EDEN OAK

TRAILSHEAD TOWN OF THE BLUE MOUNTAINS **COUNTY OF GREY**



MUNICIPALITY

TOWN OF THE BLUE MOUNTAINS 32 MILL STREET THORNBURY, ON NOH 2PO

EDEN OAK 1443 HURONTARIO STREET MISSISSAUGA, ON L5G 3H5

DEVELOPER'S ENGINEER



70 Huron Street, Suite 100 COLLINGWOOD, ON, L9Y 4L4 705-446-3510 WWW.CFCROZIER.CA

Town of Blue Mountains Planning and Development Services **Accepted For Construction Pre-Servicing Only**

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C106B Andrews Cres. STA 2+000 to 2+180 McCleod Dr. STA 2+180 to 2+260

C106C McCleod Drive STA 2+260 to 2+540 C106D Andrews Crescent STA 4+000 to 4+260 C106E Andrews Crescent STA 4+260 to 4+585 Emergency Access STA 1+845 to 2+000 C106F Watermain Connection to Georgian Trail C106G

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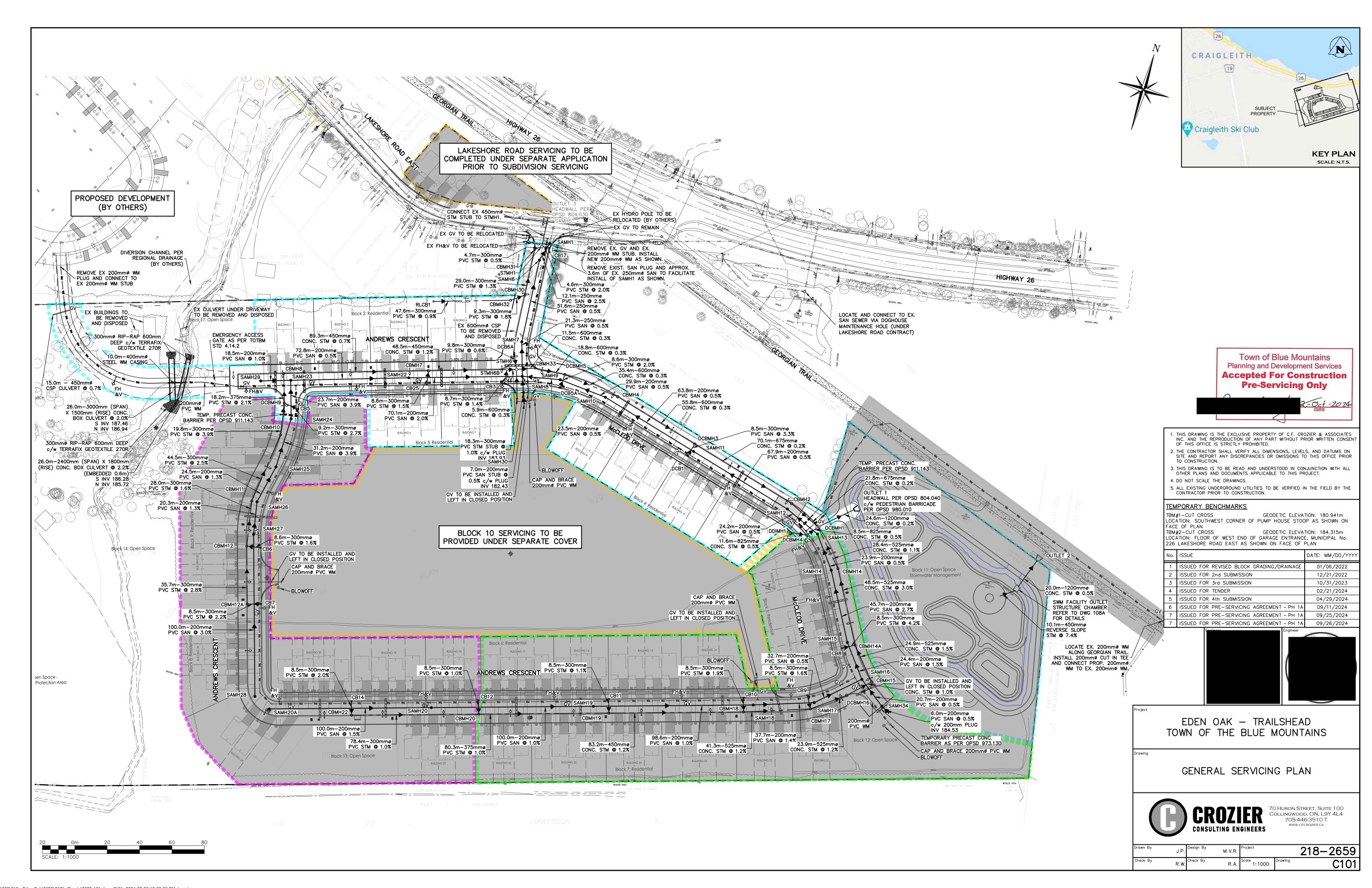
E100-E106 Site Plans - Photometrics

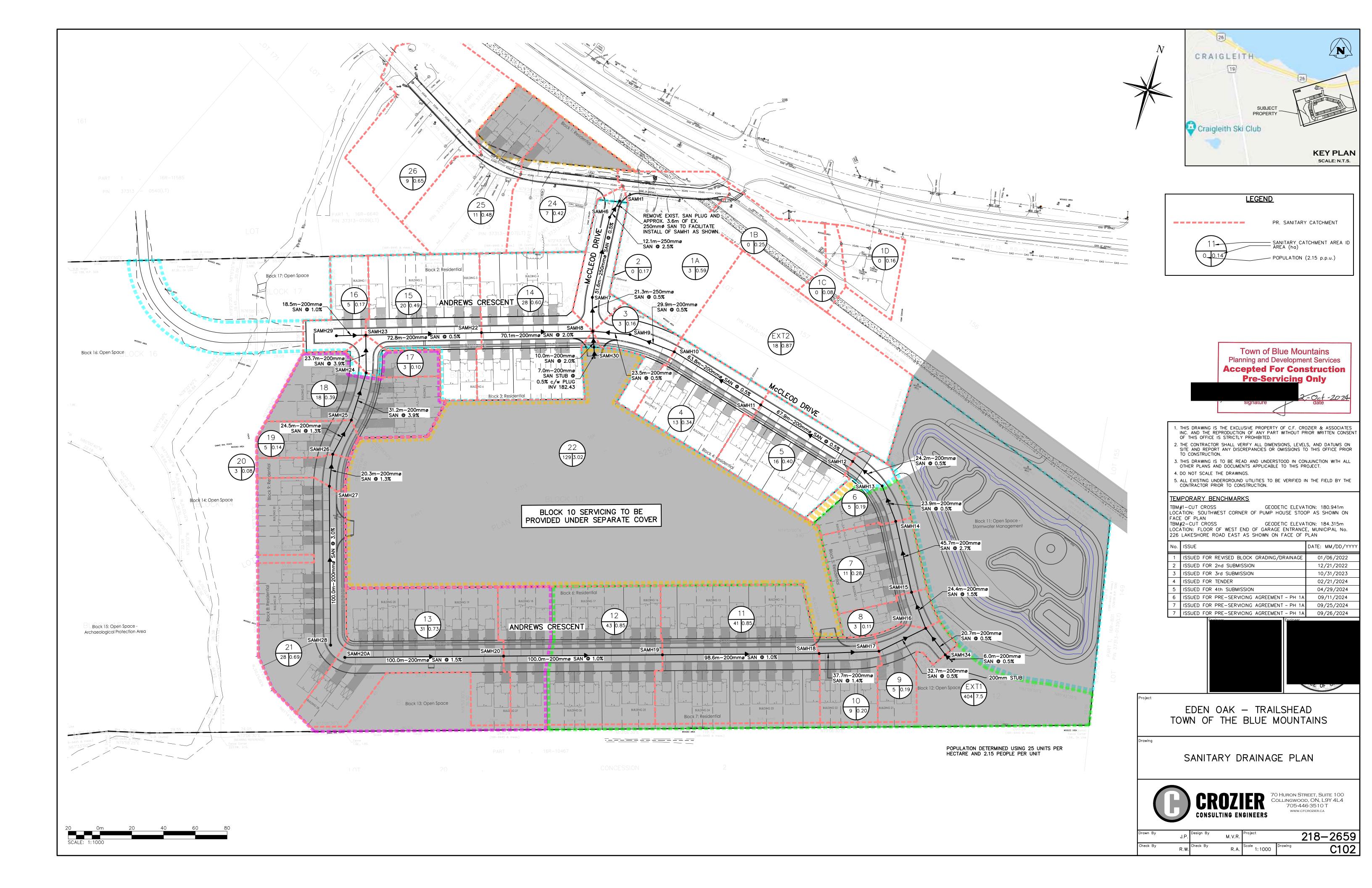
Site Lighting Details E107 E110-E116 Site Plans - Electrical E117 Site Electrical Details

