HARBOUR HOUSE DEVELOPMENT

TOWN of COLLINGWOOD
COUNTY of SIMCOE



MUNICIPALITY

TOWN OF COLLINGWOOD 97 HURONTARIO STREET COLLINGWOOD, ONTARIO, L9Y 2L8

DEVELOPER

31 HURON STREET INC. (STREETCAR)
1230 DUNDAS STREET EAST
TORONTO, ONTARIO, M4M 1S3

DEVELOPER'S ENGINEER



admiral buil ding, 1 FIRST Street, Suite 200, Collingwood, ON L9Y 1A1 705 446-3510 T 705 446-3520 F www.cfcrozier.ca info@cfcrozier.ca

LANDSCAPE ARCHITECT

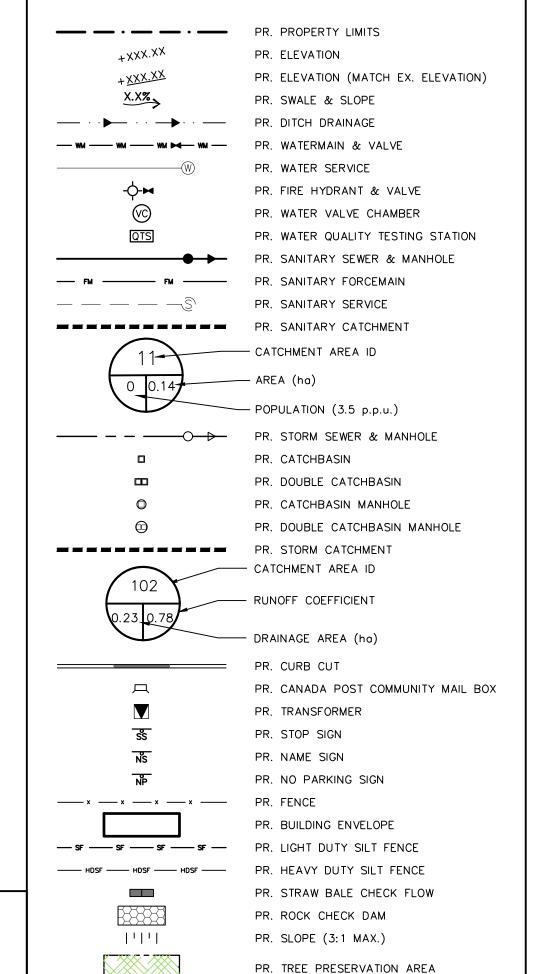


admiral building,
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Collingwood, ON L9Y 1A1
705 446-3510 T
705 446-3520 F
www.cfcrozier.ca
info@cfcrozier.ca

MASTER LEGEND

EXISTING FEATURES (EX.) —XXX.X———— EX. CONTOUR EX. WATER SERVICE EX. FIRE HYDRANT & VALVE EX. SANITARY SEWER & MANHOLE EX. STORM SEWER & MANHOLE EX. STORM CATCHBASIN EX. STORM DOUBLE CATCHBASIN EX. STORM CATCHBASIN MANHOLE EX. STORM DOUBLE CATCHBASIN MANHOLE EX. BELL PEDESTAL EX. CABLE TELEVISION PEDESTAL EX. HYDRO POLE EX. LIGHT STANDARD EX. SIGN EX. BUILDING EX. BENCHMARK NUMBER & LOCATION

PROPOSED FEATURES (PR.)



