### 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
- C. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY THE CITY OF BARRIE AND SECONDLY ONTARIO PROVINCIAL

PART OF THE PLANS OF THIS CONTRACT.

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

CIANOLTAN TAIOL YMMUD

CONTRACTION JOINT (Note 4)

2 Sidewalk width shall be wider when specified.

4 Contraction Joint may be tooled or sawcut.

A All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

CONCRETE SIDEWALK

SIDEWALK

500

BACK OF CURB

Barrie

**EXPANSION JOINT** 

A. THE PARKING LOT PAVEMENT STRUCTURE SHALL CONSIST OF THE FOLLOWING (REFER TO GEOTECHNICAL REPORT NO. 20-1067A, APR. 21,2020, BY CENTRAL EARTH ENGINEERING):

- 0.3m Slope as specifie

- 40mm HL3 ASPHALT 40mm HL3 ASPHAL1 50mm HI 8 ASPHAL 80mm HL8 ASPHALT 150mm GRANULAR 'A' 150mm GRANULAR 'A' 300mm GRANULAR 'B' 450mm GRANULAR 'B
- B. NATIVE SUBGRADE TO BE COMPACTED TO MINIMUM 98% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- PAVEMENT STRUCTURE TO BE CONFIRMED BY GEOTECHNICAL ENGINEER PRIOR TO START OF CONSTRUCTION

Slope 2 to 4%

- Concrete sidewalk

TYPICAL SECTION

1 Sidewalk thickness at residential driveways and adjacent to curb shall be 150mm.

PROPERTY LINE 0 ISSUE IN INC. IN INC.

DRIVEWAY AND ENTRANCE

C. LOCATION OF EXISTING SERVICES ARE NOT GUARANTEED

GENERAL NOTES

1. DRAWINGS

2. MEASUREMENTS

CITY OF BARRIE STANDARD

- 500 PLAN A "500 MIN., 1500 MAX. FOR COMMERCIAL OR INDUSTRIAL ENTRANCES

At commercial and industrial driveways, the thickness shall be 200mn

3 This OPSD shall be read in conjunction with OPSD 310.030, 310.031, 310.033, and 310.039.

Curb with gutter

Expansion — joints, Typ

Sidewalk bay, Typ-

Dummy joints, Typ-

Contraction — joints, Typ

JOINT LAYOUT

-----

OPSD 310.010

BSD-319

A. ALL DRAWINGS SHALL BE PRODUCED IN ACCORDANCE WITH CURRENT CITY OF BARRIE STANDARDS & SYMBOLS FOR PLAN & PROFILE DRAWINGS, GENERAL SERVICE PLANS AND LOT GRADING PLANS.

A. ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT CITY OF BARRIE STANDARD DRAWINGS (BSD) AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).

THE CONTRACTOR IS REQUIRED TO NOTIFY THE VARIOUS UTILITY COMPANIES 48 HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK.

D. A ROAD OCCUPANCY PERMIT IS REQUIRED FROM THE ROADS AND PARKS OPERATIONS BRANCH PRIOR TO THE COMMENCEMENT OF WORK WITHIN ANY CITY RIGHT-OF-WAY.

E. A SITE ALTERATION PERMIT IS REQUIRED FROM THE ENGINEERING DEPARTMENT PRIOR TO THE COMMENCEMENT OF ANY EARTH WORKS ON THE SITE.

G. GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.

H. ALL DISTURBED AREAS ARE TO BE REINSTATED TO THEIR ORIGINAL CONDITION OR BETTER, AS DETERMINED BY THE CITY ENGINEERING DEPARTMENT.

I. ALL SILT CONTROL AND EROSION PROTECTION DEVICES ARE TO BE IN PLACE PRIOR TO THE

COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO APPROVAL BY THE CITY ENGINEERING DEPARTMENT.

F. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD

A. ALL DIMENSIONS ARE IN METRES, EXCEPT PIPE DIAMETERS, WHICH ARE IN MILLIMETRES,

B. ORDER OF PRECEDENCE OF STANDARD DRAWINGS IS FIRSTLY CITY OF BARRIE STANDARD DRAWINGS (BSD) AND SECONDLY ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD).

## 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.

- 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 WATERTIGHT AND TO CONFORM TO OPSD 401.030.
- D. MANHOLE TOPS ARE TO BE SET TO FINAL GRADE.

### GENERAL

- 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.
- GRANULAR MATERIAL, USED FOR BACKFILL, SHALL BE PLACED IN LAYERS 150mm IN DEPTH MAXIMUM AND COMPACTED TO 100% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- ALL DISTURBED AREAS ARE TO BE REINSTATED 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 SOD UNLESS NOTED OTHERWISE.

### WATERMAINS

- 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 WATERMAINS 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.
- COPPER WATER SERVICES 25mm DIA. SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSS 1104.010.
- WATERMAIN BEDDING SHALL CONSIST OF WINTER SAND, 150mm BELOW AND 300mm

45° wve cleanout, option

PVC drop pipe

☐ Benching, OPSD 701.021

1500mm maintenance holes.

C All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

INTERNAL DROP

STRUCTURE

FOR NEW MAINTENANCE HOLES

1 At the elbow, a stainless steel strap is required at bottom of bell 2 Straps shall not be placed within 150mm of any maintenance hole

A Internal drop structure shall be used in maintenance holes 1500mm diameter and larger with a minimum height of 600mm from the inlet pipe invert to the bottom

B Drop pipe shall be one size smaller than the incoming sewer with a minimum 150mm diameter and maximum of 375mm diameter. A maximum of 300mm diameter for 1500mm maintenance holes.

INTERNAL DROP STRUCTURE DETAIL

SIDE VIEW FRONT VIEW

MAINTENANCE HOLE IN SECTION

FASTENER DETAIL

-----

OPSD 1003.031

Valve Chamber Detail

BSD-515

- G. CONCRETE THRUST BLOCKS ARE TO 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.

115 - 600 - 115

SECTION B-B

C Frame, grate, and adjustment units shall be installed according to OPSD 704.010.

D Pipe support shall be according to OPSD 708.020.

-----

OPSD 705.010

All dimensions are nominal.

F All dimensions are in millimetres unless otherwise shown.

115 - 600 ---

SECTION A-A

ONTARIO PROVINCIAL STANDARD DRAWING

PRECAST CONCRETE CATCH BASIN

600x600mm

1 Outlet hole size 525mm diameter maximum,

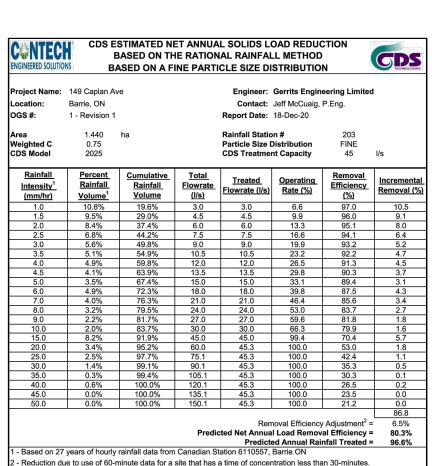
subdrain. Knockout shall be 60mm deep.

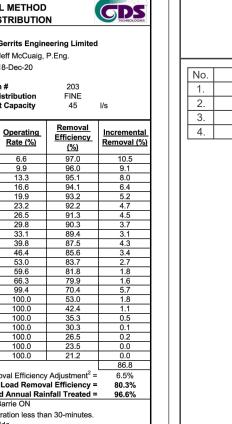
Centre reinforcing in base slab and walls

B Granular backfill shall be placed to a minimum thickness of 300mm all around the catch basin.

