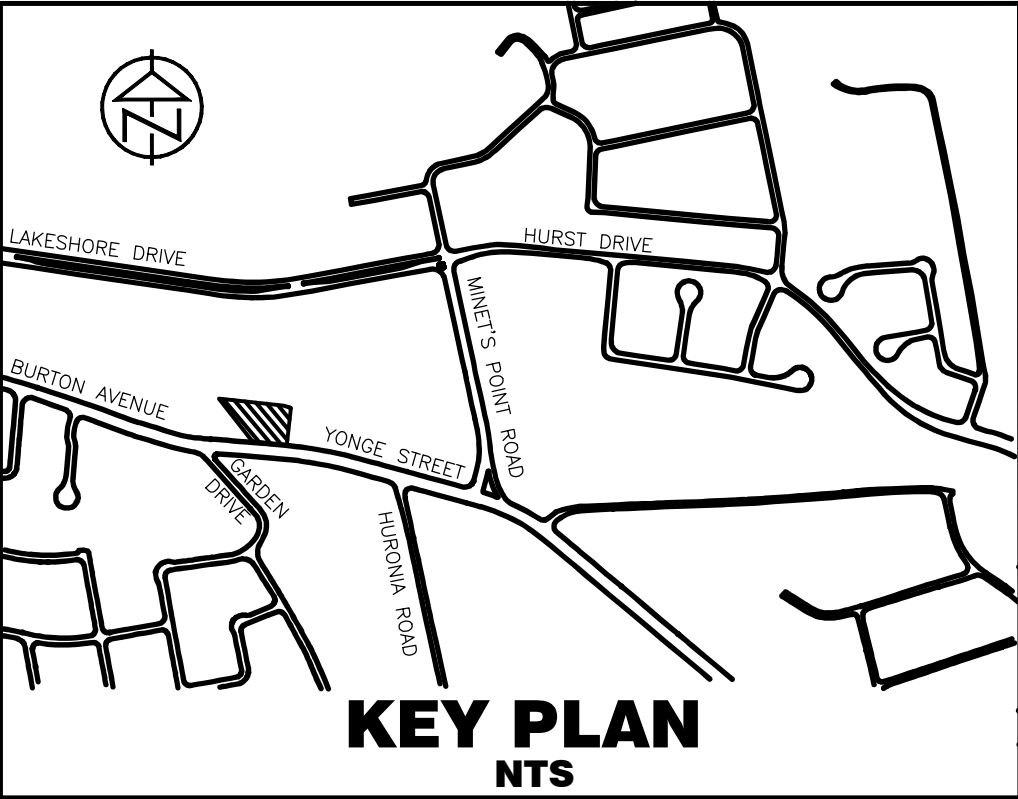
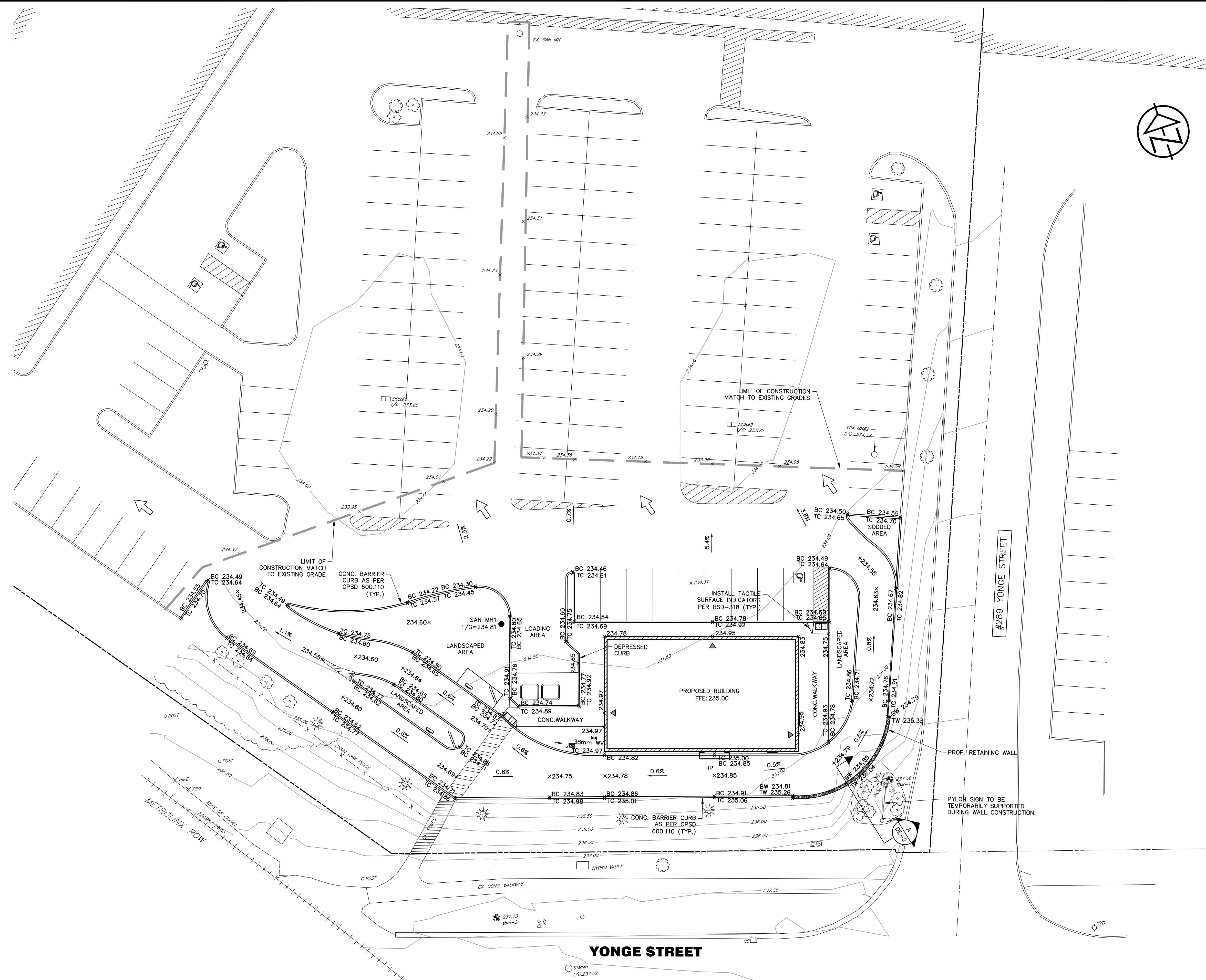




LEGEND	
	SITE PROPERTY LINE
	EXISTING PROPERTY LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING EDGE OF GRAVEL
	EXISTING C/L DITCH
	EXISTING TOP OF SLOPE
	EXISTING FENCE LINE
	EXISTING WOOD FENCE
	EXISTING C/L OF CREEK
	EXISTING BANKS
	EXISTING EDGE OF VEGETATION
	EXISTING BELL LINE
	EXISTING HYDRO
	EXISTING HYDRO POLE
	EXISTING CATCHBASIN
	EXISTING HYDRO POLE
	EXISTING FIRE HYDRANT
	EXISTING ROAD SIGN
	EXISTING BELL PEDESTAL
	EXISTING TEMPORARY BENCHMARK
	EXISTING TREES
	EX. CONTOUR
	LIMIT OF CONSTRUCTION
	EXISTING STORM MAINTENANCE HOLE
	EXISTING SANITARY MAINTENANCE HOLE
	PROP. SANITARY MAINTENANCE HOLE
	PROP. WATER VALVE
	MAIN DOORS
	PROP. RETAINING WALL
	TACTILE SURFACE INDICATOR
	DEPRESSED CURB
	FLOW DIRECTION AND GRADE
	OVERLAND FLOW

DISCLAIMER AND COPYRIGHT
CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.
TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.

BENCHMARKS
TBM1 - ELEVATION 237.36m
NORTH-EAST BOLT ON NORTH SIGN POST
STRUCTURE IN GARDEN AT ENTRANCE INTO PARKING LOT.
TBM2 - ELEVATION 237.73
NORTH-EAST CORNER BOLT ON BASE OF RAILWAY CROSSING SIGNAL ON NORTH SIDE OF YONGE STREET, EAST OF RAILWAY CROSSING.
HORIZONTAL BENCHMARK: 03120040043 (2nd ORDER)
HORIZONTAL BENCHMARK: 03120040029 (2nd ORDER)
VERTICAL BENCHMARK: 01019865457 (2nd ORDER)
VERTICAL BENCHMARK: 03120030034 (2nd ORDER)

NOTES
TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN BASED ON FIELD SURVEY COMPLETED BY TATHAM ENGINEERING, DATED SEPTEMBER 14, 2021.
SITEPLAN INFORMATION SHOWN ON THIS PLAN PREPARED BY MCCOWAN & ASSOCIATES, DATED MAY 9, 2022.

No.	REVISION DESCRIPTION	DATE
1.	ISSUED FOR SPA - FIRST SUBMISSION	DEC 31/21
1.	ISSUED FOR SPA - SECOND SUBMISSION	MAY 20/22

