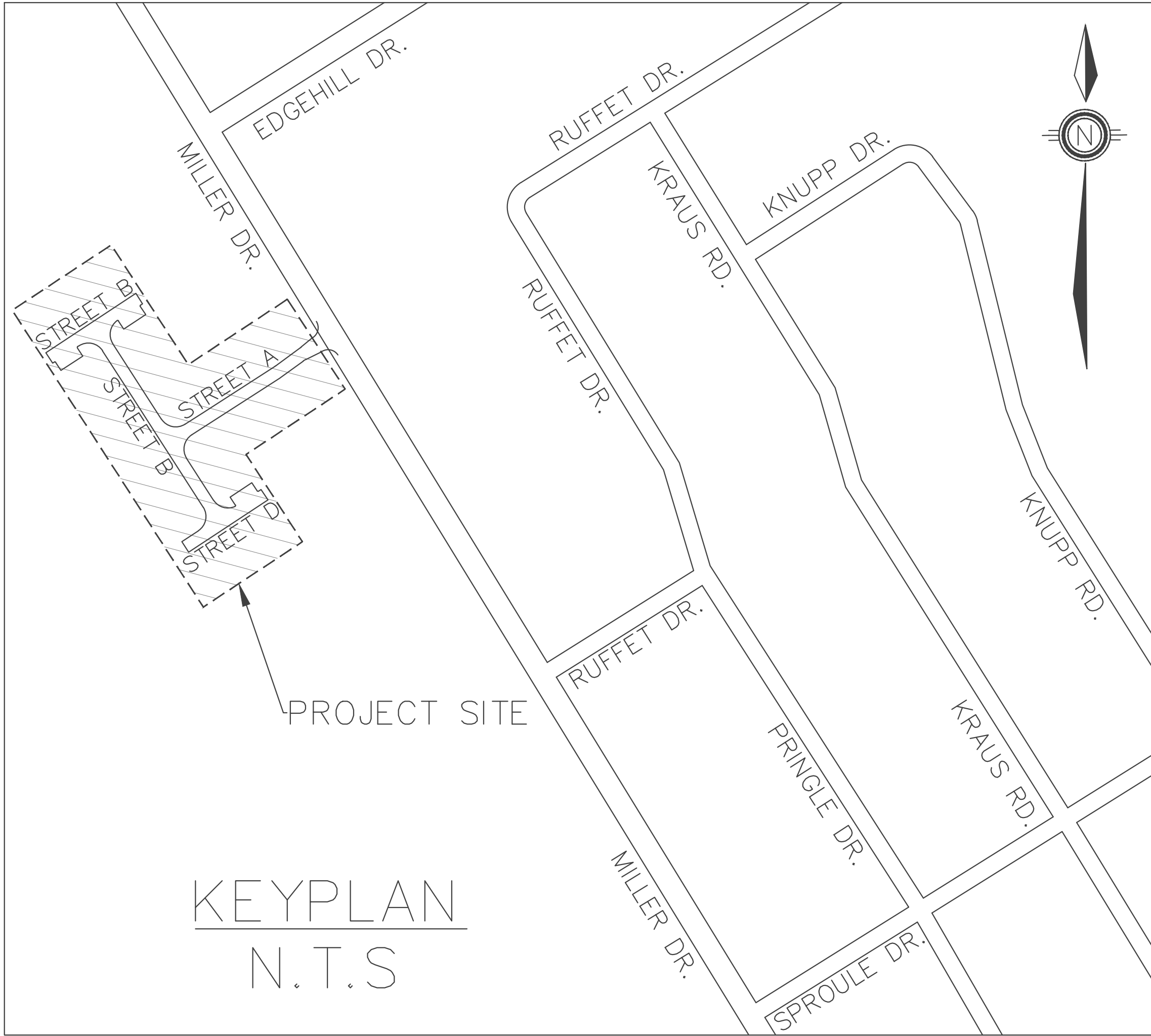




152 MILLER DRIVE
RESIDENTIAL DEVELOPMENT

152 MILLER DRIVE, BARRIE, ON



DRAWING INDEX			
SHEET	DRAWING	DRAWING TITLE	
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2 of 22	US-1	UNDERGROUND SERVICE PLAN	
3 of 22	SWM-1	PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN	
4 of 22	SWM-2	POST DEVELOPMENT STORMWATER MANAGEMENT PLAN	
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PLAN AND PROFILES			
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10 of 22	PP-2	MILLER DR	STATION 1+120 TO STATION 1+240
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17 of 22	CMP-1	CONSTRUCTION MANAGEMENT AND PARKING PLAN	
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20 of 22	ND-3	NOTES & DETAILS - 3 -	
21 of 22	ND-4	NOTES & DETAILS - 4 -	
22 of 22	ND-5	NOTES & DETAILS - 5 -	



GERRITS ENGINEERING
222 Maplevue Drive West, Suite 300
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Tel: (705) 737 3303



CITY OF BARRIE
ENGINEERING SERVICES
70 Collier Street,
Barrie, ON L4M 4T5
Tel: (705) 739-4420



ALLIANCE HOMES Ltd.
6048 Highway #9 Unit 7
Schomberg, ON L0G 1T0 Canada
Tel: (905) 761 7086



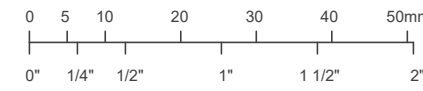
HUNT DESIGN ASSOCIATES INC.
8966 Woodbine Ave, Suite 200
Markham, ON L3R 0J7 Canada
Tel: (905) 737 5133

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1.	CLIENT REVIEW	22/02/18
2.	SITE PLAN APPROVAL	xx/xx/xx

Issued For:

SITE PLAN APPROVAL

Client



Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing:

ABOVE GROUND SERVICES PLAN

Project No. 1981-001-23 Designed by: RM Checked by: DL

Scale: 1:500 Drawn by: RM Approved by: JM

Orientation Stamp

Sheet No. 1 OF 22

Drawing No.

AS-1

LEGEND

- PRIVACY FENCE
- ACOUSTIC FENCE
- CHAIN LINK FENCE
- TREE PROTECTION
- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING STORM MAINTENANCE HOLE
- PROPOSED STORM MAINTENANCE HOLE
- SERVICE CAP
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- PROPOSED STREET LIGHTING POLE

PROPOSED SERVICE LATERAL LOCATIONS: SINGLE SERVICES

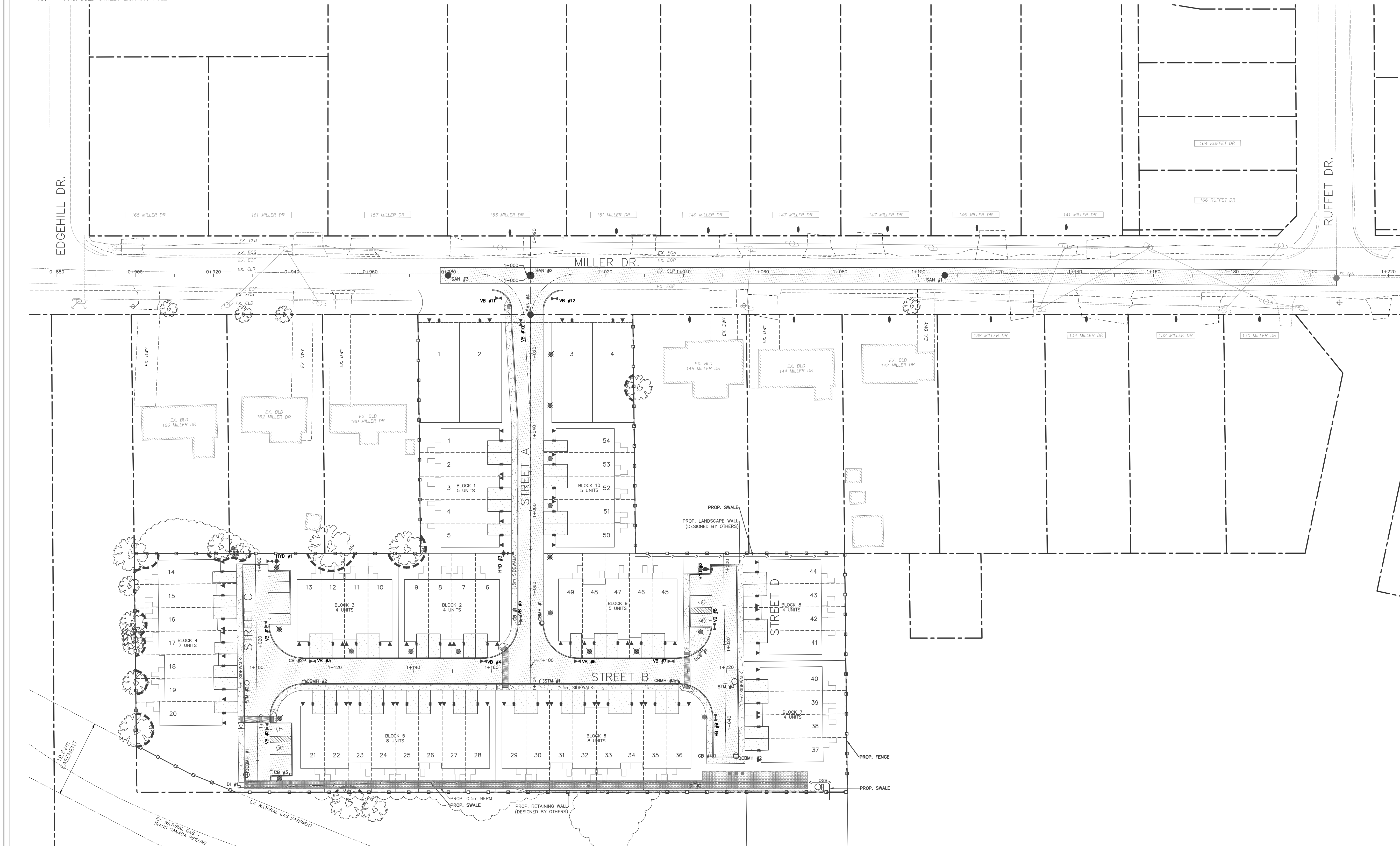
- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- WATER SERVICE

SEMI-DETACHED & TOWNHOUSE SERVICES

- SANITARY SERVICE
- WATER SERVICE

ASPHALT AREA

CONCRETE AREA

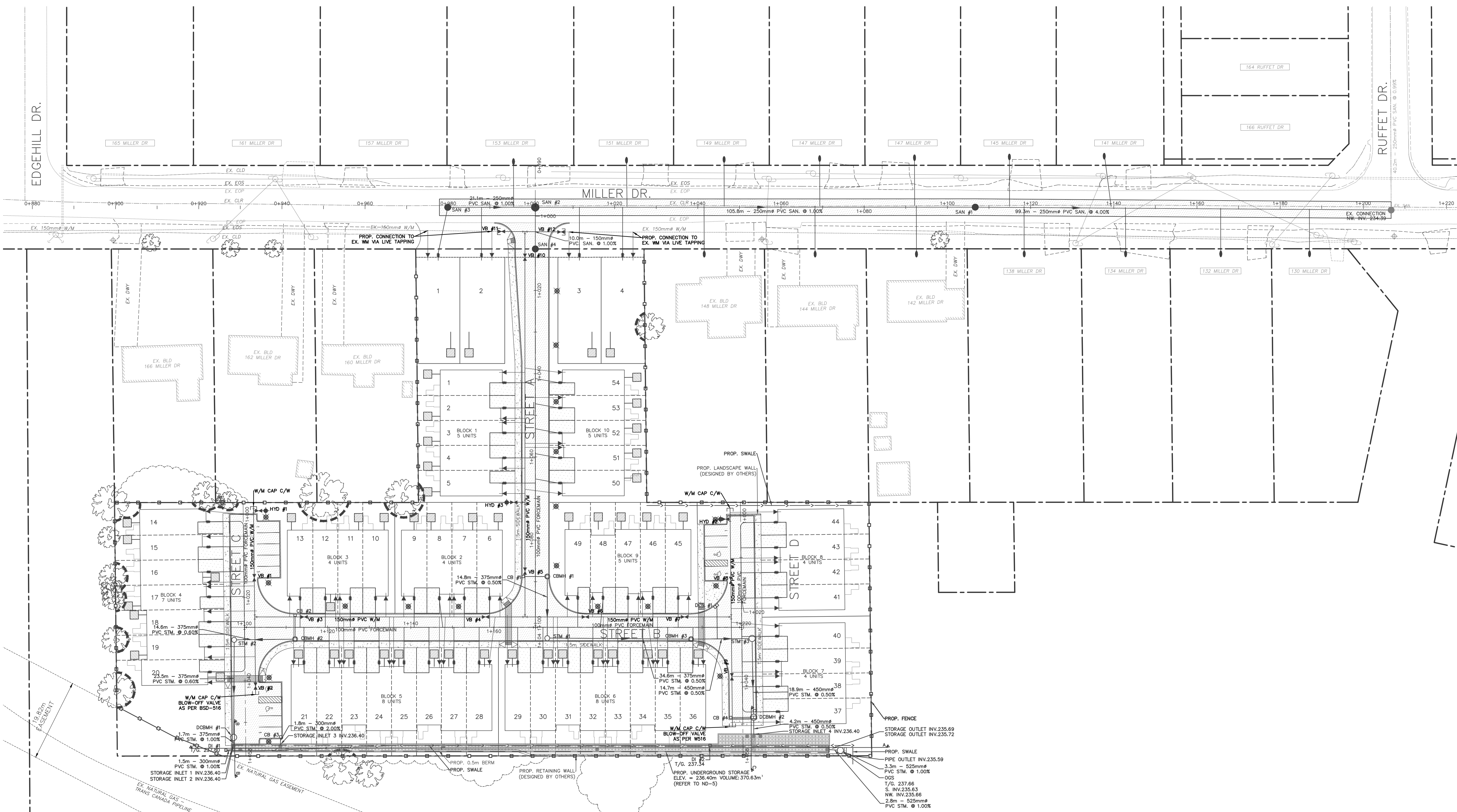
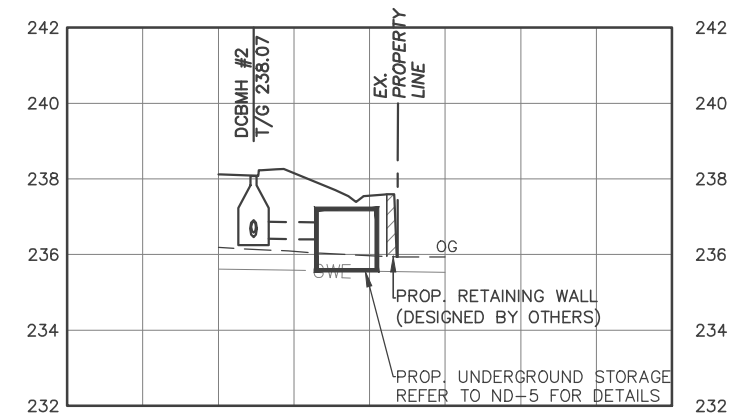
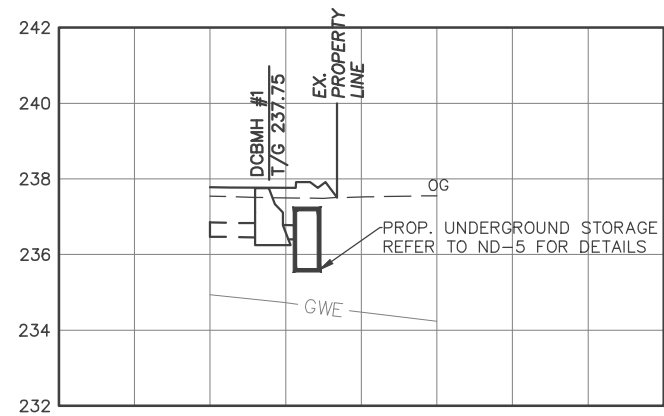
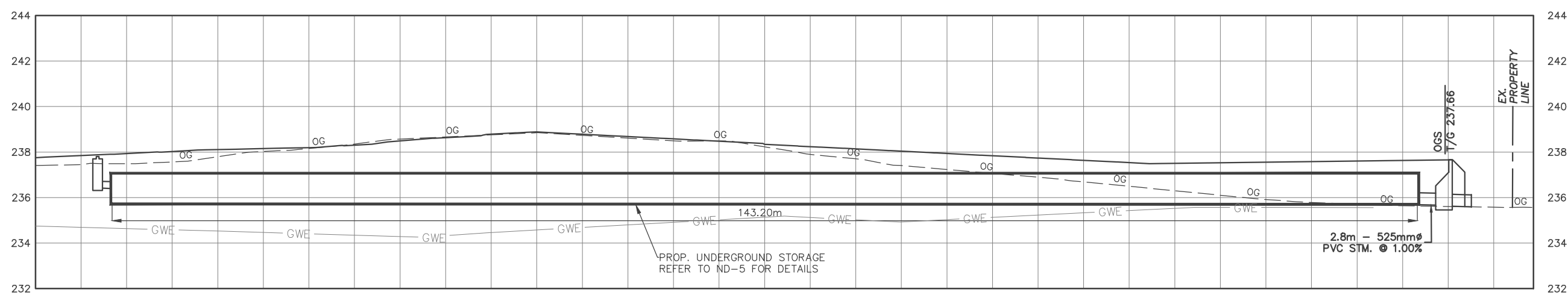
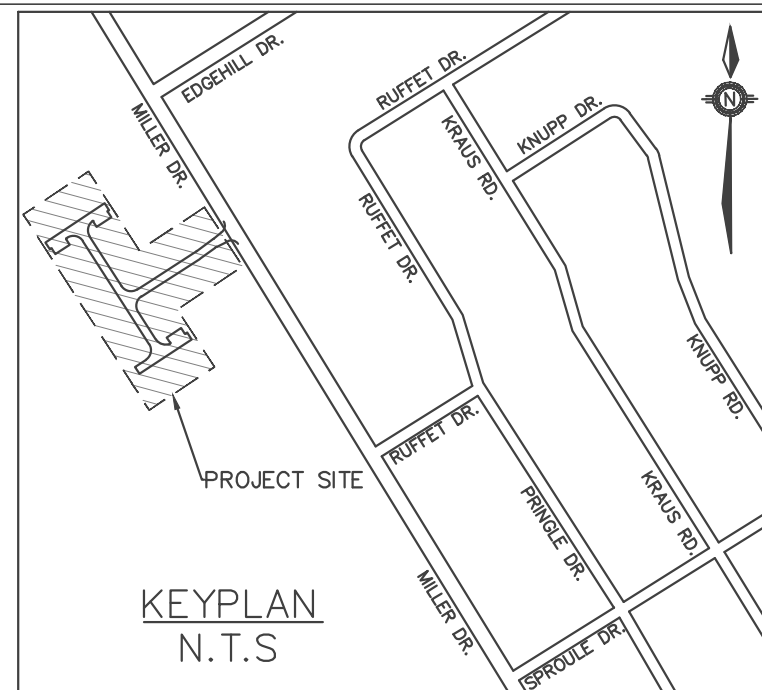
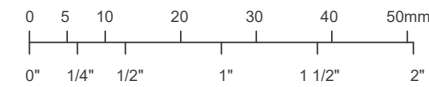


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SITE PLAN APPROVAL



Project
152 MILLER DRIVE
BARRIE, ON L4N 9X3
TOWN FILE:D28-014-2024

UNDERGROUND SERVICES PLAN

Project No.	1981-001-23	Designed by:	RM	Checked by:	DL
Scale:	1:500	Drawn by:	RM	Approved by:	JM

Orientation
Stamp



Sheet No.
2 OF 22

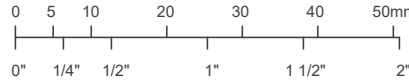
Drawing No.
US-1

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No.	Issuance Description	YYMMDD
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Issued For:
SITE PLAN APPROVAL



Project
152 MILLER DRIVE
BARRIE, ON L4N 9X3
TOWN FILE:D28-014-2024

Drawing:
**PRE-DEVELOPMENT
STORMWATER
MANAGEMENT PLAN**

Project No. 1981-001-23 Designed by: RM Checked by: DL
Scale: 1:1000 Drawn by: RM Approved by: JM

Orientation Stamp



Sheet No.
3 OF 22

Drawing No.
SWM-1

LEGEND

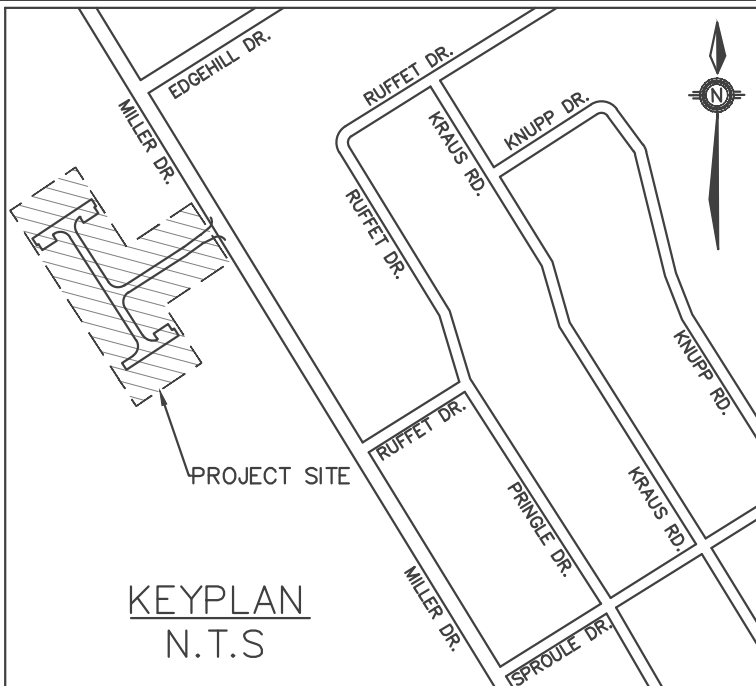
ID $\frac{X/P-1}{5.55}$ RUNOFF COEFFICIENT
AREA (ha)

CATCHMENT BOUNDARY

TREE PRESERVATION

OVERLAND FLOW

KEYPLAN
N.T.S

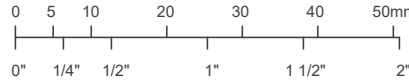


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2.	SITE PLAN APPROVAL	xx/xx/xx

Issued For:

SITE PLAN APPROVAL

Client



Project

152 MILLER DRIVE
BARRIE, ON L4N 9X3
TOWN FILE:D28-014-2024

Drawing:

POST-DEVELOPMENT STORMWATER MANAGEMENT PLAN

Project No. 1981-001-23 Designed by: RM Checked by: DL

Scale: 1:1000 Drawn by: RM Approved by: JM

Orientation Stamp



Sheet No.
4 OF 22

Drawing No.
SWM-2

LEGEND

ID $\frac{X/P-1}{5.55}$ RUNOFF COEFFICIENT
AREA (ha)

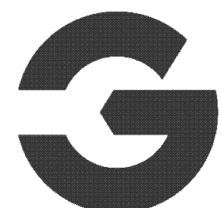
CATCHMENT BOUNDARY

TREE PRESERVATION

OVERLAND FLOW

KEYPLAN
N.T.S





STORM SEWER DESIGN

Q = 0.0028°C¹/A (cms)
C: RUNOFF COEFFICIENT
I: RAINFALL INTENSITY = A/(Tc+B)²/C
A: AREA (ha)

IDF Curve Parameters (5-Yr Return Period):

A	B	C
843.019	4.582	0.763

PROJECT NUMBER: 1981-001
PROJECT NAME: 152 Miller Drive
DESIGN SHEET NO.: STM-
DATE: x

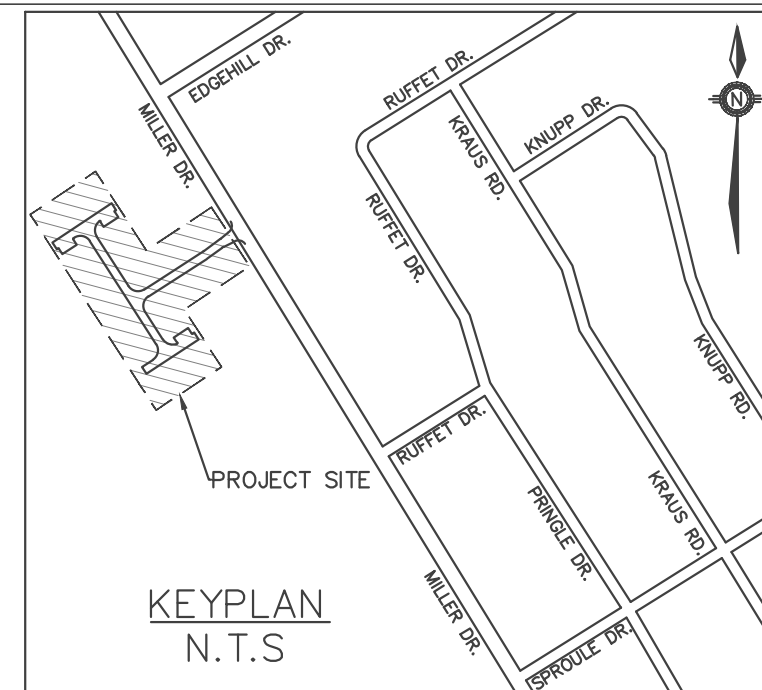
STREET NAME	SUBBASIN	MANHOLE		LENGTH	INCREMENT			TOTAL	FLOW TIME (min)		I	TOTAL Q	SLOPE	DIA.	Q FULL	V FULL	% FULL
		FROM	TO	(m)	C	A	CA	CA	TO	IN	(mm/h)	Q (cms)	(%)	(mm)	Q FULL (cms)	V FULL (m/s)	
STREET A	1	CBMH #1	STM #1	14.8	0.58	0.380	0.22	0.22	10.00	0.22	109.11	0.07	0.50	375	0.12	1.12	54%
STREET B	/	STM #1	CBMH #3	34.6	0.00	0.000	0.00	0.22	10.22	0.51	107.87	0.07	0.50	375	0.12	1.12	54%
	4	CBMH #3	STM #3	14.7	0.87	0.205	0.18	0.40	10.73	0.19	105.10	0.12	0.50	450	0.20	1.27	58%
STREET D	5	STM #3	DCBMH #2	18.9	0.82	0.151	0.12	0.52	10.93	0.25	104.10	0.15	0.50	450	0.20	1.27	75%
	/	DCBMH #2	STORAGE	4.2	0.00	0.000	0.00	0.52	11.18	0.06	102.84	0.15	0.50	450	0.20	1.27	74%
STREET B	2	CBMH #2	STM #2	14.6	0.79	0.308	0.24	0.24	10.00	0.20	109.11	0.07	0.60	375	0.14	1.23	54%
STREET C	/	STM #2	DCBMH #1	23.5	0.00	0.000	0.00	0.24	10.20	0.32	107.99	0.07	0.60	375	0.14	1.23	54%
	3	DCBMH #1	STORAGE	1.7	0.85	0.145	0.12	0.37	10.52	0.02	106.25	0.11	1.00	375	0.18	1.59	62%
	6				0.10	0.02	0.002	0.002									
	7				0.10	0.06	0.006	0.006									
	/	STORAGE	OGS	3.3	0.00	0.000	0.00	0.90	11.23	0.03	102.57	0.26	1.00	525	0.43	1.99	60%
	/	OGS	OUTLET	2.8	0.00	0.000	0.00	0.90	11.26	0.02	102.43	0.26	1.00	525	0.43	1.99	59%

LEGEND

- PRIVACY FENCE
- ACOUSTIC FENCE
- CHAIN LINK FENCE
- TREE PRESERVATION
- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING STORM MAINTENANCE HOLE
- PROPOSED STORM MAINTENANCE HOLE
- SERVICE CAP
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE

- PROPOSED SERVICE LATERAL LOCATIONS:
- SINGLE SERVICES**
- SANITARY SERVICE
 - CLEAN-OUT AT PROPERTY LINE
 - WATER SERVICE
- SEMI-DETACHED & TOWNHOUSE SERVICES**
- SANITARY SERVICE
 - WATER SERVICE

- ASPHALT AREA
- CONCRETE AREA
- RUN OFF COEFFICIENT AREA
- CATCHMENT BOUNDARY
- OVERLAND FLOW ARROW
- DEPTH OF FLOW EXCEEDS 0.10m ABOVE GUTTER ELEVATION OF CURB
- INFILTRATION GALLERY
2.0mW x 2.0mL x 2.0mD
VOLUME = 3.2m³



Gerri Engineering

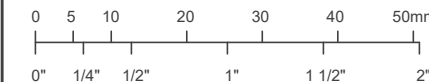
222 Mapleview Drive West, Suite 300
Barrie, ON L4N 5E7 Canada
Tel.: 705.737.3303
Fax.: 705.737.1772
www.gerrieng.com

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1.	CLIENT REVIEW	22/02/18
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Issued For:

SITE PLAN APPROVAL

Client



Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing:

STORM DRAINAGE PLAN

Project No. 1981-001-23 Designed by: RM Checked by: DL

Scale: 1/500 Drawn by: RM Approved by: JM

Orientation Stamp

Sheet No. 5 OF 22

Drawing No.

STM-1

(S603)						SANITARY SEWER DESIGN										DESIGN SHEET									
Land Use or Zoning Designation Basis (Residential)																FILE NO 1981-001-23									
																CONTRACT / PROJECT 152 MILLER DRIVE									
n ≥ D/13 M = 5/P^0.2 Babbitt						Numbers in blue or text in red are equations (Harmon or Babbitt peaking factor where; M ≥ 2), the greater of the two is used in the spreadsheet. Please refer to Section 3.3.1.1 of the Barrie Sanitary Design Guidelines for additional guidance on which peaking factor to use.																			
Q _p = P ^{0.75} q ^{0.75} M86400						(Peak population flow where; q = 225 L/day/person; P = population)										225 litres/person/day									
Q _a = PA						(Peak extransive flow; A = 0-L/L-ha over development area)																			
Q _{tot} = Q _p + Q _a						(Total peak flow as the sum of peak population flow and peak extransive flow)																			
STREET / AREA	MAINTENANCE HOLE		Land Use	Density (units/ha)	Area (ha)	DENSITY P.P.U.	POP. (P)	POP. (ACC)	M PEAKING FACTOR BABBITT	M PEAKING FACTOR HARMON	Max PEAKING FACTOR	Q _p (l/s)	AREA (ACC) (ha)	Q _a (l/s)	Q _{tot} (l/s)	L (m)	D (mm)	S (%)	Qf FULL (l/s)	d/D ⁽¹⁾	d/D ⁽²⁾ >0.5 or >0.70	Velocity FULL (m/s)	Velocity Partial ⁽³⁾ (m/s)	Velocity ⁽⁴⁾ > 0.6 (m/s)	
	FROM	TO																							
MILLER DRIVE																									
2	External Flow	SAN 3	Neighbourhood areas	25	7.66	3.13	600		600	5.539	3.932	5.539	8.648	8											
3		SAN 3	SAN 2	Neighbourhood areas	25	0.29	3.13	22	622	5.498	3.924	5.498	8.906	8	0.795	9.701	21.1	250	1.00%	59.468	0.273	Ok	1.211	0.870	OK
4		SAN 2	SAN 1	Neighbourhood areas	25	1.30	3.13	102	724	5.334	3.886	5.334	10.051	9	0.925	10.976	105.8	250	1.00%	59.468	0.290	Ok	1.211	0.901	OK
5		SAN 1	EX SAN	Neighbourhood areas	25	1.09	3.13	85	809	5.217	3.858	5.217	10.985	10	1.033	12.018	99.3	250	4.00%	118.935	0.214	Ok	2.423	1.512	OK
DATE:						CALCULATED BY:										CHECKED BY:									
Notes: (1) without extransive flow (2) with extransive flow (3) d/D>0.5 for pipes 375 and less, d/D>0.70 for pipes greater than 375 (4) Velocity check based on the lesser of full flow or partial velocity																									

STREET / AREA	MAINTENANCE HOLE		Land Use	Density (units/ha)	Area (ha)	DENSITY P.P.U.	POP. (P)	POP. (ACC)	M PEAKING FACTOR BABBIT	M PEAKING FACTOR HARMON	Max PEAKING FACTOR	Q _p (l/s)	AREA (ACC) (ha)	Q ₁ (l/s)	Q ₁₀₀ (l/s)	L (m)	D (mm)	S (%)	Qf FULL (l/s)	d/D ⁽³⁾	V _{0.5 or >0.70}	Velocity Full (m/s)	Partial ⁽¹⁾ (m/s)	Velocity ⁽⁴⁾ >0.8 (m/s)	
	FROM	TO																							
MILLER DRIVE																									
2	External Flow	SAN 3	Neighbourhood areas	25	7.66	3.13	600	600	5.539	3.932	5.539	8.648	8												
3		SAN 3	SAN 2	Neighbourhood areas	25	0.29	3.13	22	622	5.498	3.924	5.498	8.906	8	0.795	9.701	21.1	250	1.00%	59.468	0.273	Ok	1.211	0.870	Ok
4		SAN 2	SAN 1	Neighbourhood areas	25	1.30	3.13	102	724	5.334	3.886	5.334	10.051	9	0.925	10.976	105.8	250	1.00%	59.468	0.290	Ok	1.211	0.901	Ok
5		SAN 1	EX. SAN	Neighbourhood areas	25	1.09	3.13	85	809	5.217	3.858	5.217	10.985	10	1.033	12.018	99.3	250	4.00%	118.935	0.214	Ok	2.423	1.512	Ok

Notes:

- (1) without extraneous flow
- (2) with extraneous flow
- (3) $d/D > 0.5$ for pipes 375 and less, $d/D > 0.70$ for pipes greater than 375
- (4) Velocity check based on the lesser of full flow or partial velocity

	PRIVACY FENCE
	ACOUSTIC FENCE
	CHAIN LINK FENCE
	TREE PRESERVATION
	EXISTING SANITARY MAINTENANCE HOLE
	PROPOSED SANITARY MAINTENANCE HOLE
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	EXISTING STORM MAINTENANCE HOLE
	PROPOSED STORM MAINTENANCE HOLE
	SERVICE CAP
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	EXISTING WATER VALVE
	PROPOSED WATER VALVE

SINGLE SERVICES

- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- ▲ WATER SERVICE

SEMI-DETACHED & TOWNHOUSE SERVICES

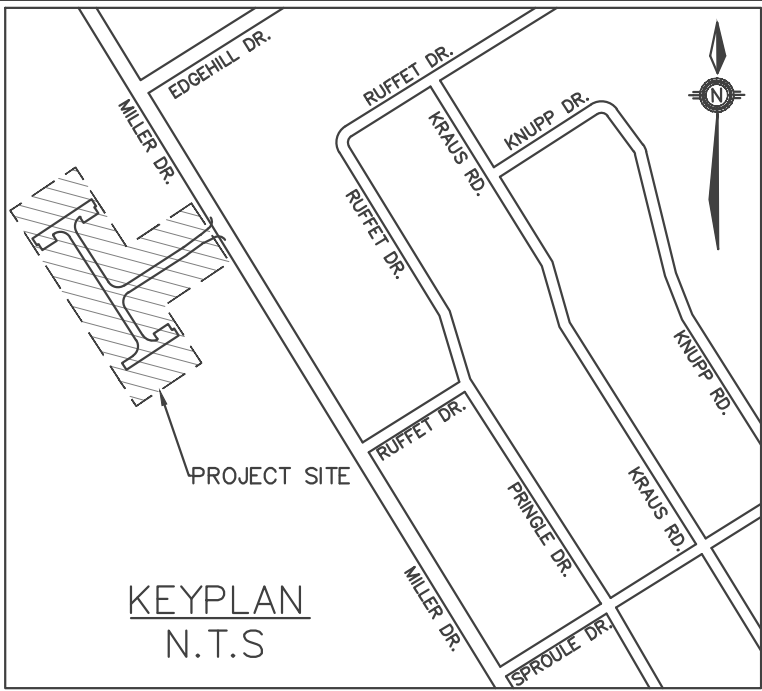
- SANITARY SERVICE
- ▲ WATER SERVICE

ASPHALT AREA

CONCRETE AREA

0.43 AREA (ha)
9 29.0 POPULATION
* DENOTES EXTERNAL)

SANITARY AREA BOUNDARY



222 Mapleview Drive West, Suite 300
Barrie, ON L4N 9E7 Canada
Tel.: 705.737.3303
Fax.: 705.737.1772
www.gerrens.com

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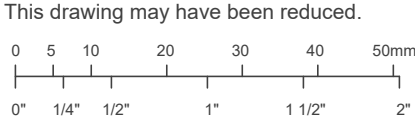
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1.	CLIENT REVIEW	22/02/18
2.	SITE PLAN APPROVAL	xx/xx/xx