ANY EXISTING, ON SITE, WATER WELLS MUST BE DECOMMISSIONED IN ACCORDANCE WITH O.REG. 903 AND MINISTRY OF THE ENVIRONMENT, CONSERVATION AND PARKS (MECP) STANDARDS.

- WHERE A COPPER SERVICE MUST BE JOINED UNDER THE FLOOR, THE COPPER SHALL BE JOINED BY SILVER SOLDER CONNECTION ONLY
- 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 ADDED PROTECTION.
- OPERATION OF FIRE HYDRANTS AND VALVES ON POTABLE WATER BY OTHER THAN MUNICIPAL WORKS DEPARTMENT IS PROHIBITED.
- THE CITY WILL SWAB, CHLORINATE AND FLUSH ALL NEW SERVICES. THE CONTRACTOR SHALL PERFORM PRESSURE TEST WITH WATER FIELD COORDINATOR WITNESSING.
- EXTERNAL CONTRACTOR TO COORDINATE WITH INTERNAL CONTRACTOR ON ALL INSTALLATION. SWABBING, CHLORINATING AND TESTING WITNESSED BY WATER FIELD SERVICES COORDINATOR.
- RESTRAINING WILL BE REQUIRED ON ALL HYDRANTS A MINIMUM OF THREE LENGTHS OF PIPE.
- HYDRANTS TO BE PAINTED RED. TRACING WIRE (#12 TWU STRANDED COPPER) TO BE INSTALLED ON THE TOTAL LENGTH OF ALL
- PVC WATERMAINS 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.
- A CHLORINATION TAIL SHALL BE INSTALLED JUST BEHIND TAPPING VALVE TO FACILITATE CHLORINATING SERVICE, TO BE REMOVED AFTER TESTING.





ENGINEERING

222 Mapleview Drive West, Suite 300

Barrie, ON L4N 9E7 Canada

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Issuance Description ISSUED FOR QUOTATION

SITE PLAN APPROVAL

SPA - 2ND SUBMISSION

20/08/06

20/12/30 21/03/19

This drawing has been created electronically

project other than that for which it was prepared.

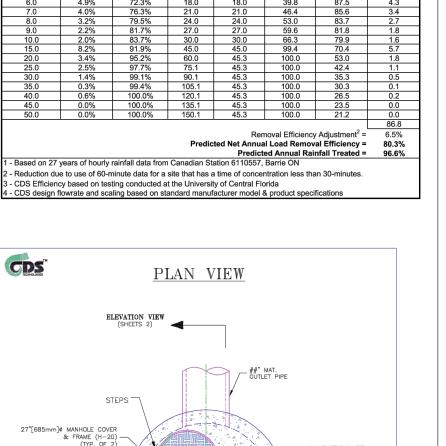
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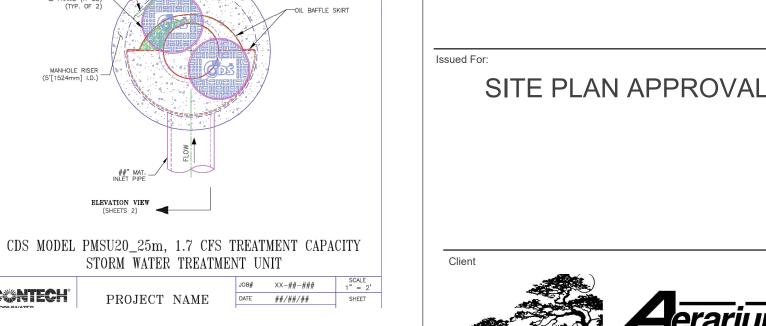
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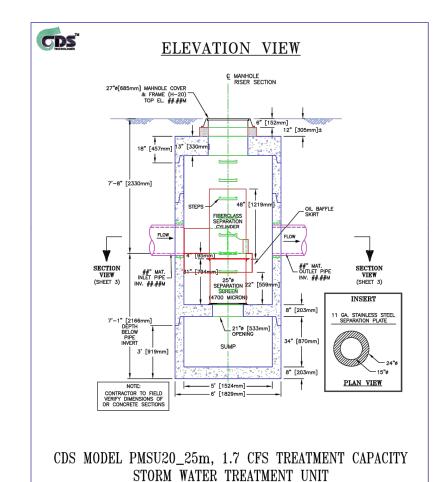
0" 1/4" 1/2" 1" 1 1/2" 2"

by the design engineer's initials.

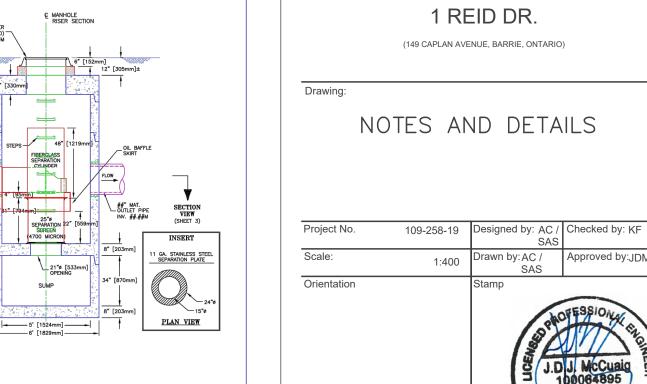
Do not scale drawings.







##" MAT. \_\_/



JOB# XX-##-###

PROJECT NAME
CITY, STATE

DATE

##/##/##

DRAWN INITIALS

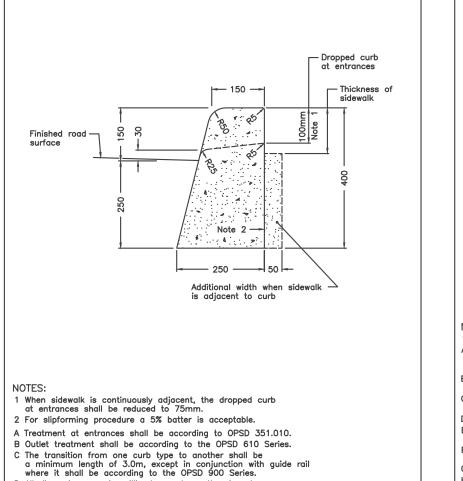
CITY, STATE

Echelon Environmental 505 Hood Road, Unit 26, Markham, Ontario L3R 5V6 Tel: (905) 948-0000 Fax: (905) 948-0577

ND-

Approved by:JDM

Drawn by: AC / SAS



-----

OPSD 600.110

SCALE: N.T.S.

D All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING

CONCRETE BARRIER CURB

CONCRETE BLOCK

COPPER WATER SERVICE

1. ANY JUNCTION MADE IN SERVICE PIPE BETWEEN MAIN STOP AND CURB STOP TO BE MADE WITH

BARRIE CONNECTION DETAIL 38mm

1. ANY JOIN THAT WADE IN SERVICE IF IP BE INVESTIGATED MAIN STOP AND CORB STOP TO APPROVED COUPLINGS. (FOR SOMM ONLY).

2. ALL WATER SERVICES TO BE INSTALLED AT RIGHT ANGLE TO THE WATERMAIN.

3. ALL TAPPINGS TO BE AT 3 OR 9 O'CLOCK POSITION ONLY.

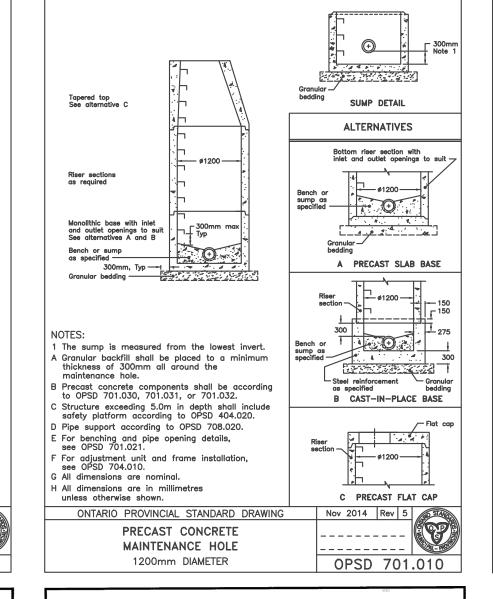
4. 915mm (36°) STAINLESS STEEL SERVICE BOX ROD.