ENGINEER STAMP

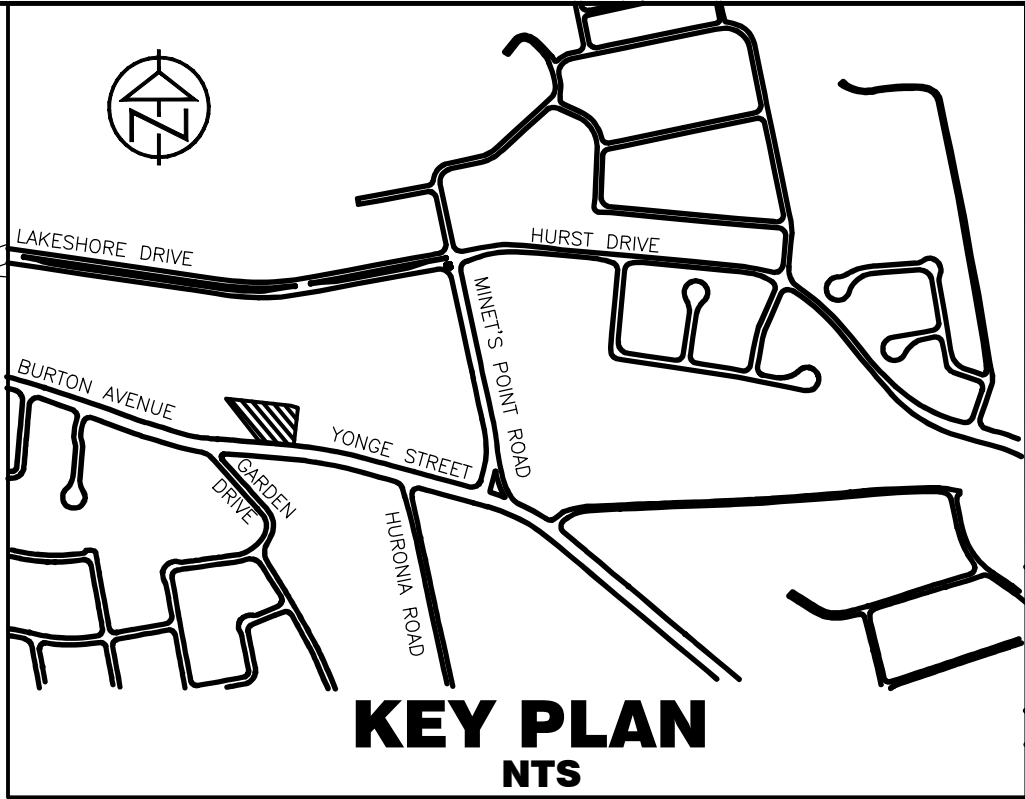
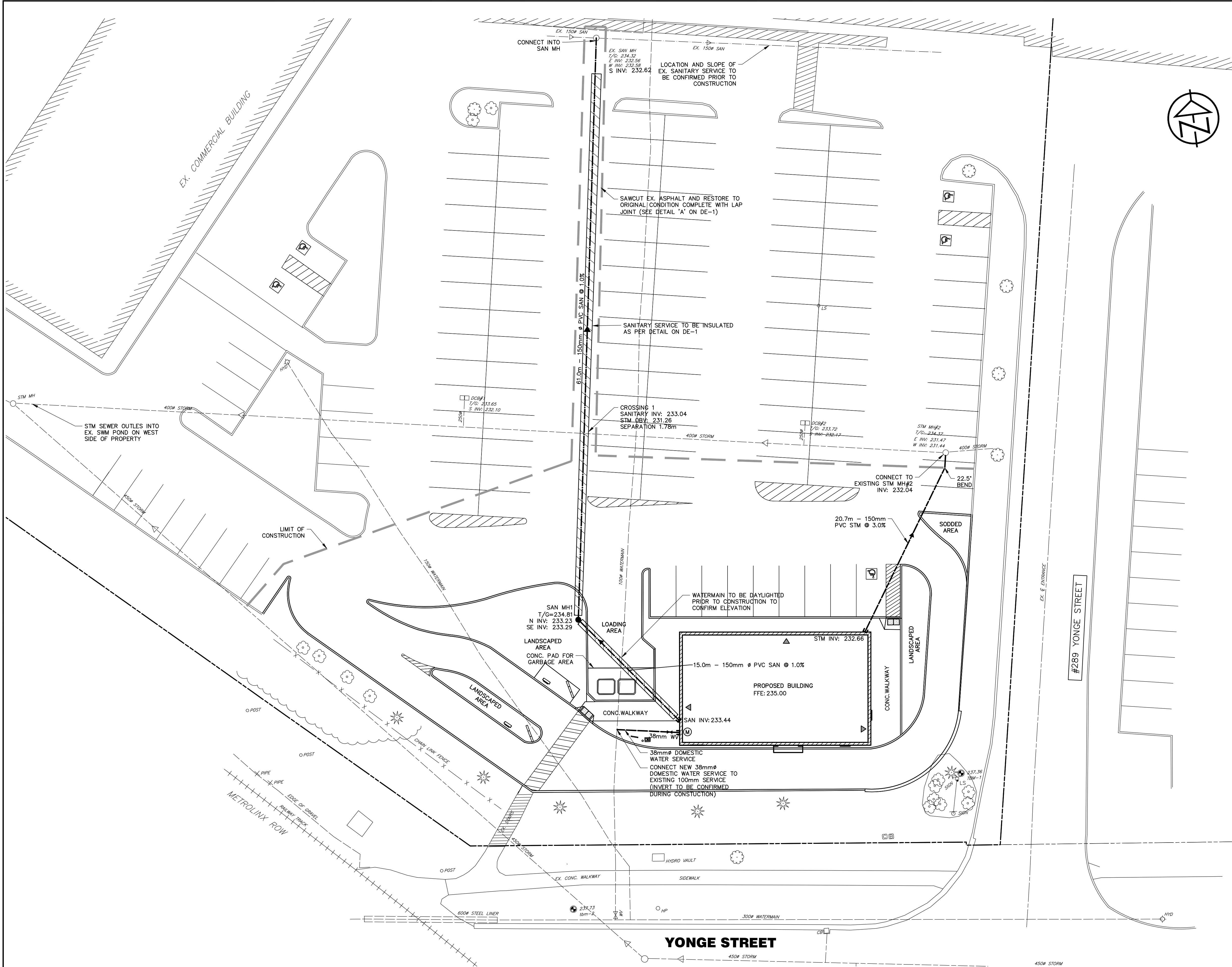


279 YONGE STREET
CITY OF BARRIE

SITE GRADING PLAN



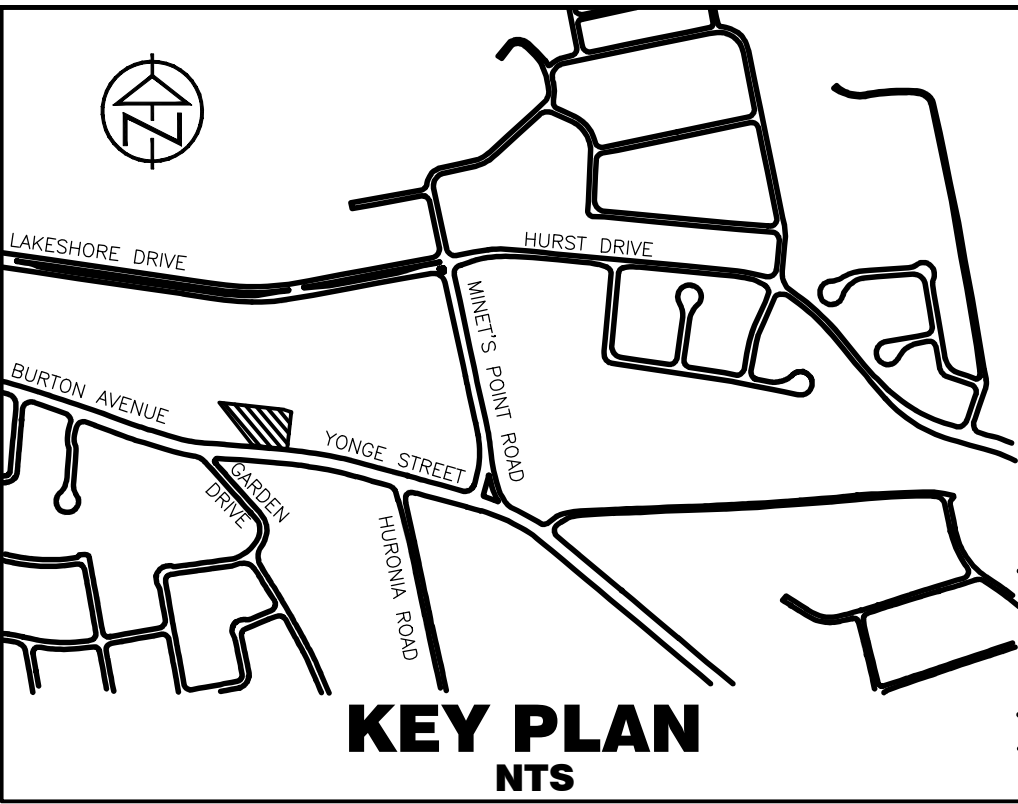
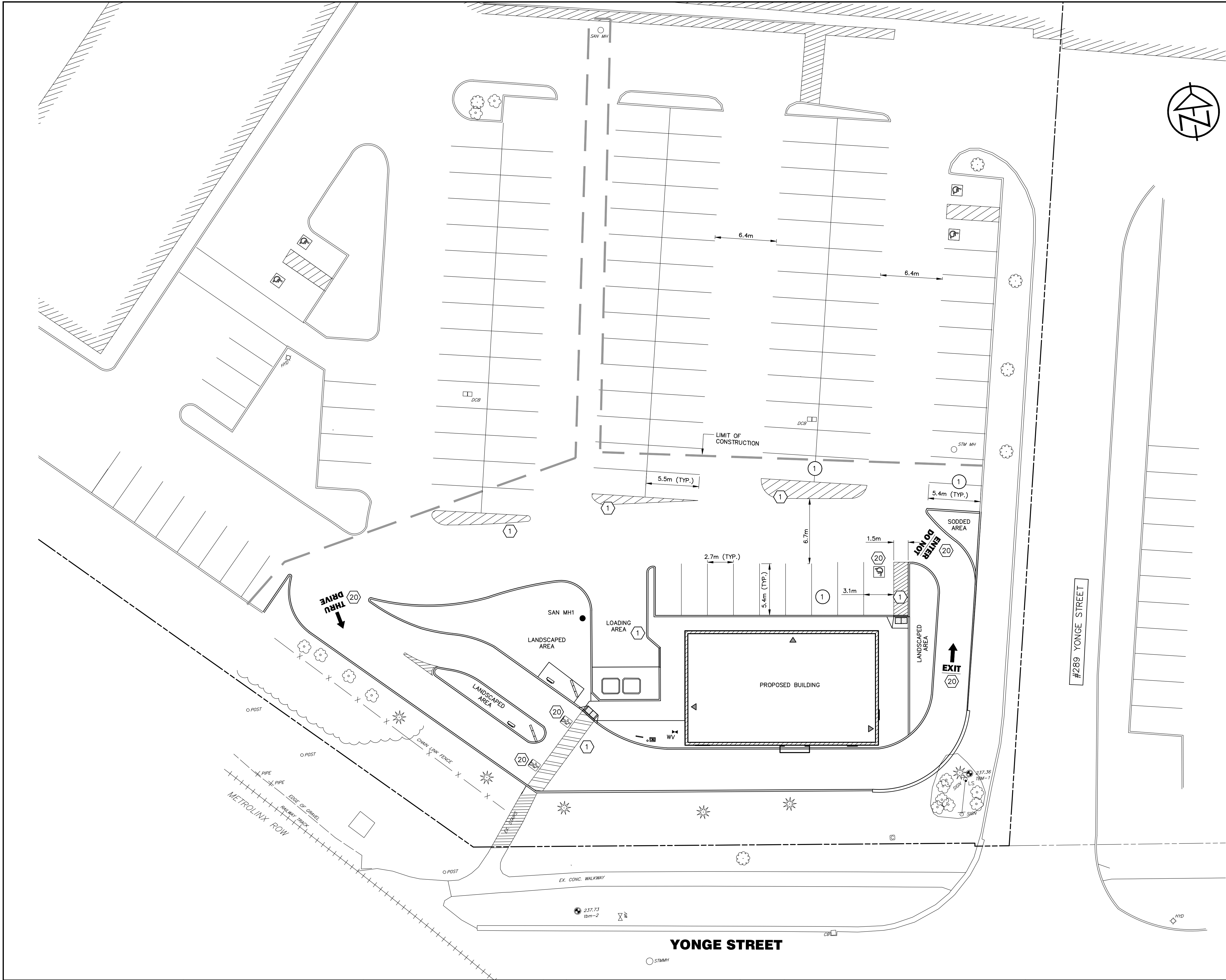
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LEGEND	
	SITE PROPERTY LINE
	EXISTING PROPERTY LINE
	EXISTING EDGE OF PAVEMENT
	EXISTING TOP OF SLOPE
	EXISTING FENCE LINE
	EXISTING BANKS
	EXISTING BELL LINE
	EXISTING HYDRO
	EXISTING HYDRO POLE
	EXISTING CATCHBASIN
	EXISTING HYDRO POLE
	EXISTING FIRE HYDRANT
	EXISTING ROAD SIGN
	EXISTING BELL PEDESTAL
	EXISTING TEMPORARY BENCHMARK
	EXISTING TREES
	PROPOSED SANITARY MANHOLE
	PROPOSED SANITARY SEWER
	PROPOSED WATERMAIN
	LIMIT OF CONSTRUCTION
	WATER METER
	WATER VALVE
	INSULATION

