

1. 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 CITY OF BARRIE, 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 THE CITY OF BARRIE AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS.
D. THE STANDARD DRAWINGS INCLUDED WITH THESE PLANS ARE PROVIDED FOR CONVENIENCE ONLY AND ARE NOT TO BE CONSTRUED 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 THIS CONTRACT.

4. PARKING LOT

- A. THE PARKING LOT PAVEMENT STRUCTURE SHALL CONSIST OF THE FOLLOWING (REFER TO GEOTECHNICAL REPORT NO. 20-10674, APR. 21, 2020, BY CENTRAL EARTH ENGINEERING):
LIGHT DUTY HEAVY DUTY
- 40mm HL3 ASPHALT - 40mm HL3 ASPHALT
- 50mm HL8 ASPHALT - 80mm HL8 ASPHALT
- 150mm GRANULAR 'A' - 150mm GRANULAR 'A'
- 300mm GRANULAR 'B' - 450mm GRANULAR 'B'

2. MEASUREMENTS

- A. ALL DIMENSIONS ARE IN METRES, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES, UNLESS SPECIFIED OTHERWISE.
B. 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.

5. SEWERS

- A. INTERNAL SANITARY SEWERS AND LATERALS TO BE MINIMUM 150mm DIAMETER PVC DR 28 WITH JOINTS CONFORMING TO CSA STANDARD A257.3.
B. SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL), UNLESS APPROVED OTHERWISE BY THE ENGINEER.
C. PRECAST MANHOLES SHALL BE 1200mm DIAMETER UNLESS OTHERWISE SPECIFIED, AND SHALL BE IN ACCORDANCE WITH OPSD 701.010, FRAME AND GRATE TO BE WATER TIGHT AND TO CONFORM TO OPD 401.030.
D. MANHOLE TOPS ARE TO BE SET TO FINAL GRADE.

3. GENERAL

- A. 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. THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.
B. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
C. GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
D. ALL DISTURBED AREAS ARE TO BE RESTORATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE ENGINEER. ALL GRASS AND VEGETATION COVERED AREAS SHALL BE RESTORED BY PLACING 200mm OF APPROVED TOPSOIL AND NURSERY SOIL UNLESS NOTED OTHERWISE.

6. WATERMANS

- A. THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE WATERMAIN AND THE SANITARY/STORM SEWER IS TO BE 2.5 METERS.
B. A MINIMUM OF 0.5m VERTICAL CLEARANCE BETWEEN THE WATERMAIN AND ALL UTILITIES MUST BE KEPT, WHILE STILL MAINTAINING A MINIMUM DEPTH OF COVER AT ALL TIMES. WHERE WATERMAIN CONFLICTS WITH SEWER PIPE, DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY TO OBTAIN MINIMUM COVER AND VERTICAL CLEARANCE.
C. WATERMANS SHALL BE PVC DR 18 AND INSTALLED WITH A MINIMUM COVER OF 1.7m OVER THE MAINS. IF MINIMUM COVER CAN NOT BE ACHIEVED, INSULATION AS PER DETAIL (THIS SHEET) WILL BE REQUIRED.
D. WATERMAIN SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES.
E. COPPER WATER SERVICES 25mm DIA. SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSS 1104.010.
F. WATERMAIN BEDDING SHALL CONSIST OF WINTER SAND, 150mm BELOW AND 300mm ABOVE THE WATERMAIN.
G. CONCRETE THRUST BLOCKS ARE TO BE INSTALLED AT ALL TEES, BENDS, HYDRANTS, ENDS OF MAINS AND CONNECTIONS 100mm AND LARGER AS PER STANDARD DRAWINGS. ALL BENDS TO BE RESTRAINED.
H. ALL JOINTS MUST BE RESTRAINED AND THRUST BLOCKED.
I. ANY EXISTING, ON SITE, WATER WELLS MUST BE DECOMMISSIONED IN ACCORDANCE WITH O.R.G. 903 AND MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP) STANDARDS.

- J. WHERE A COPPER SERVICE MUST BE JOINED UNDER THE FLOOR, THE COPPER SHALL BE JOINED BY SILVER SOLDER CONNECTION ONLY.
K. ALL SERVICE PIPE MATERIAL MUST BE DUCTILE IRON FROM THE RESTRAINING FLANGE TO A MINIMUM OF 3 METERS OUTSIDE THE FOUNDATION. REFER TO BSD-61. ALL DUCTILE SHALL BE POLY WRAPPED FOR ADD PROTECTION.
L. OPERATION OF FIRE HYDRANTS AND VALVES ON POTABLE WATER BY OTHER THAN MUNICIPAL WORKS DEPARTMENT IS PROHIBITED.
M. THE CITY WILL SWAB, CHLORINATE AND FLUSH ALL NEW SERVICES. THE CONTRACTOR SHALL PERFORM PRESSURE TEST WITH WATER FIELD COORDINATOR WITNESSING.
N. EXTERNAL CONTRACTOR TO COORDINATE WITH INTERNAL CONTRACTOR ON ALL INSTALLATION, SWABBING, CHLORINATING AND TESTING WITNESSED BY WATER FIELD SERVICES COORDINATOR.
O. RESTRAINING SHALL BE REQUIRED ON ALL HYDRANTS A MINIMUM OF THREE LENGTHS OF PIPE. HYDRANTS TO BE PAINTED RED.
P. TRACING WIRE (#12 TW STRANDED COPPER) TO BE INSTALLED ON THE TOTAL LENGTH OF ALL PVC WATERMANS AND BROUGHT UP AT EACH HYDRANT AND CONNECTED TO FLANGE BOLT. REFER TO TRACER WIRE INSTALLATION STANDARD MANUAL AND DETAIL BSD-515.
Q. SERVICE TAPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0m AND A MINIMUM OF 0.6m FROM JOINTS.
R. CONTRACTOR TO PROVIDE PLAN FOR REMOVING CHLORINATED WATER FROM SITE.
S. A CHLORINATION TAIL SHALL BE INSTALLED JUST BEHIND TAPPING VALVE TO FACILITATE CHLORINATING SERVICE, TO BE REMOVED AFTER TESTING.

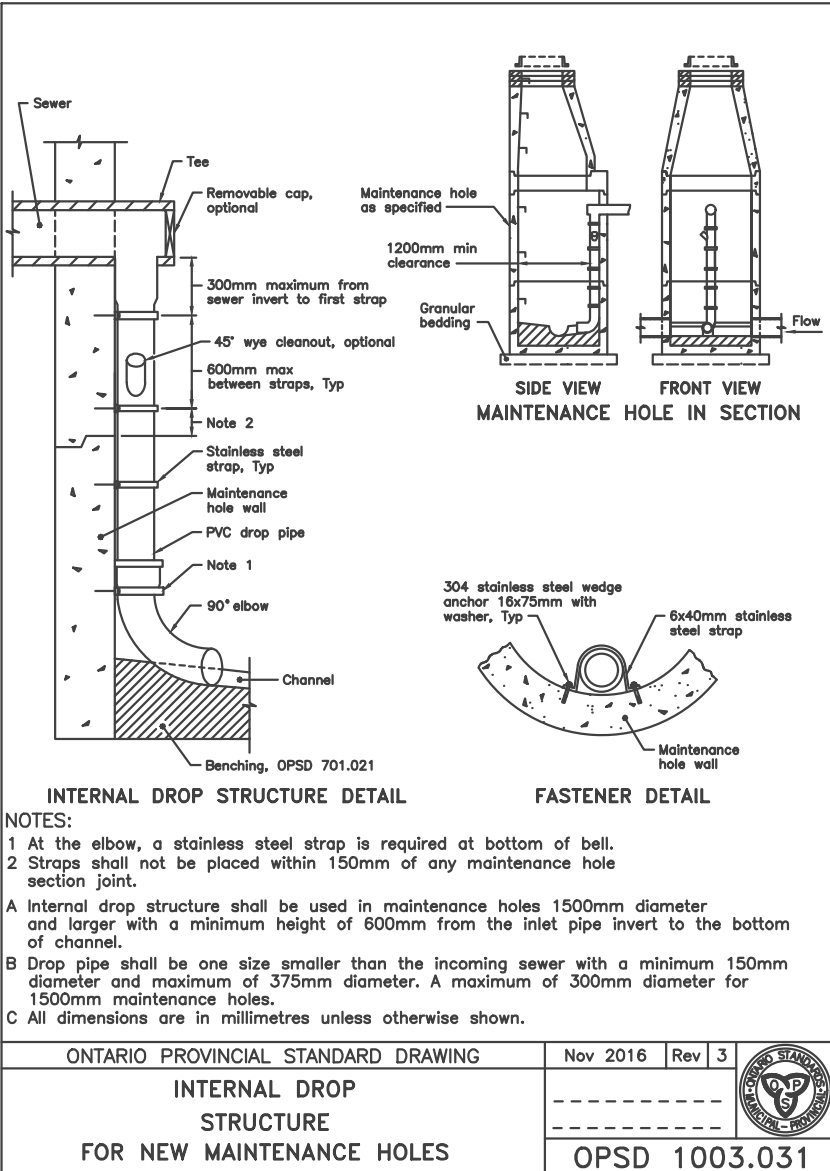
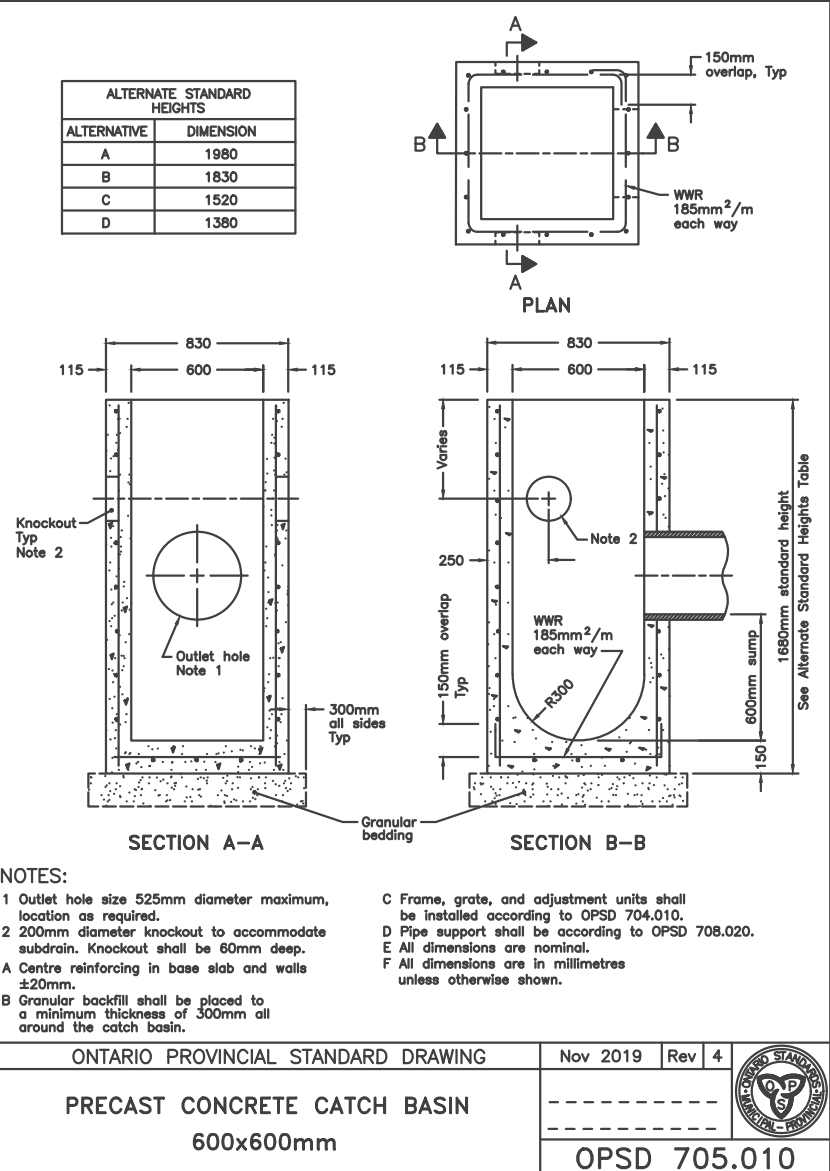
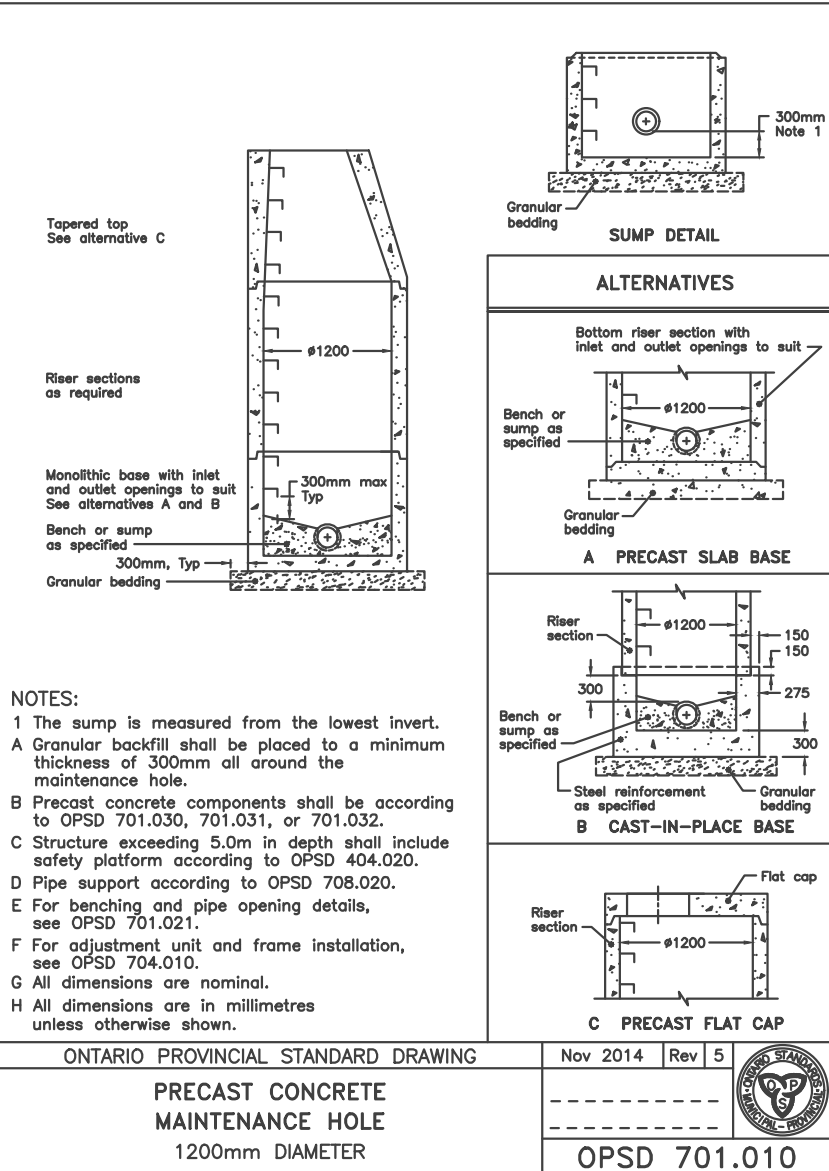
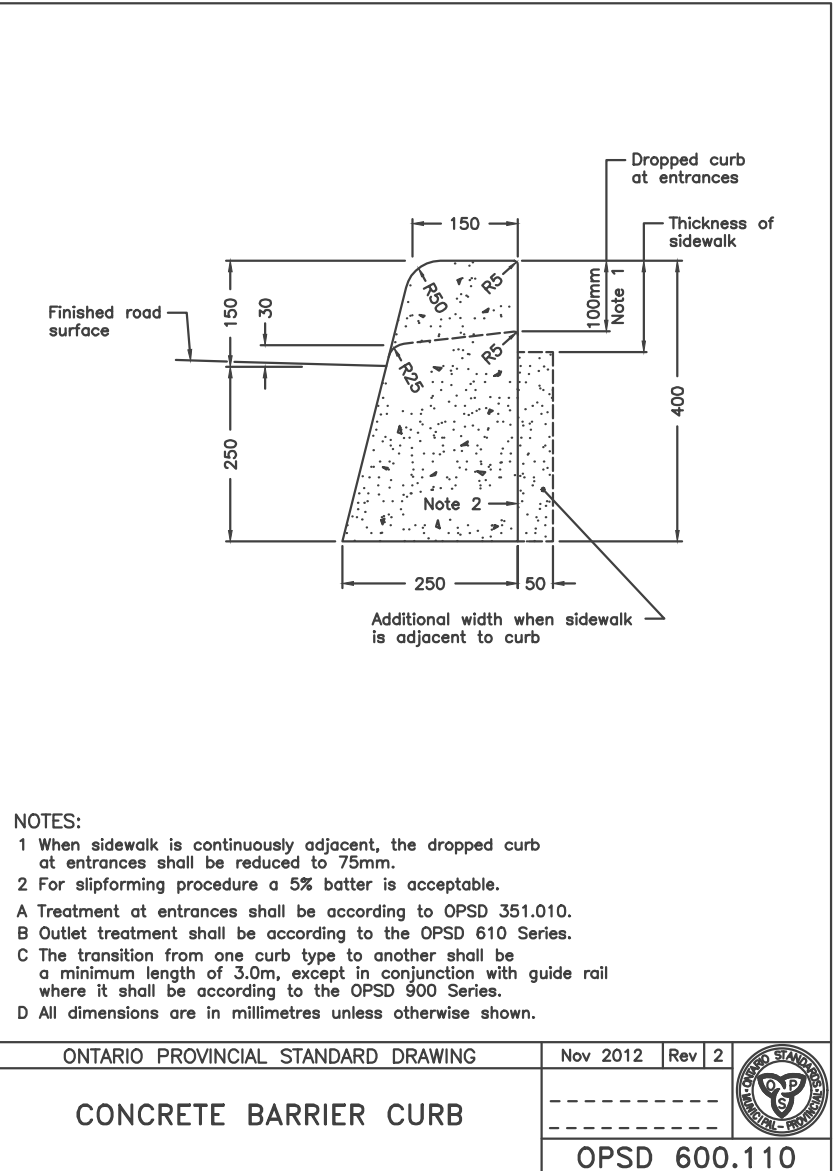
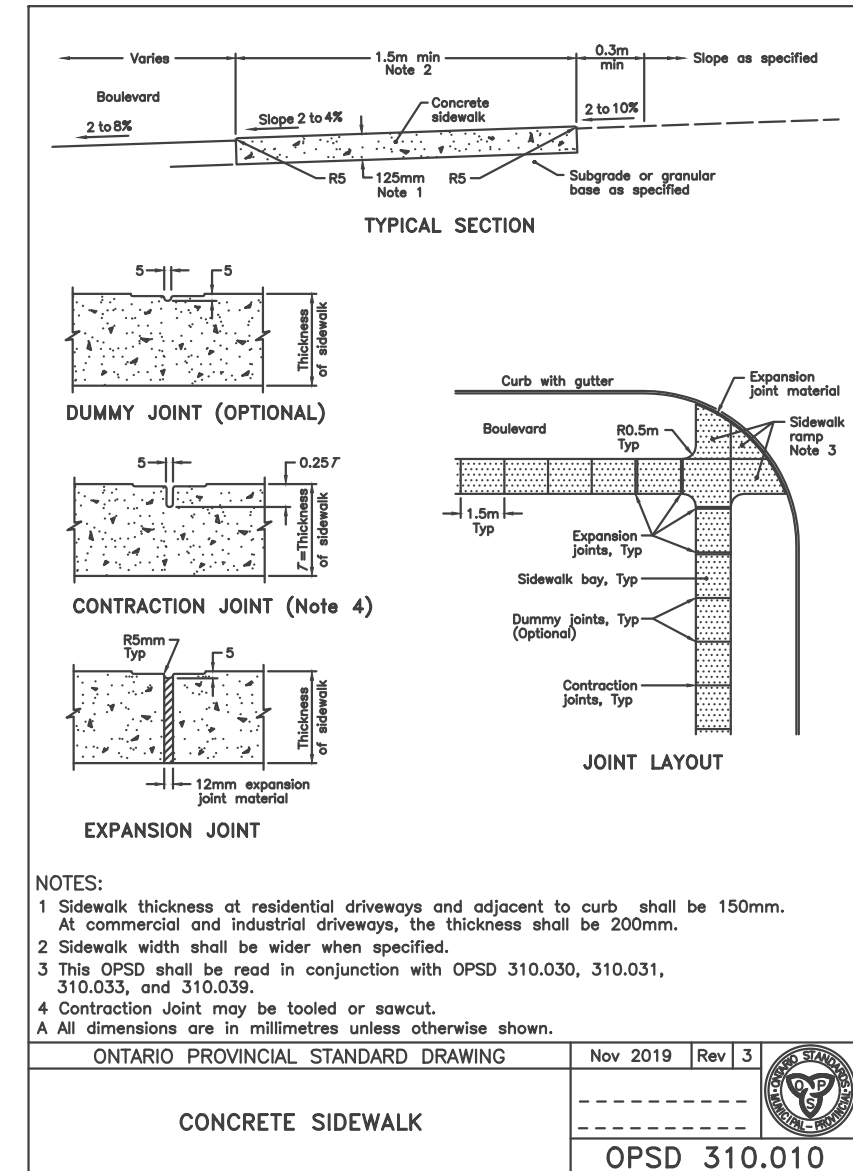