Sited For:

SITE PLAN APPROVAL

Client

 **ALLIANCE**
www.alliancehomes.ca

Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing:

SANITARY DRAINAGE
PLAN

Project No.	1981-001-23	Designed by: RM	Checked by: DL
Scale:	1:500	Drawn by: RM	Approved by: JM
Orientation	Stamp		

Sheet No.	Drawing No.
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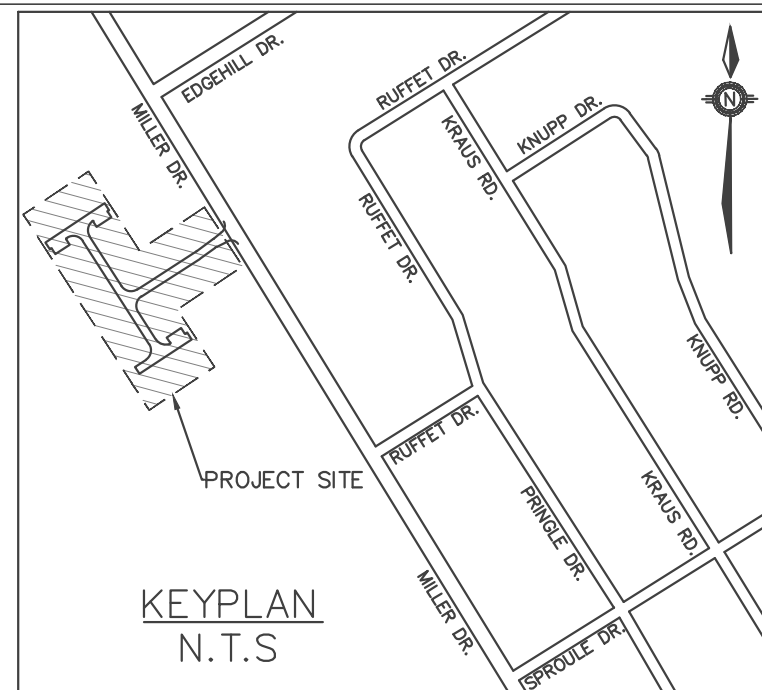
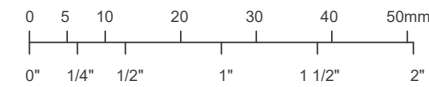
SAN-1

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LEGEND

- PRIVACY FENCE
- ACOUSTIC FENCE
- CHAIN LINK FENCE
- TREE PRESERVATION

- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING STORM MAINTENANCE HOLE
- PROPOSED STORM MAINTENANCE HOLE
- SERVICE CAP
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT

- EXISTING WATER VALVE

- PROPOSED WATER VALVE

- PROPOSED STREET LIGHTING POLE

PROPOSED SERVICE LATERAL LOCATIONS: SINGLE SERVICES

- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- WATER SERVICE

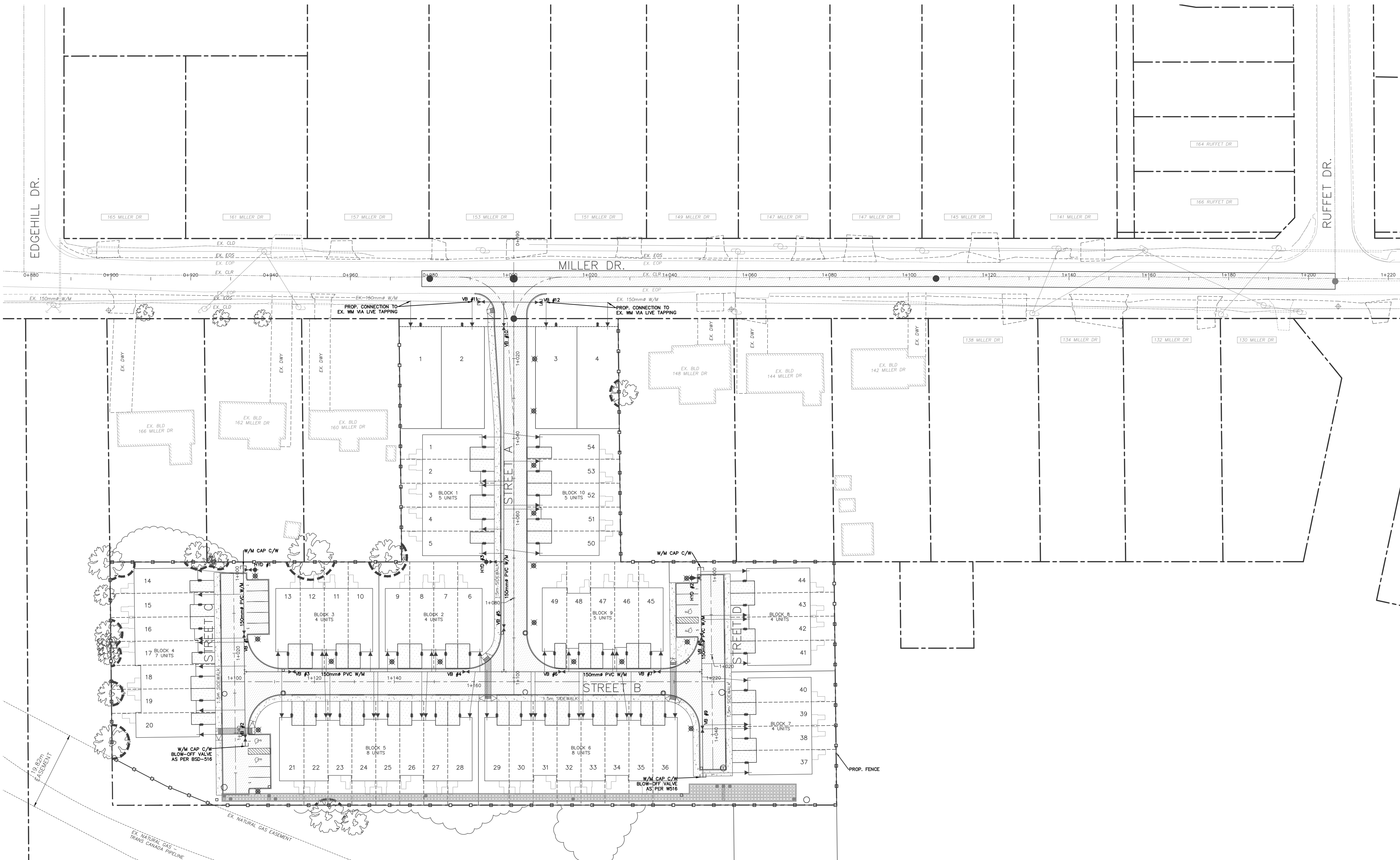
SEMI-DETACHED & TOWNHOUSE SERVICES

- SANITARY SERVICE
- WATER SERVICE

ASPHALT AREA

CONCRETE AREA

ALL HYDRANT BONNETS AND
CAPS TO BE PAINTED SILVER,
AS PER TOWN STANDARD



Issued For:

SITE PLAN APPROVAL

Client



Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing:

WATER DISTRIBUTION SYSTEM PLAN

Project No. 1981-001-23 Designed by: RM Checked by: DL

Scale: 1:500 Drawn by: RM Approved by: JM

Orientation Stamp

Sheet No. 7 OF 22 Drawing No. WD-1

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No.	Issuance Description	YY/MM/DD
1.	CLIENT REVIEW	22/02/18
2.	SITE PLAN APPROVAL	xx/xx/xx

SITE PLAN APPROVAL

 **ALLIANCE**
www.alliancehomes.ca

152 MILLER DRIVE
BARRIE, ON L4N 9X3
TOWN FILE:D28-014-2024

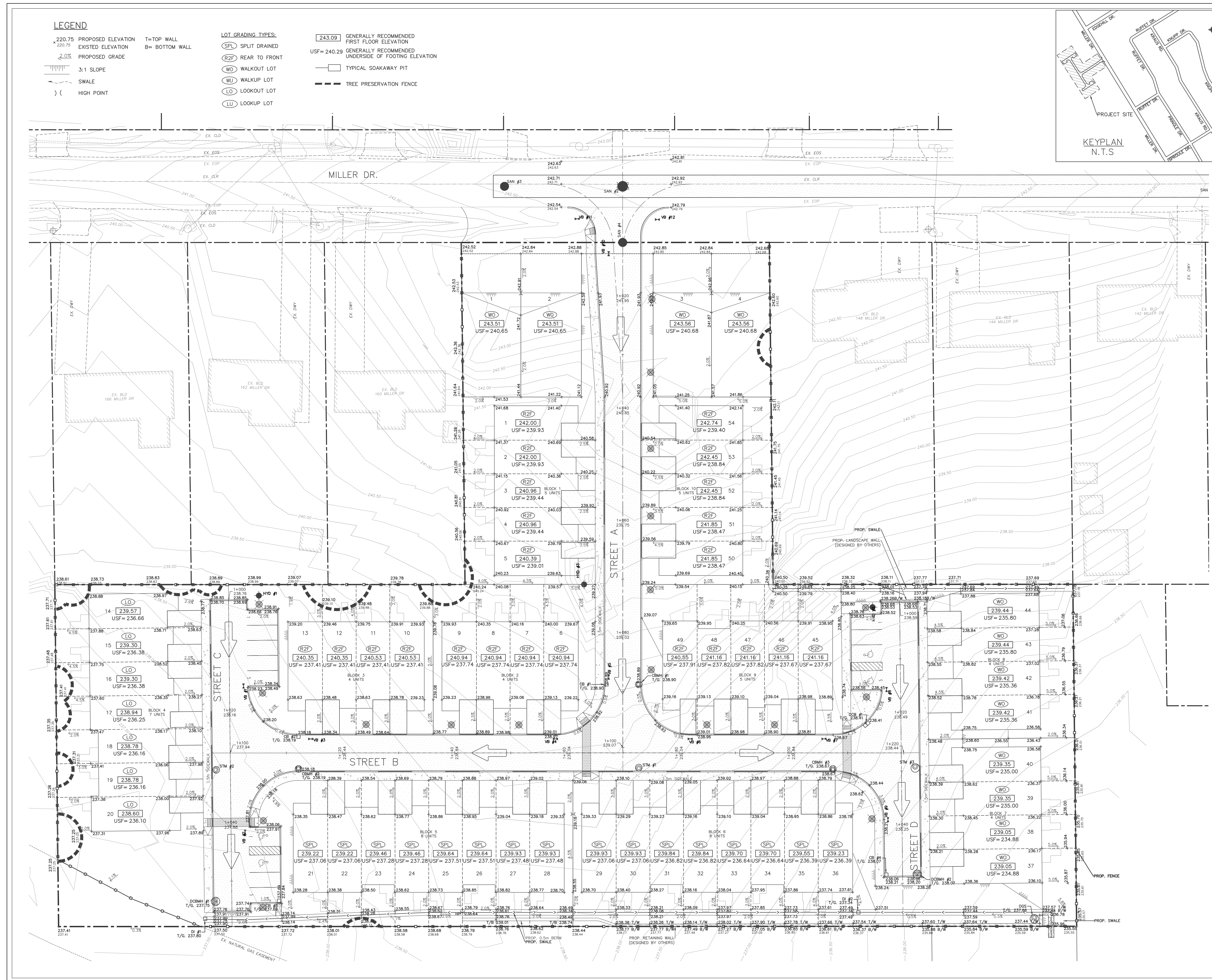
SITE GRADING PLAN

Project No.	1981-001-23	Designed by: RM	Checked by: DL
Scale:	1:300	Drawn by: RM	Approved by: JM
Orientation	Stamp		



Sheet No. 8 OF 22

SG-1

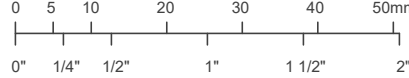


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This drawing may have been reduced.



LEGEND

- SAN# EXISTING SANITARY MAINTENANCE HOLE
- SAN# PROPOSED SANITARY MAINTENANCE HOLE
- CB# EXISTING CATCH BASIN
- CB# PROPOSED CATCH BASIN
- STM# EXISTING STORM MAINTENANCE HOLE
- STM# PROPOSED STORM MAINTENANCE HOLE
- SERVICE CAP
- HYD&VF EXISTING FIRE HYDRANT
- HYD&VF PROPOSED FIRE HYDRANT
- VB# EXISTING WATER VALVE
- VB# PROPOSED WATER VALVE
- PROPOSED STREET LIGHTING POLE

PROPOSED CUT

PROPOSED FILL

- HGL = 100 YEAR HYDRAULIC GRADE LINE
- OG = ORIGINAL GRADE
- GWE = GROUNDWATER ELEVATION
- SHGWE = SEASONAL HIGH GROUNDWATER ELEVATION
- FG = FINISHED GRADE
- CLR = CENTER LINE OF ROAD
- WATER PIPE
- STORM PIPE
- SANITARY PIPE

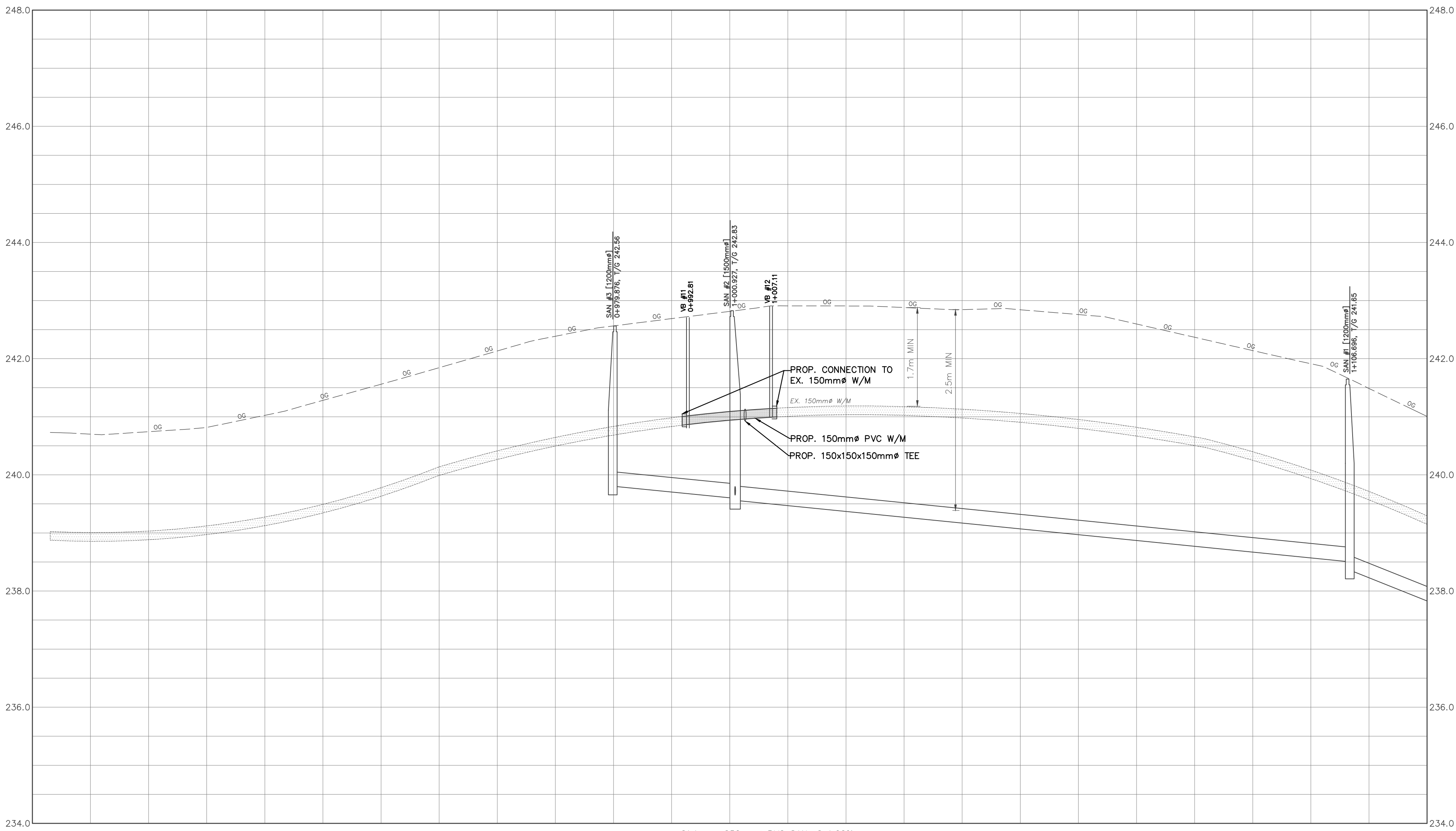
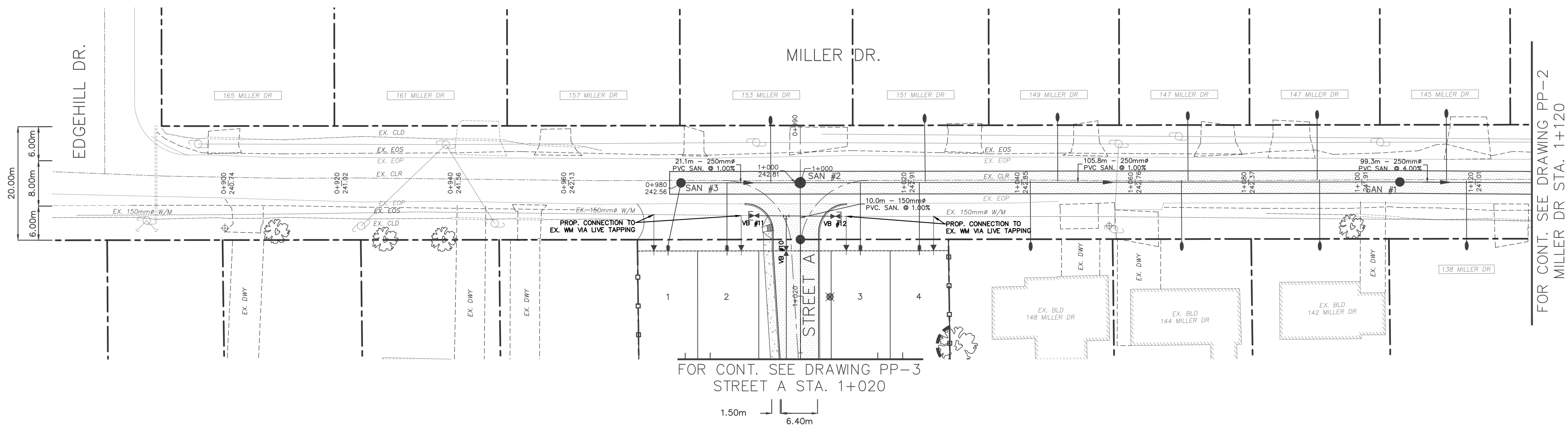
PROPOSED SERVICE LATERAL LOCATIONS:

SINGLE SERVICES

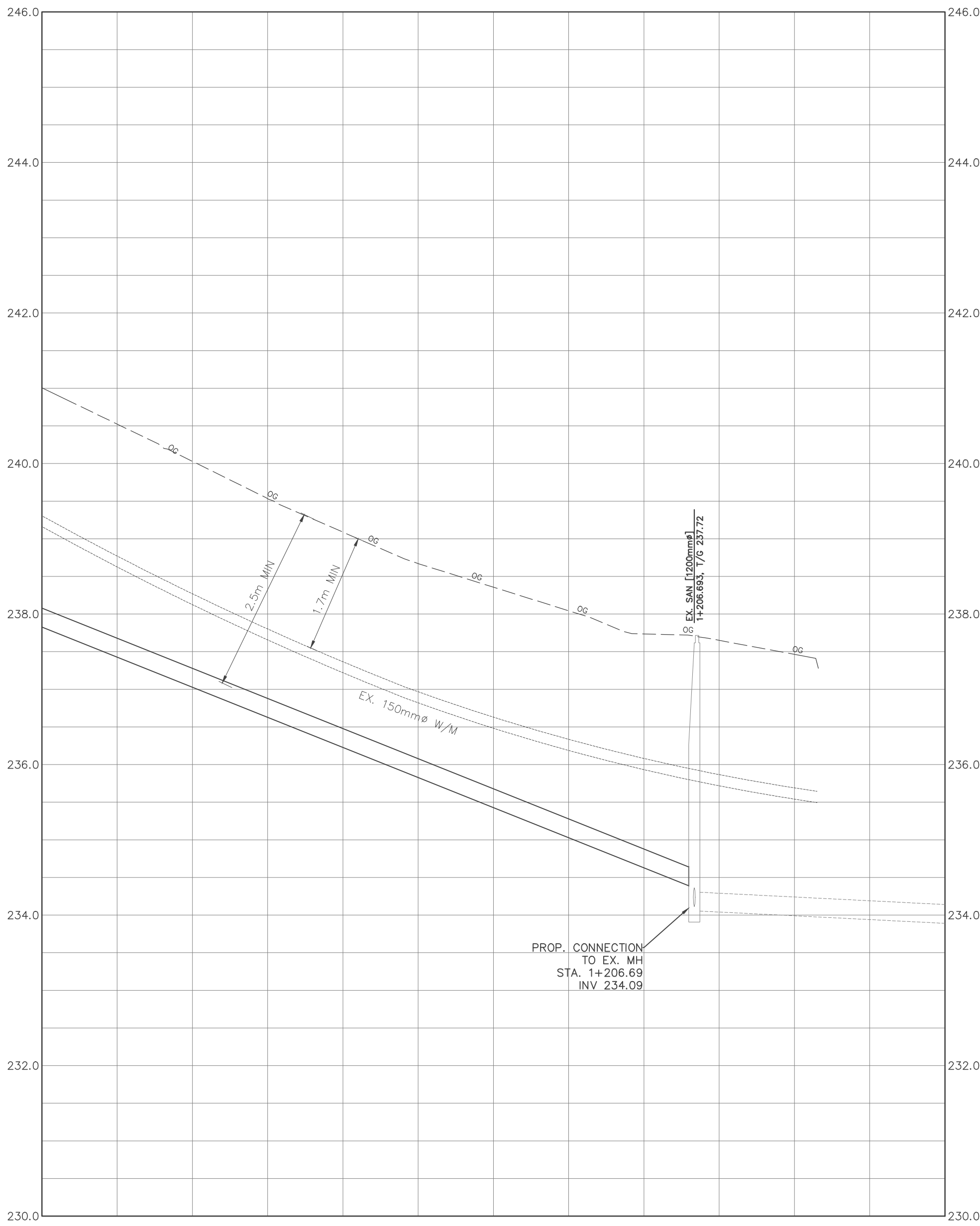
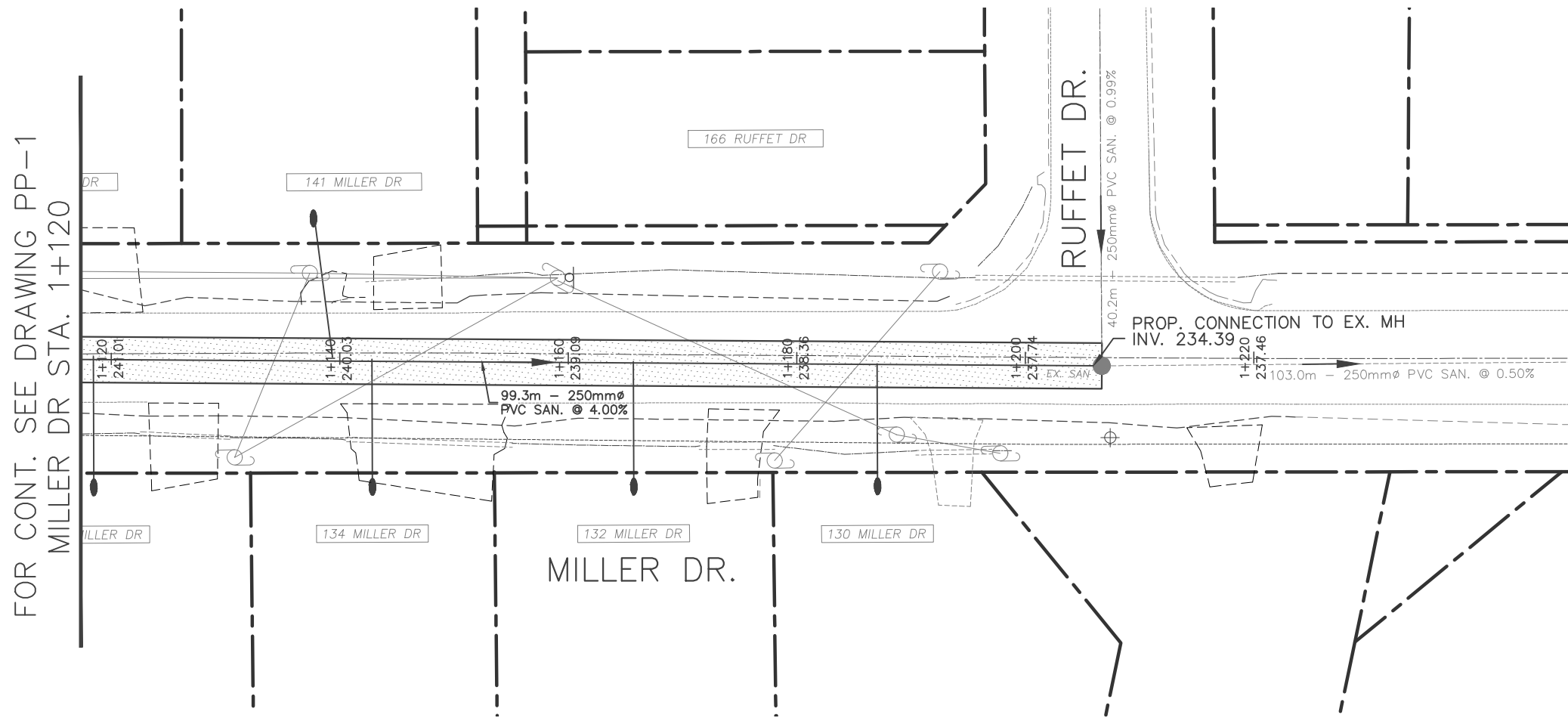
- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- WATER SERVICE

SEMI-DETACHED & TOWNHOUSE SERVICES

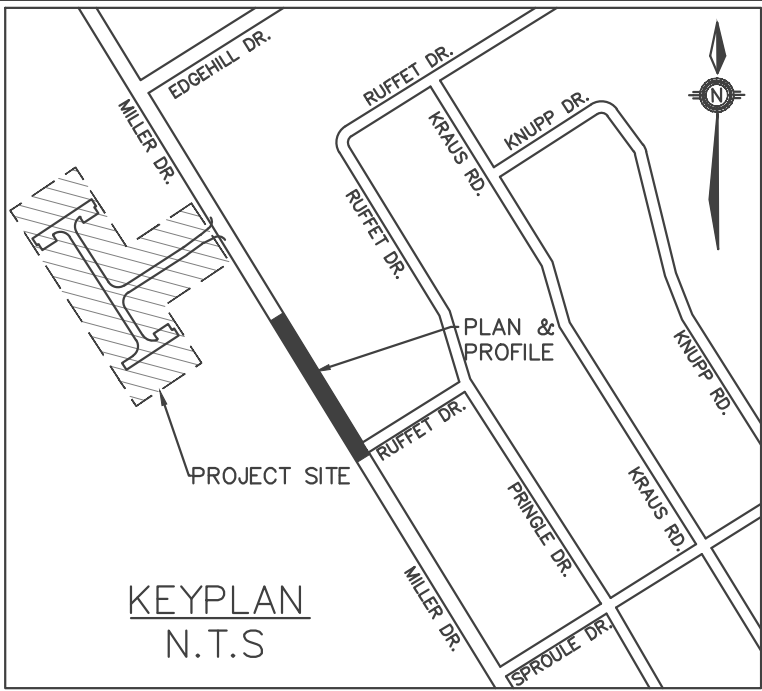
- SANITARY SERVICE
- WATER SERVICE



SANITARY SEWER INVERT		21.1m - 250mm# PVC SAN. @ 1.00%										105.8m - 250mm# PVC SAN. @ 1.00%										99.3m - 250mm# PVC SAN. @ 4.00%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 242.81		242.81 24



SANITARY SEWER INVERT		99.3m - 250mm $\varnothing$ PVC SAN. @ 4.00%						103.0m - 250mm $\varnothing$ PVC SAN. @ 0.50%	
EX. CLR PROP. CLR		241.01	240.03	239.09	238.36	237.74	237.46		
		1+120	1+140	1+160	1+180	1+200	1+220		



LEGEND

- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING STORM MAINTENANCE HOLE
- PROPOSED STORM MAINTENANCE HOLE
- SERVICE CAP
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE
- PROPOSED STREET LIGHTING POLE

PROPOSED CUT

PROPOSED FILL

- HLG = 100 YEAR HYDRAULIC GRADE LINE
- OG = ORIGINAL GRADE
- GWE = GROUNDWATER ELEVATION
- SHGWE = SEASONAL HIGH GROUNDWATER ELEVATION
- FG = FINISHED GRADE
- CLR = CENTER LINE OF ROAD
- WATER PIPE
- STORM PIPE
- SANITARY PIPE

PROPOSED SERVICE LATERAL LOCATIONS:

SINGLE SERVICES

- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- WATER SERVICE

SEMI-DETACHED & TOWNHOUSE SERVICES

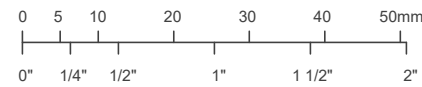
- SANITARY SERVICE
- WATER SERVICE

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No.	Issuance Description	YYMMDD
1.	CLIENT REVIEW	22/02/18
2.	SITE PLAN APPROVAL	xx/xx/xx

Issued For:

SITE PLAN APPROVAL

Client



Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

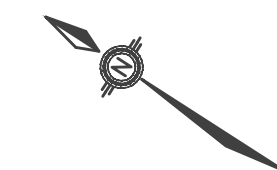
Drawing:

PLAN & PROFILE MILLER DR 1+120 TO 1+240

Project No. 1981-001-23 Designed by: RM Checked by: DL

Scale: HORZ 1:500 VERT 1:50 Drawn by: RM Approved by: JM

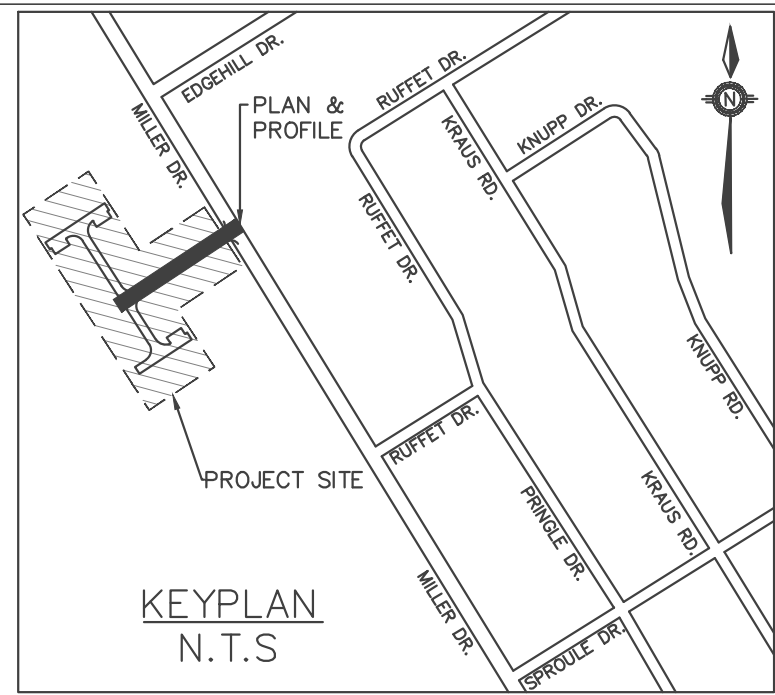
Orientation Stamp



Sheet No. 10 OF 22

Drawing No.

PP-2



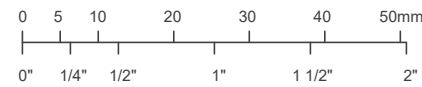
**222 Mapleview Drive West, Suite 300
Barrie, ON L4N 9E7 Canada
Tel.: 705.737.3303
Fax.: F.705.737.1772
www.gerrens.com**

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<i>SAN#</i>		EXISTING SANITARY MAINTENANCE HOLE
SAN#		PROPOSED SANITARY MAINTENANCE HOLE
<i>CB#</i>		EXISTING CATCH BASIN
CB#		PROPOSED CATCH BASIN
<i>STM#</i>		EXISTING STORM MAINTENANCE HOLE
STM#		PROPOSED STORM MAINTENANCE HOLE
		SERVICE CAP
<i>HYD&V#</i>		EXISTING FIRE HYDRANT
HYD&V#		PROPOSED FIRE HYDRANT
<i>VB#</i>		EXISTING WATER VALVE
VB#		PROPOSED WATER VALVE
		PROPOSED STREET LIGHTING POLE

 PROPOSED CUT PROPOSED FILL

HGL ————— HLG = 100 YEAR HYDRAULIC GRADE LINE

OG	= ORIGINAL GRADE
GWE	= GROUNDWATER ELEVATION
SHGWE	= SEASONAL HIGH GROUNDWATER ELEVATION
FG	= FINISHED GRADE
CLR	= CENTER LINE OF ROAD
---	WATER PIPE
---	STORM PIPE
---	SANITARY PIPE

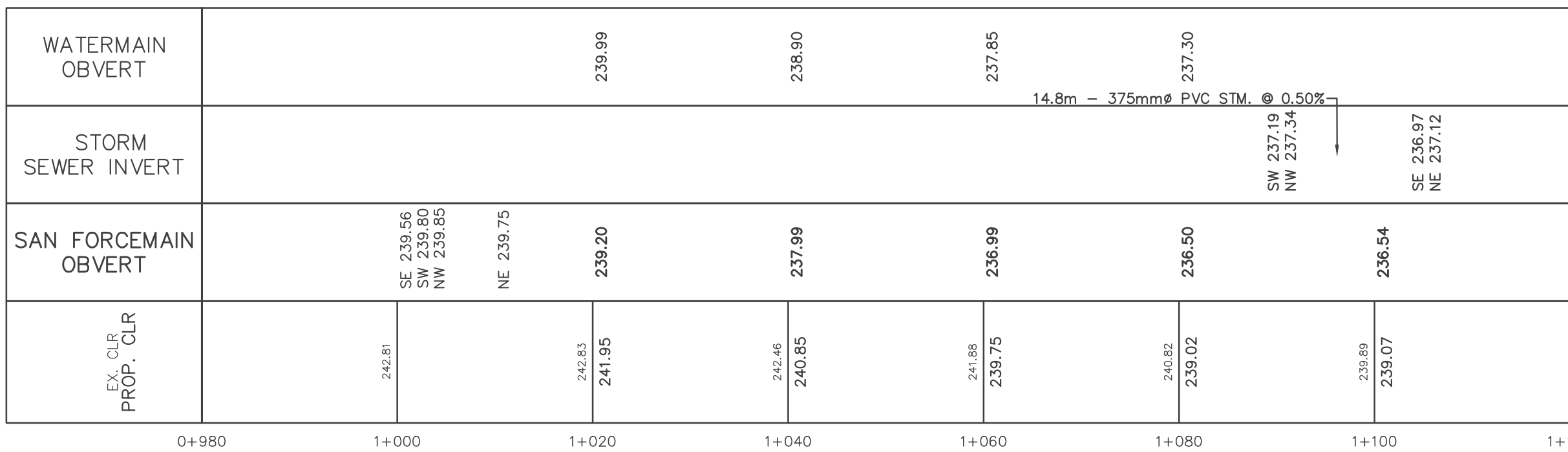
PROPOSED SERVICE LATERAL LOCATIONS:

SINGLE SERVICES

- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- ▲ WATER SERVICE

SEMI-DETACHED & TOWNHOUSE SERVICES

- SANITARY SERVICE
▲ WATER SERVICE



Issued For:

Client



Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing:

Project No.	1981-001-23	Designed by: RM	Checked by: DL
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Scale:	HORZ 1:500	Drawn by:	RM	Approved by:	JM
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Scale:	HORZ 1:500	Drawn by:	RM	Approved by:	JM
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Orientation	Stamp
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Sheet No. _____

Drawing No.	
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A number line with two scales. The top scale is in millimeters (mm) with major ticks at 0, 5, 10, 20, 30, 40, and 50. The bottom scale is in degrees (°) with major ticks at 0°, 1/4°, 1/2°, 1°, 1 1/2°, and 2°. The tick marks are aligned such that 0 mm corresponds to 0°, 5 mm to 1/4°, 10 mm to 1/2°, 20 mm to 1°, 30 mm to 1 1/2°, and 50 mm to 2°.