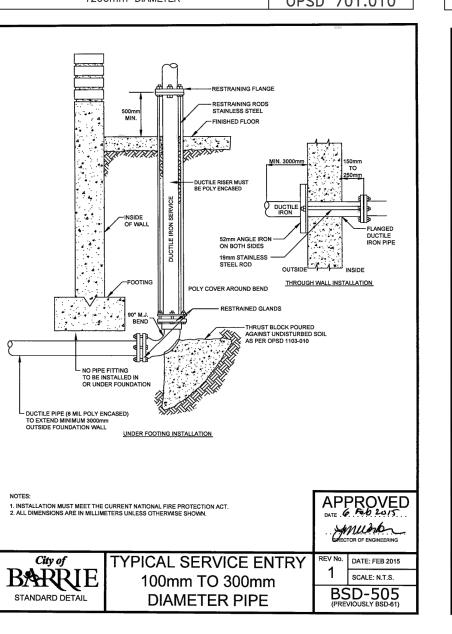
5. SEE BSD-50 FOR 38mm AND SOMM NON-COPPER WATER SERVICES.

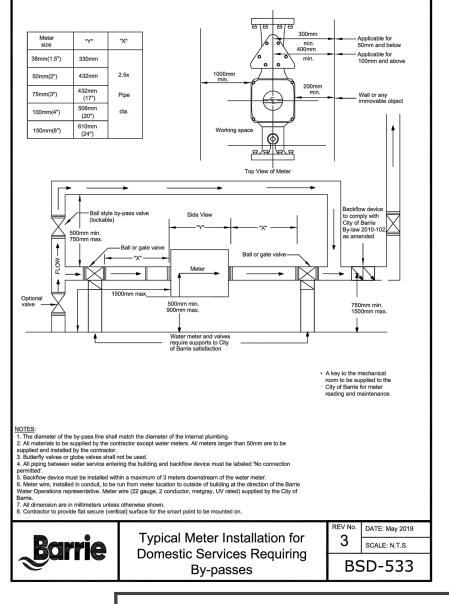
6. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

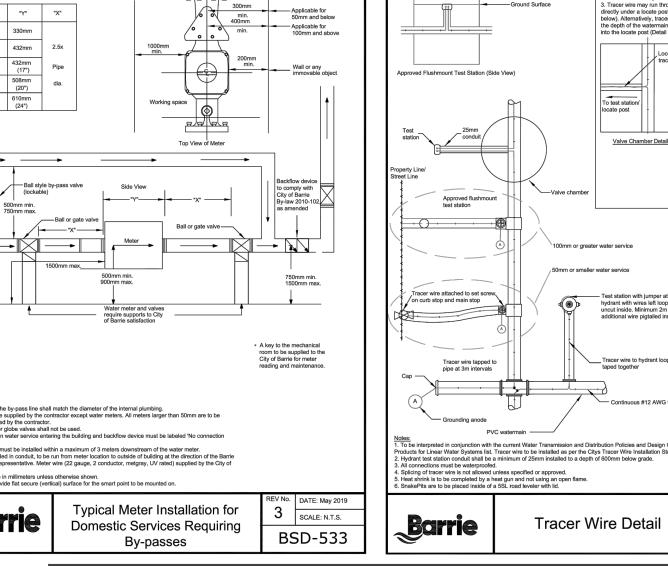
STANDARD DETAIL

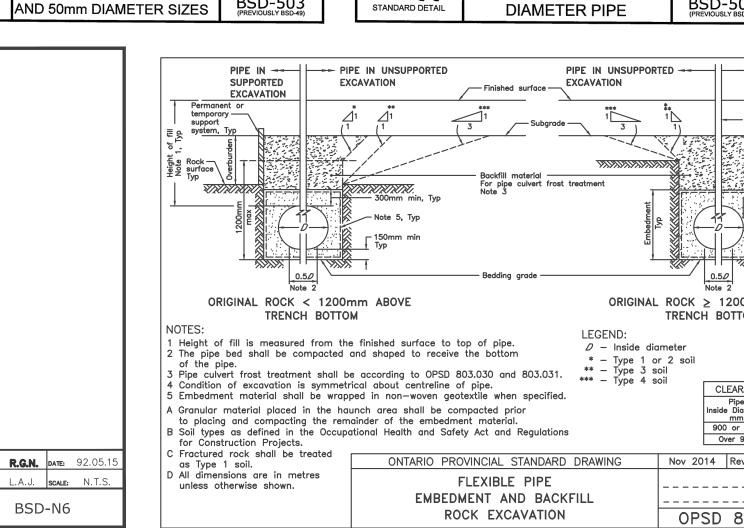
3. 3. NOTE: 3.E. REVISED & 3.I. ADDED J.S. 05.01.10 APR'D: R.G.N. DATE: 92.0.