NOTE:
1. DOMESTIC AND FIRE WATER SERVICE TO ENTER BUILDING AS PER BSD-505
2. THE DOMESTIC SERVICE IS TO BE PROVIDED WITH BACK FLOW PREVENTION DEVICE AS PER CITY BY-LAW 2017-121
3. DOMESTIC WATER METER AND BACK FLOW PREVENTER AS PER BSD-533, LOCATED IN APPROPRIATELY SIZED MECHANICAL ROOM
4. SANITARY FOR PROPOSED ADDITION TO CONNECT TO EXISTING BUILDING

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					SITE SERVICING PLAN		DRAWN: JH	DATE: DEC 2021	SS-1									
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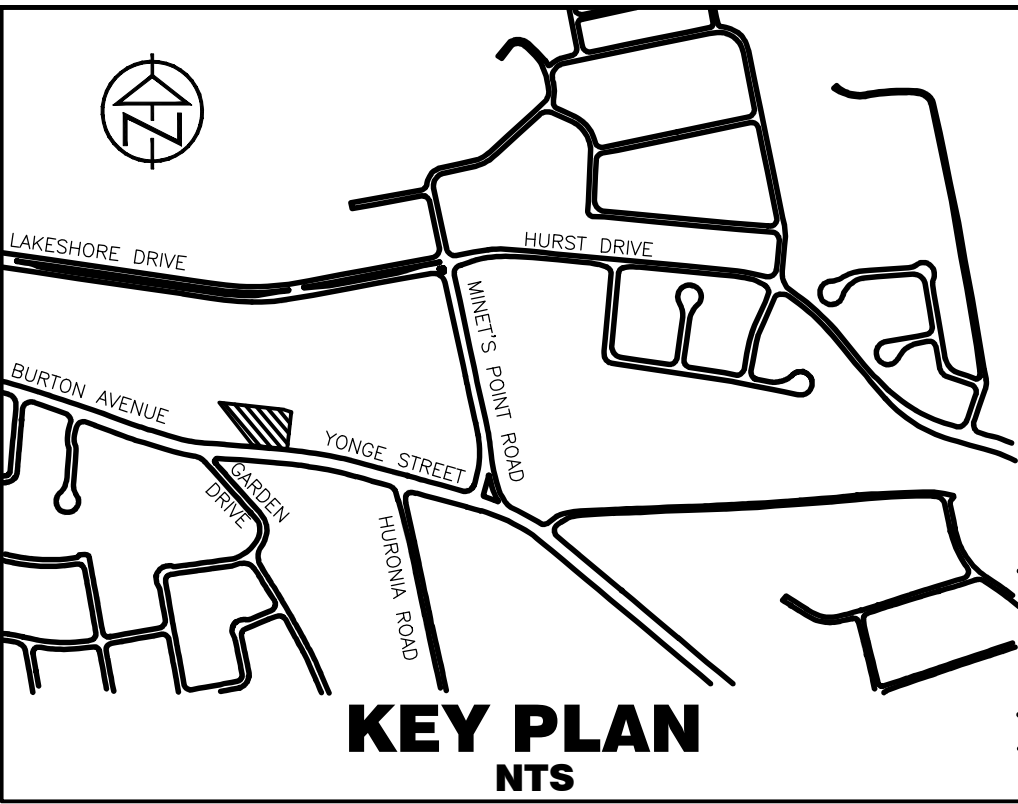
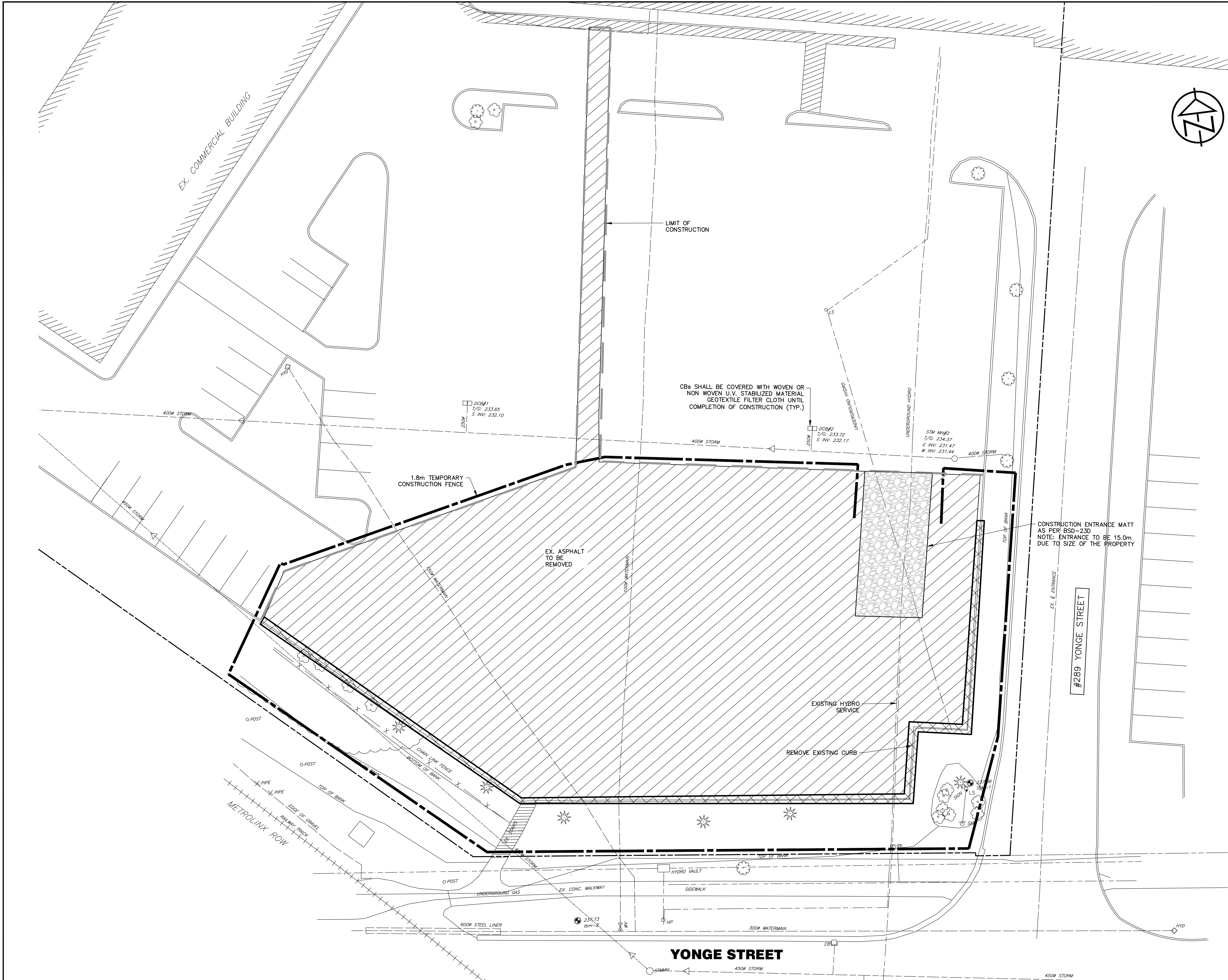


LEGEND	
	EXISTING PROPERTY LINE
	EXISTING PROPERTY LINE
	EXISTING CENTERLINE
	EXISTING EDGE OF ASPHALT
	EXISTING CABLE PEDESTAL
	EXISTING BELL PEDESTAL
	EXISTING BELL MAINTENANCE HOLE
	EXISTING HYDRO POLE
	EXISTING DECIDUOUS TREE
	EXISTING SANITARY MAINTENANCE
	EXISTING HYDRANT AND VALVE
	EXISTING WATER VALVE
	EXISTING STORM MAINTENANCE HOLE
	EXISTING CATCHBASIN
	PROPOSED MAINTENANCE HOLE
	PROPOSED WATER VALVE

1	SOLID YELLOW,10cm
2	SOLID DOUBLE YELLOW,10cm
3	363 BROKEN YELLOW,10cm
4	SOLID YELLOW,20cm
5	SOLID WHITE,10cm
6	333 BROKEN WHITE,10cm
7	363 BROKEN WHITE,10cm
8	393 BROKEN WHITE,10cm
9	SOLID WHITE,20cm
10	111 BROKEN WHITE,10cm
11	333 BROKEN WHITE,20cm
12	333 BROKEN WHITE,30cm
13	SOLID WHITE,30cm
14	SOLID WHITE,45cm
15	SOLID WHITE,60cm
20	SYMBOLS
] [LIMITS OF MARKINGS	

- NOTES:
1. 333, 363, 393, Denotes Pavement Marking Spacing (ie., 3 m line, 3 m gap, 3 m line)
 2. ① Denotes PAVEMENT MARKING, PAINT
 3. ① Denotes PAVEMENT MARKING, TEMPORARY
 4. △ Denotes PAVEMENT MARKING, TEMPORARY-REMOVABLE
 5. ① Denotes PAVEMENT MARKING, DURABLE
 6. EX. PARKING LOT IS TO BE REPAINTED AS REQUIRED

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LEGEND	
	EXISTING PROPERTY LINE
	EXISTING LOT LINE
	EXISTING CENTERLINE
	EXISTING EDGE OF ASPHALT
	EXISTING SANITARY SEWER
	EXISTING SANITARY SERVICE
	EXISTING WATERMAIN
	EXISTING WATER SERVICE
	EXISTING STORM SEWER
	EXISTING SPOT ELEVATION
	EXISTING CABLE PEDESTAL
	EXISTING BELL PEDESTAL
	EXISTING BELL MAINTENANCE HOLE
	EXISTING HYDRO POLE
	EXISTING DECIDUOUS TREE
	EXISTING SANITARY MAINTENANCE HOLE/NUMBER
	EXISTING HYDRANT AND VALVE
	EXISTING WATER VALVE
	EXISTING STORM MAINTENANCE HOLE
	EXISTING CATCHBASIN
	SERVICES TO BE REMOVED
	CONSTRUCTION FENCE
	LIMIT OF CONSTRUCTION
	CONSTRUCTION ENTRANCE MAT
	CONCRETE SIDEWALK AND CURB REMOVAL
	ASPHALT REMOVAL

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GENERAL NOTES

1. DRAWINGS

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.