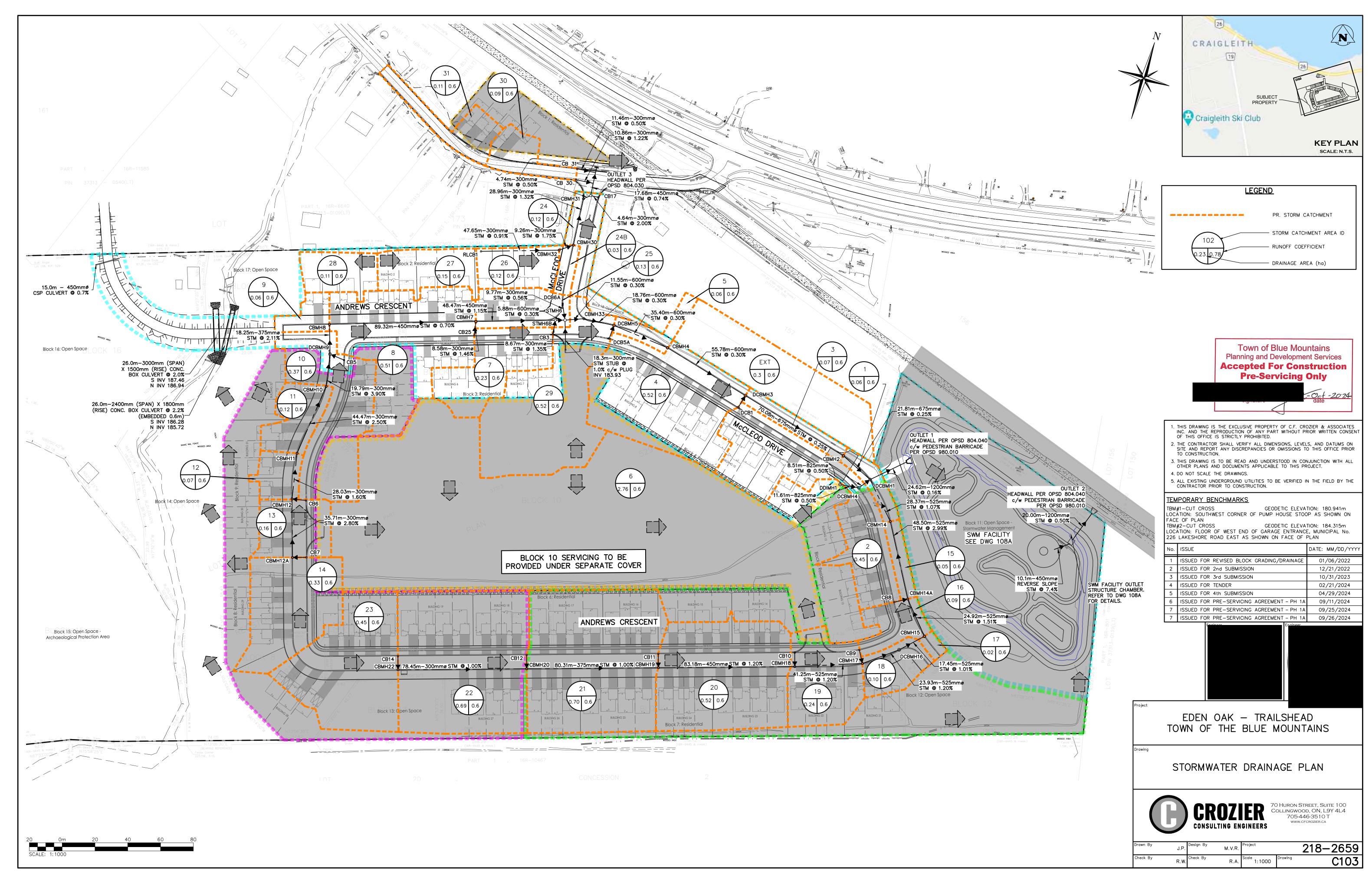
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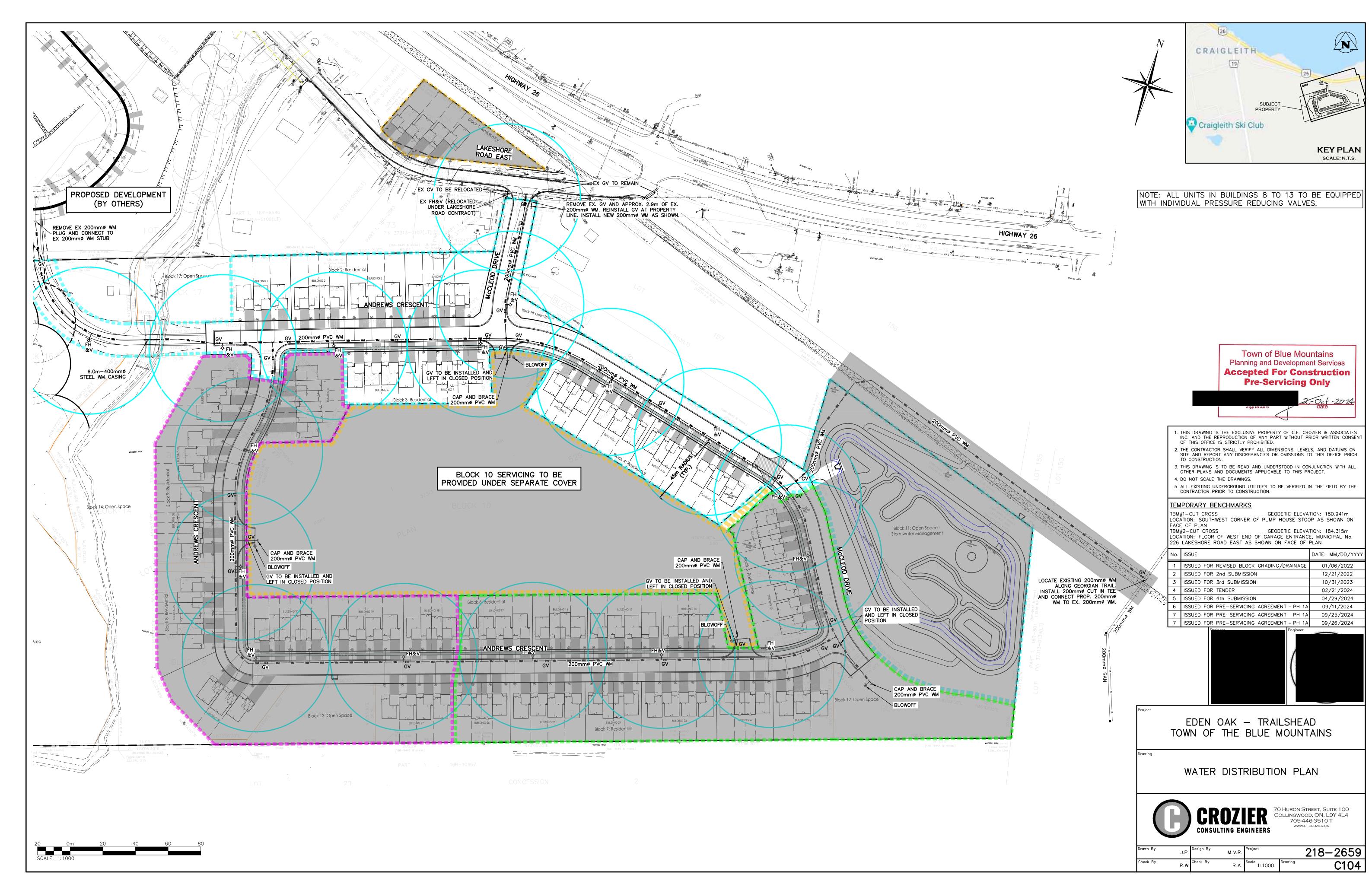
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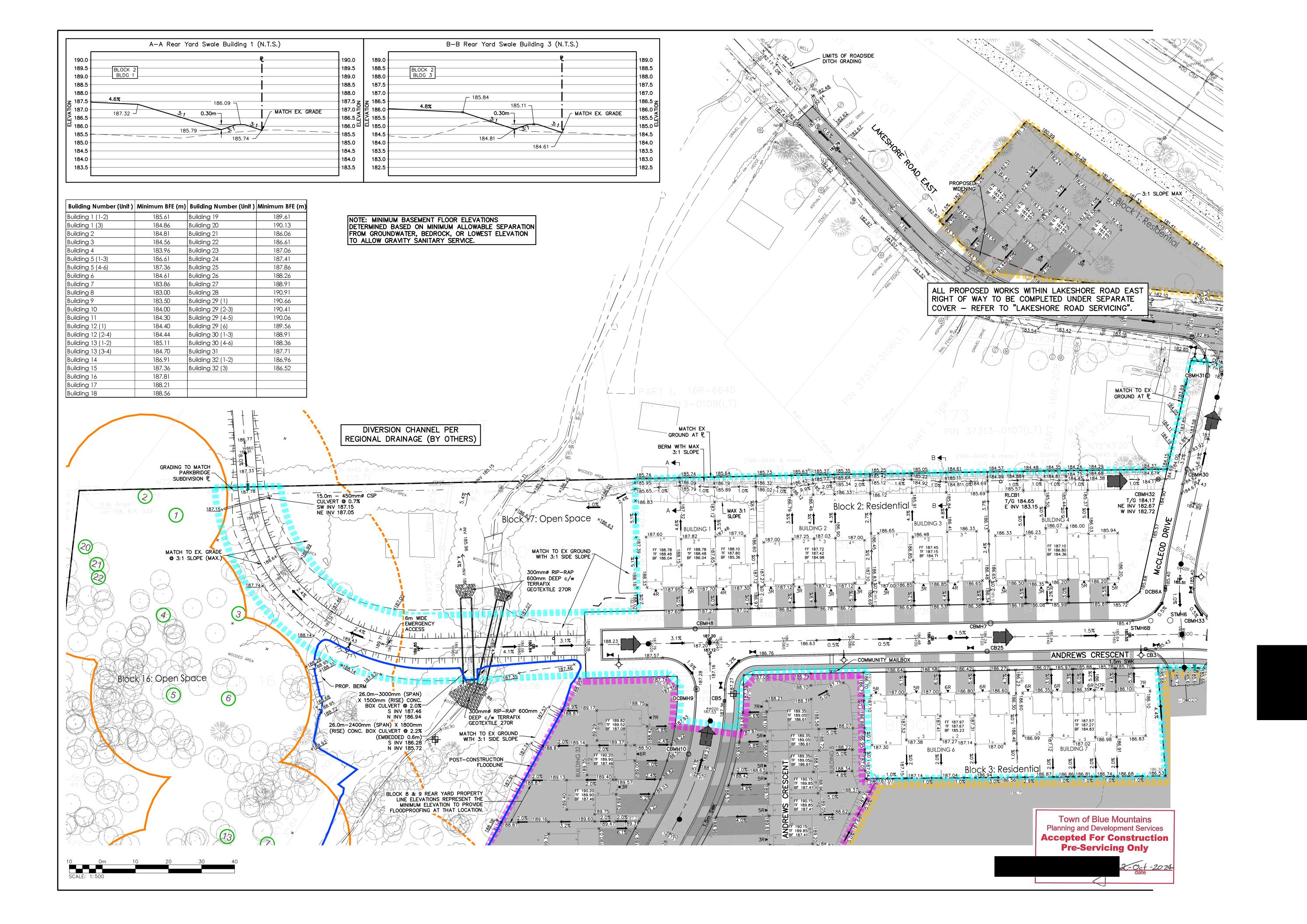
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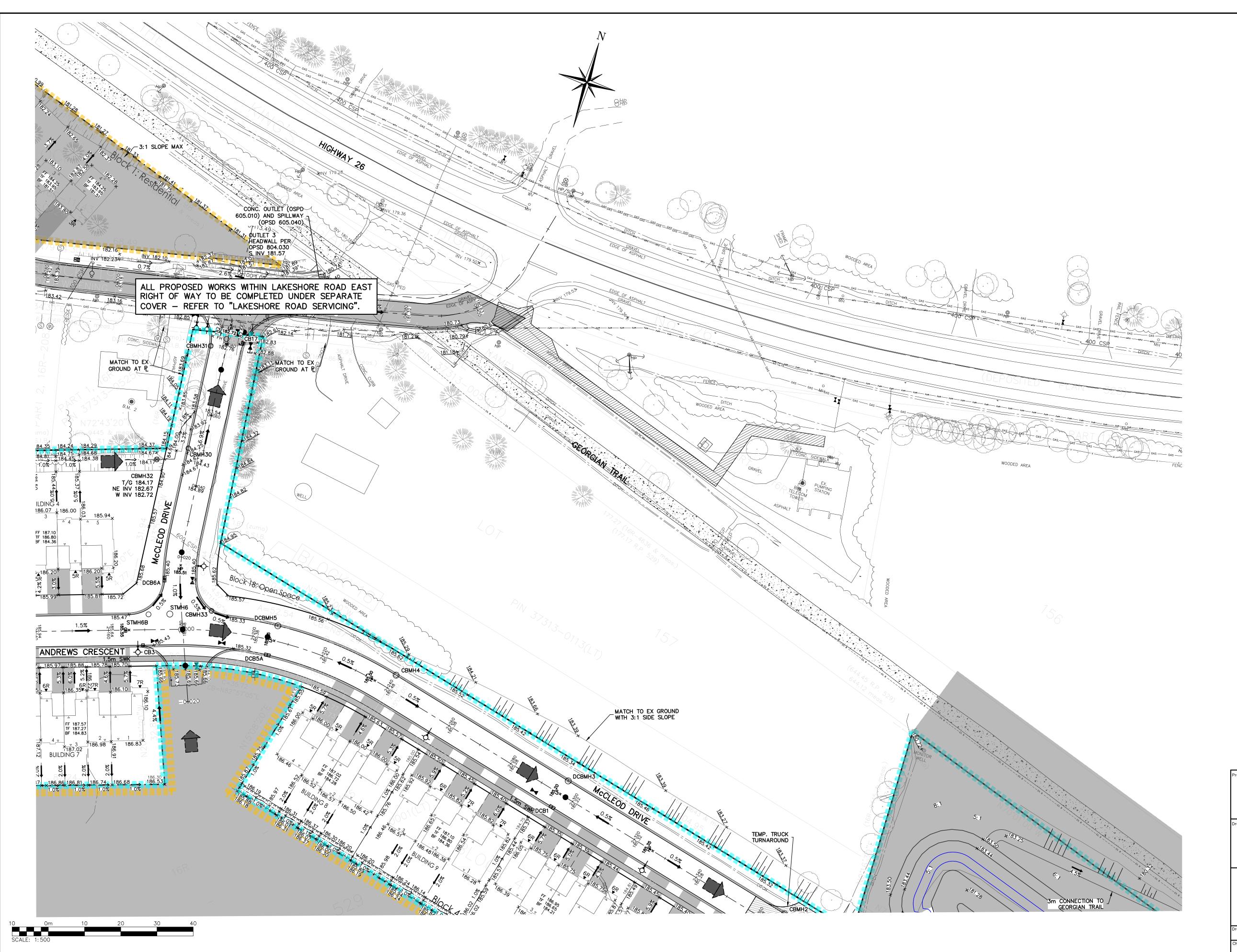


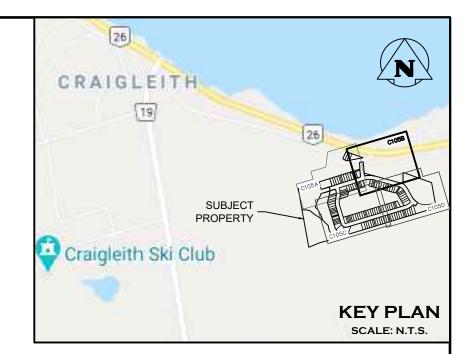












<u>LEGEND</u>

FINISHED FLOOR ELEVATION

TOP OF FOUNDATION WALL ELEVATION

BASEMENT FLOOR ELEVATION (MIN.)

NOTE: MINIMUM BASEMENT FLOOR ELEVATIONS
DETERMINED BASED ON MINIMUM ALLOWABLE SEPARATION
FROM GROUNDWATER, BEDROCK, OR LOWEST ELEVATION
TO ALLOW GRAVITY SANITARY SERVICE.

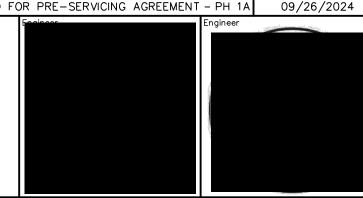


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- 5. ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

TEMPORARY BENCHMARKS

TBM#1-CUT CROSS GEODETIC ELEVATION: 180.941m LOCATION: SOUTHWEST CORNER OF PUMP HOUSE STOOP AS SHOWN ON FACE OF PLAN GEODETIC ELEVATION: 184.315m LOCATION: FLOOR OF WEST END OF GARAGE ENTRANCE, MUNICIPAL No. 226 LAKESHORE ROAD EAST AS SHOWN ON FACE OF PLAN

No.	ISSUE	DATE: MM/DD/YYYY			
1	ISSUED FOR REVISED BLOCK GRADING/DRAINAGE	01/06/2022			
2	ISSUED FOR 2nd SUBMISSION	12/21/2022			
3	ISSUED FOR 3rd SUBMISSION	10/31/2023			
4	ISSUED FOR TENDER	02/21/2024			
5	ISSUED FOR 4th SUBMISSION	04/29/2024			
6	ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A	09/11/2024			
7	ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A	09/25/2024			
7	ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A	09/26/2024			
	Engineer				



