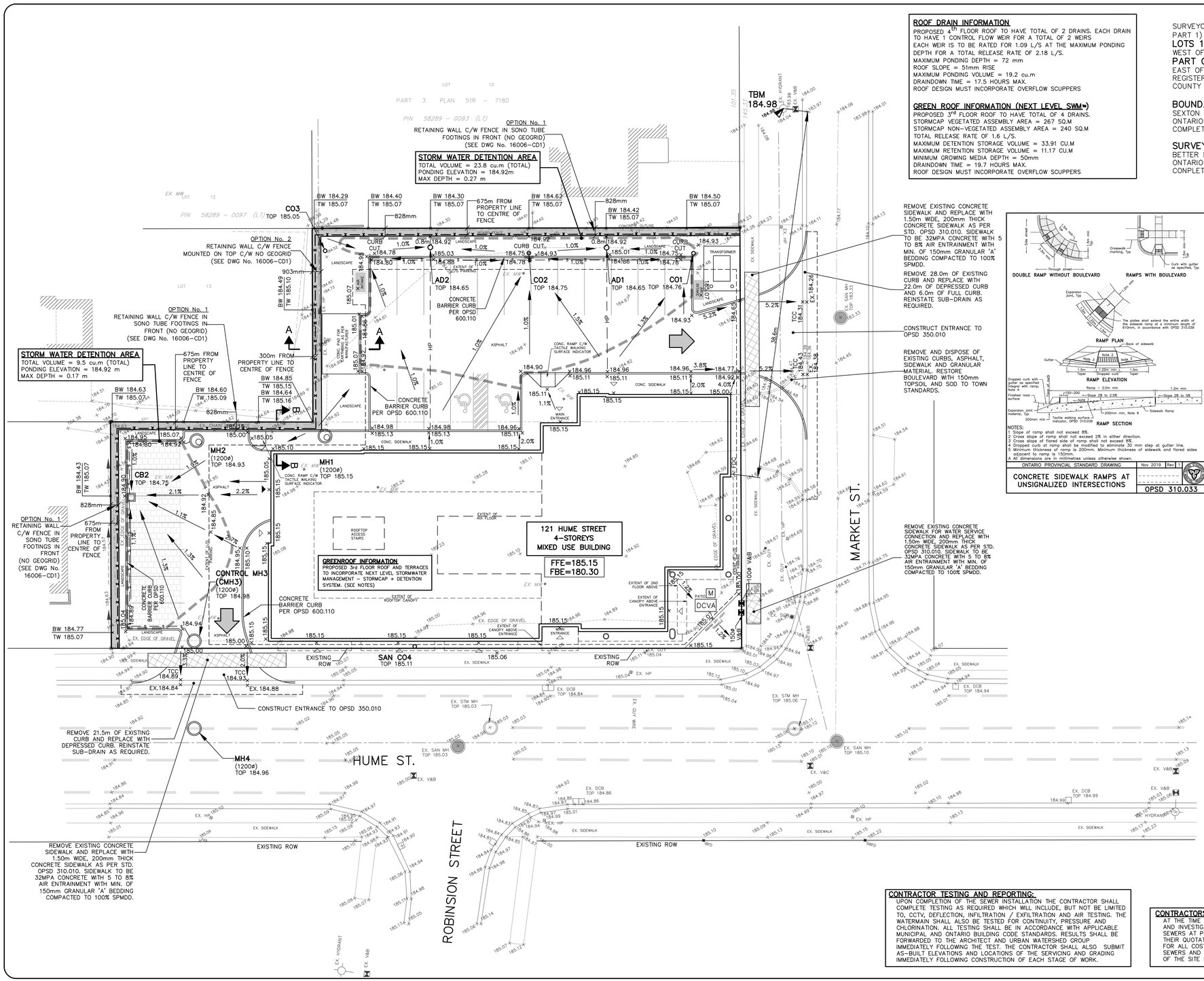


ROOF DRAIN INFORMATION

PROPOSED 4TH FLOOR ROOF TO HAVE TOTAL OF 2 DRAINS. EACH DRAIN TO HAVE 1 CONTROL FLOW WEIR FOR A TOTAL OF 2 WEIRS
EACH WEIR IS TO BE RATED FOR 1.09 L/S AT THE MAXIMUM PONDING DEPTH FOR A TOTAL RELEASE RATE OF 2.18 L/S.
MAXIMUM PONDING DEPTH = 72 mm
ROOF SLOPE = 51mm RISE
MAXIMUM PONDING VOLUME = 19.2 cu.m
DRAINDOWN TIME = 17.5 HOURS MAX.
ROOF DESIGN MUST INCORPORATE OVERFLOW SCUPPERS

