5800 YONGE STREET SUBDIVISION

TIMES 5800 INC.

CITY OF TORONTO

LIST OF DRAWINGS

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	GENERAL PLAN
GP-1	GENERAL PLAN
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TA-1	STORM TRIBUTARY AREA PLAN
	SANITARY TRIBUTARY PLAN
TA-2	SANITARY TRIBUTARY AREA PLAN
	DESIGN SHEET
DS-1	STORM & SANITARY DESIGN SHEETS
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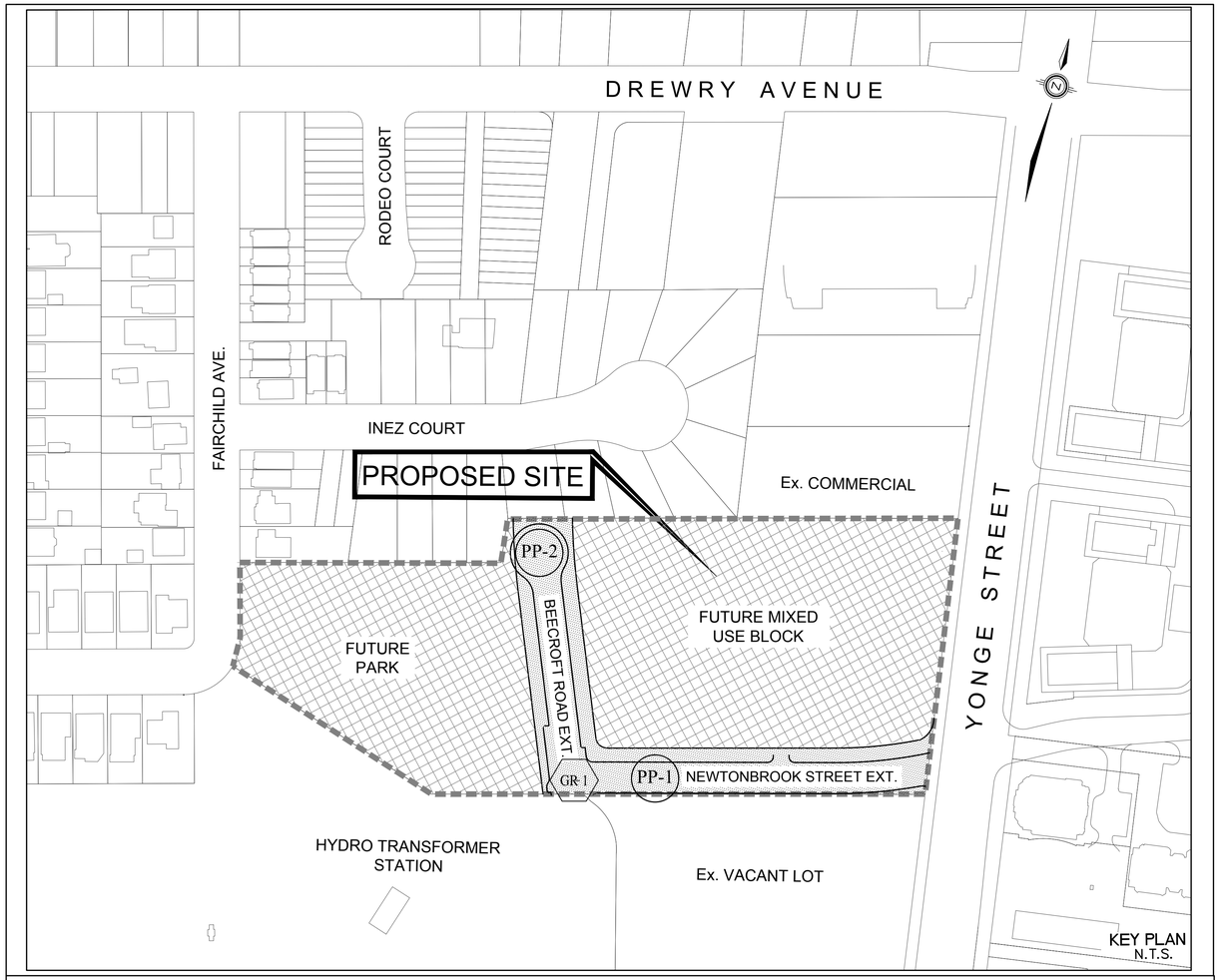
DET-2	DETAILS
DET-3	DETAILS
	UTILITY COORDINATION
UT-1	UTILITY COORDINATION PLAN



SUBMISSION HISTORY

ISSUED FOR:	DATE	NOTES
ISSUED FOR DRAFT PLAN OF SUBDIVISION	JUL. 31, 2019	
ISSUED FOR DRAFT PLAN OF SUBDIVISION	NOV. 29, 2019	

LEGEND

- PP-1 — DENOTES PLAN AND PROFILE
- GR-1 — DENOTES GRADING PLAN
- DENOTES LIMIT OF SUBDIVISION
- DENOTES RESIDENTIAL SUBDIVISION PROJECT No. 2018–4685
- DENOTES MIXED USE SITE PLAN PROJECT No. TBD

OWNER

TIMES 5800 INC.

3985 HIGHWAY 7, UNIT 202
MARKHAM, ON L3R 1L5

CONSULTANT

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MUNICIPALITY

CITY OF TORONTO

ENGINEERING & CONSTRUCTION SERVICES DIVISION

TORONTO

NORTH YORK DISTRICT

PROJECT No.

2018 - 4685

LEGISLATION, REGULATION AND CODES:

1. ALL WORK WITHIN THE CITY RIGHT-OF-WAY SHALL BE CONSTRUCTED ACCORDING TO THE LATEST CITY OF TORONTO STANDARD DRAWINGS AND SPECIFICATIONS. ONTARIO PROVINCIAL STANDARD DRAWINGS AND SPECIFICATIONS MAY, SUBJECT TO THE APPROVAL OF THE CITY OF TORONTO, BE USED WHERE NO CITY STANDARD OR SPECIFICATION IS AVAILABLE.
2. ALL WORK SHALL BE COMPLETED ACCORDING TO THE CURRENT *OCCUPATIONAL HEALTH AND SAFETY ACT* AND *REGULATIONS FOR CONSTRUCTION PROJECTS*. THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
3. ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE ACCORDING TO THE CURRENT *ONTARIO TRAFFIC MANUAL BOOK 7: TEMPORARY CONDITIONS FIELD EDITION.*

CONSTRUCTION NOTES:

1. ALL MATERIAL FOR SEWER, FORCEMAIN, WATERMAIN, HYDRANTS AND APPURTENANCES, SHALL BE ACCORDING TO CITY OF TORONTO MATERIAL/MANUFACTURER SPECIFICATIONS AS REQUIRED BY CHAPTER 6, *MATERIAL SPECIFICATIONS* FROM *DESIGN CRITERIA FOR SEWERS AND WATERMAINS* MANUAL.
2. UTILITY SEPARATION SHALL BE ACCORDING TO APPENDIX 'D' OF THE CITY OF TORONTO DESIGN CRITERIA FOR SEWERS AND WATERMAINS MANUAL.
3. SERVICE CONNECTIONS AND UTILITY CUTS MADE IN ROAD PAVEMENTS SHALL BE BACKFILLED WITH UNSHRINKABLE FILL ACCORDING TO TS 4.60.
4. ALL AREAS DISTURBED DURING CONSTRUCTION WITHIN THE CITY'S RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AND TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR. GRASS AREAS SHALL BE TREATED WITH 100mm OF TOPSOIL AND SHALL BE SODDED ACCORDING TO TS 5.00 AND TS 5.10.
5. ALL EXISTING UTILITIES SHOWN ON DRAWINGS (PLAN AND PROFILE) ARE FOR REFERENCE PURPOSES ONLY. THE CONTRACTOR SHALL SATISFY THEMSELVES AS TO THE ACTUAL LOCATION AND DEPTH OF ANY UTILITY AND SHALL BE LIABLE FOR ALL OR ANY DAMAGE.
6. ANY DISCREPANCIES BETWEEN SITE CONDITIONS AND CONSTRUCTION DRAWINGS MUST BE REPORTED TO THE CITY PRIOR TO COMMENCEMENT OF CONSTRUCTION AND APPROPRIATE ACTION TAKEN TO THE SATISFACTION OF THE CONTRACT ADMINISTRATOR.
7. ALL SURVEY STAKE LAYOUT POINTS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE LAYOUT SHALL BE IMMEDIATELY REPORTED TO THE CITY.
8. ATTENTION IS DIRECTED TO THE POSSIBILITY OF EXISTING PRIVATE SPRINKLERS AND LIGHTING SYSTEMS WITHIN THE RIGHT-OF-WAY, WHICH ARE NOT SHOWN ON THE PLANS. LOCATING, WORKING AROUND AND PROTECTING THESE SYSTEMS SHALL BE COMPLETED AT NO EXTRA COST TO THE CITY.
9. AT ALL LOCATIONS WHERE THE PROPOSED WATERMAIN CROSSES UNDER OR ABOVE THE EXISTING SEWERS, OR UTILITIES, GRANULAR A BEDDING MATERIAL IS TO EXTEND FROM THE LOWER PIPE TO THE TOP OF THE UPPER PIPE. GRANULAR A TO BE COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
10. CONTRACTOR TO PROVIDE ADEQUATE SUPPORT DURING CONSTRUCTION AND A MINIMUM OF 300 MM VERTICAL CLEARANCE BETWEEN NEW WATERMAIN AND EXISTING GAS MAINS. MINIMUM 600mm VERTICAL CLEARANCE BETWEEN NEW WATERMAIN AND GAS MAINS LARGER THAN 300mm DIAMETER.
11. ALL EXISTING WATERMAINS AND SEWER PIPES LARGER THAN 300mm DIAMETER SHALL BE SUPPORTED ACCORDING TO DRAWING T-1007.01-4.
12. ALL DIMENSIONS ARE EXPRESSED IN METRES (m) AND PIPE SIZES ARE EXPRESSED IN MILLIMETRES (mm) UNLESS OTHERWISE NOTED.

CONTACT INFORMATION

1. PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY, THE CONTRACTOR SHALL APPLY FOR A ROAD OCCUPANCY PERMIT FROM THE CITY'S RIGHT-OF-WAY MANAGEMENT UNIT DISTRICT OFFICE.
2. ALL TTC TRAFFIC IS TO BE MAINTAINED DURING CONSTRUCTION OF THIS WATERMAIN, SEWER OR ROAD. IN ORDER TO CO-ORDINATE ALL DISRUPTIONS IN SERVICE, CONTRACTOR TO CONTACT MR. MURRAY HILL 416-393-3302 AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
3. NOTIFY TORONTO WATER, WATER TREATMENT AND SUPPLY AT 416-397-0187 OR SEND AN E-MAIL MESSAGE TO TRUNKWATER@TORONTO.CA TWO WEEKS PRIOR TO EXCAVATION NEAR THE 300 MM TRANSMISSION WATERMAIN SO THAT A TORONTO WATER INSPECTOR MAY BE PRESENT.
4. DURING THE CONSTRUCTION OF WATERMAIN / SERVICES OR SEWER / LATERALS CLOSE TO AN EXISTING TRANSMISSION WATERMAIN, CONTRACTOR TO NOTIFY TORONTO WATER AT 416-397-0187 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

ORIGINAL DATA SOURCE:

1. SURVEY AND LEGAL BOUNDARY INFO OBTAINED FROM BOUNDARY AND TOPOGRAPHIC SURVEY BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018

ROAD RECONSTRUCTION:

1. RECONSTRUCTION OF DRIVEWAY ENTRANCES SHALL BE ACCORDING TO T-310.050-8.
2. LIMITS OF SIDEWALK / CURB RECONSTRUCTION ARE APPROXIMATE, ACTUAL LIMITS ARE TO BE CONFIRMED IN THE FIELD BY THE CONTRACT ADMINISTRATOR.
3. CHAINAGE IS ESTABLISHED FROM THE CENTRELINE OF CONSTRUCTION AND GUTTER GRADES ARE CALCULATED ALONG THE GUTTER LINE.
4. HEIGHT OF CURB FACES MAY VARY ALONG LENGTH OF GUTTER, AS SHOWN ON PROFILE, OR TO BE CONFIRMED IN THE FIELD.
5. ADJUST ALL STRUCTURES (MAINTENANCE HOLES, CATCH BASINS, ETC.) TO SUIT NEW DESIGN ELEVATIONS INCLUDING BREAKING DOWN AND REMOVAL OF PORTION OF TOP OF STRUCTURES TO ALLOW FOR MINIMUM 150mm ADJUSTMENTS.
6. ALL CURB SHALL BE CONSTRUCTED WITH A LEDGE AT THE BACK OF THE CURB TO FACILITATE FUTURE SIDEWALK CONSTRUCTION.
7. FULL DEPTH SAW-CUTS ARE REQUIRED AT CONSTRUCTION LIMITS OF EXISTING CURB, SIDEWALK AND PAVEMENT UNLESS OTHERWISE SHOWN.
8. SAW CUT EXISTING PAVEMENT, SIDEWALK, CURB, GUTTER, DRIVEWAYS, WALKWAYS, ETC. AT CONSTRUCTION LIMITS TO PROVIDE A CLEAN JOINT FOR THE PROPOSED WORK.
9. CONSTRUCT PEDESTRIAN SIDEWALK RAMPS WITH TACTILE WALKING SURFACE INDICATORS ACCORDING TO T-310.030-7, T-310.030-8, T-310.030-9, T-310.030-10 AND T-310.030-11.
10. EXISTING ENTRANCE RAMPS TO BE RE-INSTATED. VEHICULAR SIDEWALK RAMP SHALL BE ACCORDING TO T-310.050-1.
11. ADJUSTMENT OF APPROACHES, WALKWAYS, AND STEPS MAY BE REQUIRED. LIMITS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACT ADMINISTRATOR.
12. EXISTING ASPHALT THICKNESS MAY VARY, TAPER TO MATCH EXISTING AT CONSTRUCTION LIMITS (MINIMUM 2.0m).
13. FILTER FABRIC TO BE PLACED UNDER GRATES ON ALL CATCHBASINS TO TRAP SEDIMENT. SILT TRAPS ARE TO BE CLEANED REGULARLY AND ARE NOT TO BE REMOVED UNTIL SUCH TIME AS THE CURBS ARE CONSTRUCTED AND THE BOULEVARDS ARE SODDED OR BACKYARDS GRADED AND SODDED. FILTER FABRIC FOR SILT CONTROL TO BE TERRA FIX 270R OR APPROVED EQUIVALENT.