PR. TOPSOIL STOCKPILE LOCATION

MODULAR TREE PROTECTION FENCE

EX. BOREHOLE NUMBER & LOCATION

DRAWING TITLE

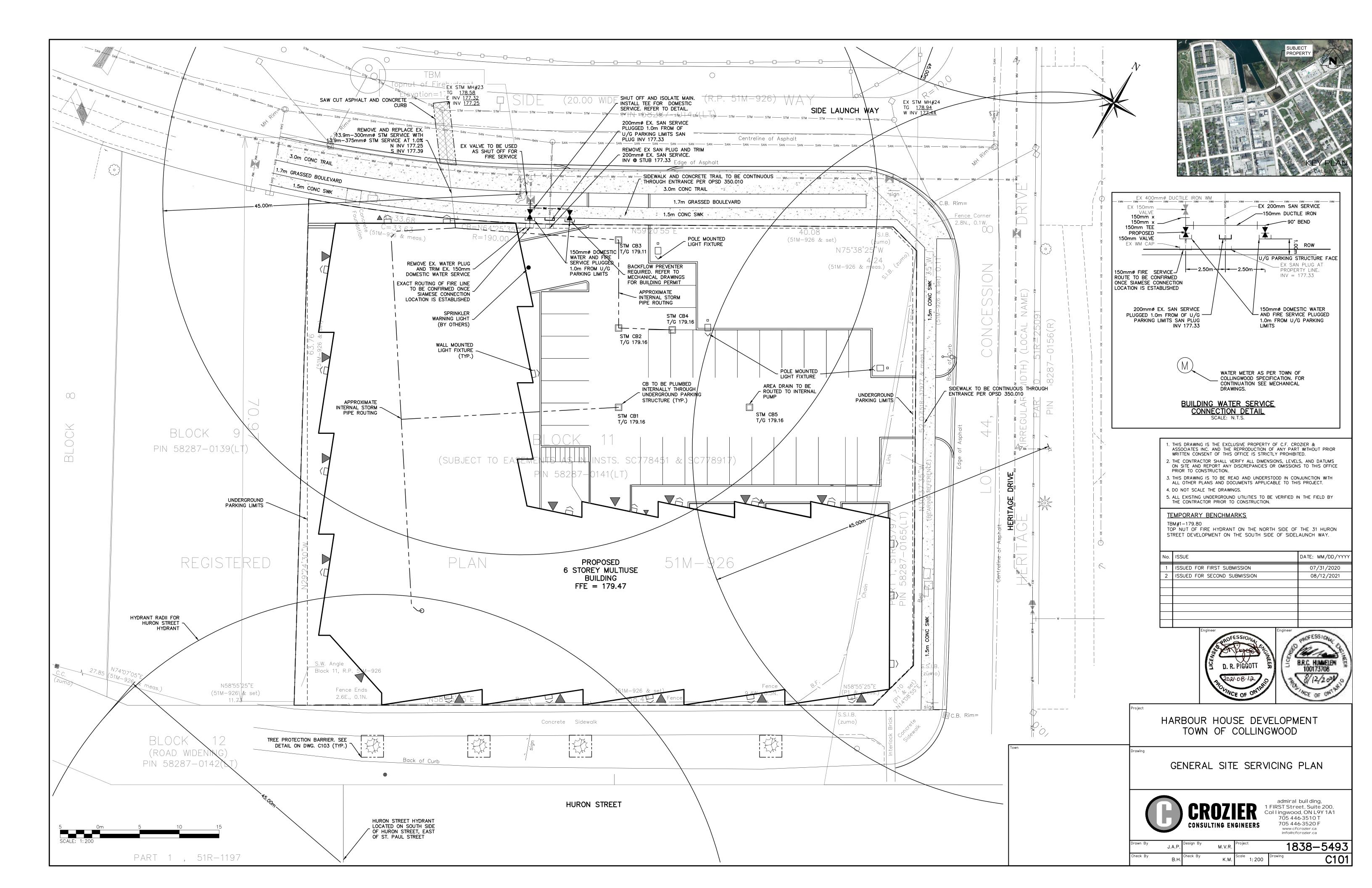
C100 TITLE PAGE

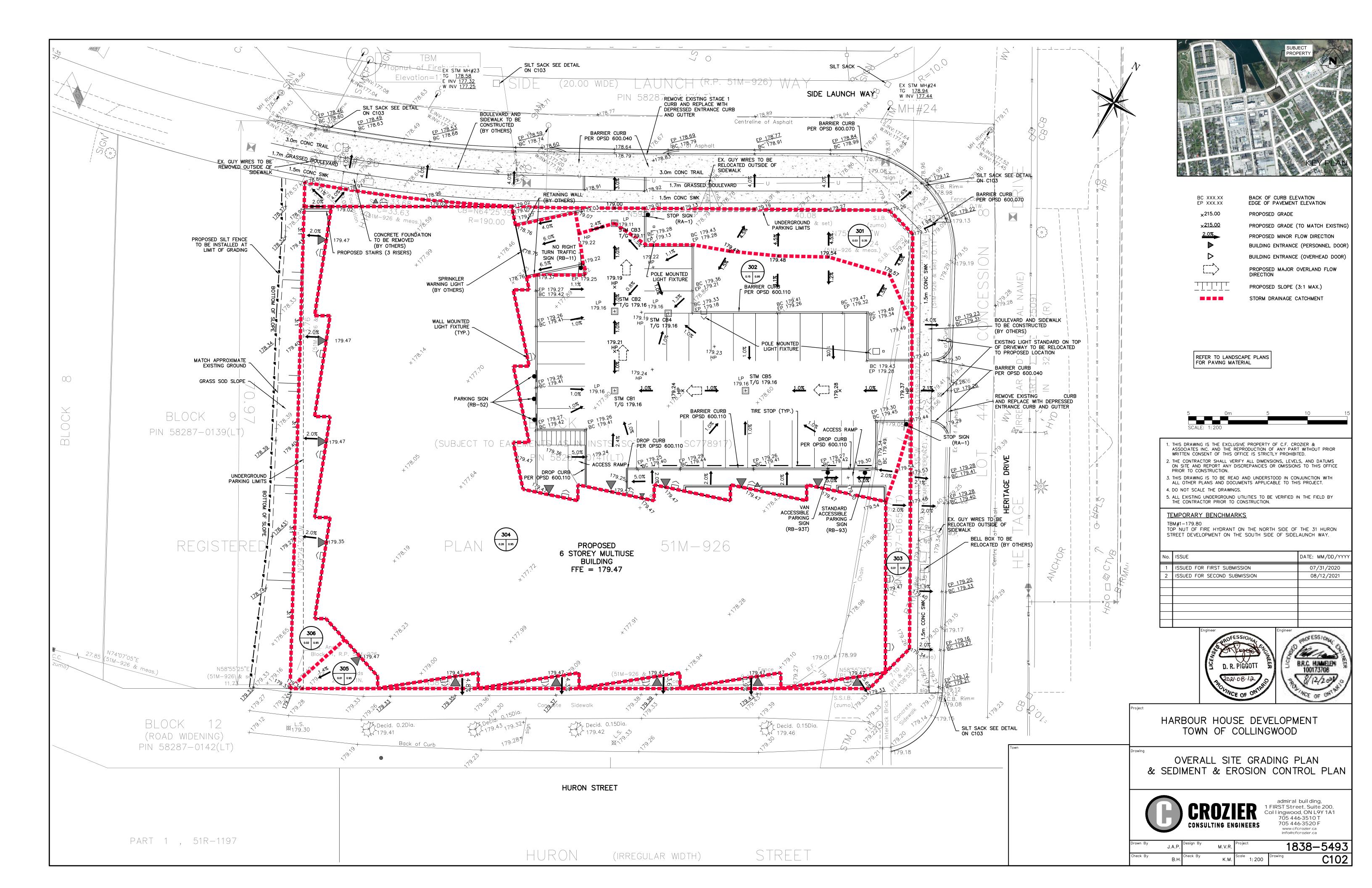
C101 GENERAL SITE SERVICING PLAN C102 OVERALL SITE GRADING PLAN &

OVERALL SITE GRADING PLAN & SEDIMENT &

EROSION CONTROL PLAN

C103 CONSTRUCTION NOTES & DETAILS





CONSTRUCTION NOTES

- A) GENERAL CONSTRUCTION
- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH TOWN OF COLLINGWOOD STANDARDS (2007), OPSD AND OPSS. WHERE CONFLICT OCCURS, TOWN OF COLLINGWOOD STANDARDS (2007) TO GOVERN.
- TRENCH BACKFILL (OPSD 802.010 & 802.013) TO BE SELECT NATIVE MATERIAL OR IMPORTED SELECT SUBGRADE TO OPSS 1010. BACKFILL TO BE
- PLACED IN MAXIMUM 200mm THICK LIFTS AND COMPACTED TO 95% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). PIPE COVER AND BEDDING TO BE GRANULAR 'A'. MINIMUM 150mm DEPTH COMPACTED TO A MINIMUM 95% SPMDD.