Table with 2 columns: Rainfall Intensity (mm/hr) and Runoff Coefficient. Includes CDS Estimated Net Annual Solids Load Reduction based on the Rational Rainfall Method.

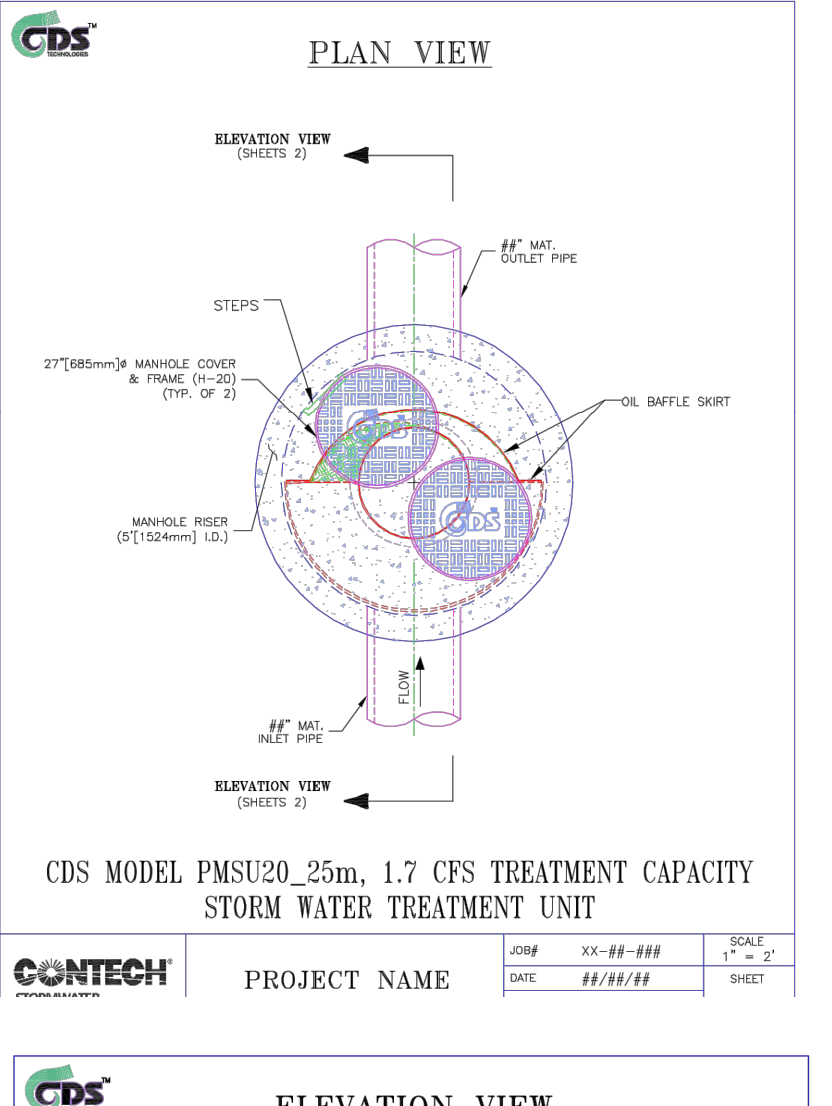
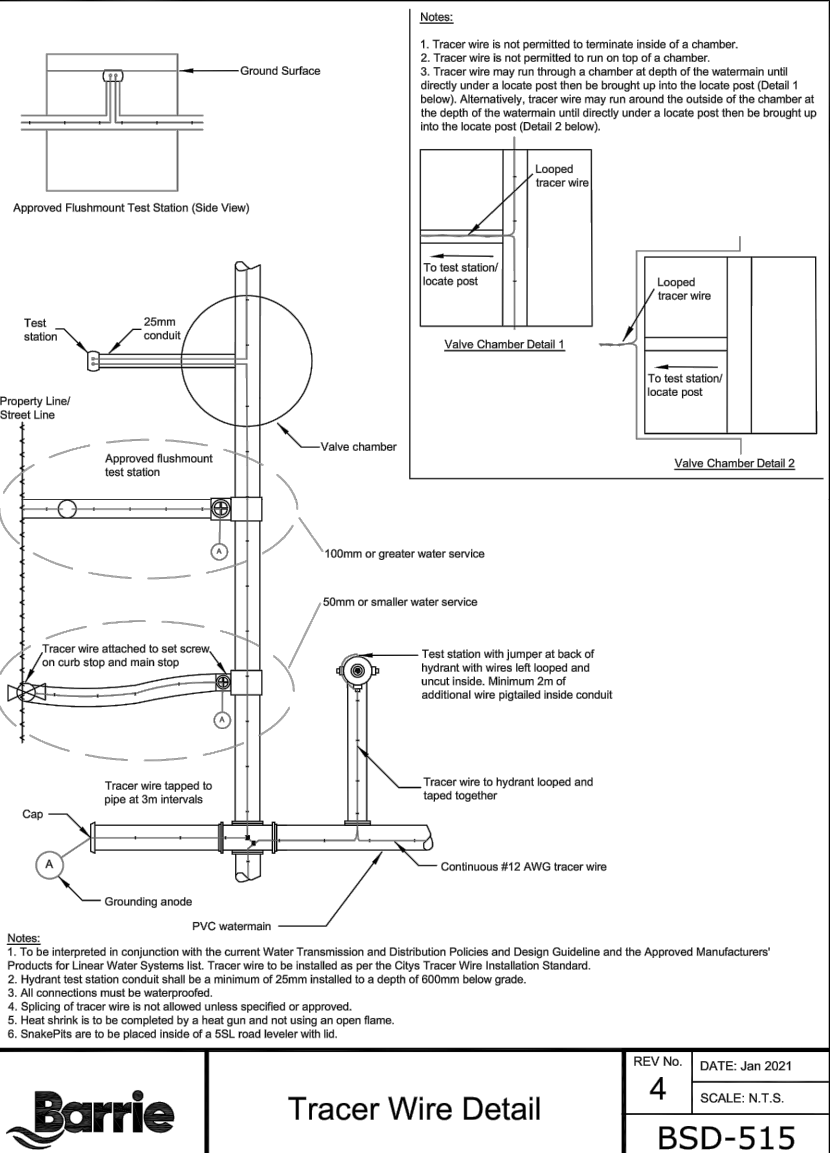
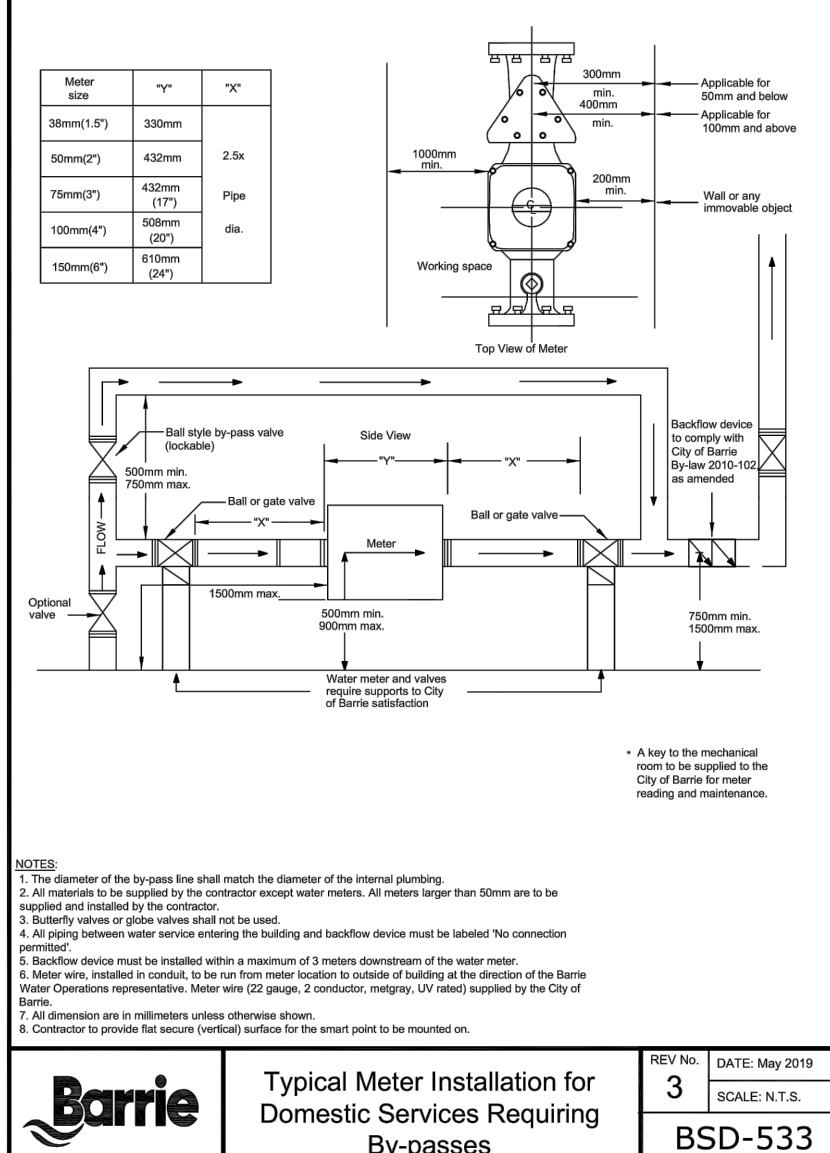
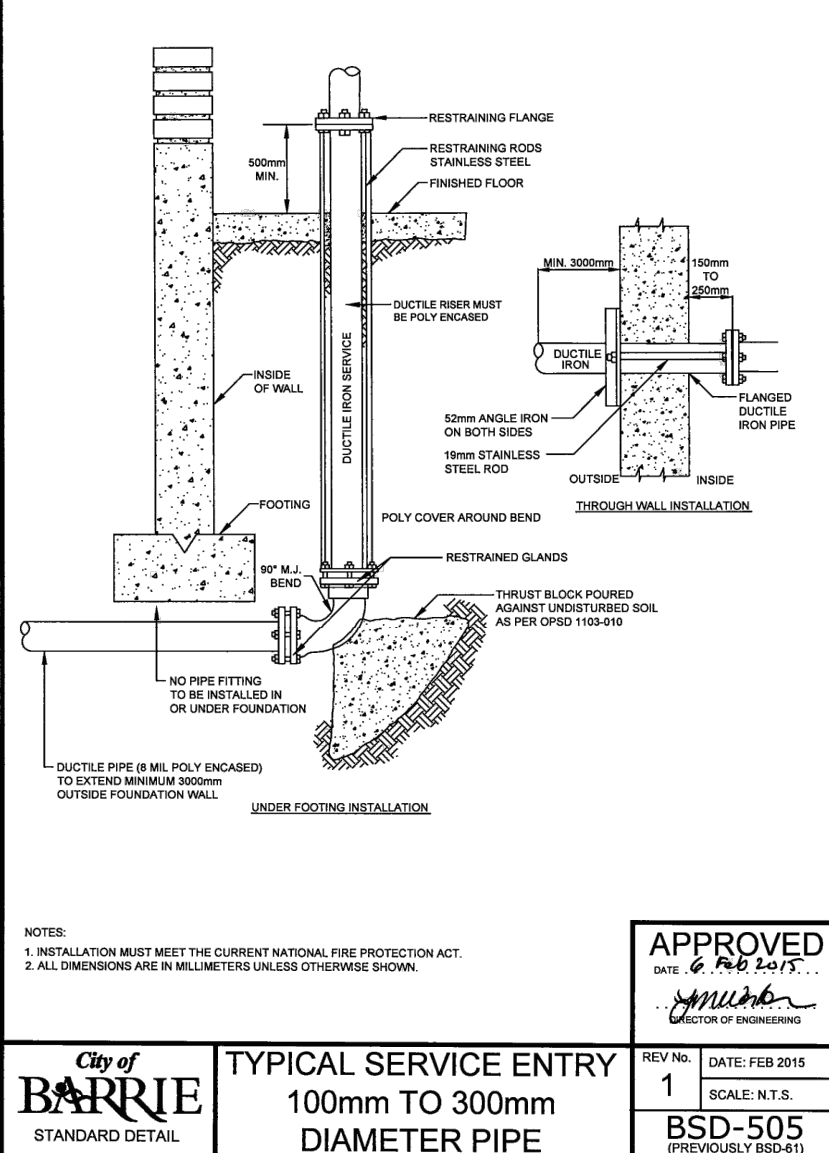
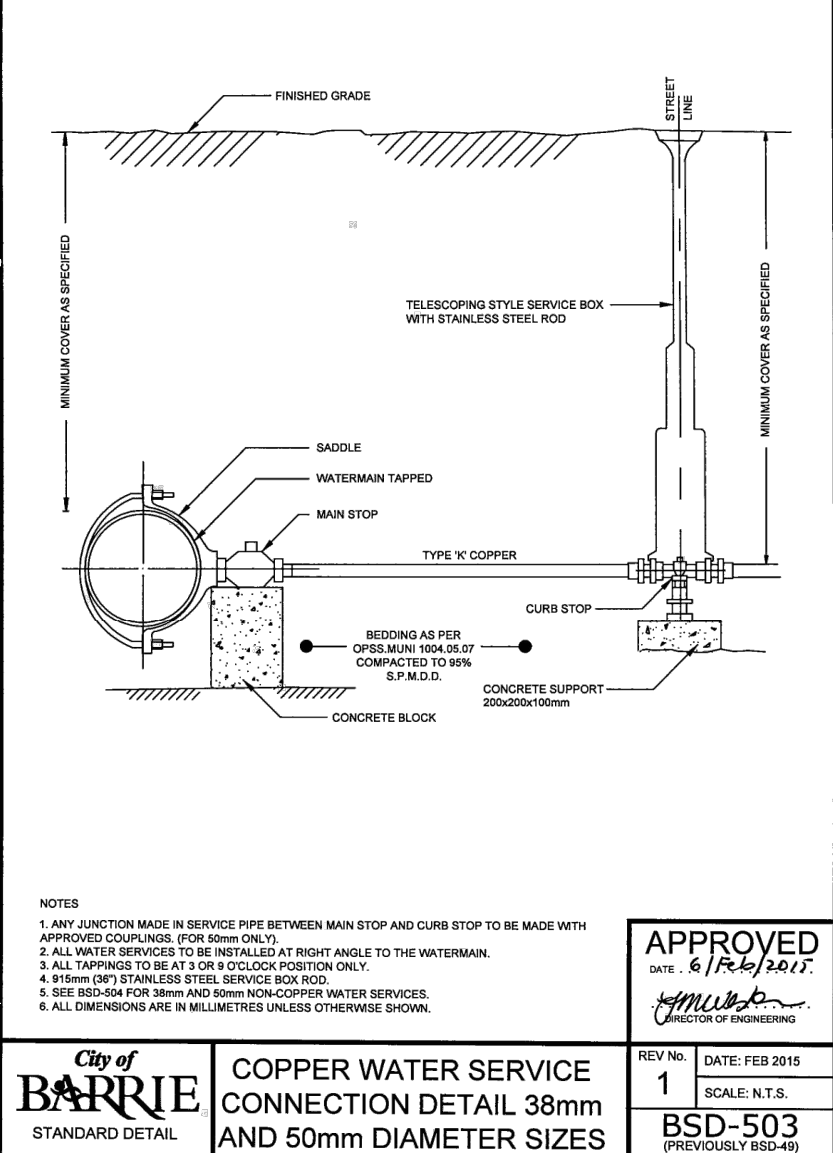