SAN#		EXISTING SANITARY MAINTENANCE HOLE
SAN#		PROPOSED SANITARY MAINTENANCE HOLE
CB#		EXISTING CATCH BASIN
CB#		PROPOSED CATCH BASIN
STM#		EXISTING STORM MAINTENANCE HOLE
STM#		PROPOSED STORM MAINTENANCE HOLE
		SERVICE CAP
HYD&VF		EXISTING FIRE HYDRANT
HYD&VF#		PROPOSED FIRE HYDRANT
VB#		EXISTING WATER VALVE
VB#		PROPOSED WATER VALVE
		PROPOSED STREET LIGHTING POLE

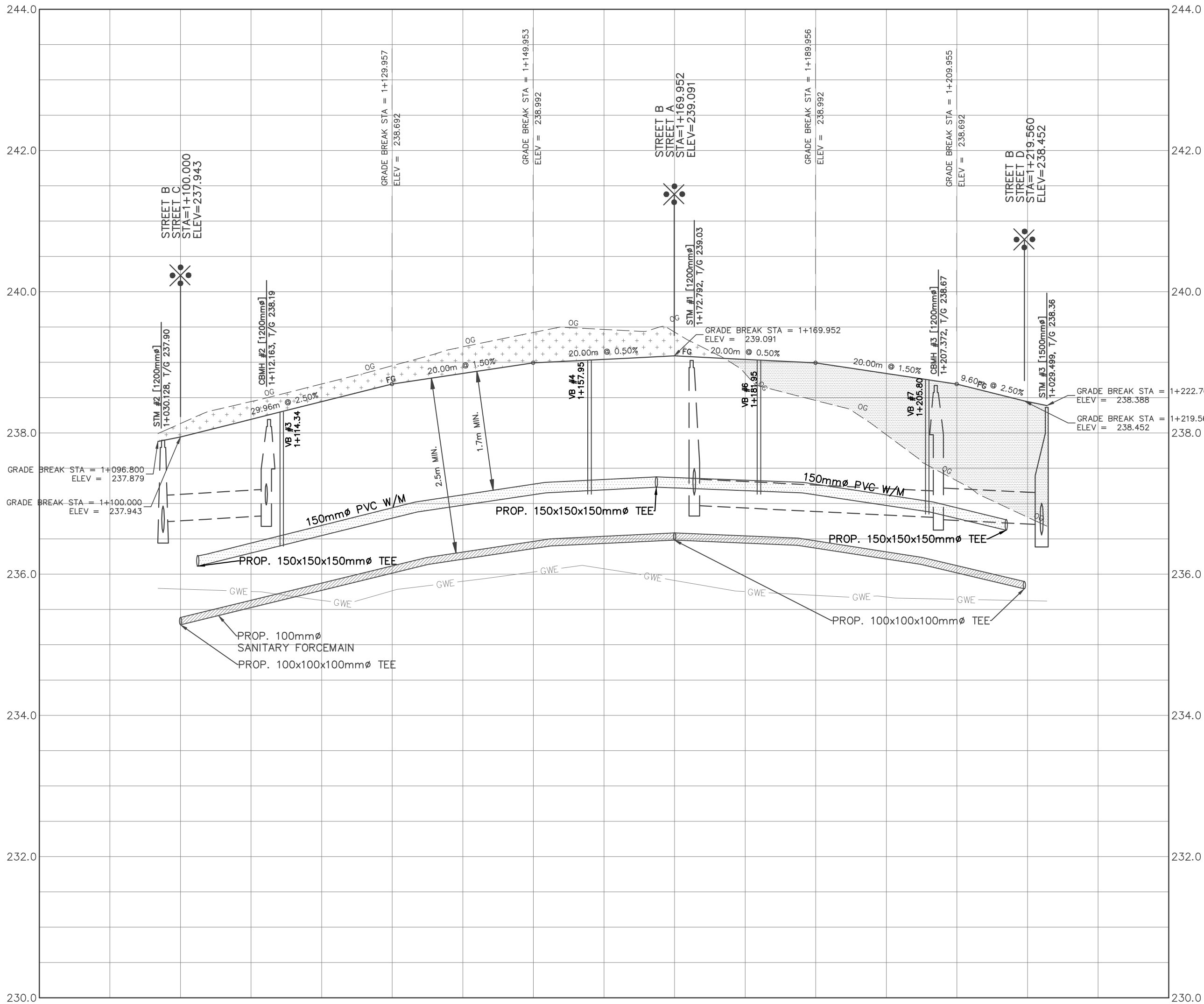
 PROPOSED FILL

OG = ORIGINAL GRADE
GWE = GROUNDWATER ELEVATION
SHGWE = SEASONAL HIGH GROUNDWATER ELEVATION
FG = FINISHED GRADE
CLR = CENTER LINE OF ROAD
WATER PIPE
STORM PIPE
SANITARY PIPE

SINGLE SERVICES

- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- ▲ WATER SERVICE

- SANITARY SERVICE
- ▲ WATER SERVICE



WATERMAIN OBVERT												
STORM SEWER INVERT		SW 236.59 SE 236.74		NW 236.83 NE 236.90			SE 236.97 NE 237.12			SE 236.77 NW 236.80		SW 236.55 NW 236.70
SAN FORCEMAIN OBVERT			235.87		236.31		236.54		236.54	236.32		
EX. CLR PROP. CLR		238.13 237.94	238.69 238.44		239.23 238.84		239.47 239.04		238.84 239.04	237.97 238.84		238.81 238.44
	1+080	1+100	1+120	1+140	1+160	1+180	1+200	1+220	1+240			

Client:



BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing

Project No.	1981.001-23	Designed by: RM	Checked by: DM
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Scale:	HOBZ 1:500	Drawn by:	RM	Approved by:	un
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Scale:	HORZ 1:500	Drawn by:	RM	Approved by:	JM
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Orientation	Stamp
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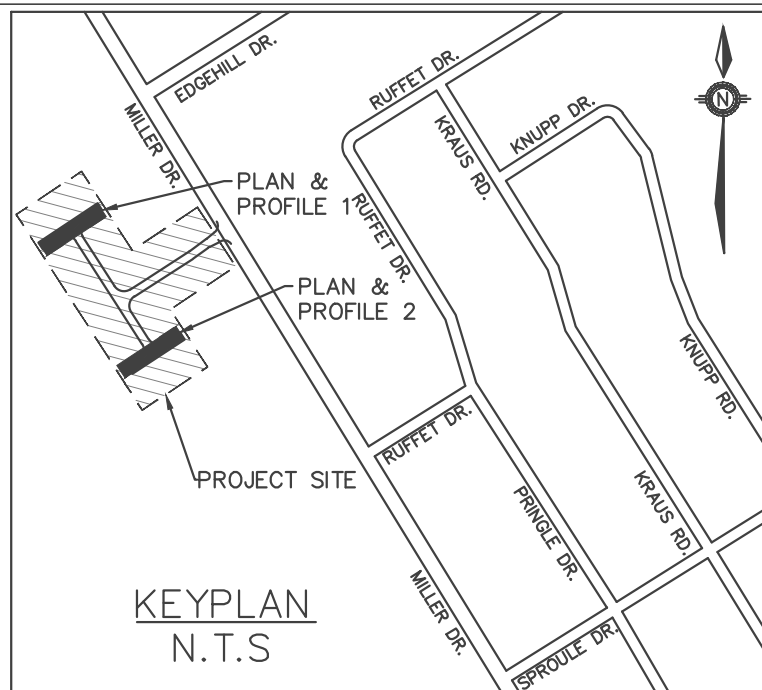
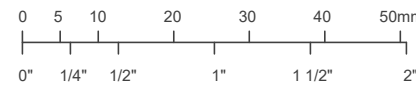


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KEYPLAN
N.T.S.

LEGEND

- SAN# ● EXISTING SANITARY MAINTENANCE HOLE
- SAN# ● PROPOSED SANITARY MAINTENANCE HOLE
- CB# □ EXISTING CATCH BASIN
- CB# □ PROPOSED CATCH BASIN
- STM# ○ EXISTING STORM MAINTENANCE HOLE
- STM# ○ PROPOSED STORM MAINTENANCE HOLE
- HYD&V# ⊕ SERVICE CAP
- HYD&V# ⊕ EXISTING FIRE HYDRANT
- HYD&V# ⊕ PROPOSED FIRE HYDRANT
- VB# ▢ EXISTING WATER VALVE
- VB# ▢ PROPOSED WATER VALVE
- ⊗ PROPOSED STREET LIGHTING POLE
- PROPOSED CUT
- PROPOSED FILL

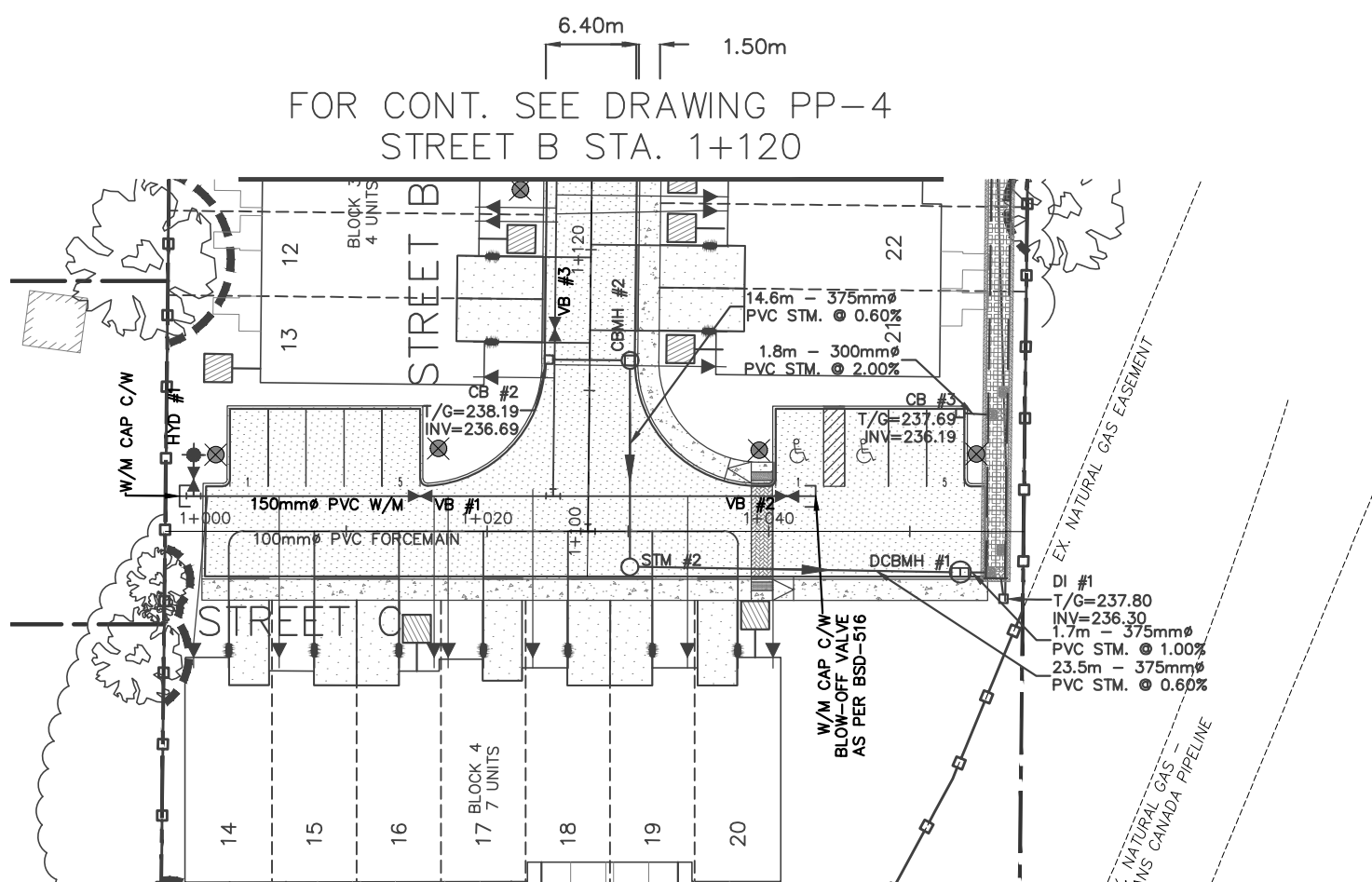
- HLG ——— HLG = 100 YEAR HYDRAULIC GRADE LINE
- OG ——— OG = ORIGINAL GRADE
- GWE ——— GWE = GROUNDWATER ELEVATION
- SHGWE ——— SHGWE = SEASONAL HIGH GROUNDWATER ELEVATION
- FG ——— FG = FINISHED GRADE
- CLR ——— CLR = CENTER LINE OF ROAD
- · — · — WATER PIPE
- — — STORM PIPE
- — — SANITARY PIPE

PROPOSED SERVICE LATERAL LOCATIONS:
SINGLE SERVICES

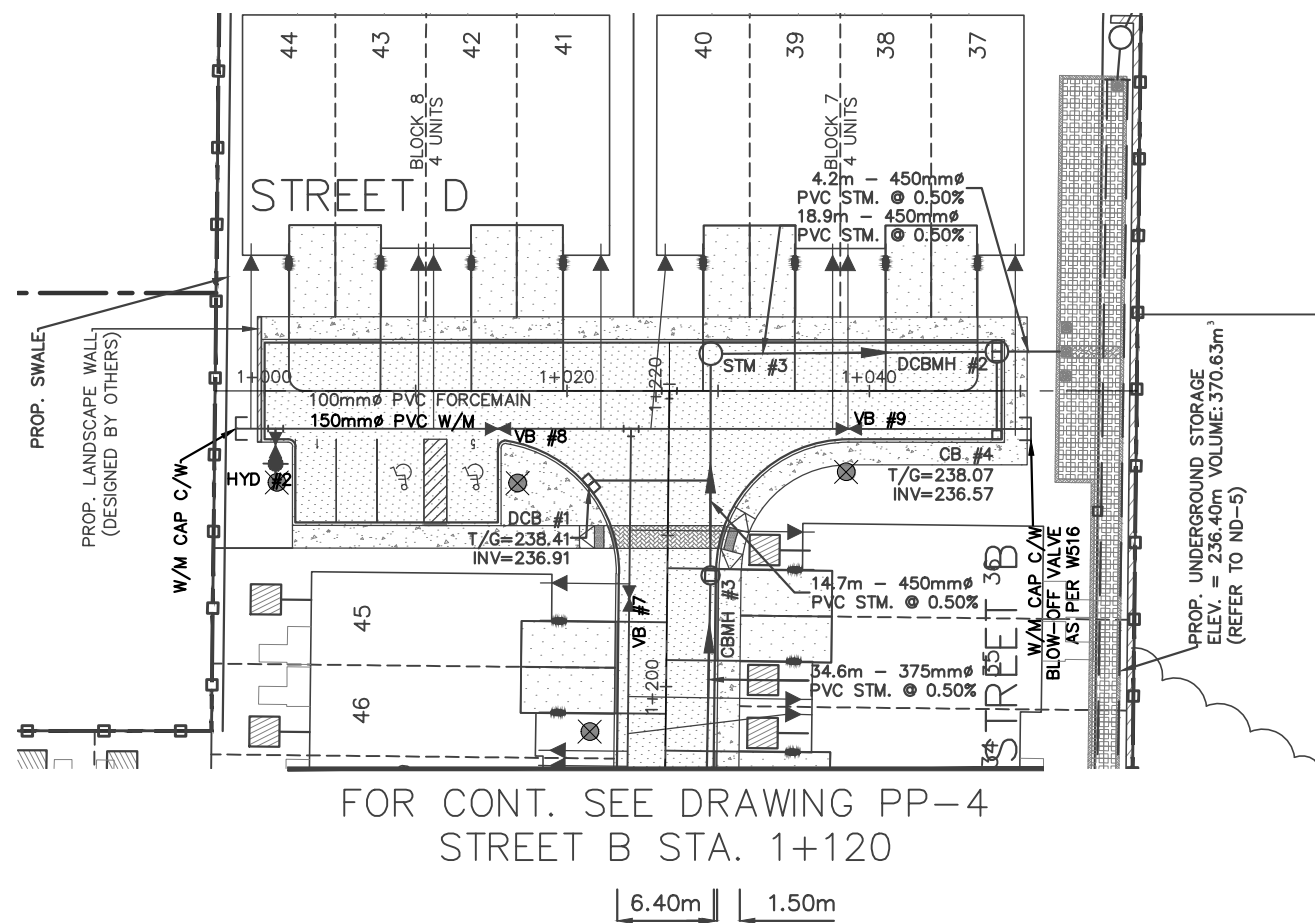
- SANITARY SERVICE
- CLEAN-OUT AT PROPERTY LINE
- ▲ WATER SERVICE

SEMI-DETACHED & TOWNHOUSE SERVICES

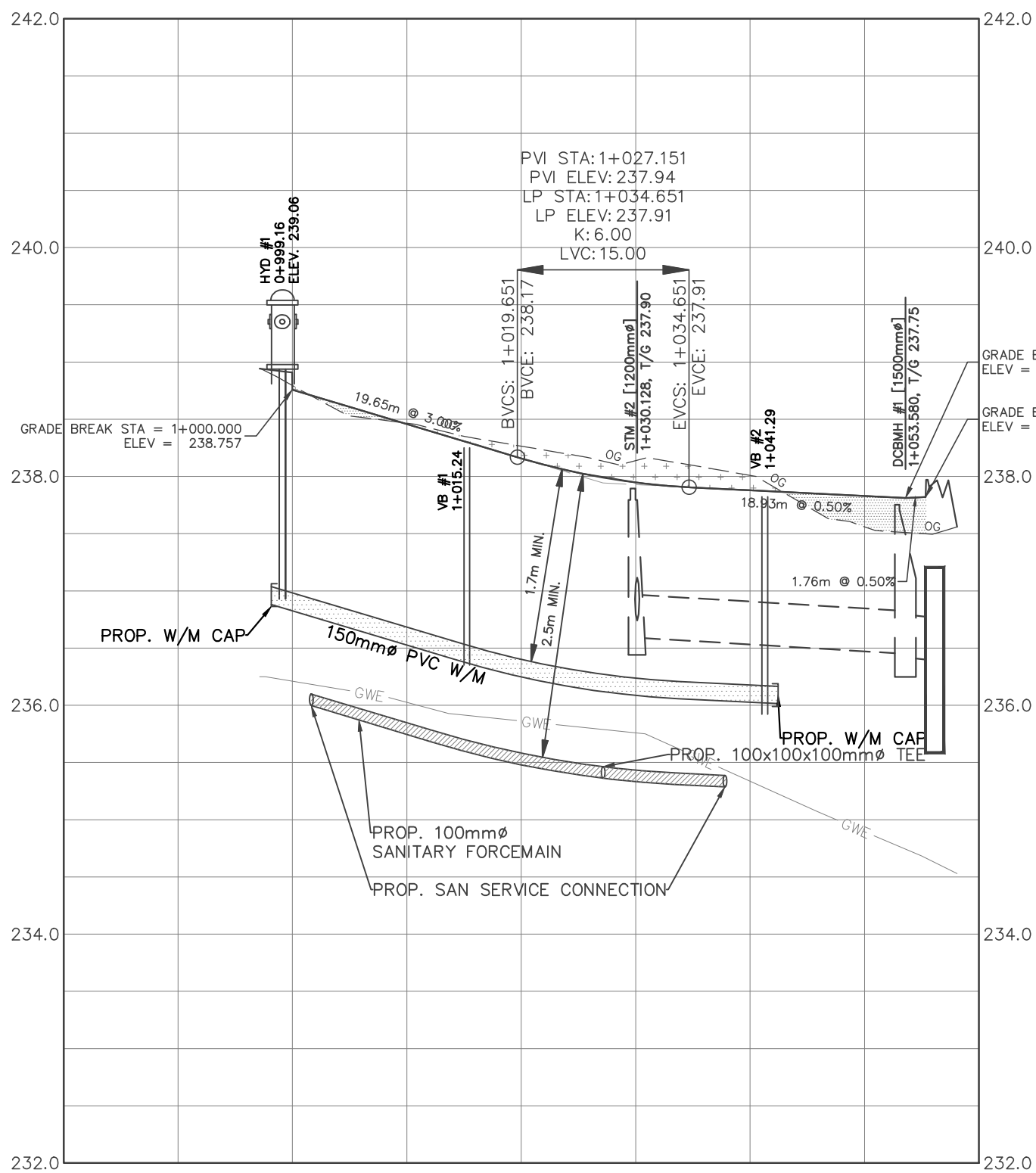
- SANITARY SERVICE
- ▲ WATER SERVICE



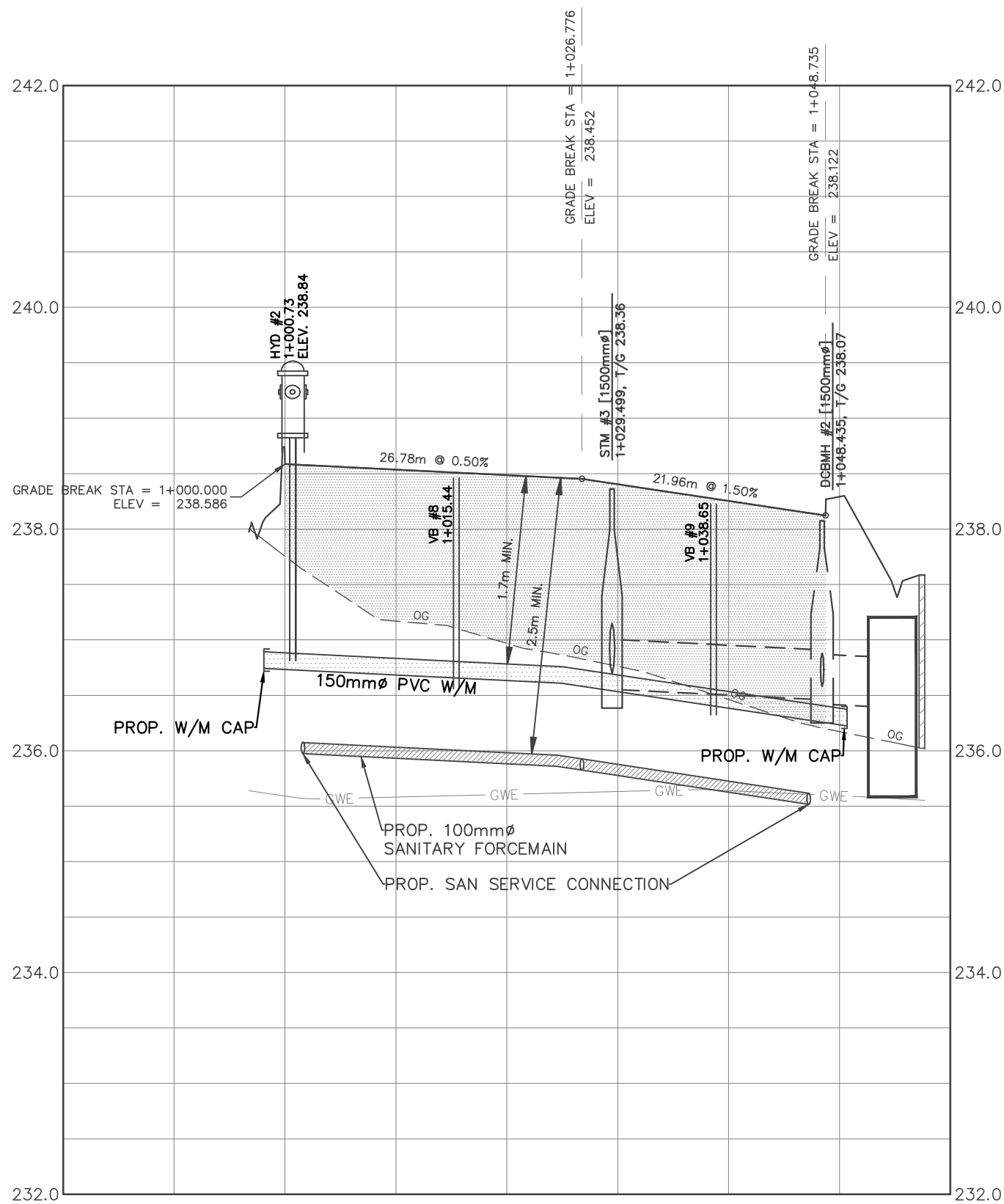
PLAN & PROFILE
STREET C



PLAN & PROFILE
STREET D



WATERMAIN OBVERT	236.98	236.40	236.18
STORM SEWER INVERT			SW 236.59 SE 236.74 23.5m - 375mm# PVC STM. @ 0.60% SW 236.42 NE 236.45
SAN FORCEMAIN OBVERT	236.15	235.58	235.38
EX. CLR PROP. CLR	237.76 237.76	238.07 238.16	238.07 237.88



WATERMAIN OBVERT	236.88	236.78	236.54
STORM SEWER INVERT			SW 236.55 NW 236.70 18.9m - 450mm# PVC STM. @ 0.50% SW 236.42 NE 236.58
SAN FORCEMAIN OBVERT	236.08	235.98	235.73
EX. CLR PROP. CLR	237.76 236.59	238.07 238.49	238.07 238.25

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LEGEND

- PRIVACY FENCE
- ACOUSTIC FENCE
- CHAIN LINK FENCE
- SILT FENCE
- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING STORM MAINTENANCE HOLE
- PROPOSED STORM MAINTENANCE HOLE
- SERVICE CAP
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE

PROPOSED SERVICE LATERAL LOCATIONS:

SINGLE SERVICES

- 125mm ϕ PVC SDR 28 SANITARY (2.00% MIN.)
 - 25mm ϕ TYPE "K" COPPER SERVICE
- SEMI-DETACHED & TOWNHOUSE SERVICES
- 125mm ϕ PVC SDR 28 SANITARY (2.00% MIN.)
 - 25mm ϕ TYPE "K" COPPER SERVICE

- PROPOSED GAS MAIN
- PROPOSED PRIMARY JOINT UTILITY TRENCH
- PROPOSED JOINT SECONDARY UTILITY TRENCH
- PROPOSED UTILITY ROAD CROSSING
- PROPOSED SOAK AWAY PITS
- PROPOSED UTILITY SERVICES LOCATION
- PROPOSED TRANSFORMER
- PROPOSED STREET LIGHTING POLE
- EXISTING STREET LIGHTING POLE
- PROPOSED MAILBOX PAD
- PROPOSED CABLE TV VAULT
- PROPOSED GRADE LEVEL BOX
- PROPOSED VAULT
- PROPOSED STOP SIGN
- PROPOSED STREET NAME SIGN

APPROVED	ALECTRA UTILITIES
SIGNATURE	
NAME (PRINT)	
DATE	
APPROVED	BELL CANADA
SIGNATURE	
NAME (PRINT)	
DATE	
APPROVED	CANADA POST
SIGNATURE	
NAME (PRINT)	
DATE	
APPROVED	ENBRIDGE GAS DISTRIBUTION INC.
SIGNATURE	
NAME (PRINT)	
DATE	
APPROVED	ROGERS CABLE
SIGNATURE	
NAME (PRINT)	
DATE	

NOTE:
ALL BELL, ROGERS & ENBRIDGE PLANT RESIDES IN A JOINT UTILITY TRENCH. TRENCH IS LOCATED IN STANDARD JOINT TRENCH LOCATIONS THROUGHOUT THE DEVELOPMENT PER TYPICAL SECTIONS

Issued For:

SITE PLAN APPROVAL

Client



Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing:

COMPOSITE UTILITY PLAN

Project No. 1981-001-23 Designed by: RM Checked by: DL

Scale: 1:500 Drawn by: RM Approved by: JM

Orientation Stamp

Sheet No. 14 OF 22

Drawing No.

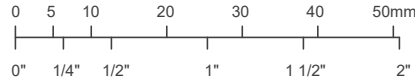
CU-1

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No.	Issuance Description	YYMMDD
1.	CLIENT REVIEW	22/02/18
2.	SITE PLAN APPROVAL	xx/xx/xx

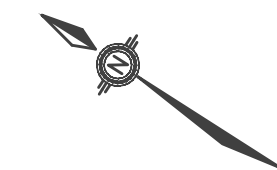
Issued For:
SITE PLAN APPROVAL



Project
152 MILLER DRIVE
BARRIE, ON L4N 9X3
TOWN FILE:D28-014-2024

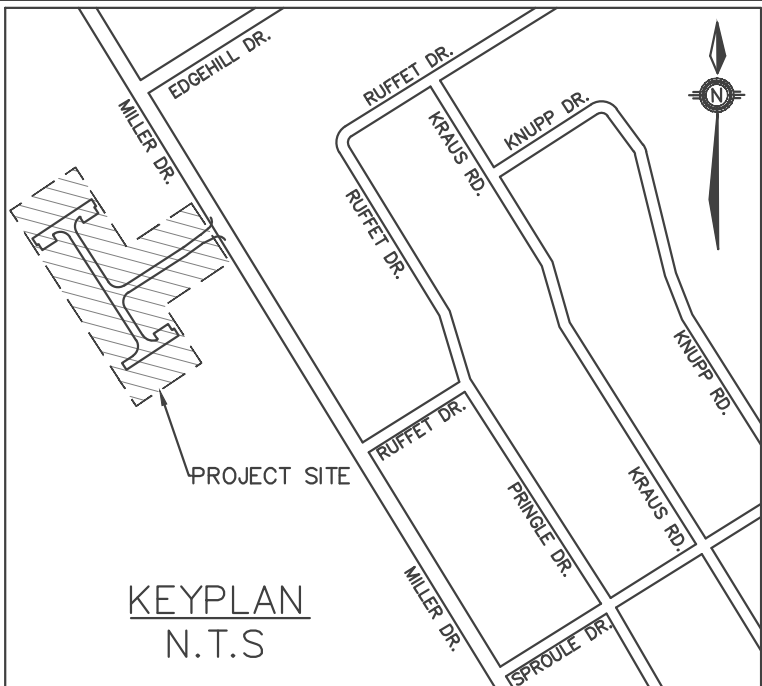
Drawing:
TRAFFIC MANAGEMENT PLAN

Project No.	1981-001-23	Designed by:	RM	Checked by:	DL
Scale:	1:500	Drawn by:	RM	Approved by:	JM
Orientation	Stamp				



