice Diameter | = | 245.0 | mm |
| Cross Sectional Area of Orifice ($A_o$) | = | 0.0471 | $m^2$ |
| Orifice Discharge Coefficient (C) | = | 0.63 | |
| Starting Water Level | = | 194.80 | m |
| Starting Surface Area | = | 11970 | $m^2$ |
| 25 mm Rainfall Water Level | = | 195.09 | m |
| 25 mm Rainfall Water Level Surface Area | = | 12784 | $m^2$ |
| Extended Detention Zone Water Level | = | 195.80 | m |
| Extended Detention Zone Surface Area | = | 14422 | $m^2$ |
| Gravitational Acceleration Constant (g) | = | 9.81 | $m/s^2$ |

## 25 mm Storm Event Drawdown Time

| | | | |
|---|---|---|---|
| Average Surface Area ($A_p$) | = | 12377 | $m^2$ |
| Starting Water Elevation Above Orifice ($h_1$) | = | 0.29 | m |
| Ending Water Elevation Above Orifice ($h_2$) | = | 0.00 | m |

$t_{25mm}$ = 28.1 hours

## Extended Detention Zone Drawdown Time

| | | | |
|---|---|---|---|
| Average Surface Area ($A_p$) | = | 13196 | $m^2$ |
| Starting Water Elevation Above Orifice ($h_1$) | = | 1.00 | m |
| Ending Water Elevation Above Orifice ($h_2$) | = | 0.00 | m |

$t_{ExtDet}$ = 55.7 hours

# Forebay Design Requirements

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | July 10, 2025 |

## Forebay Design Criteria

| | |
|---|---|
| Methodology & Data Source | Forebay dimensions per equations 4.5, 4.6, 4.7, and forebay cleanout frequency per Table 6.3 of Ministry of Environment, Conservation and Parks (MECP) Stormwater Management Planning & Design Manual (SWMPDM) March 2003. |

## Design Forebay Characteristics

| | | | |
|---|---|---|---|
| Forebay Length (L) | = | 116 | m |
| Forebay Width (W) | = | 16 | m |
| Forebay Length-to-Width Ratio (r) | = | 7.3 | |
| Depth of Permanent Pool | = | 1.3 | m |
| Water Quality Outflow ($Q_{qual}$) | = | 0.071 | $m^3/s$ |
| Settling Velocity ($V_s$) | = | 0.0003 | m/s |
| Forebay Velocity ($V_f$) | = | 0.50 | m/s |
| Cleanout Sediment Depth | = | 0.30 | m |
| Cleanout Sediment Volume (Vol) | = | 552 | $m^3$ |

## Catchment Characteristics

| | | | |
|---|---|---|---|
| Contributing Sewer Area ($A_{sew}$) | = | 38.20 | ha |
| Area Avg. Impervious | = | 55% | |
| Sediment Loading (Load) | = | 1.90 | $m^3/ha$ |
| Forebay Inlet Flow Rate ($Q_5$) | = | 3.674 | $m^3/s$ |
| Target Removal Effciency (Eff) | = | 80% | |

## Settling Length

$$L = \sqrt{\frac{r \times Q_{qual}}{V_s}} = 41.4 \text{ m}$$

## Dispersion Length

$$L = \frac{8 \times Q_5}{d \times V_f} = 58.8 \text{ m}$$

## Forebay Deep Zone Bottom Width

$$W = \frac{L}{8} = 15 \text{ m}$$

## Forebay Cleanout Frequency

$$\text{Cleanout} = \frac{Vol}{Load \times A_{sew} \times Eff} = 10 \text{ years}$$

# Water Quality Requirements

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL | July 10, 2025 |

**Water Quality Sizing Criteria**

| | |
|---|---|
| Methodology & Data Source | Volumetric water quality criteria as presented in Table 3.2 in Ministry of Environment, Conservation and Parks (MECP) Stormwater Management Planning & Design Manual (SWMPDM) March 2003. |