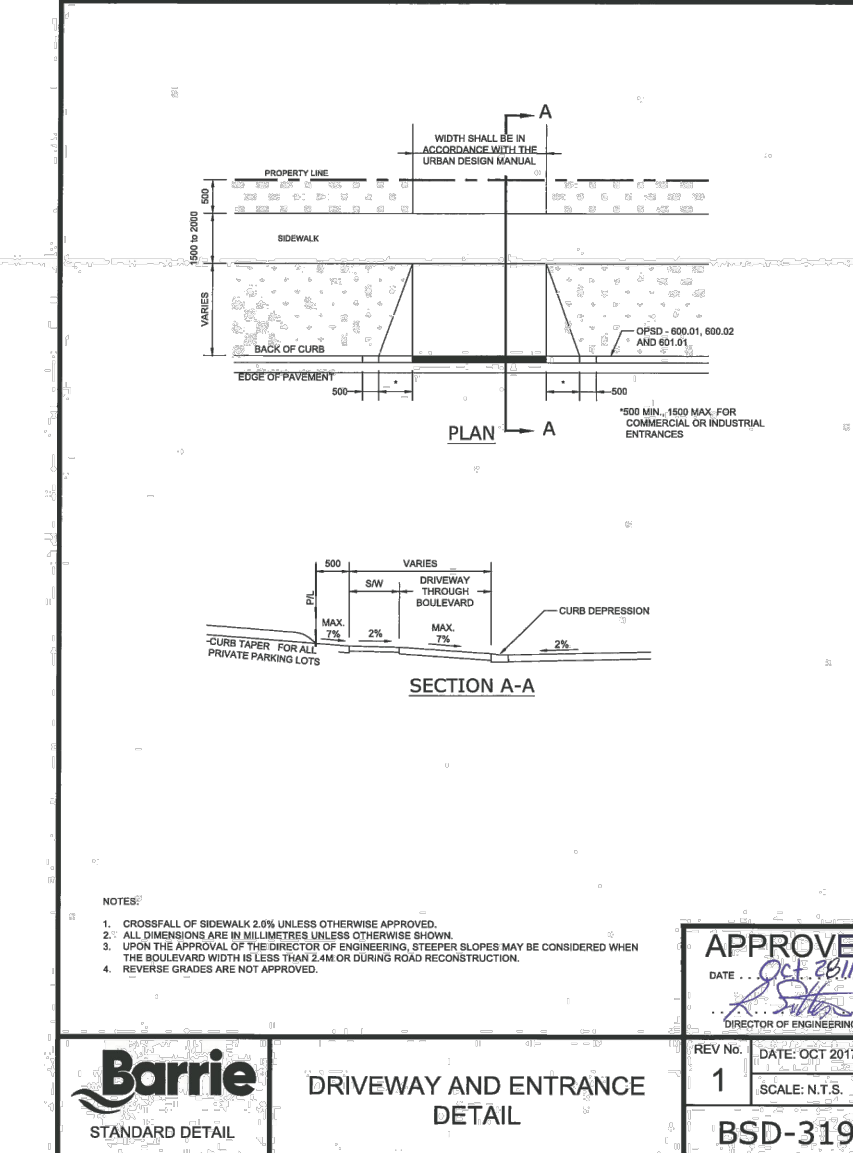
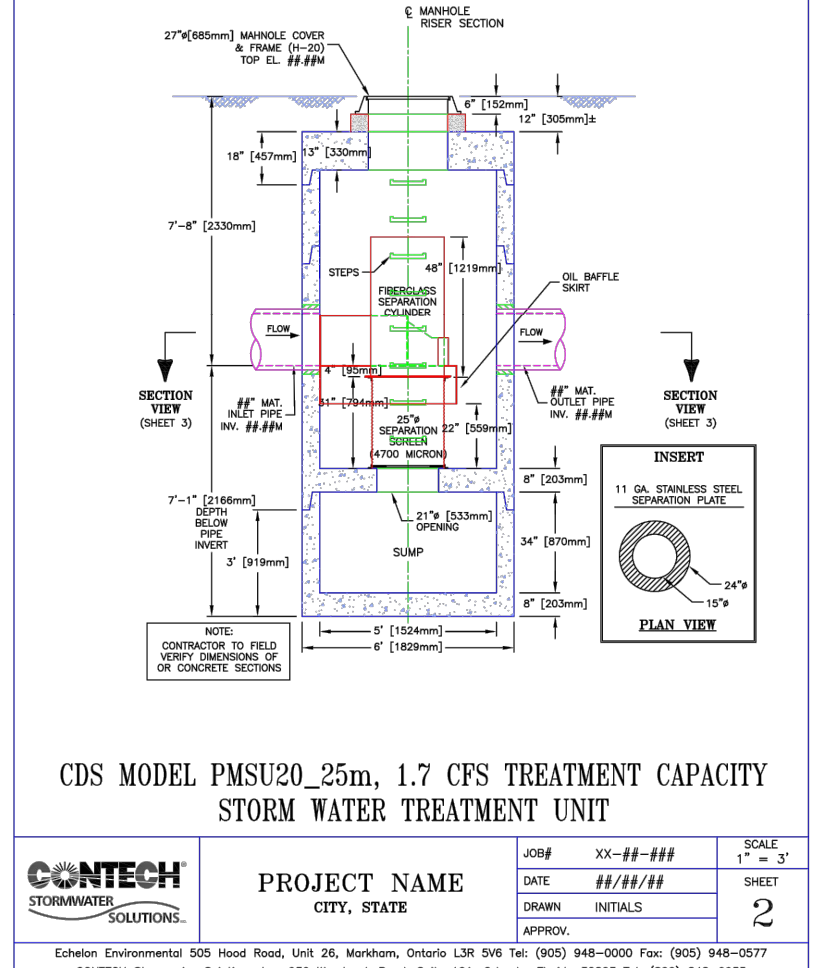
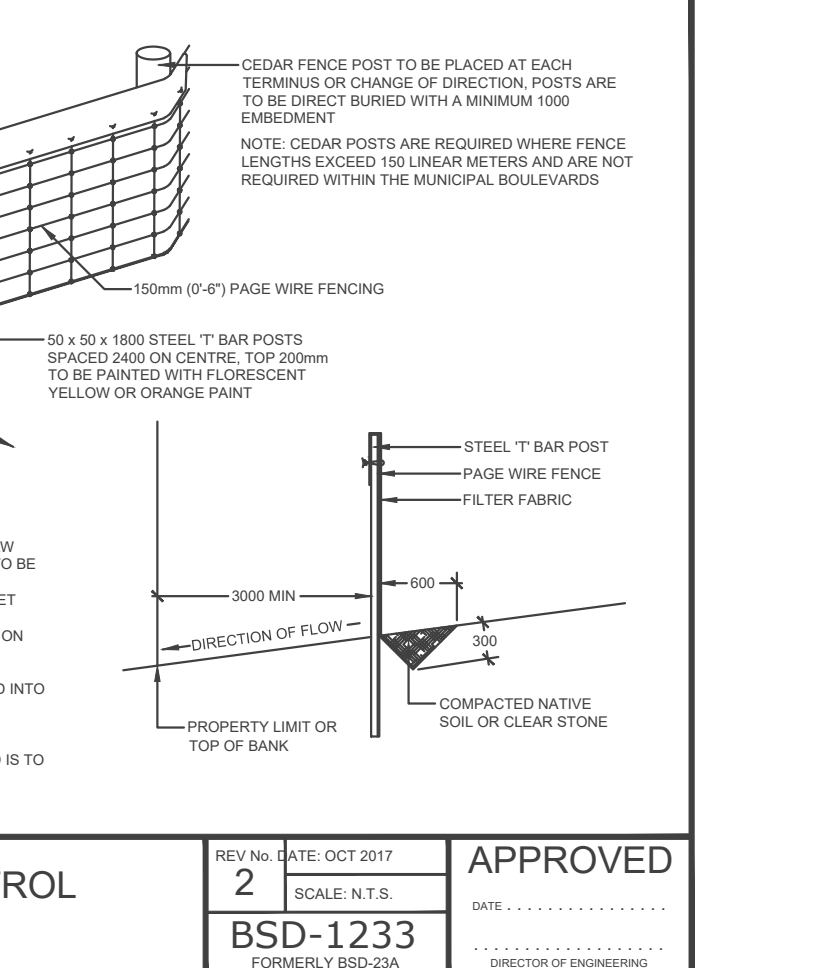
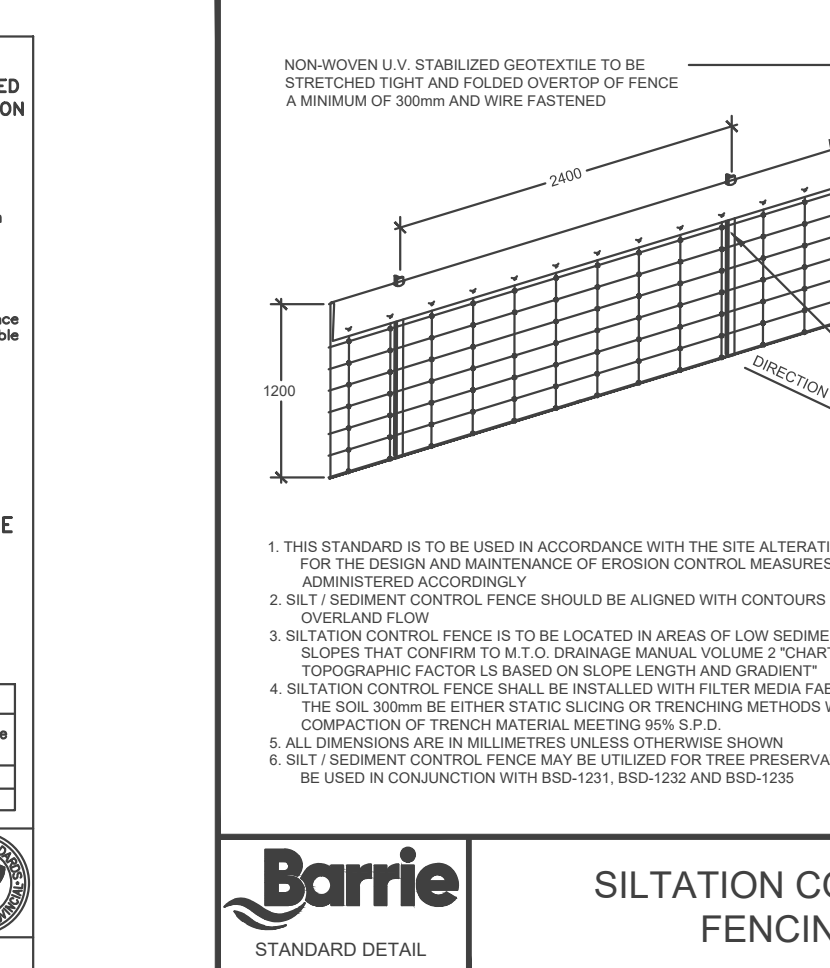
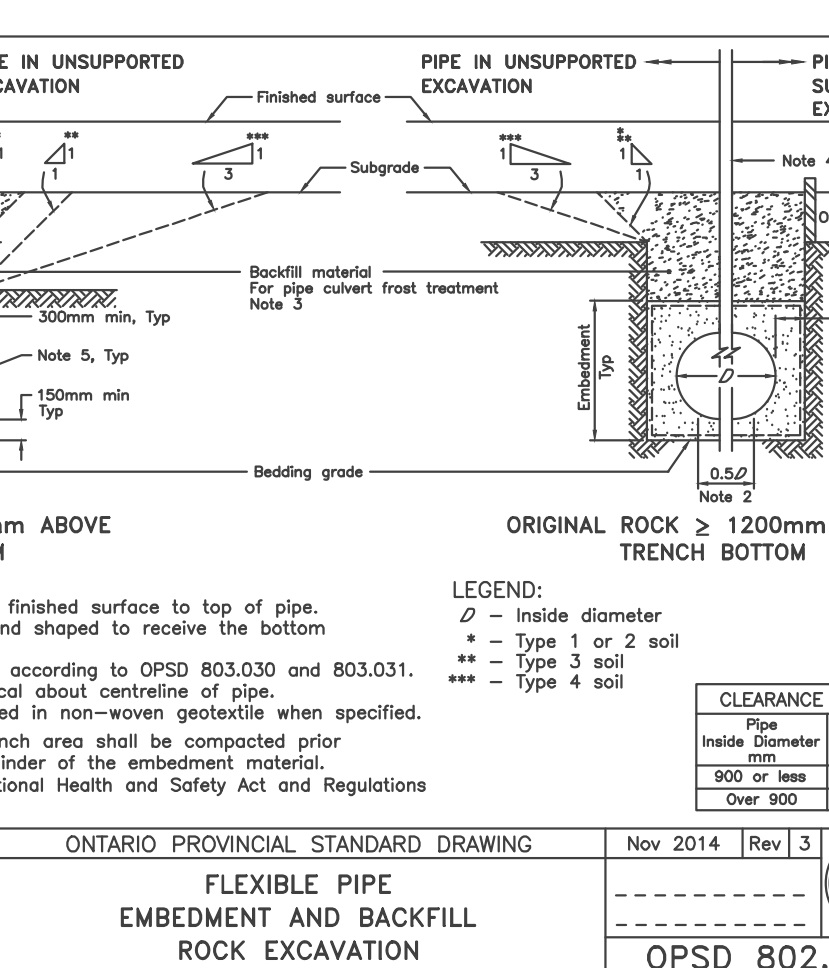
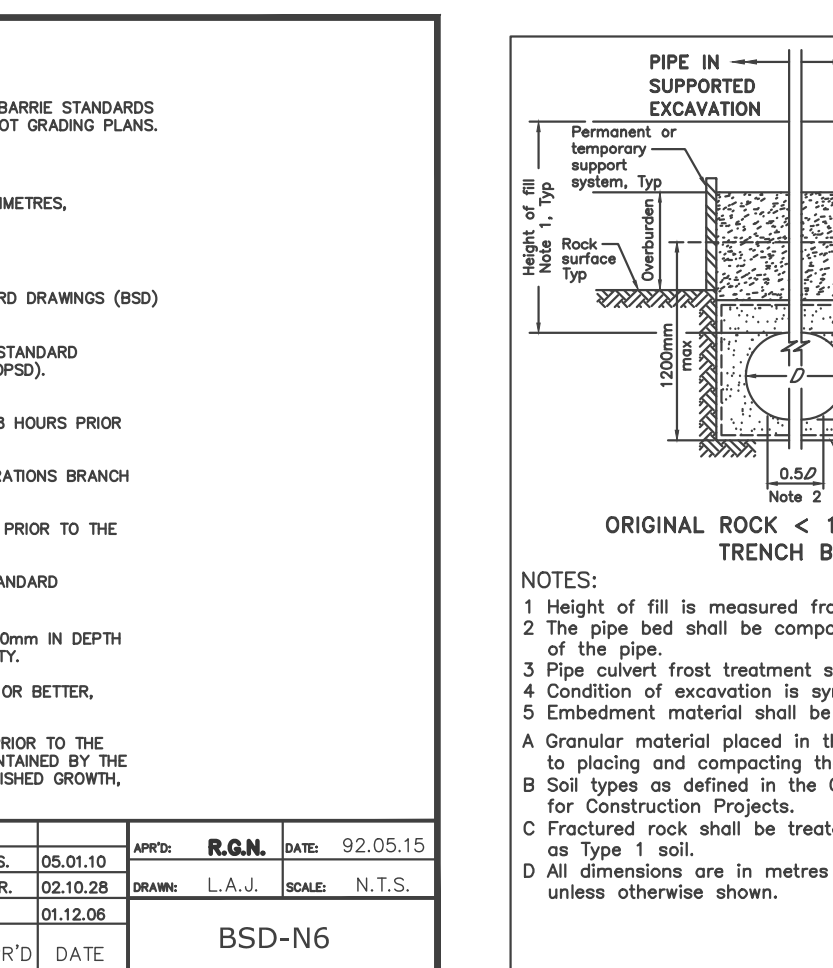


Table with 4 columns: No., Revision, Date, and Description. Includes City of Barrie Standard and General Notes.