2. MEASUREMENTS

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

3. GENERAL

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

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

C. LOCATION OF EXISTING SERVICES ARE NOT GUARANTEED.
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.

F. NATIVE MATERIAL, SUITABLE FOR BACKFILL, SHALL BE COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.

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.

CITY OF BARRIE STANDARD

GENERAL NOTES

3.	3. NOTE: 3.E. REVISED & 3.I. ADDED	J.S.	05.01.10	APPROVED	R.G.N.	DATE: 92.05.15
2.	3.D. - "ENGINEERING DEPARTMENT"	B.R.	02.10.28	DRAWN	L.A.J.	SCALE: N.T.S.
1.	3.E. TOPSOIL PERMIT		01.12.06			
NO.	REVISION	APR'D	DATE			BSD-N6

GENERAL NOTES - SANITARY SEWER

SANITARY SEWERS

A. SEWERS SHALL BE CONSTRUCTED WITH BEDDINGS AS PER OPSD-802.010, (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-802.030 OR 802.031 CLASS B (GRAN. 'A' BEDDING MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.

B. MAXIMUM DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY C.S.A., O.P.S. OR MANUFACTURERS RECOMMENDED SPECIFICATIONS.

C. PVC, CONCRETE AND PROFILE WALL PVC SEWERS SHALL HAVE RUBBER GASKET TYPE JOINTS AND SHALL BE CERTIFIED TO CONFORM TO ALL APPLICABLE CURRENT C.S.A. SPECIFICATIONS.

D. CONCRETE SANITARY SEWERS SHALL HAVE A MINIMUM STRENGTH OF 50 N/m/mm CONFORMING TO CSA STANDARD A257.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974, CLASS II).

E. MAINTENANCE HOLE TOPS (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED. ALL ADJUSTMENT WILL BE ACCORDANCE WITH BSD-N2.

F. ALL CONNECTIONS TO NEW SANITARY MAINS SHALL BE PRE-MANUFACTURED, FABRICATED TEES CONNECTIONS TO EXISTING SANITARY SEWER SHALL BE MADE WITH APPROVED FACTORY MADE TEES OR INSERTA-TEES IN STRICT ACCORDANCE TO MANUFACTURES GUIDELINES.

CITY OF BARRIE STANDARD

GENERAL NOTES
SANITARY SEWERS

4.	NOTE 'B' - "ENGINEERING"	B.R.	2002.10.28	APPROVED	R.G.N.	DATE: 92.05.15
3.	NOTE 'B' OPSD NUMBER REVISION	K.C.	2000.03.16	DRAWN	L.A.J.	SCALE: N.T.S.
2.	NOTE 'I' CHANGED	K.C.	98.03.30			
1.	CHANGES TO B. TO G.	K.C.	95.04.24			
NO.	REVISION	APR'D	DATE			BSD-N3

GENERAL NOTES - STORM SEWER

STORM SEWER

A. STORM SEWER TO BE PROVIDED ON ALL ROADS WITH CURB AND GUTTER.

B. PLACE ALL CATCH BASIN LATERALS AT 2% GRADE UNLESS OTHERWISE NOTED.
PIPE SIZE MINIMUM 250mm DIA. SINGLE, 300mm DIA. DOUBLE.

C. STORM SEWERS SHALL BE CONSTRUCTED WITH BEDDING AS PER OPSD-802.010 (GRAN. 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD-802.030 OR 802.031 CLASS B (GRAN. 'A' BEDDING MATERIAL) FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF ENGINEERING.

D. MAINTENANCE HOLE TOPS (FRAMES) AND CATCH BASIN (FRAMES) ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND THEN ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED. ALL ADJUSTMENT WILL BE ACCORDANCE WITH BSD-N2.

E. STORM SEWER TO BE LOCATED OFFSET 3.0m SOUTH OR EAST OF CENTRELINE UNLESS OTHERWISE SPECIFIED.

F. ALL CONNECTIONS TO THE STORM MAIN SHALL BE MADE WITH A STORM MANHOLE OR APPROVED FACTORY TEE CONNECTION AS PER OPSD-708.01 OR 708.03.

G. PIPE MATERIAL TO BE REINFORCED CONCRETE WITH A MINIMUM STRENGTH OF 50 N/m/mm CERTIFIED TO C.S.A. STANDARD A247.2-1982, CLASS 50-D (PREVIOUSLY C.S.A. STANDARD A257.2-1974, CLASS II) OR PVC CERTIFIED TO C.S.A. STANDARDS 182.2 AND 182.4.

H. STORM SEWER TO BE MINIMUM 300mm DIAMETER WITH JOINTS CONFORMING TO C.S.A. STANDARD A257.3.

I. ALL PIPE BEDDING MUST CONFORM TO OPSD, MAXIMUM COVER TABLE. NO FLEXIBLE PIPE SEWERS WILL BE INSTALLED WITH A DEPTH OF COVER GREATER THAN 6 METRES UNLESS SPECIFICALLY APPROVED BY THE DIRECTOR OF ENGINEERING.

J. ALL PIPE HANDLING INSTALLATIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURES INSTALLATION GUIDES AND THE O.C.P.A. OR UNIBELL GUIDELINES.

K. SUMP PUMP DISCHARGE PIPING IN BOULEVARD:
IN THE EVENT OF OVERACTIVE SUMP PUMP ACTIVITY, A 150mm DIAMETER PVC DR-28 SEWER MAY BE INSTALLED, WHEN SO DIRECTED BY THE DIRECTOR OF ENGINEERING, ALONG THE FRONTAGES OF DESIGNATED LOTS, WITH AN OFFSET OF 0.6m FROM BACK OF CURB. THIS SEWER IS TO BE CAPPED AT THE UPSTREAM END AND IS TO BE TIE INTO THE NEAREST CATCHBASIN DOWNSTREAM. DEPTH OF SEWER IS TO BE EQUAL TO SUBDRAIN DEPTH. NOT TO BE DIRECTLY CONNECTED TO FOUNDATION DRAINS.

CITY OF BARRIE STANDARD

GENERAL NOTES
STORM SEWERS

4.	NOTE 'X' - SUMP PUMP DISCHARGE PIPING	B.R.	2003.01.07	APPROVED	R.G.N.	DATE: 92.05.15
3.	NOTE 'Y' & 'C' - "DIRECTOR OF ENGINEERING"	B.R.	2002.10.28	DRAWN	L.A.J.	SCALE: N.T.S.
2.	NOTE 'C' OPSD NUMBER REVISION	K.C.	2000.03.16			
1.	NOTE 'D' CHANGED	K.C.	98.03.30			
NO.	REVISION	APR'D	DATE			BSD-N5

GENERAL NOTES - WATERMAIN

1. CONTRACTORS SHALL INFORM THE CITY OF BARRIE WATER OPERATIONS DEPARTMENT A MINIMUM OF 48 HOURS IN ADVANCE OF THEIR INTENTIONS TO PERFORM WORK ON WATER INFRASTRUCTURE.

2. OPERATION OF HYDRANTS AND VALVES ON THE POTABLE WATER SYSTEM BY OTHER THAN QUALIFIED WATER OPERATIONS STAFF IS PROHIBITED BY CURRENT BY-LAW. CITY SERVICE FEES ARE PER THE CURRENT FEES BY-LAW. THE CITY'S WATER OPERATIONS STAFF WILL SWAB, PRESSURE TEST, CHLORINATE AND FLUSH ALL NEW WATERMAIN.

3. MINIMUM COVER OVER WATERMAIN SHALL BE 1.7m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS SHALL BE 2.5m WHERE WATERMAIN CONFLICTS WITH SEWER PIPES. DEFLECT WATERMAIN HORIZONTALLY OR VERTICALLY WHILE PROVIDING A MINIMUM OF 0.5m CLEARANCE BETWEEN WATERMAIN AND SEWERS. MAINTAIN MINIMUM DEPTH OF COVER AT ALL TIMES.

4. WATERMAIN SHALL BE INSTALLED IN BEDDING AS PER OPSD 802.010 (GRANULAR 'A' EMBEDMENT MATERIAL) FOR FLEXIBLE PIPES AND OPSD 802.030 OR 802.031 CLASS 'B' (GRANULAR 'A' BEDDING MATERIAL, GRANULAR 'A' OR SELECT NATIVE COVER. MATERIAL FOR RIGID PIPE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF WATER OPERATIONS. ALTERNATIVE EMBEDMENT MATERIAL - SAND MEETING GRADATION REQUIREMENTS OF OPSD MIN 100.05.07 COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY IS PERMISSIBLE WHERE NOTED IN STANDARD DETAILS. GEOTECHNICAL CERTIFICATION OF MATERIAL AND COMPACTION TESTING MUST BE PROVIDED EVERY 150 METRES. THE COMPACTION TESTING MUST INCLUDE THE ENTIRE EMBEDMENT ENVELOPE (HAUNCHES, BEDDING, TOP OF PIPE AND COVER).

5. COPPER WATER MAINS AND SERVICES 25mm TO 50mm IN DIAMETER SHALL BE EMBEDDED IN SAND 100mm ABOVE AND BELOW TO CONFORM TO OPSD 802.104.05.07.

6. RESTRAINING WILL BE REQUIRED ON ALL HYDRANTS, THRUST BLOCKS, AS PER OPSD 1103.010 AND 1103.020. RESTRAINING DEVICES MAY BE REQUIRED IN ADDITION TO STANDARD CONCRETE THRUST BLOCKING WHERE SOIL CONDITIONS WARRANT AT THE CITY'S DISCRETION.

7. NEW WATERMAINS TO BE PVC DR18 CL150 MINIMUM, DUCTILE IRON CL52 AS PER THE APPROVED MANUFACTURERS PRODUCTS FOR LINEAR WATER SYSTEMS LIST.

8. TRACING WIRE SHALL BE #12 AWG HIGH STRENGTH COPPER CLAD (HS-CCL) AND SHALL BE INSTALLED ON THE TOTAL LENGTH OF ALL WATERMAIN AND BROUGHT UP AT EACH HYDRANT AND CONNECTED TO FLANGE BOLT. ALL SPLICES TO UTILIZE CONNECTORS AS PER THE APPROVED MANUFACTURERS PRODUCTS FOR LINEAR WATER SYSTEMS LIST.

9. ALL WATER SERVICES SHALL BE MINIMUM 25mm TYPE 'K' COPPER OR 25mm CROSS-LINKED POLYETHYLENE UNLESS OTHERWISE APPROVED BY THE DIRECTOR OF WATER OPERATIONS. WATER SERVICE SADDLES SHALL BE USED WHEN TAPPING INTO PVC WATERMAIN.