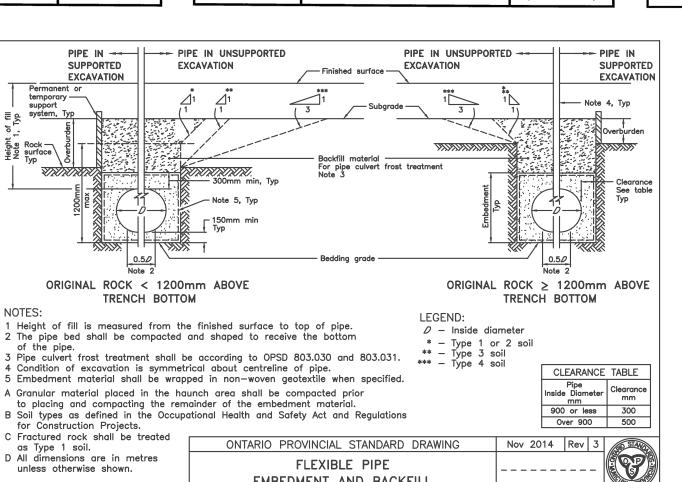


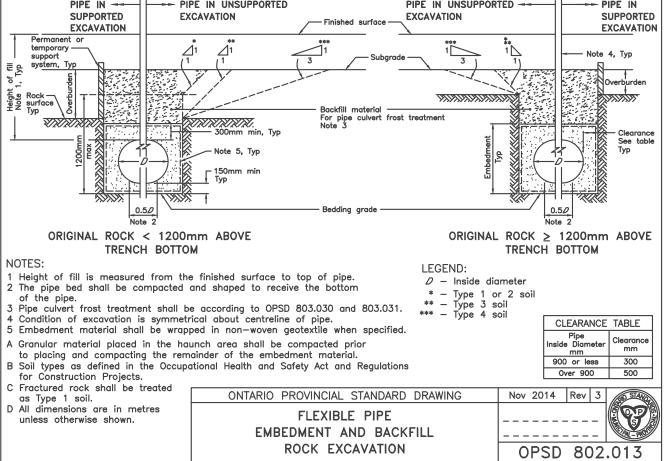


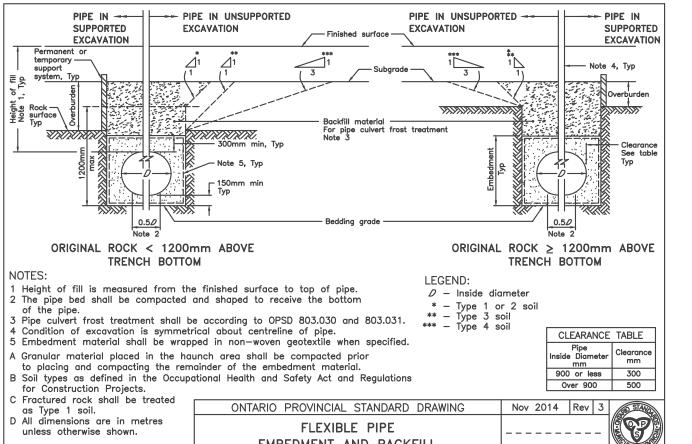


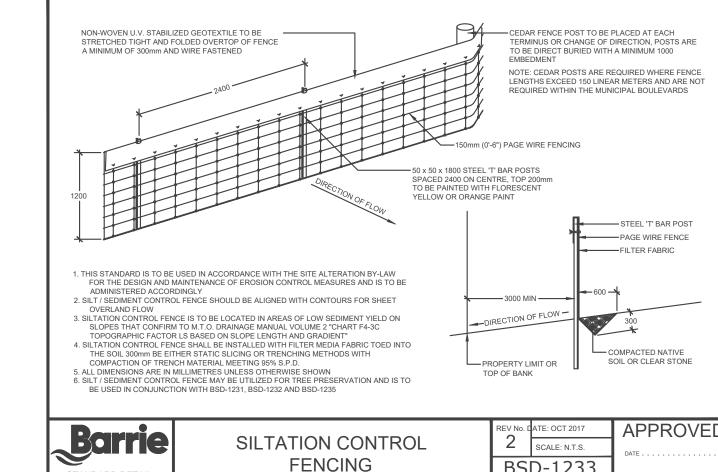




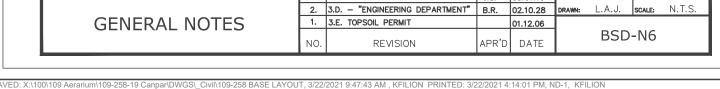


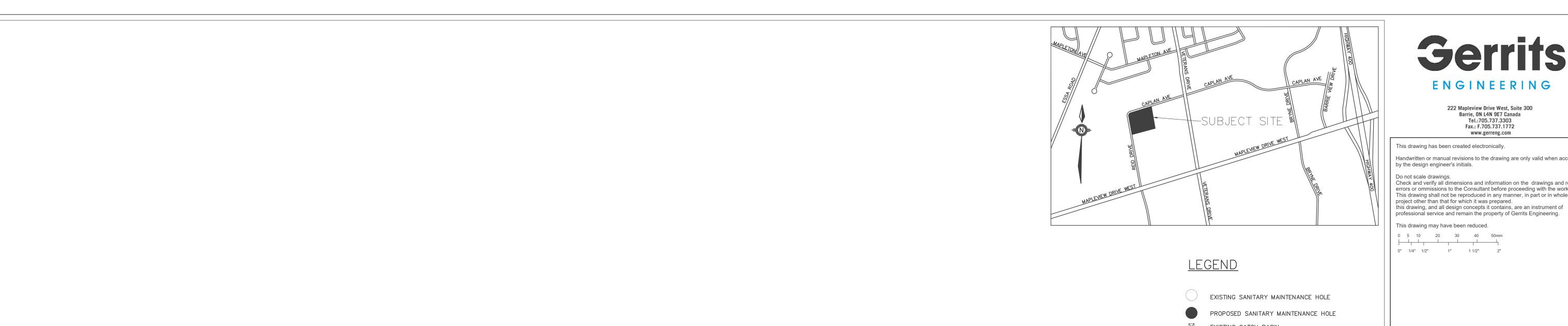






BSD-1233





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 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

(M) WATER METER LOCATION

PROPOSED TRANSFORMER

LANDSCAPE AREA

LIGHT-DUTY ASPHALT AREA

CONCRETE AREA

HEAVY-DUTY ASPHALT AREA

## Gerrits ENGINEERING

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

Issuance Description	YY/MM/DD
ISSUED FOR QUOTATION	20/08/06
SITE PLAN APPROVAL	20/12/30
SPA - 2ND SUBMISSION	21/03/19