- ALL TOPSOIL AND EARTH EXCAVATION TO BE STOCK PILED OR REMOVED TO AN APPROVED SITE AS DIRECTED BY ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETAILED LAYOUT OF THE WORK. THE OWNER'S ENGINEER WILL CONFIRM ALL BENCH MARK
- ELEVATIONS AND HORIZONTAL ALIGNMENT FOR THE CONTRACTOR.
- ALL PROPERTY BARS TO BE PRESERVED AND REPLACED BY O.L.S. AT CONTRACTOR'S EXPENSE IF REMOVED DURING CONSTRUCTION.
 THE CONTRACTOR SHALL MAKE HIS OWN ARRANGEMENTS FOR THE SUPPLY OF TEMPORARY WATER AND POWER.
 DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS-517 AND 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION.
 ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL DISTRICT.
- 10. DISTURBED AREAS OUTSIDE THE PROJECT LIMITS TO BE REINSTATED TO PREVIOUS CONDITION OR BETTER.
- THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK AND CO-ORDINATE CONSTRUCTION
- 12. ALL ROCK EXCAVATION PER OPSS-206.

 13. ALL EXCAVATION MUST BE CARRIED OUT IN FULL COMPLIANCE WITH MOST RECENT GUIDELINES OF OHSA.
- B) PARKING LOT AND ENTRANCES
- SUBGRADE TO BE COMPACTED TO A MINIMUM DRY DENSITY OF AT LEAST 95% SPMDD.