Sheet No.
15 OF 22

Drawing No.
TMP-1

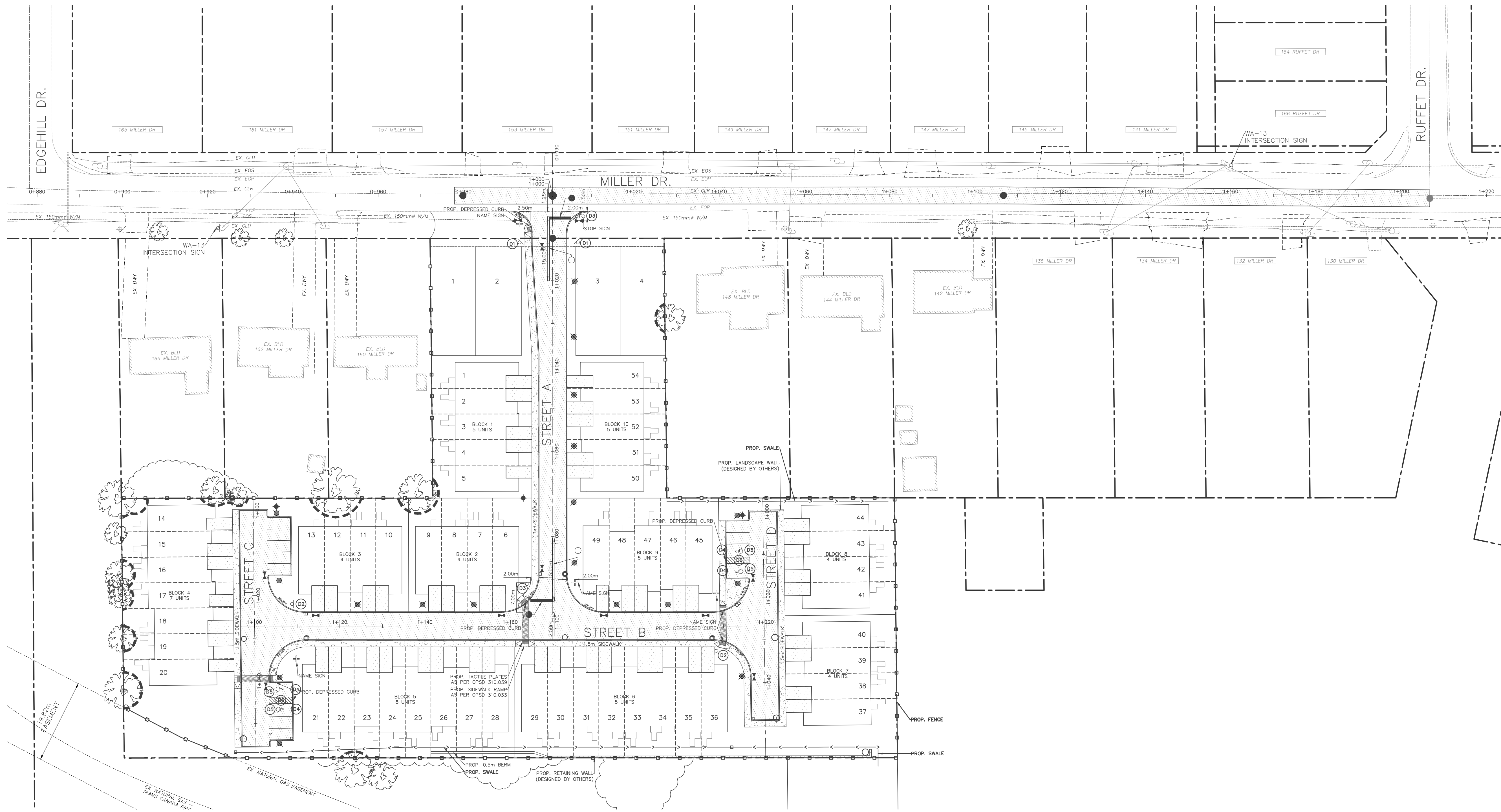
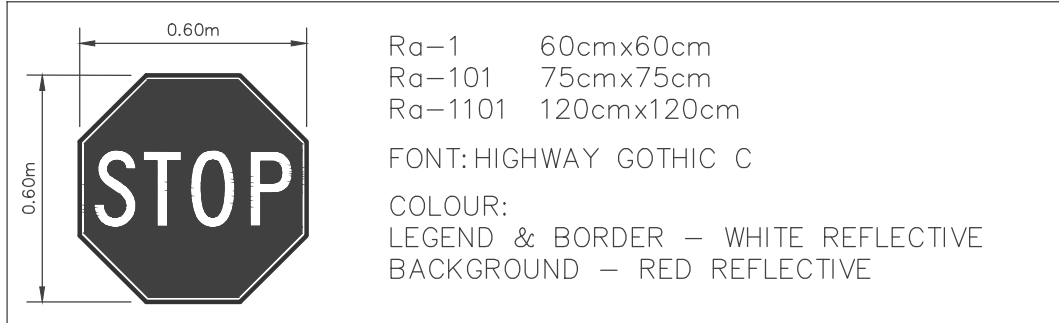
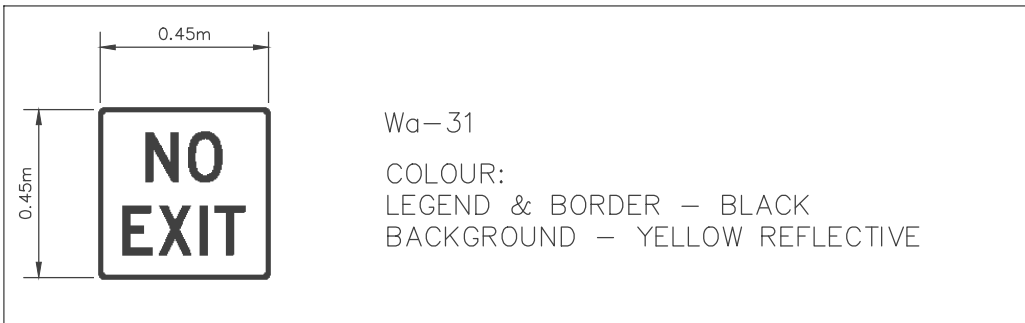
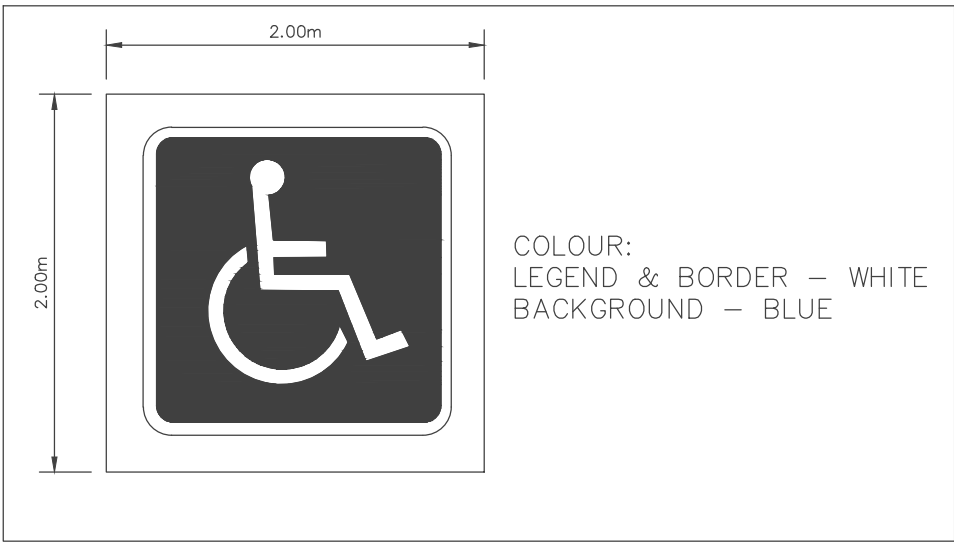
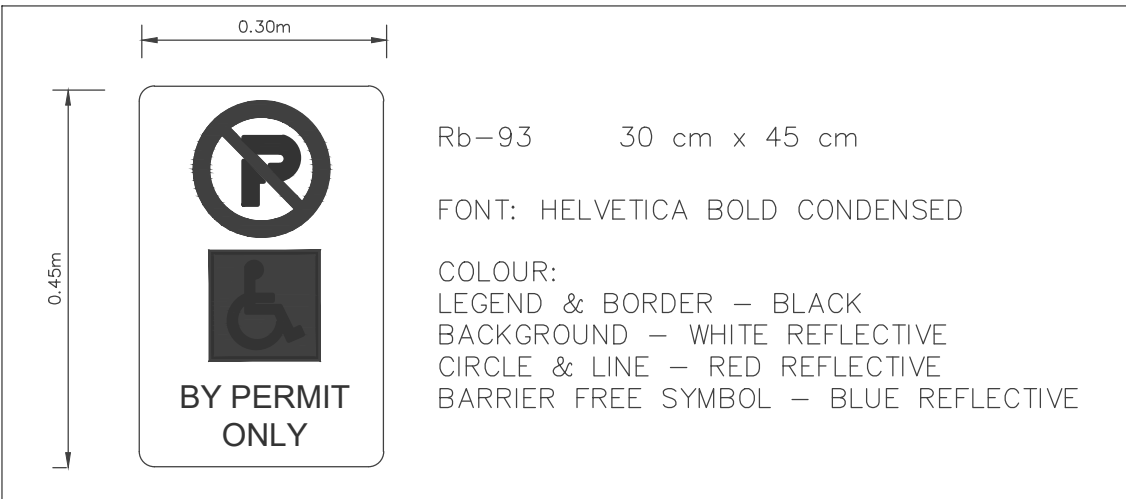
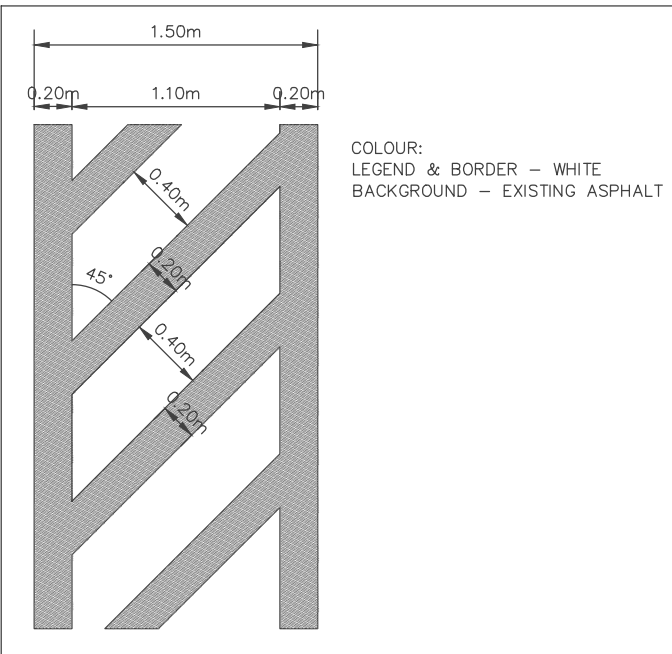


LEGEND

- 100mm YELLOW SOLID LINE
- 600mm WHITE STOP BAR
- STREET NAME SIGN
- SIGN AS INDICATED
- WHITE STOP BAR
- PROPOSED STREET LIGHTING POLE
- EXISTING SANITARY MAINTENANCE HOLE
- PROPOSED SANITARY MAINTENANCE HOLE
- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING STORM MAINTENANCE HOLE
- PROPOSED STORM MAINTENANCE HOLE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER VALVE
- PROPOSED WATER VALVE

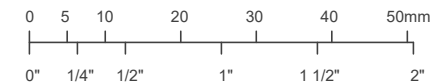
NOTE:

ALL SIDE WALKS TO BE AS PER OPSD 310.039 AND 310.033 REFER TO NOTES AND DETAILS



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No.	Issuance Description	YY/MM/DD
1.	CLIENT REVIEW	22/02/18
2.	SITE PLAN APPROVAL	xx/xx/xx

Issued For:

SITE PLAN APPROVAL



ALLIANCE
www.alliancehomes.ca

Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

CONSTRUCTION MANAGEMENT AND PARKING PLAN

Project No.	1981-001-23	Designed by: RM	Checked by: DL
Scale:	1:500	Drawn by: RM	Approved by: JM
Orientation	Stamp		

Sheet No. 17 OF 22

Drawing No. **CMP-1**

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 ONSITE.
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 NULCH FOR MORE THAN 30 DAYS SHALL BE STABILIZED WITH MULCH OR OTHER MORE APPROPRIATE COVERING, AS INSTRUCTED BY THE ENGINEER.

SILT FENCE

ROCK CHECK DAM

STRAW BALE

TEMPORARY SWALE

DIRECTION OF INTERIM OVERLAND FLOW

NVCA REGULATION LIMIT

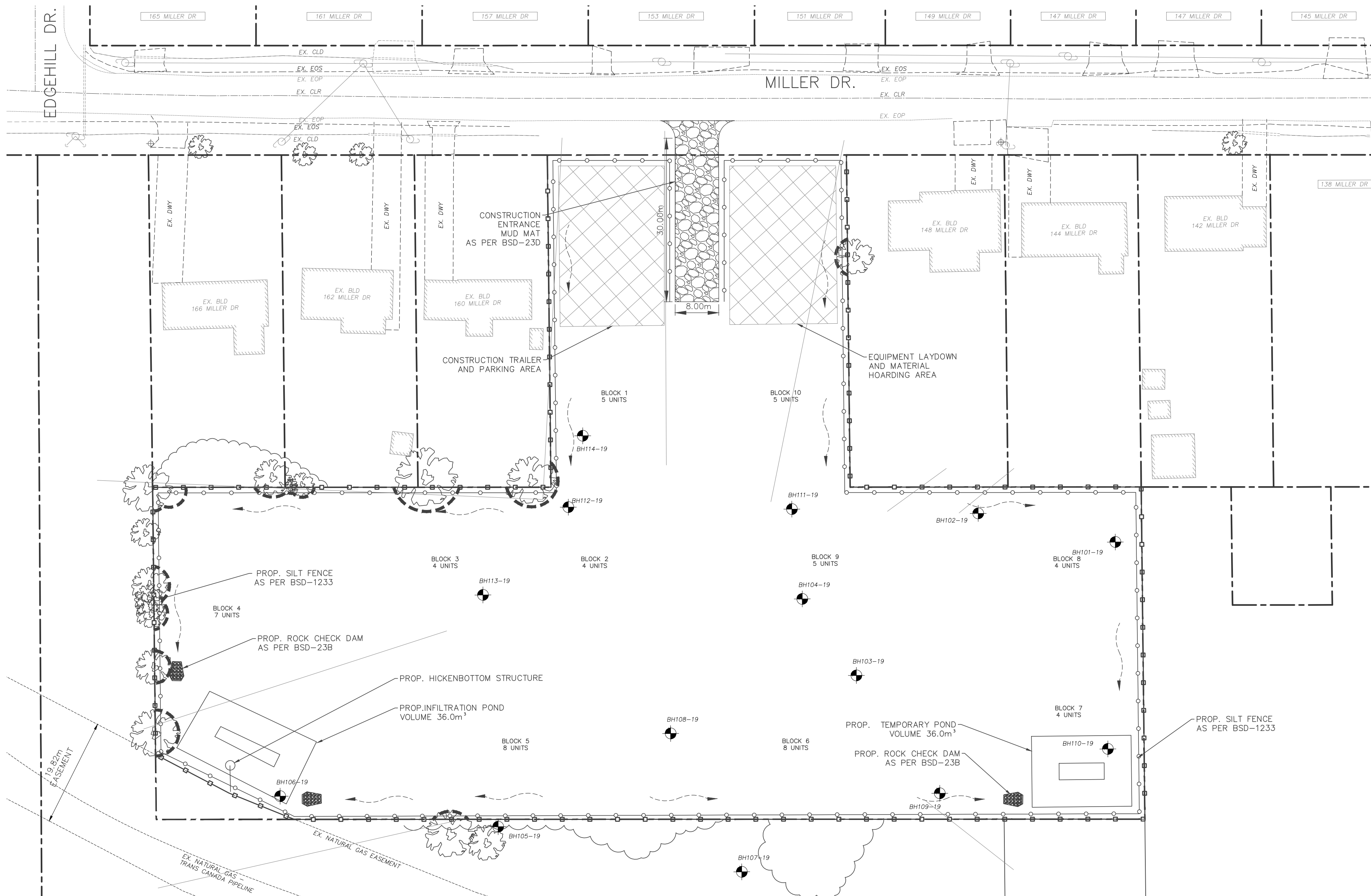
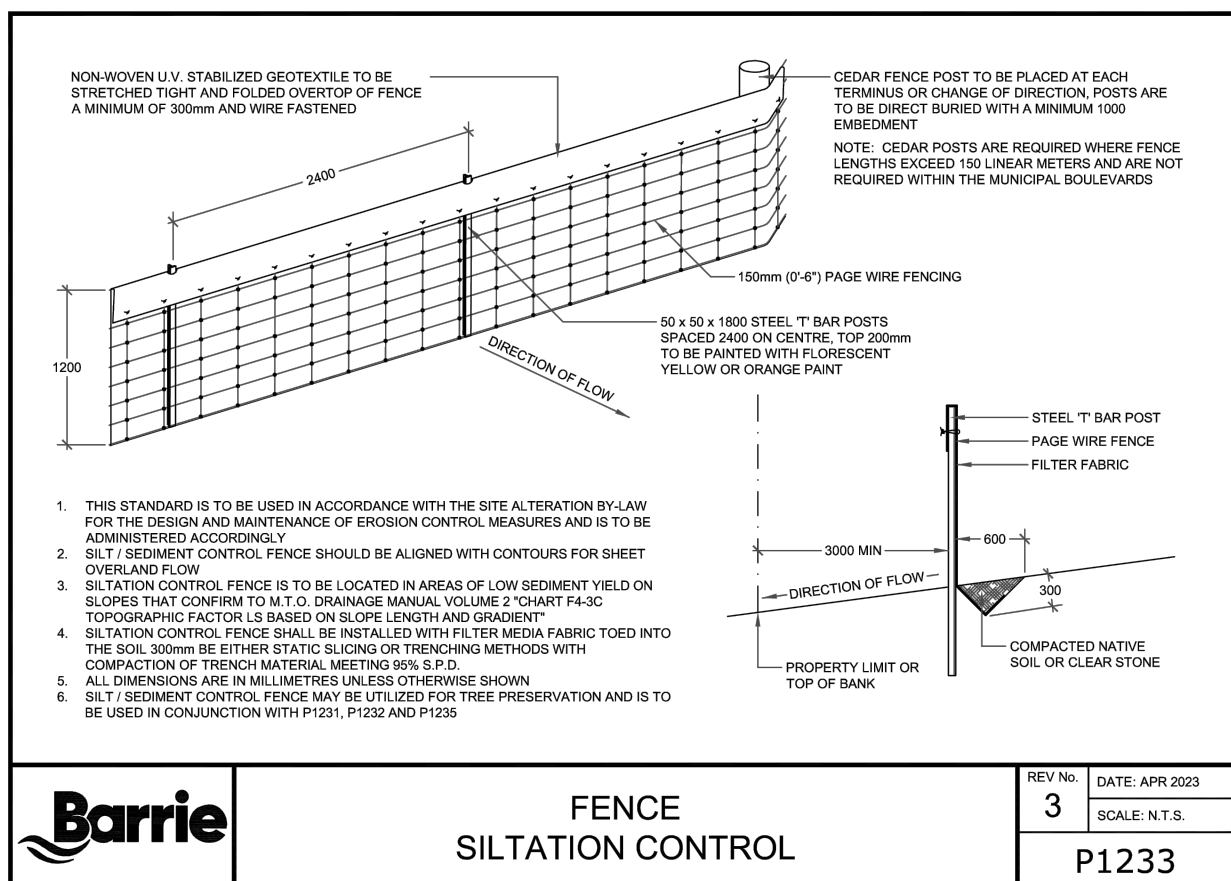
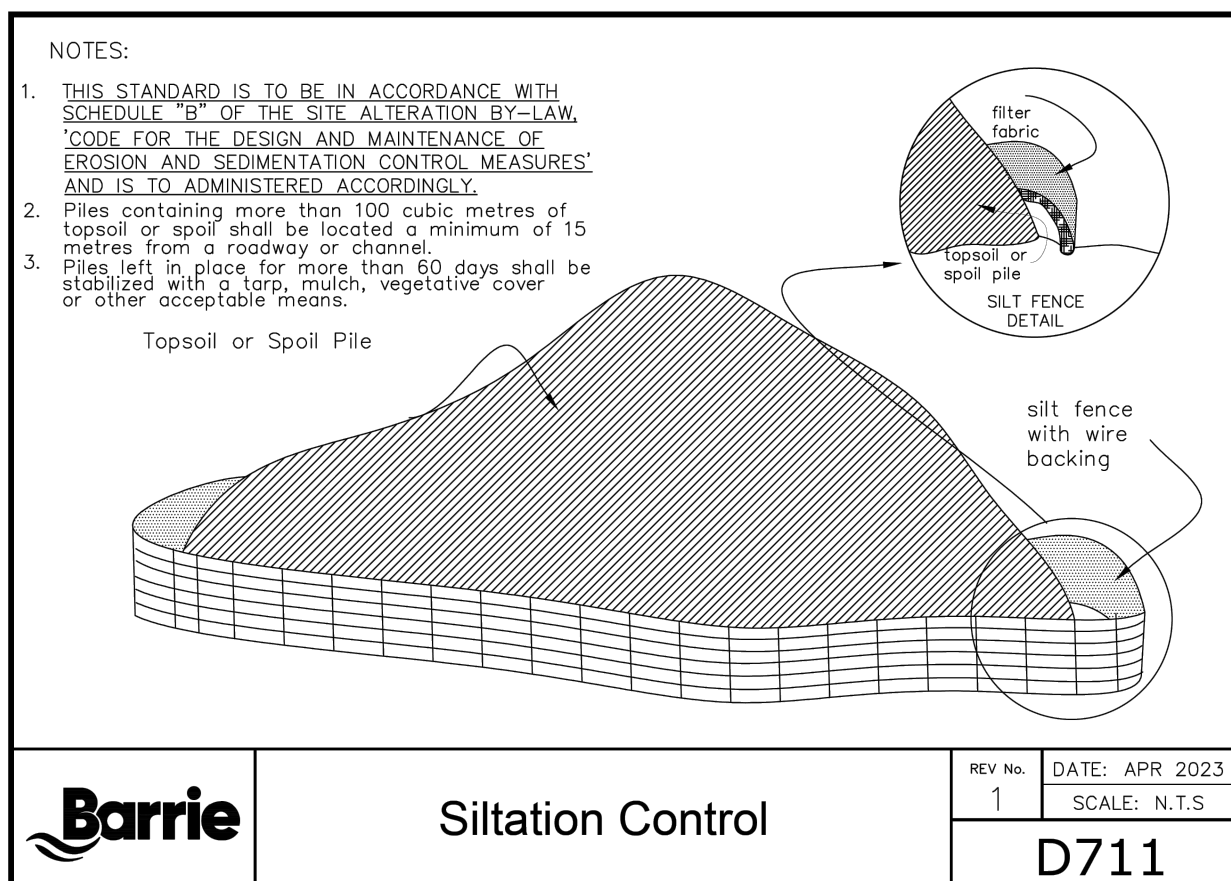
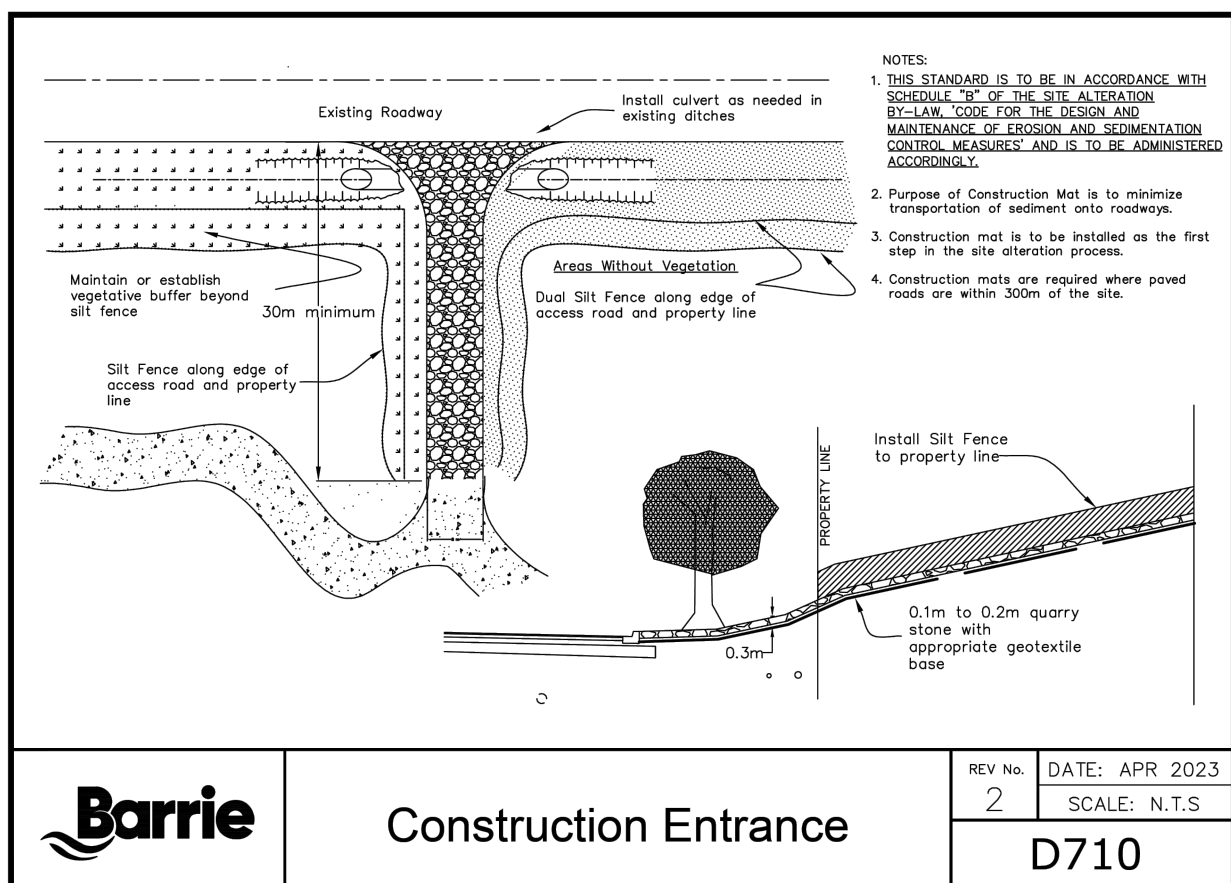
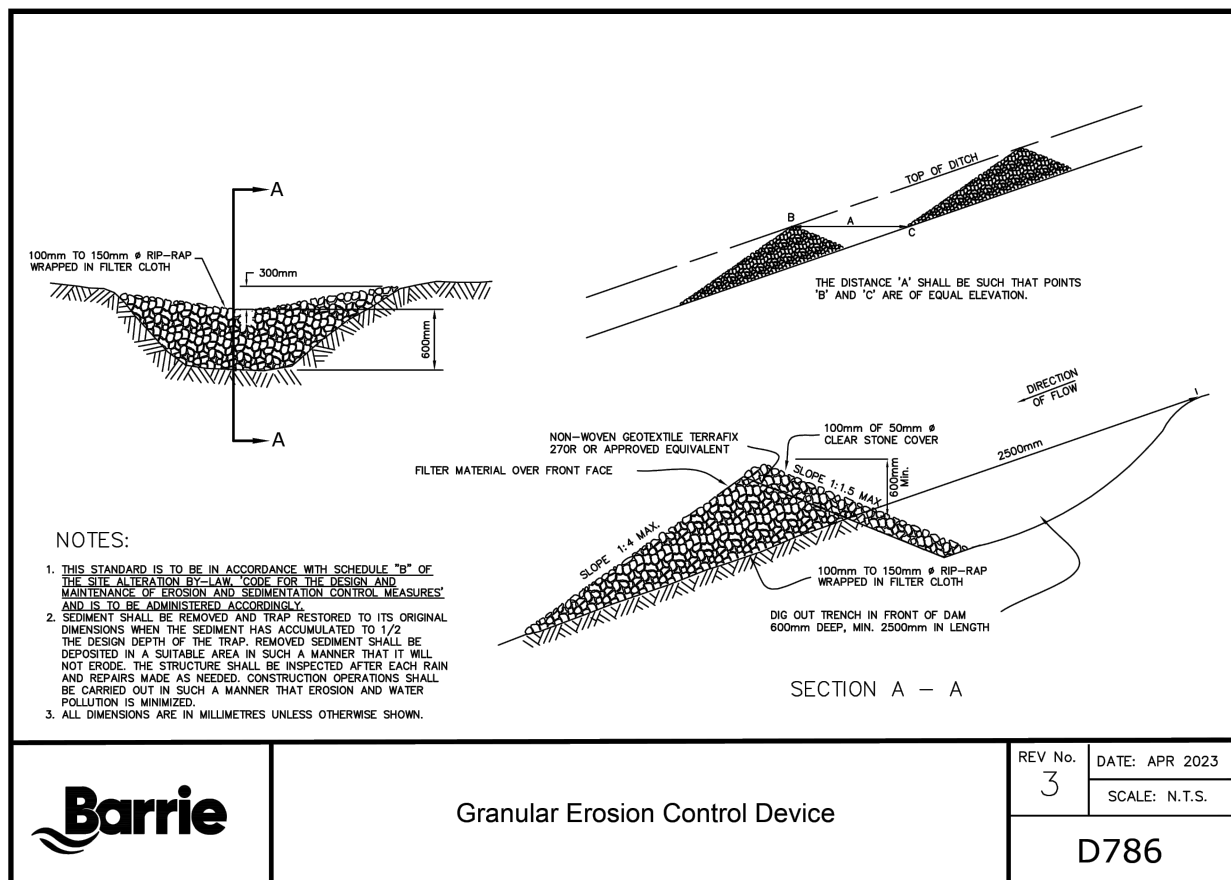
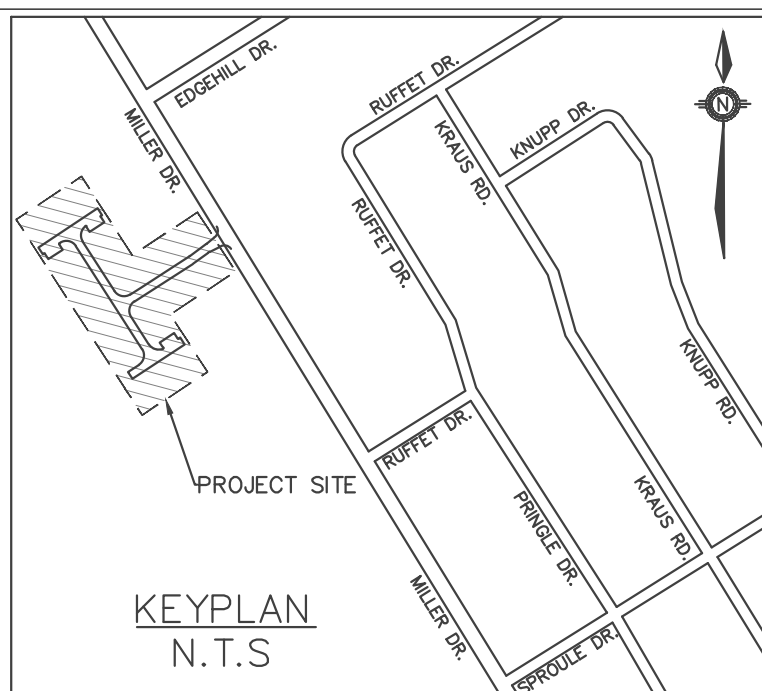
TREE PRESERVATION FENCE

ASPHALT REMOVAL AREA

SIDEWALK REMOVAL AREA

CONCRETE REMOVAL AREA

Site Area	14400.0 sq.m.
Area of Alteration	14400.0 sq.m.
Existing Land Use	RESIDENTIAL (R)
Adjoining Property Land Use	RESIDENTIAL (R)
Soil Type	Sandy Loam (Ans)



1.5.1 GENERAL

- ALL WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CITY OF BARRIE, COUNTY OF SIMCOE, APPROPRIATE CONSERVATION AUTHORITY AND ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- THE LOCATION OF ALL UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES ARE NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE LOCATION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.
- ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION AND HE SHALL REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY. DETAILS ARE NOT TO BE SCALED FROM THE DRAWINGS. ALL DIMENSIONS ARE SHOWN IN S.I. UNITS UNLESS OTHERWISE NOTED.
- ALL CONCRETE AND PLASTIC SEWER PIPES SHALL HAVE RUBBER GASKET JOINTS.
- ALL CONCRETE SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.030 CLASS 'B' AND BEDDING MATERIAL TO BE GRANULAR 'A' UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- ALL PLASTIC SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD 802.010 AND BEDDING MATERIAL TO BE GRANULAR 'A' UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- ALL BACKFILL FOR SEWERS, WATERMAINS AND UTILITIES ON THE ROAD ALLOWANCE MUST BE MECHANICALLY COMPACTED TO 100%STANDARD PROCTOR DENSITY, UNLESS OTHERWISE RECOMMENDED BY GEOTECHNICAL ENGINEER.
- SEWER MAINTENANCE HOLE FRAME AND COVERS TO BE AS PER OPSD 401.010 TYPE 'A', STAMPED "SANITARY", "STORM" AND/OR "FDC" AS APPROPRIATE.
- MAINTENANCE HOLE AND CATCHBASIN ADJUSTMENT UNITS SHALL BE A MAXIMUM OF 300MM IN HEIGHT AND THREE UNITS.
- GRANULAR BACKFILL AROUND MAINTENANCE HOLES, CATCHBASINS AND VALVE CHAMBERS SHALL BE GRANULAR 'A' COMPACTED BY MECHANICAL MEANS TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
- RISERS ARE REQUIRED ON ALL STORM AND SANITARY CONNECTIONS WHERE COVER ON THE MAIN SEWER EXCEEDS 4.5M AS PER OPSD 1006.020.
- ALL AREAS BEYOND THE SITE LIMITS WHICH ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER.
- CHAIN LINK FENCING SHALL BE AS PER OPSD 972.130 WITH ALL COMPONENTS BLACK VINYL COATED AND HEIGHT AS SPECIFIED ON THE DRAWINGS.
- EROSION AND SEDIMENT CONTROL MEASURES TO BE IN PLACE PRIOR TO START OF ANY CONSTRUCTION, AND MUST BE MAINTAINED AT ALL TIMES, IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
- ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. ONTARIO TRAFFIC MANUAL - BOOK 7 LATEST EDITION.

1.5.2 SANITARY SEWER SYSTEM

- ALL SANITARY SERVICE CONNECTIONS TO DWELLINGS SHALL BE 125MM DIAMETER P.V.C. SDR-28 LAID AT A MINIMUM SLOPE OF 2%, AND SHALL BE GREEN IN COLOUR.
- A TEST FITTING SHALL BE INSTALLED AT THE PROPERTY LINE.
- RESIDENTIAL CONNECTIONS SHALL TERMINATE AT THE CENTER OF THE PROPERTY LINE WITH A TEST FITTING, PLUG SUITABLY BRACED TO WITHSTAND TEST PRESSURES AND 89 MM X 38 MM MARKER PLACED FROM THE INVERT OF THE CONNECTION TO 600 MM ABOVE GRADE PAINTED GREEN.
- CONNECTIONS TO EXISTING SANITARY SEWER TO BE MADE WITH AN APPROVED MANUFACTURED TEE. APPROVED SADDLES SHALL ONLY BE USED FOR CONNECTING TO EXISTING SEWER MAINS. NO SERVICE CONNECTION OF A SIZE GREATER THAN HALF THE DIAMETER OF THE MAIN SEWER SHALL BE CUT INTO THE MAIN SEWER. A MAINTENANCE HOLE SHALL BE INSTALLED ON THE MAIN SEWER AT THE INTERSECTION OF A SERVICE CONNECTION, WHICH HAS A SIZE GREATER THAN HALF THE DIAMETER OF THE MAIN SEWER EXCEPT WHERE A 150 MM SERVICE CONNECTION SHALL BE PERMITTED TO CONNECT TO A 200 MM OR 250 MM MAIN SEWER PROVIDING AN APPROVED MANUFACTURED TEE IS INSTALLED AND PROVIDED THAT THE INVERT OF THE SERVICE CONNECTION IS ABOVE THE SPRING LINE OF THE MAIN SEWER.
- ALL SEWERS SHALL BE INSTALLED WITH LASER AND CHECKED PRIOR TO BACKFILLING.
- MAINTENANCE HOLE PIPE OPENING AND BENCHING DETAILS TO BE AS PER OPSD 701.021.
- FOR RESIDENTIAL, COMMERCIAL AND INSTITUTIONAL AREAS THE MINIMUM DEPTH SHALL BE 2.8 M. FOR INDUSTRIAL AREAS, THE MINIMUM DEPTH SHALL BE 2.15 M. THE DEPTH OF THE SEWER SHALL BE MEASURED FROM THE FINAL CENTRELINE FINISHED ROAD ELEVATION TO THE TOP OF THE SANITARY SEWER.
- THE DEPTH OF THE SERVICE CONNECTIONS FOR SINGLE-FAMILY UNITS AND SEMI-DETACHED UNITS AT THE PROPERTY LINE, MEASURED FROM THE FINAL CENTRELINE ROAD ELEVATION SHALL BE A MINIMUM OF 2.60 M, UNLESS OTHERWISE NOTED.
- FROST STRAPS TO BE INSTALLED AS PER OPSD 701.100.