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

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

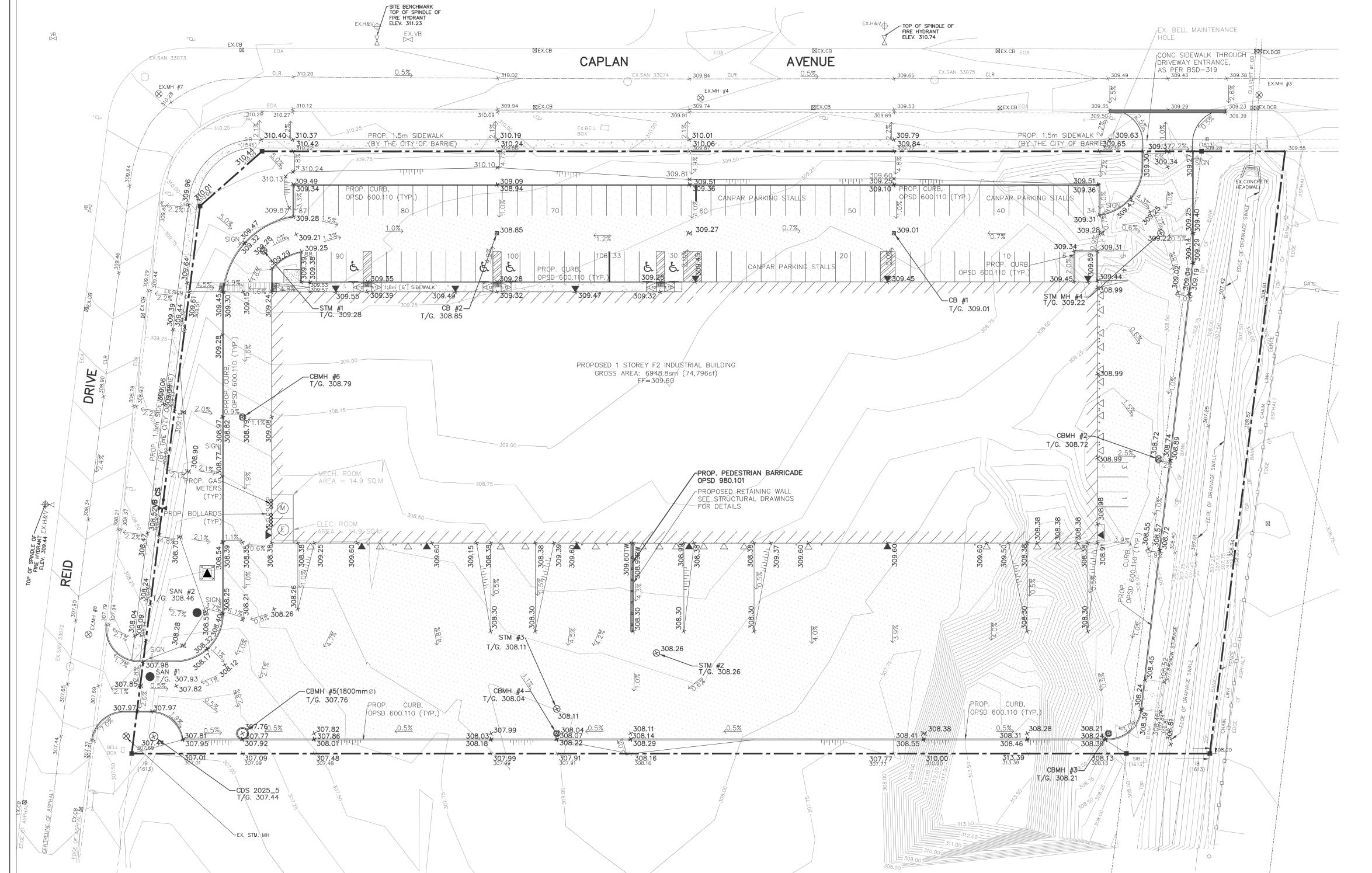


1 REID DR.

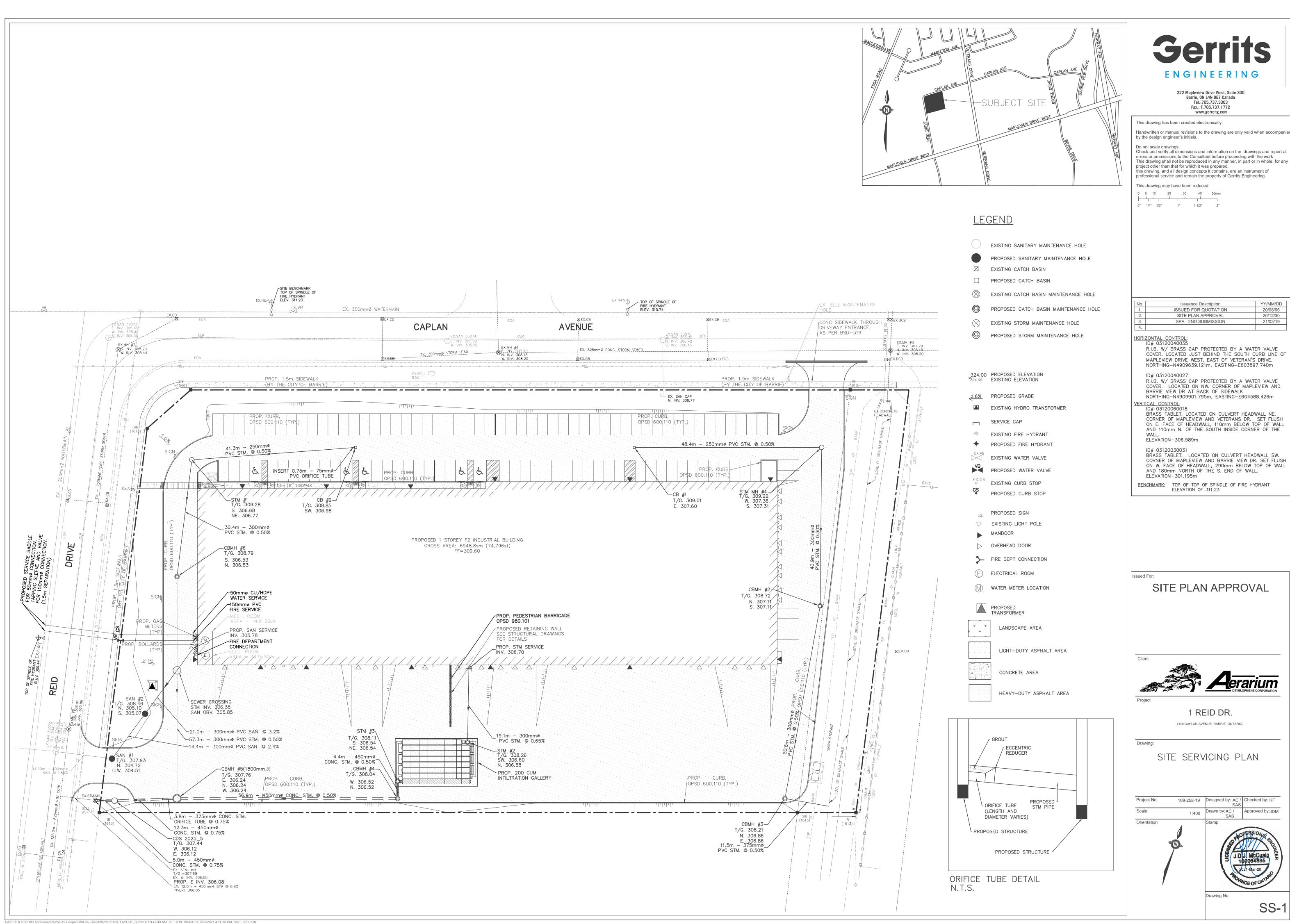
(149 CAPLAN AVENUE, BARRIE, ONTARIO)

SITE GRADING PLAN

109-258-19 Designed by: AC / Checked by: KF SG-1



VED: X:\100\109 Aerarium\109-258-19 Canpar\DWGS\\_Civil\109-258 BASE LAYOUT, 3/22/2021 9:47:43 AM, KFILION PRINTED: 3/22/2021 4:14:13 PM, SG-1, KFILION



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٥.	Issuance Description	YY/MM/DD
	ISSUED FOR QUOTATION	20/08/06
	SITE PLAN APPROVAL	20/12/30
	SPA - 2ND SUBMISSION	21/03/19

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.

R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE

COVER. LOCATED ON NW. CORNER OF MAPLEVIEW AND NORTHING-N4909901.795m, EASTING-E604588.426m

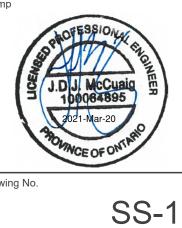
CORNER OF MAPLEVIEW AND VETERANS DR. SET FLUSH ON E. FACE OF HEADWALL, 110mm BELOW TOP OF WALL AND 110mm N. OF THE SOUTH INSIDE CORNER OF THE

