



Environment &
Climate Change
Canada

Real Property Management
Division Technical Services

Ontario Region

Environnement et
Changement Climatique
Canada

Services d'architecture
et Services Techniques

Région de l'Ontario

MIDLAND, ONTARIO.
WYE MARSH WILDLIFE CENTRE

WATERMAIN REPLACEMENT &
PARKING LOT RESURFACING

Canada

LIST OF DRAWINGS

CIVIL



ND-1	NOTES AND DETAILS
GS-1	GENERAL SERVICING
WM-1	WATER MAIN PLAN 1
WM-2	WATER MAIN PLAN 2
WM-3	WATERMAIN PLAN 3
SG-1	SITE GRADING PLAN 1
EPR-1	EROSION PROTECTION PLAN

1. GENERAL NOTES

- A. CONTRACTOR TO CORRESPOND WITH THE WYE MARSH AND ST. MARIE AMONG THE HURONS STAFF TO NOTIFY OF ALL WORKS ON SITE INCLUDING ANY PLANNED INTERRUPTION OF WATER SUPPLY. THIS SHALL BE DONE A MIN OF 72 HRS PRIOR TO DISRUPTION.
B. THE CONTRACTOR SHALL INFORM PEARSON ENGINEERING A MIN. OF 48 HOURS IN ADVANCE PRIOR TO COMMENCING WORK.
C. SILTATION CONTROL DEVICES TO BE IN PLACE PRIOR TO CONSTRUCTION.
D. NATIVE BACKFILL TO BE COMPACTED TO MINIMUM 95% S.P.M.D.D.
E. EXISTING SERVICES AND UTILITIES SHOWN ON THESE CONTRACT DRAWINGS ARE BASED ON THE BEST INFORMATION AVAILABLE AND THEIR LOCATIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE WISHES WITH THE UNDERSTANDING THAT THE OWNER DISCLAIMS ALL RESPONSIBILITY FOR ITS ACCURACY AND/OR SUFFICIENCY.
F. THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
G. IF REQUIRED, DEWATERING SHALL BE AS PER OPSS 517.
H. ALL DISTURBED AREAS SHALL BE REINSTATED TO ORIGINAL CONDITIONS OR BETTER. CONTRACTOR TO PROVIDE PRE-CONSTRUCTION AND POST CONSTRUCTION PHOTOS TO VERIFY ALL DISTURBED AREAS HAVE BEEN REINSTATED TO EXISTING CONDITIONS OR BETTER, AS PER THE APPROVED ENGINEERING DRAWINGS.
I. CONTRACTOR TO OBTAIN CANADIAN WILDLIFE PERMIT AND TOWNSHIP OF TAY WATER CONNECTION PERMIT PRIOR TO CONSTRUCTION.
J. REFER TO GEOTECHNICAL REPORT FOR INFORMATION REGARDING EXISTING SUBSURFACE CONDITIONS.
K. CONTRACTOR TO PROVIDE ANY & ALL OPERATIONS MANUALS, AS-BUILT INFORMATION AND OTHER APPLICABLE CLOSOUT DOCUMENTATION AND FAMILIARIZE WYE MARSH WILDLIFE CENTRE MAINTENANCE STAFF WITH VALVE AND HYDRANT LOCATIONS AND FUNCTIONS UPON COMPLETION OF WORKS.
L. CONTRACTOR TO PROVIDE A 12 MONTH WARRANTY PERIOD FOR ALL PROPOSED WORKS

2. DRAWINGS

- A. THE NOTES ON THIS SHEET APPLY TO ALL WORKS UNDER THIS CONTRACT UNLESS OTHERWISE NOTED ON THE SPECIFIC DETAIL DWGS.
B. THE STANDARD DRAWINGS OF THE TOWNSHIP OF ESSA, ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS (OPSS) AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) CONSTITUTE PART OF THE PLANS OF THIS CONTRACT.
C. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY TOWNSHIP OF ESSA STANDARD DRAWINGS AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS.
D. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSIDERED TO BE A COMPLETE SET FOR THE PURPOSE OF THE CONTRACT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL RELEVANT STANDARD DRAWINGS AND SPECIFICATIONS AS REQUIRED FOR THE CONTRACT.

3. MEASUREMENTS

- A. ALL MEASUREMENTS ARE IN METERS, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETERS, UNLESS SPECIFIED OTHERWISE.
B. ALL PIPE SIZES SHALL BE INTERPRETED AS INDICATING THE PIPE'S INNER DIAMETER (I.D.)
C. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION, AND ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.