10. SERVICE TAPPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0m AND A MINIMUM OF 0.6m FROM JOINTS, (ENDS OF PIPE).

11. RISER PIPES ARE TO BE INSTALLED AS PER BSD-510 AND REMOVED AS DIRECTED. SWABBING SCHEDULE TO BE SUPPLIED BY A WATER OPERATIONS FIELD REPRESENTATIVE. ALL RISERS ARE TO BE RESTRAINED OR THRUST BLOCKED.

12. ALL NEW CURB STOPS AND BOXES TO BE LOCATED AT PROPERTY LINE AND OUT OF DRIVEWAYS AND SIDEWALKS.

City of BARRIE

STANDARD DETAIL

GENERAL NOTES - WATERMAIN

REV No.	DATE: MAY 2015	APPROVED
2	SCALE: N.T.S.	DATE: May 29/15 Director of Engineering
BSD-500		

TYPICAL TRENCH RESTORATION

1. FROST TAPER USED IF DEPTH IS LESS THAN 1200mm.

2. UNBREAKABLE FSL TO BE USED IN INTERSECTIONS AND ON HIGH VOLUME ARTERIAL/COLLECTOR ROADS.

3. ALL DIMENSIONS SHOWN IN MILLIMETRES UNLESS OTHERWISE NOTED.

BOULEVARD

ROADWAY

CITY OF BARRIE STANDARD

TYPICAL TRENCH RESTORATION

REV No.	DATE: OCT 2017	APPROVED
1	SCALE: N.T.S.	DATE: Oct 28/17 Director of Engineering
BSD-330		

GENERAL NOTES ROADWORKS

1. GRADE AND CROSSFALL ADJUSTMENT OF MAINTENANCE HOLE AND CATCHBASIN FRAMES WILL BE MADE USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE.

2. ADJUSTMENT UNITS MUST BE CERTIFIED TO MEET ALL PERTINENT OPS, CSA, ASTM AND MTO-DSM LISTS, OR OTHER INDUSTRY GUIDELINES FOR MATERIALS, PERFORMANCE AND USE AS APPLICABLE.

3. ADJUSTMENT UNITS AND JOINTS WILL BE SEALED AND OR PARGED IN COMPLIANCE WITH MANUFACTURERS SPECIFICATIONS AND GUIDELINES.

4. MORTAR IS USED FOR LEVELING OF PRECAST UNITS ONLY. THE THICKNESS OF MORTAR WILL BE 10mm TO FILL ALL VOIDS CREATED BY IRREGULARITIES IN THE PRECAST UNITS TO ENSURE AN EVEN SURFACE ONLY.

Barrie

STANDARD DETAIL

GENERAL NOTES ROADWORKS

REV No.	DATE: OCT 2017	APPROVED
1	SCALE: N.T.S.	DATE: Oct 28/17 Director of Engineering
BSD-N2		

CONSTRUCTION ENTRANCE MAT

1. THIS STANDARD IS TO BE IN ACCORDANCE WITH SCHEDULE "B" OF THE SITE ALTERATION BY-LAW. LOOK FOR THE DESIGN AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES AND IS TO BE ADMINISTERED ACCORDINGLY.

2. Purpose of Construction Mat is to minimize transportation of sediment onto roadways.

3. Construction mat is to be installed as the first step in the site alteration process.

4. Construction mats are required where paved roads are within 300m of the site.

CITY OF BARRIE STANDARD

CONSTRUCTION ENTRANCE MAT

1.	Standardized Dimension Text	J.S.	05.10.28	APPROVED	R.G.N.	DATE: 04.03.16
				DRAWN	A.S.C.	SCALE: N.T.S.
NO.	REVISION	APR'D	DATE			BSD-23D

SILTATION CONTROL FENCING

1. THIS STANDARD IS TO BE USED IN ACCORDANCE WITH THE SITE ALTERATION BY-LAW FOR THE DESIGN AND MAINTENANCE OF EROSION CONTROL MEASURES AND IS TO BE ADMINISTERED ACCORDINGLY.

2. SILT / SEDIMENT CONTROL FENCE SHOULD BE ALIGNED WITH CONTOURS FOR SHEET OVERLAND FLOW.

3. SILTATION CONTROL FENCE IS TO BE LOCATED IN AREAS OF LOW SEDIMENT YIELD ON SLOPES THAT CONFIRM TO M.T.O. DRAINAGE MANUAL VOLUME 2 "CHART F4-3C" TOPOGRAPHIC FACTOR IS BASED ON SLOPE LENGTH AND GRADIENT."

4. SILTATION CONTROL FENCE SHALL BE INSTALLED WITH FILTER MEDIA FABRIC TOED INTO THE SOIL. 300mm BE EITHER STATIC SLICING OR TRENCING METHODS WITH COMPACTION OF TRENCH MATERIAL MEETING 85% S.P.D.

5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SHOWN.

6. SILT / SEDIMENT CONTROL FENCE MAY BE UTILIZED FOR TREE PRESERVATION AND IS TO BE USED IN CONJUNCTION WITH BSD-1231, BSD-1232 AND BSD-1235.

Barrie

STANDARD DETAIL

SILTATION CONTROL FENCING

REV No.	DATE: OCT 2017	APPROVED
2	SCALE: N.T.S.	DATE: Oct 10/17 Original Signed By Director of Engineering
BSD-1233 FORMERLY BSD-23A		

SANITARY SEWER INSULATION DETAIL

NOTES:

1. SANITARY SEWER SHALL BE INSULATED TO PROVIDE FROST PROTECTION WHEREVER COVER IS LESS THAN 1.7m AND AS SPECIFIED ON THE DRAWINGS.

2. INSULATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS:
• FOR EVERY 0.3m OF COVER NOT ACHIEVED BELOW 1.2m, AN ADDITIONAL LAYER OF INSULATION SHALL BE PROVIDED

CITY OF BARRIE STANDARD

SANITARY SEWER INSULATION DETAIL
NOT TO SCALE

REV No.	DATE: OCT 2017	APPROVED
2	SCALE: N.T.S.	DATE: Oct 10/17 Original Signed By Director of Engineering
BSD-1233 FORMERLY BSD-23A		

DISCLAIMER AND COPYRIGHT

CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.

BENCHMARKS

TBM1 - ELEVATION 237.36m
NORTH-EAST BOLT ON NORTH SIDE POST STRUCTURE IN GARDEN AT ENTRANCE INTO PARKING LOT.

TBM2 - ELEVATION 237.73
NORTH-EAST CORNER BOLT ON BASE OF RAILWAY CROSSING SIGNAL, ON NORTH SIDE OF YONGE STREET, EAST OF RAILWAY CROSSING.

NOTES

TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN BASED ON FIELD SURVEY COMPLETED BY TATHAM ENGINEERING, DATED SEPTEMBER 14, 2021

SITEPLAN INFORMATION SHOW ON THIS PLAN PREPARED BY MCCOWAN & ASSOCIATES, DATED DECEMBER 3, 2021

No.