GREEN ROOF INFORMATION (NEXT LEVEL SWM*)

PROPOSED 3rd FLOOR ROOF TO HAVE TOTAL OF 4 DRAINS.
STORMCAP VEGETATED ASSEMBLY AREA = 267 SQ.M
STORMCAP NON-VEGETATED ASSEMBLY AREA = 240 SQ.M
TOTAL RELEASE RATE OF 1.6 L/S.
MAXIMUM DETENTION STORAGE VOLUME = 33.91 CU.M
MAXIMUM RETENTION STORAGE VOLUME = 11.17 CU.M
MINIMUM GROWING MEDIA DEPTH = 50mm
DRAINDOWN TIME = 19.7 HOURS MAX.
ROOF DESIGN MUST INCORPORATE OVERFLOW SCUPPERS

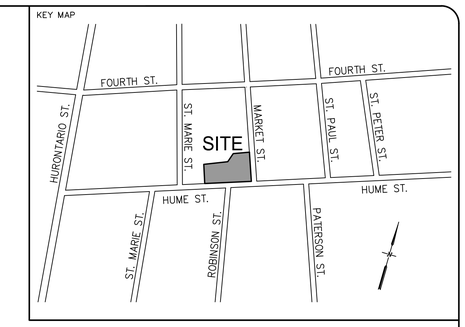
SURVEYOR'S REAL PROPERTY REPORT
PART 1) PLAN OF
LOTS 13 AND 14
WEST OF MARKET STREET AND
PART OF LOT 14
EAST OF ST.MARIE STREET
REGISTERED PLAN 144 TOWN OF COLLINGWOOD
COUNTY OF SIMCOE

BOUNDARY PLAN PREPARED BY:
SEXTON McKAY LIMITED
ONTARIO LAND SURVEYORS
COMPLETED ON NOVEMBER 02, 2012

SURVEY PREPARED BY:
BETTER MEASURES
ONTARIO LAND SURVEYORS
CONPLETED ON MAY 01, 2017

N
CONSTRUCTION NORTH

KEY MAP



DRAWING NOTES:

1. VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
2. DO NOT SCALE DRAWINGS.
3. REPORT ALL ERRORS, OMISSIONS OR DISCREPANCIES TO URBAN WATERSHED GROUP LIMITED IMMEDIATELY UPON DISCOVERY.
4. USE ONLY LATEST REVISED DRAWINGS OR THOSE THAT ARE MARKED "ISSUED FOR CONSTRUCTION".
5. THE DRAWINGS ARE THE PROPERTY OF URBAN WATERSHED GROUP LIMITED AND MUST BE RETURNED ON COMPLETION OF THE PROJECT. ANY UNAUTHORIZED USE OF THIS PLAN IS PROHIBITED.

GENERAL NOTES:

1. ELEVATIONS AND DISTANCES ARE EXPRESSED IN METRES AND DECIMAL PARTS THEREOF.
2. BOUNDARY INFORMATION SHOWN HEREON BASED ON A PLAN OF SURVEY PLAN BY EPLETT & WOROBEC SURVEYING LTD PROJECT No. 11-4597 APPROVED: JUNE 1, 2011
3. ELEVATIONS HAVE BEEN PROVIDED BY BETTER MEASURES SURVEYORS.
4. ALL ELEVATIONS ARE GEODETIC.
5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS UNLESS NOTED.
6. LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES AND SERVICES SHOWN ON THE PLAN ARE FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL UTILITIES.
7. ALL WORK WITHIN THE ROAD ALLOWANCE IS TO BE IN ACCORDANCE WITH THE TOWN OF COLLINGWOOD STANDARDS AND SPECIFICATIONS.
8. ALL DIMENSIONS AND ELEVATIONS ARE TO BE CHECKED AND VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
9. TRAFFIC CONTROLS TO CONFORM TO THE LATEST REVISION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND ONTARIO TRAFFIC MANUAL TEMPORARY CONDITIONS (BOOK 7).
10. STREET AND TRAFFIC SIGNS AS PER TOWN OF COLLINGWOOD STANDARDS.