4. WATERMAIN

- A. CONTRACTOR TO COMPLETE LOCATES PRIOR TO WATERMAIN INSTALLATION
B. IF ENCOUNTERED, INFORMATION ON EXISTING WATERMAIN TO BE PROVIDED TO ENGINEER.
C. AS BUILT INFORMATION ON PROPOSED WATERMAIN TO BE PROVIDED TO ENGINEER UPON COMPLETION OF CONSTRUCTION.
D. WATERMAIN MATERIAL TO BE PVC DR18 CL150, OR HDPE DR11 FOR OPEN CUT WATERMAIN AND HDPE DR 11 FOR DIRECTIONAL BORE WATERMAIN UNLESS NOTED OTHERWISE.
E. ALL PVC OR HDPE WATERMAIN MATERIAL SHALL CONFORM TO CSA B137.3.
F. WATERMAIN SHALL INCLUDE #12 TWJ COPPER TRACER WIRE WITH WATERMAIN INSTALLATION. TRACER WIRE TO BE INSTALLED ALONG THE TOTAL LENGTH OF WATERMAIN, AND BROUGHT UP AT HYDRANT LOCATIONS AND SECURED TO HYDRANT TOP FLANGE BOLT.
G. POLYETHYLENE PRESSURE PIPE 100 MM DIAMETER AND LARGER SHALL BE JOINED BY THE THERMAL BUTT FUSION PROCESS. PROCEDURES RECOMMENDED BY THE PIPE MANUFACTURER SHALL BE FOLLOWED.
H. MECHANICAL JOINT FITTINGS OR PVC PUSH-ON FITTINGS MEETING AWWA SPECIFICATION C-907 AND CSA B137.2 MAY BE USED ON PVC WATERMAIN 150mm TO 300mm IN DIAMETER (U.N.O.).
I. ALL MECHANICAL JOINT FITTINGS SHALL HAVE SACRIFICIAL ANODES "PROTECTO CAPS" INSTALLED ON EVERY BOLT.
J. CONNECTIONS TO NON-POLYETHYLENE FITTINGS AND APPURTENANCES THAT ARE 50mm DIAMETER AND LARGER SHALL BE MADE WITH FLANGED JOINTS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. BOLTS SHALL BE TIGHTENED TO THE TORQUE SPECIFIED BY THE MANUFACTURER FOR THE PARTICULAR SIZE AND TYPE OF STUD END.
K. ALL VALVES SHALL OPEN BY OPERATING IN A COUNTER CLOCKWISE DIRECTION.
L. MINIMUM COVER OVER WATERMAIN IS 2.0m (U.N.O.). MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.
M. ALL VALVES ARE TO BE RESILIENT SEAT GATE VALVES COMPLETE WITH VALVE BOX.
N. VALVES IN EXCESS OF 1.7m IN DEPTH SHALL REQUIRE A VALVE STEM EXTENSION.
O. CONCRETE THRUST BLOCKS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER. TO OPSD 1103.01 AND 1103.02. RESTRAINING DEVICES MAY BE REQUIRED IN ADDITION TO STANDARD CONCRETE THRUST BLOCKING WHERE SOIL CONDITIONS WARRANT.
P. AT ALL THRUST BLOCK LOCATIONS IN FILL AREAS, ALL SEGMENTS OF THE FITTING AND THE WATERMAIN SHALL BE TIED USING EMCO UNDERGROUND BELL JOINT CLAMPS OR EQUIVALENT, OR TIE-RODS INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS (U.N.O.). WHERE THE DEFLECTION ANGLE AT THE THRUST BLOCK IS MORE THAN 45°, ADDITIONAL TIE-ROD ASSEMBLIES SHALL BE INSTALLED FOR AT LEAST 10 METRES EACH SIDE OF THE THRUST BLOCK. IMPORTED GRANULAR FILL BLOCK (GRANULAR "B" OR EQUIVALENT) IS TO BE USED BEHIND THE THRUST BLOCK AND FOR A MINIMUM DISTANCE OF 2m EACH SIDE OF THE THRUST BLOCK. THE IMPORTED GRANULAR FILL IS TO BE COMPACTED TO A MINIMUM OF 100% STANDARD PROCTOR MAXIMUM DRY DENSITY. PRIOR TO CONSTRUCTION OF THE THRUST BLOCKS, THE CONTRACTOR SHALL OBTAIN THE WRITTEN APPROVAL FOR THE BACKFILL FROM A QUALIFIED GEOTECHNICAL ENGINEER. TIE-RODS AND CLAMPS SHALL BE GIVEN TWO COATS OF BITUMASTIC PAINT.
Q. PIPE SHALL BE KEPT CLEAN AS WORK PROGRESSES. WATER SHALL NOT BE PERMITTED TO FLOW THROUGH THE PROPOSED PIPE DURING CONSTRUCTION.
R. A LEAKAGE TEST SHALL BE PERFORMED ON THE COMPLETED WATERMAIN SYSTEM AT A HYDROSTATIC PRESSURE OF 1MPa (150 psi).
S. THE TEST PROCEDURE SHALL CONSIST OF INITIAL EXPANSION AND TEST PHASES. DURING THE INITIAL EXPANSION PHASE, THE TEST SECTION SHALL BE PRESSURIZED TO THE TEST PRESSURE, AND SUFFICIENT MAKE-UP WATER SHALL BE ADDED EACH HOUR FOR 3 HOURS TO RETURN TO THE TEST PRESSURE. AFTER THE INITIAL EXPANSION PHASE, THE TEST PHASE MAY BEGIN.
T. THE DURATION OF THE TEST SHALL BE A MINIMUM OF 2 HOURS. MAXIMUM ALLOWABLE LEAKAGE SHALL NOT EXCEED 0.08L/min OF PIPE DIA./km. THE CONTRACTOR SHALL ARRANGE THE TEST FOR SECTIONS OF MAIN AND SHALL INFORM THE TOWNSHIP ENGINEER WHEN A SECTION IS ON TEST AND READY FOR INSPECTION.
U. THE WATERMAIN SHALL BE FILLED SLOWLY WITH WATER AND ALL AIR SHALL BE REMOVED FROM THE PIPELINE. A 24-HOUR ABSORPTION PERIOD MAY BE ALLOWED BEFORE STARTING THE TEST.
V. WATER SYSTEM SHALL BE SWABBED AND DISINFECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIREMENTS OF THE MINISTRY OF THE ENVIRONMENT. CHLORINE CONCENTRATION AT ANY POINT IN THE MAINS IS 50ppm. AT THE END OF 24 HOURS THE CONCENTRATION MUST BE AT LEAST 10ppm.
W. RISER PIPES ARE TO BE INSTALLED FOR SWABBING
X. SWABBING, PRESSURE TEST, CHLORINATE AND FLUSHING OF THE NEW WATERMAIN WILL BE COMPLETED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER. UPON SUCCESSFUL TEST RESULTS THE CONTRACTOR WILL MAKE ALL CONNECTIONS TO THE EXISTING WATERMANS, INCLUDING EXCAVATION, BACKFILLING AND MATERIALS AS REQUIRED.