1.5.3 STORM SEWER SYSTEM

- SINGLE CATCH BASINS TO BE PRECAST CONCRETE WITH CAST IRON FRAME AND GRATE CONFORMING TO OPSD 705.010 AND DOUBLE CATCHBASINS TO BE PRECAST CONCRETE WITH CAST IRON FRAME AND GRATE CONFORMING TO OPSD 705.020. THE FRAME AND COVER FOR CATCH BASINS IN ROADWAY OR WALKWAY AREAS SHALL BE AS DETAILED IN OPSD 400.030. CATCH BASINS LOCATED IN GRASSED AREAS SHALL HAVE A BIRDCAGE GRATE PER OPSD 400.120.
- MAINTENANCE HOLE FRAMES SHALL BE AS PER OPSD 401.010 WITH TYPE A CLOSED COVER LABELED STORM.
- CONTRACTOR SHALL ENSURE THAT THE LOW POINT OF CURBS COINCIDE WITH THE LOCATION OF CATCHBASINS INSTALLED AT ROADWAY SAG AREAS.
- CATCH BASIN CONNECTIONS TO THE CURB SUBDRAIN SYSTEM TO BE IN ACCORDANCE WITH OPSD 216.021.
- SINGLE CATCH BASIN LEADS TO BE 300MM LAID AT A MINIMUM SLOPE OF 1% UNLESS OTHERWISE NOTED. DOUBLE CATCH BASIN LEADS TO BE 375MM LAID AT A MINIMUM SLOPE OF 1% UNLESS OTHERWISE NOTED. FOR REAR LOT CATCH BASINS, THE MINIMUM SIZE OF THE CONNECTION SHALL BE 300 MM DIAMETER AND THE MINIMUM GRADE SHALL BE 1.0%. ALL CATCH BASIN LEADS TO BE P.V.C. SDR-35 UNLESS OTHERWISE NOTED.
- MAINTENANCE HOLE BENCHING AND PIPE OPENING DETAILS TO BE AS PER OPSD 701.021.
- THE MINIMUM COVER TO THE TOP OBVERT PIPE OF A DEEP STORM SEWER SHALL GENERALLY BE 2.5 TO 3.0 METRES. THE MINIMUM COVER TO THE TOP OBVERT PIPE OFF A SHALLOW STORM SEWER SYSTEM SHALL NOT BE LESS THAN 1.5 METRES FROM THE CENTRE-LINE OF THE ROADWAY
- REAR LOT CATCH BASINS TO BE SUMPLESS PRECAST CONCRETE WITH STEEL FRAME AND GRATE CONFORMING TO OPSD 705.010 AND OPSD 400.120.
- REAR LOT CATCH BASIN LEADS ARE TO BE CONCRETE ENCASED FOR THE FULL LENGTH OF THE LOT AND TO THE BACK OF THE STREET CURB.
- NO CATCH BASIN SHALL BE LOCATED IN THE PROPOSED AREAS OF DRIVEWAYS.
- FROST STRAPS TO BE INSTALLED AS PER OPSD 701.100

1.5.4 WATER DISTRIBUTION SYSTEM

- P.V.C. WATERMAIN TO CONFORM TO LATEST A.W.W.A. SPECIFICATIONS.
- THE MINIMUM SIZE OF SERVICE CONNECTION TO BE PROVIDED FOR A SINGLE-FAMILY RESIDENCE LOCATED LESS THAN 30 METRES FROM THE SUPPLY MAIN SHALL BE 19 MM IN DIAMETER.
- THE END OF THE WATER SERVICE CONNECTION SHALL BE MARKED BY A SUITABLE LENGTH OF 50MM X 100 MM LUMBER EXTENDING FROM THE END OF THE CONNECTION TO A POINT 0.9 M ABOVE THE TOP OF THIS MARKER SHALL BE PAINTED BLUE.
- WATERMAIN TO HAVE A MINIMUM 1.70M COVER BELOW FINISHED CENTER LINE OF ROAD GRADE. FOR OPEN DITCH ROADS: THE COVER OVER THE WATERMAIN AND THE SERVICE CONNECTIONS SHALL NOT BE LESS THAN 1.70M. FOR UNIMPROVED ROADS: 1.70M MINIMUM TO OBVERT, MEASURED BELOW A FUTURE DESIGN CENTRE LINE ROAD GRADE.
- UNLESS OTHERWISE NOTED, THE MINIMUM HORIZONTAL SEPARATION BETWEEN THE WATERMAIN AND ANY SEWER OR SEWER MAINTENANCE HOLE SHALL BE 3.0M. A MINIMUM VERTICAL SEPARATION OF 0.5M MUST BE MAINTAINED IF WATERMAIN IS ABOVE SEWER OR OTHER UTILITIES, AND 0.5M IF SEWER IS ABOVE WATERMAIN. CLEARANCES ARE MEASURED FROM OUTSIDE EDGES OF PIPES.
- HYDRANTS SHALL BE AVK, MCAVITY OR C.V. MUELLER OPEN LEFT WITH 2 CSA HOSE PORTS, ONE 33 B PUMPER PORT AND A BREAKAWAY TYPE 6" MJ BASE. THE HYDRANT LEAD SHALL BE MINIMUM 150 MM DUCTILE, CLASS 52 WITH A RESILIENT SEATED GATE VALVE SHUT OFF ("OPEN LEFT" BY CLOW OR MEULLER) PLACED RIGHT AFTER TEE OFF MAIN. THE HYDRANTS SHALL HAVE ALL DRAIN HOLES PLUGGED AND BE INSTALLED AS PER OPSD 1105.010. HYDRANTS SHALL BE PAINTED REFLECTORIZED YELLOW IN ACCORDANCE WITH FIRE PROTECTION ASSOCIATION STANDARDS (NFPA 291).
- HYDRANT FLANGE TO BE 150MM ABOVE GRADE AS PER OPSD 1105.010 REV#2
- WATERMAIN BEDDING SHALL BE AS PER OPSD 802.010 AND BEDDING MATERIAL TO BE GRANULAR 'A' UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- GATE VALVES SHALL BE USED ON ALL WATERMAIN. GATE VALVES SHALL BE AN AVK, MUELLER OR CLOW RESILIENT WEDGE TYPE WITH SLIDING TYPE VALVE BOX OR APPROVED EQUAL. ALL VALVES SHALL BE OF THE APPROVED TYPE WITH NON-RISING STEM AND A 50 MM SQUARE OPERATING NUT OPENING COUNTER-CLOCKWISE ALL VALVES ON 200 MM DIA. WATERMAIN AND SMALLER SHALL HAVE MECHANICAL JOINT ENDS. ALL VALVES LARGER THAN 300 MM DIA. SHALL BE INSTALLED INSIDE CHAMBERS AND SHALL HAVE FLANGED ENDS. A FLANGE TO PLAIN END SPACER AND A VICTAULIC COUPLING SHALL BE INSTALLED INSIDE THE CHAMBER TO PERMIT REMOVAL OF THE VALVE IF NECESSARY. ALL VALVES TO BE WRAPPED IN DENSO PASTE – PETROLATUM TAPE PRIMER.
- VALVE IN BOXES SHALL BE INSTALLED AS PER OPSD1101.020 AND CONFORM TO A.W.W.A. C500. MAINLINE VALVES TO BE MECHANICALLY RESTRAINED.
- DENSO PASTE-PETROLATUM TAPE PRIMER SHALL BE INSTALLED ON EVERY VALVE, HYDRANT AND FITTING CONNECTED TO A NON-FERROUS WATERMAIN. FITTINGS SHALL INCLUDE BENDS, TEES, CROSSES, SLEEVES, REDUCERS, PLUGS, CAPS, JOINT RESTRAINERS AND COUPLINGS ETC.
- A TRACER WIRE SHALL BE PROVIDED ALONG THE TOP OF ALL POLYVINYL CHLORIDE (PVC) WATERMAIN TO PERMIT FUTURE FIELD TRACING. THESE TRACER WIRES SHALL BE ATTACHED TO THE TOP OF THE WATERMAIN AND SHALL BE LOOPED UP AND OUTSIDE EACH VALVE BOX AND DRILLED IN AT THE TOP, INCLUDING HYDRANT VALVES AND SHALL ALSO BE CONNECTED TO THE BOTTOM FLANGE OF ALL HYDRANTS. TRACER WIRES SHALL BE NO. 12 GAUGE STRANDED COPPER (TWH) COMPLETE WITH PLASTIC COATING.
- CONNECTIONS TO EXISTING WATERMAIN OR WATER SERVICE CONNECTIONS SHALL NOT BE MADE UNTIL THE NEW WATERMAIN HAS BEEN TESTED, SWABBED, CHLORINATED AND FLUSHED TO THE SATISFACTION OF THE TOWNSHIP AND WRITTEN PERMISSION IS RECEIVED FROM THE TOWNSHIP.
- MINIMUM CURVATURE OF ANY WATERMAIN SHALL BE COMPLETED BY PIPE DEFLECTION IN ACCORDANCE WITH THE MANUFACTURER'S RADIUS GUIDELINES.

1.5.5 ROADS AND WALKWAYS

- CATCHBASIN, MAINTENANCE HOLE AND VALVE CHAMBER COVERS SHALL BE SET FLUSH TO BASE COURSE ASPHALT LEVEL AND ADJUSTED TO GRADE PRIOR TO INSTALLING TOP COURSE OF ASPHALT.
- IN GENERAL ALL NEW TOWNSHIP ROADS SHALL BE CONSTRUCTED TO AN URBAN CROSS-SECTION, WITH MOUNTABLE CURB AND GUTTER TO OPSD 600.030 ON LOCAL ROADWAYS
- CONCRETE FOR CURBS TO CONFORM TO O.P.S.S. 353.
- TEMPORARY ASPHALT CURBING SHALL BE PLACED BEHIND ALL CATCH BASINS WITHIN THE TRAVELLED PORTION OF THE ROADWAY AT THE STAGE OF BASE COURSE ASPHALT. ASPHALT CURBING SHALL BE PLACED IN ACCORDANCE WITH OPSD 601.010 - TYPE "D", BETWEEN THE TWO ADJACENT EXPANSION JOINTS. PRIOR TO PLACING SURFACE COURSE ASPHALT, TEMPORARY ASPHALT CURBS SHALL BE REMOVED AND REPLACED BY CONCRETE CURB.
- UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER, THE FOLLOWING MINIMUM PAVEMENT STRUCTURES (COMPACTED DEPTH) SHALL BE USED:

	OPSS GRAN 'B'	OPSS GRAN 'A'	BASE	TOP
LOCAL RESIDENTIAL	300MM	150MM	50MM (HL8)	40MM (HL3 OR HL4)
HEAVY DUTY	400MM	150MM	90MM (HL9)	40MM (HL3 or HL4)

- RESIDENTIAL DRIVEWAYS SHALL BE PAVED FROM CURB TO GARAGE IN ACCORDANCE WITH THE FOLLOWING PAVEMENT STRUCTURE (COMPACTED DEPTH), AND OTHER DRIVEWAYS SHALL CONSIST OF THE FOLLOWING PAVEMENT STRUCTURE (COMPACTED DEPTH) WITHIN THE MUNICIPAL ROAD ALLOWANCE, UNLESS OTHERWISE RECOMMENDED BY THE GEOTECHNICAL ENGINEER:

- UNSHRINKABLE FILL TO BE USED FOR CUTS UNDER EXISTING ROADS AND SHALL EXTEND TO SUBGRADE LEVEL.
- EXTERIOR PATH OF TRAVEL (INCLUDING SIDEWALKS, RAMPS, TRAILS ETC.) TO BE CONSTRUCTED IN ACCORDANCE WITH THE ONTARIANS WITH DISABILITIES ACT (AODA).

1.6 GRADING

- DRIVEWAYS ARE TO HAVE A MINIMUM SEPARATION OF 1.0M AT CURBS AND SHALL NOT CROSS THE PROJECTION OF THE PROPERTY LINE.
- A MINIMUM HORIZONTAL CLEAR SEPARATION OF 1.5M BETWEEN THE EDGE OF DRIVEWAY AND A UTILITY STRUCTURE OR HYDRANT AND 1.0M FOR OTHER STREET FURNITURE SHALL BE MAINTAINED.
- DRIVEWAY GRADES TO BE A MINIMUM OF 2% AND A MAXIMUM OF 7%.
- DRIVEWAY LOCATION SHALL NOT BE CHANGED WITHOUT APPROVAL OF SUBDIVISION ENGINEER AND THE TOWN OF ORO-MEDONTE.
- DOWNSPOUTS SHALL DISCHARGE TO THE GROUND SURFACE VIA SPLASH PADS AND SHOULD BE DIRECTED TO THE FRONT OF THE HOUSE.
- DOWNSPOUT LOCATIONS TO BE INDICATED ON SITING/GRADING (PLOT) PLANS.
- ALL BOULEVARDS AREAS SHALL BE GRADED WITH MINIMUM SLOPE OF 2% AND MAXIMUM SLOPE OF 5%. ALL WATER BOXES, MAINTENANCE HOLE COVERS, AND VALVE BOXES, ETC. SHALL BE SET FLUSH WITH THE FINISHED SOD SURFACE.
- A MINIMUM OF 6.0M ADJACENT TO THE REAR OF THE HOUSE SHALL BE GRADED AT 2% - 7% SLOPE.
- THE GRADE OF GRASSED OR OTHER LANDSCAPED AREAS SHALL HAVE A MAXIMUM SLOPE OF 7% AND A MINIMUM SLOPE OF 2%.
- FOR REAR TO FRONT DRAINAGE, A MAXIMUM OF THREE REAR LOTS SHALL OUTLET BETWEEN ANY TWO LOTS.
- ALL GRASSED EMBANKMENTS SHALL HAVE A MAXIMUM SLOPE OF 3H:1V.
- A MINIMUM OF 0.15M CLEARANCE MUST BE PROVIDED BETWEEN THE BRICKLINE AND THE FINAL TOP OF GROUND ELEVATION AT THE HOUSE.
- SWALE GRADES ON GRASSED AREAS SHALL HAVE A MINIMUM SLOPE OF 2.0% AND A MAXIMUM SLOPE SUCH THAT CONTAINED FLOW VELOCITY DOES NOT EXCEED 1.25 METERS PER SECOND.
- SWALES SHALL HAVE A MAXIMUM SIDE SLOPE OF 3H:1V. A MINIMUM DEPTH OF 0.15M AT 3H:1V AND A MAXIMUM DEPTH FOR A SIDE YARD AND MID-YARD SWALE SHALL BE 0.45M AT 4H:1V. MAXIMUM DEPTH FOR A REAR YARD SWALE SHALL BE 0.75M AT 5H:1V.
- REAR YARD CATCH BASINS SHALL BE OFFSET A MINIMUM OF 2.0M FROM THE LOT LINE.
- FOOTINGS TO BE FOUNDED IN UNDISTURBED NATIVE SOIL OR, IF LOCATED IN ENGINEERED FILL, FOUNDATIONS SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF, AND CERTIFIED IN THE FIELD BY, A GEOTECHNICAL ENGINEER.
- A MINIMUM 100MM TOPSOIL SHALL BE PROVIDED ON ALL DWELLING LOTS, COMMERCIAL AND INDUSTRIAL PROPERTIES. A MINIMUM 150MM TOPSOIL SHALL BE PROVIDED ON ALL TOWN OWNED LANDS AND SCHOOL BLOCKS.
- WHERE THE COMBINED SIDE YARD BETWEEN BUILDINGS IS LESS THAN 3.0M COMBINED OR 1.5M ON ANY ONE SIDE, THE SURFACE TREATMENT SHALL BE 75MM OF CLEAR STONE OVER A VEGETATION SUPPRESSING GEOTEXTILE.
- ALL LOT GRADING MUST COMPLY WITH TOWN CRITERIA AND STANDARDS.

1.7 TREE PRESERVATION

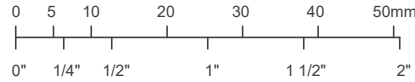
- ALL EXISTING TREES WHICH ARE TO REMAIN SHALL BE FULLY PROTECTED WITHIN A TREE PRESERVATION ZONE (TPZ). THE PROTECTION SHALL BE ERECTED OUTSIDE THE DRIPLINE OF TREES PLUS 1.0 METER INTO THE DEVELOPMENT AREA OR IN ACCORDANCE WITH ARBORIST REPORT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- THE CONTRACTOR SHALL TAKE EVERY PRECAUTION NECESSARY TO PREVENT DAMAGE TO TREES OR SHRUBS TO BE RETAINED.
- NO CONSTRUCTION ACTIVITY, GRADE CHANGES, TREATMENT OR EXCAVATION OF ANY KIND IS PERMITTED WITHIN THE TPZ. THE TPZ MUST REMAIN UNDISTURBED AT ALL TIMES.
- THE TPZ SHALL REMAIN IN PLACE UNTIL ALL SITE WORK HAS BEEN COMPLETED, AND MAY NOT BE REMOVED, RELOCATED OR OTHERWISE ALTERED WITHOUT THE WRITTEN PERMISSION OF A CONSULTING ARBORIST OR LANDSCAPE ARCHITECT.
- ANY TREE/SHRUB MARKED FOR PRESERVATION WHICH IS DAMAGED OR HAS DIED AS A RESULT OF CONTRACTOR NEGLIGENCE SHALL EITHER BE REPLACED WITH A SPECIMEN OF EQUIVALENT SPECIES AND SIZE OR MONETARILY COMPENSATED FOR ACCORDING TO THE ACCEPTED TREE PRESERVATION REPORT FOR THE DEVELOPMENT.
- ANY TREES DESIGNATED FOR REMOVAL SHALL HAVE THE STUMPS COMPLETELY EXCAVATED AND REMOVED FROM THE SITE.

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No.	Issuance Description	YY/MM/DD
1.	CLIENT REVIEW	22/02/18
2.	SITE PLAN APPROVAL	xx/xx/xx

Issued For:

SITE PLAN APPROVAL

Client



Project

152 MILLER DRIVE

BARRIE, ON L4N 9X3

TOWN FILE:D28-014-2024

Drawing:

NOTES & DETAILS

- 1 -

Project No.	1981-001-23	Designed by: RM	Checked by: DL
Scale:	N/A	Drawn by: RM	Approved by: JM

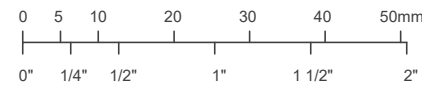
Orientation	Stamp
Sheet No.	Drawing No.