LOCATES AND LIABILITY:

1. THE CONTRACTOR SHALL RECTIFY ALL DISTURBED AREAS TO THE ORIGINAL CONDITION OR BETTER AND TO THE SATISFACTION OF THE TOWN OF COLLINGWOOD.
2. THE LOCATION OF ALL UNDER/ABOVE GROUND UTILITIES AND STRUCTURES ARE APPROXIMATE ONLY, AND WHERE SHOWN ON THE DRAWING(S) THE ACCURACY OF THE LOCATION OF SUCH UTILITIES ARE NOT GUARANTEED. THE CONTRACTOR SHALL DETERMINE THE LOCATION OF ALL SUCH UTILITIES AND STRUCTURES BY CONSULTING THE APPROPRIATE AUTHORITIES OR UTILITY COMPANIES CONCERNED. THE CONTRACTOR SHALL PROVE THE LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE OR RESTORATION TO SAME.
3. THE OWNER SHALL BE NOTIFIED IMMEDIATELY OF ANY CONFLICTS WITH EXISTING SERVICES.

GRADING NOTES:

1. ALL DRAINAGE TO BE SELF CONTAINED AND DISCHARGED TO A LOCATION APPROVED BY THE TOWN OF COLLINGWOOD PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
2. ANY CHANGES TO GRADES OR SERVICING FROM THE ORIGINALLY APPROVED SITE PLAN MUST BE APPROVED BY THE TOWN OF COLLINGWOOD ENGINEERING DEPARTMENT.
3. FILL AREAS SHALL BE GRADED AND COMPACTED TO 98% STD. PROCTOR DENSITY, FREE OF DEPRESSIONS.
4. THE SUITABILITY AND COMPACTION OF ALL FILL MATERIALS ARE TO BE CONFIRMED BY A RECOGNIZED SOILS CONSULTANT TO THE TOWN ENGINEER PRIOR TO THE INSTALLATION OF THE ROAD BASE.
5. CONCRETE CURB ON THE PROPERTY TO BE AS PER OPSD 600.110 BARRIER CURB. CURB HEIGHTS TO BE SPECIFIED ON THIS PLAN.
6. PROVIDE MINIMUM CURB RADII PER TOWN OF COLLINGWOOD STANDARDS AT ALL ENTRANCES.
7. WHERE MAXIMUM GRADES ARE NOT ACHIEVABLE, GRADING TO BE MADE UP WITH SLOPES NOT STEEPER THAN 4:1 (H:V)
8. ALL DISTURBED AREAS TO BE REINSTATED TO ORIGINAL CONDITION OR BETTER. PLACE 150mm OF TOPSOIL AND NURSERY SOD IN ALL DISTURBED GRASSED AREAS PER OPSS.MUNI 802 AND OPSS.MUNI 803 TO THE SATISFACTION OF THE TOWN OF COLLINGWOOD ENGINEERING DEPARTMENT.
9. ALL BOULEVARDS TO BE RESTORED WITH 150mm MINIMUM OF TOPSOIL AND SOD PER OPSS.MUNI 802 AND OPSS.MUNI 803 TO THE SATISFACTION OF THE TOWN OF COLLINGWOOD ENGINEERING DEPARTMENT.
10. STREET CURBS ARE TO BE CONTINUOUS THROUGH THE PROPOSED ENTRANCE.
11. THE TOPS OF ANY CURBS BORDERING THE DRIVEWAYS WITHIN THE MUNICIPAL BOULEVARD WILL BE FLUSH WITH THE MUNICIPAL ROAD CURB AND SIDEWALK.
12. MUNICIPAL SIDEWALKS SHALL BE CONTINUOUS THROUGH ALL ENTRANCES TO THE SITE AND THE CURB SHALL BE TAPERED BACK 600mm. SIDEWALKS SHALL BE COMPLETELY REMOVED AND REPLACED WITH A 180mm MIN. CONCRETE THICKNESS, 30MPA, 5-7% AIR ENTRAINMENT AT ALL PROPOSED INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL ENTRANCES.
13. THE FIRE ACCESS ROUTE AND ASPHALT DRIVEWAY WILL BE DESIGNED TO SUPPORT A LOAD OF NOT LESS THAN 11,363 KG PER AXLE AND HAVE A CHANGE IN SLOPE OF NOT MORE THAN 8.0% OVER A MIN. DISTANCE OF 15.0m.
14. THE PORTIONS OF THE DRIVEWAY WITHIN THE MUNICIPAL BOULEVARD WILL BE PAVED BY THE CONTRACTOR ON BEHALF OF THE OWNER.
15. THE MINIMUM PAVEMENT DESIGN WITHIN THE MUNICIPAL ROAD ALLOWANCE SHALL BE AS FOLLOWS: (REFER TO SOILS REPORT: USE STRONGER DESIGN)