REVISION DESCRIPTION

DATE

ENGINEER STAMP

1. ISSUED FOR SPA - FIRST SUBMISSION
2. ISSUED FOR SPA - SECOND SUBMISSION

DEC 31/21
MAY 20/22

PROFESSIONAL ENGINEER

D. J. REID

100225660

May 20/22

PROVINCE OF ONTARIO

279 YONGE STREET
CITY OF BARRIE

DETAILS & NOTES
SHEET 1

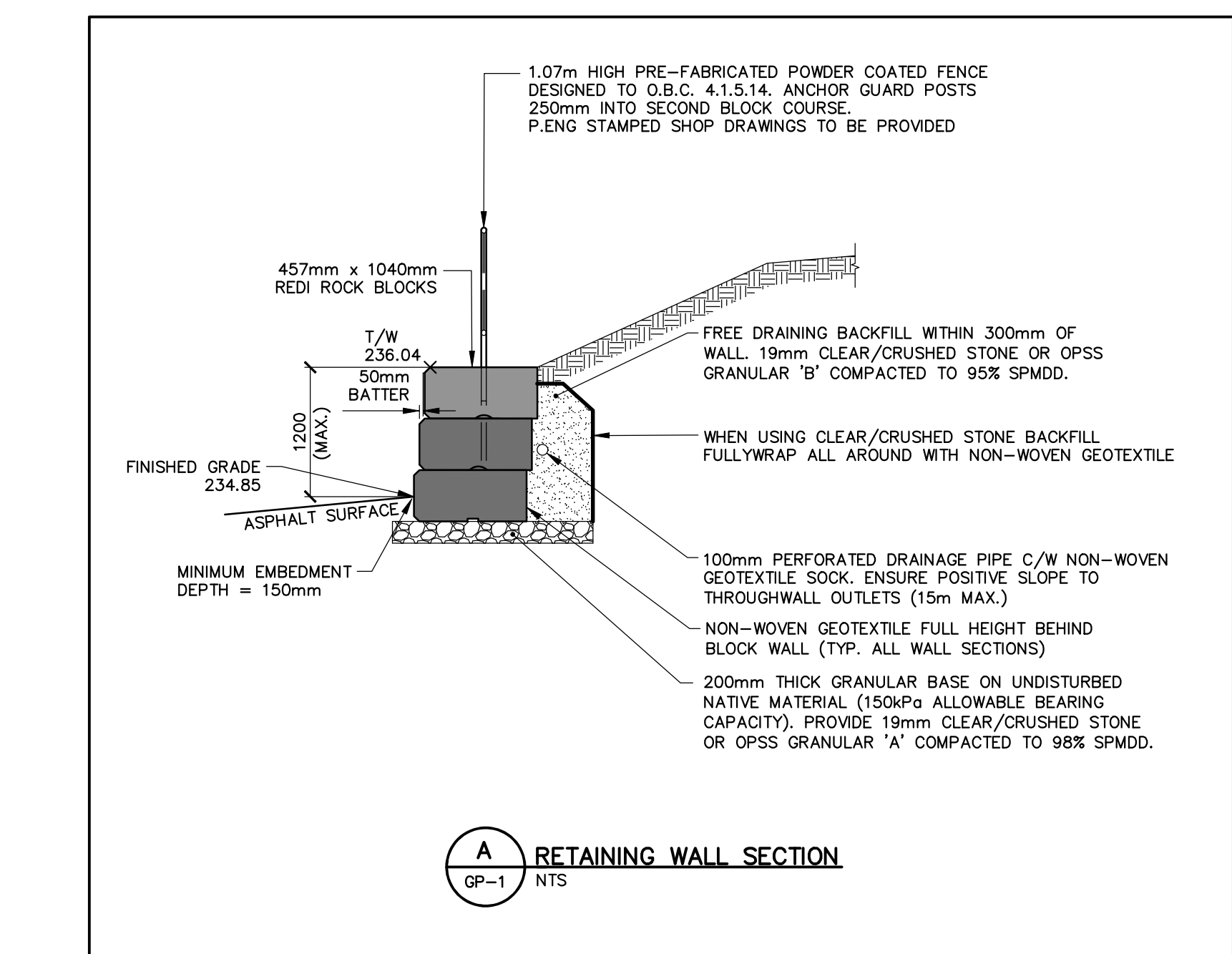