Gerrits Engineering logo and contact information: 222 Mapleview Drive West, Suite 300, Barrie, ON L4N 5E7 Canada. Tel: 705.737.3303, Fax: 705.737.1772, www.gerrits.com

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Table with 3 columns: No., Issuance Description, and YY/MM/DD. Includes Issued for Quotation, Site Plan Approval, and SPA-2ND SUBMISSION.

Table with 2 columns: Rainfall Intensity (mm/hr) and Runoff Coefficient. Includes CDS Estimated Net Annual Solids Load Reduction based on the Rational Rainfall Method.

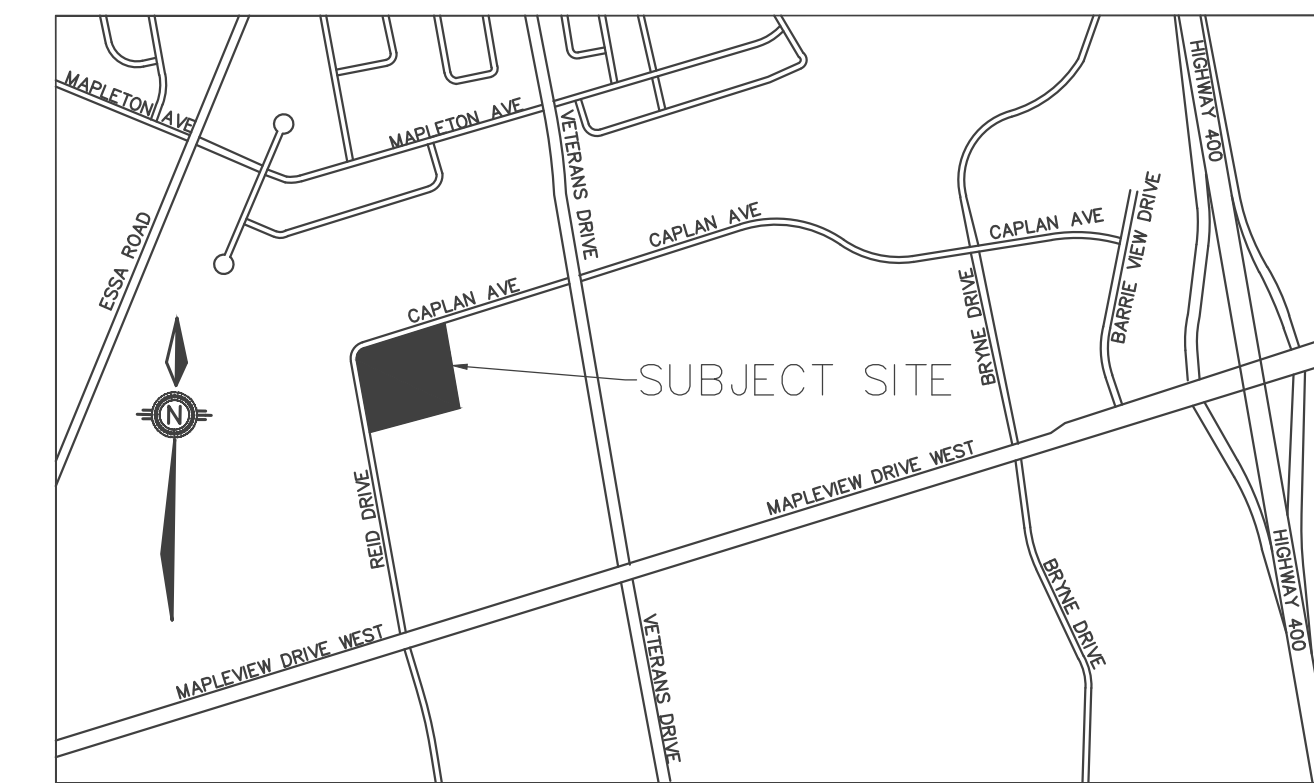
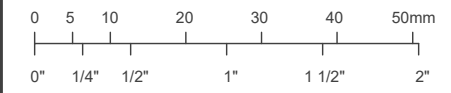
Site Plan Approval drawing showing plan view and elevation view of the storm water treatment unit.

Notes and Details section for the site plan approval, including project information, scale, and orientation.

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This drawing may have been reduced.



LEGEND

- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- EXISTING CATCH BASIN
- ▣ PROPOSED CATCH BASIN
- ⊗ EXISTING CATCH BASIN MAINTENANCE HOLE
- ⊙ PROPOSED CATCH BASIN MAINTENANCE HOLE
- ⊗ EXISTING STORM MAINTENANCE HOLE
- ⊙ PROPOSED STORM MAINTENANCE HOLE
- ▲ PROPOSED ELEVATION
- ▽ EXISTING ELEVATION
- ▲ PROPOSED GRADE
- ▲ EXISTING HYDRO TRANSFORMER
- SERVICE CAP
- ⊕ EXISTING FIRE HYDRANT
- ⊕ PROPOSED FIRE HYDRANT
- ⊕ EXISTING WATER VALVE
- ⊕ PROPOSED WATER VALVE
- ⊕ EXISTING CURB STOP
- ⊕ PROPOSED CURB STOP
- ⊕ PROPOSED SIGN
- ⊕ EXISTING LIGHT POLE
- ▽ MANDOOR
- ▽ OVERHEAD DOOR
- ▽ FIRE DEPT CONNECTION
- ⊕ ELECTRICAL ROOM
- ⊕ WATER METER LOCATION
- ▲ PROPOSED TRANSFORMER
- ▨ LANDSCAPE AREA
- ▨ LIGHT-DUTY ASPHALT AREA
- ▨ CONCRETE AREA
- ▨ HEAVY-DUTY ASPHALT AREA

No.	Issuance Description	YY/MM/DD
1.	ISSUED FOR QUOTATION	20/08/06
2.	SITE PLAN APPROVAL	20/12/20
3.	SPA-2ND SUBMISSION	21/03/19
4.		

HORIZONTAL CONTROL:
 ID# 03120040035
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED JUST BEHIND THE SOUTH CURB LINE OF MAPLEVIEW DRIVE WEST, EAST OF VETERANS DRIVE. NORTHING=N4909639.121m, EASTING=E604588.740m

ID# 03120040027
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED ON NW CORNER OF MAPLEVIEW AND BARRIE VIEW DR AT BACK OF SIDEWALK NORTHING=N4909639.121m, EASTING=E604588.426m

VERTICAL CONTROL:
 ID# 03120060018
 BRASS TABLET. LOCATED ON CULVERT HEADWALL NE CORNER OF MAPLEVIEW AND VETERANS DR. SET FLUSH ON E. FACE OF HEADWALL, 110mm BELOW TOP OF WALL AND 110mm N. OF THE SOUTH INSIDE CORNER OF THE WALL. ELEVATION=306.589m

ID# 03120030031
 BRASS TABLET. LOCATED ON CULVERT HEADWALL SW CORNER OF MAPLEVIEW AND BARRIE VIEW DR. SET FLUSH ON W. FACE OF HEADWALL, 290mm BELOW TOP OF WALL AND 180mm NORTH OF THE S. END OF WALL. ELEVATION=301.195m

BENCHMARK: TOP OF TOP OF SPINDLE OF FIRE HYDRANT ELEVATION OF 311.23

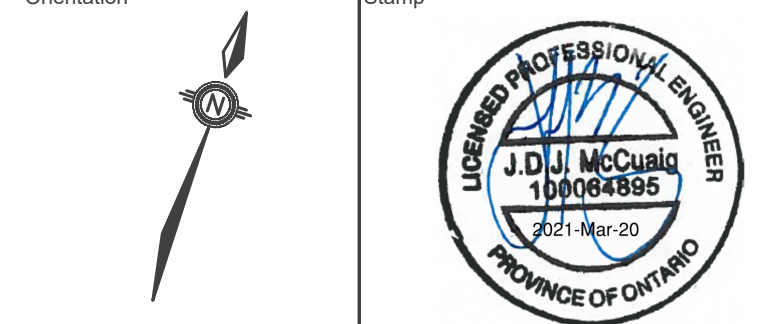
Issued For: SITE PLAN APPROVAL



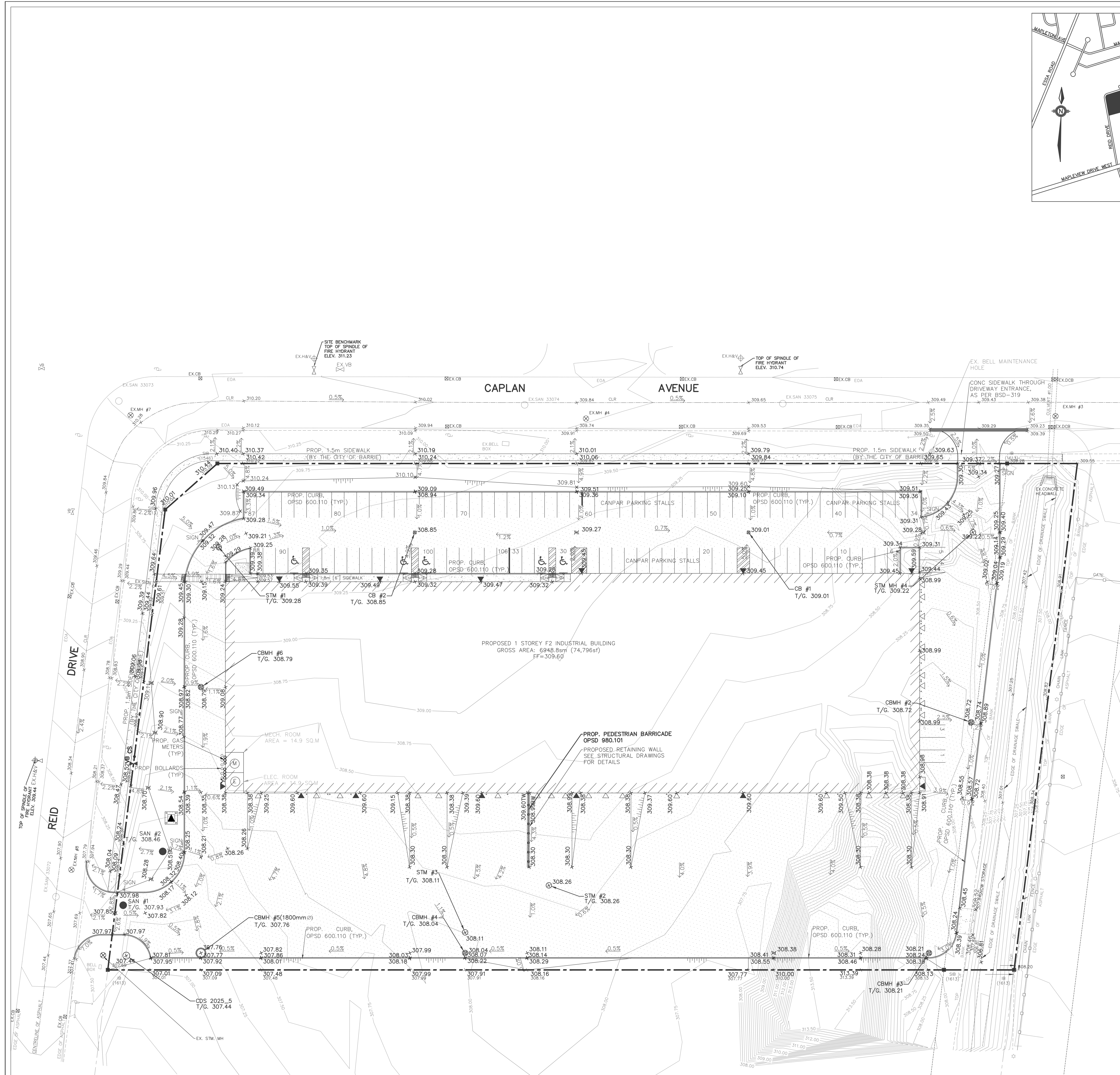
Client
 Project
1 REID DR.
 (149 CAPLAN AVENUE, BARRIE, ONTARIO)

Drawing: SITE GRADING PLAN

Project No.	109-258-19	Designed by:	AC / SAS	Checked by:	KF
Scale:	1:400	Drawn by:	AC / SAS	Approved by:	JDM
Orientation		Stamp			