WATERMAINS

1. PVC WATERMAINS SHALL BE MINIMUM DR 18 CLASS 235 (AWWA) C900-07.
2. EMBEDMENT MATERIAL FOR FLEXIBLE PIPE SHALL BE ACCORDING TO OPSD 802.010 AND USING GRANULAR A ACCORDING TO TS 1010 AND COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
3. MINIMUM COVER ON WATERMAINS SHALL BE 1.8m.
4. ALL HYDRANTS SHALL BE CONSTRUCTED ACCORDING TO T-1105.01.
5. HYDRANT LEADS SHALL BE MINIMUM DR 18 CLASS 235 (AWWA) C900-07.
6. ALL SERVICE CONNECTIONS SHALL BE CONSTRUCTED ACCORDING TO T-1104.01, T-1104.02-1, T-1104.02-3, T-1105.02-1 AND T-1105.02-2.
7. SINGLE WATER SERVICE CONNECTIONS SHALL BE A MINIMUM OF 19mm DIA. TYPE "K" SOFT COPPER ACCORDING TO T-1104.01. WHEN SERVICE LENGTH EXCEEDS 30m, THE DIAMETER SHALL BE 25mm DIA.
8. ALL CURB AND VALVE BOXES TO BE LOCATED AT STREET LINE.
9. MECHANICAL THRUST RESTRAINTS SHALL BE INSTALLED AT ALL FITTINGS, BENDS, TEES, CROSSES, REDUCERS AND VALVES FOR ALL WATERMAIN SIZES. MECHANICAL RESTRAINTS AT JOINTS SHALL BE INSTALLED AT EVERY PIPE JOINT 6.1m OF EITHER SIDE OF THE VALVE FOR WATERMAINS 100mm DIAMETER OR LARGER.
10. ALL TEES, PLUGS, HORIZONTAL, VERTICAL BENDS, REDUCERS AND HYDRANTS TO HAVE CONCRETE THRUST BLOCKS ACCORDING TO T-1103.01 AND T-1103.020.
11. WATERMAINS MUST FOLLOW THE ONTARIO MINISTRY OF THE ENVIRONMENT PROCEDURE F-6-1 THAT GOVERN THE SEPARATION OF SEWERS AND WATERMAINS. A MINIMUM VERTICAL CLEARANCE OF 0.30m WHEN CROSSING OVER AND 0.5 M WHEN CROSSING UNDER SEWERS AND ALL OTHER UTILITIES IS REQUIRED. MUST ALSO MAINTAIN 2.5m HORIZONTAL SEPARATION WITH SEWERS.
12. ALL VALVES LESS THAN 400mm WILL BE IN A VALVE AND BOX ACCORDING TO T-1101.02-2. ALL VALVES 400mm AND LARGER SHALL BE IN A CHAMBER.
13. SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL METALLIC PIPES AND APPURTENANCES, WATER SERVICES AND FITTINGS ACCORDING TO T-1106.04, T-1106.05, T-1106.06 AND TS 7.22.
14. TRACER WIRE INSTALLATION SHALL BE ACCORDING TO TS 7.40.
15. HYDROSTATIC PRESSURE TEST AND LEAKAGE TESTING OF THE WATERMAIN SHALL BE ACCORDING TO TS 441.
16. THE NEW WATERMAIN SHALL BE ISOLATED ACCORDING TO T-1104.03-3 OR T-1104.03-4 UNTIL BACTERIOLOGICAL TESTS ARE SATISFACTORLY COMPLETED.
17. PROVISIONS FOR FLUSHING THE WATER MAIN PRIOR TO TESTING AND SO FORTH MUST BE PROVIDED WITH AT LEAST A 50mm OUTLET ON 100mm AND LARGER LINES ACCORDING TO T-1104.03-1. COPPER WATER SERVICES SHALL HAVE FLUSHING POINTS AT THE END, THE SAME SIZE AS THE LINE. ON FIRE LINES, FLUSHING OUTLET TO BE 50mm DIAMETER MINIMUM OR A HYDRANT.
18. DISINFECTION OF THE WATERMAIN SHALL BE ACCORDING TO TS 7.30 AND SHALL INCLUDE ALL NEW WATER SERVICES 100mm DIA AND LARGER.
19. TORONTO WATER REQUIRES THAT THE NEW DISTRIBUTION SYSTEM REMAIN ISOLATED UNTIL SATISFACTORY BACTERIOLOGICAL SAMPLE RESULTS ARE RECEIVED. ECS CONTRACT ADMINISTRATOR SHALL NOTIFY TORONTO WATER WHEN SAMPLE RESULTS HAVE PASSED IN ORDER TO PROCEED WITH REMOVAL OF THE BLOW-OFF AND BACK FILLING OF THE ACCESS PIT.
20. AFTER SATISFACTORY DISINFECTION OF THE NEW WATERMAIN IS ACHIEVED, PERMANENT CONNECTIONS TO THE EXISTING WATERMAIN(S) WITH A FILLER PIECE SHALL BE MADE ACCORDING TO TS 7.70.
21. CITY IN-SERVICE WATER VALVES, CURB STOPS, FIRE HYDRANTS CAN ONLY BE OPERATED BY TORONTO WATER STAFF.
22. ALL NEW WATERMAINS SHALL BE INSULATED WHERE THE COVER IS LESS THAN 1.65m ACCORDING TO T-708.01-4.
23. THE CONTRACTOR SHALL CONNECT OR RECONNECT ALL STRAY CURRENT DRAINAGE CABLES CONNECTED TO THE TTC ELECTRIFIED RAIL SYSTEM ENCOUNTERED DURING WATERMAIN CONSTRUCTION.

WATERMAIN - FILL AREAS

<CONTRACT ADMINISTRATOR TO DECIDE WHETHER TO USE>

1. PIPES ARE NOT TO BE LAID ON FILL UNTIL THE FIELD DENSITY TEST REPORTS HAVE BEEN SUBMITTED AND APPROVED BY THE ENGINEER.
2. FILL TO BE PLACED TO A MINIMUM OF 600mm ABOVE THE WATERMAIN GRADES AND TO 3m MINIMUM ON EACH SIDE PRIOR TO WATERMAIN LAYING COMPACTED TO A MINIMUM OF 100% OF MAXIMUM DRY DENSITY IN 300mm LIFTS.
3. SOIL DENSITY TESTS SHALL BE TAKEN ALONG CENTRELINE OF THE WATERMAIN AND ON LINES 1.5m ON EITHER SIDE OF SAME AT A MAXIMUM INTERVAL OF 30m. TESTS TO BE TAKEN AT EACH 600mm LIFT.
4. ALL HYDRANTS, TEES, VALVES, BENDS, PLUGS AND EACH PIPE JOINT ARE TO BE MECHANICALLY RESTRAINED.
5. PIPE JOINT DEFLECTIONS ARE NOT ALLOWED.

EROSION AND SEDIMENT CONTROL

1. EROSION AND SEDIMENT CONTROL (ESC) MEASURES WILL BE IMPLEMENTED PRIOR TO, AND MAINTAINED DURING CONSTRUCTION PHASES, TO PREVENT ENTRY OF SEDIMENT INTO THE WATER. ALL DAMAGED EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE REPAIRED OR REPLACED WITHIN 48 HOURS OF INSPECTION OR BOTH.
2. ALL DISTURBED AREAS WILL BE MINIMIZED TO THE EXTENT POSSIBLE, AND TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES.
3. THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENT LADEN RUNOFF FROM LEAVING THE WORK AREA. IF THE PRESCRIBED MEASURES ON THE PLANS ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE, THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS AND A TORONTO REGION CONSERVATION AUTHORITY ENFORCEMENT OFFICE SHOULD BE IMMEDIATELY CONTACTED. ADDITIONAL ESC MEASURES TO BE KEPT ON SITE AND USED AS NECESSARY.
4. ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE WATER. VEHICULAR REFUELING AND MAINTENANCE AND REFUELING WILL BE CONDUCTED A MINIMUM OF 30m FROM THE WATER.
5. ALL GRADES WITHIN THE REGULATORY FLOOD PLAN WILL BE MAINTAINED OR MATCHED.

SANITARY & STORM SEWERS

1. MAIN LINE PVC PIPE SHALL BE DR 35.
2. SANITARY SERVICE CONNECTIONS SHALL BE SINGLE, 150mm DIAMETER MINIMUM, PVC DR 28 INSTALLED AT 2 PERCENT AND THE COLOUR SHALL BE GREEN, FOR SINGLE RESIDENTIAL DWELLINGS.
3. EMBEDMENT MATERIAL FOR FLEXIBLE PIPE SHALL BE ACCORDING TO OPSD 802.010 AND USING GRANULAR A ACCORDING TO TS 1010 AND COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
4. BEDDING FOR RIGID PIPE SHALL BE CLASS B BEDDING MATERIAL ACCORDING TO OPSD 802.031 AND USING GRANULAR A BEDDING MATERIAL ACCORDING TO TS 1010 AND COMPACTED TO MINIMUM 98 % OF MAXIMUM DRY DENSITY.
5. ULTRA-RIB PIPE IS NOT PERMITTED WITHIN THE MUNICIPAL RIGHT-OF-WAY.
6. MAINTENANCE HOLES SHALL BE ACCORDING TO T-701.010 (1200mm), T-701.011 (1500mm), T-701.012-1 (1800mm) OR T-701.013 (2400mm). FRAME AND COVER SHALL BE ACCORDING TO OPSD 401.010 TYPE A CLOSED (SANITARY) TYPE B OPEN (STORM).
7. MAINTENANCE HOLE CHAMBER OPENINGS MUST BE LOCATED ON THE UPSTREAM SIDE OF THE MAINTENANCE HOLE.
8. BENCHING DETAILS SHALL BE ACCORDING TO T-701.021 OR AS SHOWN ON THE DRAWINGS.
9. DROP STRUCTURES SHALL BE ACCORDING TO T-1003.01 (EXTERNAL) AND T-1003.01-2 (INTERNAL).
10. SANITARY MAINTENANCE HOLES SHALL HAVE WATERTIGHT FRAMES AND COVERS IN PONDING AREAS ACCORDING TO OPSD 401.030.
11. REINFORCED CONCRETE PIPE SHALL BE MINIMUM 65-D. HEIGHT OF FILL TO BE VERIFIED USING OPSD TABLES 807.010 AND 807.030.
12. NON-REINFORCED CONCRETE PIPE 150mm TO 250mm SHALL BE CLASS 3. HEIGHT OF FILL TO BE VERIFIED USING OPSD TABLE 807.040.
13. SINGLE CATCHBASINS SHALL BE ACCORDING TO T-705.010 COMPLETE WITH GOSS TRAP, WHERE SPECIFIED. FRAME AND COVER SHALL BE ACCORDING TO OPSD 400.070.
14. DOUBLE CATCHBASINS SHALL BE ACCORDING TO T-705.020 COMPLETE WITH GOSS TRAP, WHERE SPECIFIED.
15. CATCHBASIN LEADS TO BE 250mm PVC DR 35 FOR SINGLE CATCHBASINS AND 300mm PVC DR 35 FOR DOUBLE CATCHBASINS.
16. CONNECTION DETAIL FOR SEWER PIPE AT CATCHBASINS AND MAINTENANCE HOLES SHALL BE ACCORDING TO T-708.020.

PAVEMENT MAKE-UP FOR BLOCK 2 DRIVEWAYS

(AS PER CITY STD T-310.050-8)

40mm SUPERPAVE SP 9.5, TRAFFIC CATEGORY B,PG 58-28 TOP (SURFACE)
60mm SUPERPAVE SP 19.0, TRAFFIC CATEGORY B,PG 58-28 BASE (BINDER)
150mm GRANULAR 'A'

PAVEMENT MAKE-UP FOR PUBLIC ROADS

(AS PER GEOTECHNICAL REPORT RECOMMENDATIONS BY DS CONSULTANTS LTD., REVISED JUNE 24, 2019)

40mm SUPERPAVE SP 12.5B
70mm SUPERPAVE SP 19.0B
150mm GRANULAR 'A'
150mm GRANULAR 'B' (TYPE II)

TORONTO BENCH MARK No. 12319654373
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARK No. 12319654373 HAVING A PUBLISHED ELEVATION OF 192.989 METRES.

SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

No.	DATE	REVISIONS	INITIAL	SIGNED
2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

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REGISTERED PROFESSIONAL ENGINEER
H. O. TOZCU
NOV.29/2019
PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS.
THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER OF DEVELOPMENT ENGINEERING DATE: _____

5800 YONGE STREET TIMES 5800 INC. CITY OF TORONTO GENERAL NOTES

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018-4685
SCALE	N.T.S.			DRAWING NUMBER	GN-1		
DATE	MARCH 2019					REF FILES:	

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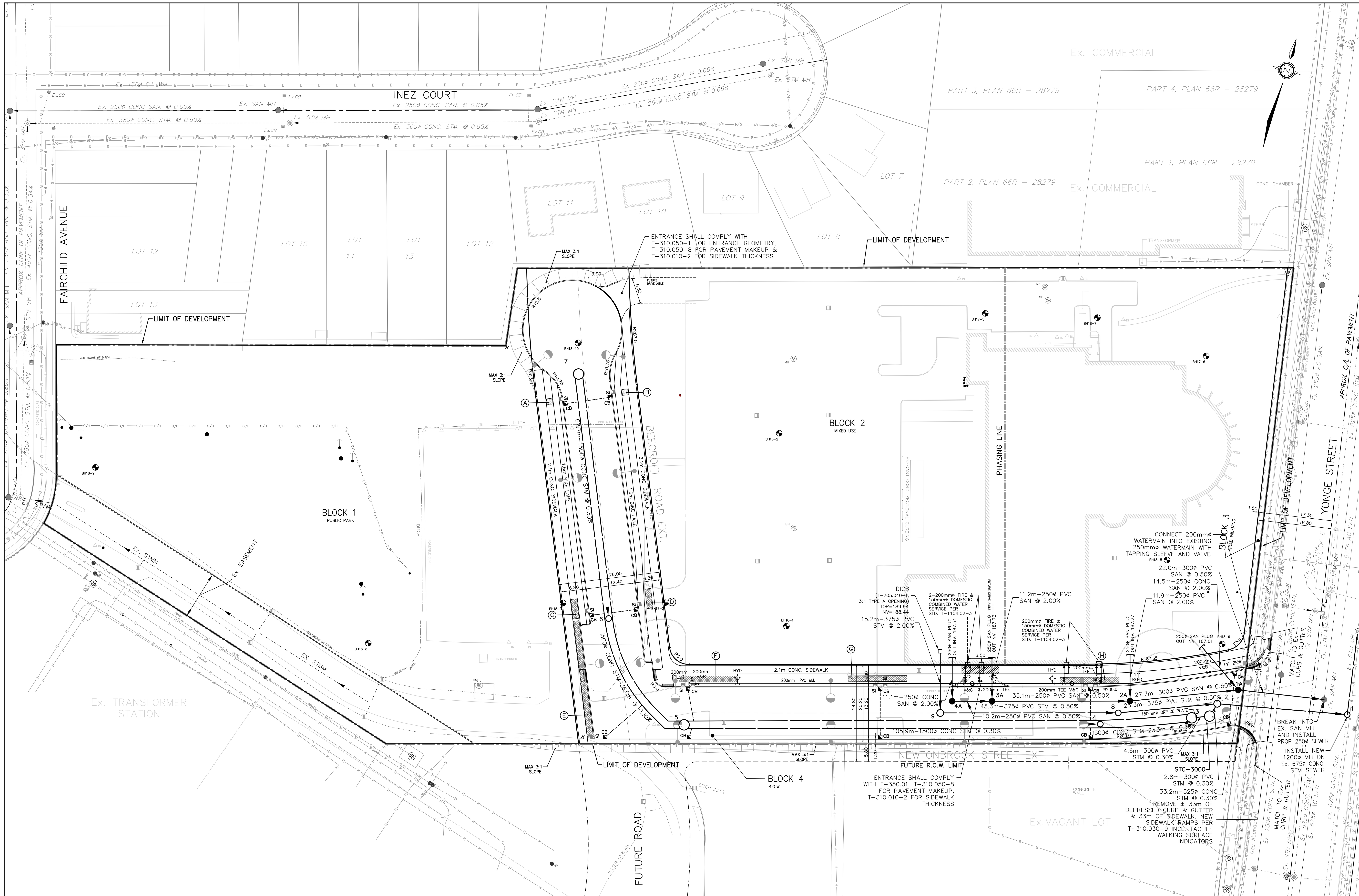

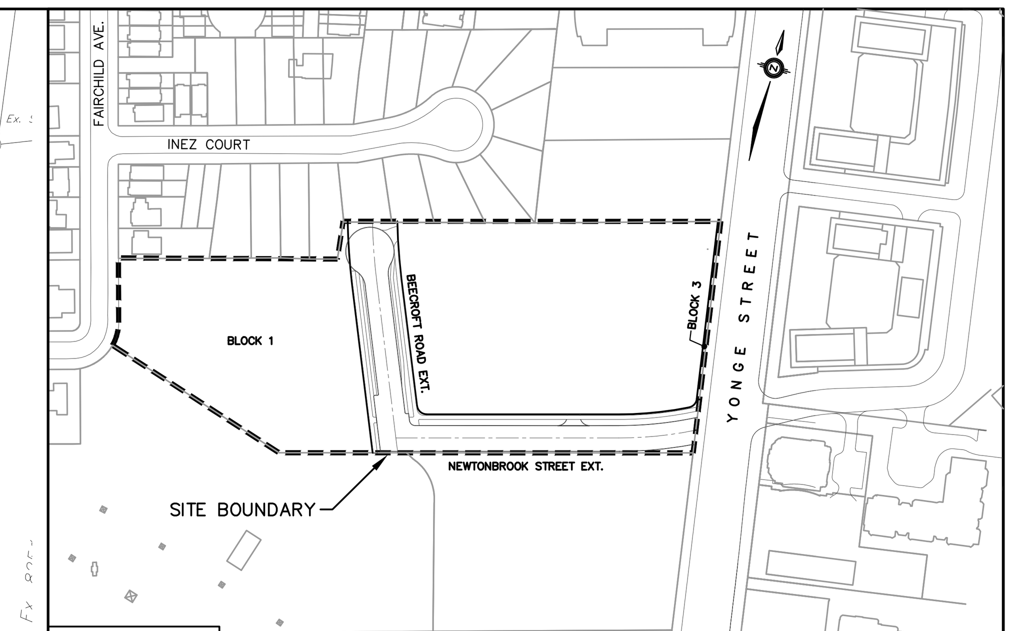

KEY PLAN
N.T.S.

LEGEND

- DENOTES VALVE AND CHAMBER
- DENOTES VALVE AND BOX
- DENOTES HYDRANTS & VALVE
- DENOTES EXISTING HYDRANTS & VALVE
- DENOTES SINGLE OR DOUBLE CATCHBASIN WITH CB SHIELD INSERT (SEE DETAIL ON D–2)
- DENOTES SINGLE OR DOUBLE CATCHBASIN WITH HEAVY DUTY HONEYCOMB GRATING
- DENOTES STANDARD SIDE INLET WITH PIPE DRAIN PER CITY OF TORONTO GSTG STD. G–3
- DENOTES SANITARY MANHOLE
- DENOTES STORM MANHOLE
- DENOTES BIORETENTION LID FEATURE (REFER TO DETAILS SHEETS)
- DENOTES 1.8m HIGH WOOD PRIVACY FENCE
- DENOTES 1.5m HIGH CHAIN LINK FENCE
- DENOTES EXISTING CHAIN LINK FENCE
- DENOTES LIMIT OF SUBDIVISION
- DENOTES EXISTING TREE TO REMAIN
- DENOTES HYDRO SUBMERSIBLE TRANSFORMER VAULT
- DENOTES EXISTING BURIED ROGERS LINE
- DENOTES EXISTING BURIED HYDRO LINE
- DENOTES EXISTING BURIED BELL LINE
- DENOTES EXISTING GAS LINE
- DENOTES EXISTING OVERHEAD LINE
- DENOTES EXISTING CATCH BASIN
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING EASEMENT
- DENOTES CENTERLINE OF ROW
- TACTILE WALKING SURFACE INDICATORS PER T–310.030–10 & T–310.030–11
- HEAVY DUTY SIDEWALK PER STD T–310.010–2

TORONTO BENCH MARK No. 12319654373

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SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

NOTES:

1. REFER TO DWG GN–1 FOR GENERAL NOTES
2. REFER TO DWG SEC–1 FOR SECTIONS
3. REFER TO DWG SC–1 FOR TREE PROTECTION REQUIREMENTS AS WELL AS GENERAL REMOVALS

Bioretention LID Feature Construction Specification Table

LID	Dimension [m]		Makeup			Liner	
	L	W	Filter Media [m]	Choker [m]	Gravel Storage Layer [m]	Geotextile	Impervious
A	2.22	1.8	1	0.1	0.3		✓
B	2.22	1.8	1	0.1	0.3		✓
C	3.89	1.8	1	0.1	0.3		✓
D	3.89	1.8	1	0.1	0.3		✓
E	12.50	1.8	1	0.1	0.5	✓	
F	12.50	1.8	1	0.1	0.5	✓	
G	12.50	1.8	1	0.1	0.5	✓	
H	2.78	1.8	1	0.1	0.3		✓

PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT OF WAY THE CONTRACTOR OR DEVELOPER OR CONSULTANT WILL OBTAIN ALL NECESSARY ROAD OCCUPANCY PERMITS FROM THE CITY'S RIGHT–OF–WAY MANAGEMENT SECTION. CONTACT 416–395–7112.

DIGITAL INFORMATION

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2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
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PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER OF DEVELOPMENT ENGINEERING DATE: ______

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
GENERAL PLAN

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018–4685
SCALE	1:500			DRAWING NUMBER	GP-1		
DATE	MARCH 2019					REF FILES:	

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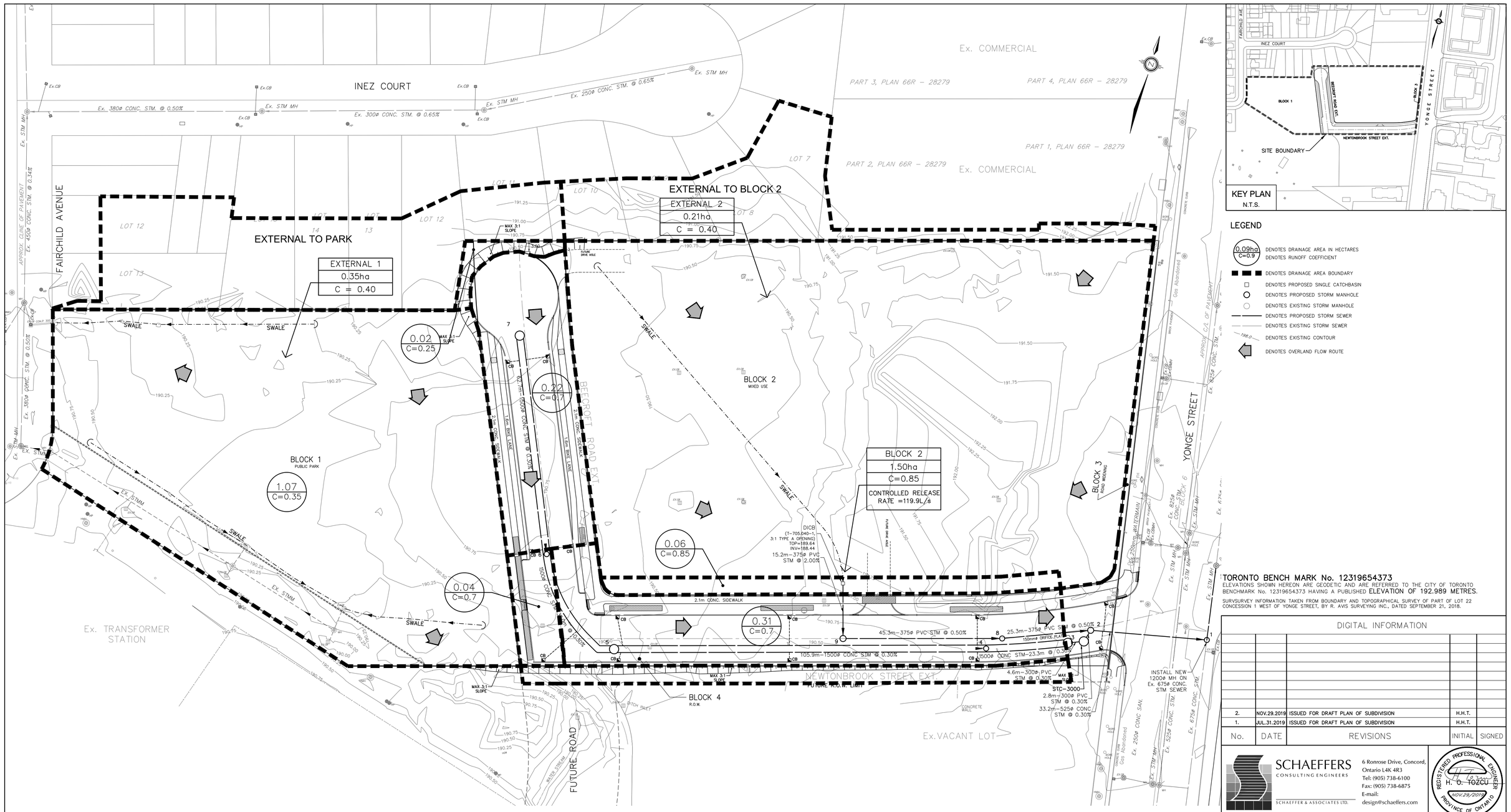

LEGEND

- 0.09ha C=0.9 — DENOTES DRAINAGE AREA IN HECTARES / DENOTES RUNOFF COEFFICIENT
- DENOTES DRAINAGE AREA BOUNDARY
- DENOTES PROPOSED SINGLE CATCHBASIN
- DENOTES PROPOSED STORM MANHOLE
- DENOTES EXISTING STORM MANHOLE
- DENOTES PROPOSED STORM SEWER
- DENOTES EXISTING STORM SEWER
- DENOTES EXISTING CONTOUR
- DENOTES OVERLAND FLOW ROUTE

TORONTO BENCH MARK No. 12319654373
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARK No. 12319654373 HAVING A PUBLISHED ELEVATION OF 192.989 METRES.

SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

No.	DATE	REVISIONS	INITIAL	SIGNED
2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

SCHAEFFERS CONSULTING ENGINEERS
SCHAEFFER & ASSOCIATES LTD.
6 Ronrose Drive, Concord, Ontario L4K 4R3
Tel: (905) 738-6100
Fax: (905) 738-6875
E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER
H. H. TOZCU
NOV.29/2019
PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

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MANAGER OF DEVELOPMENT ENGINEERING — DATE: _____

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5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
STORM TRIBUTARY AREA PLAN

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018-4685
SCALE	1:500			DRAWING NUMBER	TA-1		
DATE	MARCH 2019						

REF FILES:

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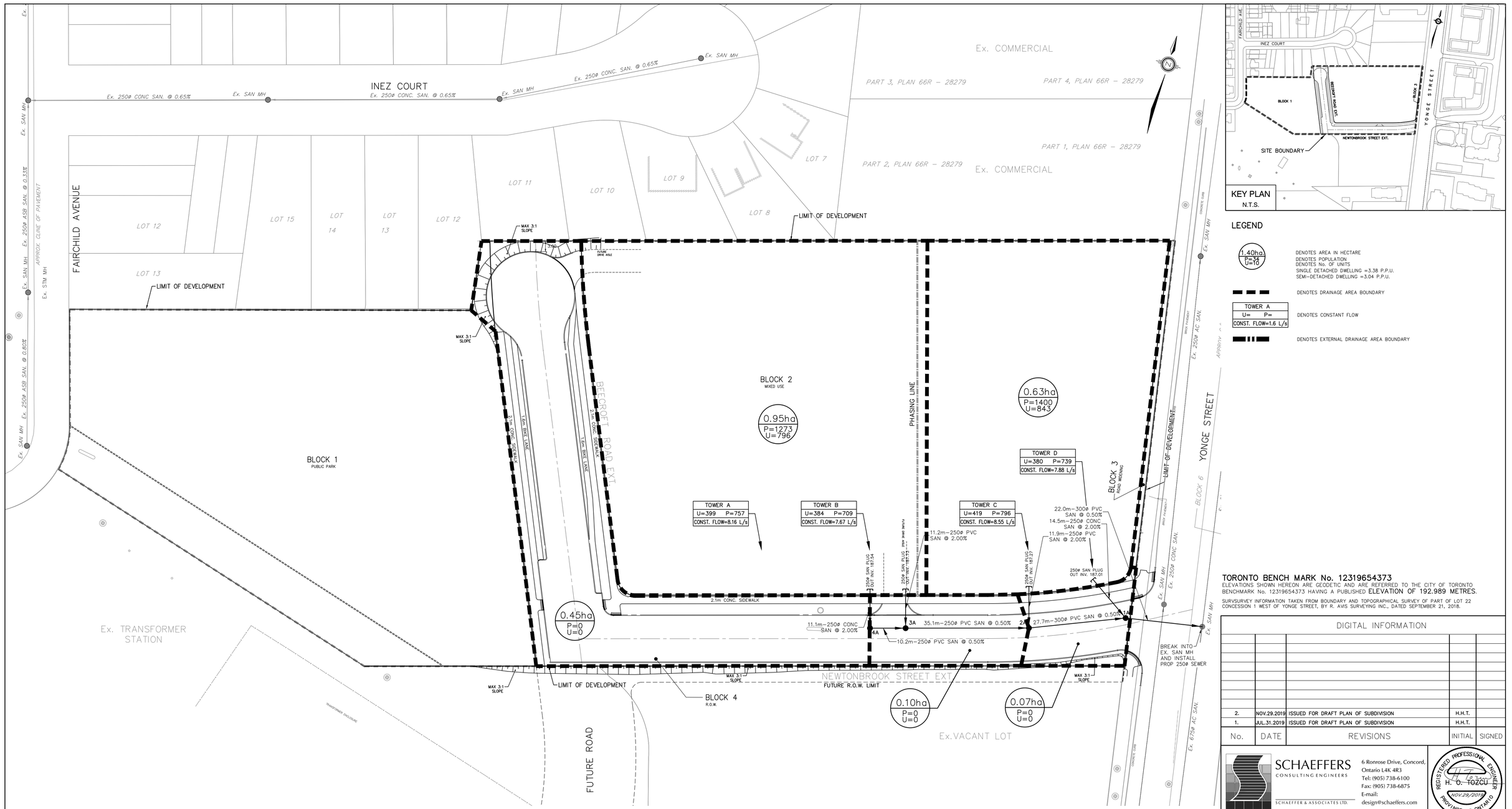

LEGEND

1.40ha / P=XX / U=XX — DENOTES AREA IN HECTARE; DENOTES POPULATION; DENOTES No. OF UNITS; SINGLE DETACHED DWELLING =3.38 P.P.U.; SEMI–DETACHED DWELLING =3.04 P.P.U.

DENOTES DRAINAGE AREA BOUNDARY

TOWER A	
U=	P=
CONST. FLOW=1.6 L/s	

DENOTES CONSTANT FLOW

DENOTES EXTERNAL DRAINAGE AREA BOUNDARY

TORONTO BENCH MARK No. 12319654373
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SURVEY/SURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

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E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER — H. O. TOZCU — NOV.29/2019 — PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

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MANAGER OF DEVELOPMENT ENGINEERING — DATE: _____

NOTES:
1. REFER TO DWG GN–1 FOR GENERAL NOTES
2. REFER TO DWG SEC–1 FOR SECTIONS
3. REFER TO DWG SC–1 FOR TREE PROTECTION REQUIREMENTS AS WELL AS GENERAL REMOVALS

PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT OF WAY THE CONTRACTOR OR DEVELOPER OR CONSULTANT WILL OBTAIN ALL NECESSARY ROAD OCCUPANCY PERMITS FROM THE CITY'S RIGHT–OF–WAY MANAGEMENT SECTION. CONTACT 416–395–7112.

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
SANITARY TRIBUTARY AREA PLAN

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018–4685
SCALE	1:500			DRAWING NUMBER	TA-2		
DATE	MARCH 2019						

REF FILES:

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TORONTO

DESIGNED BY: H.H. Tozcu, P.Eng. DATE: June 25, 2019
CHECKED BY: H. Tozcu, P.Eng. DATE: June 25, 2019

Works & Emergency Services

STORM SEWER DESIGN SHEET

REGISTERED PROFESSIONAL ENGINEER — H. H. TOZCU — 100130655 — June 25, 2019 — PROVINCE OF ONTARIO

SCHAEFFERS Consulting Engineers
6 Ronrose Drive, Concord, Ontario L4K 4R3
Tel: (905) 738-6100 Fax: (905) 738-6875
SCHAEFFER & ASSOCIATES LTD. design@schaeffers.com

PROJECT NAME: 5800 Yonge Street
LOCATION: 5800 Yonge Street
PROJECT NO.: 2018-4685

AREA CODE ____ TT ☐ UNIT ☐ Proposed - Sewer / As Constructed - Sewer SWNM ☐

Street Name	From M.H.	To M.H.	CITY USE ONLY FROM	TO	BCK	AREAS AND COEFFICIENTS AREA	CO	AREA	CO	AREA	CO	SEWER LENGTH	SIZE	GRADE	TIME	I.EQ. AC.	ACCUM. AC.	I	Q	CAP.	VEL.	TIME (Min.)	TOTAL TIME	ACTUAL VEL.
Newtonbrook St. Ext.	Blck 2	9				1.58	0.85	0.21	0.40			15.2	375	2.00	10.00	1.4270	1.427	250.320	***0.1199***	0.1824	2.5859	0.10	10.10	11.52
																			Future Block 2 Release Rate = 119.9L/s (Refer to SWM Report)					
Newtonbrook St. Ext.	9	8				0.00	0.00					45.3	375	0.50	11.52	0.0000	1.427	223.452	***0.1199***	0.1290	1.2930	0.58	12.11	12.11
Newtonbrook St. Ext.	8	2				0.00	0.00					25.3	375	0.50	12.11	0.0000	1.427	214.789	***0.1199***	0.1290	1.2930	0.33	12.43	12.43
Total to MH2																	**1.427**		**0.1199**					**12.43**
Beecroft Rd. Ext.	7	6				0.22	0.70					62.7	1500	0.30	10.00	0.1540	0.154	250.320	0.1071	4.0447	2.5344	0.41	10.41	10.57
Beecroft Rd. Ext.	6	5				0.04	0.70					36.0	1500	0.30	10.57	0.0280	0.182	239.528	0.1211	4.0447	2.5344	0.24	10.80	10.83
Newtonbrook St. Ext.	5	4				0.31	0.70	0.11	0.70	0.06	0.85	105.9	1500	0.30	10.83	0.3450	0.527	234.833	0.3438	4.0447	2.5344	0.70	11.53	11.87
Newtonbrook St. Ext.	4	3				0.0000	0.00					23.3	1500	0.30	11.87	0.0000	0.527	218.204	0.3194	4.0447	2.5344	0.15	12.03	12.03
Newtonbrook St. Ext.	3	STC-3000				0.0000	0.00					4.6	300	0.30	12.03	0.0000	0.527	215.977	***0.0523***	0.0540	0.8384	0.09	12.12	12.12
																			ROW Release Rate = 52.3L/s (Refer to SWM Report)					
Newtonbrook St. Ext.	STC-3000	2				0.0000	0.00					2.8	300	0.30	12.12	0.0000	0.527	214.672	***0.0523***	0.0540	0.8384	0.06	12.17	12.17
Total to MH2																	**0.527**		**0.0523**					**12.17**
Newtonbrook St. Ext.	2	1				0.0000	0.00					33.20	525	0.30	12.43	0.0000	1.954	210.271	0.1722	0.2445	1.2527	0.44	12.88	12.88
																	1.954		**0.1722**					**12.88**

TORONTO

Sanitary Design Sheet
Proposed Sewers on Street A

Works & Emergency Services

DESIGN PARAMETERS:

Pop per unit - Multi-Unit:	1.4 ppu (1 Bdrm) 2.1 ppu (2 Bdrm) 3.1 ppu (3 Bdrm)
Average Flow - Residential	450 Lpcd
Non-Residential	180,000 L/ha floor /d
Infiltration	0.26 L/ha

REGISTERED PROFESSIONAL ENGINEER — H. H. TOZCU — 100130655 — June 25, 2019 — PROVINCE OF ONTARIO

PROJECT No.: 2018-4685
PROJECT NAME: 5800 Yonge Street
LOCATION: TORONTO
DATE: 25-Jun-2019
DESIGNED BY: H. H. Tozcu, P.Eng.
CHECKED BY:

A= AREA
P= POPULATION
M= $1+\frac{14}{4+(P/1000)^{1/2}}$
q= 450 L/C/D

Qp= MqP= population flow (l/s) / 86400
Qi= 0.26* A (l/s)
Qt= Qp+Qi (l/s)

SCHAEFFERS Consulting Engineers
6 Ronrose Drive, Concord, Ontario L4K 4R3
Tel: (905) 738-6100 Fax: (905) 738-6875
SCHAEFFER & ASSOCIATES LTD. design@schaeffers.com

Street Name	MH To	MH From	Res. Units	Commercial Area (ha) Drainage Area (ha)	Commercial Area (ha) Cumulative Area Served (hectares)	Infiltration Area Area(ha)	Infiltration Area Cumulative Area Served (hectares)	POPULATION RES (See Notes)	POPULATION Non-RES	Cumulative Population RES	Cumulative Population Non-Res	Peaking Factor	Residential Flow (l/s)	Commercial Flow (l/s)	Infiltration Flow (L/s)	Maximum Cumulative Flow l/s	Type of Pipe Factor (n)	Pipe Dia (mm)	Minimum Grade (%)	Capacity at Minimum Grade l/s	Length of Sewer (meters)	Actual Velocity (m.s)	Full Velocity (m.s)	% FULL	Comments
	MH #	MH #			A					P	P	M	Q	Q	Qi	Qt	n			Q full		V	V full	Qt/Qfull	
Newtonbrook St. Ext.	PLUG	MH4A	406	0.21	0.21	0.48	0.48	705 *	0	705	N/A	3.89	14.28	0.44	0.12	14.85	0.013	250	2.00	84.10	11.10	0.00	0.00	17.7%	
Newtonbrook St. Ext.	MH4A	MH3A		0.00	0.21	0.45	0.93	0	0	705	N/A	3.89	14.28	0.44	0.24	14.96	0.013	250	0.50	42.05	10.20	0.78	0.86	35.6%	
					0.21		**0.93**			**705**															
Newtonbrook St. Ext.	PLUG	MH3A	390	0.00	0.00	0.48	0.48	705 *	0	705	N/A	3.89	14.28	0.00	0.12	14.41	0.013	250	2.00	84.10	11.20	1.28	1.71	17.1%	
Newtonbrook St. Ext.	MH3A	MH2A		0.00	0.21	0.10	1.50	0	0	1409	N/A	3.70	27.15	0.44	0.39	27.98	0.013	250	0.50	42.05	35.10	0.92	0.86	66.5%	
					0.21		**1.50**			**1409**															
Newtonbrook St. Ext.	PLUG	MH2A	425	0.19	0.19	0.32	0.32	728 *	0	728	N/A	3.88	14.73	0.40	0.08	15.21	0.013	250	2.00	84.10	11.90	1.31	1.71	18.1%	
Newtonbrook St. Ext.	MH2A	MH1A		0.00	0.40	0.07	1.89	0	0	2137	N/A	3.56	39.66	0.84	0.49	40.99	0.013	300	0.50	68.38	27.70	1.01	0.97	59.9%	
					0.40		**1.89**			**2137**															
Newtonbrook St. Ext.	PLUG	MH1A	390	0.00	0.00	0.32	0.32	728 *	0	728	N/A	3.88	14.73	0.00	0.08	14.81	0.013	250	2.00	84.10	14.50	0.00	0.00	17.6%	
Newtonbrook St. Ext.	MH1A	Ex.MH		0.00	0.40	0.00	2.20	0	0	2865	N/A	3.46	51.62	0.84	0.57	53.03	0.013	300	0.50	68.38	22.00	1.07	0.97	77.6%	
					0.40		**2.20**			**2865**															

Notes:
- Building statistics for unit counts and commercial areas for each Tower are based on Architectural Coordination set, revised 2019-04-18.
- Population counts for residential component of site plan block has been determined utilizing varied persons per unit rates per City of Toronto Sewer Design Guidelines.
- Commercial Flow has been calculated based on Commercial area.