5. DIRECTIONAL DRILL WATERMAIN INSTALLATION

- A. DIRECTIONAL DRILLING TO BE COMPLETED FOLLOWING OPSS 450 (REVISED NOV. 2016).
B. DIRECTIONAL DRILLING TO BE AT AN AVERAGE DEPTH OF 2.5m WHERE POSSIBLE.
C. CONTRACTOR TO COMPLETE LOCATES ALONG THE PROPOSED DRILLING ALIGNMENT PRIOR TO THE COMMENCEMENT OF ANY DRILLING WORKS.
D. WORK SITE ADJACENT TO DRILLING EQUIPMENT SHALL BE GRADED OR FILLED TO PROVIDE A LEVEL WORKING AREA FOR THE DRILLING RIG.
E. AFTER SUCCESSFULLY REAMING THE BORE TO THE REQUIRED DIAMETER, THE WATERMAIN SHALL BE PULLED THROUGH THE BORE PATH COMPLETE WITH TRACER WIRE AS OPSS 450. ONCE THE PULLBACK OPERATION HAS COMMENCED IT SHALL CONTINUE WITHOUT INTERRUPTION UNTIL THE PRODUCT IS COMPLETELY PULLED INTO THE BORE.
F. UPON COMPLETION OF DRILLING WORKS, CONTRACTOR TO REINSTATE ALL DISTURBED AREAS TO PRE-CONSTRUCTION CONDITION OR BETTER.
G. CONTRACTOR TO PROVIDE CONTINUOUS VERTICAL AND HORIZONTAL SURVEY INFORMATION DURING INSTALLATION (20m INTERVALS) FOR AS-BUILT INFORMATION PURPOSES.
H. CONTRACTOR TO PROVIDE ONSITE HEADS TO DRILL A "BURP HOLE" FOR THE DIRECTIONAL DRILLING WORKS AND CONTAIN SLURRY WITH SILTATION FENCE DURING CONSTRUCTION.
I. PRIOR TO CONSTRUCTION, CONTRACTOR IS TO PREPARE WORK PLAN FOR THE DIRECTIONAL DRILLING WORKS AND A CONTINGENCY PLAN TO ADDRESS "FRAK-OUT".

6. OPEN CUT WATERMAIN INSTALLATION

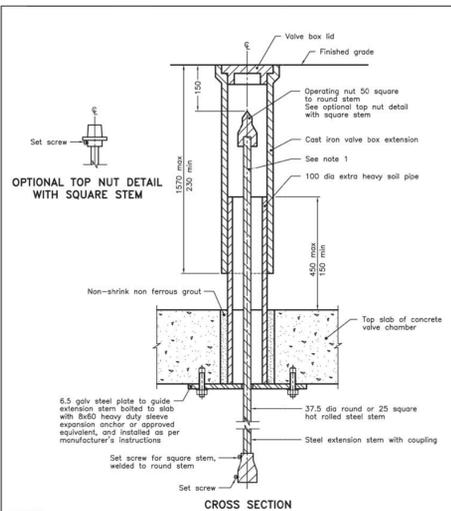
- A. UNSUPPORTED TEMPORARY EXCAVATION ABOVE THE GROUNDWATER TABLE SHOULD NOT EXCEED SIDE SLOPES OF 1H:1V. IF EXCAVATIONS ARE CARRIED OUT BELOW THE GROUNDWATER TABLE WITHOUT POSITIVE DEWATERING, SIDE SLOPES SHOULD NOT EXCEED 3H:1V.
B. FLATTENING AND/OR BLANKETING OF THE SLOPES MAY BE REQUIRED TO MAINTAIN STABILITY AND CONTROL LOSS OF GROUND.
C. SURFACE RUNOFF SHOULD BE DIRECTED AWAY FROM OPEN EXCAVATIONS. ALL EXCAVATIONS TO BE CARRIED OUT IN ACCORDANCE WITH THE APPLICABLE OHSA REQUIREMENTS.
D. STOCKPILES OF EXCAVATED MATERIAL TO BE KEPT AT LEAST THE SAME HORIZONTAL DISTANCE FROM THE TOP EDGE OF THE EXCAVATION AS THE EXCAVATION DEPTH TO PREVENT SLOPE INSTABILITY.
E. BOULDERS LARGER THAN A DIAMETER OF 0.3m TO BE REMOVED FROM SIDE SLOPES TO ENSURE WORKER SAFETY.
F. EXCAVATIONS TO BE KEPT OPEN FOR AS SHORT A DURATION AS POSSIBLE AND COMPLETELY FILLED IN AT THE END OF EVERY WORK DAY.
G. SHOULD A TRENCH LINER BOX BE USED TO REDUCE THE LATERAL EXTENT OF THE EXCAVATIONS, THE BOX WILL ONLY PROVIDE PROTECTION ONLY IN PLACE.
H. ANY VOIDS BETWEEN THE EXCAVATION WALL AND THE TRENCH LINER BOX TO BE FILLED IMMEDIATELY TO REDUCE THE POTENTIAL FOR LOSS OF GROUND AND SUPPORT OF ADJACENT UTILITIES, ROADWAYS, ETC.
I. TRENCH EXCAVATIONS TO BE CARRIED OUT IN SHORT SECTIONS WITH THE SUPPORT SYSTEMS INSTALLED IMMEDIATELY UPON COMPLETION OF THE EXCAVATION.
J. EXCAVATIONS BEHIND THE TRENCH LINE BOX TO BE BACKFILLED PROMPTLY TO PREVENT LOSS OF GROUND.
K. WATERMAIN SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPSD 802.010 (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD 802.030 OR 802.031 CLASS 'B' (GRAN. 'A' BEDDING MATERIAL, GRAN. 'A' OR SELECT NATIVE COVER MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF MUNICIPAL WORKS OR SAND MEETING GRADATION REQUIREMENTS OF OPS 1004.05.05 COMPACTED TO 95% PROCTOR DENSITY. GEOTECHNICAL CERTIFICATION OF MATERIAL AND COMPACTION MUST BE PROVIDED EVERY 150m. THE COMPACTION TESTING MUST INCLUDE THE ENTIRE EMBEDMENT ENVELOPE (HAUGHES, BEDDING AND TOP OF PIPE)