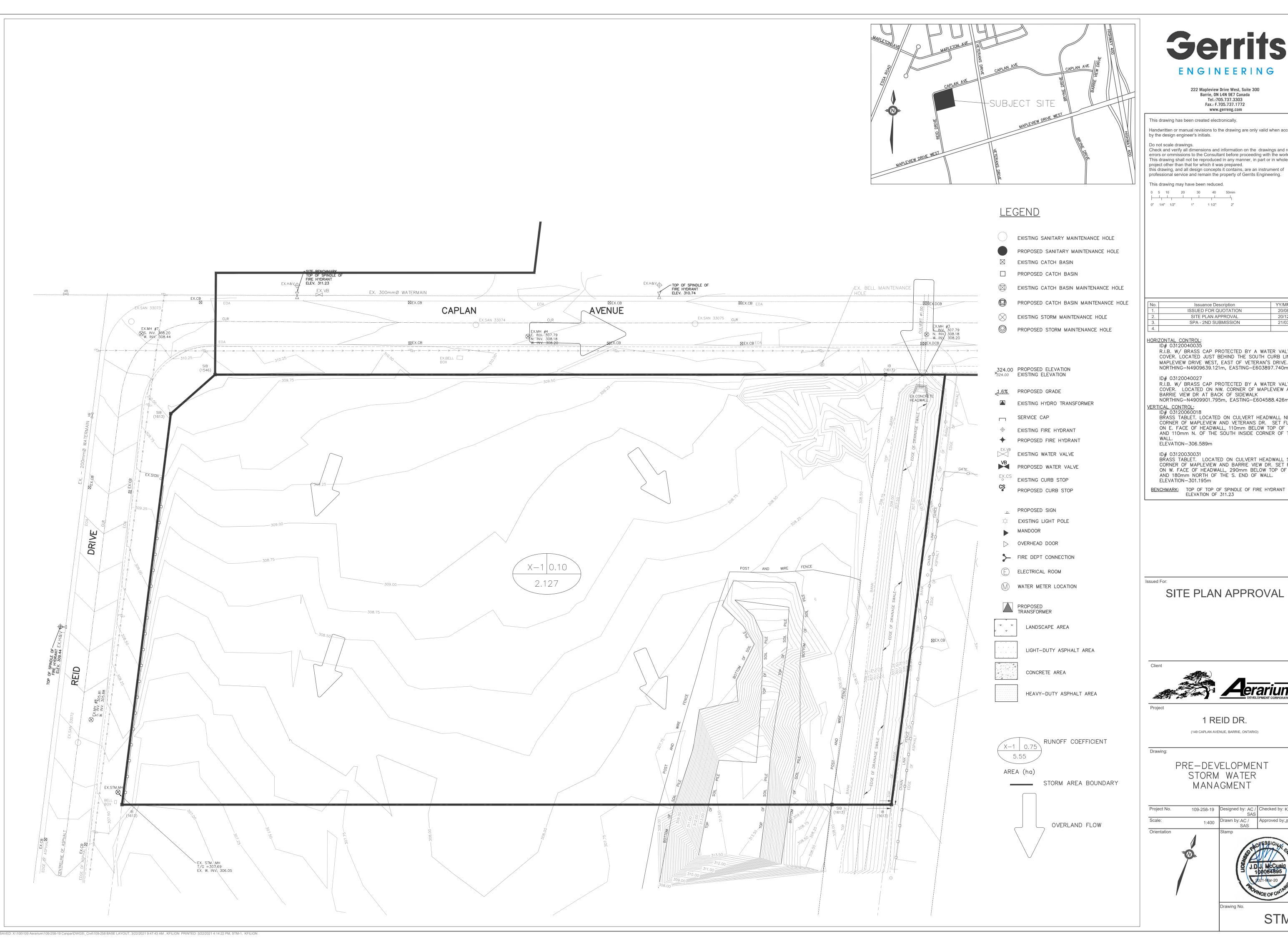
BRASS TABLET. LOCATED ON CULVERT HEADWALL SW. CORNER OF MAPLEVIEW AND BARRIE VIEW DR. SET FLUSH ON W. FACE OF HEADWALL, 290mm BELOW TOP OF WALL

SITE PLAN APPROVAL



109-258-19 Designed by: AC / Checked by: KF 1:400 Drawn by: AC / Approved by: JDM SAS





## ENGINEERING

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

> Issuance Description
> ISSUED FOR QUOTATION 20/08/06 20/12/30 21/03/19 SITE PLAN APPROVAL SPA - 2ND SUBMISSION

HORIZONTAL CONTROL: ID# 03120040035

R.Ï.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 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

SITE PLAN APPROVAL

1 REID DR.

(149 CAPLAN AVENUE, BARRIE, ONTARIO)

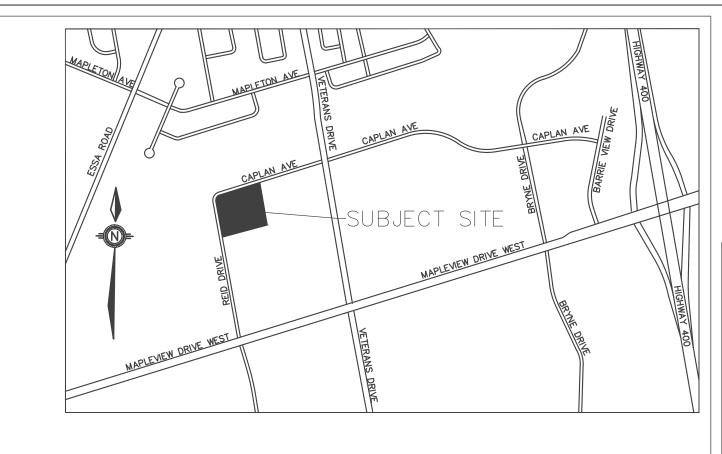
PRE-DEVELOPMENT STORM WATER MANAGMENT

109-258-19 Designed by: AC / Checked by: KF

Orientation



STM-1



## <u>LEGEND</u>

- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE

- EXISTING CATCH BASIN MAINTENANCE HOLE
- PROPOSED CATCH BASIN MAINTENANCE HOLE
- EXISTING STORM MAINTENANCE HOLE
- PROPOSED STORM MAINTENANCE HOLE

## 1.6% PROPOSED GRADE

- EXISTING HYDRO TRANSFORMER

- ◆ EXISTING FIRE HYDRANT
- PROPOSED WATER VALVE
- EX.CS EXISTING CURB STOP
- PROPOSED CURB STOP
- \_ PROPOSED SIGN
- > OVERHEAD DOOR
- FIRE DEPT CONNECTION
- ELECTRICAL ROOM
- WATER METER LOCATION

LANDSCAPE AREA

LIGHT-DUTY ASPHALT AREA

HEAVY-DUTY ASPHALT AREA

OVERLAND FLOW

RUNOFF COEFFICIENT P-2 0.755.55

AREA (ha)

## ENGINEERING

222 Mapleview Drive West, Suite 300 Barrie, ON L4N 9E7 Canada Fax.: F.705.737.1772

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This drawing may have been reduced. 0 5 10 20 30 40 50mm 

0" 1/4" 1/2" 1" 1 1/2" 2"

	Issuance Description	YY/MM/DD
	ISSUED FOR QUOTATION	20/08/06
	SITE PLAN APPROVAL	20/12/30
	SPA - 2ND SUBMISSION	21/03/19
_		

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 ELEVATION-306.589m

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

1 REID DR.

(149 CAPLAN AVENUE, BARRIE, ONTARIO)