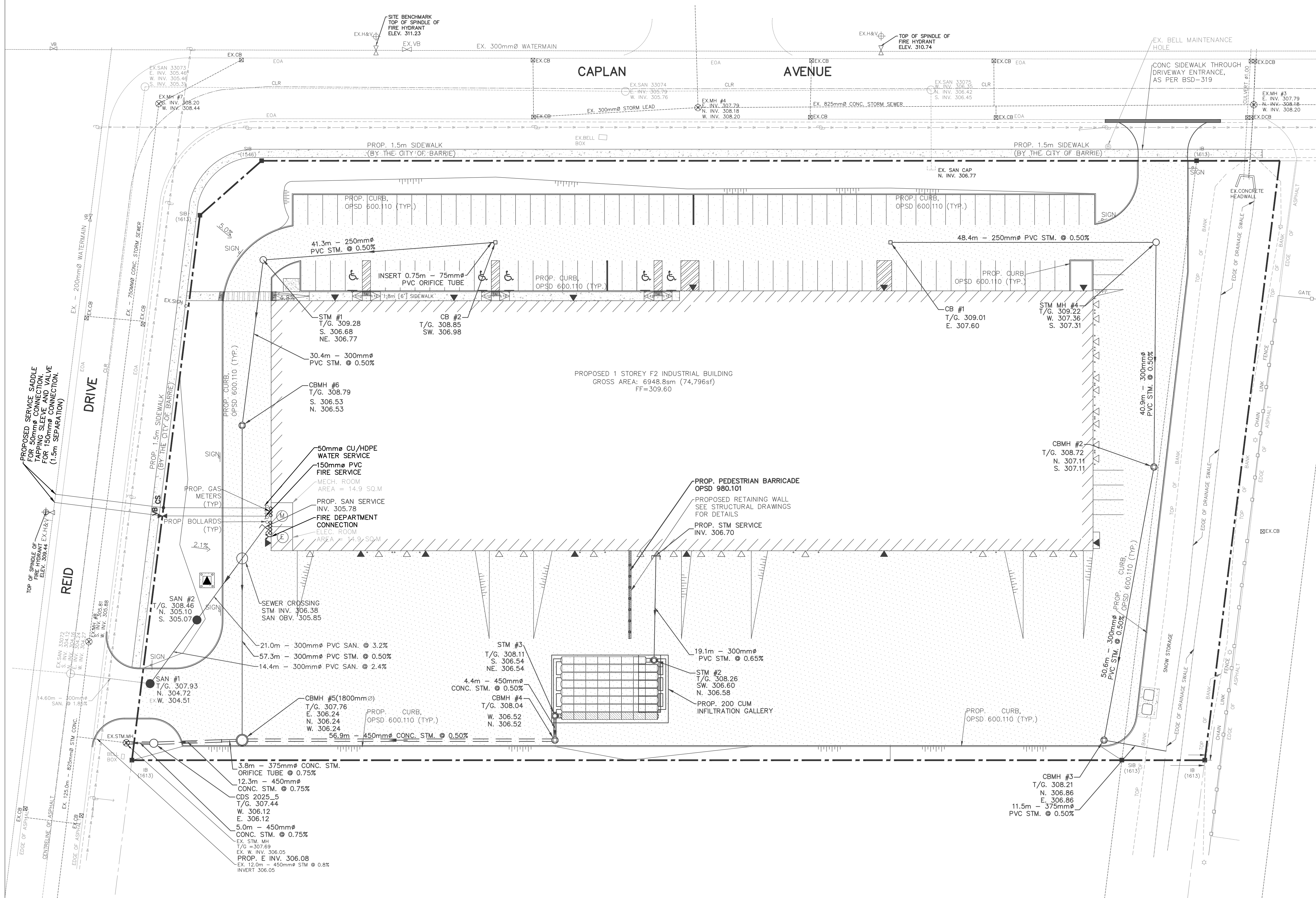
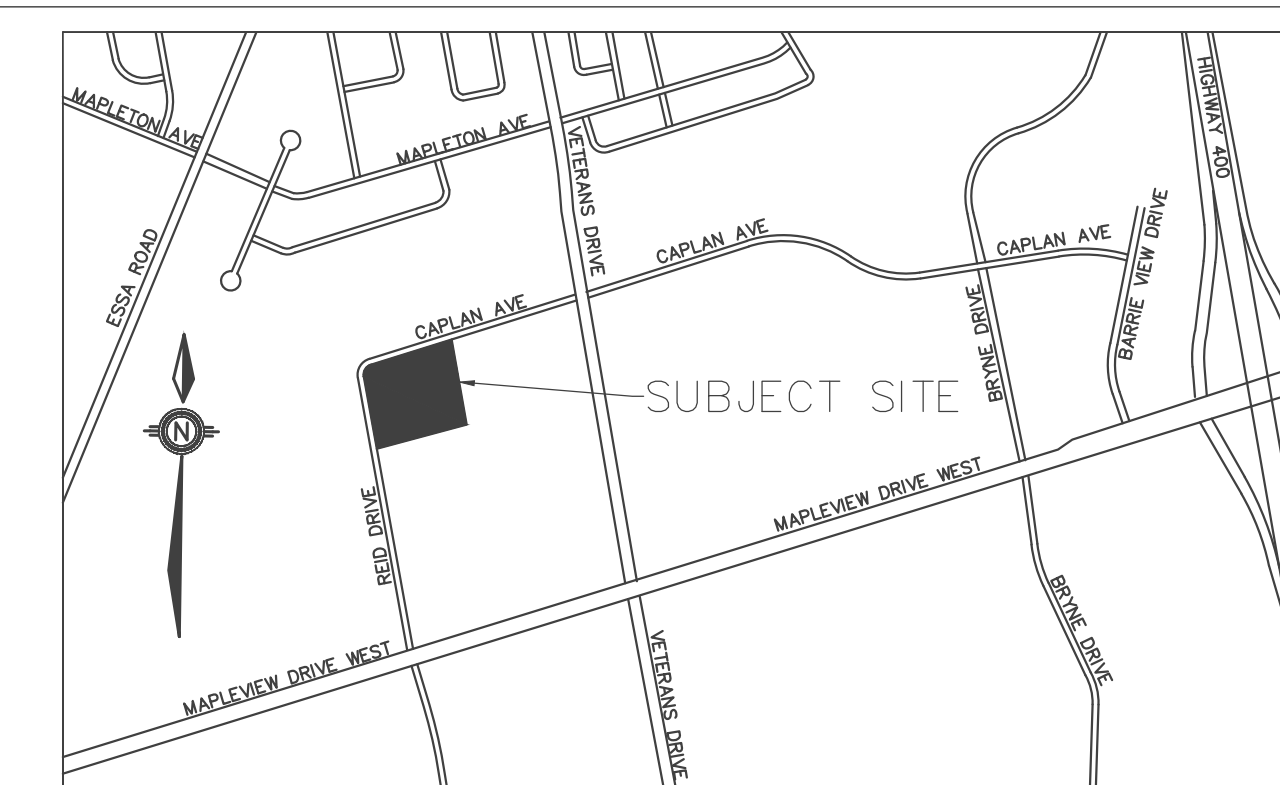


Drawing No. **SG-1**



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This drawing may have been reduced.
 0 5 10 20 30 40 50mm
 0' 14" 12" 1' 1 1/2" 2"



LEGEND

- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- ⊠ EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- ⊗ EXISTING CATCH BASIN MAINTENANCE HOLE
- ⊙ PROPOSED CATCH BASIN MAINTENANCE HOLE
- ⊗ EXISTING STORM MAINTENANCE HOLE
- ⊙ PROPOSED STORM MAINTENANCE HOLE
- 324.00 PROPOSED ELEVATION
- 324.00 EXISTING ELEVATION
- 1.6% PROPOSED GRADE
- ▲ EXISTING HYDRO TRANSFORMER
- SERVICE CAP
- ⊕ EXISTING FIRE HYDRANT
- ⊕ PROPOSED FIRE HYDRANT
- ▽ EXISTING WATER VALVE
- ▽ PROPOSED WATER VALVE
- ⊕ EX.CS EXISTING CURB STOP
- ⊕ PROPOSED CURB STOP
- ⊕ PROPOSED SIGN
- ⊕ EXISTING LIGHT POLE
- ▶ MANDOOR
- ▽ OVERHEAD DOOR
- ⊕ FIRE DEPT CONNECTION
- ⊕ ELECTRICAL ROOM
- ⊕ WATER METER LOCATION
- ▲ PROPOSED TRANSFORMER
- LANDSCAPE AREA
- LIGHT-DUTY ASPHALT AREA
- CONCRETE AREA
- HEAVY-DUTY ASPHALT AREA

No.	Issuance Description	YY/MM/DD
1.	ISSUED FOR QUOTATION	20/08/06
2.	SITE PLAN APPROVAL	20/12/30
3.	SPA - 2ND SUBMISSION	21/03/19
4.		

HORIZONTAL CONTROL:
 ID# 03120040035
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED JUST BEHIND THE SOUTH CURB LINE OF MAPLEVIEW DRIVE WEST, EAST OF VETERAN'S DRIVE. NORTHING-N4909639.121m, EASTING-E603897.740m

ID# 03120040027
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED ON NW CORNER OF MAPLEVIEW AND BARRIE VIEW DR AT BACK OF SIDEWALK. NORTHING-N4909901.795m, EASTING-E604588.426m

VERTICAL CONTROL:
 ID# 03120060018
 BRASS TABLET. LOCATED ON CULVERT HEADWALL NE CORNER OF MAPLEVIEW AND VETERANS DR. SET FLUSH ON E. FACE OF HEADWALL, 110mm BELOW TOP OF WALL AND 110mm N. OF THE SOUTH INSIDE CORNER OF THE WALL. ELEVATION-306.589m

ID# 03120030031
 BRASS TABLET. LOCATED ON CULVERT HEADWALL SW CORNER OF MAPLEVIEW AND BARRIE VIEW DR. SET FLUSH ON W. FACE OF HEADWALL, 290mm BELOW TOP OF WALL AND 180mm NORTH OF THE S. END OF WALL. ELEVATION-301.195m

BENCHMARK: TOP OF TOP OF SPINDLE OF FIRE HYDRANT ELEVATION OF 311.23

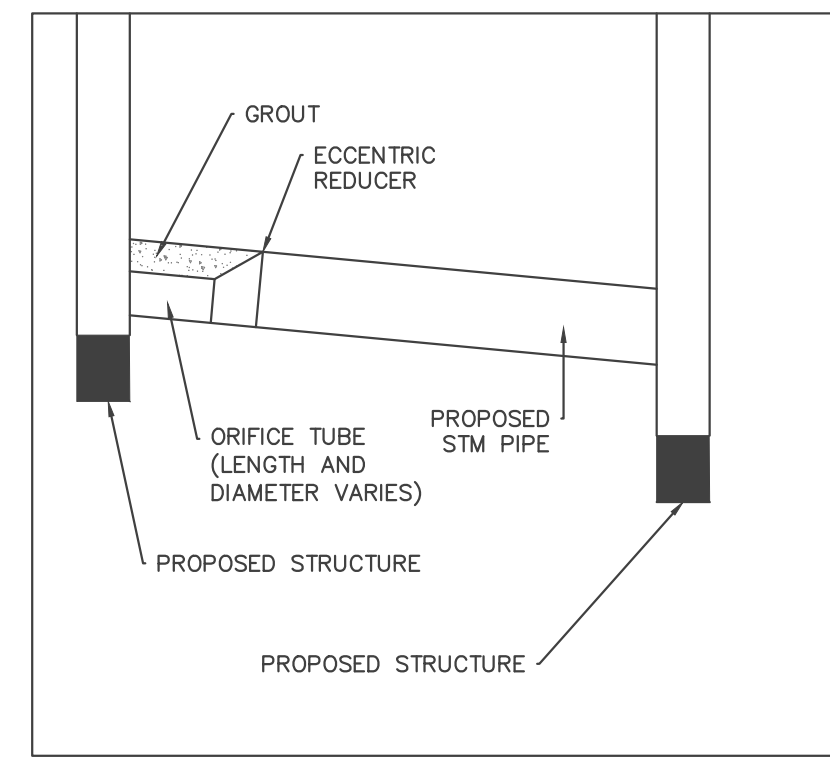
SITE PLAN APPROVAL

Client:

Project: 1 REID DR.
 (140 CAPLAN AVENUE, BARRIE, ONTARIO)

SITE SERVICING PLAN

Project No.	109-258-19	Designed by:	AC /	Checked by:	KF
Scale:	1:400	Drawn by:	AC /	Approved by:	JDM
Orientation:		Stamp:			

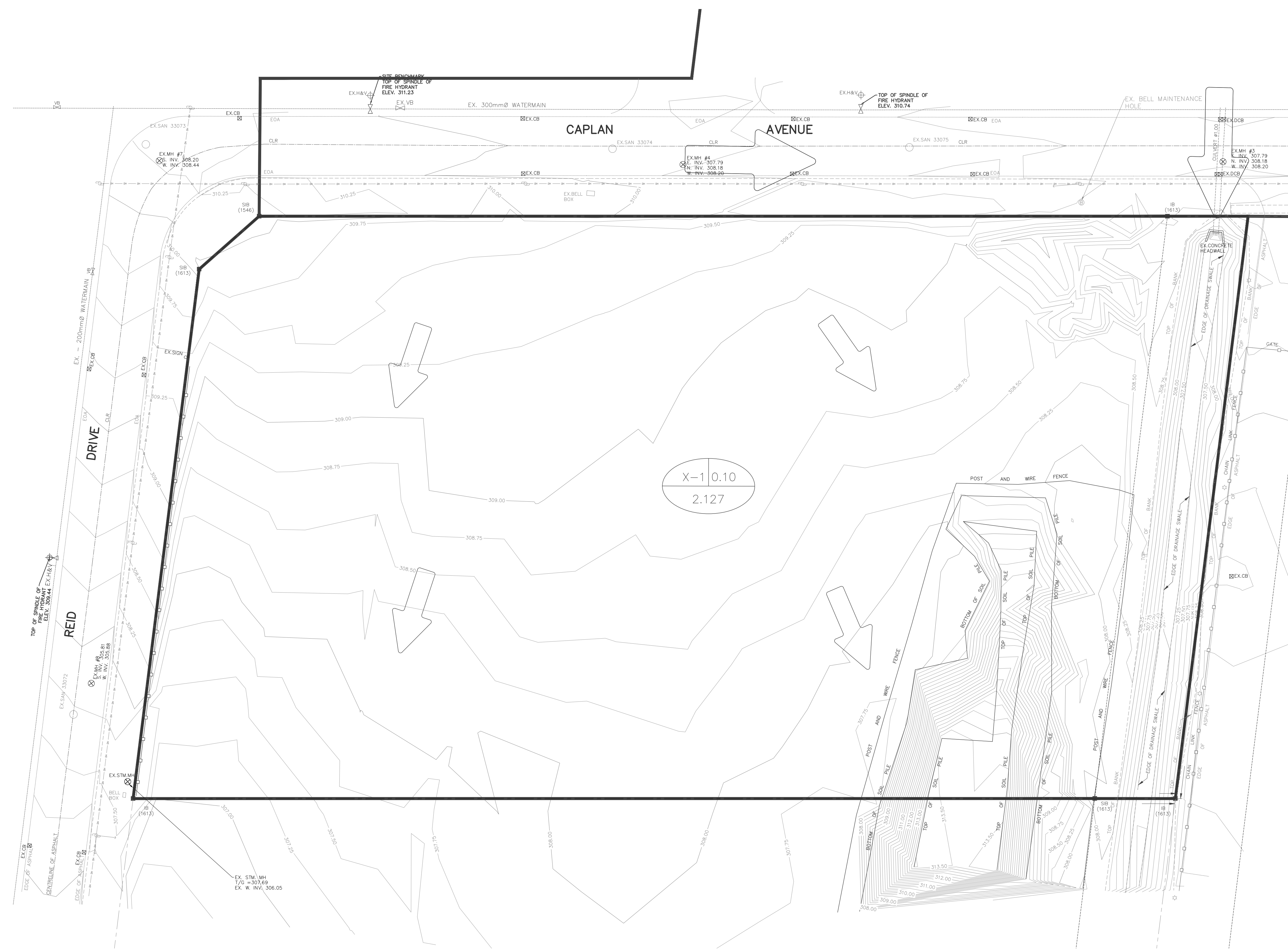
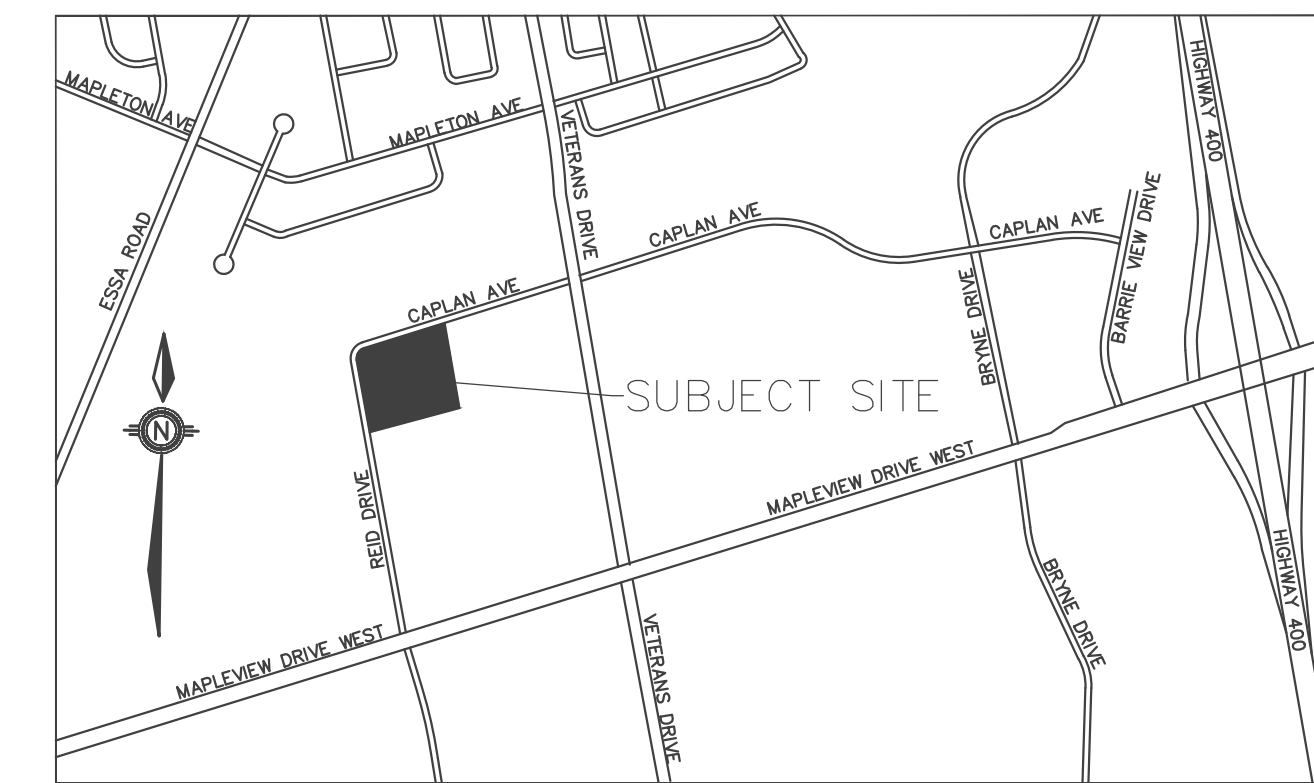


ORIFICE TUBE DETAIL
 N.T.S.