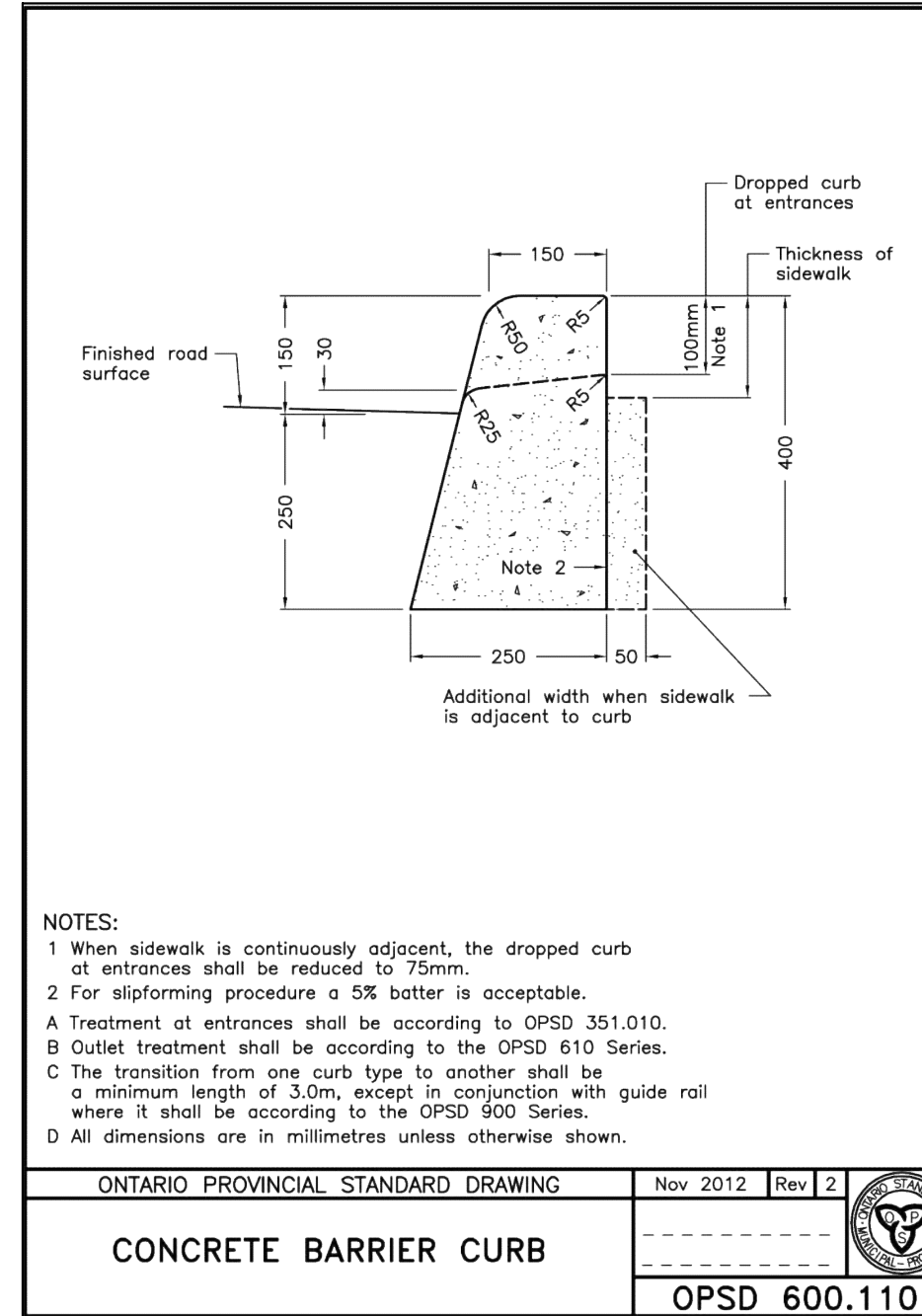
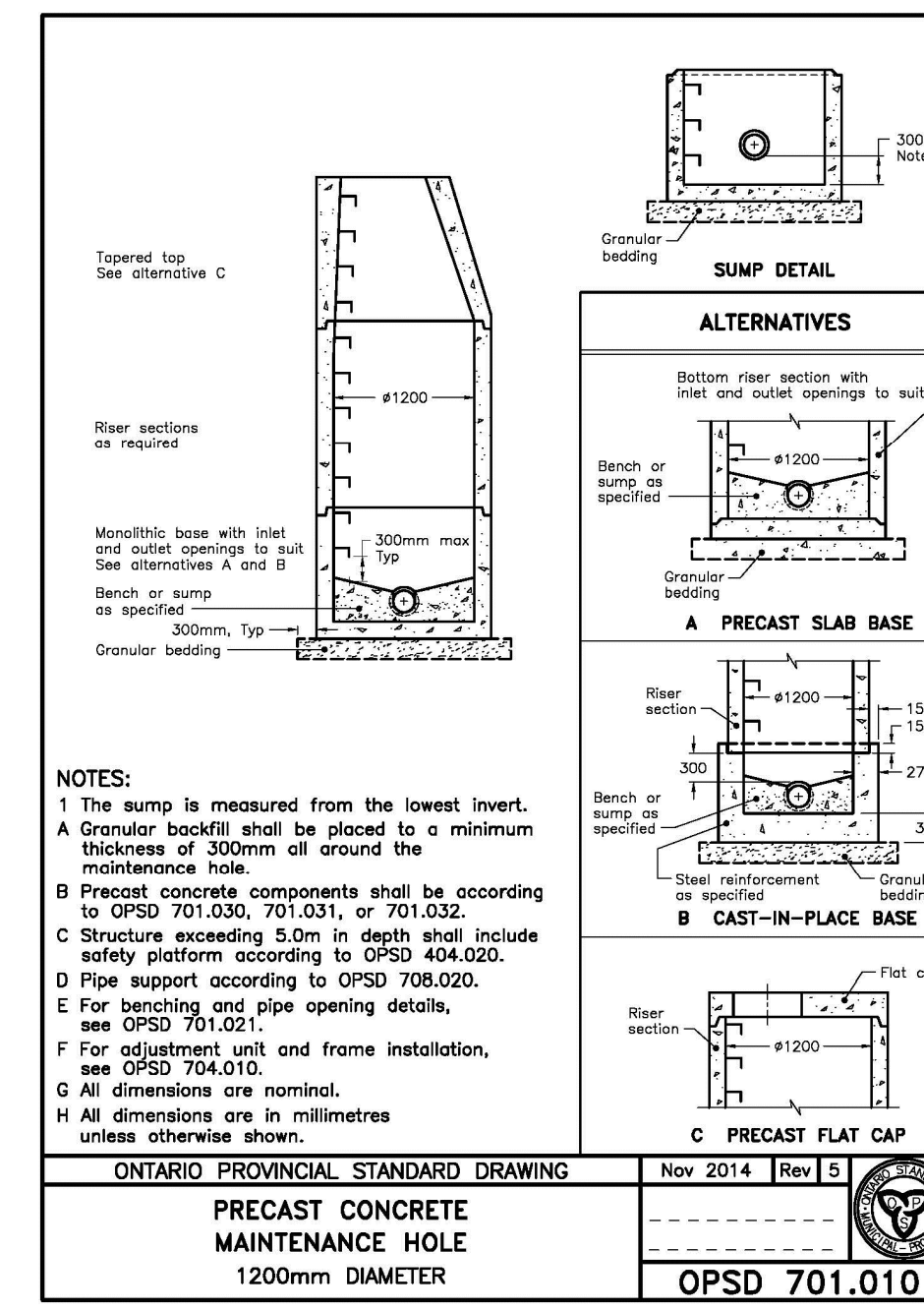
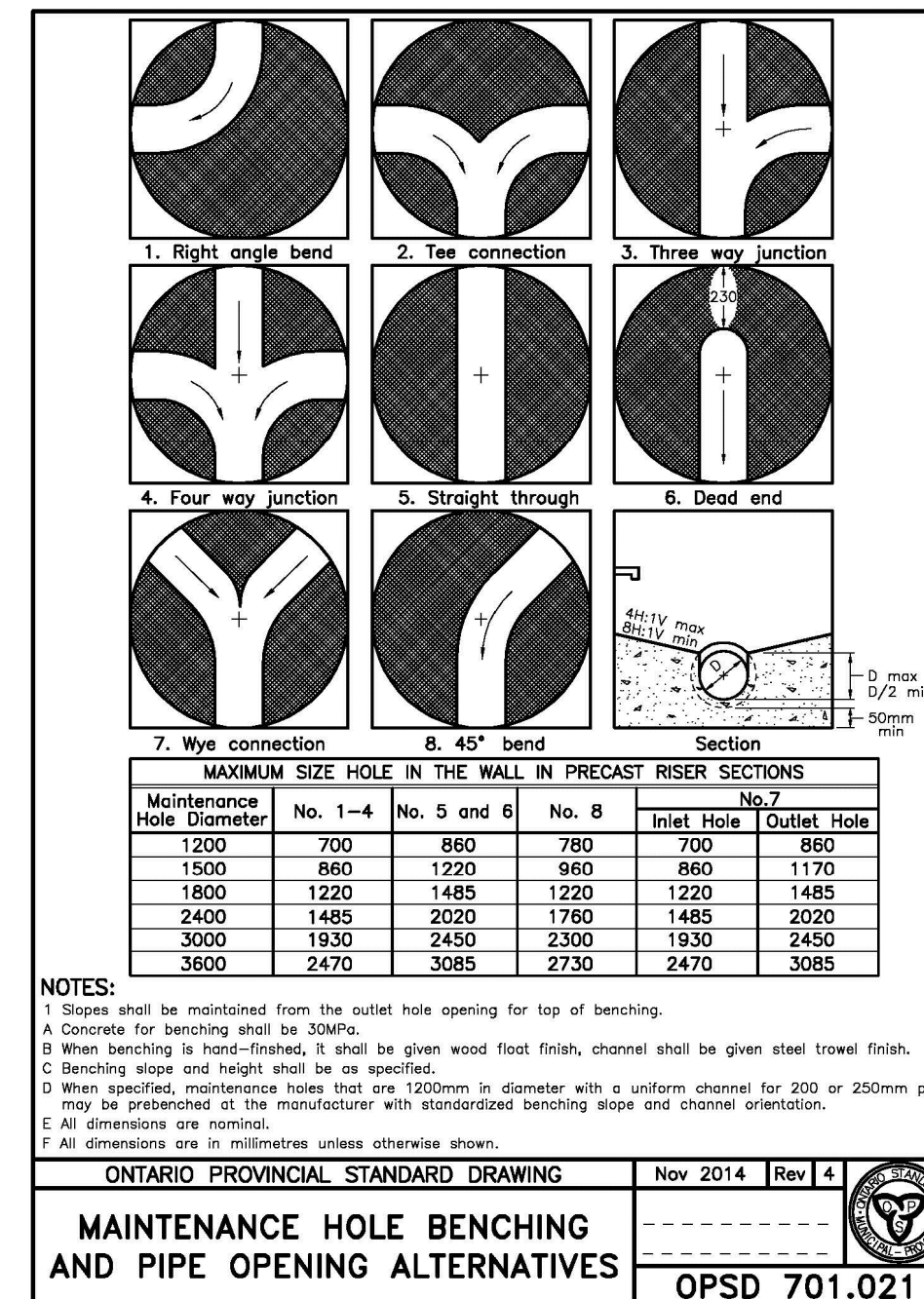
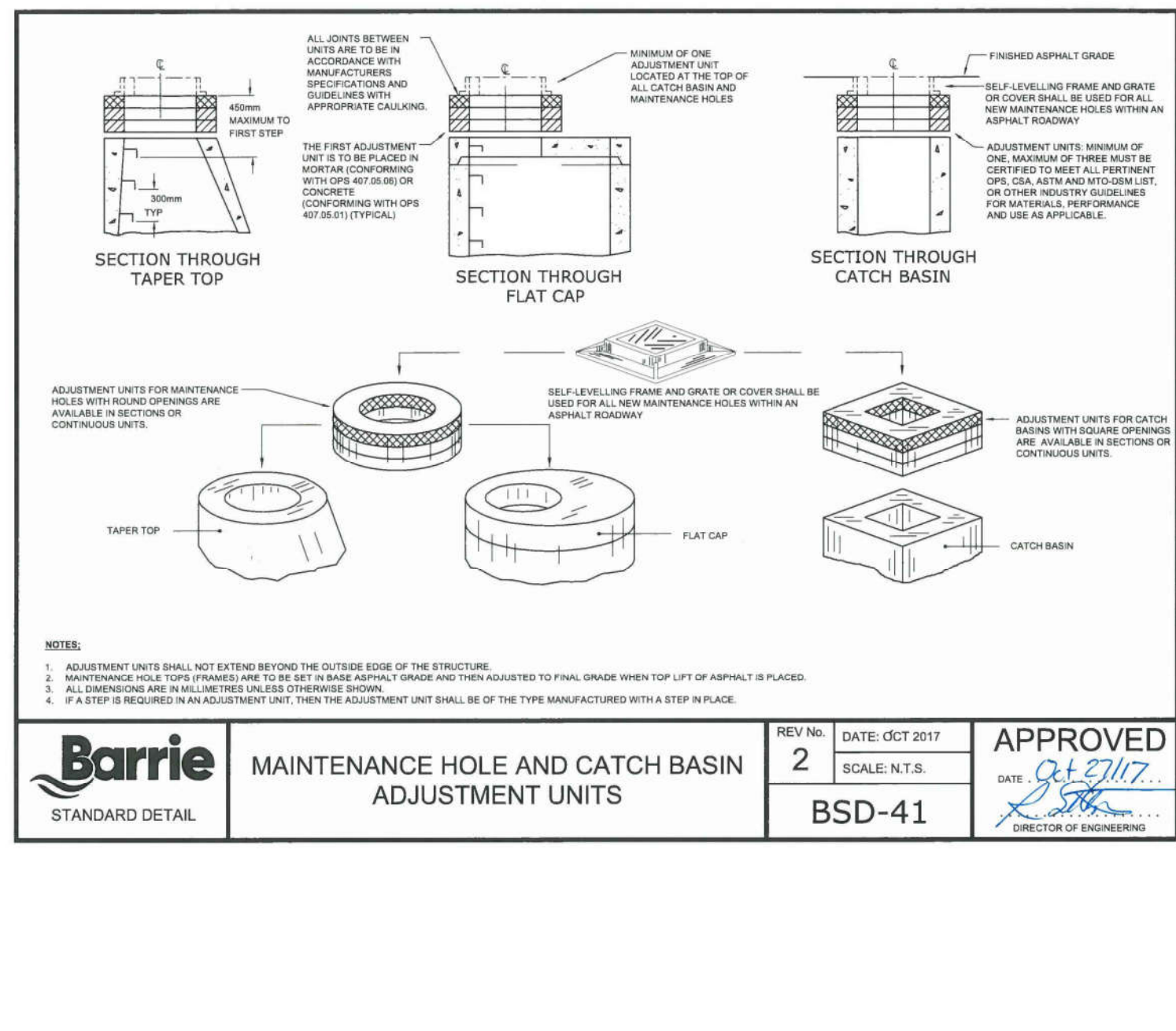
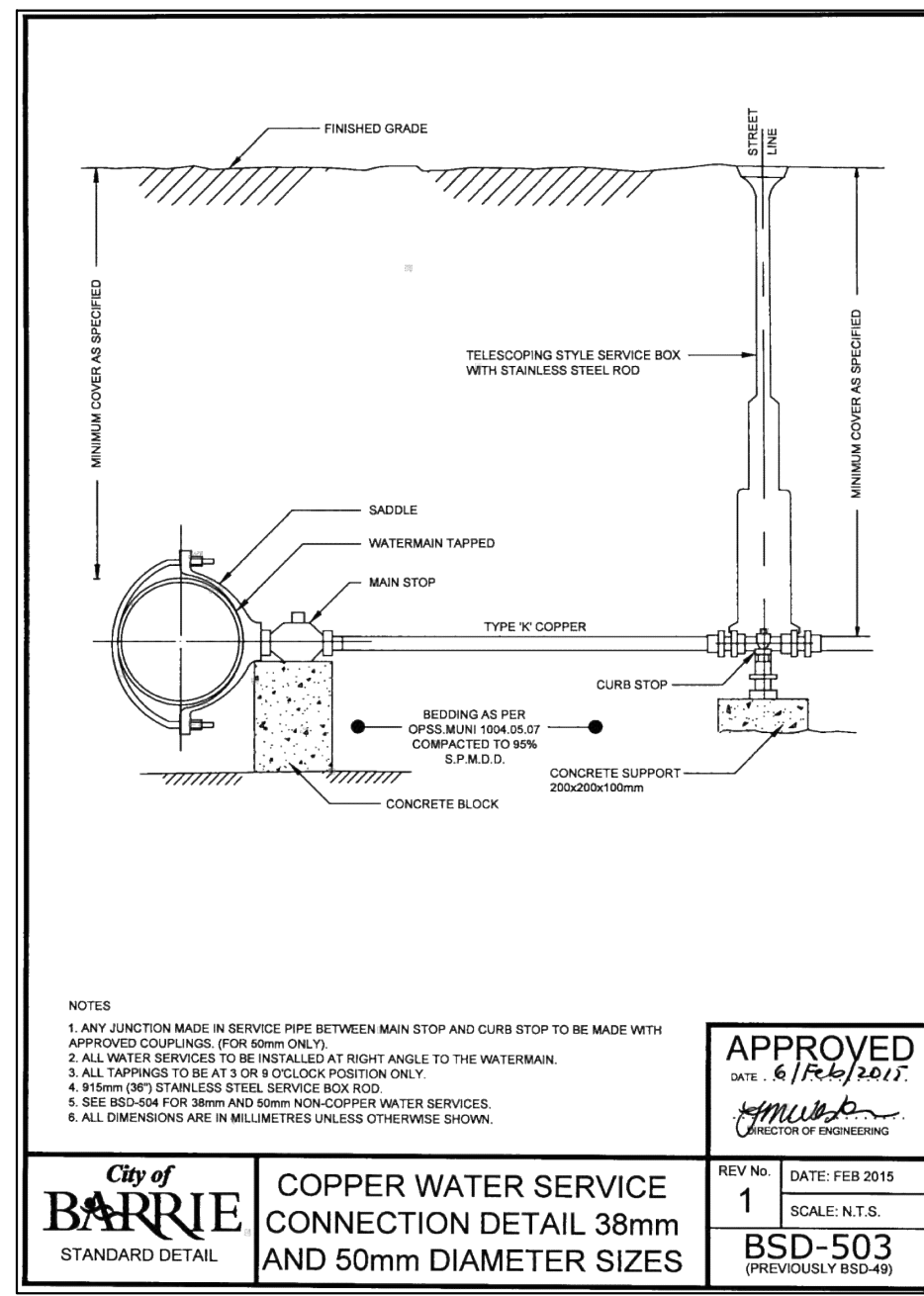
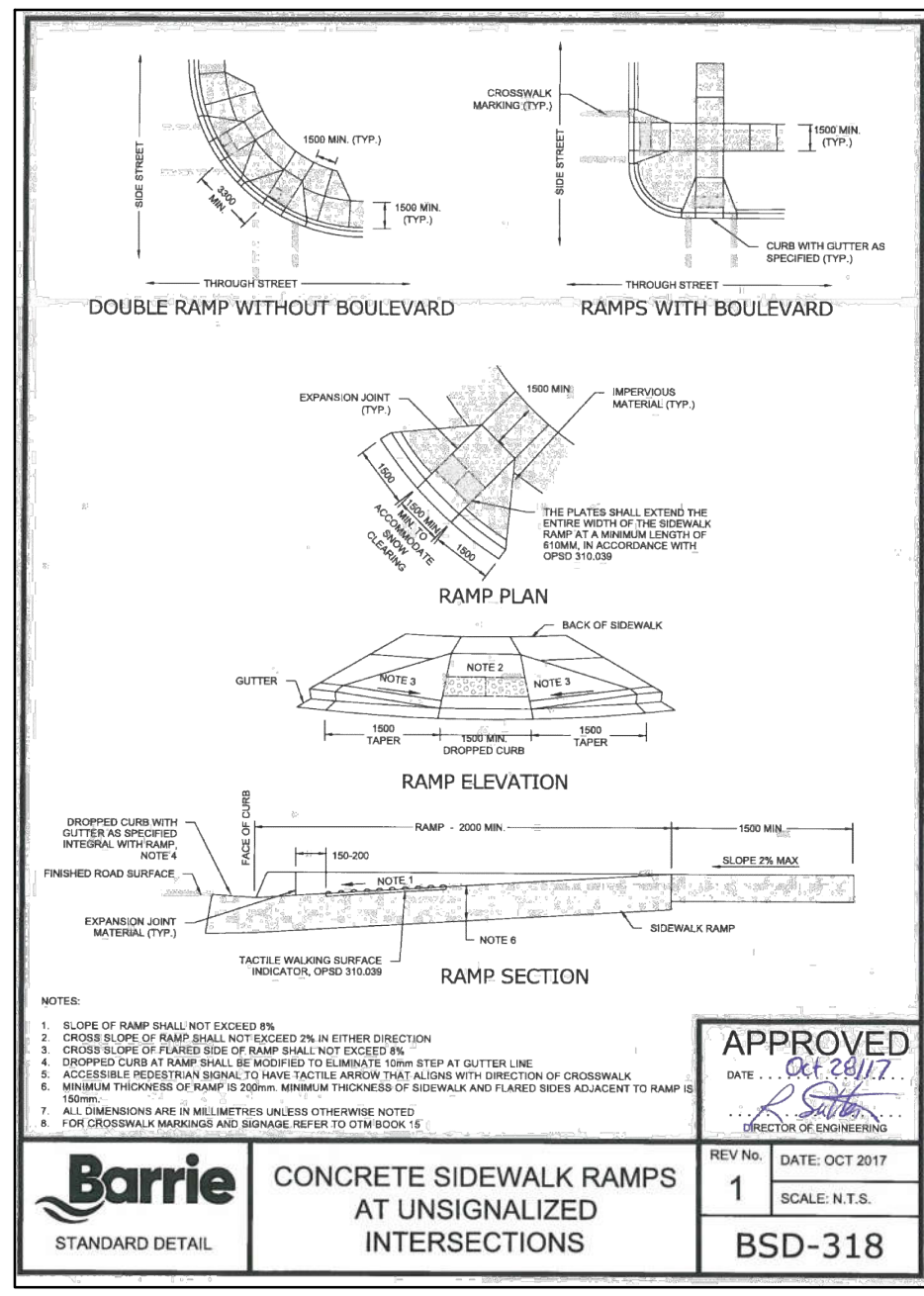
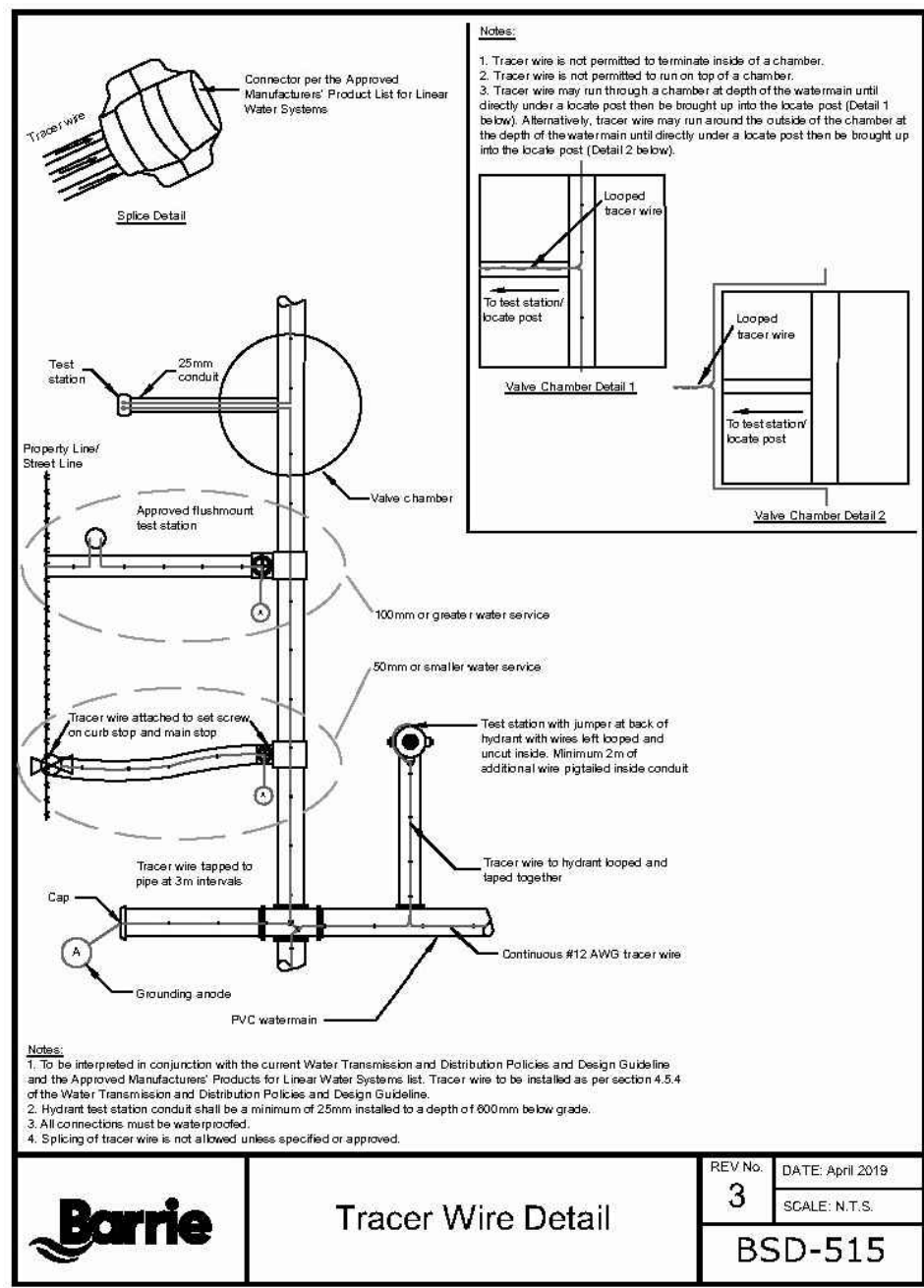
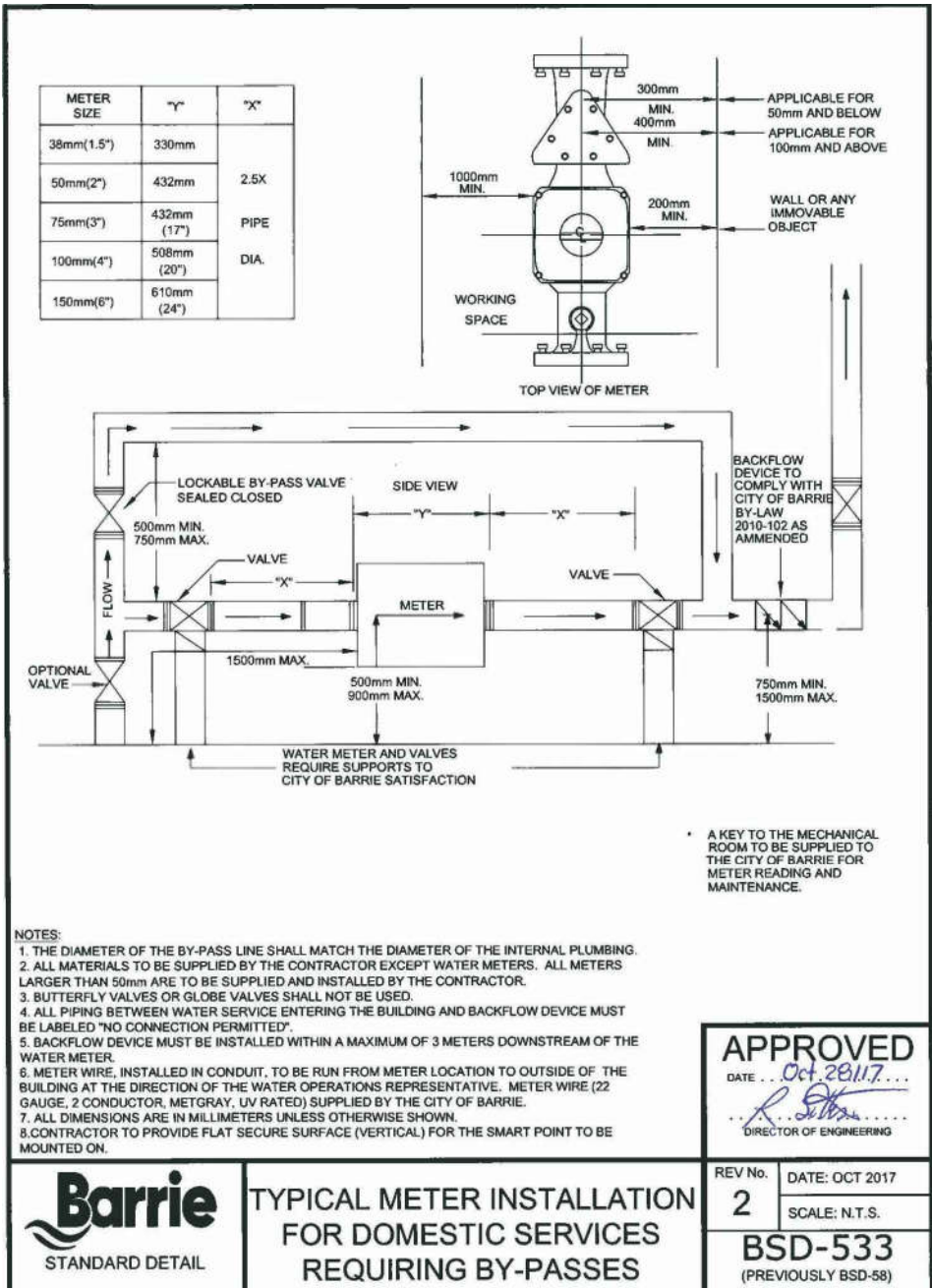
TATHAM ENGINEERING