- SUBGRADE TO BE PROOF ROLLED AND CERTIFIED PRIOR TO PLACING GRANULAR 'B'.
- GRANULAR 'A' AND 'B' BASE MATERIALS TO BE COMPACTED TO 100% OF THE MATERIAL'S RESPECTIVE SPMDD AND PLACED IN MAX. 150mm LIFTS. REFER TO PAVEMENT STRUCTURE DETAILS FOR INTERNAL ROADWAY, DRIVEWAYS AND PARKING AREAS.
- SELECT SUBGRADE MATERIAL, OR IMPORTED GRANULAR MATERIAL APPROVED BY THE ENGINEER, COMPACTED TO 98% SPMDD TO BE USED AS FILL IN ALL AREAS WHERE PROPOSED PIPE INVERTS ARE HIGHER THAN EXISTING GRADE OR AS INSTRUCTED BY THE ENGINEER.
- ALL GRANULARS AND ASPHALT MATERIALS PLACEMENT TO BE IN ACCORDANCE WITH OPSS 314 AND OPSS 310. JOINTS WITH EXISTING ASPHALT TO BE SAW CUT STRAIGHT PRIOR TO PLACING NEW ASPHALT AND TACK COAT APPLIED TO EXISTING ASPHALT.
- CONCRETE CURB TO OPSD 600.110 AND OPSS 353. CONCRETE CURB AND GUTTER TO OPSD 600.040 AND OPSS 353. CONCRETE SIDEWALK TO OPSD 310.010, 310.030, 350.010 AND OPSS 351. SUBBASE TO CONSIST OF MIN. 150mm OF GRANULAR 'A' UNLESS THROUGH DRIVEWAYS.