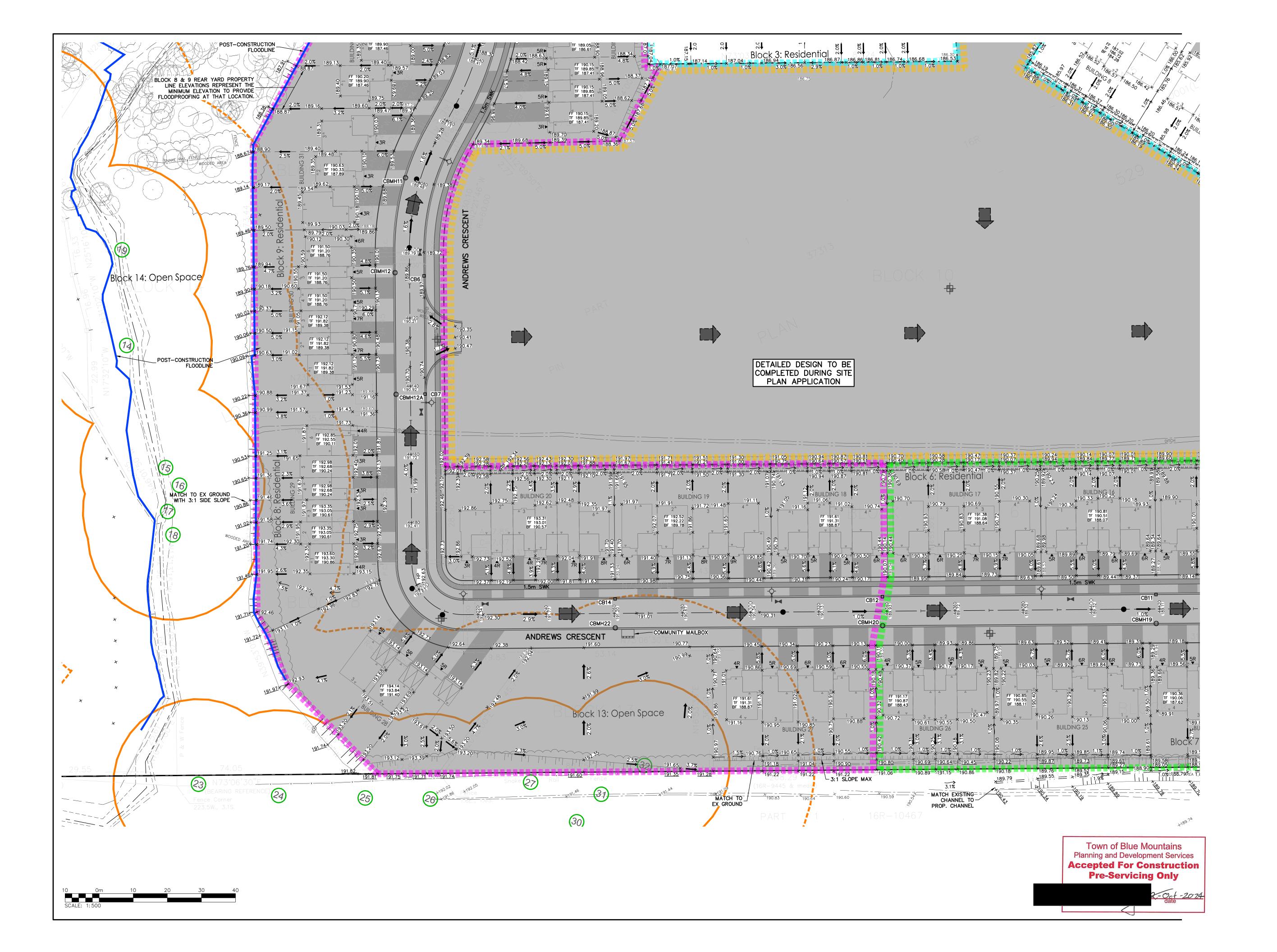
EDEN OAK - TRAILSHEAD TOWN OF THE BLUE MOUNTAINS

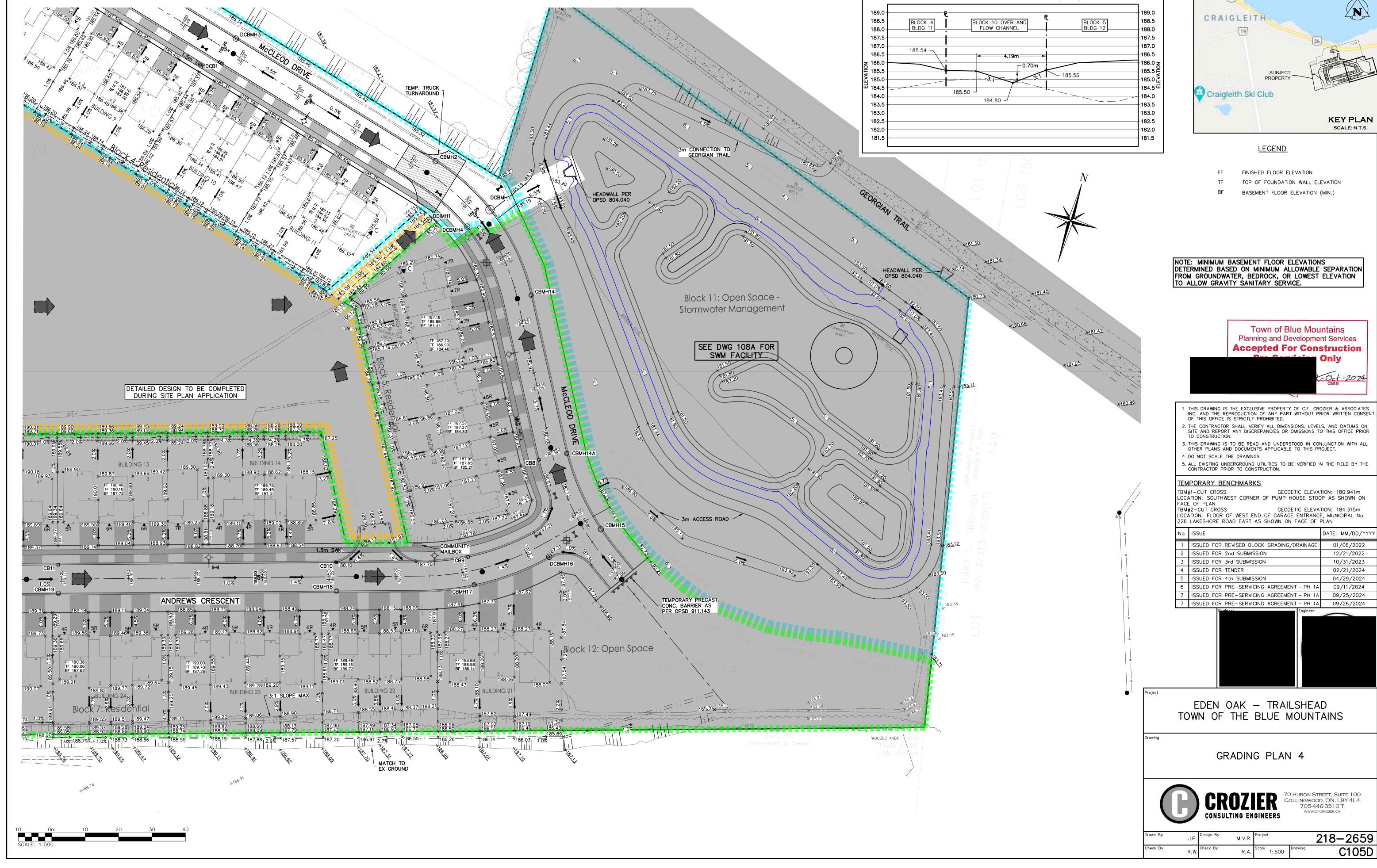
GRADING PLAN 2



70 HURON STREET, SUITE 100 COLLINGWOOD, ON, L9Y 4L4 705-446-3510 T www.cfcrozier.ca

218-2659 C105B 1: 500





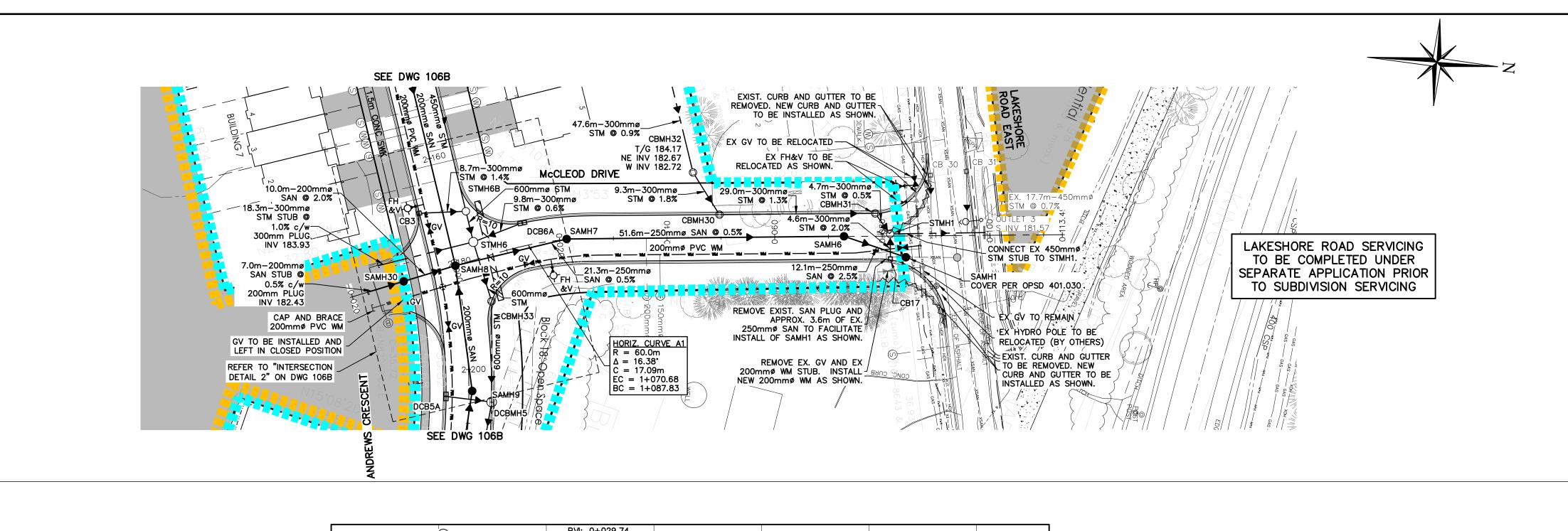


C-C Overland Channel Block 4-5 (N.T.S.)



DATE: MM/DD/YYY

C105D





Town of Blue Mountains
Planning and Development Services
Accepted For Construction
Pre-Servicing Only