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 0 5 10 20 30 40 50mm
 0" 1/4" 1/2" 1" 1 1/2" 2"



LEGEND

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- PROPOSED SANITARY MAINTENANCE HOLE
- ⊠ EXISTING CATCH BASIN
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- ⊙ PROPOSED STORM MAINTENANCE HOLE

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- 224.00 EXISTING ELEVATION
- 1.6% PROPOSED GRADE
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- ⊠ SERVICE CAP
- ⊕ EXISTING FIRE HYDRANT
- ⊕ PROPOSED FIRE HYDRANT
- ⊕ EXISTING WATER VALVE
- ⊕ VB PROPOSED WATER VALVE
- ⊕ CS EXISTING CURB STOP
- ⊕ CS PROPOSED CURB STOP

- ⊕ PROPOSED SIGN
- ⊕ EXISTING LIGHT POLE
- ⊕ MANDOOR
- ⊕ OVERHEAD DOOR
- ⊕ FIRE DEPT CONNECTION
- ⊕ ELECTRICAL ROOM
- ⊕ WATER METER LOCATION

- ⊕ PROPOSED TRANSFORMER
- ⊕ LANDSCAPE AREA
- ⊕ LIGHT-DUTY ASPHALT AREA
- ⊕ CONCRETE AREA
- ⊕ HEAVY-DUTY ASPHALT AREA

- X-1 0.75 RUNOFF COEFFICIENT
- 5.55 AREA (ha)
- STORM AREA BOUNDARY
- ↓ OVERLAND FLOW

No.	Issuance Description	YY/MM/DD
1.	ISSUED FOR QUOTATION	20/08/06
2.	SITE PLAN APPROVAL	20/12/20
3.	SPA - 2ND SUBMISSION	21/03/19
4.		

HORIZONTAL CONTROL:
 ID# 03120040035
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED JUST BEHIND THE SOUTH CURB LINE OF MAPLEVIEW DRIVE WEST, EAST OF VETERAN'S DRIVE, NORTHING-N4909901.795m, EASTING-E604588.426m

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VERTICAL CONTROL:
 ID# 03120060018
 BRASS TABLET. LOCATED ON CULVERT HEADWALL NE CORNER OF MAPLEVIEW AND VETERAN'S DR. SET FLUSH ON E. FACE OF HEADWALL, 110mm BELOW TOP OF WALL AND 110mm N. OF THE SOUTH INSIDE CORNER OF THE WALL. ELEVATION-306.589m

ID# 03120030031
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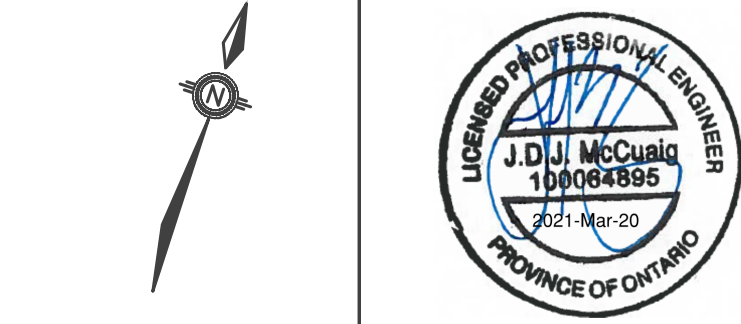
Issued For: SITE PLAN APPROVAL



Client
 Project
1 REID DR.
 (149 CAPLAN AVENUE, BARRIE, ONTARIO)

Drawing: PRE-DEVELOPMENT STORM WATER MANAGEMENT

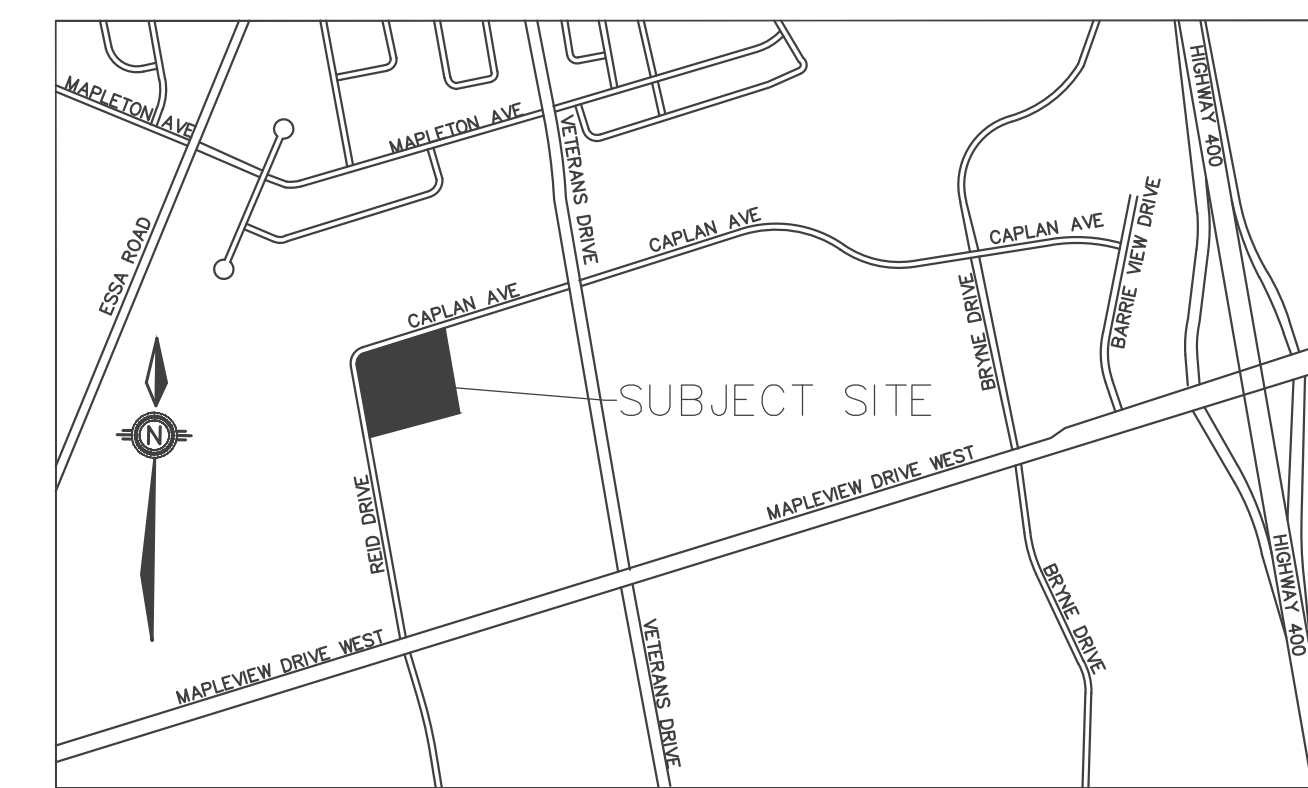
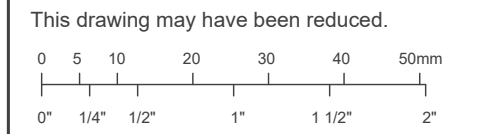
Project No.	109-258-19	Designed by: AC / SAS	Checked by: KF
Scale:	1:400	Drawn by: AC / SAS	Approved by: JDM
Orientation		Stamp	



Drawing No.
STM-1

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LEGEND

- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- ⊠ EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- ⊠ EXISTING CATCH BASIN MAINTENANCE HOLE
- ⊙ PROPOSED CATCH BASIN MAINTENANCE HOLE
- ⊠ EXISTING STORM MAINTENANCE HOLE
- ⊙ PROPOSED STORM MAINTENANCE HOLE
- 324.00 PROPOSED ELEVATION
- 524.00 EXISTING ELEVATION
- ↓ 0.6% PROPOSED GRADE
- ⊠ EXISTING HYDRO TRANSFORMER
- SERVICE CAP
- ⊠ EXISTING FIRE HYDRANT
- ⊠ PROPOSED FIRE HYDRANT
- ⊠ EXISTING WATER VALVE
- ⊠ PROPOSED WATER VALVE
- ⊠ EXISTING CURB STOP
- ⊠ PROPOSED CURB STOP
- ⊠ PROPOSED SIGN
- ⊠ EXISTING LIGHT POLE
- ⊠ MANDOOR
- ⊠ OVERHEAD DOOR
- ⊠ FIRE DEPT CONNECTION
- ⊠ ELECTRICAL ROOM
- ⊠ WATER METER LOCATION
- ⊠ PROPOSED TRANSFORMER
- LANDSCAPE AREA
- LIGHT-DUTY ASPHALT AREA
- CONCRETE AREA
- HEAVY-DUTY ASPHALT AREA
- ↓ OVERLAND FLOW
- ID (P-2) 0.75 RUNOFF COEFFICIENT
- 5.55 AREA (ha)

No.	Issuance Description	YY/MM/DD
1.	ISSUED FOR QUOTATION	20/08/06
2.	SITE PLAN APPROVAL	20/12/30
3.	SPA-2ND SUBMISSION	21/03/19
4.		

HORIZONTAL CONTROL:
 ID# 03120040035
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED JUST BEHIND THE SOUTH CURB LINE OF MAPLEVIEW DRIVE WEST, EAST OF VETERANS DRIVE. NORTHING=N4909901.795m, EASTING=E603897.740m

ID# 03120040027
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED ON NW CORNER OF MAPLEVIEW AND BARRIE VIEW DR AT BACK OF SIDEWALK. NORTHING=N4909901.795m, EASTING=E604588.426m

VERTICAL CONTROL:
 ID# 03120060018
 BRASS TABLET. LOCATED ON CULVERT HEADWALL NE CORNER OF MAPLEVIEW AND VETERANS DR. SET FLUSH ON E. FACE OF HEADWALL, 110mm BELOW TOP OF WALL AND 110mm N. OF THE SOUTH INSIDE CORNER OF THE WALL. ELEVATION=306.589m

ID# 03120030031
 BRASS TABLET. LOCATED ON CULVERT HEADWALL SW CORNER OF MAPLEVIEW AND BARRIE VIEW DR. SET FLUSH ON W. FACE OF HEADWALL, 290mm BELOW TOP OF WALL AND 180mm NORTH OF THE S. END OF WALL. ELEVATION=301.195m

BENCHMARK: TOP OF TOP OF SPINDLE OF FIRE HYDRANT ELEVATION OF 311.23

ISSUED FOR: SITE PLAN APPROVAL

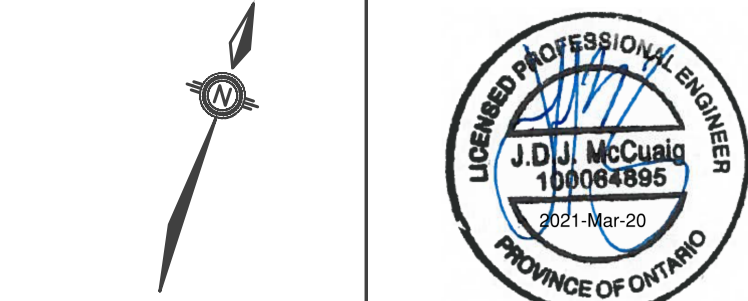


Client
 Project
1 REID DR.
 (149 CAPLAN AVENUE, BARRIE, ONTARIO)

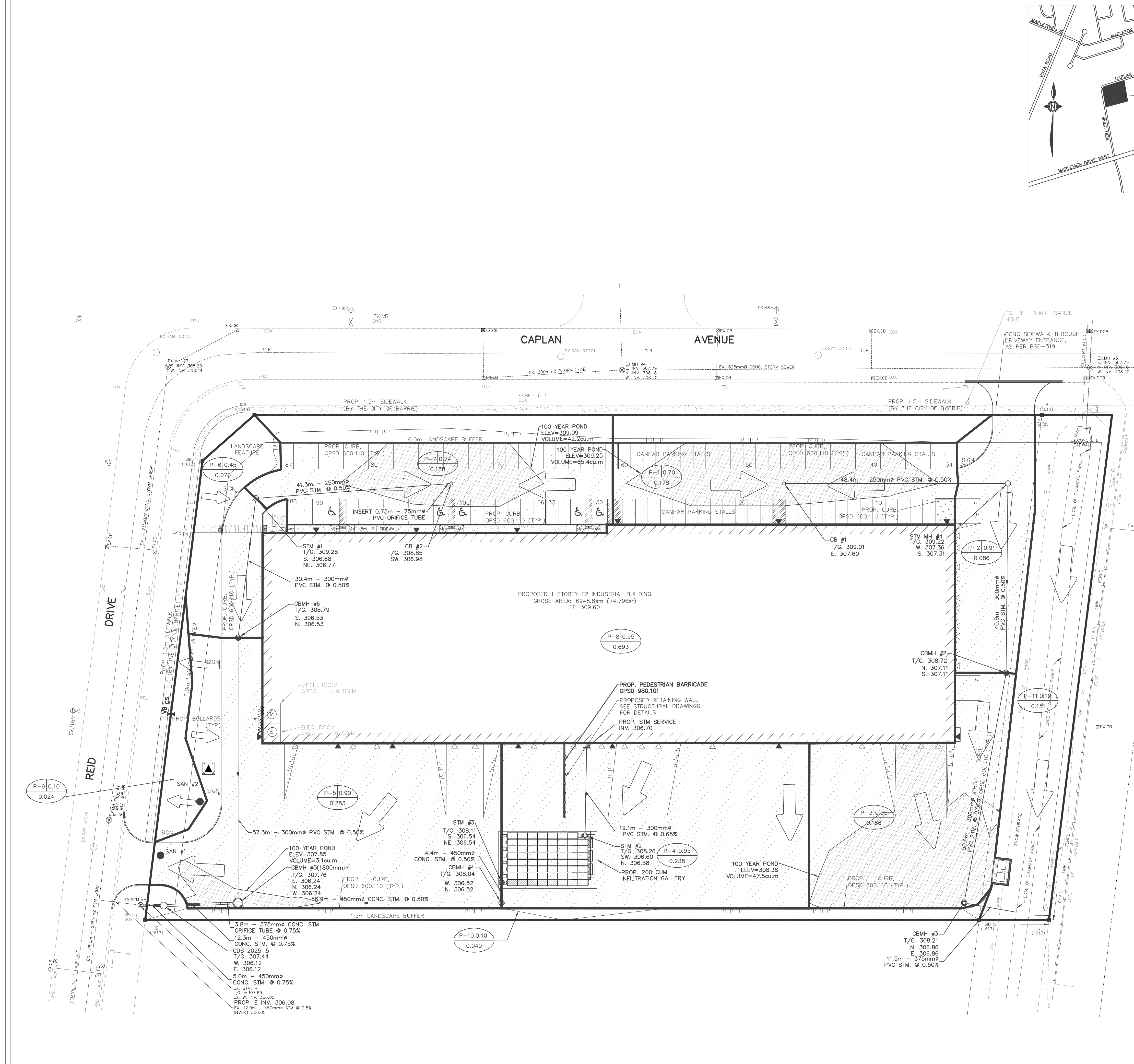
POST-DEVELOPMENT STORM WATER MANAGEMENT

Project No. 109-258-19
 Scale: 1:700
 Orientation

Designed by: AC / SAS
 Checked by: KF
 Drawn by: AC / SAS
 Approved by: JDM
 Stamp



Drawing No.
STM-2



NOTES FOR SEDIMENT & EROSION CONTROL

1. DISTURBED AREAS THAT HAVE FAILED TO HAVE STABLE GROUND COVER ESTABLISHED BY OCTOBER 30TH SHALL BE PROTECTED WITH A SILTATION CONTROL FENCE OR STRAW MULCH ETC. AND MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION BECOMES ESTABLISHED IN THE SUBSEQUENT GROWING SEASON.
2. ANY DEWATERING WASTE SHALL BE DISCHARGED TO A VEGETATED AREA AT LEAST 30 M FROM ANY WATERCOURSE AND FILTERED. FILTERING METHODS MUST BE APPROVED BY THE SITE ADMINISTRATOR.
3. SILT FENCE SHALL BE PUT IN PLACE PRIOR TO AND MAINTAINED DURING ALL GRADING. SILT FENCE TO BE INSPECTED PRIOR TO COMMENCEMENT OF EARTH GRADING ACTIVITIES. SILT FENCE TO BE INSPECTED AND REPAIRED OR REPLACED IF DAMAGED AS DIRECTED BY THE SITE ADMINISTRATOR. SILT CONTROLS TO BE INSPECTED ON A REGULAR BASIS AND AFTER EVERY RAIN EVENT. INSTALLATION SHALL BE TO THE MANUFACTURER'S SUGGESTED SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE PREPARED FOR UNEXPECTED CONDITIONS AND ACCORDINGLY HAVE STOCKPILED MATERIALS ON SITE FOR NECESSARY REPAIRS AS A RESULT OF FAILED OR INADEQUATE CONTROL MEASURES. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK, AND AFTER EVERY RAINFALL EVENT.
5. MUD MATS AT SOUTH ENTRANCE WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES THE SITE SHALL BE USED. MUD MATS TO CONSIST OF 300mm min. 100mm TO 200mm CLEAR STONE HAVING DIMENSIONS 6.0m WIDE X 30.0m LONG (AS PER BSD 23D).
6. CONTRACTOR SHALL OBTAIN A CURRENT COPY AND BECOME FAMILIAR WITH OPSS 577, CONSTRUCTION SPECIFICATION FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS WELL AS ALL APPLICABLE MUNICIPAL STANDARDS.
7. THE CONTRACTOR MAY CONSIDER ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES. SUCH MEASURES SHOULD BE PRESENTED IN WRITING FOR APPROVAL OF THE SITE ADMINISTRATOR AND MUST BE APPROVED IN WRITING BY THE CONSERVATION AUTHORITY.
8. THE TOPS OF ALL FILTER FABRIC MUST BE A MINIMUM OF 1.0 METRES ABOVE THE GROUND LEVEL AND ATTACHED TO THE FENCE WITH A CONTINUOUS STEEL WIRE. ALTERNATIVELY, THE FILTER FABRIC MUST BE FOLDED OVER THE TOP OF THE FENCE AND ATTACHED TO THE FENCE WITH WIRE LOOPED THROUGH THE FABRIC ON BOTH SIDES OF THE FENCE. FILTER FABRIC IS TO BE TERRAFIX 270R OR EQUIVALENT.
9. ALL DISTURBED GROUND LEFT INACTIVE SHALL BE STABILIZED BY SEEDING, SODDING, MULCHING, OR COVERING OR OTHER EQUIVALENT CONTROL MEASURES. THIS PERIOD OF INACTIVITY SHALL BE AT THE DISCRETION OF THE DIRECTOR OF INFRASTRUCTURE BUT SHALL NOT EXCEED THIRTY DAYS OR SUCH LONGER PERIOD DEEMED ADVISABLE BY DIRECTOR OF INFRASTRUCTURE.
10. CONTRACTOR SHALL INSTALL AND MAINTAIN CATCHBASIN SEDIMENT BARRIERS THROUGHOUT THE SITE DURING ALL CONSTRUCTION ACTIVITIES IN ORDER TO TRAP SEDIMENT.