C) SANITARY SEWERS

- M.H.'S TO OPSD 701.010, 701.030 & 704.010.
- BENCHING TO OPSD 701.021.
- BACKFILL AND EMBEDMENT TO OPSD 802.010, GRANULAR 'A' BEDDING.
- TRENCH BACKFILL TO BE SELECT NATIVE MATERIAL AS APPROVED BY ENGINEER OR IMPORTED GRANULAR MATERIAL.
- FRAMES AND COVERS TO OPSD 401.01 TYPE 'A' (CLOSED COVER). MANHOLES FRAMES TO BE SET TO BASE COURSE ASPHALT AND RAISED BY ADDING RISER RINGS AS REQUIRED.
- PIPE SUPPORT AT MAINTENANCE HOLES AS PER OPSD 708.020.
- GENERAL INSTALLATION AND TESTING OF SEWERS AND APPURTENANCES TO BE IN ACCORDANCE WITH OPSS 407, 408, 409 (CCTV), 410, 421 AND ALL SPECIFICATIONS REFERENCED WITHIN THESE SECTIONS. CONTRACTOR SHALL BE REQUIRED TO PERFORM LEAKAGE & DEFLECTION TESTING
- 10. SANITARY SEWER SDR 28 PVC GREEN COLOUR. 11. FROST STRAPS PER OPSD 701.100.

D) WATERMAINS

- BACKFILL AND EMBEDMENT TO OPSD 802.010, GRANULAR 'A' EMBEDMENT.
- TRENCH BACKFILL TO BE SELECT NATIVE MATERIAL AS APPROVED BY ENGINEER OR IMPORTED GRANULAR MATERIAL. THRUST BLOCKS TO OPSD 1103.010 AND 1103.020 WHERE SUITABLE SOILS ARE ENCOUNTERED.
- SERVICE CONNECTIONS TO OPSD 1104.010, 100mm GRANULAR 'A' EMBEDMENT AND COVER OVER PIPE
- MINIMUM COVER ON WATERMAIN AND SERVICES TO BE 1.7m.
- GATE VALVES, BENDS AND FITTINGS TO BE CONNECTED WITH ROMAC GRIPPER RING RESTRAINING CLAMP. CLEARANCE BETWEEN WATERMAINS AND SEWERS TO BE A MINIMUM OF 0.5m VERTICAL (CLEAR) C/W RIGID INSULATION AND 2.5m MINIMUM (CLEAR)
- 8. FOLLOWING TESTING, CONTRACTOR SHALL OPERATE EACH WATER SERVICE TO VERIFY FULL FLOW AND PRESSURE AT THE GATE VALVE AND/OR CURB STOP TO THE SATISFACTION OF THE ENGINEER.
- GENERAL INSTALLATION AND TESTING OF WATERMAIN AND APPURTENANCES TO BE IN ACCORDANCE WITH OPSS 701 AND ALL SPECIFICATIONS REFERENCED WITHIN THESE SECTIONS. WORK MUST BE PREFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE, ONTARIO FIRE CODE AND LOCAL CODES. WATER LINES ARE TO BE TESTED TO THE SATISFACTION OF THE LOCAL PLUMBING INSPECTOR. COMPLETE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH REQUIREMENTS OF AWWA STANDARD C651-99. ALL WATERMAIN TESTING & CHLORINATION WILL BE CONDUCTED BY TOWN OF COLLINGWOOD WATER DEPARTMENT AT CONTRACTORS COST. WATERMAINS ARE NOT TO BE
- CONNECTED TO EXISTING WATERMAINS UNTIL BACTERIOLOGICAL TESTING HAS BEEN SUCCESSFULLY COMPLETED & CERTIFIED BY TOWN OF COLLINGWOOD WATER DEPARTMENT. 10. COMPLETE WATER SERVICE SHALL BE DISINFECTED IN ACCORDANCE WITH REQUIREMENTS OF O. REG. 459/00 & SATISFACTION OF TOWN OF
- COLLINGWOOD WATER DEPARTMENT. 11. WATERMAIN - CLASS 52 OR PRESSURE CLASS 350 CEMENT LINED DUCTILE IRON. CONDUCTIVITY CONNECTORS TO BE USED ON ALL JOINTS.
- 12. WATERMAIN SERVICES 25mmø/50mmø/64mmø TYPE 'K' SOFT COPPER PIPE AS NOTED.
- 13. SERVICE BOXES TO NUMBER 7, D-I CLOW OR MUELLER, 24" STAINLESS STEEL RODS STRAIGHT c/w CAP PAINTED BLUE. 14. ALL SERVICES SHALL BE METERED. METERS TO BE COMPLETE WITH REMOTE READOUT OR RADIO READ AS DETERMINED BY THE TOWN OF COLLINGWOOD WATER DEPARTMENT. WATER METER TO BILL FOR ENTIRE PROPERTY. ADDITIONAL METERS CAN BE ADDED INTERNALLY FOR EACH
- 15. VALVES RESILIENT SEAT, RSGV MECHANICAL JOINT, OPEN LEFT CLOW OR MUELLER WITH 5-SL-48 SLIDING VALVE BOX C/W CAP PAINTED BLUE. 16. MECHANICAL JOINT DUCTILE FITTINGS - AWWA/ANSI C153/A21.53.
- 17. ALL WATERMAIN FITTINGS TO BE LEAD FREE. 18. MECHANICAL JOINT RESTRAINTS TO BE USED DURING TRANSITION OF WATERMAIN INSTALLATION IN NATIVE SOILS TO ENGINEERED FILL. MECHANICAL
- JOINT RESTRAINTS TO BE MEGA-LUG OR APPROVED EQUAL. 19. ALL VALVES TO BE OPERATED BY THE TOWN OF COLLINGWOOD WATER DEPARTMENT, CONTRACTOR TO PROVIDE MIN. 48hr NOTIFICATION FOR REQUEST.
- ALL CONNECTIONS TO EXISTING MUNICIPAL WATERMAINS MUST BE INSPECTED BY TOWN OF COLLINGWOOD WATER DEPARTMENT OR REPRESENTATIVE AND GIVING 48 HOURS NOTICE PRIOR TO BACKFILLING OPERATIONS.
- 21. EACH BUILDING TO INSTALL MEASURES FOR BACKFLOW PROTECTION SUITABLE TO TOWN OF COLLINGWOOD WATER DEPARTMENT IN ACCORDANCE WITH ONTARIO BUILDING CODE & C.S.A. B64 AND THE TOWN WATER BY-LAW. BACKFLOW PREVENTORS AT EACH BUILDING TO BE TESTABLE & CERTIFIED ANNUALLY, WITH ALL ASSOCIATED COSTS THE RESPONSIBILITY OF THE
- OWNER.