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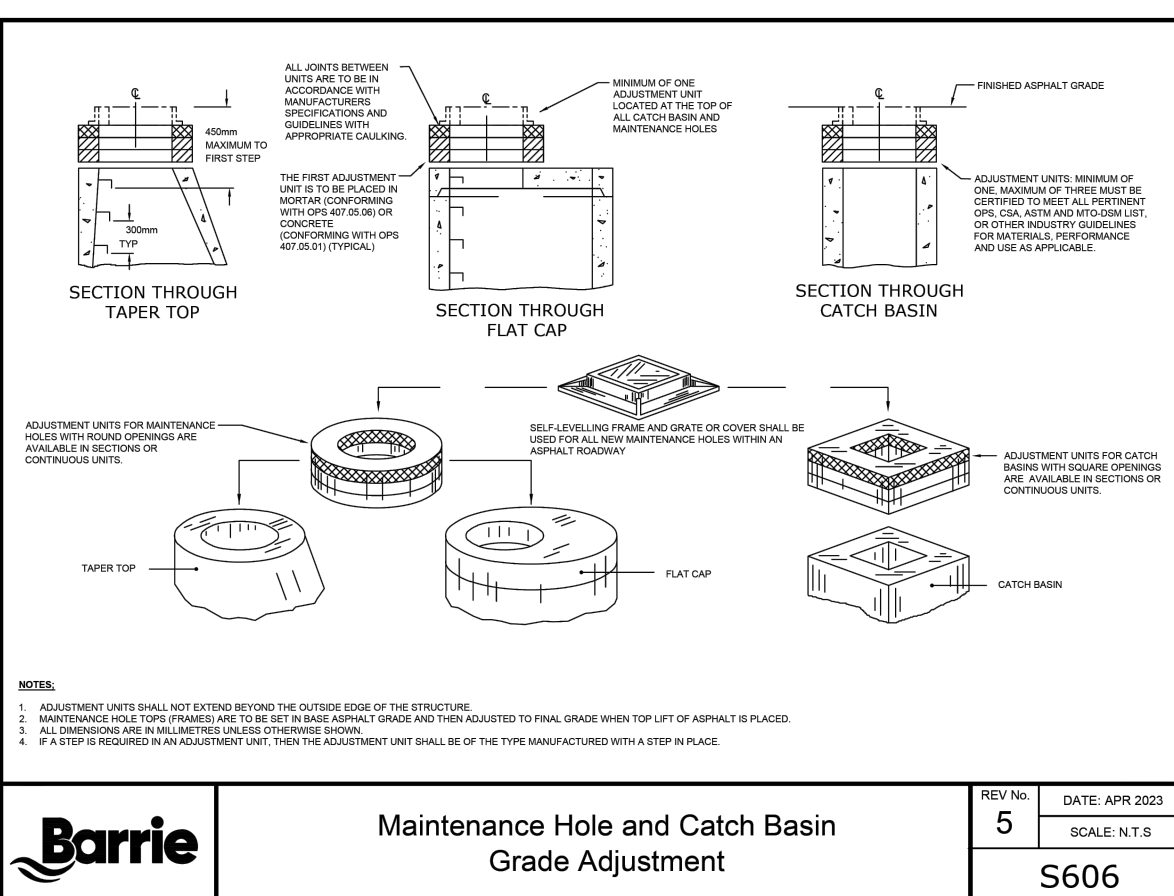
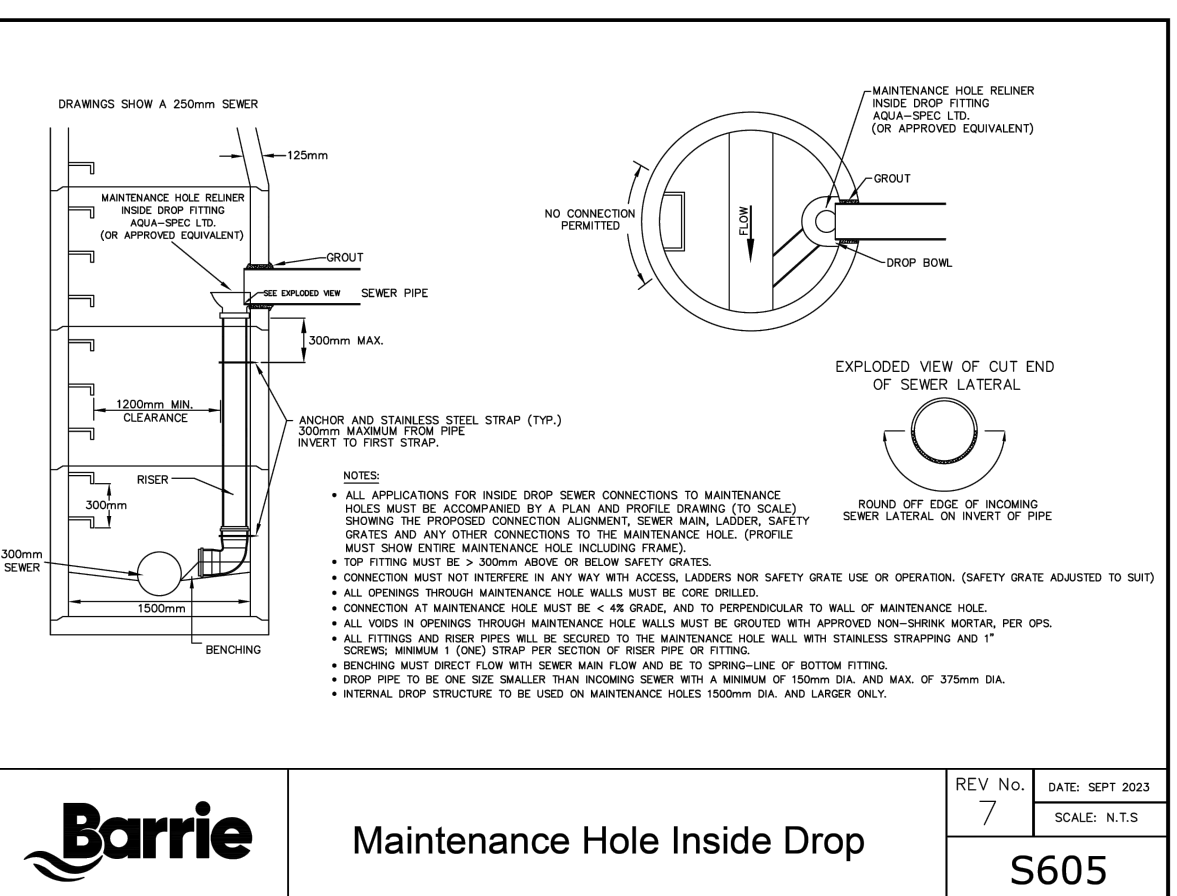
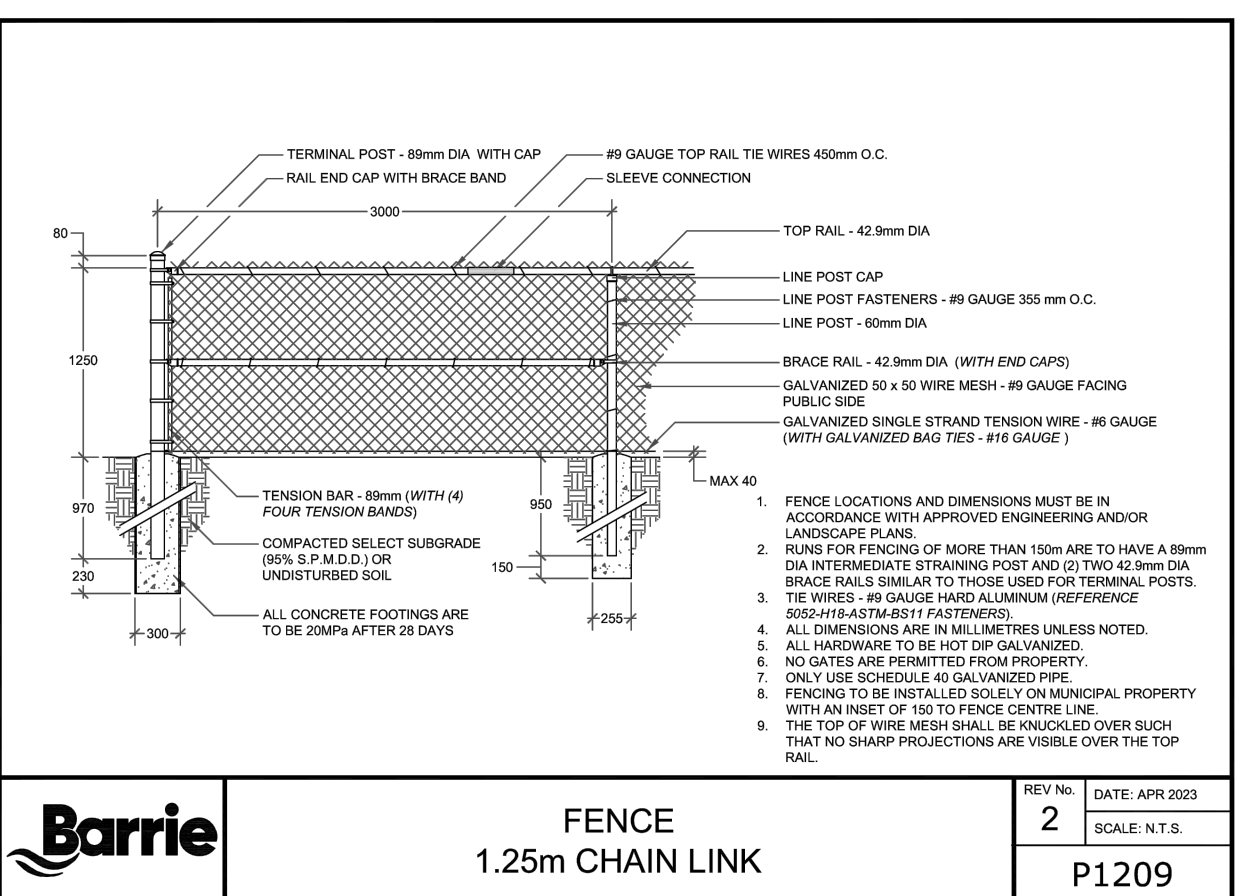
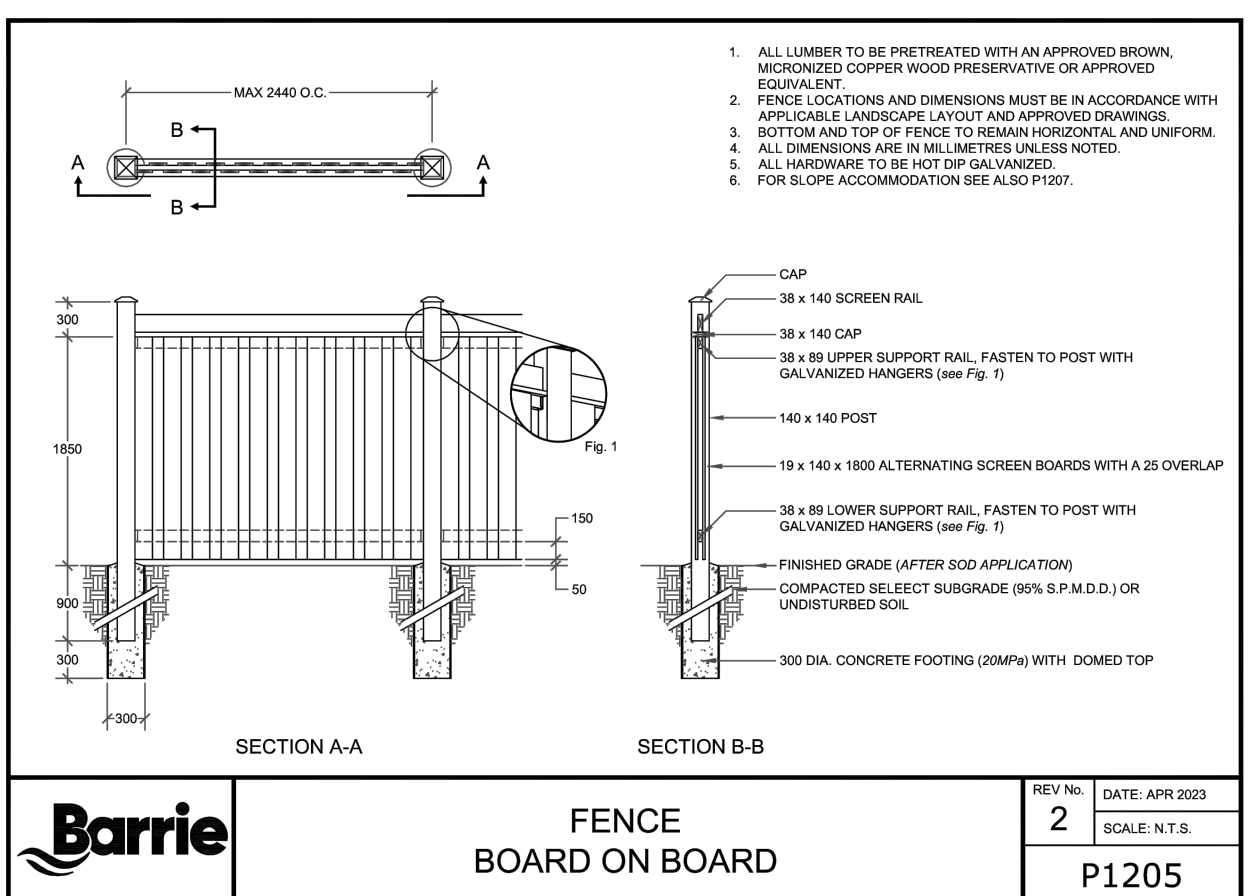
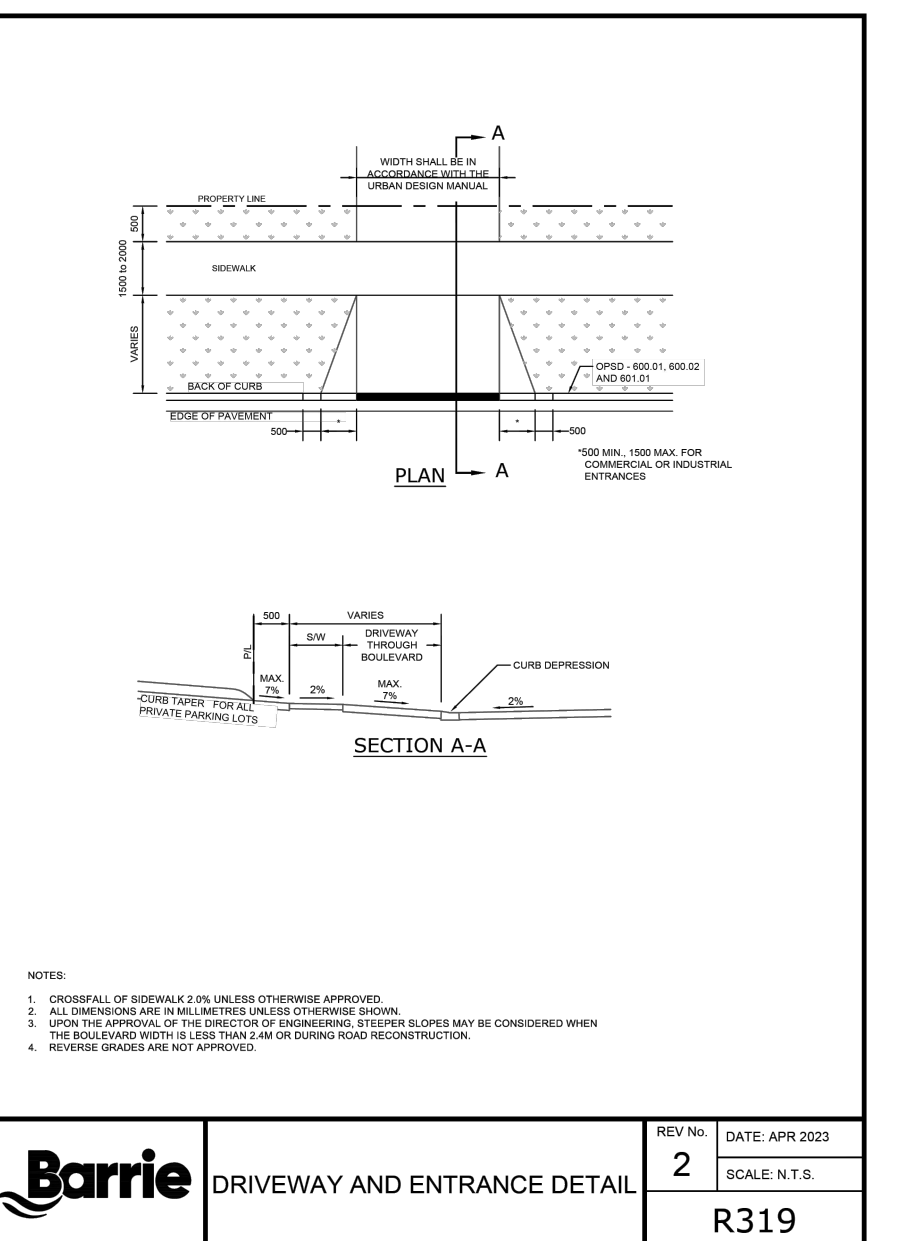
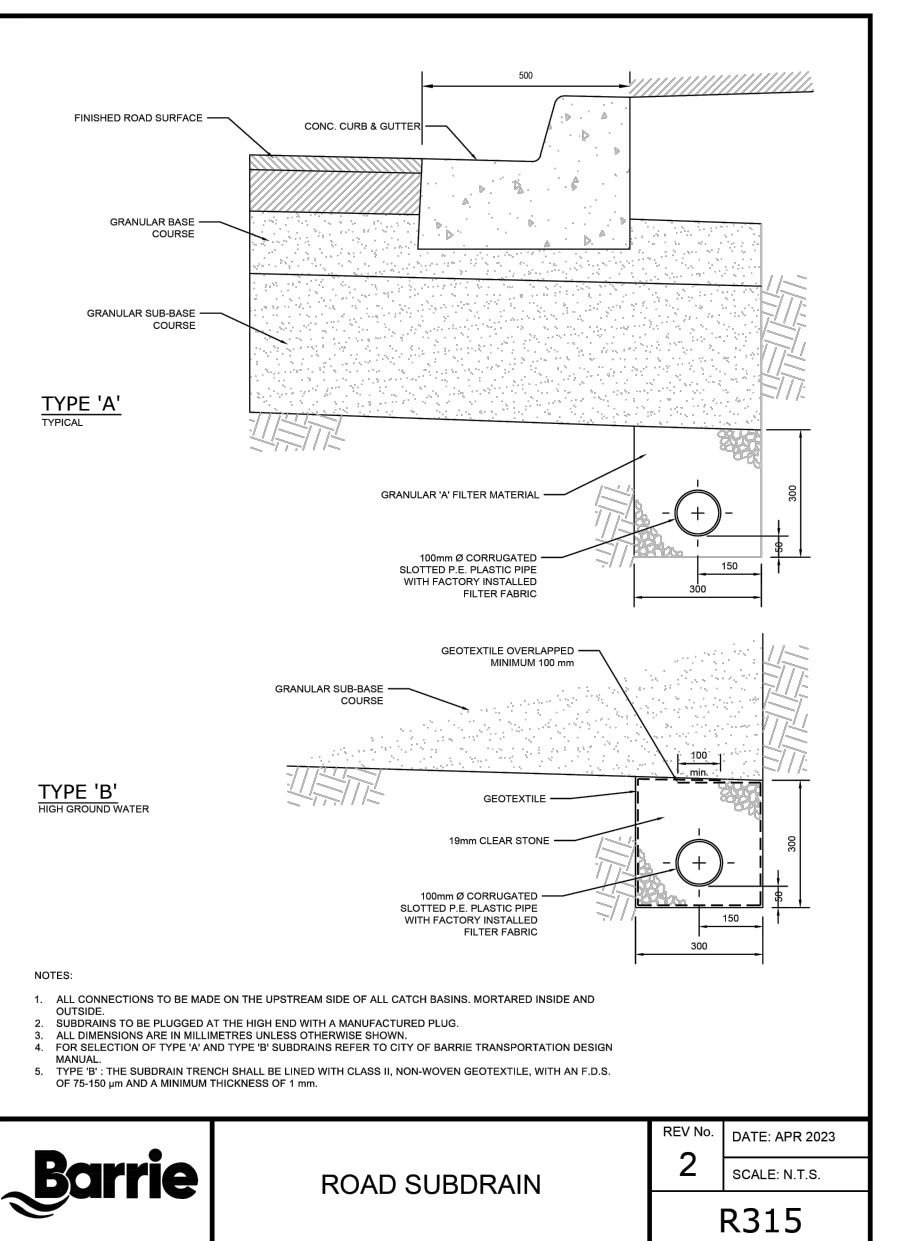
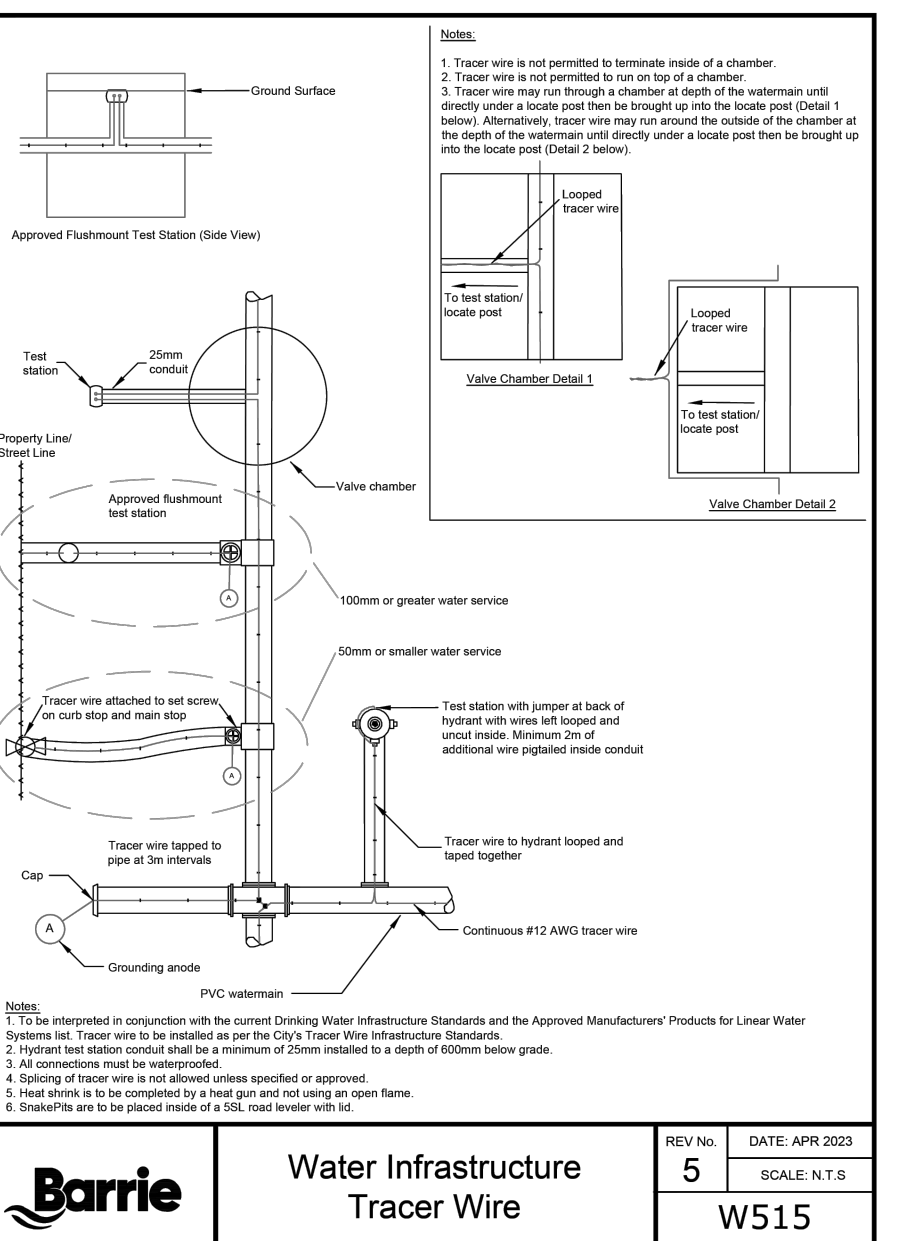
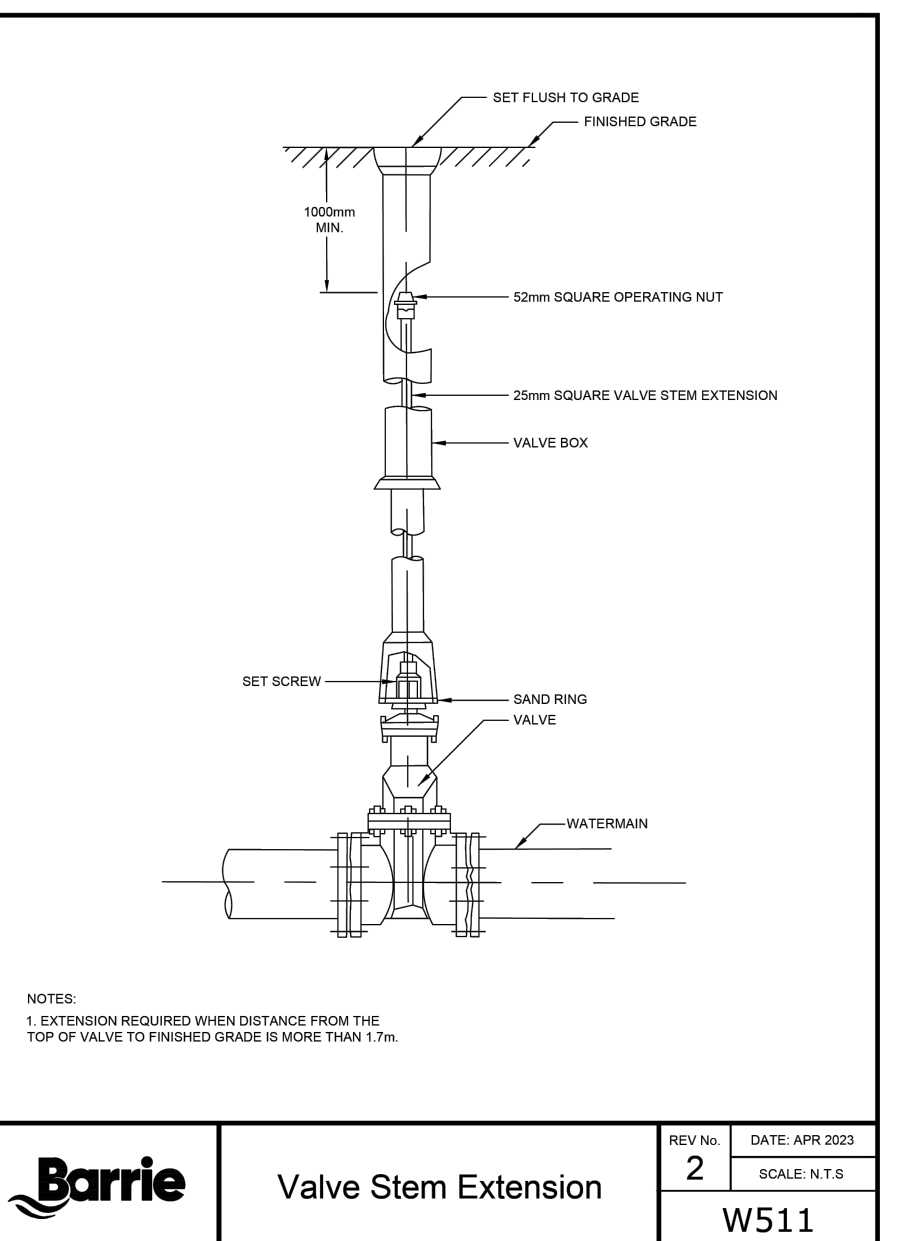
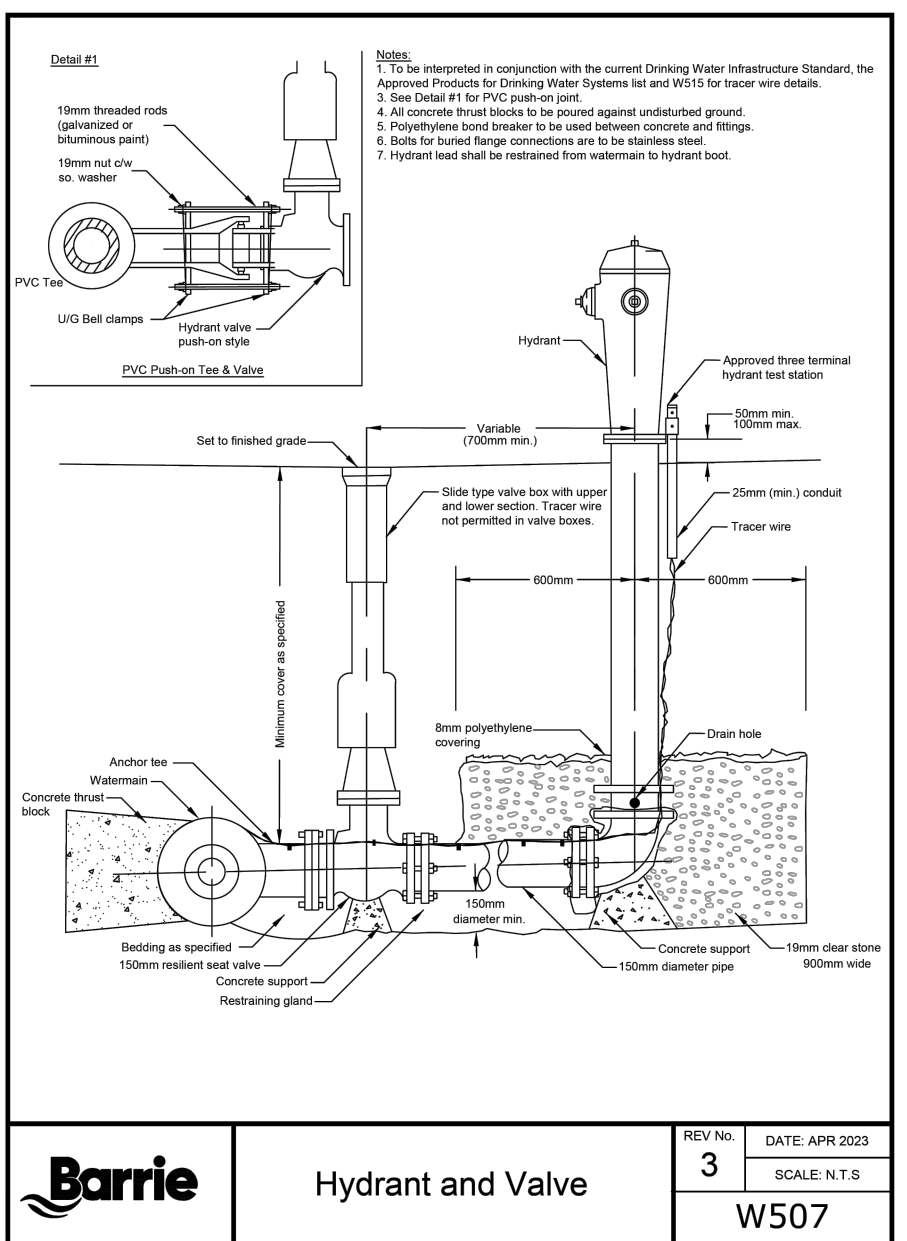
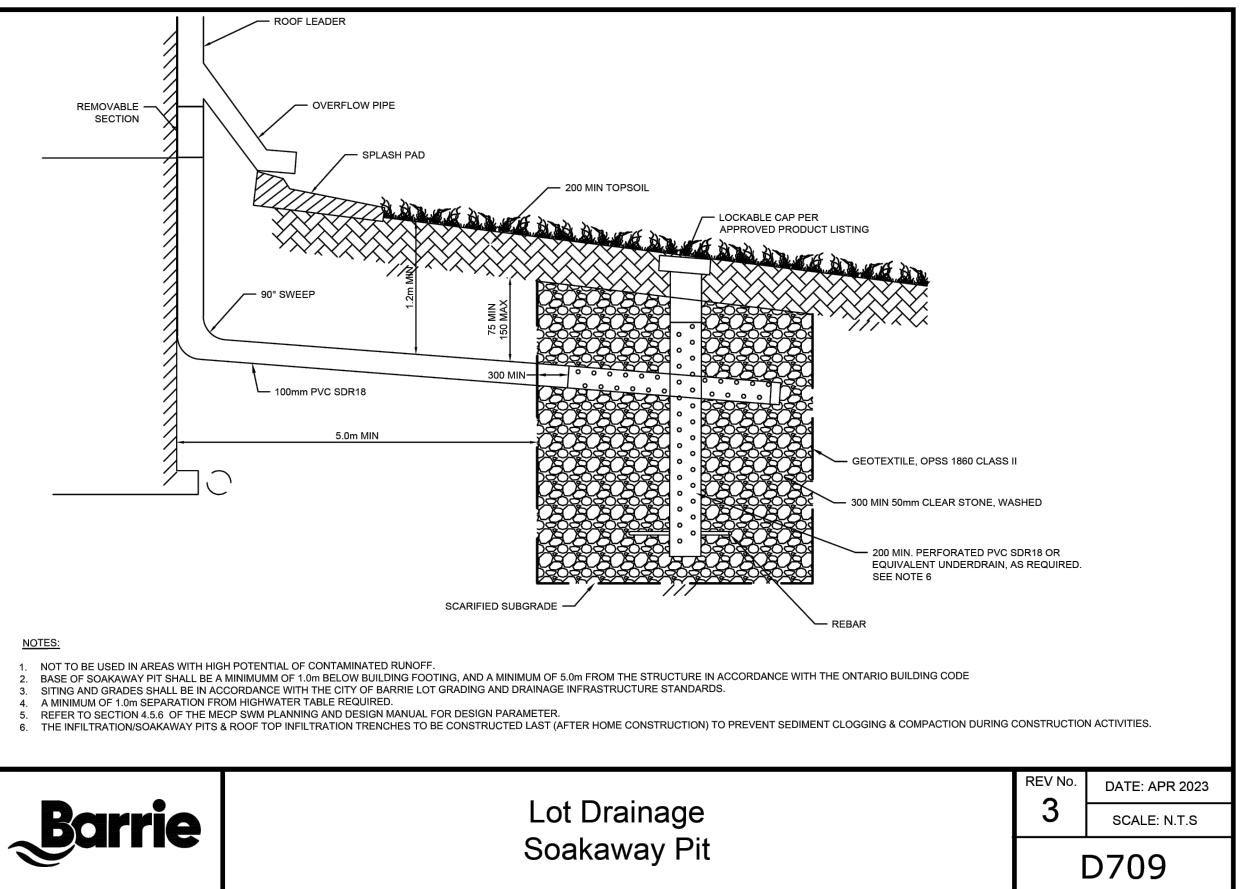
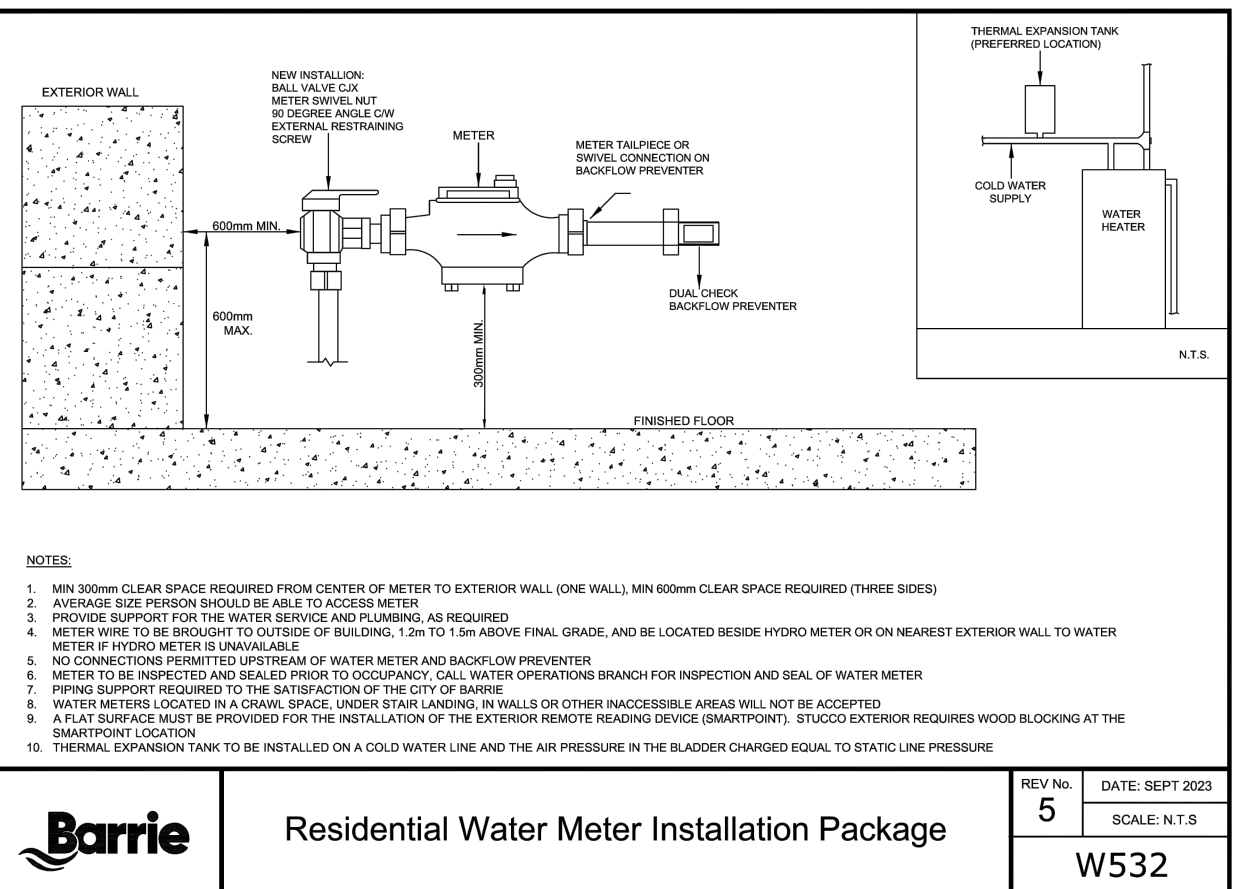
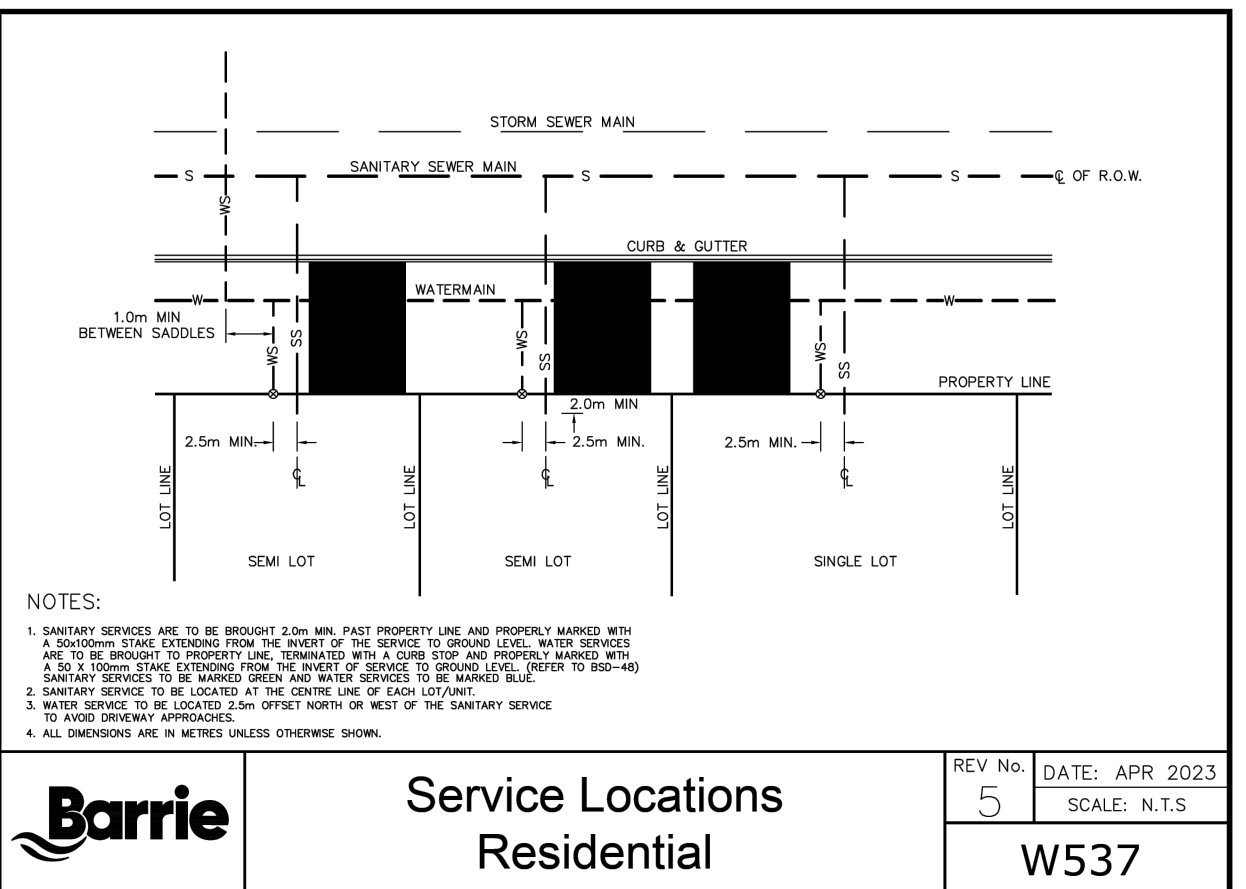
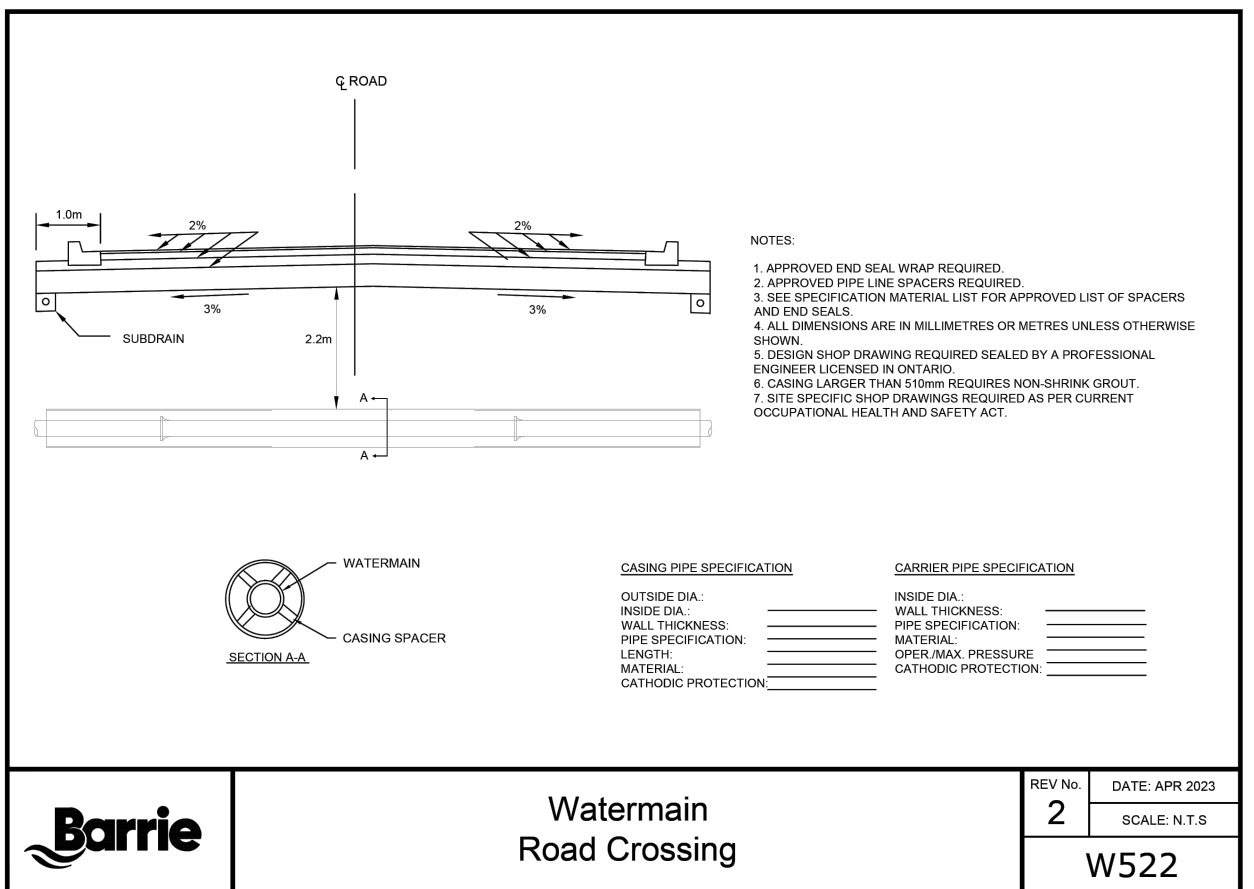
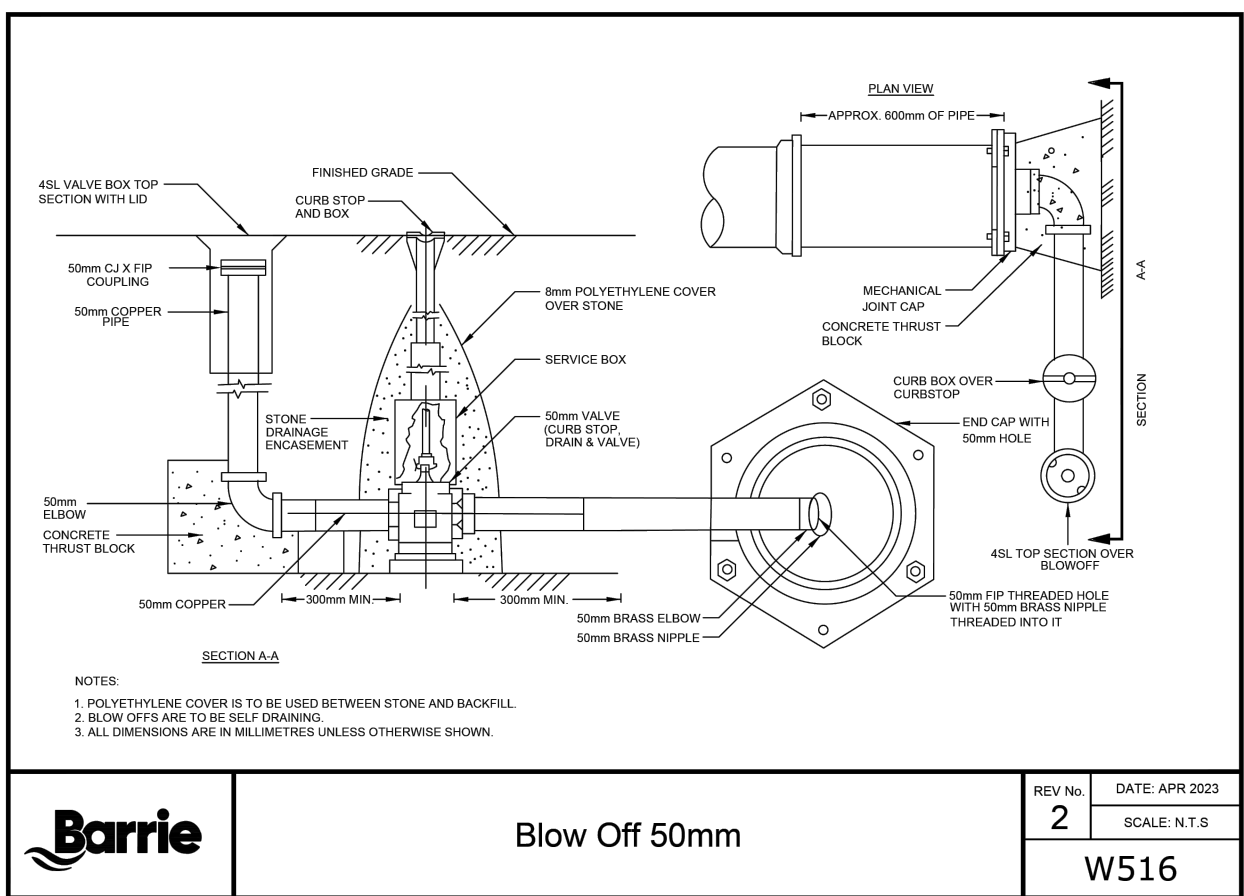
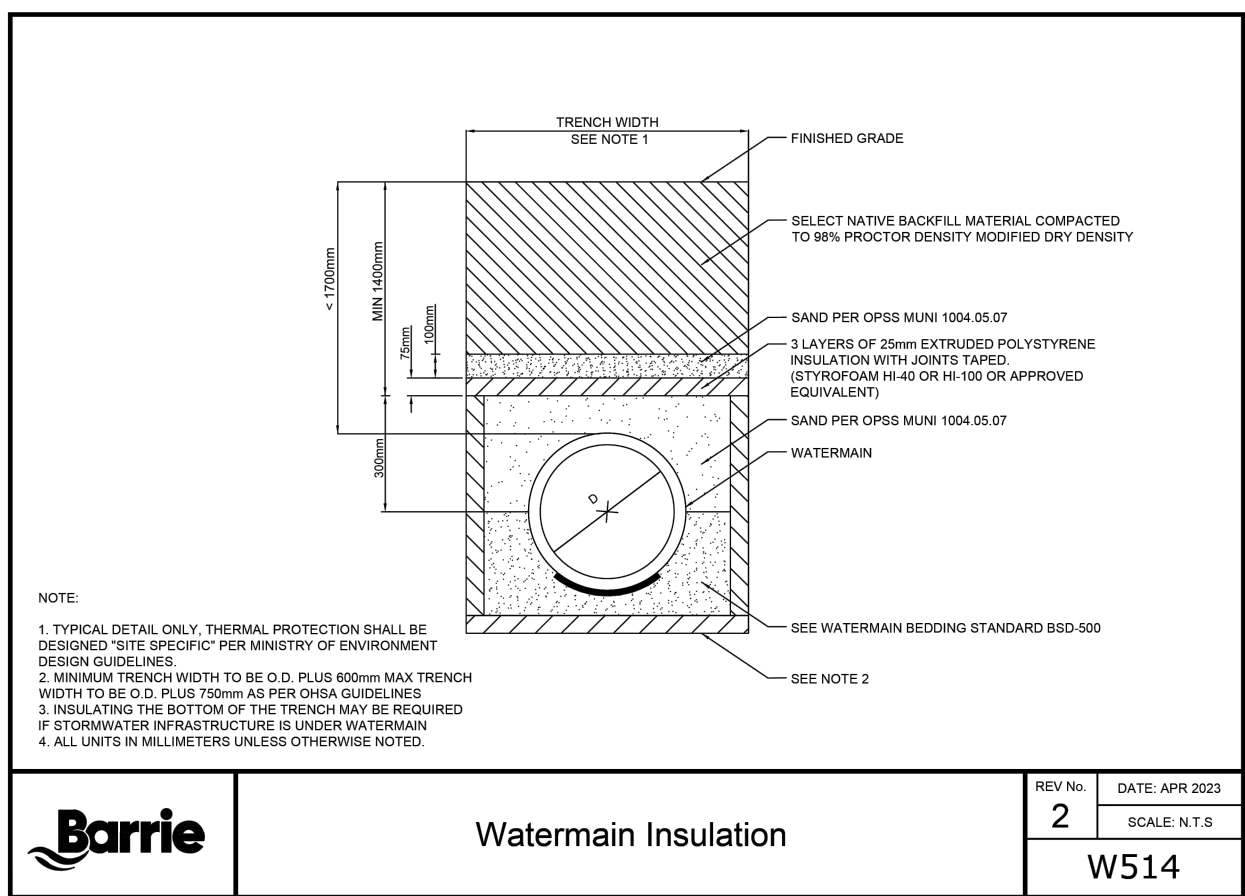
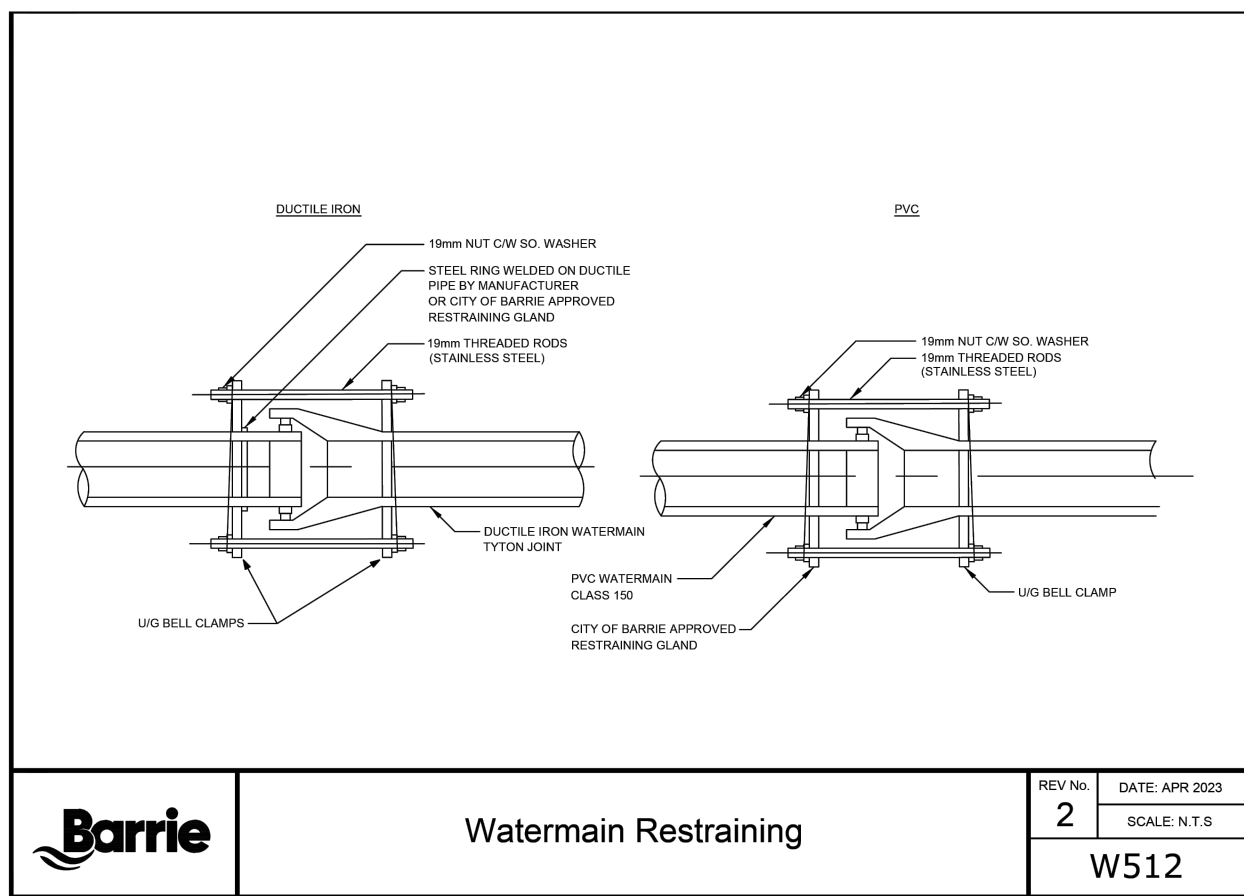
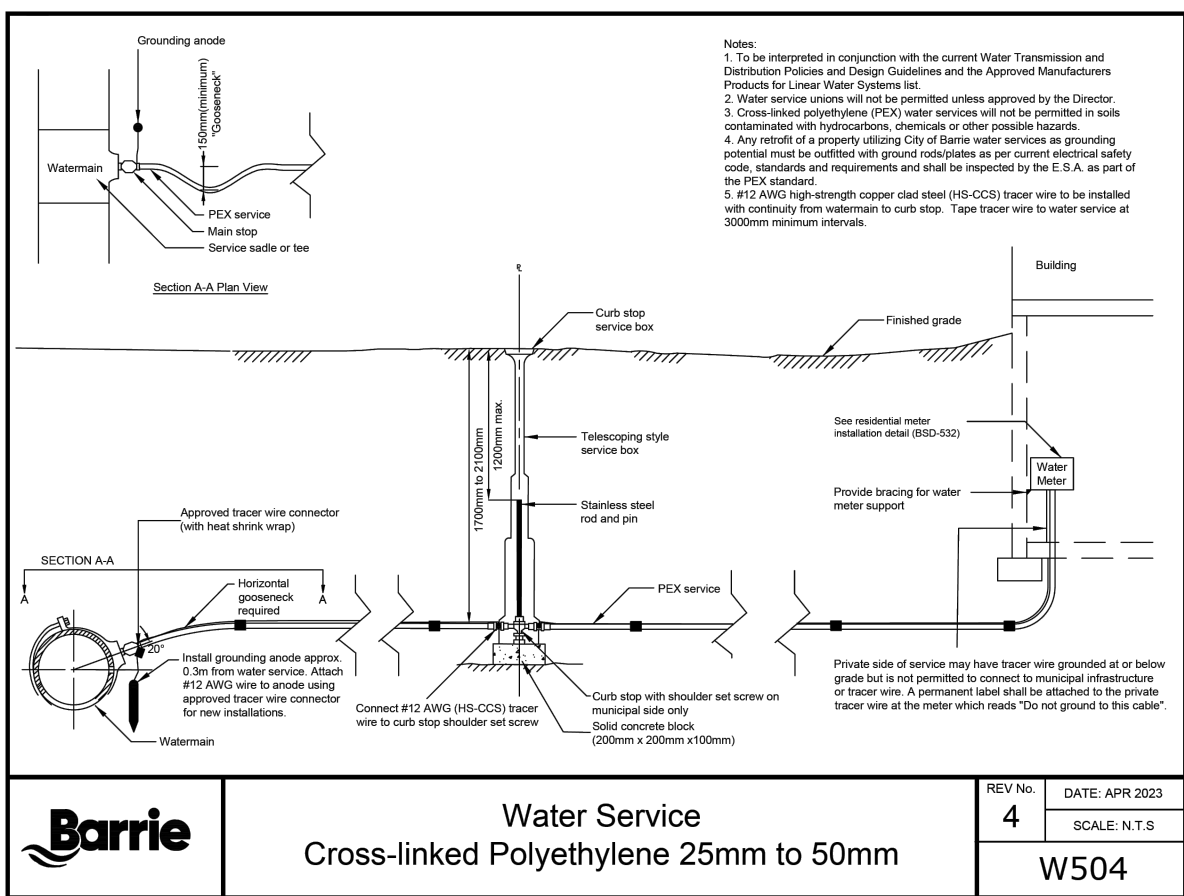
SITE PLAN APPROVAL