7. PAVEMENT RESURFACING

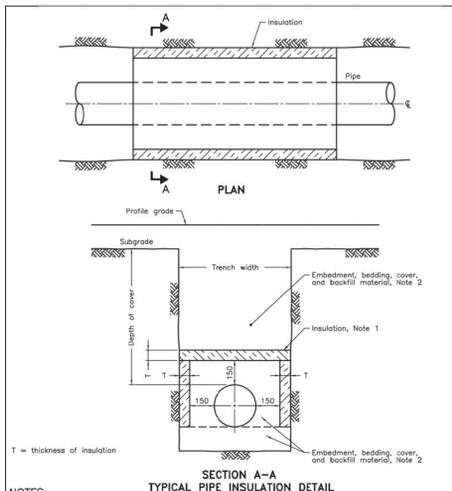
- A. CONTRACTOR TO REMOVE EXISTING ASPHALT WITHIN THE WYE MARSH WILDLIFE CENTRE PARKING LOT AND DISPOSE OFF SITE.
B. ALL ASPHALT THAT IS PROPOSED TO BE REMOVED, IS TO BE REMOVED TO THE FULL DEPTH (75-100mm).
C. CONTRACTOR SHALL COORDINATE PARKING LOT WORKS WITH THE WYE MARSH WILDLIFE CENTRE TO PROVIDE PARKING DURING RESURFACING WORKS.
D. SELECT SUBGRADE MATERIAL APPROVED BY THE ENGINEER, COMPACTED TO 100% SPMD0.
E. AS PER THE GEOTECHNICAL REPORT COMPLETED BY GOLDER ASSOCIATES LTD THE PAVEMENT STRUCTURE IS AS FOLLOWS:
PAVEMENT STRUCTURE:
- 60mm OF SUPER PAVE 12.5
- 150mm GRANULAR 'A'
F. LINE PAINTING SHALL CONFORM TO OPSS 1712 FOR BASE ASPHALT LINE PAINTING AND TO OPSS 1713 FOR SURFACE COURSE ASPHALT. YELLOW PAINT USED TO REPLACE EXISTING LINE WORK FOR PARKING SPACES AND ACCESSIBLE PARKING SYMBOLS
G. FINISHED SURFACE ELEVATIONS ARE TO MATCH PROPOSED GRADES INDICATED ON DRAWINGS
H. ALL CURB ON-SITE TO REMAIN. IF DAMAGED, CURB TO BE REINSTATED TO ORIGINAL CONDITIONS OR BETTER. CONTRACTOR TO PROVIDE PRE-CONSTRUCTION AND POST CONSTRUCTION PHOTOS TO VERIFY ALL DISTURBED AREAS HAVE BEEN REINSTATED TO EXISTING CONDITIONS OR BETTER, AS PER THE APPROVED ENGINEERING DRAWINGS.

8. MISCELLANEOUS ITEMS

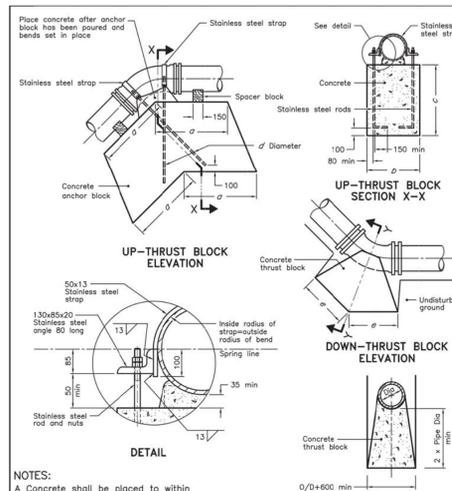
- A. IN THE EVENT OF EXISTING WATERMAIN IS DAMAGED, CONTRACTOR TO ENSURE THAT 2 WASHROOM FACILITIES BE AVAILABLE AND EXISTING WATERMAIN BE REPAIRED AND OPERATIONAL WITHIN 8 HOURS OF BREAK. AN ALTERNATE SOURCE OF POTABLE WATER WILL BE REQUIRED DURING TESTING AND COMMISSIONING OF NEW WATERMAIN, SHOULD EXISTING WATERMAIN BE DAMAGED DURING CONSTRUCTION.
B. DIRECTIONAL DRILL TO AVOID EXISTING 100mmØ WATERMAIN, IF EXISTING WATERMAIN IS DAMAGED DURING THE DIRECTIONAL DRILLING PROCESS, CONTRACTOR TO REPAIR AT NO EXTRA COST TO THE CONTRACT.
C. IF ADDITIONAL RECEIVING PITS/ SENDING PITS ARE REQUIRED FOR DIRECTIONAL DRILLING INSTALL, THEY SHALL BE SUPPLIED AT NO EXTRA COST TO THE CONTRACT.
D. CONTRACTOR TO HAVE ARCHEOLOGIST JOHN TIGOS ON SITE FOR ALL SUBSURFACE EXCAVATIONS WITHIN THE ST. MARIE AMONG THE HURONS PROPERTY.