2-0-1-2014

~~~~~ REMOVALS

NOTE:
BEDROCK ELEVATION SHOWN ON PROFILE PROVIDED FROM A COMBINATION OF:

TESTS PITS DUG BY SMRS CONSTRUCTION (JULY 2024)
BOREHOLES PER THE GEOTECHNICAL INVESTIGATION BY SOIL ENG LTD. (SEPT 2020)

NOTE: CLAY PLUGS AS PER OPSD 802.095 SHALL BE PLACED IN PIPE TRENCHES (WATERMAIN, SANITARY AND STORM SEWERS) WHERE THE BOTTOM OF

NOTE:
0.3m OF CLEARANCE TO BE PROVIDED FROM SEASONALLY HIGH GROUNDWATER
TABLE AND BASEMENT FLOOR SLAB PER TOWN ENGINEERING STANDARDS.

#### NOTE: ALL BACKFILL WITHIN ROW LIMITS TO BE ENGINEERED FILE

TRENCH IS BELOW THE GROUNDWATER ELEVATION.

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# TEMPORARY BENCHMARKS

TBM#1-CUT CROSS GEODETIC ELEVATION: 180.941m LOCATION: SOUTHWEST CORNER OF PUMP HOUSE STOOP AS SHOWN ON FACE OF PLAN

FACE OF PLAN
TBM#2-CUT CROSS
GEODETIC ELEVATION: 184.315m
LOCATION: FLOOR OF WEST END OF GARAGE ENTRANCE, MUNICIPAL No.
226 LAKESHORE ROAD EAST AS SHOWN ON FACE OF PLAN

 No.
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 6
 ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A
 09/11/2024

7 ISSUED FOR PRE-SERVICING AGREEMENT - PH 1/2

ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A

Engineer

EDEN OAK — TRAILSHEAD TOWN OF THE BLUE MOUNTAINS

Drawing

MCCLEOD DRIVE STA 1+000 TO 1+200



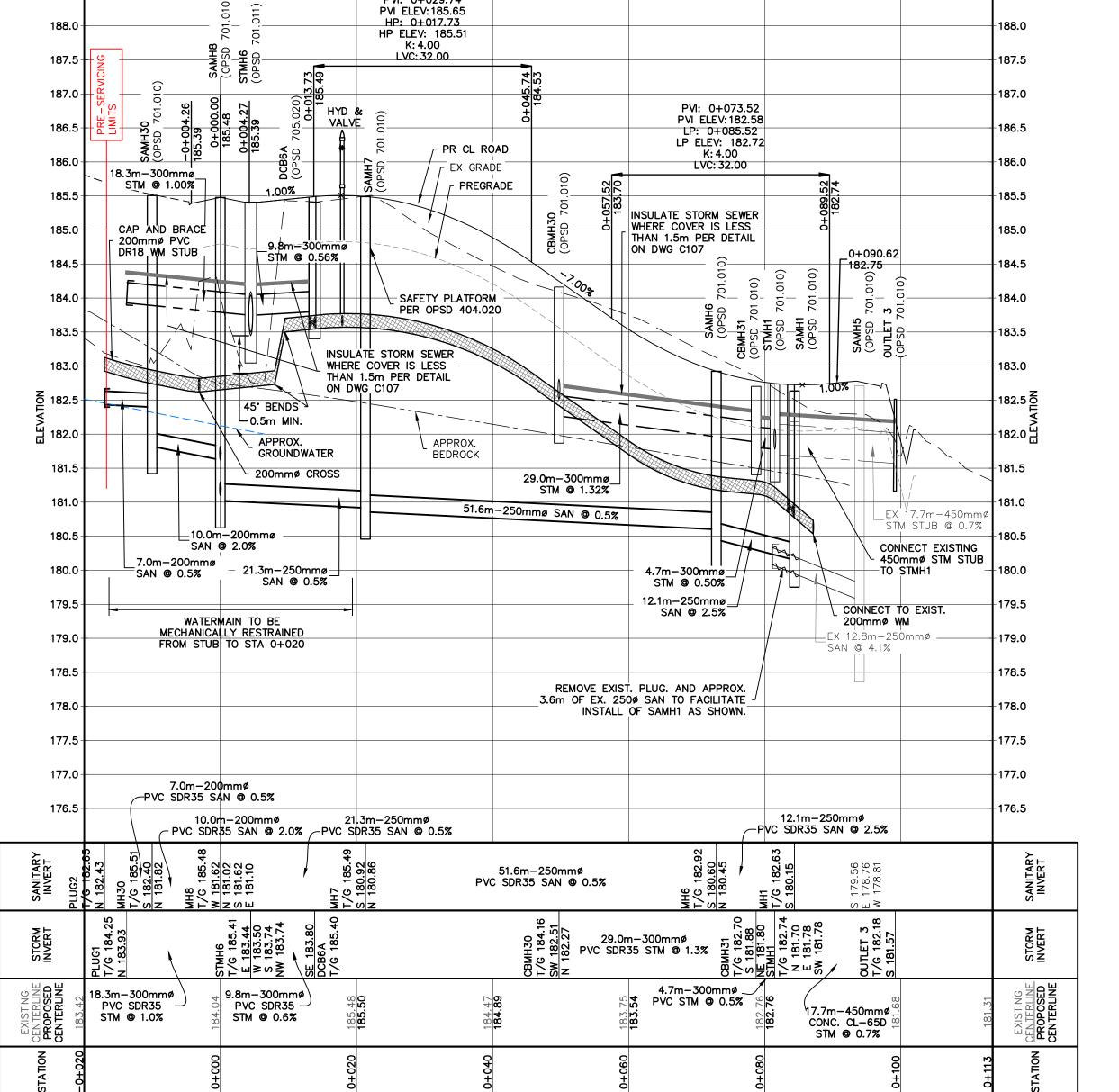
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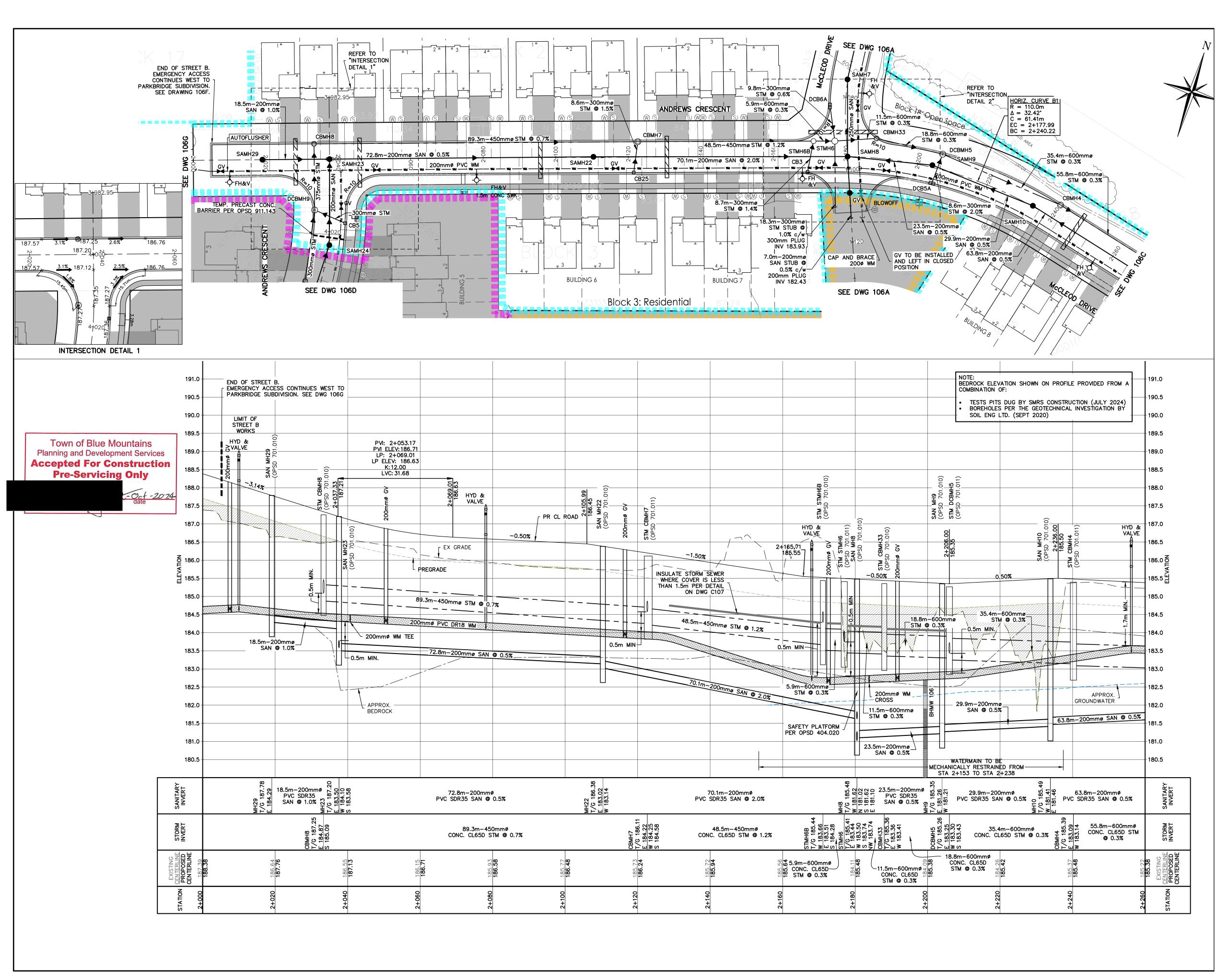
09/25/2024

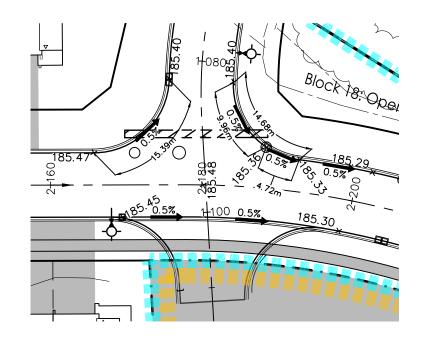
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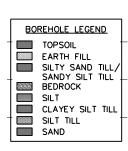
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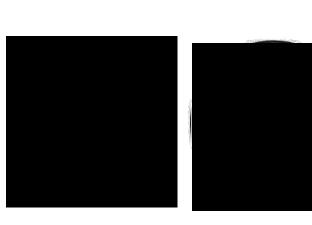
Check By R.W. Check By R.A. Scale V 1:50 Drawing C106A

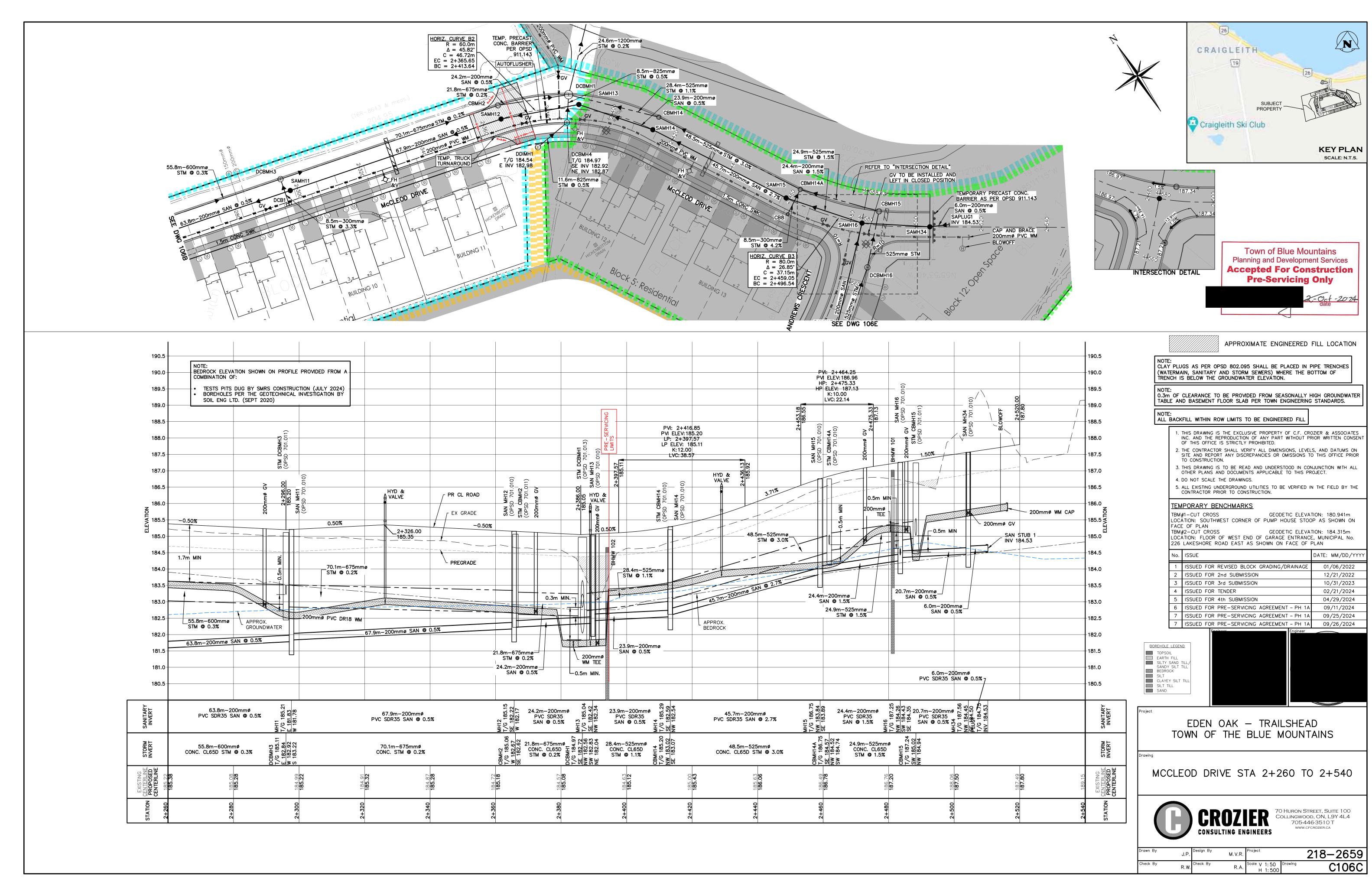


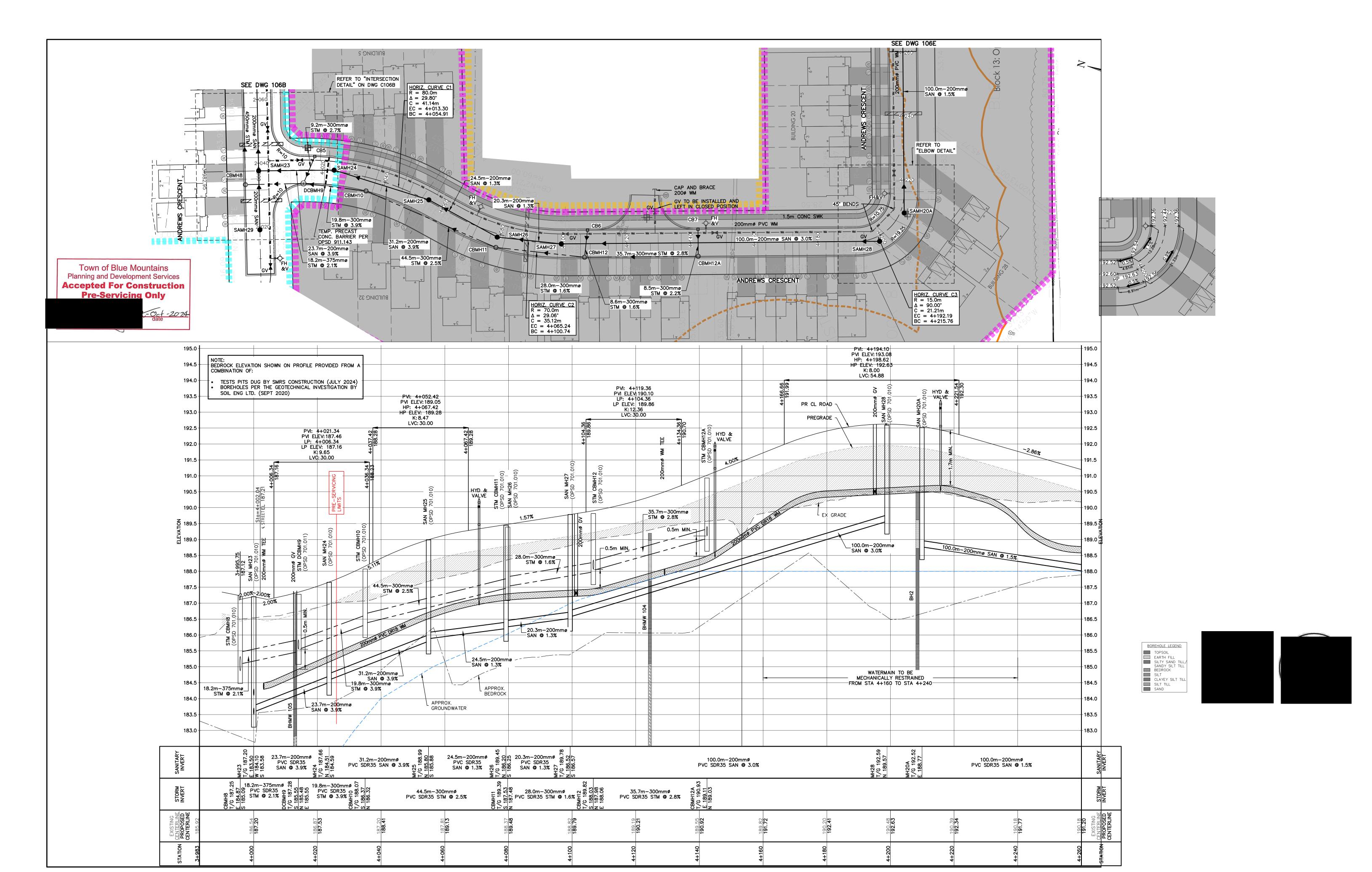


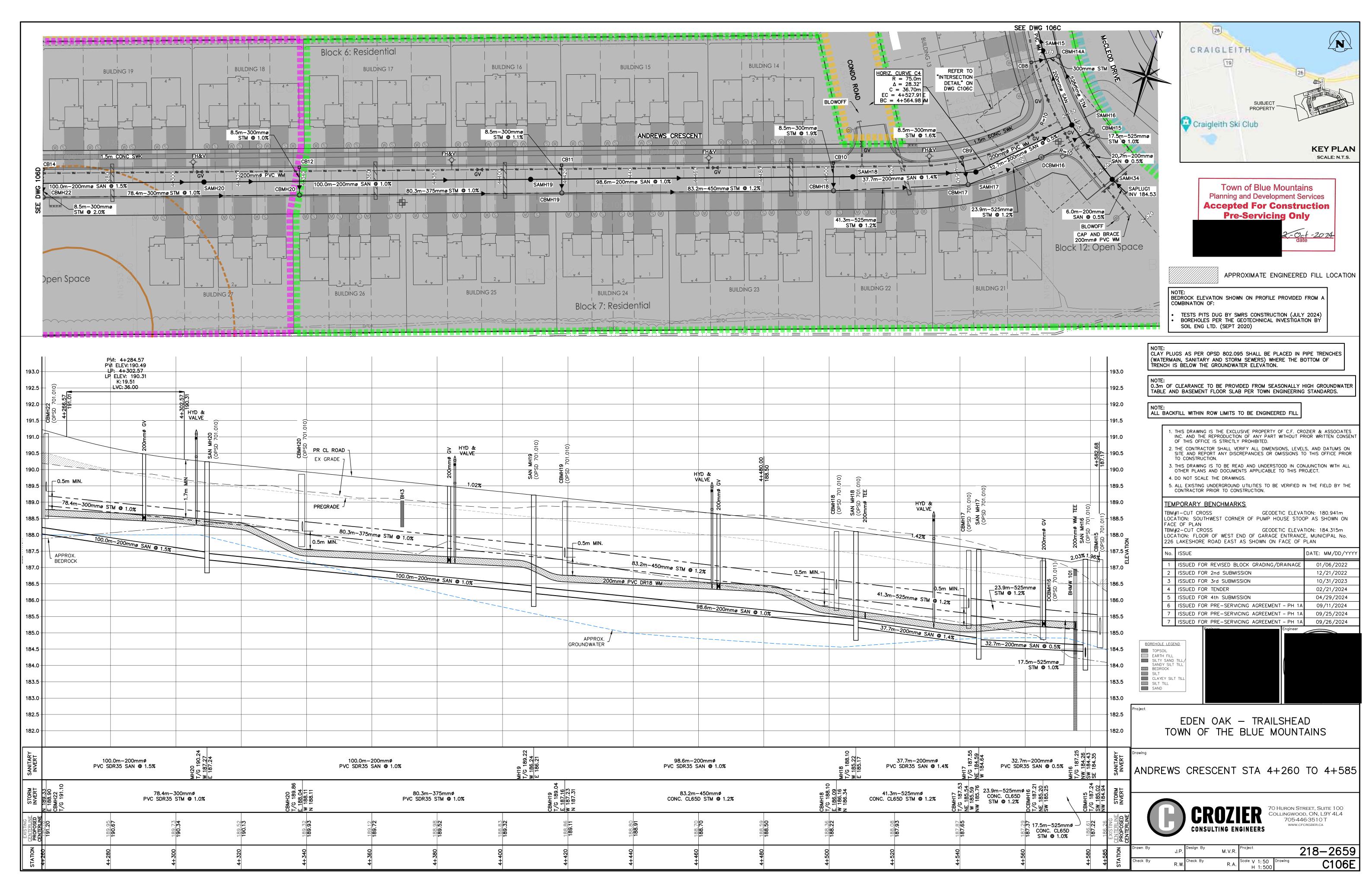


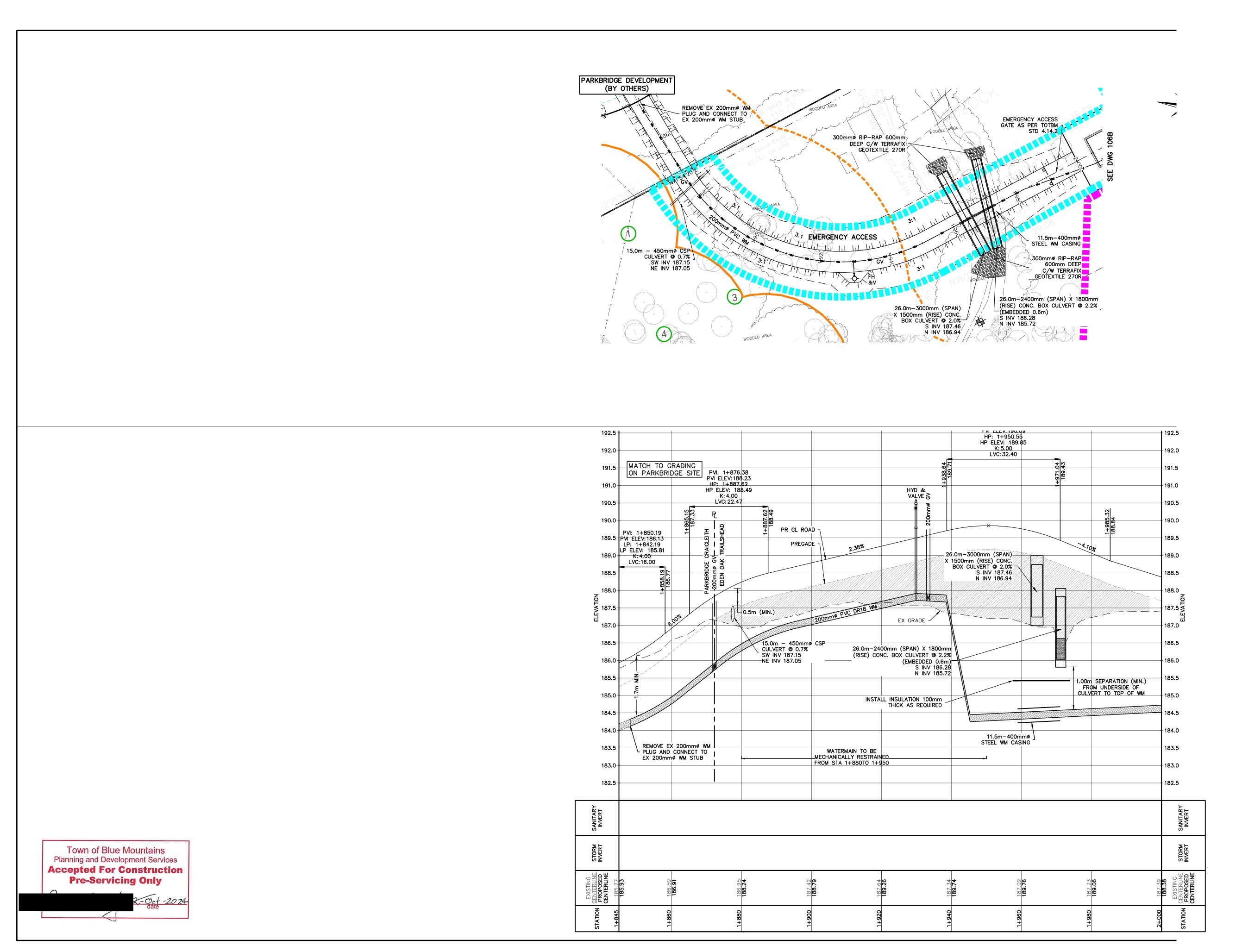


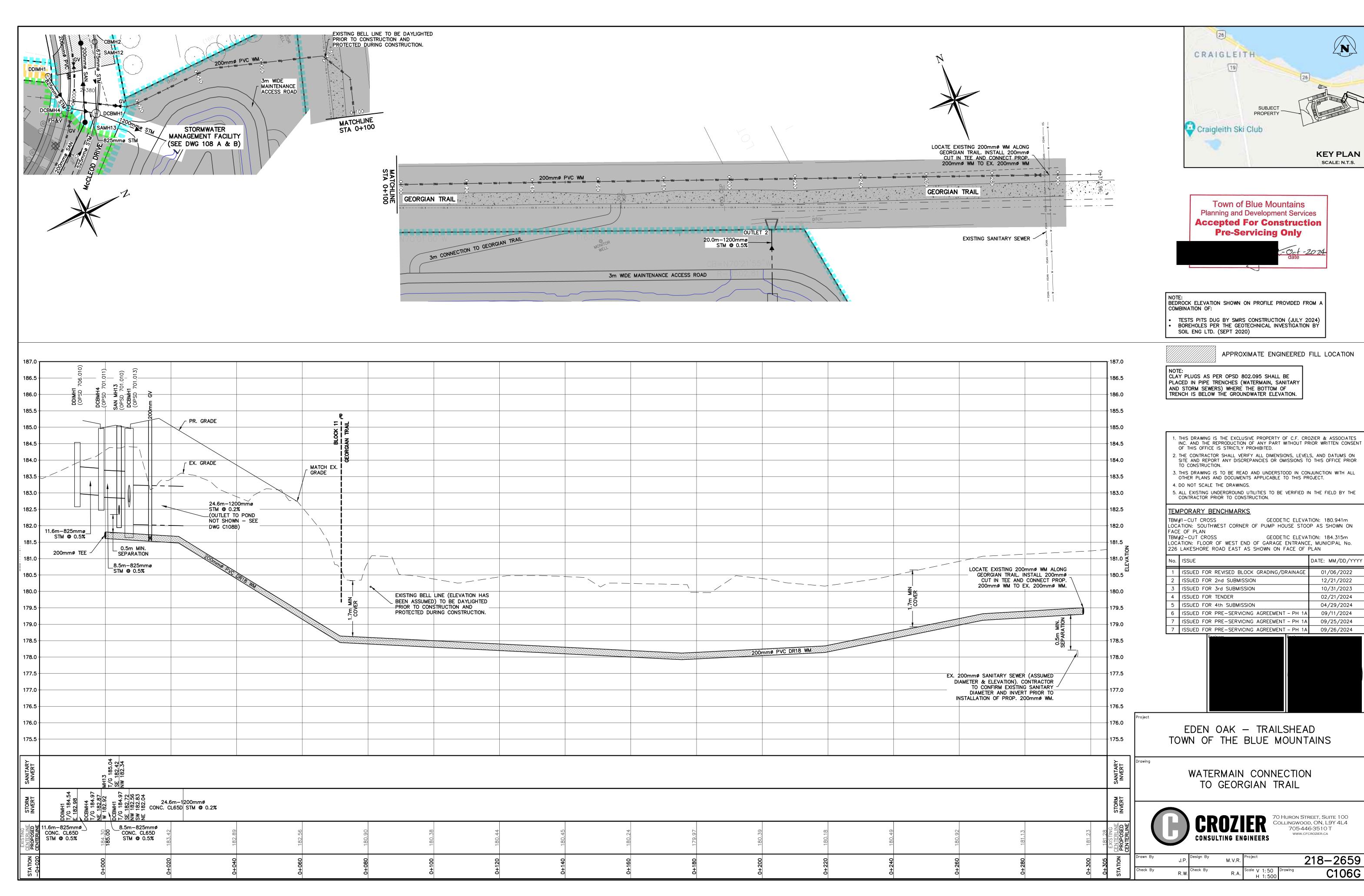












#### **CONSTRUCTION NOTES**

- ALL EXISTING UNDERGROUND UTILITIES AND SERVICES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY SITE ILLUMINATION TO BE DIRECTED DOWNWARD AND INTERNAL TO SITE ONLY.
- DETAILS ON PROPOSED PLANTING, LANDSCAPE FEATURES, SITE TREATMENTS ARE PREPARED BY LANDSCAPE ARCHITECT.
- ROAD OCCUPANCY PERMIT IS REQUIRED FROM THE TOWN PRIOR TO ANY WORKS COMPLETED WITHIN THE MUNICIPAL RIGHT OF WAY (ROW). CONTRACTOR IS RESPONSIBLE TO RETAIN PERMIT.
- ALL BOULEVARDS & DISTURBED AREAS ARE TO BE RESTORED TO EXISTING CONDITIONS OR BETTER, 100mm TOPSOIL & SEED UNLESS OTHERWISE CLEAR STONE WRAPPED IN FILTER CLOTH CAN BE SUBSTITUTED FOR BEDDING MATERIAL IF APPROVED BY THE GEOTECHNICAL ENGINEER.
- ALL PROPERTY BARS TO BE PROTECTED DURING CONSTRUCTION. BARS ARE TO BE PLACED BY O.L.S. AT CONTRACTOR'S EXPENSE IF DAMAGED OR
- DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS-517 & 518 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION. CONTRACTOR IS RESPONSIBLE FOR OBTAINING M.E.C.P. PERMIT IF REQUIRED.
- ALL RIP-RAP/GABION MATTRESSES TO BE PLACED UPON FILTER CLOTH.
- O. ALL ROCK EXCAVATION TO BE CARRIED OUT PER OPSS-206. . SIGNAGE TO BE INSTALLED PER TOWN STANDARDS. STREET SIGNS AND STOP SIGNS TO BE INSTALLED ON SEPARATE POSTS.
- 2. BASEMENT FLOOR SLABS MUST BE A MINIMUM OF 0.5m ABOVE SEASONAL HIGH GROUND WATER TABLE. 3. <u>PER GEOTECHNICAL RECOMMENDATIONS</u>, WHERE THE BOTTOM OF PIPE TRENCH (STORM, SANITARY AND WATERMAIN) IS BELOW THE WATER TABLE
- PLUGS SHALL BE 1.0m THICK MEASURED ALONG THE PIPE, AND SHOULD COMPLETELY REPLACE THE GRANULAR BEDDING AND SAND BACKFILL PLACED ABOVE THE SPRINGLINE AND THE OBVERT OF THE SEWER OR WATERMAIN. THE CLAY PLUGS MUST BE COMPACTED TO 95% SPMDD. MATERIAL USED FOR THE CLAY PLUGS SHOULD CONTAIN NOT LESS THAN 15% PARTICLES FINER THAN 2 MICRONS AND SHOULD HAVE A COEFFICIENT OF PERMEABILITY LESS THAN 10-6 CM/SECOND. UNSHRINKABLE FILL CAN ALSO BE USED AS A SUBSTITUTE FOR CLAY PLUGS. BEFORE CONSTRUCTION THE CONTRACTOR SHOULD SUBMIT A REPRESENTATIVE SAMPLE OF THE PROPOSED CLAY PLUG MATERIAL FOR PERMEABILITY AND PARTICLE SIZE TESTING TO THE GEOTECHNICAL ENGINEER TO VERIFY COMPLIANCE WITH THE SPECIFICATIONS. DURING CONSTRUCTION, FURTHER REPRESENTATIVE SAMPLES SHOULD BE TESTED TO DETERMINE ITS ACCEPTABILITY. ALTERNATIVELY, CUT OFF COLLARS CAN BE INSTALLED AROUND THE PIPE BARREL TO ACHIEVE THE SAME EFFECT. COLLARS SHOULD NOT BE PLACED CLOSER THAN 1.0M TO A PIPE JOINT AND PRECAUTIONS