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5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
STORM & SANITARY DESIGN SHEETS

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018–4685
SCALE	N.T.S.			DRAWING NUMBER	DS-1		
DATE	MARCH 2019					REF FILES:	

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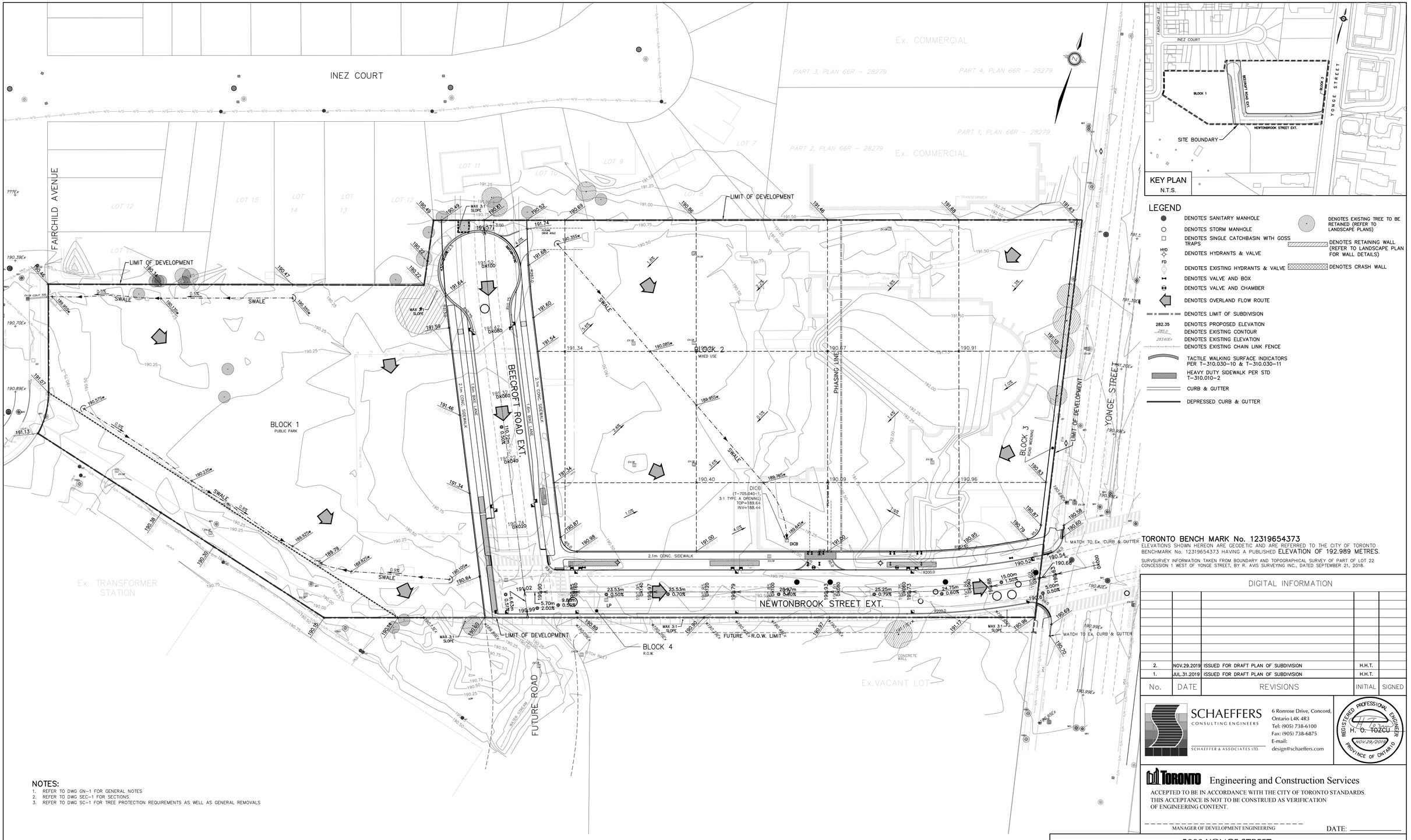

KEY PLAN
N.T.S.

LEGEND

- DENOTES SANITARY MANHOLE
- DENOTES STORM MANHOLE
- DENOTES SINGLE CATCHBASIN WITH GOSS TRAPS
- DENOTES HYDRANTS & VALVE
- DENOTES EXISTING HYDRANTS & VALVE
- DENOTES VALVE AND BOX
- DENOTES VALVE AND CHAMBER
- DENOTES OVERLAND FLOW ROUTE
- DENOTES LIMIT OF SUBDIVISION
- 282.35 DENOTES PROPOSED ELEVATION
- 285.0 DENOTES EXISTING CONTOUR
- 283.6EX DENOTES EXISTING ELEVATION
- DENOTES EXISTING CHAIN LINK FENCE
- TACTILE WALKING SURFACE INDICATORS PER T-310.030-10 & T-310.030-11
- HEAVY DUTY SIDEWALK PER STD T-310.010-2
- CURB & GUTTER
- DEPRESSED CURB & GUTTER
- DENOTES EXISTING TREE TO BE RETAINED (REFER TO LANDSCAPE PLANS)
- DENOTES RETAINING WALL (REFER TO LANDSCAPE PLAN FOR WALL DETAILS)
- DENOTES CRASH WALL

TORONTO BENCH MARK No. 12319654373

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PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

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2. REFER TO DWG SEC-1 FOR SECTIONS
3. REFER TO DWG SC-1 FOR TREE PROTECTION REQUIREMENTS AS WELL AS GENERAL REMOVALS

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
GRADING PLAN

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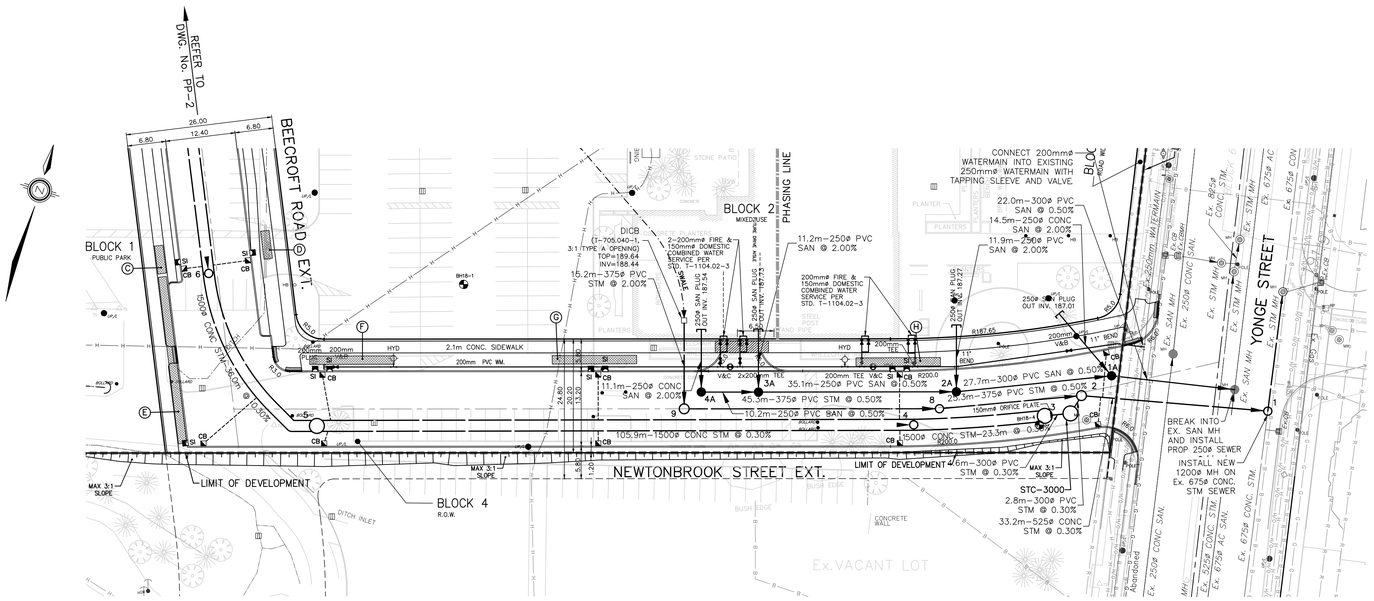

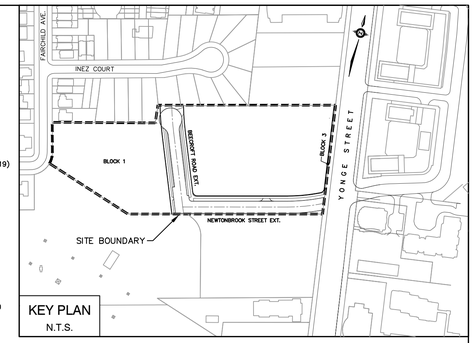

PAVEMENT MAKE-UP FOR BLOCK 2 DRIVEWAYS

(AS PER CITY STD T-310.050-8)

40mm SUPERPAVE SP 9.5, TRAFFIC CATEGORY B,PG 58-28 TOP (SURFACE)
60mm SUPERPAVE SP 19.0, TRAFFIC CATEGORY B,PG 58-28 BASE (BINDER)
150mm GRANULAR 'A'

PAVEMENT MAKE-UP FOR PUBLIC ROADS

(AS PER GEO-TECHNICAL REPORT RECOMMENDATIONS BY DS CONSULTANTS LTD., REVISED JUNE 24, 2019)

40mm SUPERPAVE SP 12.5B
70mm SUPERPAVE SP 19.0B
150mm GRANULAR 'A'
150mm GRANULAR 'B' (TYPE II)

NOTES:

1. FOR GENERAL NOTES REFER TO DWG. No. GN-1.
2. FOR SILTATION CONTROL MEASURES REFER TO SC-1 AND SC-2.
3. THE LOCATION OF ALL UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO COMMENCING THE CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITIES OF DAMAGE.
4. ANY CONFLICTS WITH EXISTING SERVICES AND/OR UTILITIES SHALL BE REPORTED TO THE ENGINEER FOR REVIEW AND ADVICE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. INFORMATION REGARDING ANY EXISTING SERVICES AND/OR UTILITIES SHOWN ON THIS DRAWING ARE FURNISHED AS THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE SEES FIT WITH THE UNDERSTANDING THAT THE OWNER, ENGINEER AND CITY DISCLAIM ALL RESPONSIBILITY FOR ITS ACCURACY AND/OR SUFFICIENCY.
6. THE CONTRACTOR SHALL PROVIDE DETAILS TO SUPPORT THE EX. SERVICES AND/OR UTILITIES FOR ENGINEER'S APPROVAL PRIOR TO THE START OF CONSTRUCTION.

SPECIAL NOTES:

1. ALL PROPOSED PIPES IN THE EXISTING R.O.W. TO BE CONSTRUCTED IN VERTICAL TRENCH BOX. THE TRENCH SHALL BE BACKFILLED WITH UNSHRINKABLE MATERIAL.
2. ANY REQUIRED DEWATERING OF SEWER TRENCHES SHALL BE AS PER SOILS REPORT.
3. ANY WATER SERVICE EXCEEDING 30m IN LENGTH WILL HAVE A DIA. OF 25mm.
4. WHERE THE WATERMAIN WILL BE INSTALLED IN FILL AREAS FOR ANY REASON SUCH AS EXCAVATION OF TRENCHES, SITE DEMOLITION BACKFILL, ETC. THE WATERMAIN SHALL BE CONSTRUCTED WITH RESTRAINED JOINTS.

LEGEND

- DENOTES Ex. VALVE AND BOX
- DENOTES VALVE AND BOX
- DENOTES HYDRANT AND VALVE
- CB / DCB — DENOTES SINGLE OR DOUBLE CATCHBASIN WITH CB SHIELD INSERT (SEE DETAIL ON D-2)
- SI — DENOTES STANDARD SIDE INLET WITH PIPE DRAIN PER CITY OF TORONTO GSTG STD. G-3
- DENOTES SANITARY MANHOLE
- DENOTES STORM MANHOLE
- DENOTES WATER VALVE AND MAIN STOP
- B — DENOTES BIORETENTION LID FEATURE (REFER TO DETAILS SHEETS)
- DENOTES RETAINING / CRASH WALL
- DENOTES EXISTING CHAIN LINK FENCE
- DENOTES LIMIT OF SUBDIVISION
- TACTILE WALKING SURFACE INDICATORS PER T-310.030-10 & T-310.030-11

Bioretention LID Feature Construction Specification Table

LID	Dimension [m]		Makeup			Liner	
	L	W	Filter Media [m]	Choker [m]	Gravel Storage Layer [m]	Geotextile	Impervious
A	2.22	1.8	1	0.1	0.3		✓
B	2.22	1.8	1	0.1	0.3		✓
C	3.89	1.8	1	0.1	0.3		✓
D	3.89	1.8	1	0.1	0.3		✓
E	12.50	1.8	1	0.1	0.5	✓	
F	12.50	1.8	1	0.1	0.5	✓	
G	12.50	1.8	1	0.1	0.5	✓	
H	2.78	1.8	1	0.1	0.3		✓

SPECIAL NOTES:

1) ALL PVC PIPES TO BE INSTALLED WITH BEDDING CLASS 'B' AS PER OPSD 802.010, UNLESS OTHERWISE NOTED.
2) ALL CONC PIPES TO BE INSTALLED WITH BEDDING CLASS 'B' AS PER OPSD 802.030, UNLESS OTHERWISE NOTED.