PAVEMENT STRUCTURE WITHIN MUNICIPAL ROAD ALLOWANCE (TOWN OF COLLINGWOOD STANDARD)

40mm HL3 ASPHALT
70mm HL8 ASPHALT
150mm GRANULAR 'A'
450mm GRANULAR "B"
710mm - TOTAL

* THE SOILS CONSULTANT SHOULD REVIEW THE ABOVE WITH RESPECT TO THE EXPECTED USAGE.

ASPHALT PAVEMENT DESIGN:

1. FILL AREAS SHALL BE GRADED AND COMPACTED TO 95% SPMDD, FREE OF DEPRESSIONS.
2. PROVIDE TWO SUBDRAINS, MINIMUM LENGTH OF 3.0m, EXTENDING FROM OPPOSITE SIDES OF CATCHBASINS TO DRAIN THE GRANULAR SUB-BASE LAYER. SUBDRAIN TO BE SET IN 300mm TRENCH WITH GRANULAR 'A' BEDDING.
3. THE PAVEMENT STRUCTURE SHALL BE CONSTRUCTED OF THE FOLLOWING MINIMUM THICKNESS OF MATERIALS:

CAR PARKING ONLY	ACCESS / FIRE ROUTE
40mm HL3 ASPHALT @ 97% MBD	50mm HL3 ASPHALT @ 97% MBD
50mm HL8 ASPHALT @ 97% MBD	50mm HL8 ASPHALT @ 97% MBD
150mm - GRANULAR "A"	150mm - GRANULAR "A"
300mm - GRANULAR "B"	350mm - GRANULAR "B"
540mm - TOTAL	600mm - TOTAL

THE SOILS CONSULTANT SHALL CONFIRM PRIOR TO CONSTRUCTION

SERVICE WORKS

1. ALL DISTURBED AREAS WITHIN THE ROAD ALLOWANCE ARE TO BE REINSTATED TO ORIGINAL CONDITION OR BETTER. PLACE 150mm OF TOPSOIL AND NURSERY SOD IN ALL DISTURBED GRASSED AREAS PER OPSS.MUNI 802 AND OPSS.MUNI 803.
2. CONCRETE SIDEWALKS AND WALKWAY AS PER OPSD 310.010 WITH 150mm GRANULAR "A" BASE COMPACTED TO MIN 98% SPDD. SUB-GRADE TO BE COMPACTED TO SOILS CONSULTANTS RECOMMENDATIONS.
3. URBAN ENTRANCE PER OPSD 350.010.
4. PROVIDE MINIMUM 5.00m CURB RADII AT ALL ENTRANCES.

RETAINING WALL NOTES:

1. THE CONSTRUCTION OF RETAINING WALLS, INCLUDING BEDDING, BEDDING DRAINAGE, TIEBACKS AND BACKFILL ARE TO BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER.
2. WALLS THAT ARE GREATER THAN 1.0m IN HEIGHT SHALL BE DESIGNED BY A PROFESSIONAL STRUCTURAL ENGINEER (BY OTHERS) AND THE CONTRACTOR TO PROVIDE STAMPED SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER.
3. FENCING / HANDRAIL SHALL BE INSTALLED ALONG TOP OF ALL RETAINING WALLS WHEN HEIGHT OF WALL EXCEEDS 0.6m IN ACCORDANCE WITH O.B.C.

CONTRACTOR TESTING AND REPORTING:

UPON COMPLETION OF THE SEWER INSTALLATION THE CONTRACTOR SHALL COMPLETE TESTING AS REQUIRED WHICH WILL INCLUDE, BUT NOT BE LIMITED TO, CCTV, DEFLECTION, INFILTRATION / EXFILTRATION AND AIR TESTING. THE WATERMAIN SHALL ALSO BE TESTED FOR CONTINUITY, PRESSURE AND CHLORINATION. ALL TESTING SHALL BE IN ACCORDANCE WITH APPLICABLE MUNICIPAL AND ONTARIO BUILDING CODE STANDARDS. RESULTS SHALL BE FORWARDED TO THE ARCHITECT AND URBAN WATERSHED GROUP IMMEDIATELY FOLLOWING THE TEST. THE CONTRACTOR SHALL ALSO SUBMIT AS-BUILT ELEVATIONS AND LOCATIONS OF THE SERVICING AND GRADING IMMEDIATELY FOLLOWING CONSTRUCTION OF EACH STAGE OF WORK.