Client: **ALLIANCE**
www.alliancehomes.ca

Project: **152 MILLER DRIVE**
BARRIE, ON L4N 9X3
TOWN FILE: D28-014-2024

NOTES & DETAILS

Project No. 1981-001-23 Designed by: RM Checked by: DL
Scale: N/A Drawn by: RM Approved by: JM
Orientation: Stamp



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

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1.	CLIENT REVIEW	22/02/18
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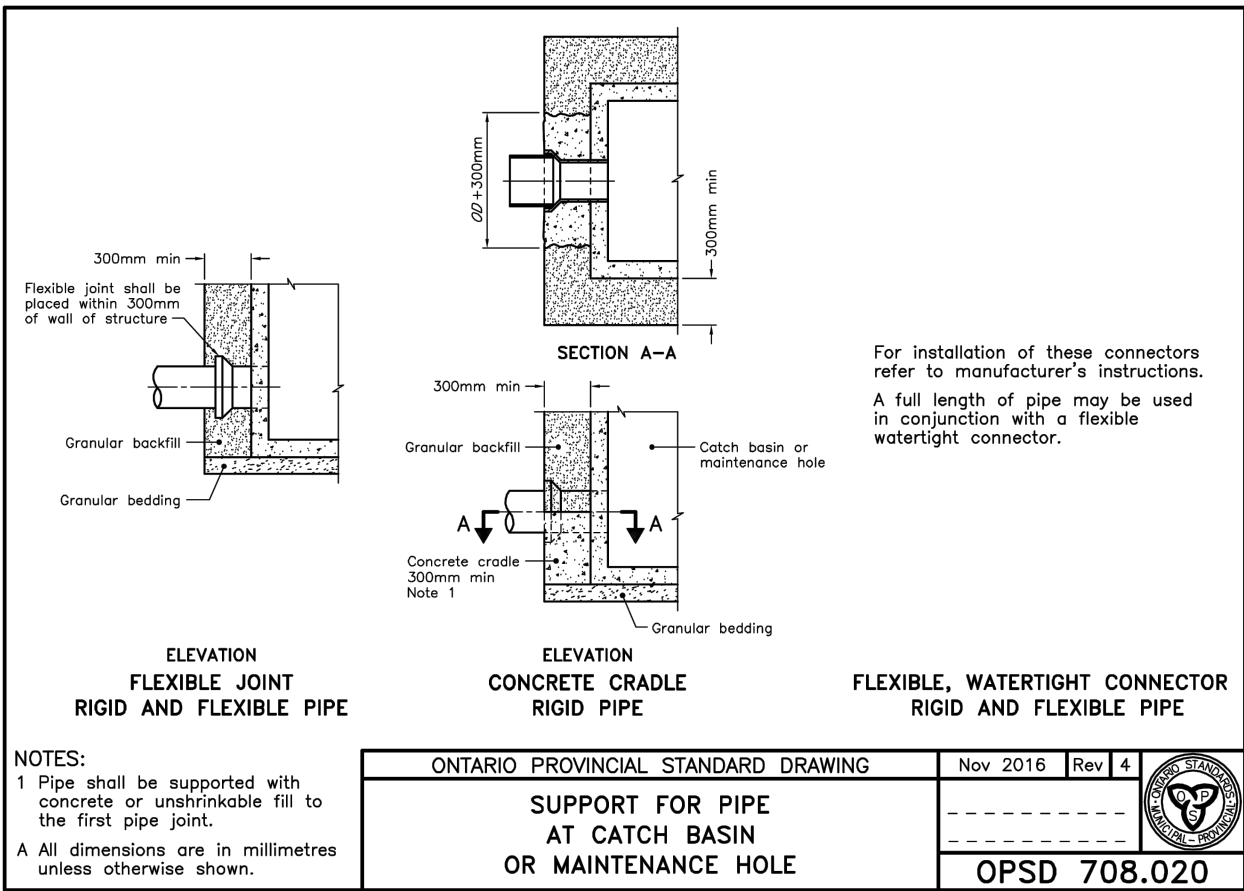
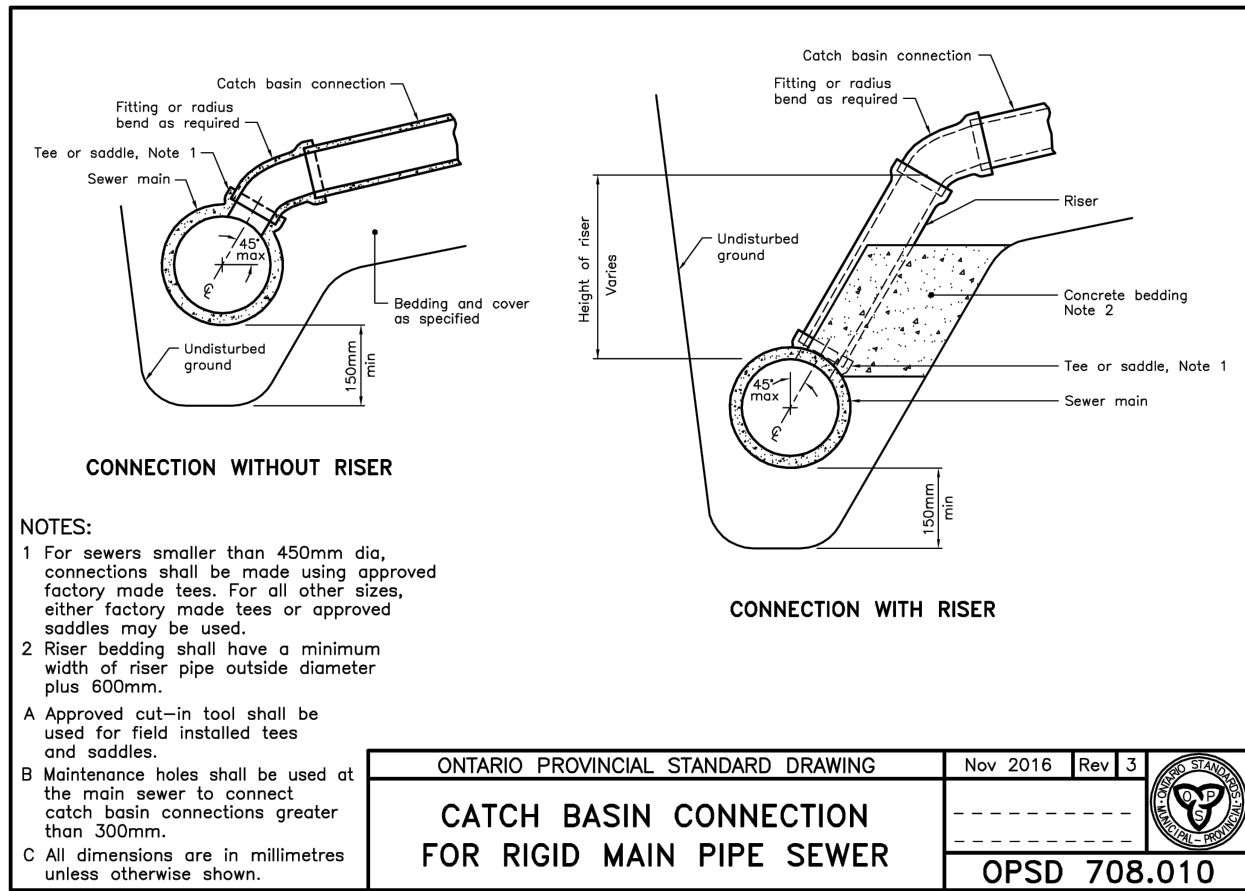
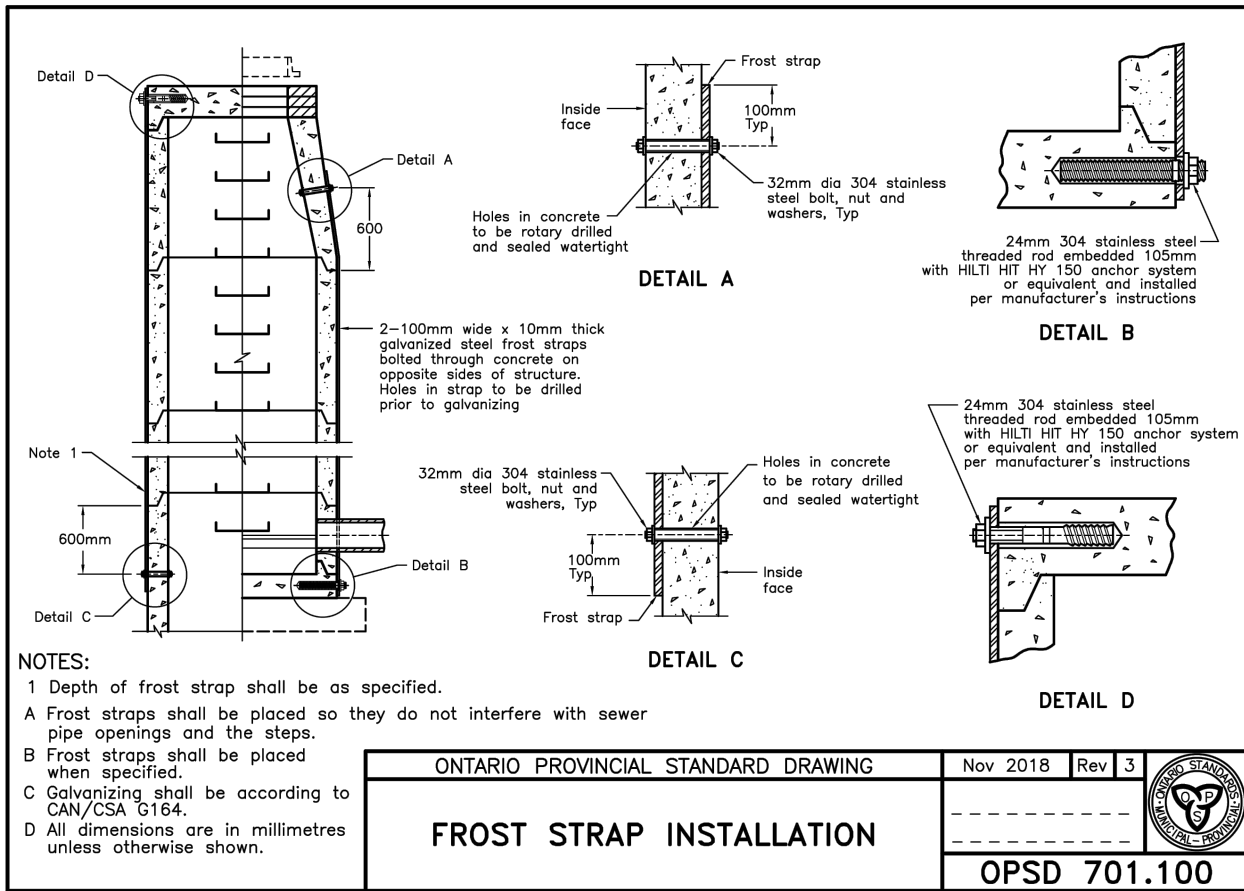
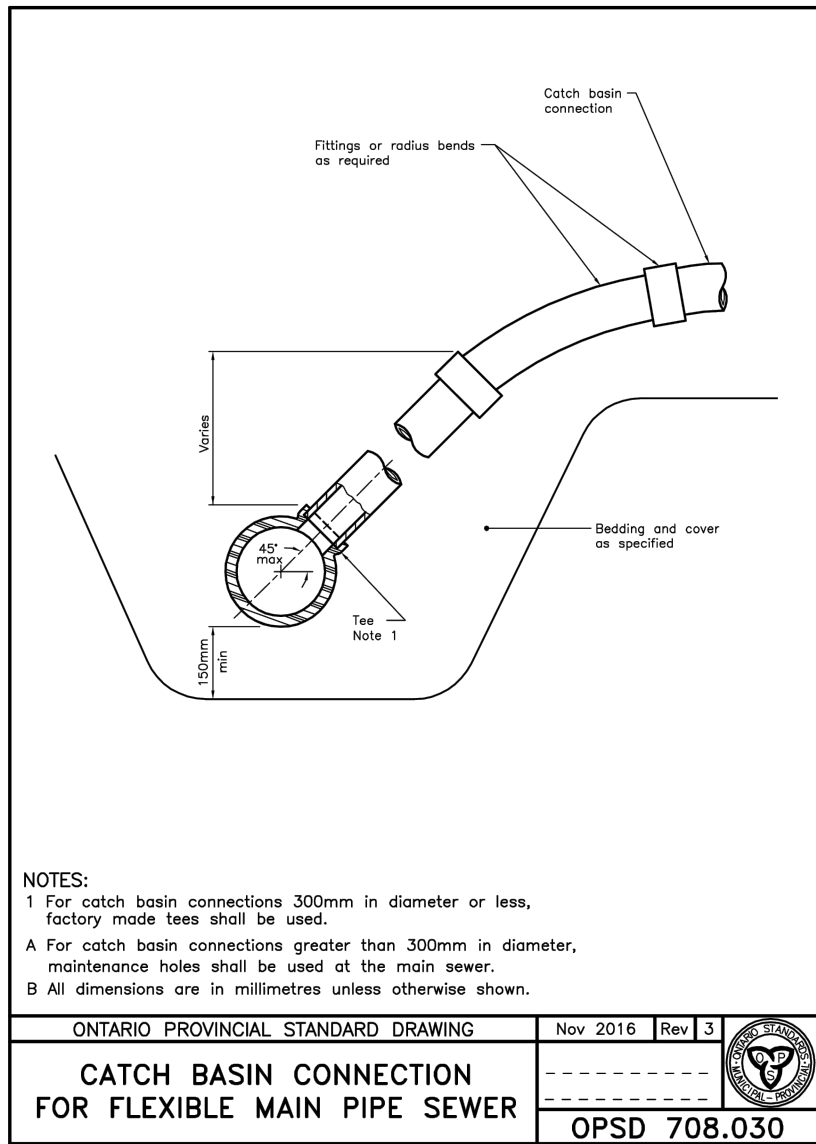
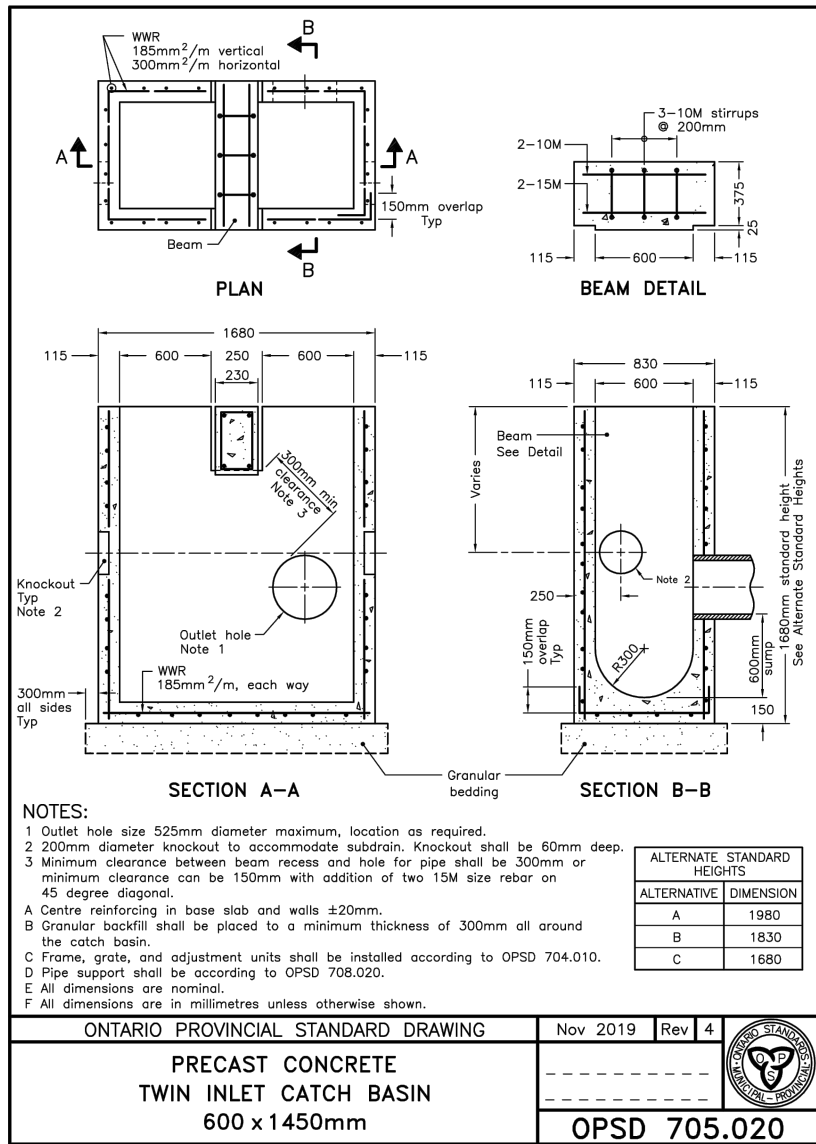
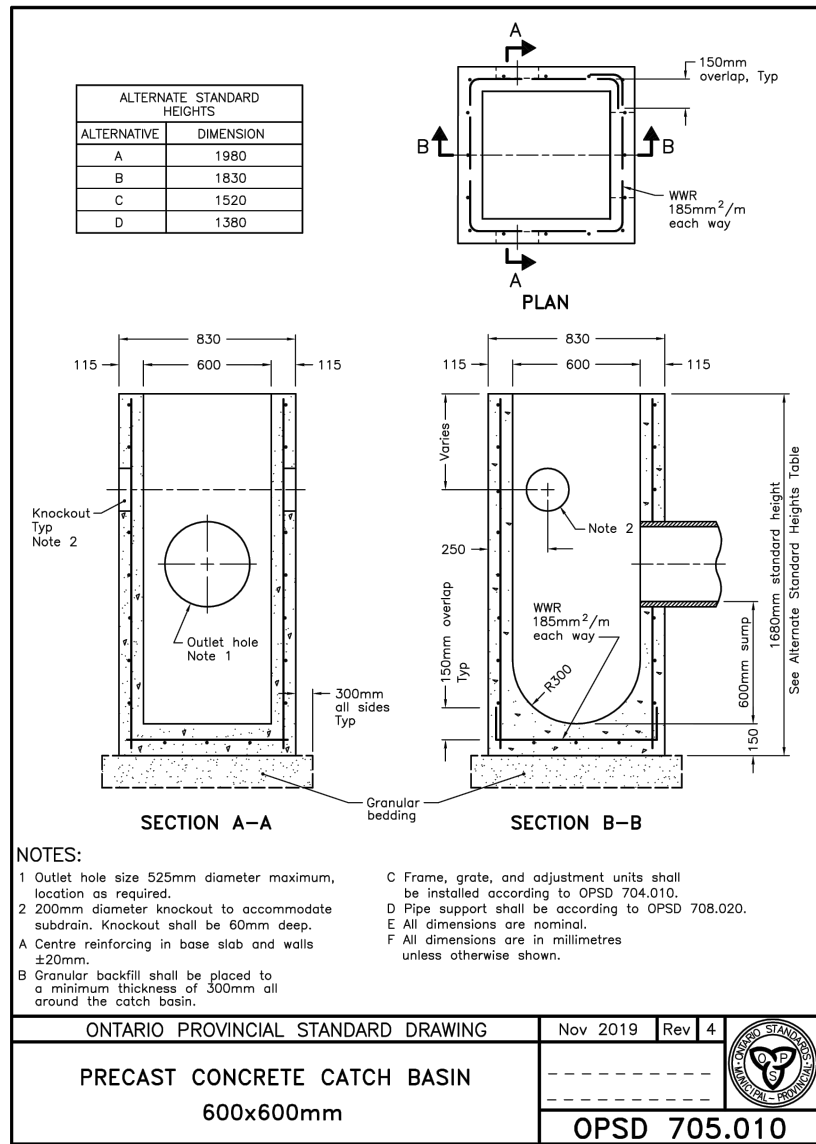
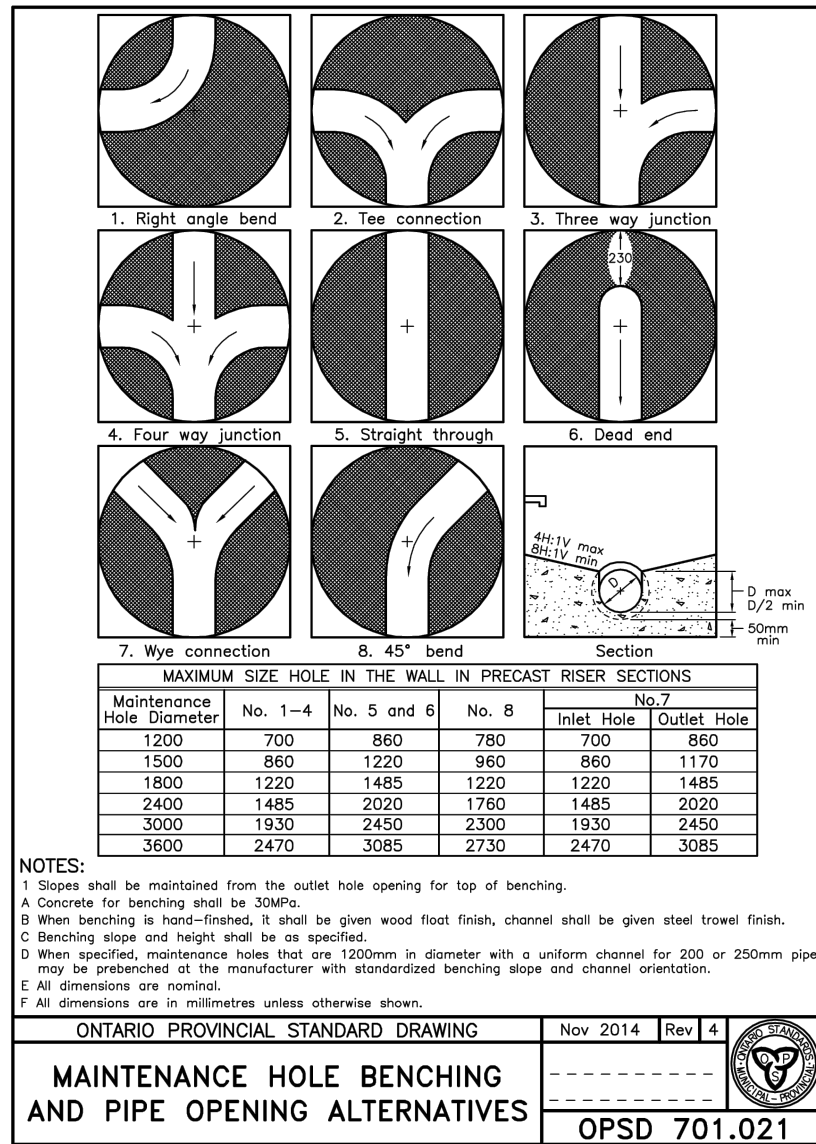
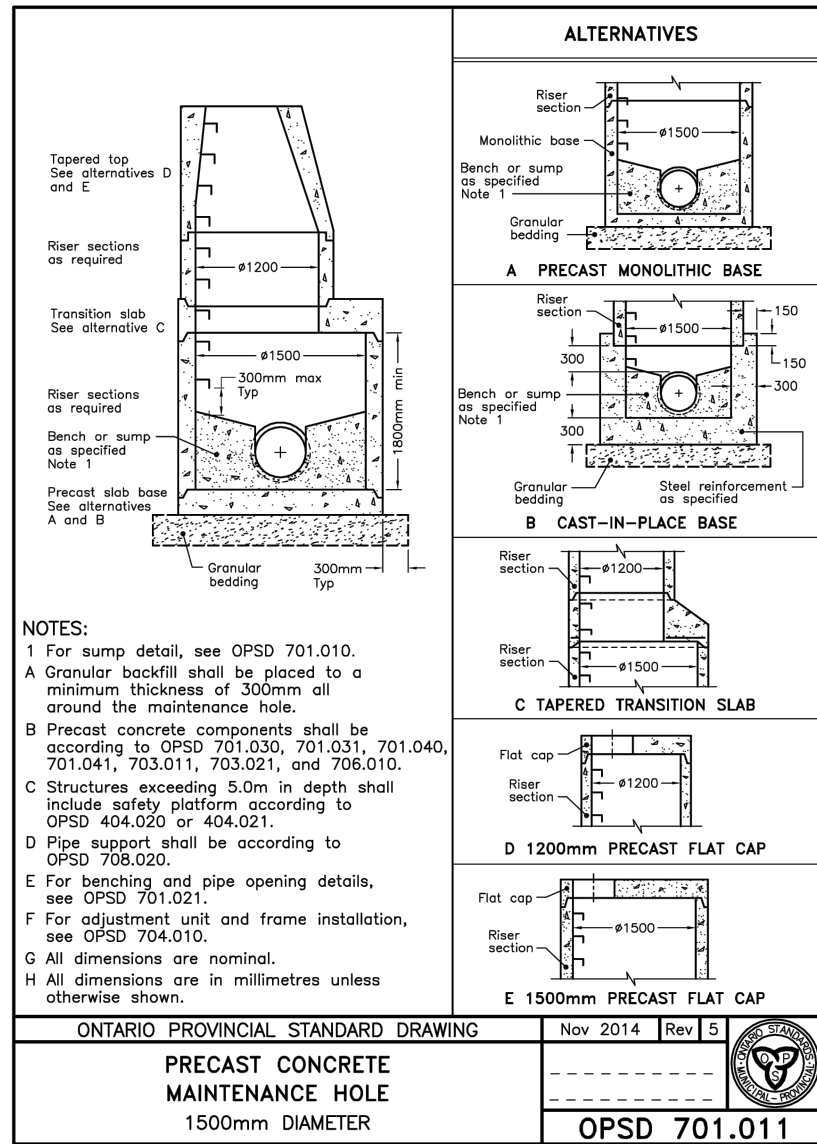
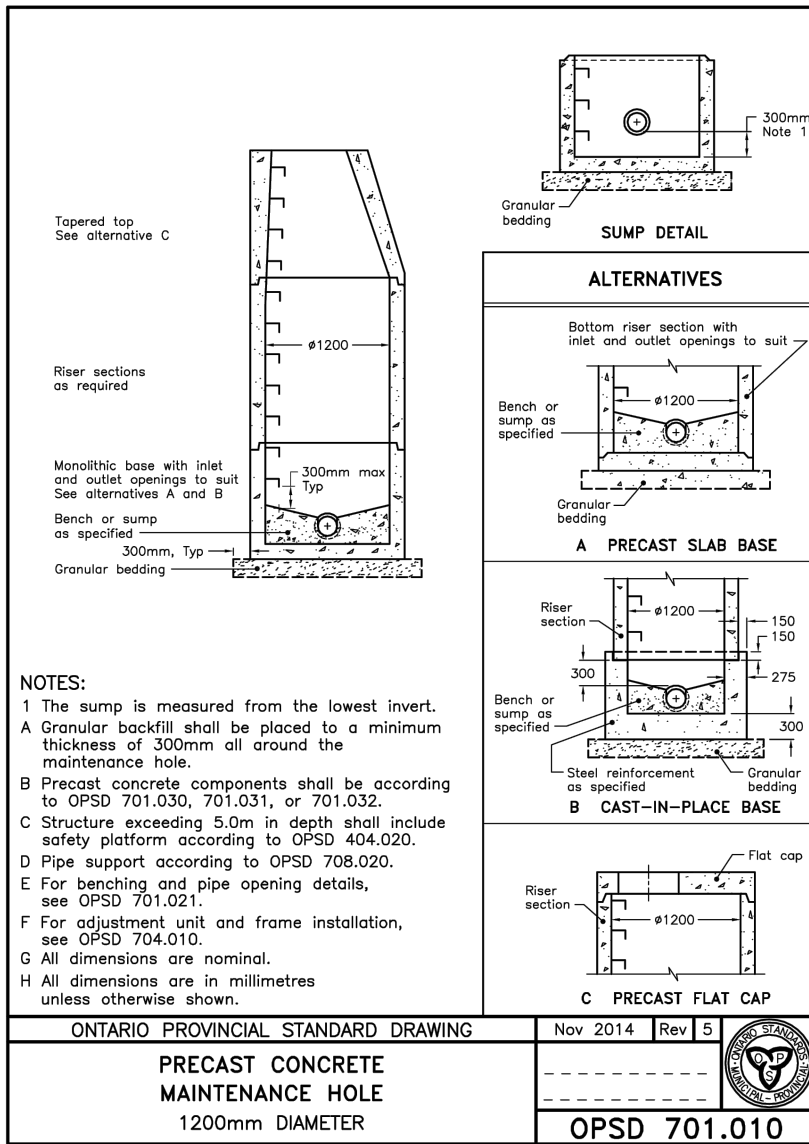
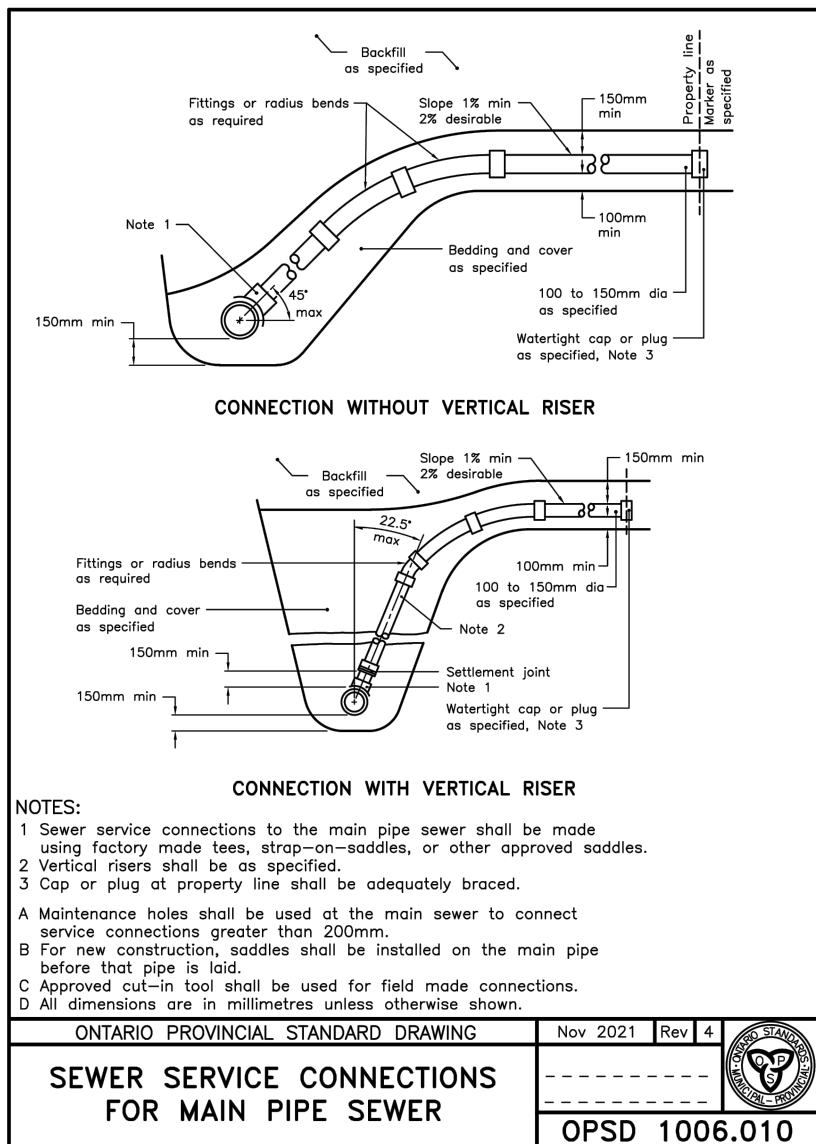
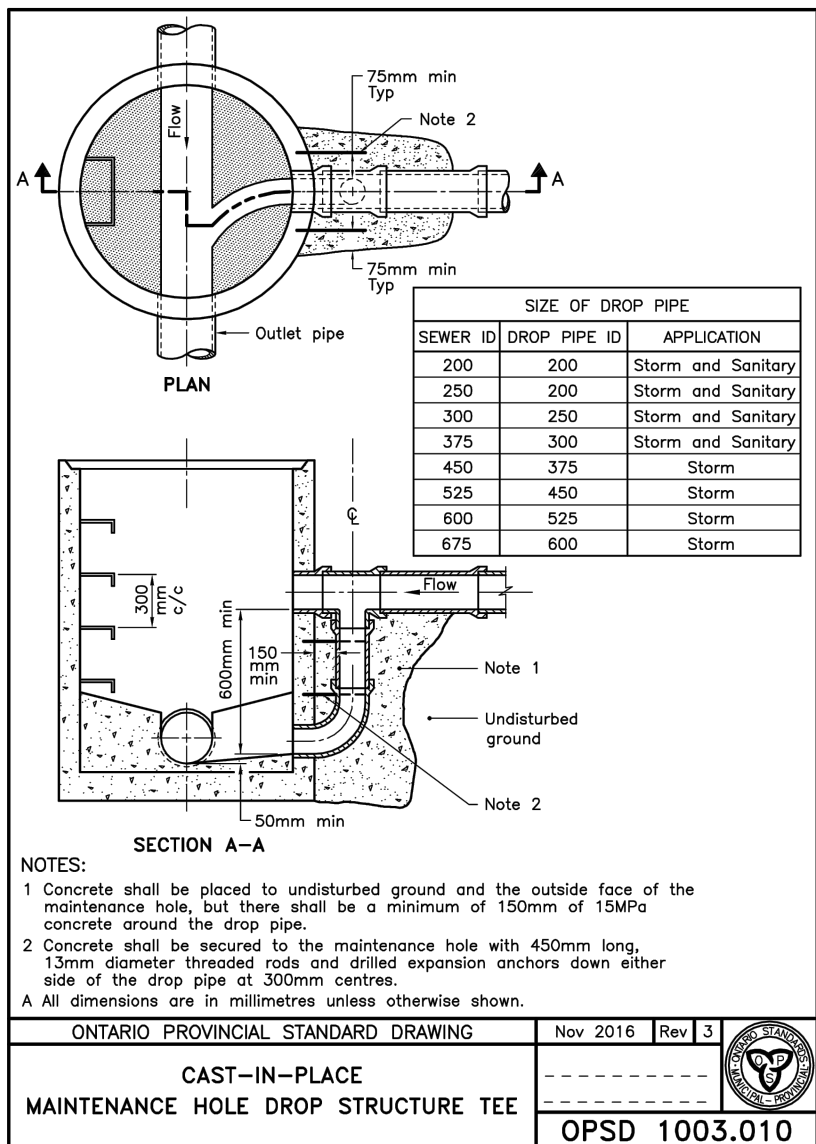
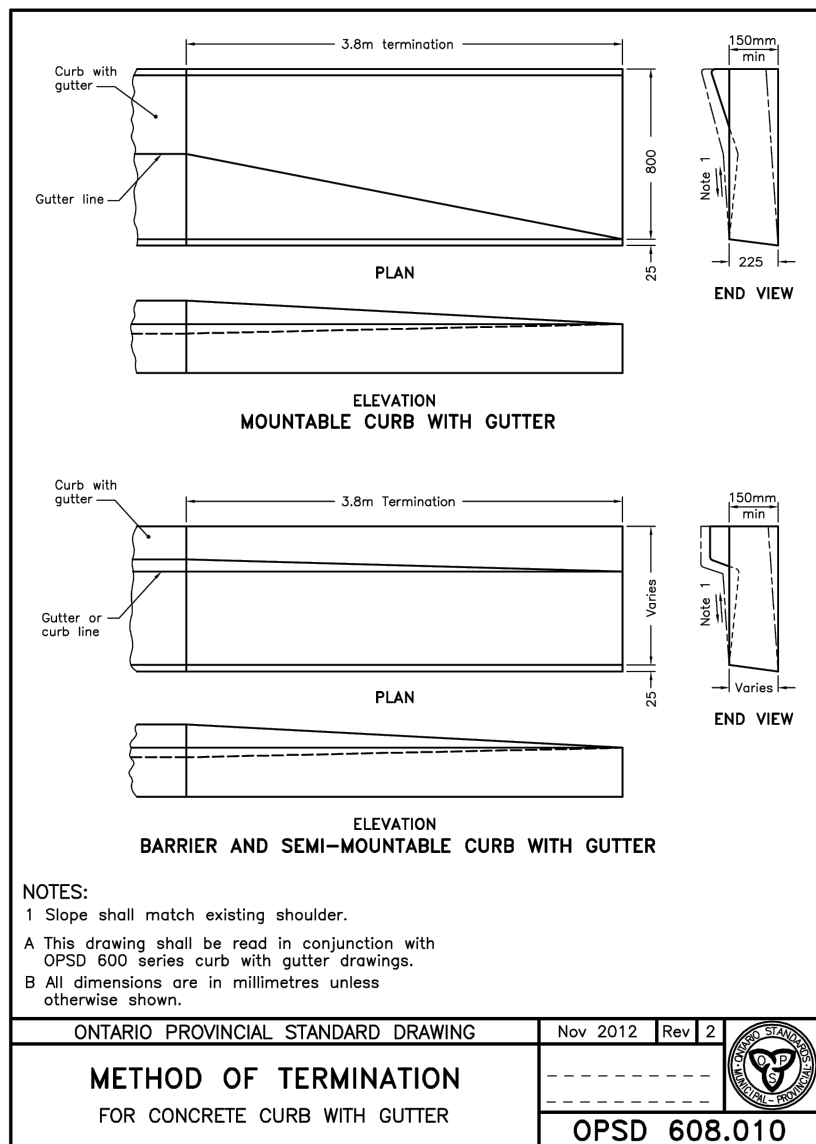
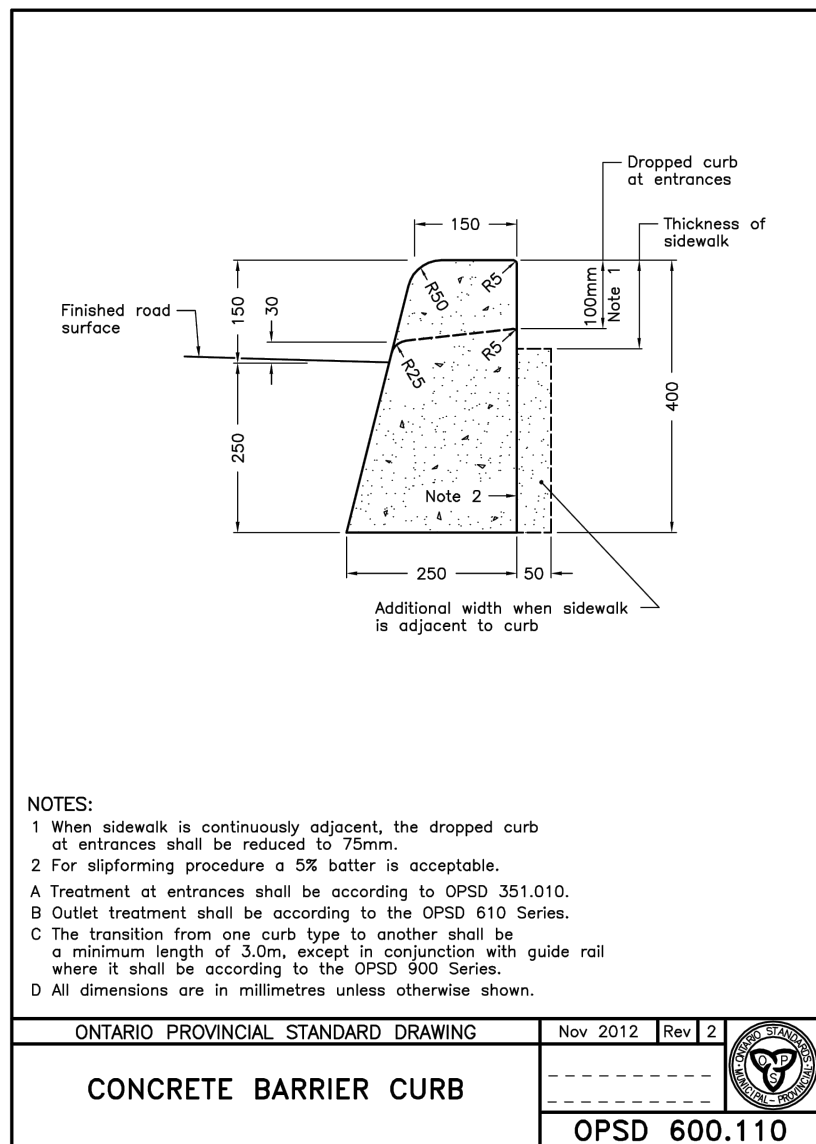
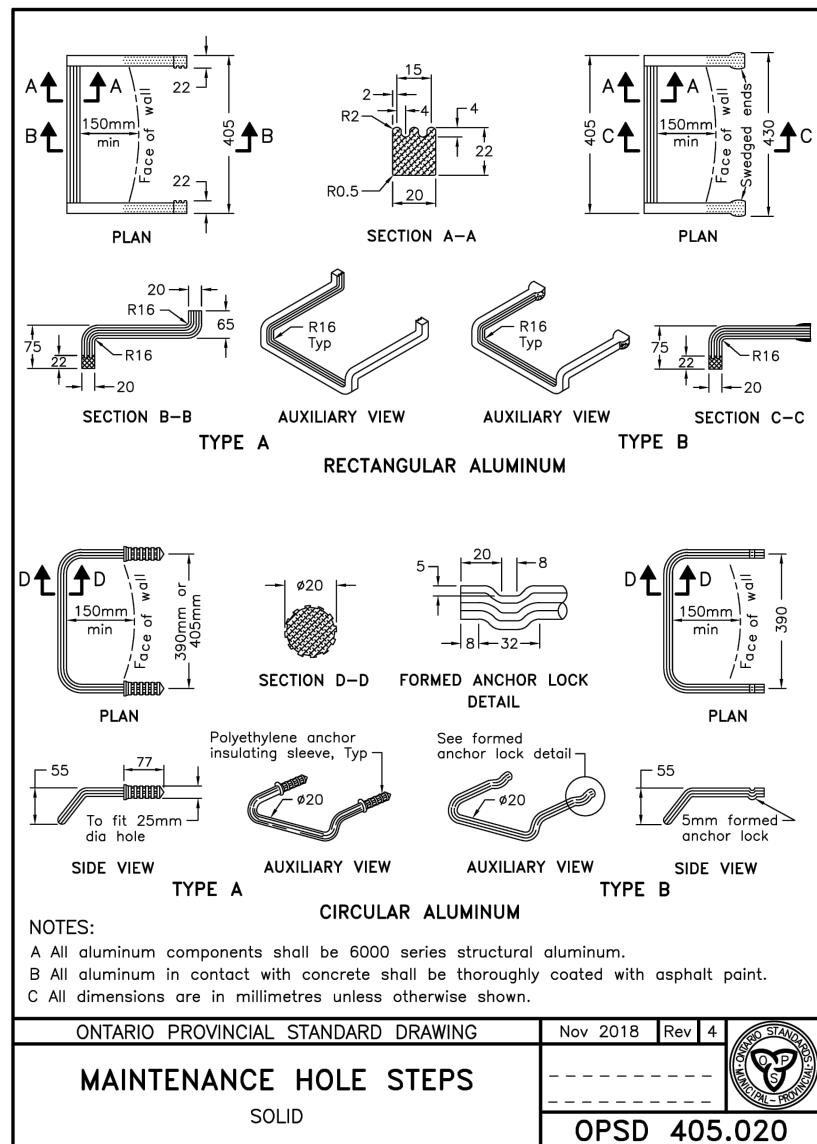
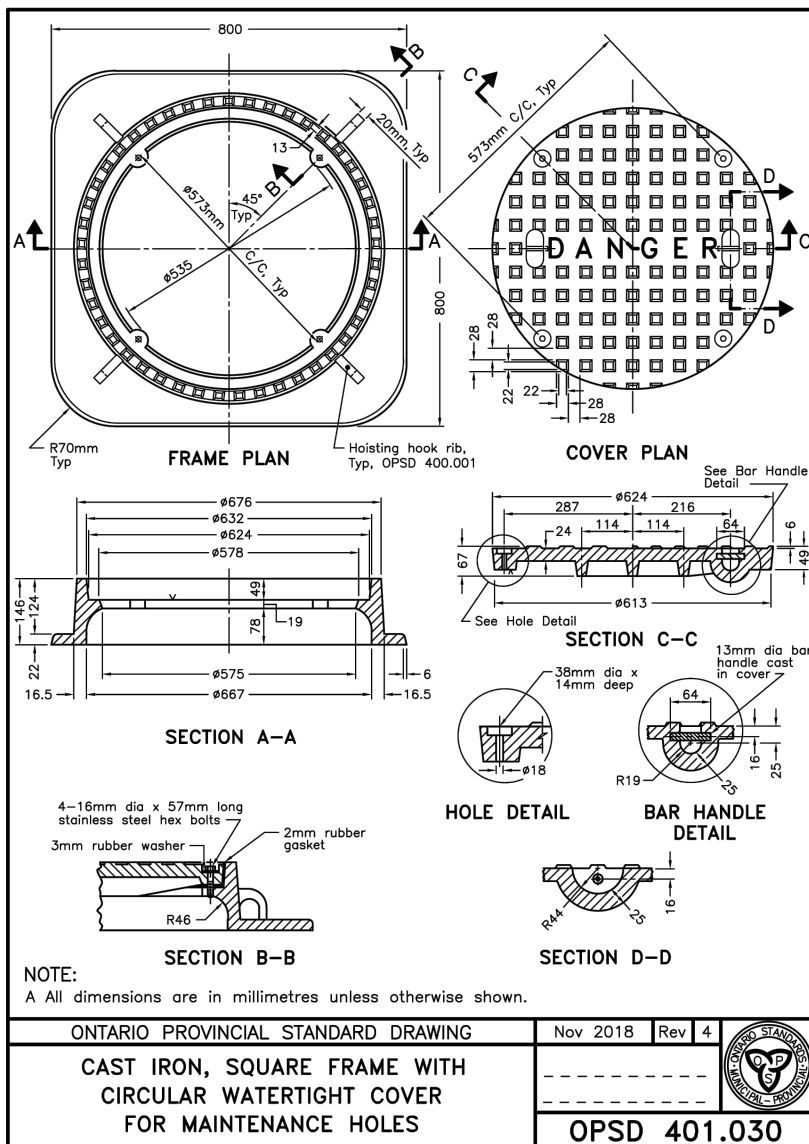
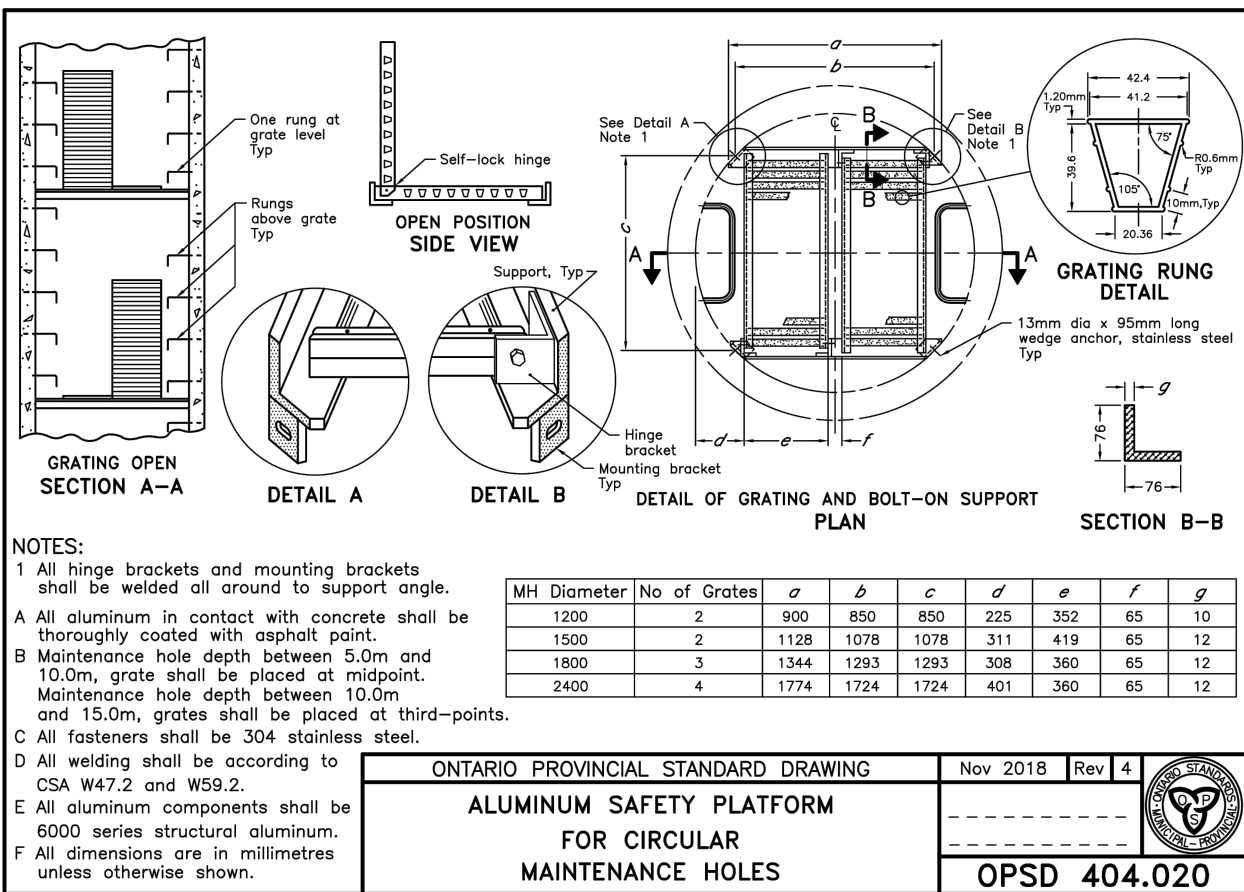
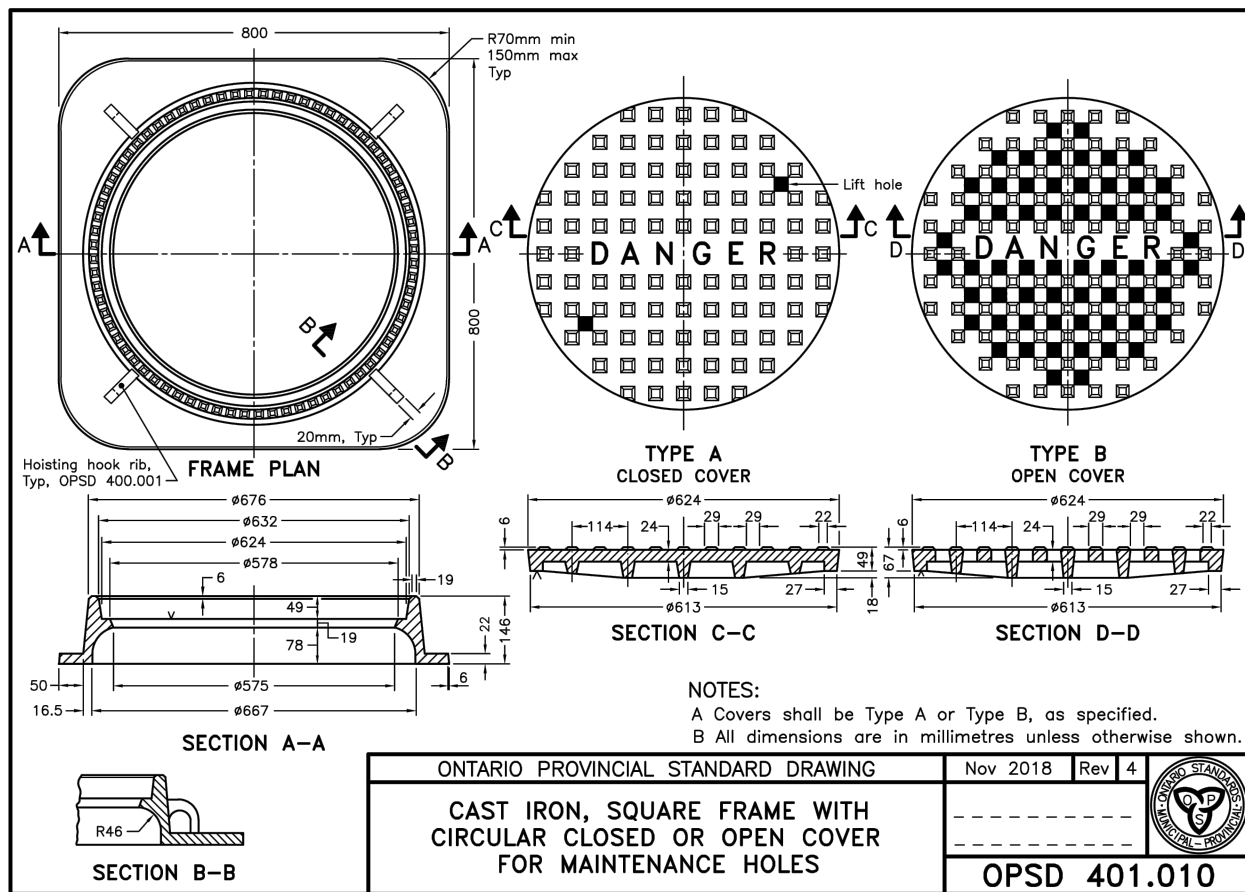
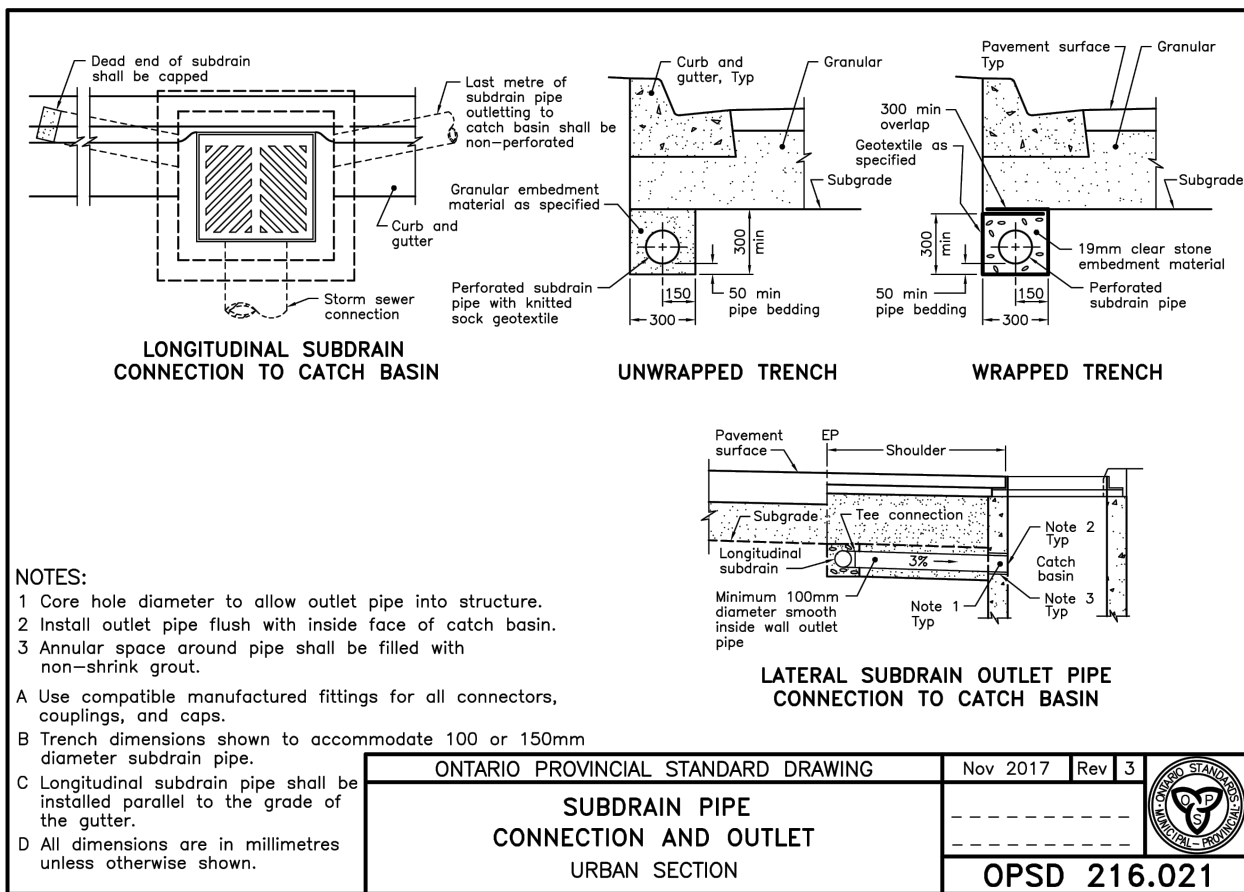
Issued For:
SITE PLAN APPROVAL