TORONTO BENCH MARK No. 12319654373

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARK No. 12319654373 HAVING A PUBLISHED ELEVATION OF 192.989 METRES.

SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

No.	DATE	REVISIONS	INITIAL	SIGNED
2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

SCHAEFFERS CONSULTING ENGINEERS
SCHAEFFER & ASSOCIATES LTD.
6 Ronrose Drive, Concord, Ontario L4K 4R3
Tel: (905) 738-6100
Fax: (905) 738-6875
E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER — H. H. TOZCU — NOV.29/2019 — PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER, DEVELOPMENT ENGINEERING DATE: _____

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
NEWTONBROOK STREET EXT.
FROM STA. 0+000.000 TO STA. 0+180.000

DESIGN	H.H.T.	DRAWN	M.P.	CHECKED	H.T.	PROJECT No.	2018-4685
SCALE	HORIZ 1:500 VERT 1:100			DRAWING NUMBER	PP-1		
DATE	APRIL 2018						

REF FILES:

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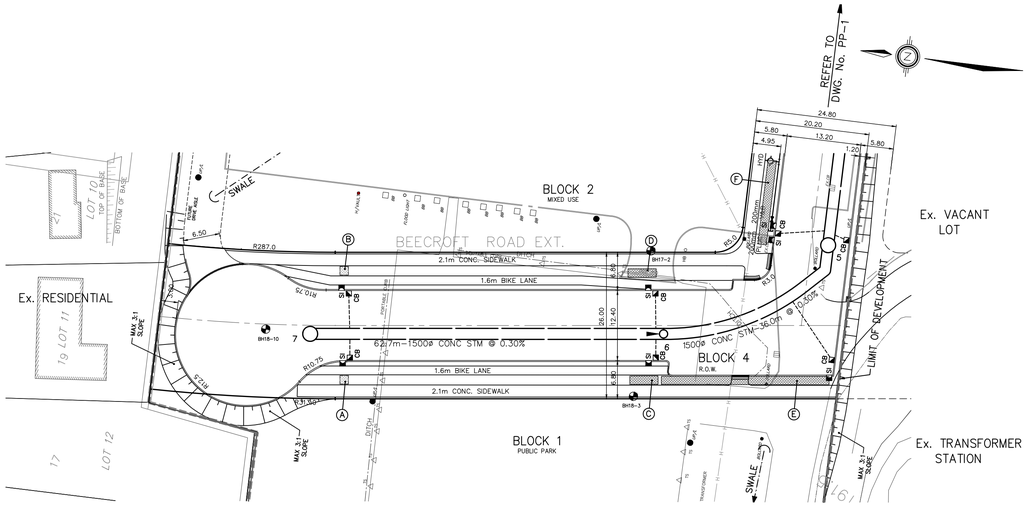
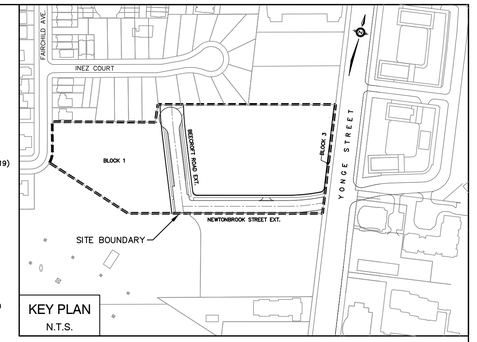




PAVEMENT MAKE-UP FOR BLOCK 2 DRIVEWAYS

(AS PER CITY STD T-310.050-8)

40mm SUPERPAVE SP 9.5, TRAFFIC CATEGORY B,PG 58-28 TOP (SURFACE)
60mm SUPERPAVE SP 19.0, TRAFFIC CATEGORY B,PG 58-28 BASE (BINDER)
150mm GRANULAR 'A'

PAVEMENT MAKE-UP FOR PUBLIC ROADS

(AS PER GEO-TECHNICAL REPORT RECOMMENDATIONS BY DS CONSULTANTS LTD., REVISED JUNE 24, 2019)

40mm SUPERPAVE SP 12.5B
70mm SUPERPAVE SP 19.0B
150mm GRANULAR 'A'
150mm GRANULAR 'B' (TYPE II)

NOTES:

1. FOR GENERAL NOTES REFER TO DWG. No. GN-1.
2. FOR SILTATION CONTROL MEASURES REFER TO SC-1 AND SC-2.
3. THE LOCATION OF ALL UNDERGROUND AND ABOVEGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON CONTRACT DRAWINGS, AND WHERE SHOWN THE ACCURACY OF THE LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. PRIOR TO COMMENCING THE CONSTRUCTION, THE CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITIES OF DAMAGE.
4. ANY CONFLICTS WITH EXISTING SERVICES AND/OR UTILITIES SHALL BE REPORTED TO THE ENGINEER FOR REVIEW AND ADVICE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. INFORMATION REGARDING ANY EXISTING SERVICES AND/OR UTILITIES SHOWN ON THIS DRAWING ARE FURNISHED AS THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL INTERPRET THIS INFORMATION AS HE SEES FIT WITH THE UNDERSTANDING THAT THE OWNER, ENGINEER AND CITY DISCLAIM ALL RESPONSIBILITY FOR ITS ACCURACY AND/OR SUFFICIENCY.
6. THE CONTRACTOR SHALL PROVIDE DETAILS TO SUPPORT THE EX. SERVICES AND/OR UTILITIES FOR ENGINEER'S APPROVAL PRIOR TO THE START OF CONSTRUCTION.

SPECIAL NOTES:

1. ALL PROPOSED PIPES IN THE EXISTING R.O.W. TO BE CONSTRUCTED IN VERTICAL TRENCH BOX. THE TRENCH SHALL BE BACKFILLED WITH UNSHRINKABLE MATERIAL.
2. ANY REQUIRED DEWATERING OF SEWER TRENCHES SHALL BE AS PER SOILS REPORT.
3. ANY WATER SERVICE EXCEEDING 30m IN LENGTH WILL HAVE A DIA. OF 25mm.
4. WHERE THE WATERMAIN WILL BE INSTALLED IN FILL AREAS FOR ANY REASON SUCH AS EXCAVATION OF TRENCHES, SITE DEMOLITION BACKFILL, ETC. THE WATERMAIN SHALL BE CONSTRUCTED WITH RESTRAINED JOINTS.

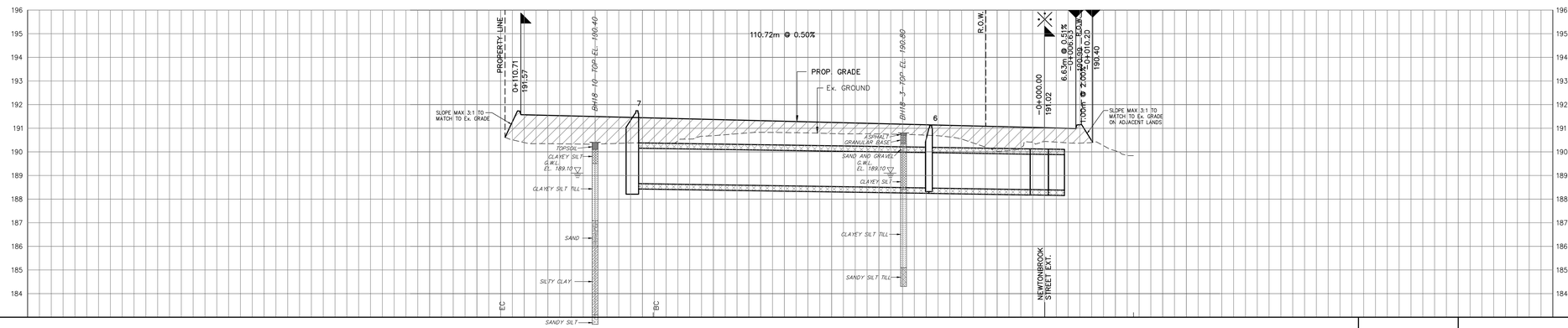
LEGEND

- DENOTES Ex. VALVE AND BOX
- DENOTES VALVE AND BOX
- DENOTES HYDRANT AND VALVE
- CB / DCB — DENOTES SINGLE OR DOUBLE CATCHBASIN WITH CB SHIELD INSERT (SEE DETAIL ON D-2)
- SI — DENOTES STANDARD SIDE INLET WITH PIPE DRAIN PER CITY OF TORONTO GSTG STD. G-3
- DENOTES SANITARY MANHOLE
- DENOTES STORM MANHOLE
- DENOTES WATER VALVE AND MAIN STOP
- (B) — DENOTES BIORETENTION LID FEATURE (REFER TO DETAILS SHEETS)
- DENOTES RETAINING / CRASH WALL
- DENOTES EXISTING CHAIN LINK FENCE
- DENOTES LIMIT OF SUBDIVISION
- TACTILE WALKING SURFACE INDICATORS PER T-310.030-10 & T-310.030-11

Bioretention LID Feature Construction Specification Table							
LID	Dimension [m]		Makeup			Liner	
	L	W	Filter Media [m]	Choker [m]	Gravel Storage Layer [m]	Geotextile	Impervious
A	2.22	1.8	1	0.1	0.3		✓
B	2.22	1.8	1	0.1	0.3		✓
C	3.89	1.8	1	0.1	0.3		✓
D	3.89	1.8	1	0.1	0.3		✓
E	12.50	1.8	1	0.1	0.5	✓	
F	12.50	1.8	1	0.1	0.5	✓	
G	12.50	1.8	1	0.1	0.5	✓	
H	2.78	1.8	1	0.1	0.3		✓

SPECIAL NOTES:

1) ALL PVC PIPES TO BE INSTALLED WITH BEDDING CLASS 'B' AS PER OPSD 802.010, UNLESS OTHERWISE NOTED.
2) ALL CONC PIPES TO BE INSTALLED WITH BEDDING CLASS 'B' AS PER OPSD 802.030, UNLESS OTHERWISE NOTED.



TORONTO BENCH MARK No. 12319654373
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SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

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2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

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E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER — H. O. TOZCU — NOV.29/2019 — PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER, DEVELOPMENT ENGINEERING DATE: _____

SANITARY SEWER	
STORM SEWER	T88.665E — 1500ø CONC STM 62.7m @ 0.30% CL-65D — T88.477NW / T88.477SE — 1500ø CONC STM-31.5m @ 0.30% CL-65D
PROPOSED ELEVATION	190.33 (191.52) · 190.35 (191.42) · 190.83 (191.32) · 190.76 (191.22) · 190.63 (191.12) · 190.44 (191.02)
STATION	0+120.00 · 0+114.05 · 0+100.00 / 0+098.39 · 0+082.72 / 0+080.00 · 0+060.00 · 0+040.00 · 0+020.00 · 0+000.00 · 0+018.82 / 0+020.00

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
BEECROFT ROAD EXT.
FROM STA. 0+000.000 TO STA. 0+120.000

DESIGN	H.H.T.	DRAWN	M.P.	CHECKED	H.T.	PROJECT No.	2018-4685
SCALE	HORIZ 1:500 VERT 1:100			DRAWING NUMBER	PP-2		
DATE	APRIL 2018					REF FILES:	