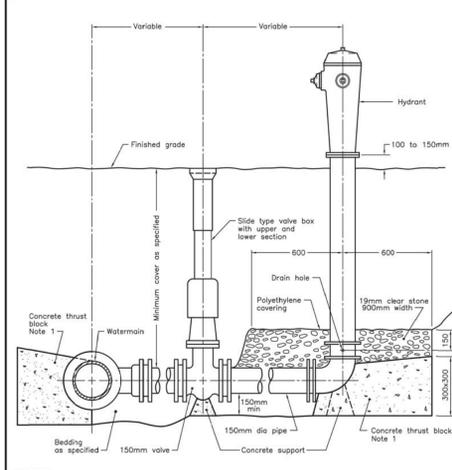
ONTARIO PROVINCIAL STANDARD DRAWING Nov 2018 Rev 4 VALVE OPERATOR OPSD 1101.020



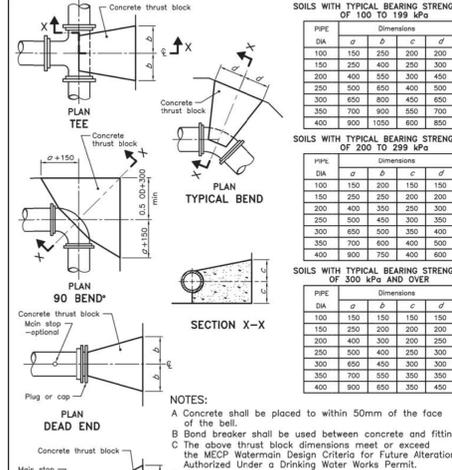
ONTARIO PROVINCIAL STANDARD DRAWING Nov 2015 Rev 0 INSULATION FOR SEWERS AND WATERMANS IN SHALLOW TRENCHES OPSD 1109.030



ONTARIO PROVINCIAL STANDARD DRAWING Nov 2018 Rev 4 CONCRETE THRUST BLOCKS FOR VERTICAL BENDS OPSD 1103.020



ONTARIO PROVINCIAL STANDARD DRAWING Nov 2006 Rev 1 HYDRANT INSTALLATION OPSD 1105.010



ONTARIO PROVINCIAL STANDARD DRAWING Nov 2018 Rev 3 CONCRETE THRUST BLOCKS FOR TEES, PLUGS, AND HORIZONTAL BENDS OPSD 1103.010