E) STORM SEWERS

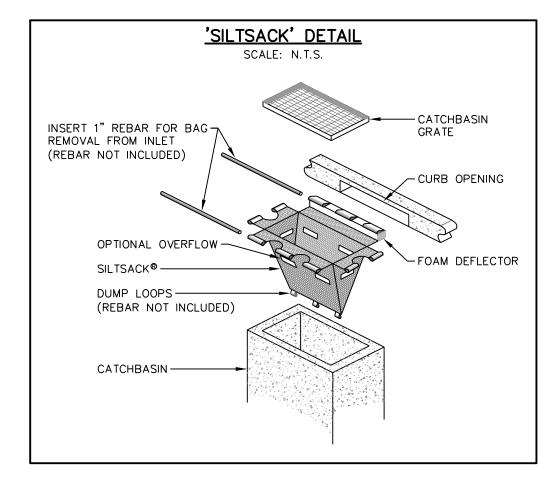
- MH AND CBMH TO OPSD 701.012, 701.030, 701.100, 704.010, C/W SUMP UNLESS NOTED OTHERWISE.
- STEPS TO OPSD 405.010. M.H. FRAMES AND GRATES TO OPSD - 401.01 OPEN COVER.
- CB'S TO ZURN Z537 HEAVY-DUTY PARKING DECK DRAIN.
- CB AND CBMH FRAMES AND GRATES TO OPSD 400.020 PIPE SUPPORT AT MH'S, CB'S, CBMH'S AND DCBMH'S TO OPSD - 708.020. PROTECTION DURING CONSTRUCTION TO OPSD - 808.010.
- 8. BACKFILL AND EMBEDMENT TO OPSD 802.010 (FLEXIBLE PIPE) GRANULAR 'A' EMBEDMENT OR OPSD 802.030, 802.031 AND 802.032 (RIGID PIPE) GRANULAR 'A' EMBEDMENT.
- 9. BACKFILL AND EMBEDMENT MATERIAL TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S SPMDD.
- 10. STORM SEWERS SHALL BE PVC SMOOTH WALL RIBBED PIPE MINIMUM STIFFNESS (320kPa). ALL PIPE TO BE JOINED WITH A GASKETTED BELL AND SPIGOT SYSTEM. CATCHBASIN LEADS TO BE 300mmø CONCRETE PIPE (CLASS IV).