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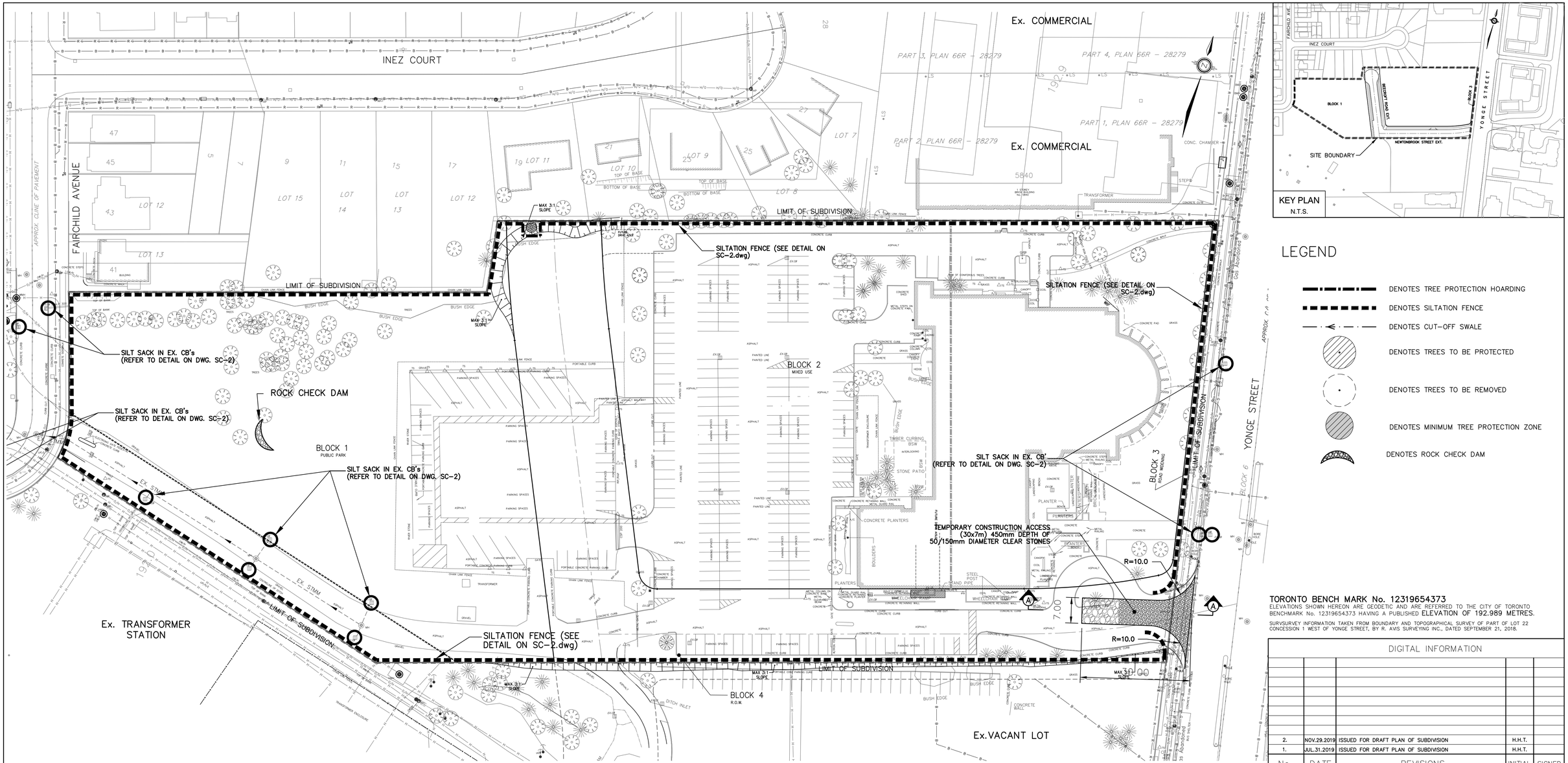

LEGEND

- DENOTES TREE PROTECTION HOARDING
- DENOTES SILTATION FENCE
- DENOTES CUT-OFF SWALE
- DENOTES TREES TO BE PROTECTED
- DENOTES TREES TO BE REMOVED
- DENOTES MINIMUM TREE PROTECTION ZONE
- DENOTES ROCK CHECK DAM

TORONTO BENCH MARK No. 12319654373
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SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AXIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

No.	DATE	REVISIONS	INITIAL	SIGNED
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1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

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REGISTERED PROFESSIONAL ENGINEER
H. O. TOZCU
NOV.29/2019
PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

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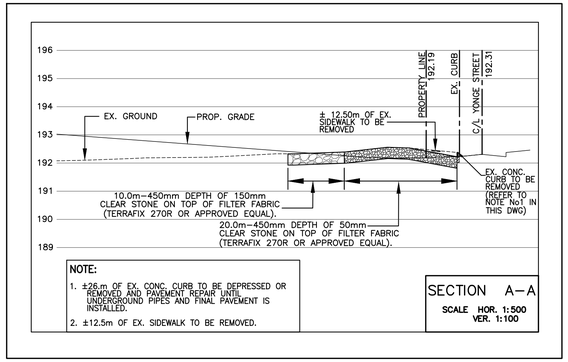
MANAGER OF DEVELOPMENT ENGINEERING DATE: _____



NOTE:
1. ±26.m OF EX. CONC. CURB TO BE DEPRESSED OR REMOVED AND PAVEMENT REPAIR UNTIL UNDERGROUND PIPES AND FINAL PAVEMENT IS INSTALLED.
2. ±12.5m OF EX. SIDEWALK TO BE REMOVED.

SECTION A-A
SCALE HOR. 1:500
VER. 1:100

Erosion and Sediment Control / General Notes

1. Sediment barriers, check dams and temporary construction access to be installed prior to the beginning of construction.
2. All sediment control devices to be routinely inspected and maintained in proper working order until area is stabilized.
3. If necessary, trucks will be washed down before leaving the site.
4. The site will be wet down if necessary to control dust.
5. All construction equipment must be parked on-site.
6. Will comply with City of Toronto Noise By-Law.
7. Sediment Control Fence to be as per City of Toronto standard T-219.130-l.
8. All construction vehicles to enter and exit site from temporary construction access.
9. All topsoil stockpiles to be surrounded with sediment control fencing.
10. Filter fabric to be placed under grates on all catchbasins to trap sediment. Silt traps are to he cleaned regularly and are not to be removed until such time as the curbs are constructed and the boulevards are sodded or backyards graded and sodded. Filter fabric for silt control to be Terra Fix 270R or approved equivalent.
11. Filter Cloth will be placed on the catchbasins on public street across the property's frontage.
12. In the case of any conflict with another plan, this plan prevails only in respect to construction measures and activities such as the Construction Access, Silt Fence, Security Fence, Sediment Control and Mud Mats.
13. Street sweeping, catch basin cleaning and dust control are the responsibility of the developer and must be kept under control on all roadways to the satisfaction of the City.

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
SILTATION CONTROL PLAN

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018-4685
SCALE	1:500			DRAWING NUMBER	SC-1		
DATE	MARCH 2019						

REF FILES:

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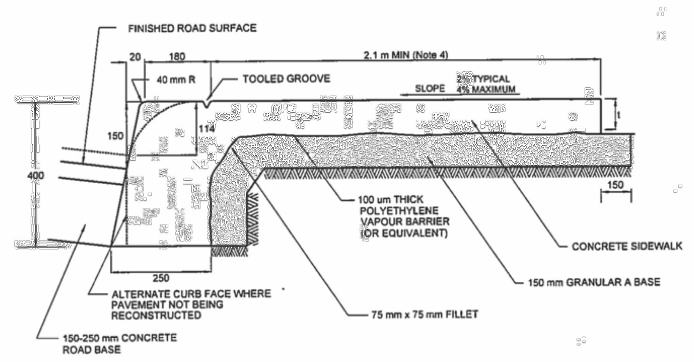
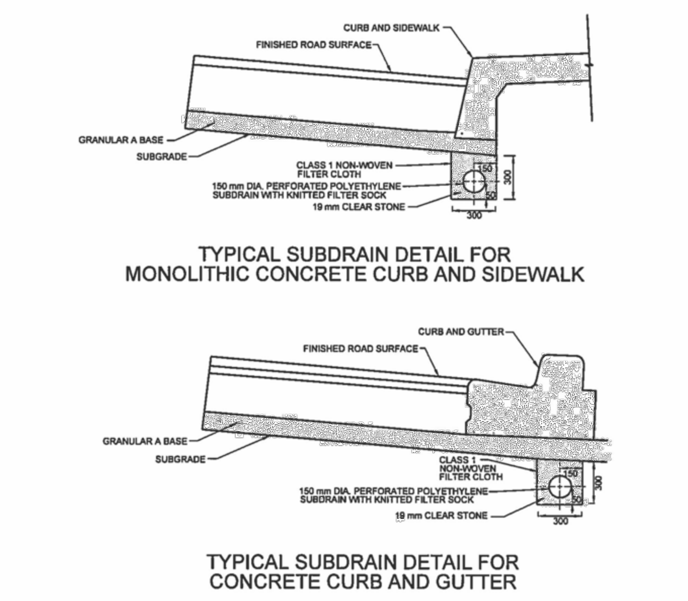


NOTES:

1. t = THICKNESS OF SIDEWALK.
2. SIDEWALK THICKNESS 150 mm EXCEPT ACROSS COMMERCIAL, INDUSTRIAL AND HIGH DENSITY RESIDENTIAL DRIVEWAY WHERE IT SHALL BE 180 mm.
3. JOINTS SHALL BE ACCORDING TO T-310.010-1.
4. ON LOCAL ROADS, THE MINIMUM SIDEWALK WIDTH CAN BE REDUCED TO 1.8M EXCEPT FOR NEW DEVELOPMENTS WHICH MUST ADHERE TO THE TORONTO GREEN STANDARDS AND DIPS.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — COMBINED CONCRETE CURB AND SIDEWALK — REV 3 — SEP 2017 — T-310.010-4 — NTS — SHEET 1

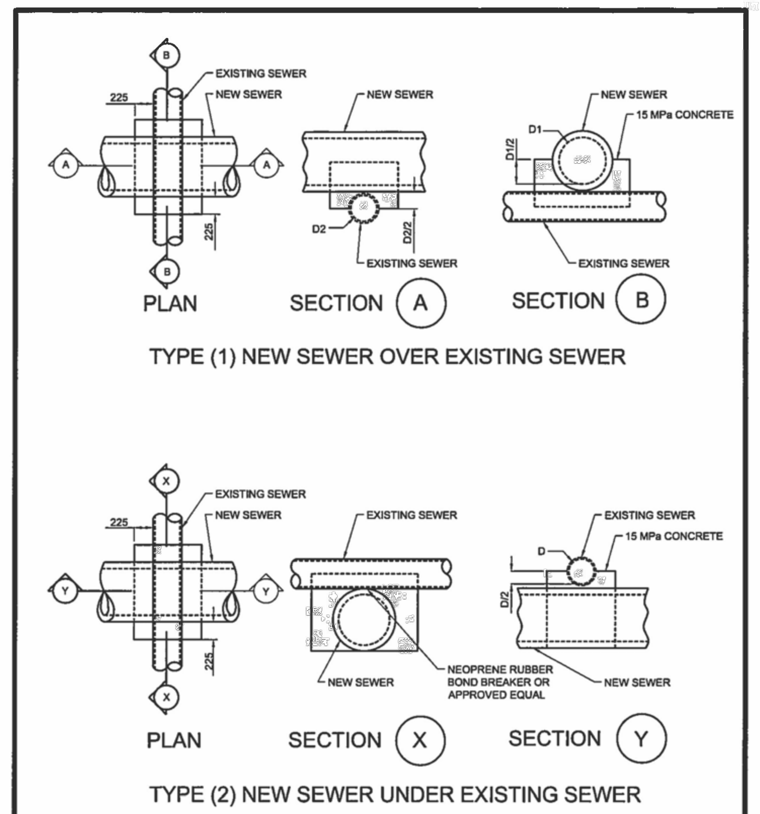


NOTES:

1. FILTER CLOTH SHALL BE OVERLAPPED AT TOP AND INSTALLED ACCORDING TO TS 405.
2. IF THE EXISTING CONCRETE CURB AND GUTTER IS TO REMAIN IN PLACE, THE SUBDRAIN SHALL BE PLACED BEHIND THE CURB UNDER THE STONE BASE. THE SUBDRAIN SHALL BE PLACED AS CLOSE AS POSSIBLE TO THE CENTRELINE OF THE CURB.
3. LEDGE BEHIND CURB IS FOR ILLUSTRATION ONLY, REFER TO T-600.05-1 FOR DETAIL.

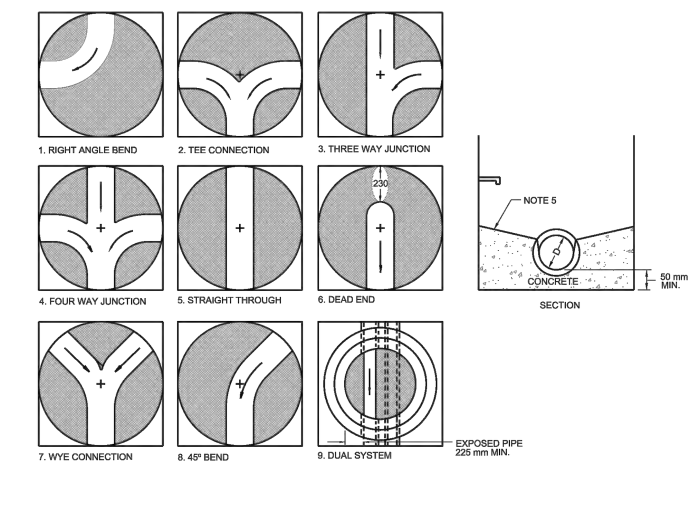
All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — ROADWAY SUBDRAINS — REV 3 — NOV 2014 — T-216.02-8 — NTS — SHEET 1



All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING — DETAIL OF CROSSING OF NEW SEWER OVER/UNDER EXISTING SEWER — REV 1 — APR 2013 — T-1007.01-7 — NTS — SHEET 1



NOTES:

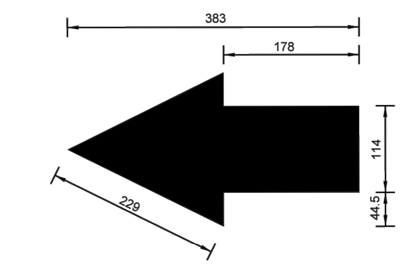
1. CONCRETE FOR BENCHING SHALL BE 32 MPa.
2. BENCHING TO BE GIVEN WOOD FLOAT FINISH, CHANNEL TO BE GIVEN STEEL TROWEL FINISH.
3. ALL DIMENSIONS ARE NOMINAL.
4. TOP OF BENCHING SHALL BE SLOPED NO GREATER THAN 4:1 NOR LESS THAN 8:1 (HORIZONTAL TO VERTICAL).
5. FOR STORM AND SANITARY SEWERS, BENCHING TO CROWN.