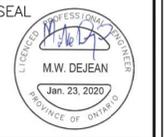


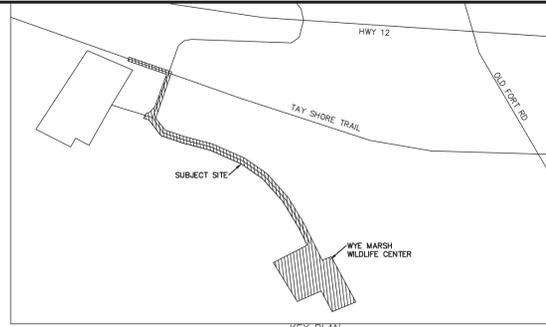
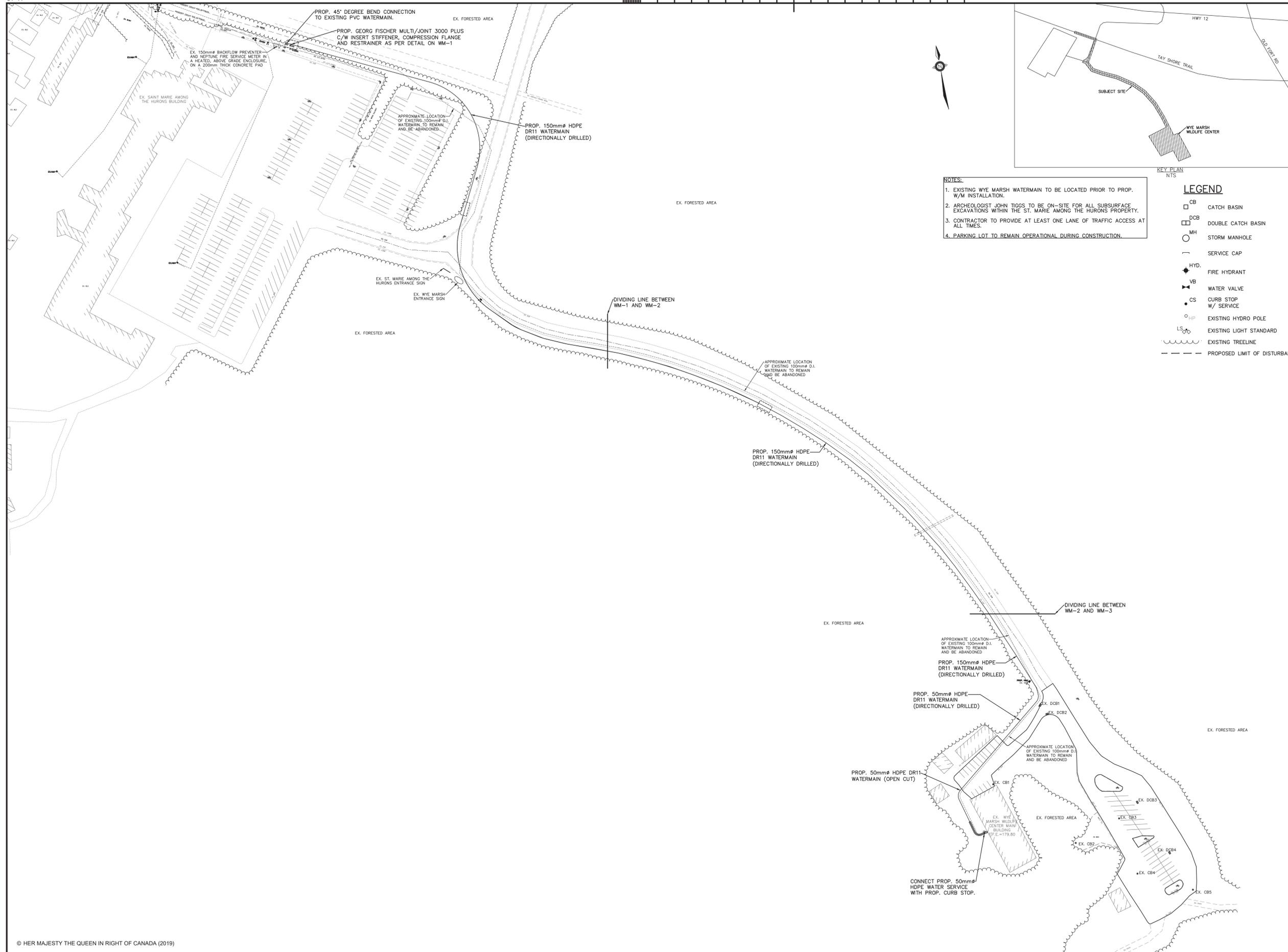
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- A Detail No. No. du détail
B drawing no. - where detail required dessin no. - où détail exigé
C drawing no. - where detail deleted dessin no. - où détail éliminé

project title titre du projet WYE_MARSH_WILDLIFE_CENTER 16160_HIGHWAY_12_EAST MIDLAND_ONTARIO WYE MARSH WATERMAIN REPLACEMENT & PARKING LOT RESURFACING

NOTES AND DETAILS 1

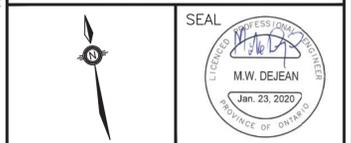
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- NOTES:**
- EXISTING WYE MARSH WATERMAIN TO BE LOCATED PRIOR TO PROP. W/M INSTALLATION.
 - ARCHEOLOGIST JOHN TIGGS TO BE ON-SITE FOR ALL SUBSURFACE EXCAVATIONS WITHIN THE ST. MARIE AMONG THE HURONS PROPERTY.
 - CONTRACTOR TO PROVIDE AT LEAST ONE LANE OF TRAFFIC ACCESS AT ALL TIMES.
 - PARKING LOT TO REMAIN OPERATIONAL DURING CONSTRUCTION.

- LEGEND**
- CB CATCH BASIN
 - DCB DOUBLE CATCH BASIN
 - MH STORM MANHOLE
 - SERVICE CAP
 - HYD. FIRE HYDRANT
 - ◆ VB WATER VALVE
 - CS CURB STOP W/ SERVICE
 - HP EXISTING HYDRO POLE
 - LS EXISTING LIGHT STANDARD
 - EXISTING TREELINE
 - - - - - PROPOSED LIMIT OF DISTURBANCE