Project
152 MILLER DRIVE
BARRIE, ON L4N 9X3
TOWN FILE:D28-014-2024

Drawing:

NOTES & DETAILS
- 4 -

Project No.	1981-001-23	Designed by:	RM	Checked by:	DL
Scale:	N/A	Drawn by:	RM	Approved by:	JM
Orientation				Stamp	



152 MILLER DRIVE
BARRIE, ON

DRAWING INDEX

TITLE	SHEET NO
COVER SHEET	1 OF 5
SYSTEM LAYOUT SHEET	2 OF 5
SYSTEM OVERLAY SHEET	3 OF 5
DETAIL SHEET	4 OF 5

PROJECT INFORMATION			
SITE CONTACT	PHIL ALLEN	416-296-5990	PHIL.ALLEN@STORMCON.CA
ENGINEER / TECHNICAL SPECIALIST	ERIC CUMISKEY	289-380-3742	ECUMISKEY@STORMCON.CA
SALES REP:	GREG DZIEWECKI	437-231-6080	GREG.D@STORMCON.CA
PROJECT NO:	2024-070		
COMMENTS:	REVISION	DATE	COMMENT

 STORMCON 85 CONNIE CRESENT CONCORD, ON L4K 1J1	SALES@STORMCON.CA www.STORMCON.CA	NOTE: THESE SHOP DRAWINGS MAY CONTAIN COMPONENTS INCLUDING BUT NOT LIMITED TO: MANHOLES, CATCH BASINS, STONE PILES AND FITTINGS. MANUFACTURER'S CATALOGS AND OTHER NECESSARY APPURTENANCES THAT MAY NOT BE SUPPLIED BY STORMCON. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND/OR SUPPLIER TO CONFIRM THE MATERIALS PROVIDED.
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- GENERAL NOTES
- COORDINATE WITH MANUFACTURER'S REPRESENTATIVE/DISTRIBUTOR FOR PRE-CONSTRUCTION MEETING AND SITE INSPECTION DURING INSTALLATION.
 - ENGINEERING DRAWINGS SUPERSEDE ALL PROVIDED DOCUMENTATION. REFER TO SITE ENGINEERS FOR ADDITIONAL INFORMATION.
 - COORDINATE GREENSTORM INSTALLATION ACTIVITIES WITH OTHER SITE ACTIVITIES.
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
 - THE SUB-GRADE AND SIDE BACKFILL TO BE COMPACTED TO 95% SPD OR AS DIRECTED BY THE QUALIFIED ENGINEER.
 - PRESERVE EXISTING AND ADJACENT UTILITIES. THE SYSTEM MUST BE IDENTIFIED TO STORMCON AT THE SUBMITTAL. MAXIMUM AND MINIMUM INSTALLATION DEPTHS ASSUME THE GROUND WATER IS AT OR BELOW THE BASE OF THE SYSTEM BASELINE. OTHER NOTED.
 - CONFIRM GEOTECHNICAL SOIL EVALUATION BY A QUALIFIED ENGINEER TO DETERMINE SUITABILITY OF STRUCTURAL INSTALLATION.
 - CONFIRM FOR BURIED UNDERGROUND UTILITIES INCLUDING GAS, ELECTRICAL, PIPELINES OR CONDUITS.
 - ROOTS FROM SURROUNDING TREES MAY DAMAGE THE SYSTEM. DESIGN ENGINEER TO INSTRUCT ADEQUATE SEPARATION FROM ALL TREES.
 - WHEN INSTALLED IN CONFORMANCE TO THE INSTALLATION GUIDELINES, GREENSTORM ET CAN HANDLE STANDARD CLASS TRUCK LOADS AFTER 80% COVER, FOR NON-STANDARD LOADS AND INSTALLATION WITHIN GROUNDWATER, CONTACT MANUFACTURER'S REPRESENTATIVE/DISTRIBUTOR.
 - PROTECT THE INSTALLATION AGAINST DAMAGE WITH CONSTRUCTION TAPE, FENCING OR OTHER MEANS. FILL THE CONSTRUCTION IS COMPLETE.
 - ENSURE THAT CONSTRUCTION FOLLOWS APPLICABLE FEDERAL, PROVINCIAL, LOCAL, MUNICIPAL AND LOCAL LAWS, ORDINANCES, REGULATIONS AND SAFETY REQUIREMENTS.
 - VEHICULAR LOADING IS PROHIBITED UNTIL BACKFILLED AS PER MANUFACTURER'S INSTALLATION GUIDELINES. THE USE OF EQUIPMENT OVER GREENSTORM CHAMBERS IS LIMITED.
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO PARKED TRUCKS, CARS, CUMPS, TRUCKS OR EQUIPMENT ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE CONSTRUCTION GUIDE.
 - PROFIT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE CONSTRUCTION GUIDE.

- CHECK REQUIRED MATERIALS AND EQUIPMENT
- ALL GREENSTORM CHAMBERS AND ACCESSORIES AS SPECIFIED IN THE ENGINEER'S PLANS INCLUDING NON-WOVEN GEOTEXTILE, CONNECTORS, GUARDS, SIDEWALLS ADAPTER, RISER AND LINER WHERE APPLICABLE.
 - RECORRECTING SAW OR ROUTER.
 - TRANSPORT LASSER LEVEL MEASURING DEVICE.
 - COMPACTOR EQUIPMENT WITH MINIMUM GROVE WEIGHT HEIGHT OF 10,000 LBS (4,500 KG).
 - ACCEPTABLE FILL MATERIAL, AS SHOWN IN INSTALLATION INSTRUCTIONS.
 - QUANTITIES FOR GEOTEXTILES ARE APPROXIMATE AND MAY VARY BASED ON OVERLAP / WASTAGE.
 - CHECK GREENSTORM CHAMBERS FOR DAMAGE PRIOR TO INSTALLATION. DO NOT USE DAMAGED CHAMBERS, CONTACT YOUR SUPPLIER IMMEDIATELY TO REPORT DAMAGE OR PACKING LIST DISCREPANCIES.

- NOTES FOR BEDDING AND INSTALLATIONS
- CONTRACTORS ARE EXPECTED TO COMPREHEND AND USE THE MOST CURRENT INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING A SYSTEM INSTALLATION. FOR THE MOST CURRENT INSTALLATION INSTRUCTIONS, CONTACT STORMCON AT (888) 386-7264 OR VISIT WWW.STORMCON.CA.
 - CONTACT STORMCON AT LEAST TWO WEEKS PRIOR TO SYSTEM INSTALLATION TO ARRANGE FOR A PRE-CONSTRUCTION MEETING.
 - USE GREENSTORM INSTALLATION INSTRUCTIONS AS A GUIDELINE ONLY FOR MINIMUM/MAXIMUM REQUIREMENTS. ACTUAL DESIGN MAY VARY. REFER TO APPROVED CONSTRUCTION DRAWINGS FOR JOB-SPECIFIC DETAILS. ENGINEERING DRAWINGS SUPERSEDE ALL PROVIDED DOCUMENTATION.
 - THE FOUNDATION STONE SHALL BE LEVEL AND COMPACTED PRIOR TO CHAMBER INSTALLATION.
 - ANY DISCREPANCIES WITH THE SYSTEM SUB-GRADE SOIL'S BEARING CAPACITY MUST BE REPORTED TO THE GEOTECHNICAL ENGINEER.
 - CONTRACTOR TO REFER TO GREENSTORM INSTALLATION INSTRUCTIONS CONCERNING VEHICULAR TRAFFIC. RESPONSIBILITY FOR PROTECTING VEHICLES THAT EXCEED REQUIREMENTS SPECIFIED FROM TRAVELING ACROSS OR PARKING OVER THE CHAMBER SYSTEM LIES SOLELY WITH THE CONTRACTOR THROUGHOUT THE ENTIRE SITE CONSTRUCTION PROCESS. THE PLACEMENT OF WARNING TAPE, TEMPORARY FENCING, AND/OR APPROPRIATELY LOCATED SIGNS IS HIGHLY RECOMMENDED.
 - TRAFFIC OF INSTALLATION EQUIPMENT OR OTHER VEHICULAR TRAFFIC OVER TOP OF THE GREENSTORM STORMWATER SYSTEM IS STRICTLY RESTRICTED AND PROHIBITED UNTIL SATISFACTORY COVER AND COMPACTION IS ACHIEVED ACCORDING TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - EROSION AND SEDIMENT CONTROL MEASURES MUST MEET LOCAL CODES AND THE DESIGN ENGINEER'S SPECIFICATIONS THROUGHOUT THE ENTIRE SITE CONSTRUCTION PROCESS.
 - GREENSTORM SYSTEMS MUST BE DESIGNED AND INSTALLED IN ACCORDANCE WITH STORMCON'S MINIMUM REQUIREMENTS. FAILURE TO DO SO WILL VOID THE LIMITED WARRANTY.

THIS DRAWING WAS PREPARED TO SUPPORT THE PROJECT ENGINEER OF RECORD FOR THE PROPOSED SYSTEM. IT IS THE ULTIMATE RESPONSIBILITY OF THE PROJECT ENGINEER OF RECORD TO ENSURE THAT THE GREENSTORM SYSTEMS DESIGN IS IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE STORMCON PRODUCTS ARE DESIGNED IN ACCORDANCE WITH STORMCON'S MINIMUM REQUIREMENTS. STORMCON DOES NOT APPROVE PLANS, SIZES, OR SYSTEM DESIGN.

PROPOSED SYSTEM ELEVATIONS	
MINIMUM ALLOWABLE GRADE (TOP OF FINISHED GRADE)	231.00
MINIMUM ALLOWABLE GRADE	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 1	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 2	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 3	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 4	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 5	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 6	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 7	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 8	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 9	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 10	230.00
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GREENSTORM STORAGE TOP ELEVATION LEVEL 99	230.00
GREENSTORM STORAGE TOP ELEVATION LEVEL 100	230.00