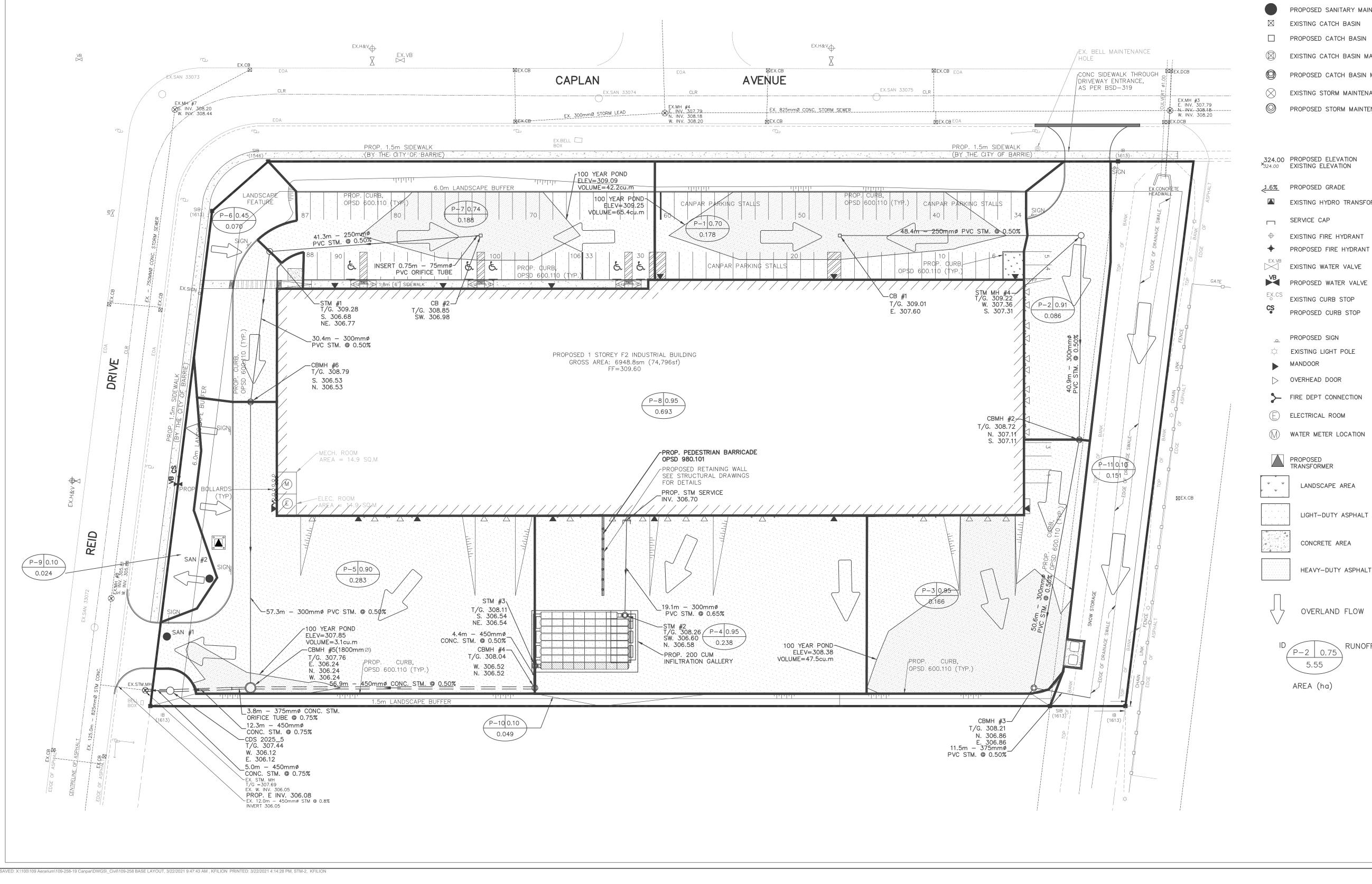
POST-DEVELOPMENT STORM WATER MANAGEMENT

Project No. 109-258-19 Designed by: AC / Checked by: KF Drawn by: AC / SAS 1:?00 Orientation





STM-2



## NOTES FOR SEDIMENT & EROSION CONTROL

SAVED: X:\100\109 Aerarium\109-258-19 Canpar\DWGS\\_Civil\109-258 BASE LAYOUT, 3/22/2021 9:47:43 AM , KFILION PRINTED: 3/22/2021 4:14:32 PM, ESC-1, KFILION

- 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.
   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 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.

SITE BENCHMARK TOP OF SPINDLE OF FIRE HYDRANT ELEV. 311.23

EX. 300mmØ WATERMAIN

**CAPLAN** 

10. CONTRACTOR SHALL INSTALL AND MAINTAIN CATCHBASIN SEDIMENT BARRIERS THROUGHOUT THE SITE DURING ALL CONSTRUCTION ACTIVITIES IN ORDER TO TRAP

## SEQUENCE OF CONSTRUCTION

- ENGINEER TO BE NOTIFIED PRIOR TO INITIATION OF ANY ON SITE WORKS. SILT FENCE AND CONSTRUCTION ACCESS MATS TO BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY WORKS ONSITE.
- 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). 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.
- 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

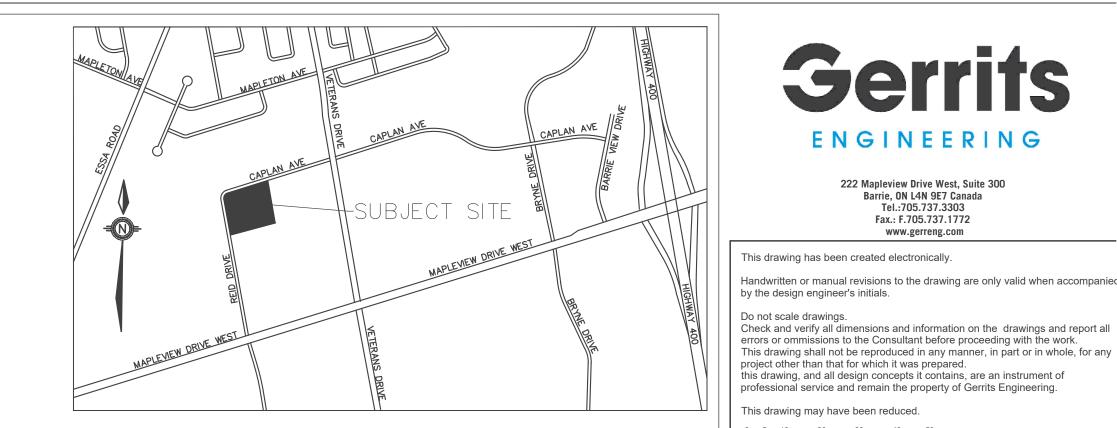
THE ON-CALL CITY OF BARRIE ENVIRONMENTAL OFFICER SHALL ALSO BE NOTIFIED VIA PAGER (705) 720-5056 IN THE EVENT THE SPILL REACHES PUBLIC PROPERTY.

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

₩EX.CB EOA

TOP OF SPINDLE OF FIRE HYDRANT ELEV. 310.74

AVENUE



EX. BELL MAINTENANCE

EXISTING SANITARY MAINTENANCE HOLE PROPOSED SANITARY MAINTENANCE HOLE

☐ PROPOSED CATCH BASIN

EXISTING CATCH BASIN MAINTENANCE HOLE

PROPOSED CATCH BASIN MAINTENANCE HOLE

EXISTING STORM MAINTENANCE HOLE

## LEGEND

EXISTING CATCH BASIN

PROPOSED STORM MAINTENANCE HOLE

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

ENGINEERING

222 Mapleview Drive West, Suite 300

Barrie, ON L4N 9E7 Canada

Tel.:705.737.3303

Fax.: F.705.737.1772

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HORIZONTAL CONTROL ID# 03120040035

ID# 03120040027

ELEVATION-306.589m

ELEVATION-301.195m

ID# 03120030031

VERTICAL CONTROL: ID# 03120060018

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Issuance Description

ISSUED FOR QUOTATION

SITE PLAN APPROVAL SPA - 2ND SUBMISSION

R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE

R.I.B. W/ BRASS CAP PROTECTED BY A WATER VALVE COVER. LOCATED ON NW. CORNER OF MAPLEVIEW AND

NORTHING-N4909901.795m, EASTING-E604588.426m

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

BRASS TABLET. LOCATED ON CULVERT HEADWALL SW. CORNER OF MAPLEVIEW AND BARRIE VIEW DR. SET FLUSH

AND 180mm NORTH OF THE S. END OF WALL.