SHOULD BE TAKEN TO ENSURE THAT 95% COMPACTION IS ACHIEVED AROUND THE COLLARS. WATERTIGHT CONNECTIONS ARE REQUIRED BETWEEN

CLAY PLUGS AS PER OPSD 802.095 SHALL BE PLACED IN TRENCHES AT 50m INTERVALS ALONG THE FULL LENGTH OF THE TRENCH. THE CLAY

#### THE COLLAR AND THE PIPE WALL. ROADS

GENERAL

- 10. ALL EXCAVATION SHALL CONFORM TO THE CURRENT ONTARIO PROVINCIAL SPECIFICATION FOR GRADING OPSS 206. . THE DEVELOPER SHALL RETAIN A QUALIFIED SOILS CONSULTANT TO CARRY OUT COMPACTION TESTS ON THE COMPLETED SUBGRADE AND
- SUBSEQUENT LIFTS OF GRANULAR BASE MATERIAL BEFORE PLACEMENT OF NEXT GRANULAR OR ASPHALT LIFT. 2. ALL VEGETATION, BOULDERS OVER 150mmø, TOPSOIL AND ORGANIC OR FROST-SUSCEPTIBLE MATERIALS, SHALL BE REMOVED FROM THE ROAD
- BASE TO A DEPTH OF AT LEAST 1.20m BELOW FINISHED GRADE AND REPLACED WITH SUITABLE MATERIAL. 3. ALL UNSUITABLE EXCAVATED MATERIAL SHALL BE REMOVED FROM THE ENTIRE ROAD CORRIDOR AND DEPOSITED OFF THE SITE TO A DISPOSAL AREA APPROVED BY THE CONTRACT ADMINISTRATOR.
- 4. THE SUB-GRADE SHALL BE SHAPED TO CONFORM TO THE REQUIRED LONGITUDINAL GRADE AND CROSS-SECTION AND SHALL HAVE A CROSSFALL OF 3% FROM THE CENTRELINE OF ROADWAY TO 0.5m FROM BACK OF CURB. 5. NATIVE SUB-GRADE TO BE GRADED, COMPACTED AND PROOF-ROLLED PRIOR TO PLACEMENT OF GRANULARS. COMPACTION TO BE MINIMUM 98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). ALL IDENTIFIED SOFT AND WEAK SPOTS SHALL BE EXCAVATED AND BACKFILLED WITH A SUITABLE GRANULAR BASE MATERIAL. PROOF-ROLL TO BE OBSERVED AND ACCEPTED BY THE MUNICIPALITY AND GEOTECHNICAL ENGINEER PRIOR
- TO FIRST LIFT OF GRANULAR MATERIAL. MUNICIPALITY TO BE NOTIFIED OF GRANULAR 'B' PROOF ROLL AND GIVEN THE OPTION TO ATTEND. THE GRANULAR BASE SHALL BE LAID ON DRY, SMOOTH, PROPERLY GRADED SUB-GRADE, AND SHALL BE SPREAD FOR THE REQUIRED WIDTH TO MEET THE EDGE OF SUB-GRADE. THE GRANULAR ROAD BASE SHALL CONSIST OF A BOTTOM COURSE OF 450mm MIN. CONSOLIDATED GRANULAR 'B' MATERIAL FULL WIDTH ACROSS THE ROADWAY AND A TOP COURSE OF 150mm CONSOLIDATED GRANULAR 'A' MATERIAL FULL WIDTH ACROSS HE ROADWAY AND CONFORMING IN ALL RESPECTS TO THE MINISTRY OF TRANSPORTATION ONTARIO PROVINCIAL STANDARD SPECIFICATIONS 1010.
- THE GRANULAR MATERIAL SHALL BE SPREAD IN LAYERS OF 150mm MAXIMUM COMPACTED DEPTHS, AND EACH LAYER SHALL BE THOROUGHLY COMPACTED TO 100% SPMDD.
- 8. NO GRANULAR BASE SHALL BE PLACED UNTIL THE GRADE ON WHICH IT IS TO BE LAID HAS BEEN INSPECTED AND APPROVED BY THE GEOTECHNICAL CONSULTANT AND CONTRACT ADMINISTRATOR.
- 9. ALL GRANULAR CONSTRUCTION SHALL CONFORM IN ALL RESPECTS TO ONTARIO PROVINCIAL STANDARD SPECIFICATION OPSS 314 20. AS SOON AS THE GRANULAR BASE HAS BEEN COMPLETED IT SHALL BE THOROUGHLY COMPACTED AND SHAPED AND THE BASE COURSE ASPHALT PLACED. THE BASE COURSE SHALL CONSIST OF 50mm MIN. THICKNESS OF HL4 BASE COURSE ASPHALT. THE SURFACE COURSE SHALL CONSIST O 40mm MIN. THICKNESS OF HL3 SURFACE COURSE ASPHALT. ASPHALT WORK SHALL CONFORM IN ALL RESPECTS TO ONTARIO PROVINCIAL STANDARD SPECIFICATIONS 310.
- THE ASPHALT COMPONENTS SHOULD BE COMPACTED TO 92% MAXIMUM RELATIVE DENSITY, AS PER OPSS 310. 22. JOINTS WITH EXISTING ASPHALT TO BE SAW CUT STRAIGHT PRIOR TO PLACING NEW ASPHALT AND TACK COAT APPLIED TO EXISTING ASPHALT AND
- 23. ALL SERVICES, MANHOLES, VALVES, ETC. ARE TO BE INSTALLED TO MATCH GRADE OF BASE COURSE OF ASPHALT AND/OR FINISHED GRADE OF LANDSCAPING. UPON PLACEMENT OF SURFACE COURSE OF ASPHALT ALL APPURTENANCES LOCATED IN ROADWAY SHALL BE RAISED TO MATCH FINISHED GRADE
- 4. SUBDRAINS TO BE LOCATED AS PER ROADWAY DETAIL ON DWG, C107 AND O.P.S.D. 207.030. GRANULAR A EMBEDMENT MATERIAL OR APPROVED EQUIVALENT TO BE USED. WHERE LOCATION OF SUBDRAINS ARE NOT IN WELL DRAINED NATIVE SAND OR WELL DRAINED IMPORTED GRANULAR, THI SUBDRAIN SHALL HAVE GEOTEXTILE WRAP AND BE SURROUNDED ON ALL SIDES WITH 150MM OF 19MM CLEAR STONE AND CLEAR STONE TO BE COMPLETELY WRAPPED IN FABRIC.