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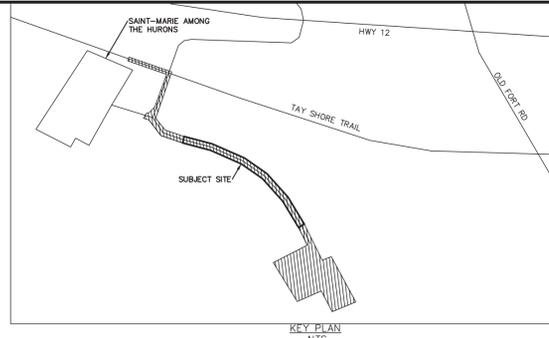
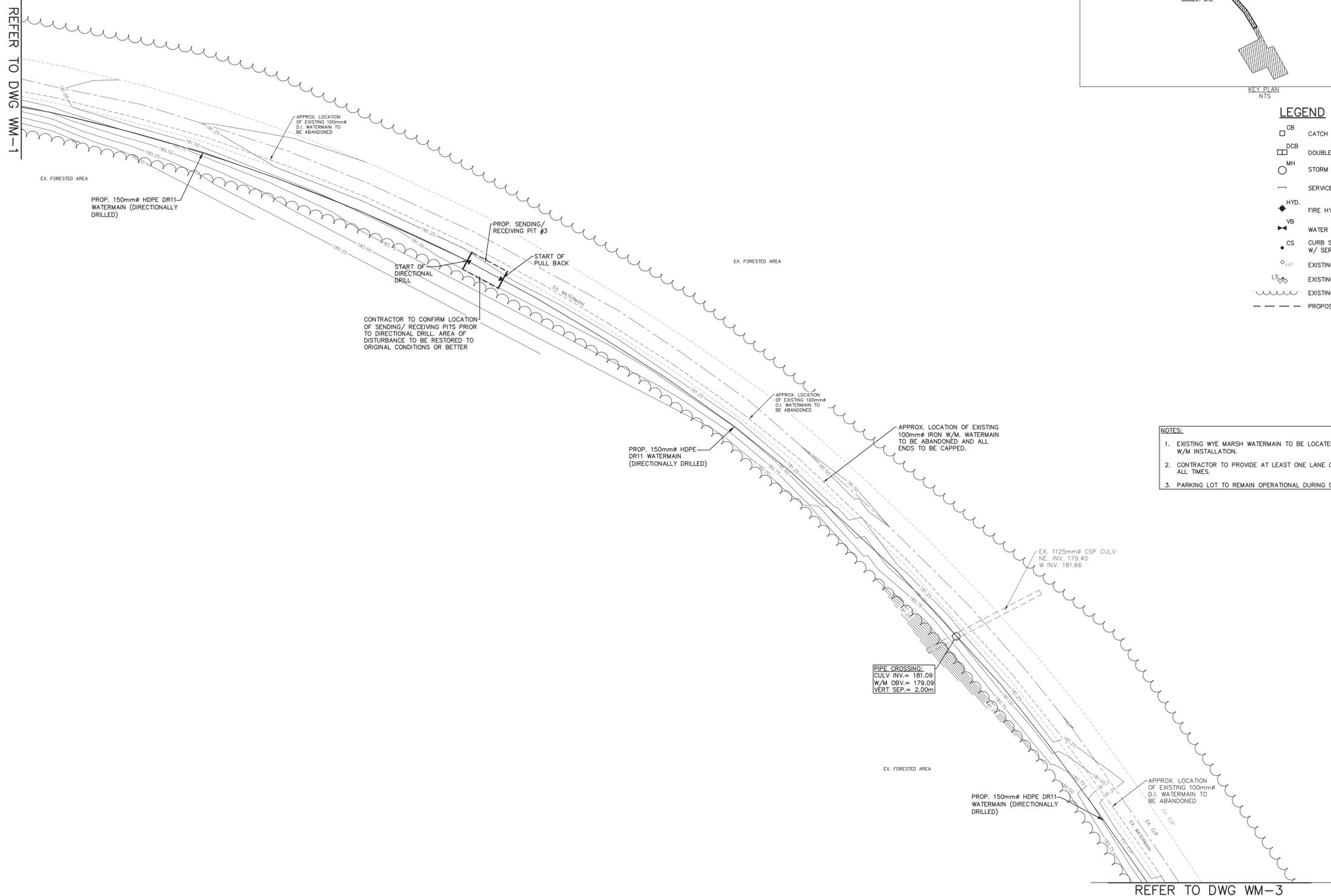
Do not scale drawings. Verify all dimensions and conditions on site and immediately notify the engineer of all discrepancies.

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project title
 titre du projet
**WYE_MARSH_WILDLIFE_CENTER
 16160_HIGHWAY_12_EAST
 MIDLAND_ONTARIO**

project title
 titre du dessin
GENERAL SERVICING 1

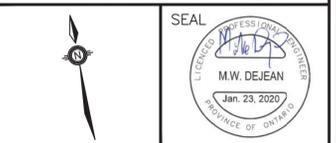
drawn by dessiné par	PG
designed by conçue par	MB
approved by approuvé par	GMP
tender soumission	project manager administrateur de projets ROD_KHALED
project date date du projet	2019/04/17
project no. no. du projet	18070
drawing no. dessiné no.	GS-1



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- NOTES:**
1. EXISTING WYE MARSH WATERMAIN TO BE LOCATED PRIOR TO PROP. W/M INSTALLATION.
 2. CONTRACTOR TO PROVIDE AT LEAST ONE LANE OF TRAFFIC ACCESS AT ALL TIMES.
 3. PARKING LOT TO REMAIN OPERATIONAL DURING CONSTRUCTION.