ELEVATION OF 311.23

BENCHMARK: TOP OF TOP OF SPINDLE OF FIRE HYDRANT

SITE PLAN APPROVAL

ON W. FACE OF HEADWALL, 290mm BELOW TOP OF WALL

BARRIE VIEW DR AT BACK OF SIDEWALK

COVER. LOCATED JUST BEHIND THE SOUTH CURB LINE OF MAPLEVIEW DRIVE WEST, EAST OF VETERAN'S DRIVE. NORTHING-N4909639.121m, EASTING-E603897.740m

20/08/06

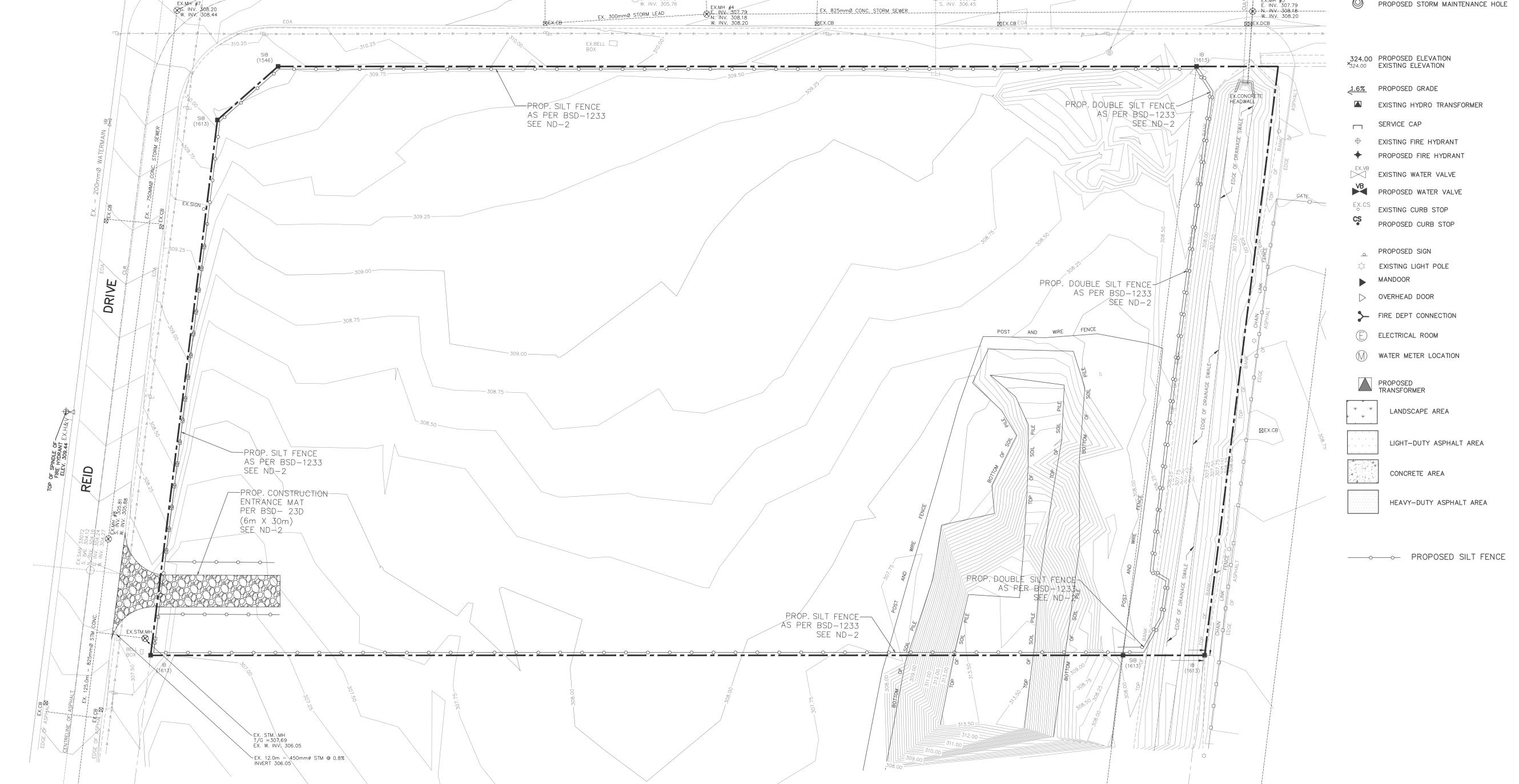
EROSION & SEDIMENT CONTROL PLAN

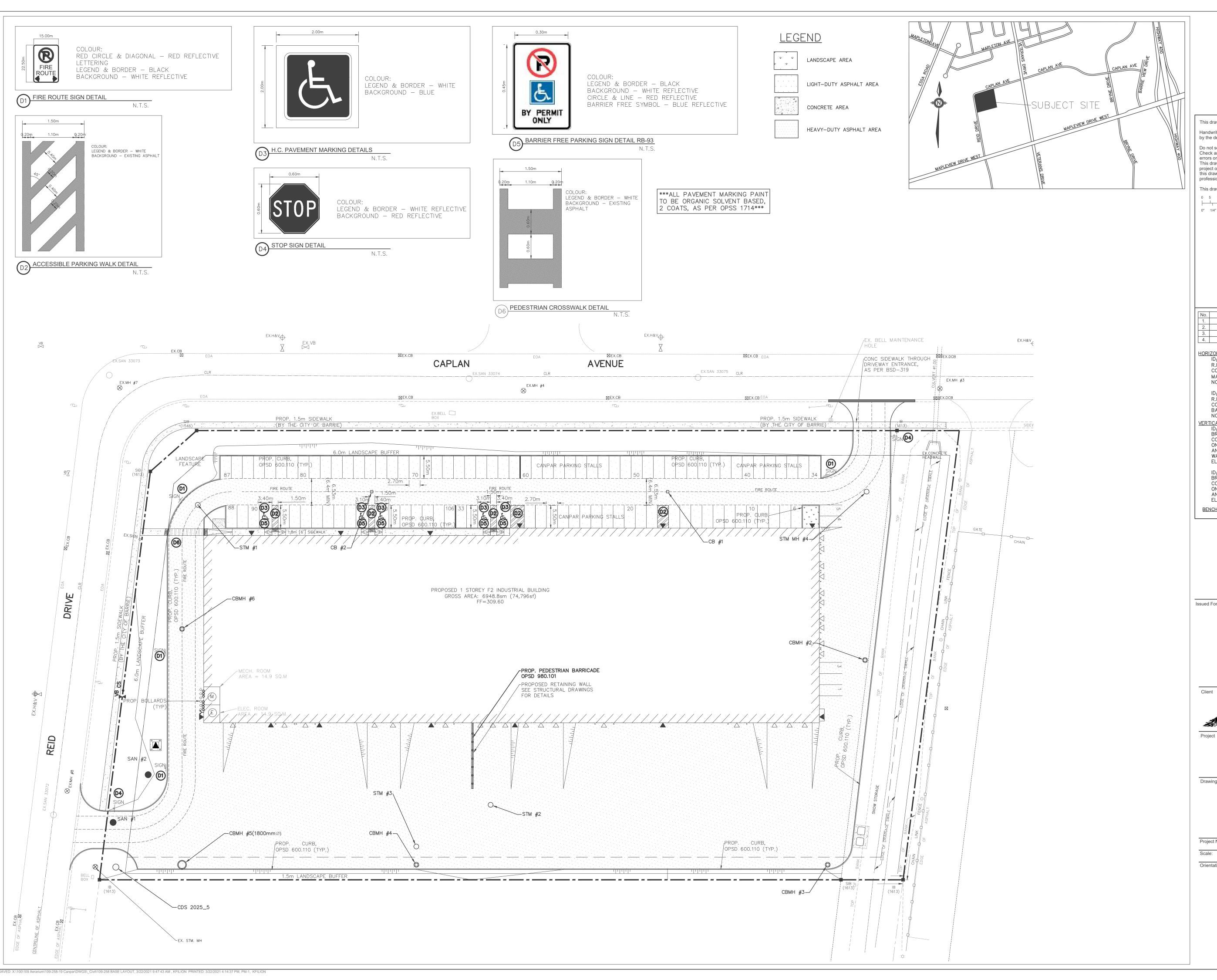
109-258-19 Designed by: AC / Checked by: KF





ESC-1





# ENGINEERING

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	SPA - 2ND SUBMISSION	21/03/19

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

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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 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



1 REID DR.

(149 CAPLAN AVENUE, BARRIE, ONTARIO)

PAVEMENT MARKINGS

109-258-19 Designed by: AC / Checked by: KF

PLAN