DESIGN: JH/DJR
DRAWN: JH
CHECK: BFS

FILE: 421377
DATE: DEC 2021
SCALE: N.T.S.

DWG:
DE-1

Drawing Name: 421377-DD01.dwg, Plotted: May 20, 2022



Sealed for retaining wall

DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED. TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF TATHAM ENGINEERING LIMITED.	BENCHMARKS TBM1 – ELEVATION 237.36m NORTH-EAST BOLT ON NORTH SIGN POST STRUCTURE IN GARDEN AT ENTRANCE INTO PARKING LOT. TBM2 – ELEVATION 237.73 NORTH-EAST CORNER BOLT ON BASE OF RAILWAY CROSSING SIGNAL, ON NORTH SIDE OF YONGE STREET, EAST OF RAILWAY CROSSING.	NOTES TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN BASED ON FIELD SURVEY COMPLETED BY TATHAM ENGINEERING, DATED SEPTEMBER14, 2021 SITEPLAN INFORMATION SHOW ON THIS PLAN PREPARED BY MCCOWAN & ASSOCIATES, DATED DECEMBER 3, 2021	<table><thead><tr><th>No.</th><th>REVISION DESCRIPTION</th><th>DATE</th></tr></thead><tbody><tr><td>1.</td><td>ISSUED FOR SPA – FIRST SUBMISSION</td><td>DEC 31/21</td></tr><tr><td>2.</td><td>ISSUED FOR SPA – SECOND SUBMISSION</td><td>MAY 20/22</td></tr></tbody></table>	No.	REVISION DESCRIPTION	DATE	1.	ISSUED FOR SPA – FIRST SUBMISSION	DEC 31/21	2.	ISSUED FOR SPA – SECOND SUBMISSION	MAY 20/22	ENGINEER STAMP 	279 YONGE STREET CITY OF BARRIE	TATHAM ENGINEERING		
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DETAILS & NOTES SHEET 2				DESIGN: JH/DJR DRAWN: JH CHECK: BFS	FILE: 421377 DATE: DEC 2021 SCALE: N.T.S	DWG: DE-2											