#### STORM SEWER

- MAIN SEWERS SHALL BE PVC PIPE (OPSS 410), MIN. PIPE STIFFNESS SHALL BE 320kPa OR CONCRETE A257.2 CLASS 65D (MIN.). ALL PIPE TO BE JOINED WITH A GASKETED BELL & SPIGOT SYSTEM.
- MINIMUM PIPE SIZE, INCLUDING CATCHBASIN LEADS, SHALL BE 300mmø
- STORM SEWER EMBEDMENT SHALL CONFORM WITH OPSD 802.010 USING GRANULAR 'A'. PRECAST STORM MANHOLES SHALL BE PER OPSD 701.010 (1200mmø), 701.011 (1500mmø), 701.012 (1800ø), OR 701.013 (2400ø), WITH FRAME AND GRATE PER OPSD 401.010 TYPE 'A' AND HOLLOW RECTANGULAR LADDER RUNGS PER OPSD 405.010. BENCHING SHALL BE PROVIDED IN ALL MANHOLES.
- PRECAST CATCHBASINS ARE TO BE OPSD 705.010 (SINGLE) OR 705.020 (DOUBLE) WITH FRAME AND GRATE OPSD 400.020. ALL CATCHBASINS AND CATCHBASIN MANHOLES SHALL HAVE SUMPS. FROST STRAPS REQUIRED ON ALL MANHOLES AS PER OPSD 701.100.
- CULVERTS TO HAVE MIN. 300mm COVER WHERE POSSIBLE. CULVERT MATERIAL TO BE PER TOWN STANDARD OR APPROVAL EQUIVALENT. MINIMUM COVER ON STORM SEWER & CATHBASINS LEADS TO BE PER TOWN STANDARD. CONTRACTOR TO APPLY INSULATION AS PER DETAIL ON
- DWG C107 WHERE MINIMUM COVER IS NOT OBTAINED. STORM PIPE 450mm IN DIAMETER AND GREATER SHALL BE CONCRETE PIPE. ALL PIPE SMALLER THAN 450mm IN DIAMETER SHALL BE P.V.C.

#### WATERMAIN A) PIPING

- ALL CONSTRUCTION TO CONFORM TO AWWA C605-94 AND AWWA C600-99 STANDARDS. MATERIALS TO MEET NSF 60, 61 & 372.
- WATERMAIN PIPE SHALL BE PVC DR18 (SIZES UP TO AND INCLUDING 300mmø), CONFORMING TO AWWA C900. A DIFFERENT PIPE STRENGTH OR TYPE MAY BE REQUIRED BY THE MUNICIPALITY FOR SPECIAL CONDITIONS.
- WATERMAIN DEFLECTION NOT TO EXCEED MANUFACTURER'S RECOMMENDATIONS. WHERE DEFLECTION CAN NOT MEET MANUFACTURER'S RECOMMENDATIONS, CONTRACTOR TO INSTALL THE REQUIRED MANUFACTURED BEND AS NECESSARY.
- WATERMAIN SHALL BE BEDDED IN ACCORDANCE WITH OPSD 802.010 WITH GRANULAR 'A'.
- WATERMAIN TO BE TESTED AND APPROVED PER THE TOWN OF THE BLUE MOUNTAINS WATERMAIN COMMISSIONING PROTOCOL STANDARD (MAY 2007). CONTRACTOR TO SUBMIT WATERMAIN COMMISSIONING PLAN TO CONTRACT ADMINISTRATOR AND MUNICIPALITY 2 WEEKS BEFORE WATERMAIN INSTALLATION BEGINS.TESTING SHALL NOT COMMENCE UNTIL WATERMAIN COMMISSIONING PLAN IS APPROVED BY CONTRACT ADMINISTRATOR &
- ALL TESTING REQUIRES NOTIFICATION IN WRITING, 48 HOURS PRIOR TO ALL TESTING.
- ALL CONNECTIONS TO EXISTING MUNICIPAL SUPPLY MAINS MUST BE WITNESSED BY THE MUNICIPALITY OR REPRESENTATIVE AND GIVING 48 HOURS NOTICE PRIOR TO CONNECTION AND BACKFILLING OPERATIONS. THE PVC PIPE INSTALLATION SHALL INCLUDE TRACER WIRE. TRACER WIRE TO BE 10 GAUGE, MULTI-STRAND SHALL BE PLACED ON TOP &
- ATTACHED IN TWO PLACES ON EACH LENGTH OF PVC WATERMAIN. ALL CONNECTIONS SHALL BE MADE WITH "DRYCONN WATERPROOF CONNECTORS" OR APPROVED EQUAL. MUNICIPALITY MUST BE ON SITE DURING ANY TRACER WIRE CONTINUITY TESTING.
- THE MINIMUM COVER ON WATERMAINS SHALL BE 1.7m. WHEN COVER IS LESS THAN 1.7m, CONTRACTOR TO PROVIDE INSULATION PER DETAIL ON ). CATHODIC PROTECTION REQUIRED ON ALL METALLIC FITTINGS AND PIPE AS PER OPSS 702 & TOWN STANDARD.
- THRUST BLOCKS OR JOINT RESTRAINTS SHALL BE REQUIRED AT ALL CHANGES IN PIPE DIRECTION, TERMINATIONS AND ANY LOCATION WHERE THRUST PRESSURES MAY OCCUR. WHERE SOIL CONDITIONS ARE SUSPECT, SUCH AS IN DISTURBED SOILS OR SOILS WITH BEARING CAPACITY OF LESS THAN 200kPa, PIPE RESTRAINERS SHALL BE USED. SEE TOWN STANDARDS OF APPROPRIATE PRODUCT REQUIREMENTS. THE USE OF
- THREADED RODS IN JOINT RESTRAINT IS NOT PERMISSIBLE. FIRE HYDRANTS SHALL BE CANADA VALVE, OPEN LEFT. PAINTED CHROME YELLOW COMPLETE WITH FLEX STAKE HYDRANT MARKER, MODEL FHV802, 1.5m TALL, WITH A 0.3m X 0.3m REFLECTIVE SIGN WITH A HYDRANT SYMBOL.

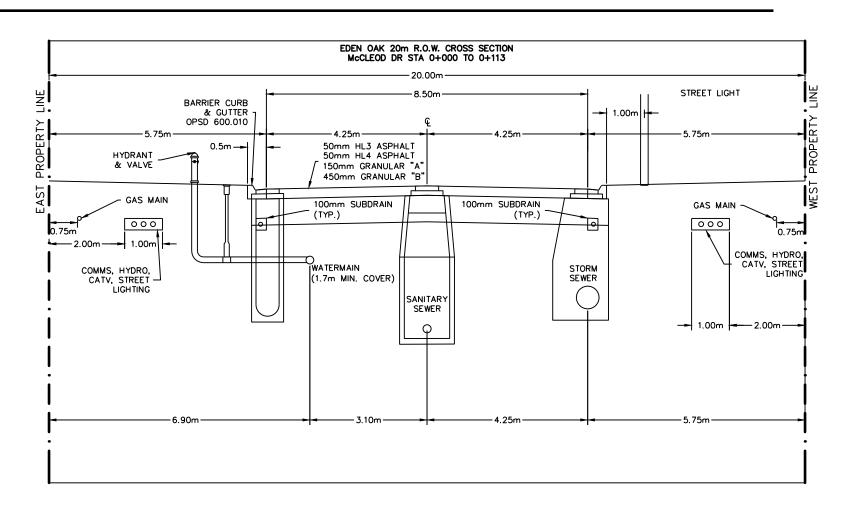
### B) SERVICES

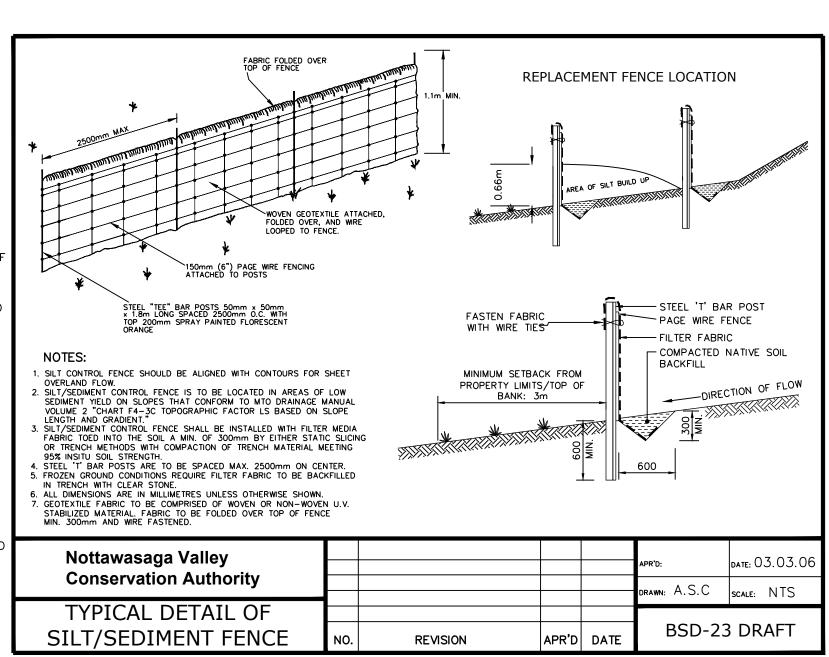
- EACH HOUSING UNIT SHALL HAVE A SEPARATE 20mmø MIN. TYPE 'K' COPPER OR 25mmø POLY WATER SERVICE. A CURB STOP AND EXTENSION SERVICE BOX AND MAIN STOP MUST BE INSTALLED ON EACH SERVICE USING COMPRESSION JOINT FITTINGS.
- WATER SERVICE FITTINGS SHALL BE AS FOLLOWS: -MAIN STOPS ARE TO BE CAMBRIDGE BRASS 301NL SERIES
- -CURB STOPS ARE TO BE SELF DRAINING, CAMBRIDGE BRASS 202NL SERIES. -SERVICE BOXES ARE TO BE OF ALL IRON/STEEL CONSTRUCTION AND SUPPLIED WITH STAINLESS STEEL SADDLES, CAMBRIDGE BRASS 8403 SERIES.