**Contributing Catchments**

| Catchment ID | Area (ha) | Impervious (%) |
|---|---|---|
| 301 | 5.30 | 0% |
| 302 | 5.52 | 0% |
| 201 | 38.20 | 55% |
| **Total** | **49.02** | **42.9%** |

**Treatment Method Details**

| | |
|---|---|
| **SWM Facility Type** | Wet Pond |
| **Target Treatment Leve** | Enhanced Level |
| **Treatment Percentage** | 80% |

**Treatment Requirements**

| | | |
|---|---|---|
| **Water Quality Storage Requirement** | 7,721 | $m^3$ |
| **Extended Detention Volume (40 $m^3$)** | 1,961 | $m^3$ |
| **Permanent Pool Volume Required** | 5,760 | $m^3$ |
| **25 mm Storm Runoff Depth** | 9 | mm |
| **25 mm Storm Runoff Volume** | 4,328 | $m^3$ |
| **Required Extended Detention Volume** | 4,328 | $m^3$ |
| **Erosion Control Storage Required** | 8,333 | $m^3$ |

| | | | |
|---|---|---|---|
| **Permanent Pool Volume Provided** | 13,536 | **Provided > Required** | |
| **Extended Detention Storage Provided** | 13,244 | **Provided > Required** | |
| **Active Storage Provided** | 41,289 | **Provided > Required** | |

TATHAM ENGINEERING

# Trapezoidal Weir Discharge Calculation

| Project Details | | Prepared By: | |
|---|---|---|---|
| Linksview Subdivision | 125027 | KB | 7/10/2025 |

**Source:** Hydraulic Structures, C.D.Smith, University of Saskatchewan
Trapezoidal Broad Crested Weir

The trapezoidal weir is a combination of the rectangular weir and the triangular weir

**Parameters:**

| | | |
|---|---|---|
| Weir Bottom Width (m) | W = | 40 |
| Head (m) | H = | 0.21 |
| Weir Downstream Length (m) | L = | 0.1 |
| Side Slope (H:V) | S = | 10.0 |

**Rectangular Weir**

$$Q = CWH^{3/2}$$

| | |
|---|---|
| H/L = | 2.100 |
| C = | 1.700 |

| | | |
|---|---|---|
| Rectangular Weir Flow ($m^3/s$) | Q = | **6.544** |

**Triangular Weir**

$$Q = CH^{5/2}\tan(\theta/2)$$

| | | |
|---|---|---|
| Notch Angle (one side) | 84.289 | degrees |
| Notch Angle (one side) | 1.471127674 | radians |

$\tan(\theta/2)$ = 10.000000

| | |
|---|---|
| Triangular H/L | 2.100 |
| C | 1.280 |

| | | |
|---|---|---|
| Triangular Weir Flow ($m^3/s$) | Q = | **0.259** |

**Total Rectangular + Triangular Weir**

| | | |
|---|---|---|
| Trapezoidal Weir Flow ($m^3/s$) | Q = | **6.803** |

# Storm Sewer Design Sheet

**Project Details**

| | |
|---|---|
| Linksview Subdivision | 125027 |

**Prepared By**

| | |
|---|---|
| EL/KB | June 2025 |

**Municipality**

Town of Collingwood

**Manning's Equation for Full Pipe Flow**

$$Q = \frac{1}{n} \cdot A \cdot R^{2/3} \cdot S^{1/2}$$

**1050 Dia. STM**

| | | | | | |
|---|---|---|---|---|---|
| n | = | Manning's n | = | 0.013 | |
| S | = | Slope | = | 0.00500 | m/m |
| | | Diameter | = | 1.05 | m |
| A | = | Area | = | 0.865901 | $m^2$ |
| | | Permimeter | = | 3.298672 | m |
| R | = | Hydraulic Radius | = | 0.2625 | m |

**Solving for Flow & Velocity**

**Flow = 1.93 $m^3/s$**

**Velocity = 2.23 m/s**