SEQUENCE OF CONSTRUCTION

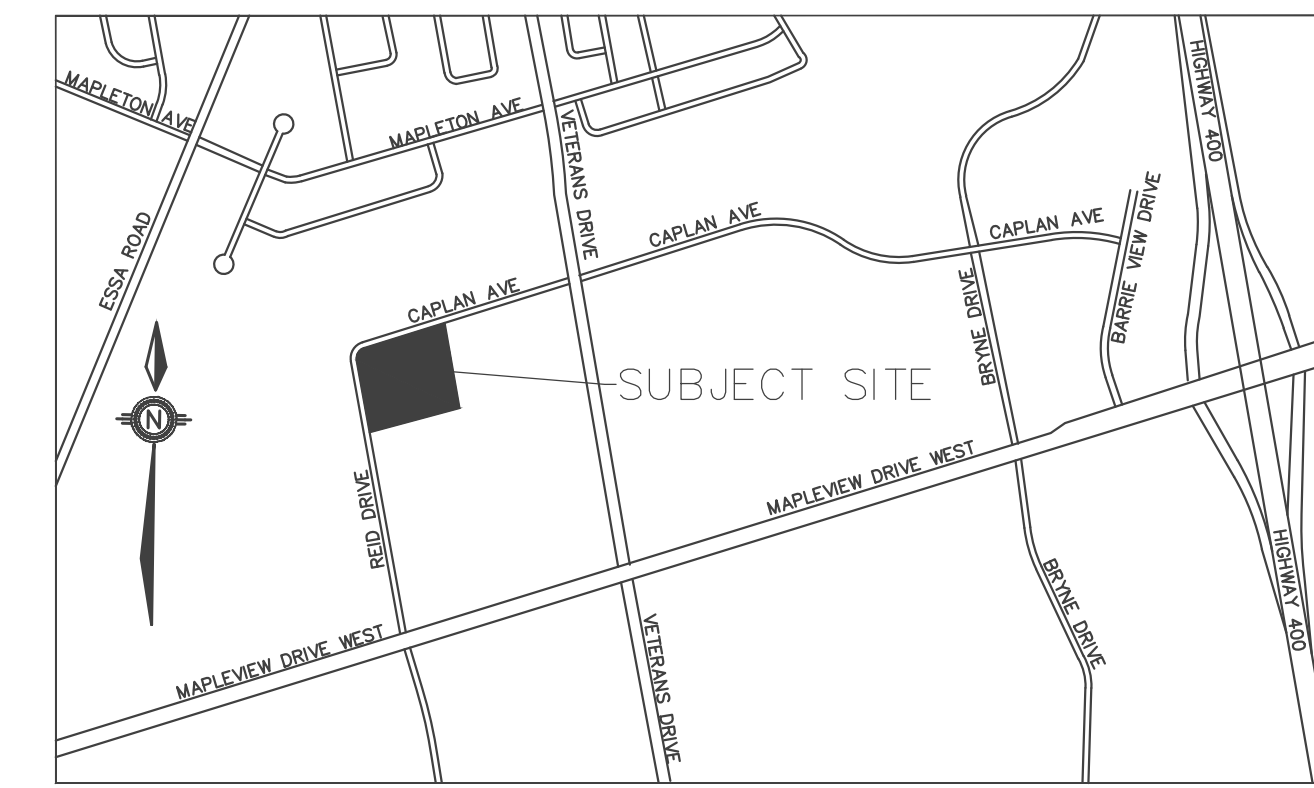
1. ENGINEER TO BE NOTIFIED PRIOR TO INITIATION OF ANY ON SITE WORKS.
2. SILT FENCE AND CONSTRUCTION ACCESS MATS TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORKS ON SITE.
3. VEGETATION REMOVAL MAY COMMENCE AFTER ALL SILT FENCE IS INSTALLED AND APPROVED BY THE ENGINEER.
4. COMMENCE WITH EARTH EXCAVATION AND SITE SERVICING (TO BE REMOVED FROM SITE - NO STOCKPILE).
5. EROSION CONTROL MEASURES TO BE MAINTAINED AS DIRECTED BY THE ENGINEER DURING THE CONSTRUCTION PERIOD. ADDITIONAL CONTROL MEASURES MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.
6. ALL DISTURBED GROUND LEFT INACTIVE FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH SEED, SOD, MULCH OR OTHER ADEQUATE COVERING, AS INSTRUCTED BY THE ENGINEER.

Site Area	21272 sq.m.
Area of Alteration	21272 sq.m.
Existing Land Use	Industrial (EM-1)
Adjoining Property Land Use	Industrial/Institutional
Soil Type	Dundonald (Ds)

NO FUEL TO BE STORED ON SITE. IN CASE OF A SPILL PLEASE CONTACT: MOECC SPILLS ACTION CENTER 1-800-268-6060

THE ON-CALL CITY OF BARRIE ENVIRONMENTAL OFFICER SHALL ALSO BE NOTIFIED VIA PAGER (705) 720-5056 IN THE EVENT THE SPILL REACHES PUBLIC PROPERTY.

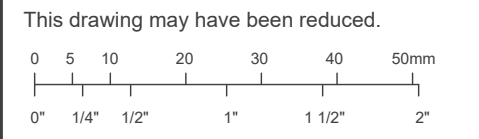
THE SEDIMENT CONTROLS ARE TO REMAIN IN PLACE UNTIL WRITTEN DIRECTION IS RECEIVED FROM THE ENGINEER REGARDING THEIR REMOVAL.



222 Mapleview Drive West, Suite 300
Barrie, ON L4N 5E7 Canada
Tel: 705.737.3303
Fax: 705.737.1772
www.gerrits.com

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LEGEND

- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- ⊠ EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- ⊗ EXISTING CATCH BASIN MAINTENANCE HOLE
- ⊕ PROPOSED CATCH BASIN MAINTENANCE HOLE
- ⊗ EXISTING STORM MAINTENANCE HOLE
- ⊕ PROPOSED STORM MAINTENANCE HOLE

- 324.00 PROPOSED ELEVATION
- 324.00 EXISTING ELEVATION
- 1.6% PROPOSED GRADE
- ⊠ EXISTING HYDRO TRANSFORMER
- SERVICE CAP
- ⊕ EXISTING FIRE HYDRANT
- ◆ PROPOSED FIRE HYDRANT
- ⊕ EXISTING WATER VALVE
- ⊕ PROPOSED WATER VALVE
- ⊕ EXISTING CURB STOP
- ⊕ PROPOSED CURB STOP

- ▲ PROPOSED SIGN
- ★ EXISTING LIGHT POLE
- ▶ MANDOOR
- ▶ OVERHEAD DOOR
- ⊕ FIRE DEPT CONNECTION
- ⊕ ELECTRICAL ROOM
- ⊕ WATER METER LOCATION

- ▲ PROPOSED TRANSFORMER
- LANDSCAPE AREA
- LIGHT-DUTY ASPHALT AREA
- CONCRETE AREA
- HEAVY-DUTY ASPHALT AREA

- PROPOSED SILT FENCE

No.	Issuance Description	YY/MM/DD
1.	ISSUED FOR QUOTATION	20/08/06
2.	SITE PLAN APPROVAL	20/12/20
3.	SPA-2ND SUBMISSION	21/03/19
4.		

HORIZONTAL CONTROL:
ID# 03120040035
R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED JUST BEHIND THE SOUTH CURB LINE OF MAPLEVIEW DRIVE WEST, EAST OF VETERAN'S DRIVE. NORTHING-N4909901.795m, EASTING-E604588.426m

ID# 03120040027
R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED ON NW CORNER OF MAPLEVIEW AND BARRIE VIEW DR AT BACK OF SIDEWALK NORTHING-N4909901.795m, EASTING-E604588.426m

VERTICAL CONTROL:
ID# 03120060018
BRASS TABLET. LOCATED ON CULVERT HEADWALL NE CORNER OF MAPLEVIEW AND VETERANS DR. SET FLUSH ON E. FACE OF HEADWALL, 110mm BELOW TOP OF WALL AND 110mm N. OF THE SOUTH INSIDE CORNER OF THE WALL. ELEVATION-306.589m

ID# 03120030031
BRASS TABLET. LOCATED ON CULVERT HEADWALL SW CORNER OF MAPLEVIEW AND BARRIE VIEW DR. SET FLUSH ON W. FACE OF HEADWALL, 290mm BELOW TOP OF WALL AND 180mm NORTH OF THE S. END OF WALL. ELEVATION-301.195m

BENCHMARK: TOP OF TOP OF SPINDLE OF FIRE HYDRANT ELEVATION OF 311.23

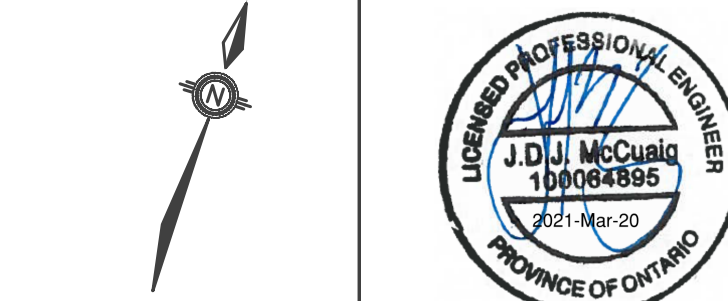
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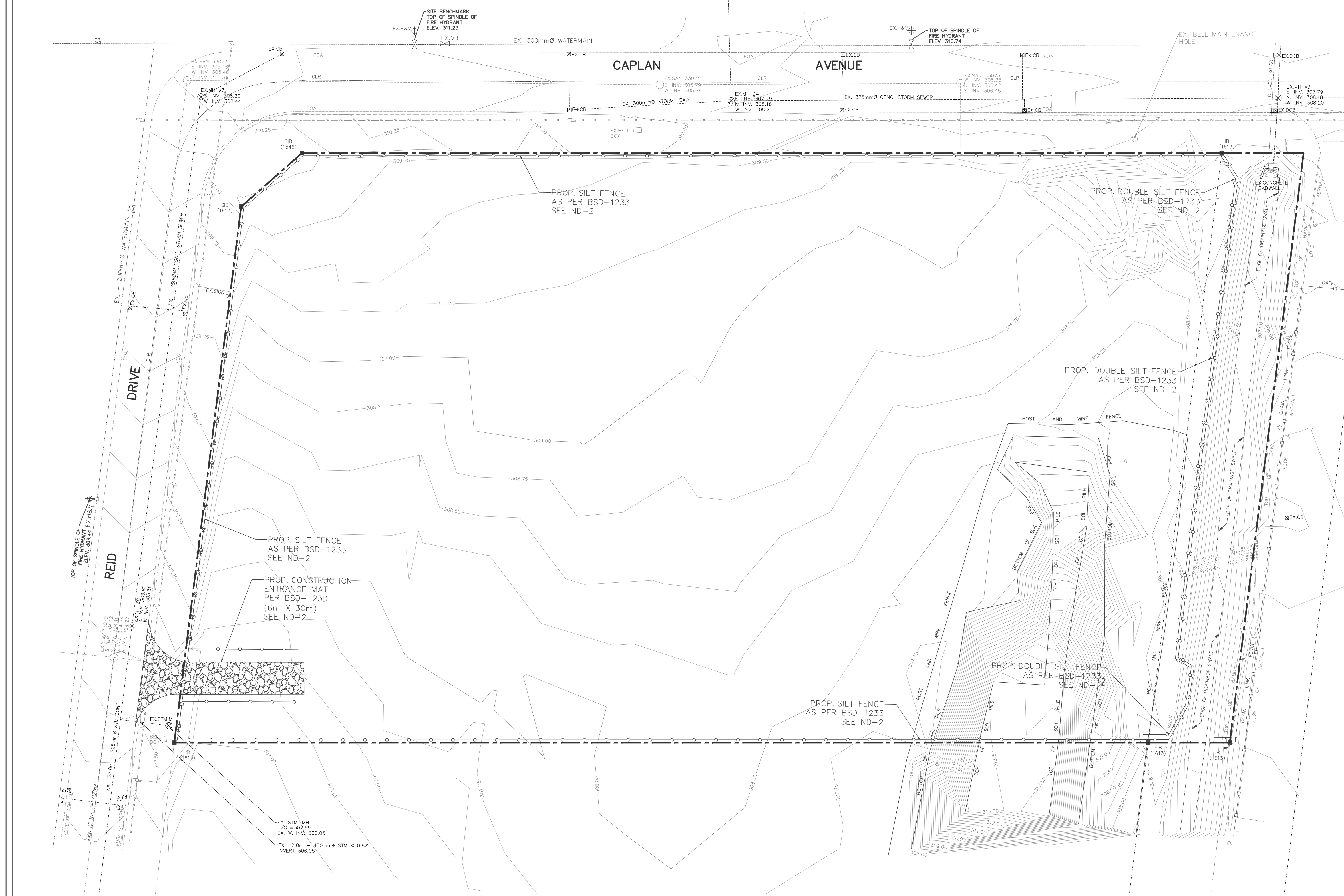
1 REID DR.
(149 CAPLAN AVENUE, BARRIE, ONTARIO)

EROSION & SEDIMENT CONTROL PLAN

Project No.	109-258-19	Designed by: AC / SAS	Checked by: KF
Scale:	1:400	Drawn by: AC / SAS	Approved by: JDM
Orientation		Stamp	