CONTRACTORS NOTE:

AT THE TIME OF TENDER, THE CONTRACTOR SHALL REVIEW THE DRAWINGS AND INVESTIGATE ALL EXISTING SERVICES, WATERMAINS, UTILITIES AND SEWERS AT POINTS OF CROSSING TO THEIR SATISFACTION AND MODIFY THEIR QUOTATION ACCORDINGLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE ADJUSTMENT OF ALL UTILITIES, SEWERS AND WATERMAINS AS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE SITE SERVICING.

NOTE:

ALL DRAWINGS IN THIS SET SHALL BE READ IN CONJUNCTION WITH EACH OTHER. DRAWINGS INCLUDE THE FOLLOWING:

1. SITE GRADING PLAN
2. SITE SERVICING PLAN
3. EROSION & SEDIMENT CONTROL PLAN
4. CONSTRUCTION DETAILS PLAN

NO.	DESCRIPTION	BY	DATE
7.	ISSUED FOR SITE PLAN APPROVAL	B.K.	2020/12/17
6.	ISSUED FOR SITE PLAN APPROVAL	B.K.	2020/07/06
5.	ISSUED FOR REVIEW	P.E.	2020/01/09
4.	REVISED SITE PLAN	P.E.	2019/12/05
3.	REVISED SITE PLAN	P.E.	2019/11/21
2.	DELETE WATER WELL NOTE	B.K.	2017/06/02
1.	ISSUED FOR REVIEW	B.K.	2017/05/29

REVISIONS

BENCHMARK:
TEMPORARY SITE BENCHMARK 184.98m
TEMPORARY SITE BENCHMARK ON TOP NUT OF FIRE HYDRANT ON MARKET STREET AS ILLUSTRATED ON THIS PLAN HAVING A ELEVATION OF 184.98 METRES

LEGEND:

- PROPERTY LINE
- 184.90 EXISTING ELEVATION
- 191.28 PROPOSED ELEVATION
- EXISTING SHEET FLOW
- PROPOSED SHEET FLOW
- EXISTING STORM MANHOLE
- PROPOSED STORM MANHOLE
- EXISTING SINGLE/DOUBLE CATCHBASIN
- PROPOSED SINGLE/DOUBLE CATCHBASIN
- EXISTING SANITARY MANHOLE
- PROPOSED SANITARY MANHOLE
- EX. WW EXISTING MONITORING WELL
- EXISTING VALVE & BOX
- PROPOSED VALVE & BOX
- PERVIOUS PAVERS
- MAJOR SYSTEM OVERLAND FLOW ROUTE
- 100YR STORM WATER DETENTION BOUNDARY
- PROPOSED FENCE, REFER TO LANDSCAPE FOR DETAILS
- HP HIGHPOINT RIDGE

LICENSED PROFESSIONAL ENGINEER
J.D. HARTMAN
7 DEC 20
PROVINCE OF ONTARIO

CONSULTANT
15955 AIRPORT ROAD, SUITE 304
CALEDON EAST, ONTARIO, L7C 1H9
PHONE: (905) 584-1458 FAX: (905) 584-1461
Urban Watershed Group Ltd.
A Member of the GREENLAND Group of Companies
urbanwater@grnland.com

DESIGNED BY:	P. ELLIS	DATE:	MAY 09, 2017
DRAWN BY:	B. KLESS	SURVEYED BY:	BETTER MEASURES O.L.S.
CHECKED BY:	J. HARTMAN	DWG. No.	16006-GR1
SCALE:	1:200		

CLIENT NAME:
PROPOSED MIXED USE DEVELOPMENT
121 HUME STREET
COLLINGWOOD, ONTARIO
FILE No. D11420

DRAWING NAME:
SITE GRADING PLAN

I:\URBAN WATERSHED GROUP\16006 - MIXED USE DEVELOPMENT (121)\ENGINEERING\16006 - MIXED USE DEVELOPMENT - 2020-12-17 - R7\16006 - MIXED USE DEVELOPMENT - 2020-12-17.DWG
Date Plotted: Dec 18, 2020 - 3:39pm