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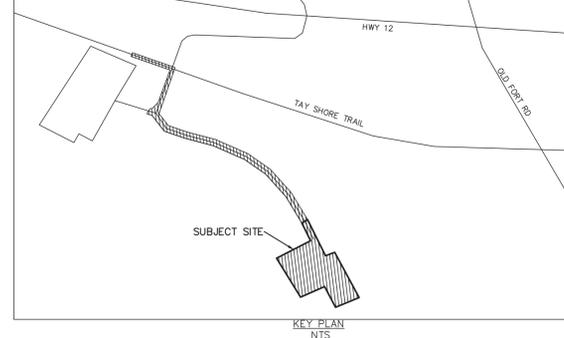
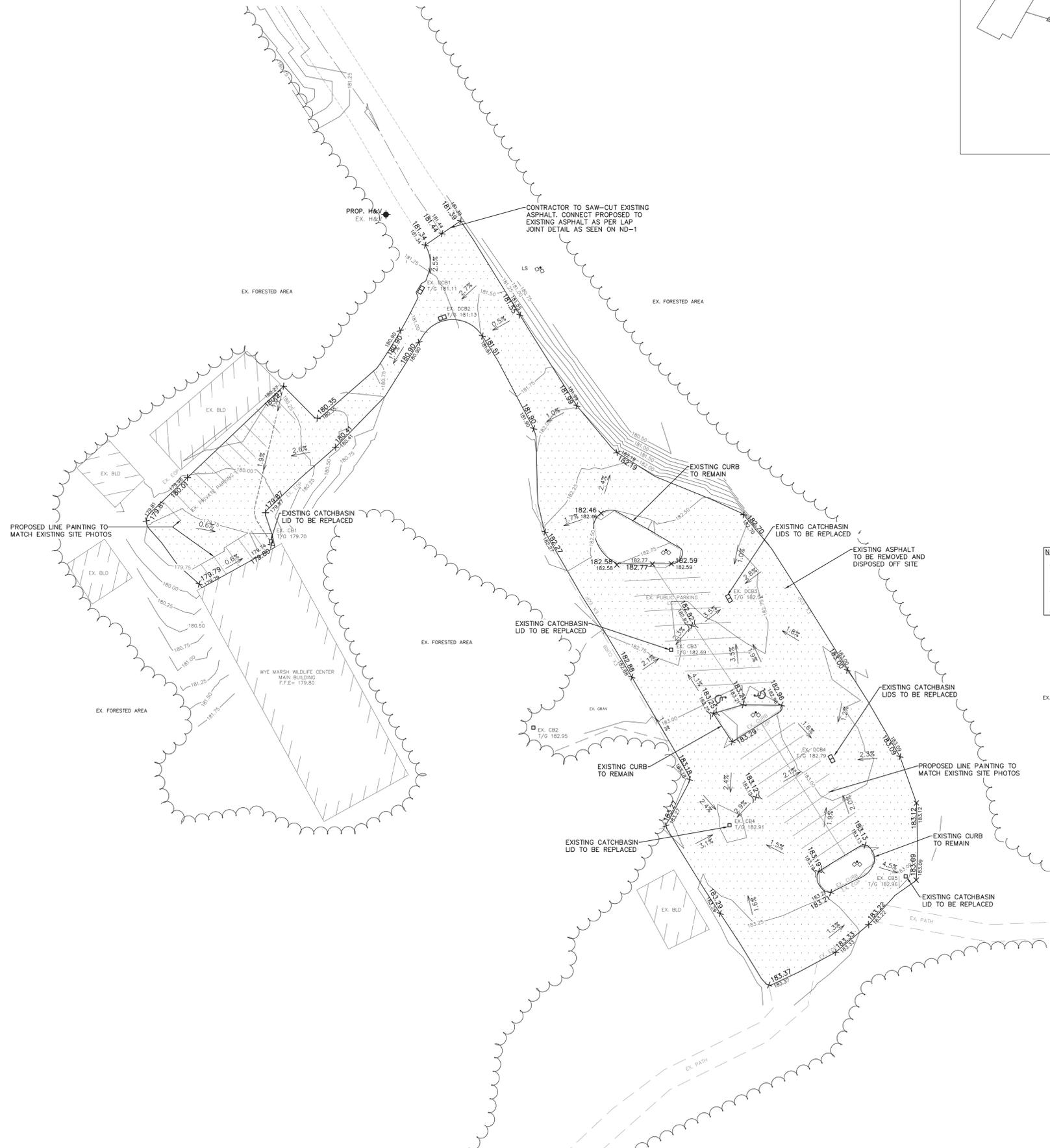
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project title
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**WYE MARSH WILDLIFE CENTER
 16160 HIGHWAY 12 EAST
 MIDLAND ONTARIO**
 WYE MARSH WATERMAIN REPLACEMENT &
 PARKING LOT RESURFACING

drawing title
 titre du dessin
WATERMAIN PLAN 2

drawn by
 dessiné par PG
 designed by
 conçu par MB
 approved by
 approuvé par GMP
 tender submission project manager
 soumission administrateur de projets
 ROD_KHALED

project date
 date du projet 2019/04/17
 project no.
 no. du projet 18070
 drawing no.
 dessiné no. WM-2



LEGEND

- CB CATCH BASIN
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- ~ EXISTING TREELINE
- - - PROPOSED LIMIT OF DISTURBANCE
- × 254.63 PROPOSED ELEVATION
- 254.09 EXISTING ELEVATION
- 1.5% PROPOSED DIRECTION AND GRADE
- BACK OF CURB
- EDGE OF PAVEMENT
-) (HIGH POINT
- PROPOSED AREA OF ASPHALT REMOVAL AND REPLACEMENT

- NOTES:
- EXISTING WYE MARSH WATERMAIN TO BE LOCATED PRIOR TO PROP. W/M INSTALLATION.
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**WYE MARSH WILDLIFE CENTER
16160 HIGHWAY 12 EAST
MIDLAND ONTARIO**

**WYE MARSH WATERMAIN REPLACEMENT &
PARKING LOT RESURFACING**

drawing title
titre du dessin
SITE GRADING PLAN 1

drawn by
dessiné par PG

designed by
conçu par MB

approved by
approuvé par GMP

tender submission
project manager
administrateur de projets
ROD_KHALED

project date
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project no.
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drawing no.
dessiné no. SG-1