- CURB STOPS SHALL BE LOCATED AT PROPERTY LIMITS & SUPPLIED WITH A 89mm X 38mm MARKER FROM THE INVERT OF THE SERVICE TO 600mm ABOVE GRADE PAINTED BLUE.
- SERVICE CONNECTIONS TO WATERMAINS SHALL BE MADE BY DIRECT TAPPING OR WITH BROAD BAND STAINLESS STEEL SADDLES. SERVICE SADDLES TO BE STAINLESS STEEL 8403 SERIES DOUBLE STRAP & TAPPING SADDLE TO BE CAMBRIDGE BRASS 8403 STAINLESS.
- SERVICE CONNECTIONS SHALL BE LEFT WITH A TAIL 1m ABOVE FINAL GRADE & CAPPED OR CRIMPED.
- SERVICE CONNECTIONS WITH RESIDUAL PRESSURES EXCEEDING 550 kPa (80psi) MUST BE EQUIPPED WITH PRESSURE REDUCING DEVICES UPSTREAM OF WATER METER IN FUTURE HOMES. SERVICES TO BE INSTALLED WITH TRACER WIRE TERMINATING UP CURB STOP VALVE. TRACER WIRE TO BE 10 GAUGE, MULTISTRAND AND PLACED PARALLEL WITH SERVICE. MUNICIPALITY TO CONFIRM TRACER WIRE INSTALLATION AND FUNCTIONALITY VIA CONTINUITY TESTING

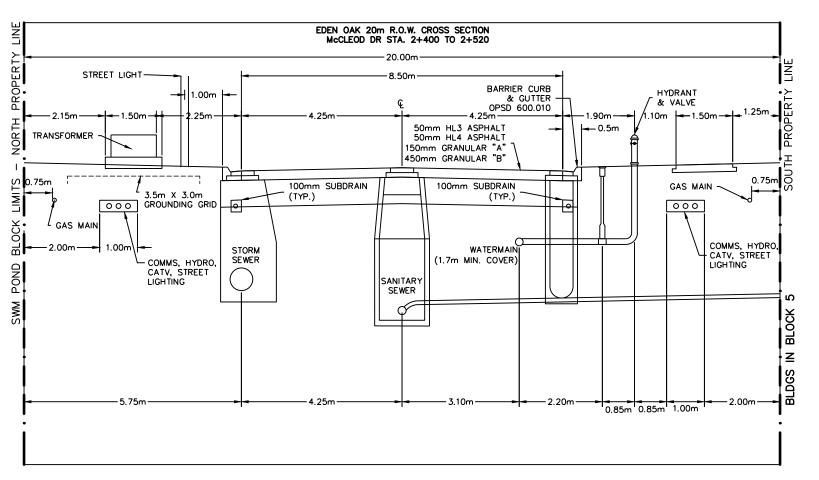
#### POST-INSTALLATION. SANITARY SEWERS

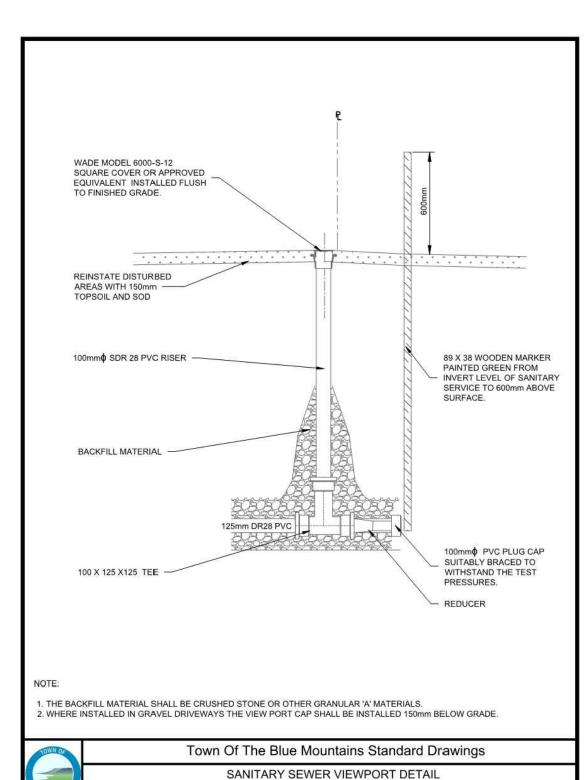
- MAIN SEWERS SHALL BE PVC SDR 35 WITH RUBBER GASKET CONNECTIONS AND MIN. SIZE OF 200mmø. ALL SANITARY SEWER PIPES SHALL
- CONFORM TO THE REQUIREMENTS OF CSA AND OPSS. SANITARY SEWER EMBEDMENT SHALL CONFORM WITH OPSD 802.010 USING GRANULAR 'A'.
- PRECAST SANITARY MANHOLES SHALL CONFORM WITH OPSD 701.010 (1200mmø) WITH HOLLOW RECTANGULAR LADDER RUNGS PER OPSD 405.010.
- BENCHING SHALL BE PROVIDED IN ALL MANHOLES. PRECAST SANITARY MANHOLES EXCEEDING 5.0m DEPTH SHALL BE INSTALLED WITH ALUMINUM SAFETY PLATFORM AND SECURED TO MANHOLE PER
- MANHOLE COVERS SHALL BE CAMRON DS579 (OR APPROVED EQUAL) AND INSTALLED AS PER MUNICIPAL STANDARD. HOUSE SERVICE CONNECTIONS SHALL BE PVC SDR 28 WITH RUBBER GASKET CONNECTIONS AND SHALL BE 125mmø MIN. SERVICE CONNECTIONS TO
- SHOP MANUFACTURED "TEE" CONNECTIONS SHALL BE USED FOR HOUSE SERVICE CONNECTIONS ON 200mm AND 250mm SEWERS. SERVICE CONNECTIONS ARE NOT TO BE CONNECTED TO MAINTENANCE HOLES.
- FROST STRAPS REQUIRED ON ALL MANHOLES AS PER OPSD 701.100.

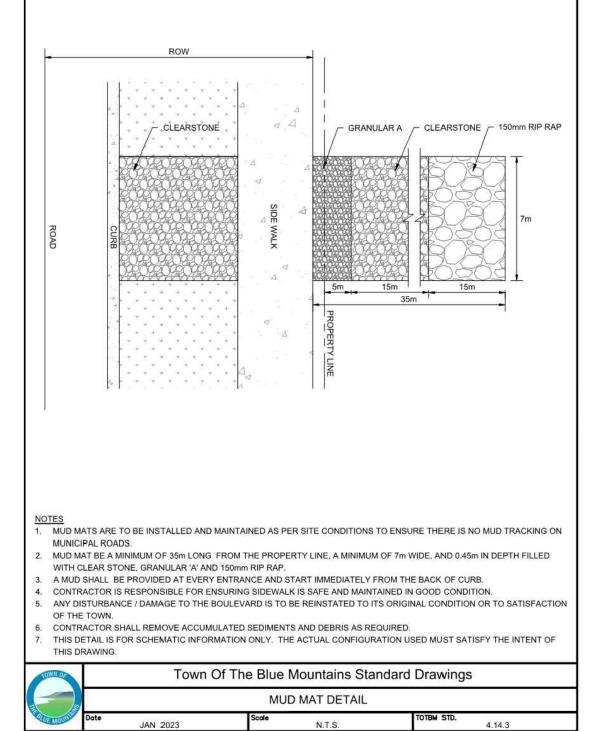
EDEN OAK 20m R.O.W. CROSS SECTION McCLEOD DR. STA 2+180 TO 2+400 AND ANDREWS CRES. BARRIER CUE OPSD 600.010 & VALVE TRANSFORMER 0.5m --50mm HL4 ASPHAL 150mm GRANULAR "A 100mm SUBDRAIN 00mm SUBDRAIN (TYP.) (TYP.) ~ **TWATFRMAIN** .7m MIN. COVER) 1.00m 0.85m 0.85m





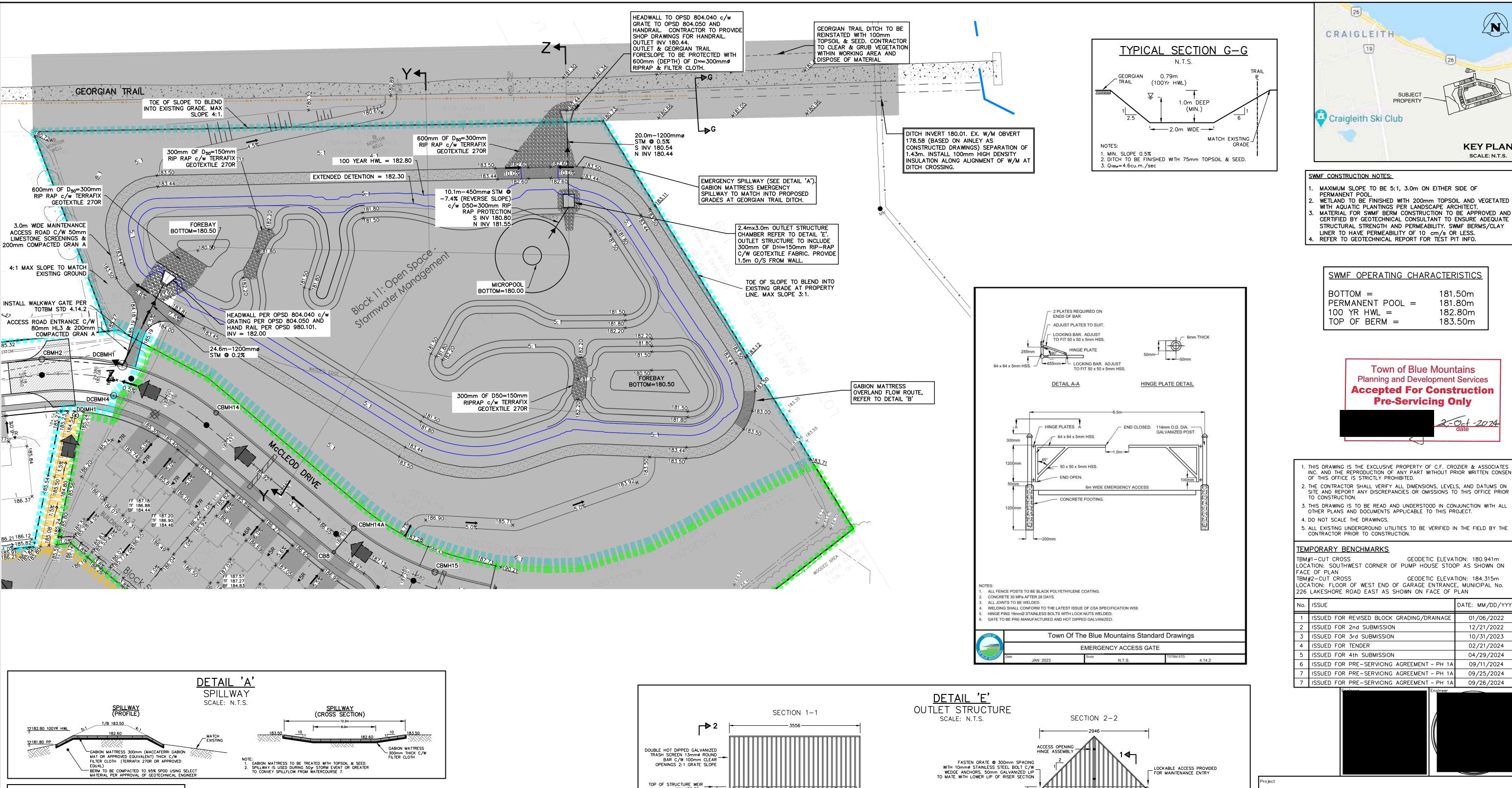












DETAIL 'B'

GABION MATTRESS

SCALE: N.T.S.

NOTE: SIDE SLOPES & BOTTOM OF CABION MATTRESS TO BE FINISHED WITH TOPSOIL & SEED.



#### **SWMF CONSTRUCTION NOTES:**

- MAXIMUM SLOPE TO BE 5:1, 3.0m ON EITHER SIDE OF
- PERMANENT POOL.
- WITH AQUATIC PLANTINGS PER LANDSCAPE ARCHITECT. MATERIAL FOR SWMF BERM CONSTRUCTION TO BE APPROVED AND CERTIFIED BY GEOTECHNICAL CONSULTANT TO ENSURE ADEQUATE STRUCTURAL STRENGTH AND PERMEABILITY. SWMF BERMS/CLAY

#### SWMF OPERATING CHARACTERISTICS

| BOTTOM =                                          | 181.50m |
|---------------------------------------------------|---------|
| PERMANENT POOL =                                  | 181.80m |
| PERMANENT POOL =<br>100 YR HWL =<br>TOP OF BERM = | 182.80m |
| TOP OF BERM =                                     | 183.50m |

Town of Blue Mountains Planning and Development Services **Accepted For Construction Pre-Servicing Only** 2-Oct-2014

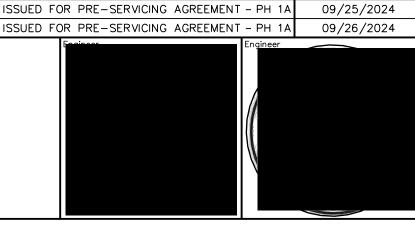
- . THIS DRAWING IS THE EXCLUSIVE PROPERTY OF C.F. CROZIER & ASSOCIATES INC. AND THE REPRODUCTION OF ANY PART WITHOUT PRIOR WRITTEN CONSENT OF THIS OFFICE IS STRICTLY PROHIBITED.
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- 3. THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL 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

GEODETIC ELEVATION: 180.941m TBM#1-CUT CROSS LOCÄTION: SOUTHWEST CORNER OF PUMP HOUSE STOOP AS SHOWN ON

GEODETIC ELEVATION: 184.315m LOCATION: FLOOR OF WEST END OF GARAGE ENTRANCE, MUNICIPAL No. 226 LAKESHORE ROAD EAST AS SHOWN ON FACE OF PLAN

DATE: MM/DD/YYY ISSUED FOR REVISED BLOCK GRADING/DRAINAGE 01/06/2022 ISSUED FOR 2nd SUBMISSION 12/21/2022 ISSUED FOR 3rd SUBMISSION 10/31/2023 4 ISSUED FOR TENDER 02/21/2024 ISSUED FOR 4th SUBMISSION 04/29/2024 09/11/2024 ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A