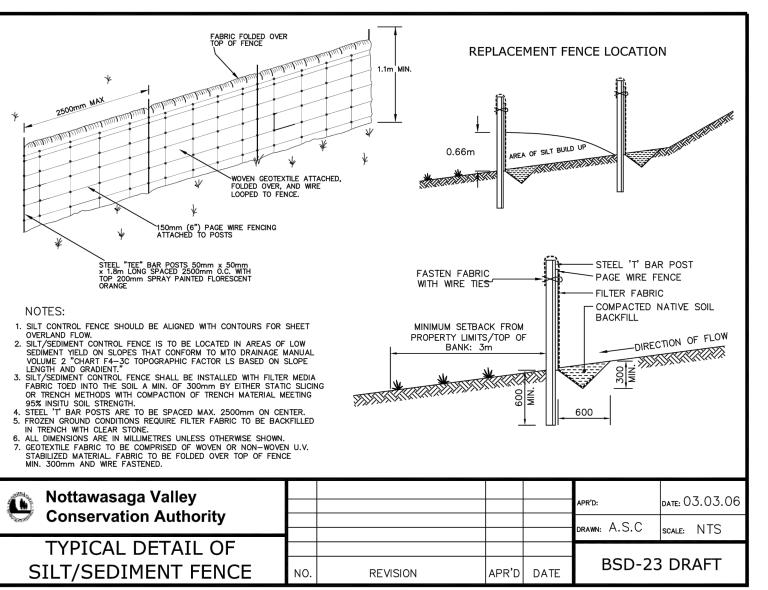
SEDIMENT AND EROSION CONTROL

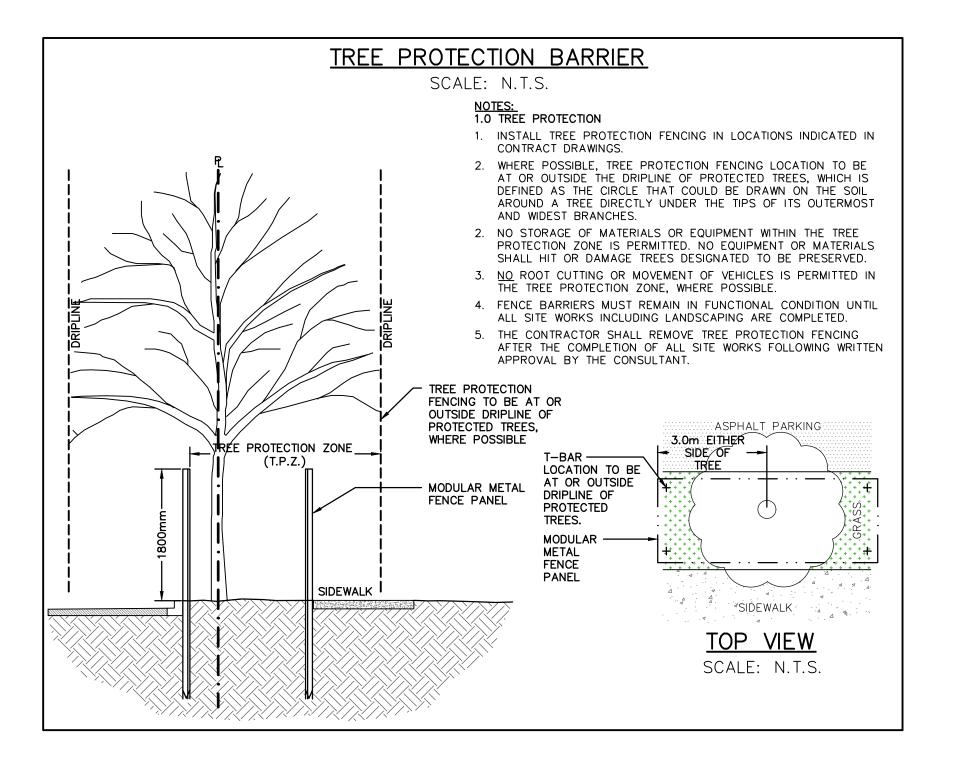
A) GENERAL - CONSTRUCTION

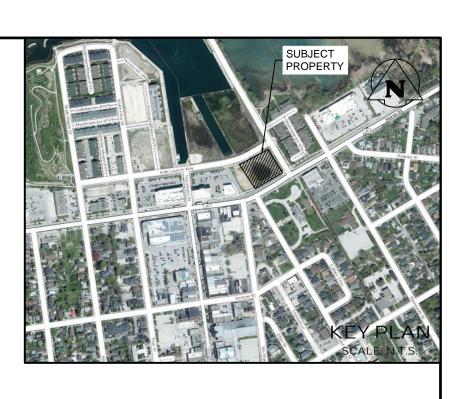
- ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED. SEDIMENT AND EROSION CONTROL MEASURES THAT ARE DESIGNED TO CONTROL RUNOFF
- FROM SPECIFIC AREAS MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO SITE. THE CONTRACTOR MAY CONSIDER ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES. SUCH MEASURES MUST BE PRESENTED IN WRITING FOR APPROVAL OF THE CONTRACT ADMINISTRATOR AND THE TOWN.
- THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE ON-SITE TO REPAIR SEDIMENT AND EROSION CONTROL MEASURES IN THE EVENT OF UNFORESEEN CONDITIONS: HIGHWATER, EXTREME RAINFALL EVENTS, ETC.
- MUD MAT TO BE CONSTRUCTED AT ACCESS POINT. NO MAINTENANCE OR REPAIR WORK ON CONSTRUCTION EQUIPMENT IS ALLOWED WITHIN 20m OF AN EXISTING WATERCOURSE OR DITCH EXCEPT AS
- 6. ALL TEMPORARY SOIL OR DIRT STOCKPILES ARE TO BE PROVIDED WITH THE NECESSARY SEDIMENT AND EROSION CONTROL FEATURES. IF STOCKPILES ARE TO REMAIN FOR A PERIOD LONGER THAN 30 DAYS, STOCKPILES SHALL BE HYDROSEEDED AND SURROUNDED WITH SILT FENCE.