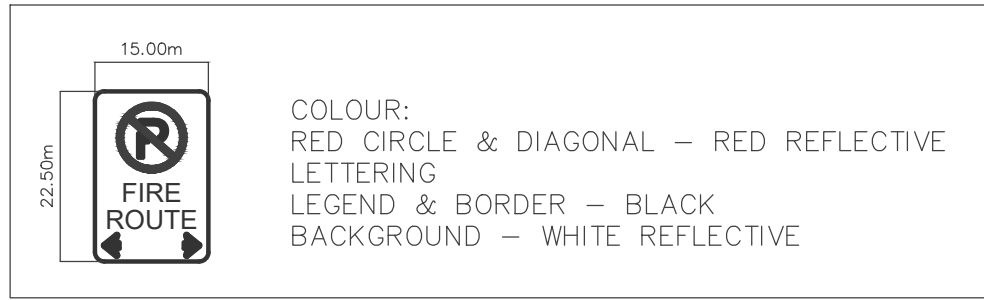
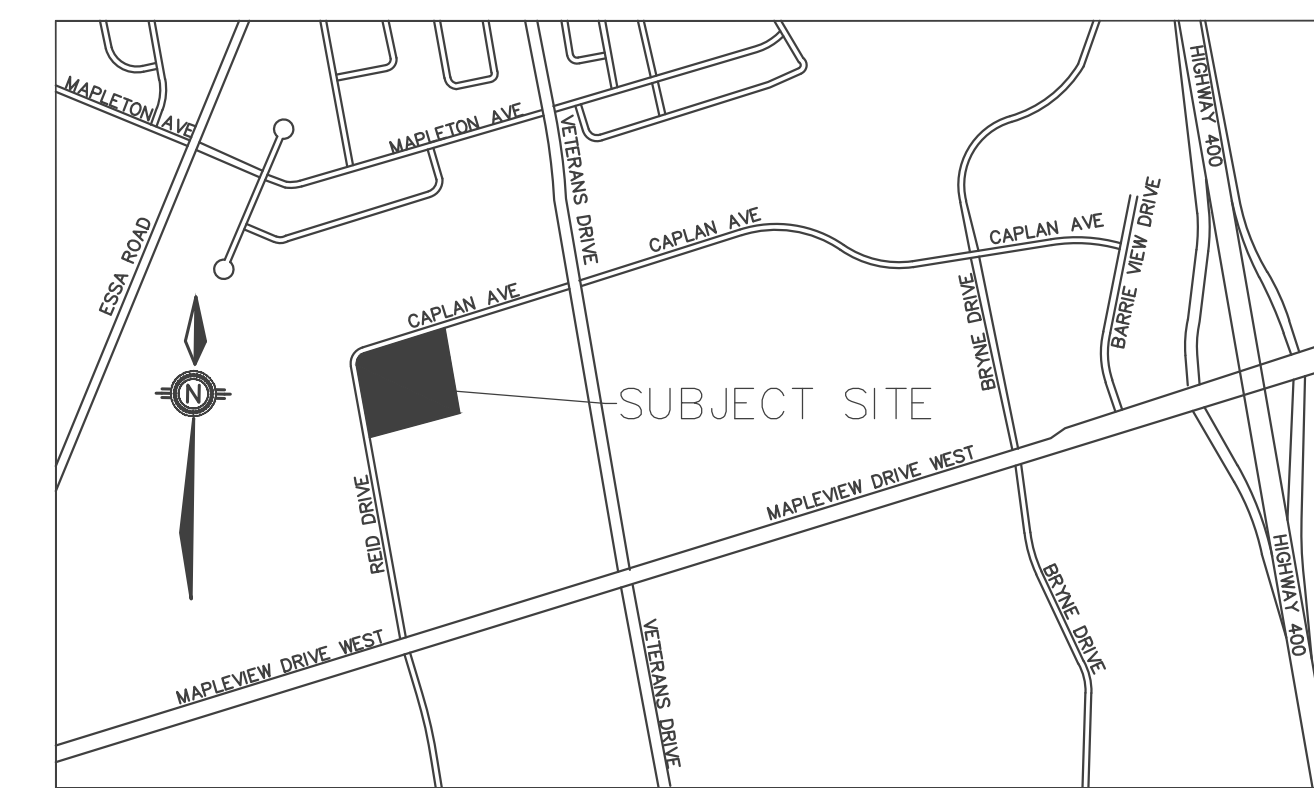
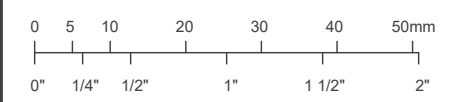
Drawing No. ESC-1



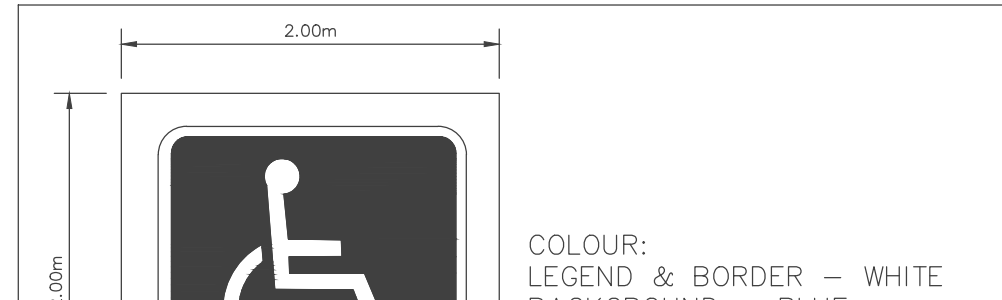
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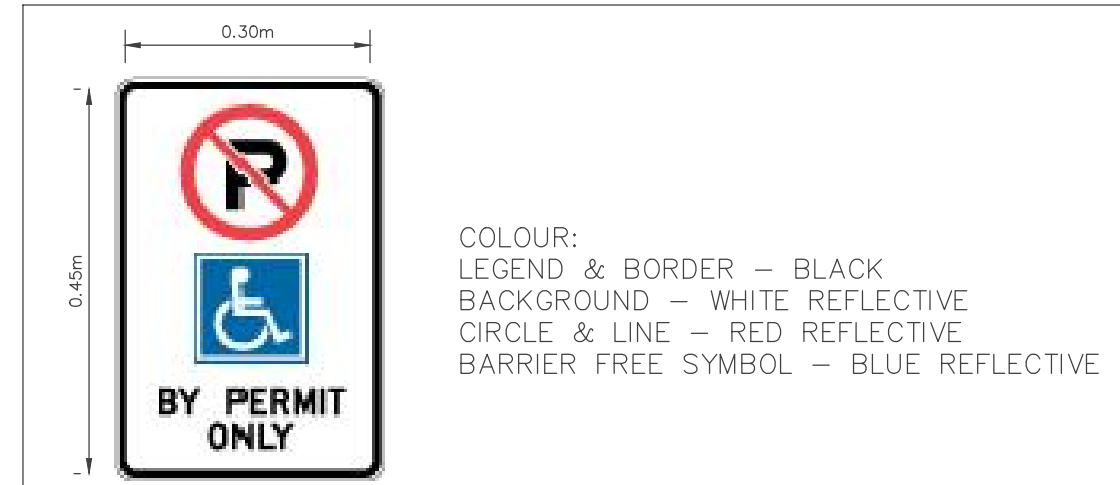
This drawing may have been reduced.



D1 FIRE ROUTE SIGN DETAIL
 N.T.S.



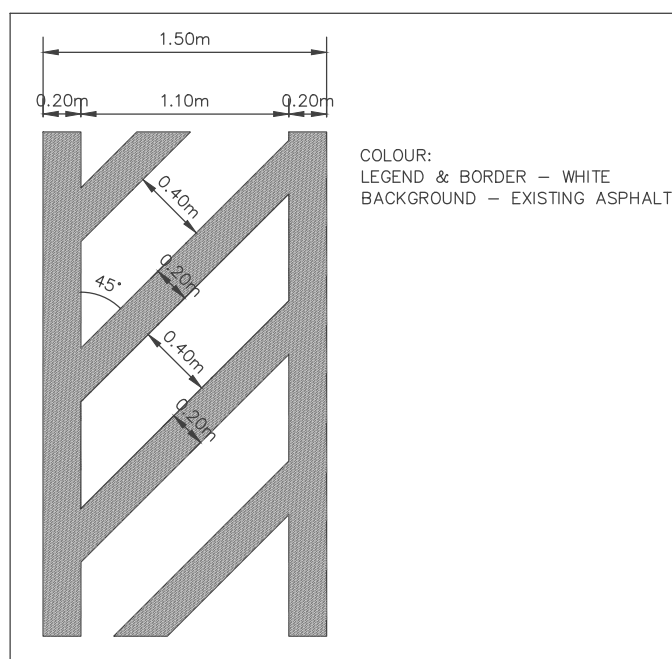
D3 H.C. PAVEMENT MARKING DETAILS
 N.T.S.



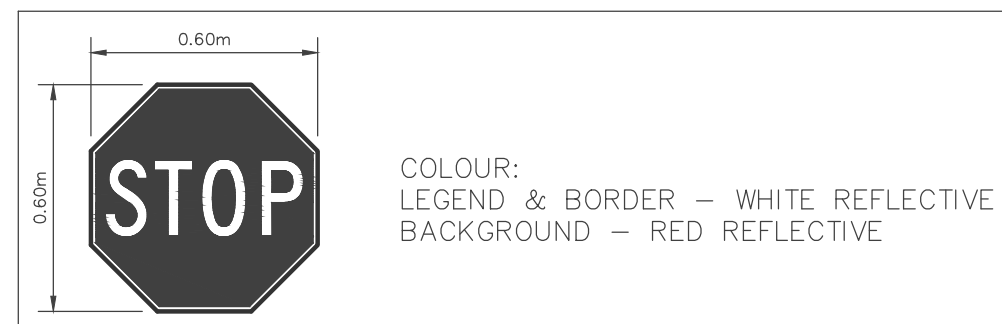
D5 BARRIER FREE PARKING SIGN DETAIL RB-93
 N.T.S.

LEGEND

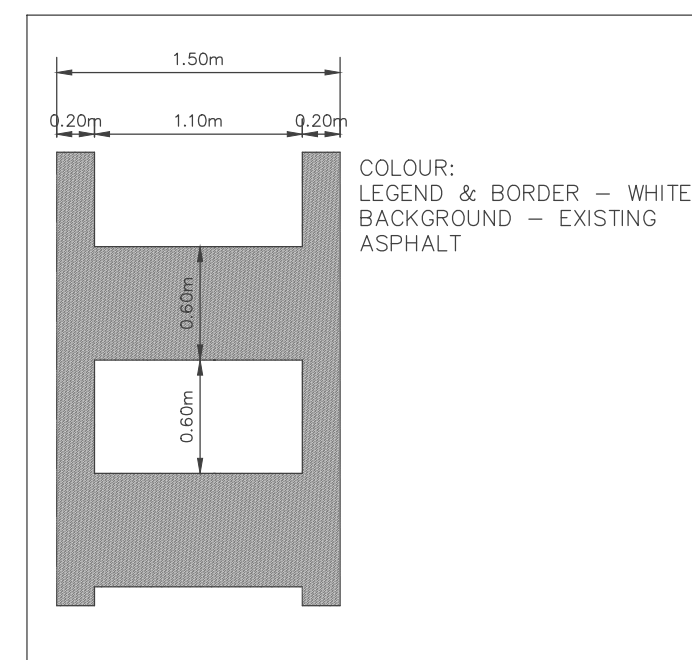
- LANDSCAPE AREA
- LIGHT-DUTY ASPHALT AREA
- CONCRETE AREA
- HEAVY-DUTY ASPHALT AREA



D2 ACCESSIBLE PARKING WALK DETAIL
 N.T.S.

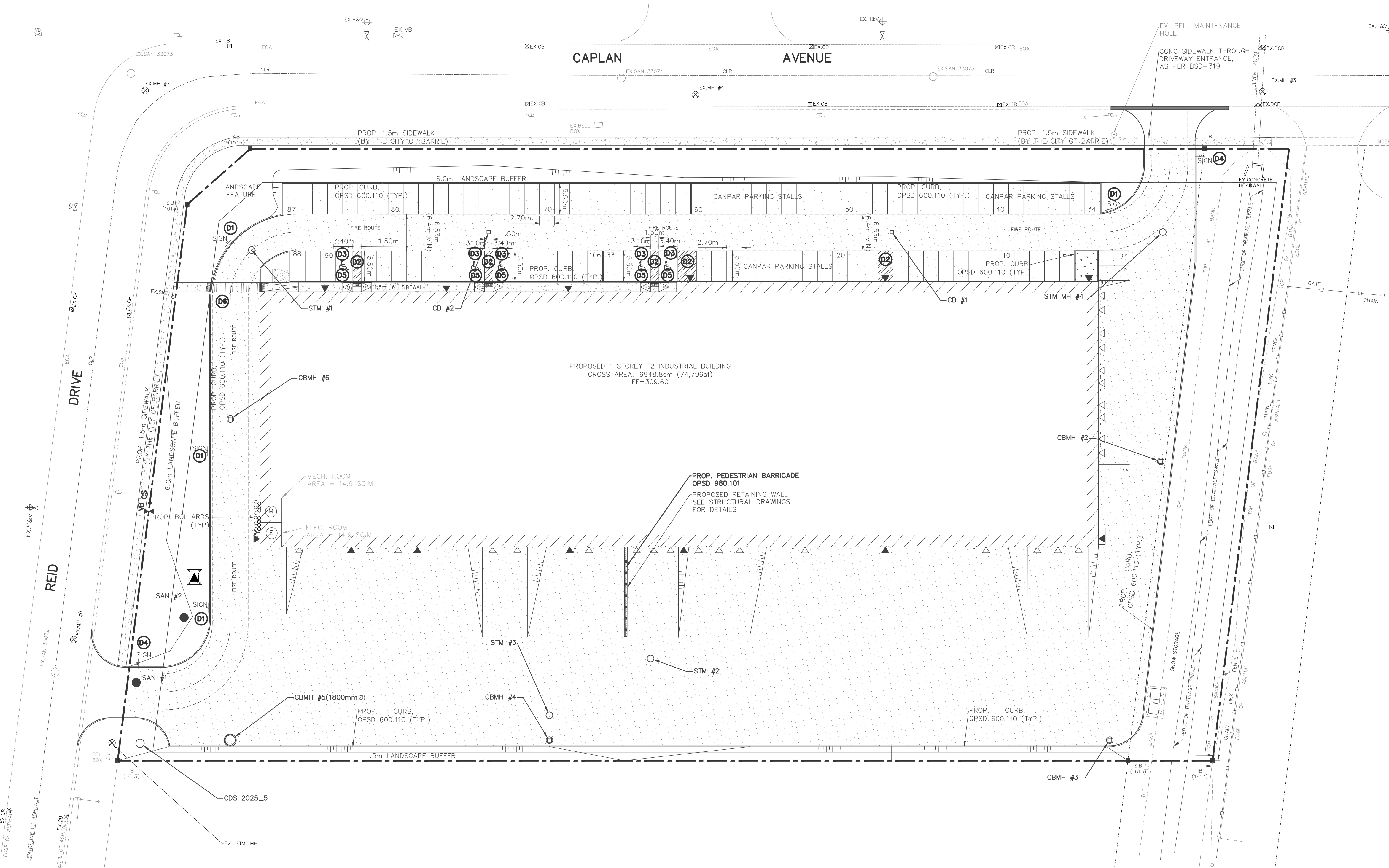


D4 STOP SIGN DETAIL
 N.T.S.



D6 PEDESTRIAN CROSSWALK DETAIL
 N.T.S.

ALL PAVEMENT MARKING PAINT TO BE ORGANIC SOLVENT BASED, 2 COATS, AS PER OPSS 1714



No.	Issuance Description	YY/MM/DD
1.	ISSUED FOR QUOTATION	20/08/06
2.	SITE PLAN APPROVAL	20/12/30
3.	SPA - 2ND SUBMISSION	21/03/19
4.		

HORIZONTAL CONTROL:
 ID# 03120040035
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED JUST BEHIND THE SOUTH CURB LINE OF MAPLEVIEW DRIVE WEST, EAST OF VETERAN'S DRIVE. NORTHING=N4909639.121m, EASTING=E603897.740m

ID# 03120040027
 R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED ON NW CORNER OF MAPLEVIEW AND BARRIE VIEW DR AT BACK OF SIDEWALK NORTHING=N4909901.795m, EASTING=E604588.426m

VERTICAL CONTROL:
 ID# 03120060018
 BRASS TABLET. LOCATED ON CULVERT HEADWALL NE CORNER OF MAPLEVIEW AND VETERAN'S DR. SET FLUSH ON E. FACE OF HEADWALL, 110mm BELOW TOP OF WALL AND 110mm N. OF THE SOUTH INSIDE CORNER OF THE WALL. ELEVATION=306.589m

ID# 03120030031
 BRASS TABLET. LOCATED ON CULVERT HEADWALL SW CORNER OF MAPLEVIEW AND BARRIE VIEW DR. SET FLUSH ON W. FACE OF HEADWALL, 290mm BELOW TOP OF WALL AND 180mm NORTH OF THE S. END OF WALL. ELEVATION=301.195m

BENCHMARK: TOP OF TOP OF SPINDLE OF FIRE HYDRANT ELEVATION OF 311.23

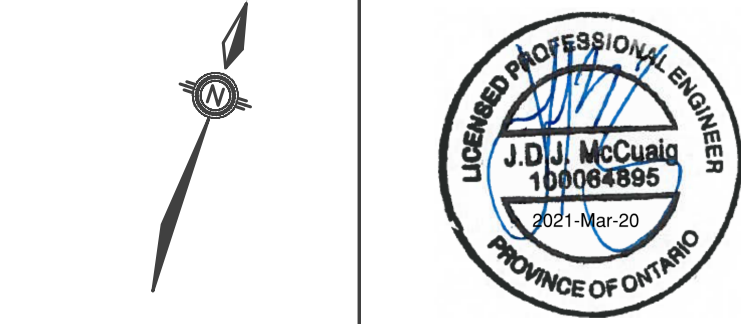
Issued For:
SITE PLAN APPROVAL

Client

 Project
1 REID DR.
 (149 CAPLAN AVENUE, BARRIE, ONTARIO)

Drawing:
PAVEMENT MARKINGS PLAN

Project No.	109-258-19	Designed by: AC / SAS	Checked by: KF
Scale:	1:400	Drawn by: AC / SAS	Approved by: JDM
Orientation		Stamp	



Drawing No.
PM-1