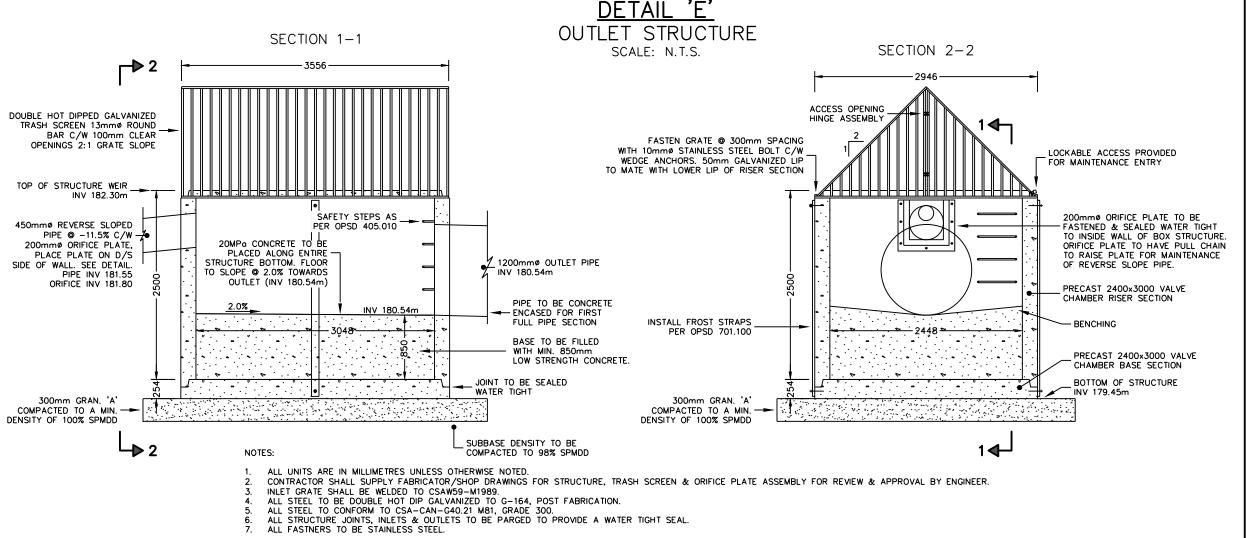
EDEN OAK - TRAILSHEAD TOWN OF THE BLUE MOUNTAINS

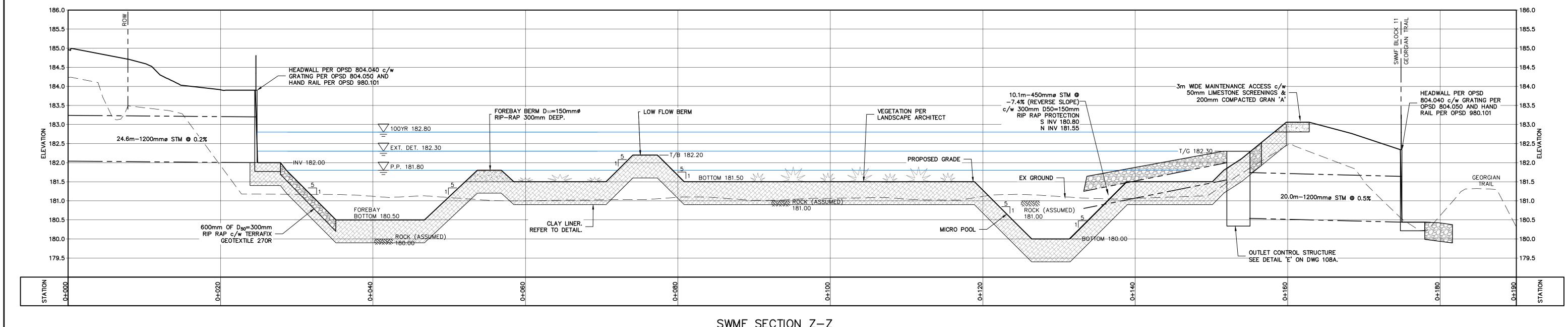
STORMWATER MANAGEMENT FACILITY PLAN

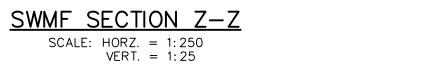


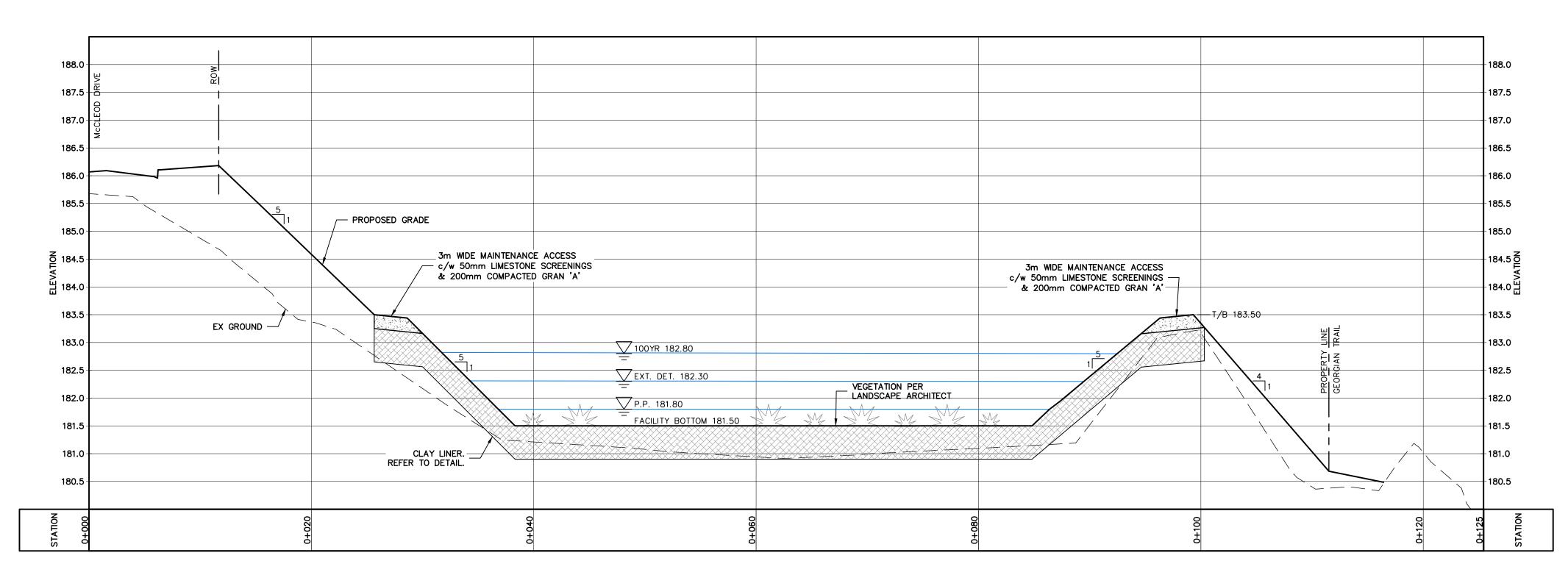
COLLINGWOOD, ON, L9Y 4L4 705-446-3510 T WWW.CFCROZIER.CA

218-2659 M.V.R

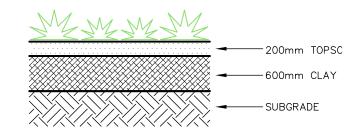








# TYPICAL CLAY LINER FOR SWM FACIITY SCALE N.T.S.



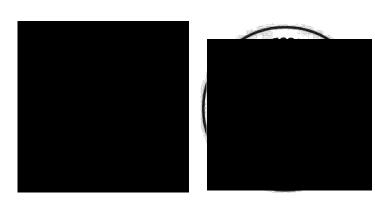
1. CLAY LINER TO BE CONSTRUCTED USING INORGANIC SOIL HAVI 30% CLAY CONTENT PLACED IN LIFTS NO MORE THAN 20cm T COMPACTED TO AT LEAST 98% STANDARD PROCTOR DRY DENS IN ORDER TO PROVIDE A PROPER SEAL TO AVOID LEAKAGE.

2. PLACEMENT AND LOCATION OF CLAY LINER TO BE CONFIRMED DIRECTION OF THE GEOTECHNICAL ENGINEER.

3. CLAY COLLARS/PLUGS SHOULD BE PROVIDED IN THE TRENCHE PIPES LOCATED WITHIN THE CLAY LINERS AT SUITABLE LOCATI AT/BEYOND THE PERIMETER OF THE SWM FACILITY.

4. MATERIAL SPECIFICATIONS FOR CLAY LINER SHALL BE BASED RECOMMENDATIONS OF GEOTECHNICAL CONSULTANT. PERMEABIL MATERIAL SHALL NOT EXCEED 10-5 cm/s.

5. TOPSOIL NOT TO BE PLACED BELOW PERMANENT POOL ELEVAL



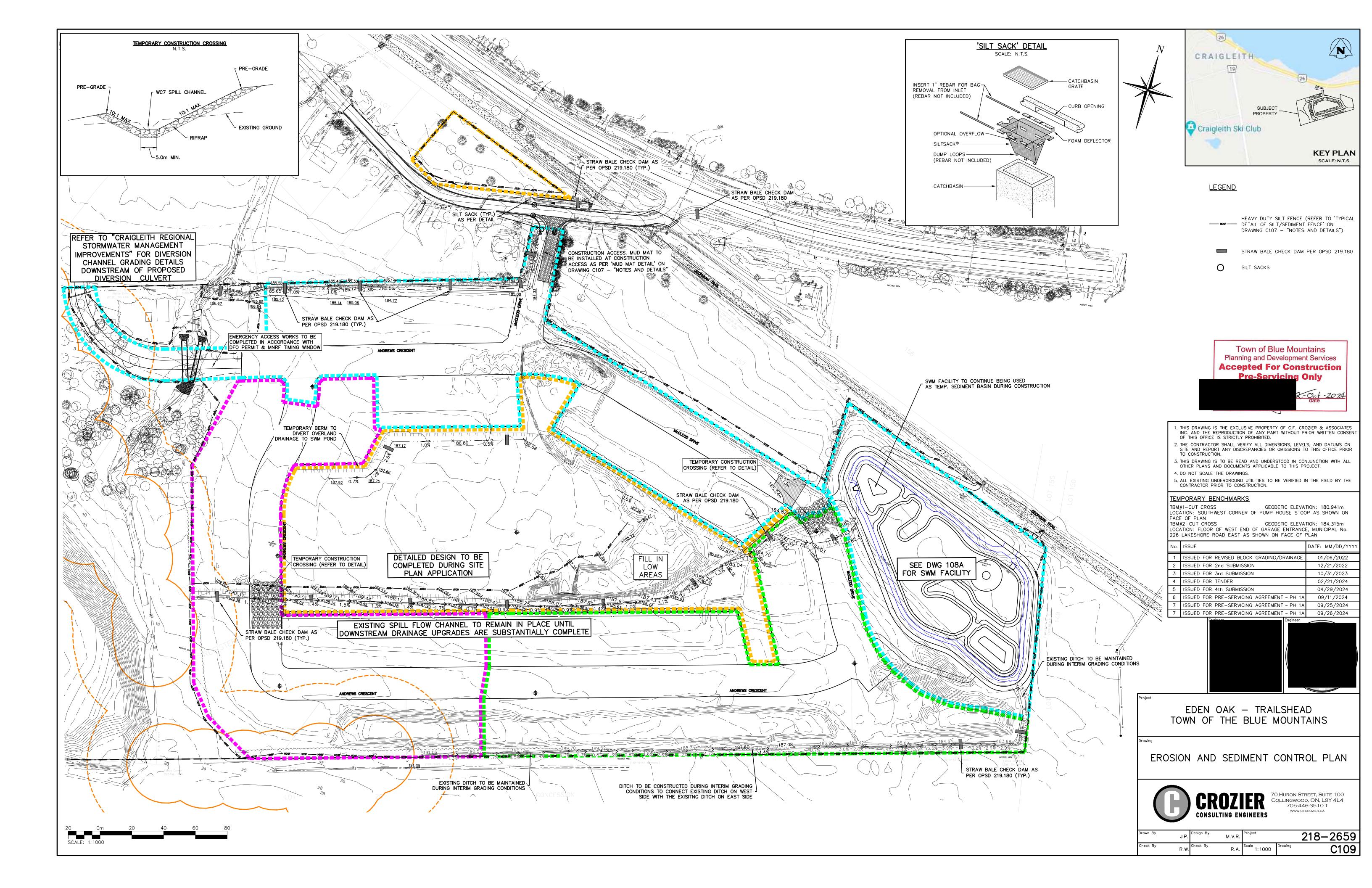
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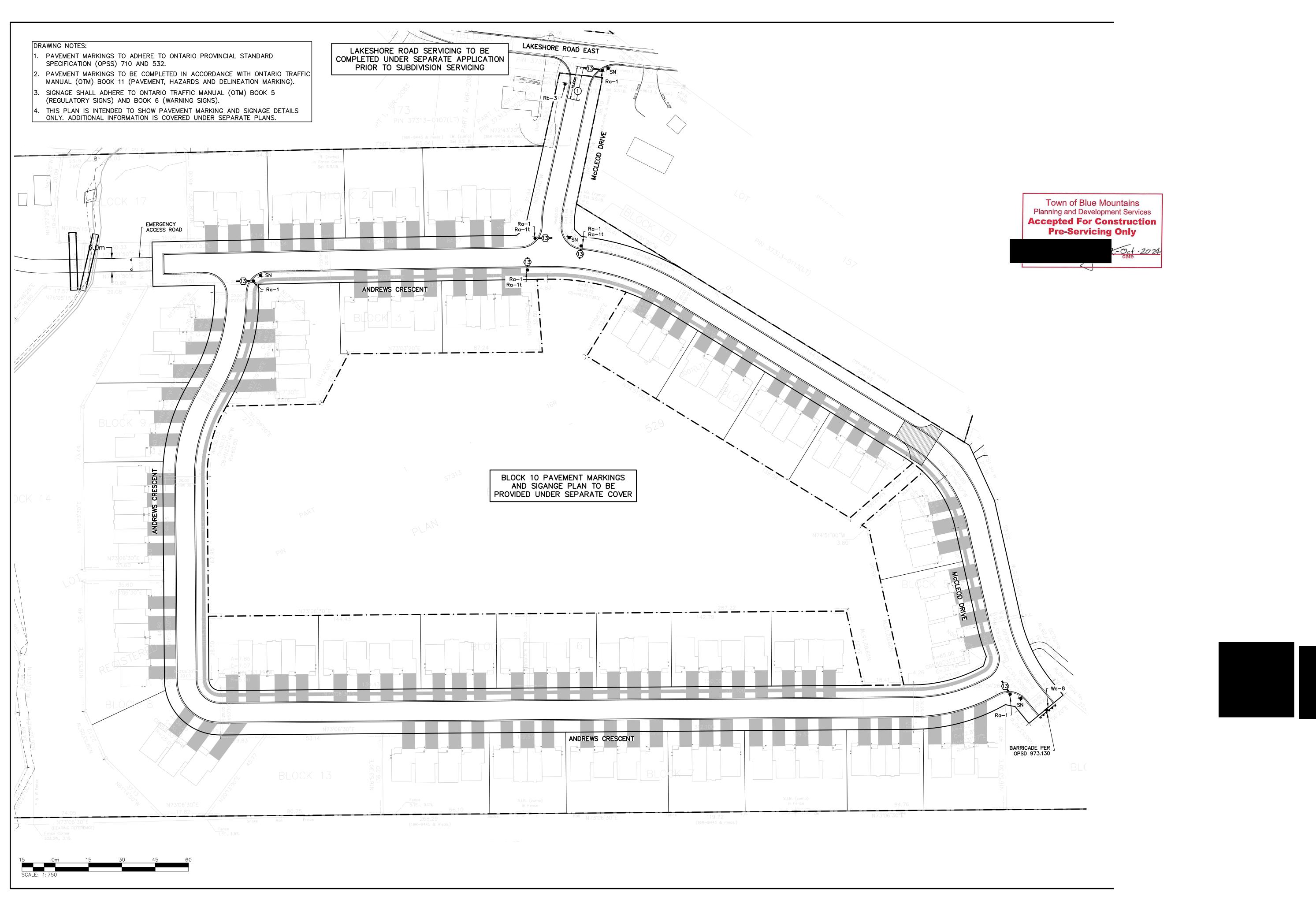
2-0-1-2014
date

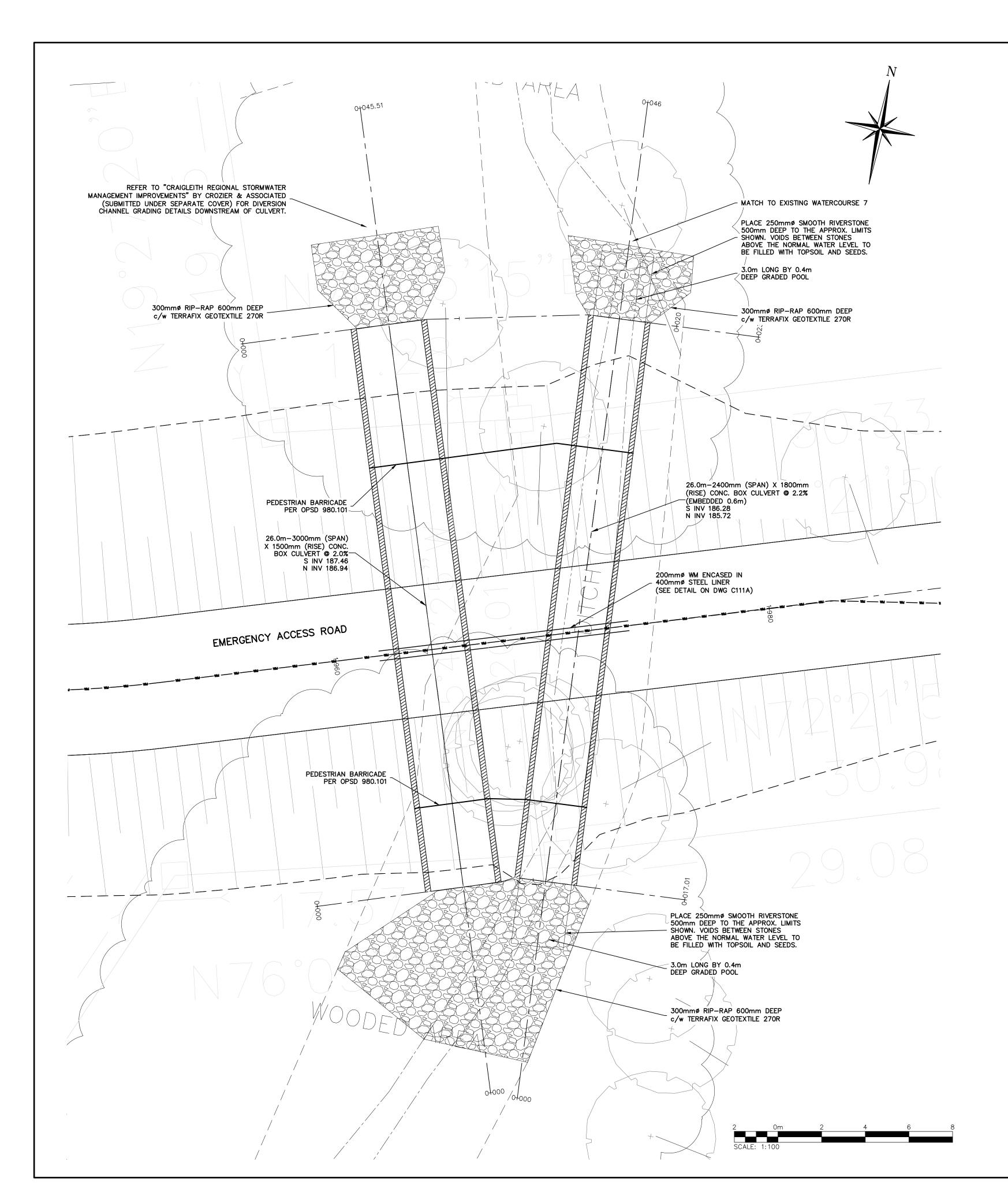
SWMF SECTION Y—Y

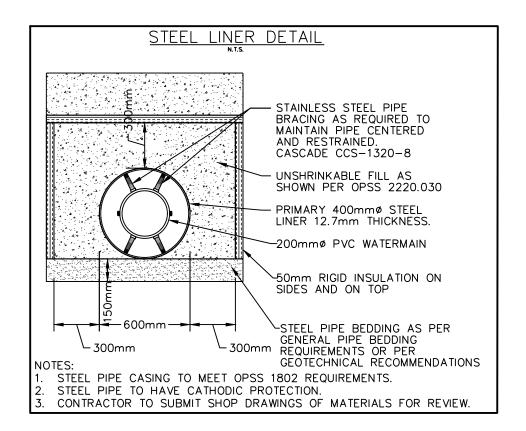
SCALE: HORZ. = 1:250
VERT. = 1:25











#### CONSTRUCTION NOTES

- NO IN-WATER WORKS BETWEEN MARCH 15TH JULY 15TH.
- 1. NO IN-WATER WORKS BETWEEN MARCH 15TH JULY 15TH.
  2. NO TREE CLEARING BETWEEN APRIL 1ST AUGUST 30TH.
- WATERPROOFING TO BE ADDED ALONG ENTIRE BURIED SECTION OF BOX CULVERTS EXTENDING 0.5m DOWN EACH WALL

#### GENERAL CONSTRUCTION SCHEDULE

GENERAL

- 1. IN STREAM WORKS TO COMPLY WITH NVCA/DFO FISHERY TIMING GUIDELINES AND ASSOCIATED PERMITTING.
- 2. MAINTAIN TEMPORARY BY-PASS CULVERTS AND OVERLAND SPILL ROUTE PRIOR TO ANY EXCAVATION.
- COMPLETE ASSOCIATED SEDIMENT CONTROLS, CULVERT AND UNDERGROUND SERVICES ENSURING WORKING IN THE DRY AT ALL TIMES.

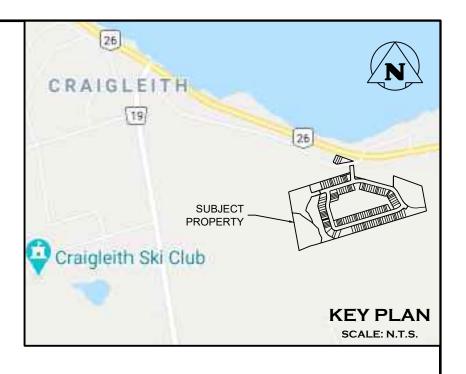
#### REQUIREMENTS FOR THE CONTRACTOR

APPLICATIONS.

- 1. SUBMISSION SHALL INCLUDE DETAILS ON REACTION LOADS, BOTH HORIZONTAL & VERTICAL, TO BE RESISTED BY FOUNDATION AS WELL AS
- DETAILS ON PROPOSED ANCHORAGE FOR CULVERT AND FOOTINGS.

  2. ENSURE THAT THE SHOP DRAWINGS ARE SPECIFIC TO THIS CONTRACT, AND
- REFERENCED TO CFCA PROJECT No. 218-2659, AND NOT A "STOCK ITEM".

  3. ENSURE THAT SHOP DRAWINGS SHOW AND SPECIFY ALL JOINT FILLERS, SEALS AND COMPOUNDS, GROUT, AND GEOTEXTILE INSTALLATIONS AND



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date



APPROXIMATE ENGINEERED FILL LOCATION

CLAY PLUGS AS PER OPSD 802.095 SHALL BE PLACED IN PIPE TRENCHES (WATERMAIN, SANITARY AND STORM SEWERS) WHERE THE BOTTOM OF TRENCH IS BELOW THE GROUNDWATER ELEVATION.

NOTE:
0.3m OF CLEARANCE TO BE PROVIDED FROM
SEASONALLY HIGH GROUNDWATER TABLE AND BASEMENT
FLOOR SLAB PER TOWN ENGINEERING STANDARDS.

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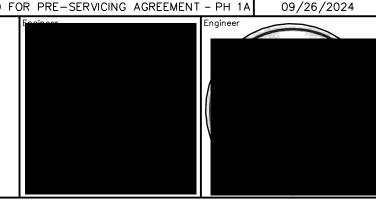
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| No. | ISSUE                                      | DATE: MM/DD/YYYY |
|-----|--------------------------------------------|------------------|
| 1   | ISSUED FOR REVISED BLOCK GRADING/DRAINAGE  | 01/06/2022       |
| 2   | ISSUED FOR 2nd SUBMISSION                  | 12/21/2022       |
| 3   | ISSUED FOR 3rd SUBMISSION                  | 10/31/2023       |
| 4   | ISSUED FOR TENDER                          | 02/21/2024       |
| 5   | ISSUED FOR 4th SUBMISSION                  | 04/29/2024       |
| 6   | ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A | 09/11/2024       |
| 7   | ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A | 09/25/2024       |
| 7   | ISSUED FOR PRE-SERVICING AGREEMENT - PH 1A | 09/26/2024       |



EDEN OAK — TRAILSHEAD TOWN OF THE BLUE MOUNTAINS

Drawir

WC7 CULVERT CROSSING - PLAN



70 HURON STREET, SUITE 100 COLLINGWOOD, ON, L9Y 4L4 705-446-3510 T www.cfcrozier.ca

 A By
 J.P.
 Design By
 M.V.R.
 Project
 218-2659

 K By
 R.W.
 Check By
 R.A.
 Scale
 1:100
 Drawing
 C111A