 7. CONTRETOR TO ENSURE POSITIVE DRAINAGE THROUGH SITE SUCH THAT NO UPSTREAM OR DOWNSTREAM IMPACT OCCURS DURING CONSTRUCTION
- 8. THE CONTRACTOR WILL BE RESPONSIBLE TO CLEAN ALL ADJACENT ROADWAYS AS REQUIRED OR AS DIRECTED BY THE SITE ENGINEER OR TOWN.









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2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, LEVELS, AND DATUMS

- ON SITE AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THIS OFFICE PRIOR TO CONSTRUCTION. 3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH
- ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT.
- 4. DO NOT SCALE THE DRAWINGS.
- 5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

TEMPORARY BENCHMARKS

TBM#1-179.80

TOP NUT OF FIRE HYDRANT ON THE NORTH SIDE OF THE 31 HURON STREET DEVELOPMENT ON THE SOUTH SIDE OF SIDELAUNCH WAY.

No.	ISSUE	DATE: MM/DD/YYYY
1	ISSUED FOR FIRST SUBMISSION	07/31/2020
2	ISSUED FOR SECOND SUBMISSION	08/12/2021





HARBOUR HOUSE DEVELOPMENT TOWN OF COLLINGWOOD

CONSTRUCTION NOTES AND DETAILS



The HarbourEdge Buil ding, 40 Huron Street, Suite 301, ingwood, ON L9Y 4R3 7Ŏ5 446-3510 T 705 446-3520 F www.cfcrozier.ca info@cfcrozier.ca

1838-5493 M.V.R J.A.P NTS