MAXIMUM SIZE HOLE IN THE WALL IN PRECAST RISER SECTIONS

MAINTENANCE HOLE DIAMETER	NO. 1– 4	NO. 5 AND 6	NO. 8	No. 7 INLET HOLE	No. 7 OUTLET HOLE	NO. 9 mm
1200	700	860	780	700	860	250 + 375
1500	860	1220	960	860	1170	375 + 525
1800	1220	1485	1220	1220	1485	525 + 600
2400	1485	2020	1760	1485	2020	750 + 960

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING — MAINTENANCE HOLE BENCHING DETAILS AND PIPE OPENING ALTERNATIVES — REV 2 — APR 2013 — T-701.021 — NTS — SHEET 1

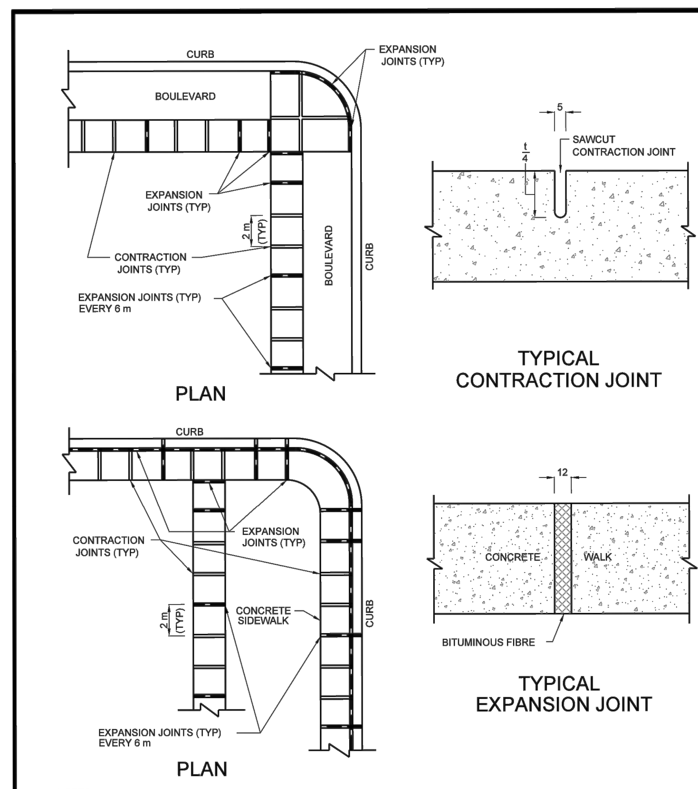


NOTES:

1. ARROW TO BE SOLID WHITE PAINT (2 COATS) OR WHITE DURABLE MARKING.
2. ARROW TO BE INSTALLED IN CENTRE OF LANE CLOSEST TO CENTRELINE OF ROAD, ON THE SAME SIDE AS CATCH BASIN.
3. AT DOUBLE CATCH BASINS, ONE ARROW TO BE INSTALLED.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — CATCH BASIN INDICATOR ARROW MARKING — REV 0 — NOV 2014 — T-216.02-25 — NTS — SHEET 1

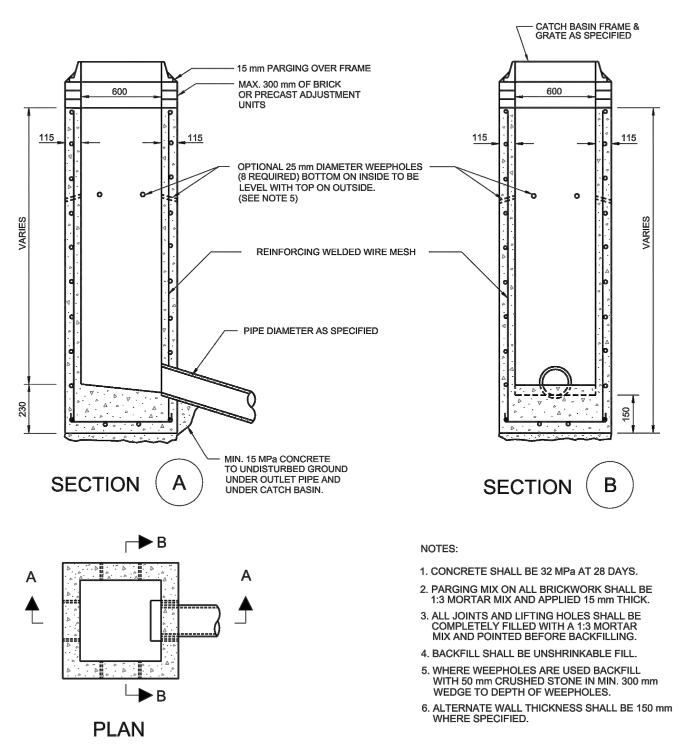


NOTES:

1. POLES AND OTHER FIXED OBJECTS SHALL BE ISOLATED BY THE USE OF EXPANSION JOINTS.
2. t = THICKNESS OF SIDEWALK.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — LOCATION AND DETAIL OF JOINTS FOR SIDEWALK — REV 2 — NOV 2016 — T-310.010-1 — NTS — SHEET 1

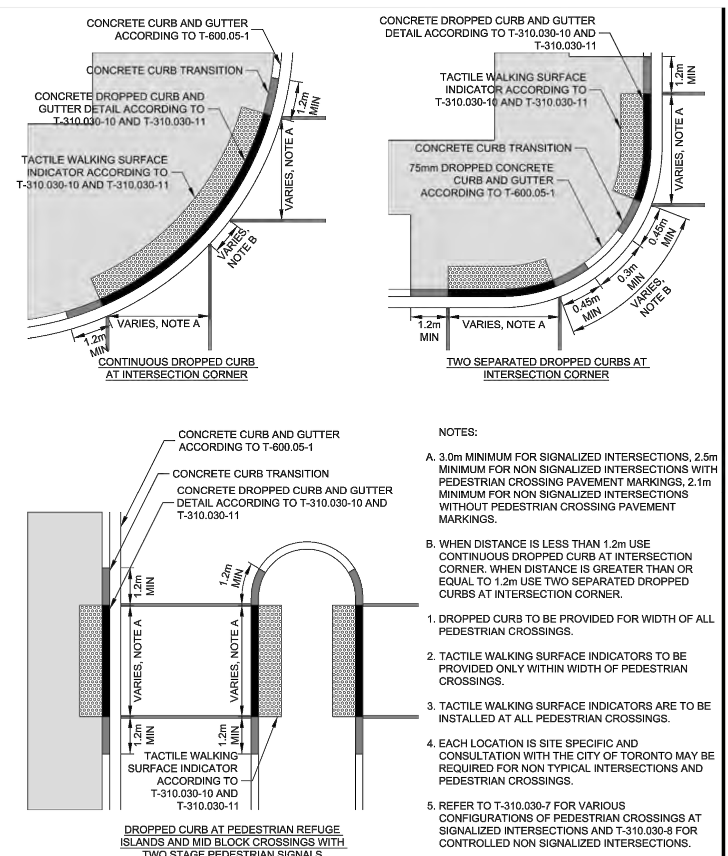


NOTES:

1. CONCRETE SHALL BE 32 MPa AT 28 DAYS.
2. PARGING MIX ON ALL BRICKWORK SHALL BE 1:3 MORTAR MIX AND APPLIED 15 mm THICK.
3. ALL JOINTS AND LIFTING HOLES SHALL BE COMPLETELY FILLED WITH A 1:3 MORTAR MIX AND POINTED BEFORE BACKFILLING.
4. BACKFILL SHALL BE UNSHRINKABLE FILL.
5. WHERE WEEPHOLES ARE USED BACKFILL WITH 50 mm CRUSHED STONE IN MIN. 300 mm WEDGE TO DEPTH OF WEEPHOLES.
6. ALTERNATE WALL THICKNESS SHALL BE 150 mm WHERE SPECIFIED.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING — PRECAST CATCH BASIN WITHOUT SUMP — REV 1 — APR 2013 — T-705.010-1 — NTS — SHEET 1



NOTES:

A. 3.0m MINIMUM FOR SIGNALIZED INTERSECTIONS, 2.5m MINIMUM FOR NON SIGNALIZED INTERSECTIONS WITH PEDESTRIAN CROSSING PAVEMENT MARKINGS, 2.1m MINIMUM FOR NON SIGNALIZED INTERSECTIONS WITHOUT PEDESTRIAN CROSSING PAVEMENT MARKINGS.
B. WHEN DISTANCE IS LESS THAN 1.2m USE CONTINUOUS DROPPED CURB AT INTERSECTION CORNER. WHEN DISTANCE IS GREATER THAN OR EQUAL TO 1.2m USE TWO SEPARATED DROPPED CURBS AT INTERSECTION CORNER.
1. DROPPED CURB TO BE PROVIDED FOR WIDTH OF ALL PEDESTRIAN CROSSINGS.
2. TACTILE WALKING SURFACE INDICATORS TO BE PROVIDED ONLY WITHIN WIDTH OF PEDESTRIAN CROSSINGS.
3. TACTILE WALKING SURFACE INDICATORS ARE TO BE INSTALLED AT ALL PEDESTRIAN CROSSINGS.
4. EACH LOCATION IS SITE SPECIFIC AND CONSULTATION WITH THE CITY OF TORONTO MAY BE REQUIRED FOR NON TYPICAL INTERSECTIONS AND PEDESTRIAN CROSSINGS.
5. REFER TO T-310.030-7 FOR VARIOUS CONFIGURATIONS OF PEDESTRIAN CROSSINGS AT SIGNALIZED INTERSECTIONS AND T-310.030-8 FOR CONTROLLED NON SIGNALIZED INTERSECTIONS.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — LOCATION OF DROPPED CURBS AT CONTROLLED INTERSECTIONS — REV 1 — NOV 2016 — T-310.030-9 — NTS — SHEET 1

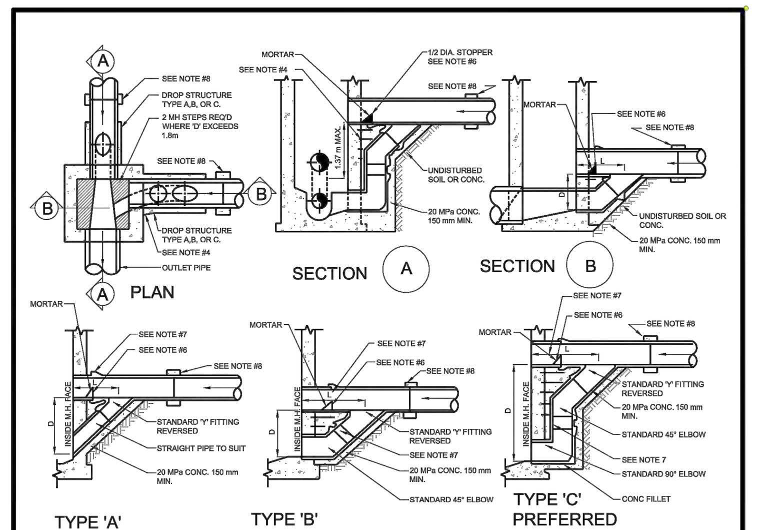


TABLE OF MINIMUM DIMENSIONS AND MAXIMUM VELOCITIES

DROP PIPE (mm)	TYPE 'A' 'D'	TYPE 'A' 'L'	TYPE 'B' 'D'	TYPE 'B' 'L'	TYPE 'C' 'D'	TYPE 'C' 'L'	MAX. VELOCITY m/sec NO STOPPER	MAX. VELOCITY m/sec STOPPER
200	.915	.815	.610	.760	1.22	1.07	1.42	3.78
250	1.02	.840	.650	.815	1.30	1.07	1.55	4.05
300	1.09	.865	.710	.915	1.45	1.14	1.71	4.11
375	1.17	.915	.915	1.14	1.91	1.22	1.92	4.18
450	1.30	.990	.990	1.22	2.06	1.30	2.16	4.27
525	1.42	1.04	1.07	1.30	2.21	1.45	2.35	4.45
600	1.52	1.09	1.14	1.37	2.44	1.52	2.53	4.60
675	1.63	1.14	1.22	1.45	2.51	1.60	2.70	4.72
750	1.73	1.22	1.30	1.52	2.67	1.68	2.83	5.00

DIMENSIONS IN METRES

NOTES:

1. DROP PIPE TO BE ONE SIZE SMALLER THAN INLET UNLESS OTHERWISE NOTED.
2. DROP PIPE TO HAVE CROWN LEVEL WITH OUTLET PIPE AND BENCHED TO CROWN.
3. DROP PIPE TO BLEND WITH FLOW.
4. DROP STRUCTURE TO BE ENCASED IN A MINIMUM OF 150 mm OF 20 MPa CONCRETE AND DOWELLED TO MAINTENANCE HOLE WITH 12 mm DIA. DOWELS, 450 mm LONG, EITHER SIDE OF DROP PIPE AND AT 300 mm C TO C.
5. MAXIMUM VELOCITIES SHOWN IN TABLE INDICATE MAXIMUM VELOCITY IN INCOMING PIPE WITH NO OVERSHOOTING.
6. WHEN USED ON STORM SEWERS OR SANITARY SEWERS 375 mm DIA. OR LARGER, A 1/2 DIA CONCRETE STOPPER MAY BE INSERTED IN THE INVERT OF THE MAIN LINE AS INDICATED.
7. ADJUSTMENT IN 'D' AND 'L' TO BE MADE WITH PLAIN END STRAIGHT PIPE.
8. WHERE 'Y' FITTING JOINS FIRST PIPE, A 300 mm WIDE BY 15 mm THICK 20 MPa CONCRETE COLAR IS TO BE CONSTRUCTED.
9. ALL CONCRETE IN DROP STRUCTURE TO BE 20 MPa AT 28 DAYS.
10. MINIMUM DIMENSIONS BASED ON USE OF STANDARD CONCRETE FITTINGS AS PER LATEST INFORMATION BY SUPPLIERS.
11. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S PERMISSIBLE VARIATIONS.
12. WHERE PIPES CONNECT TO MAINTENANCE HOLE, JOINTS ARE TO BE WATERTIGHT WITH APPROVED SEAL / JOINT WATERSTOP.

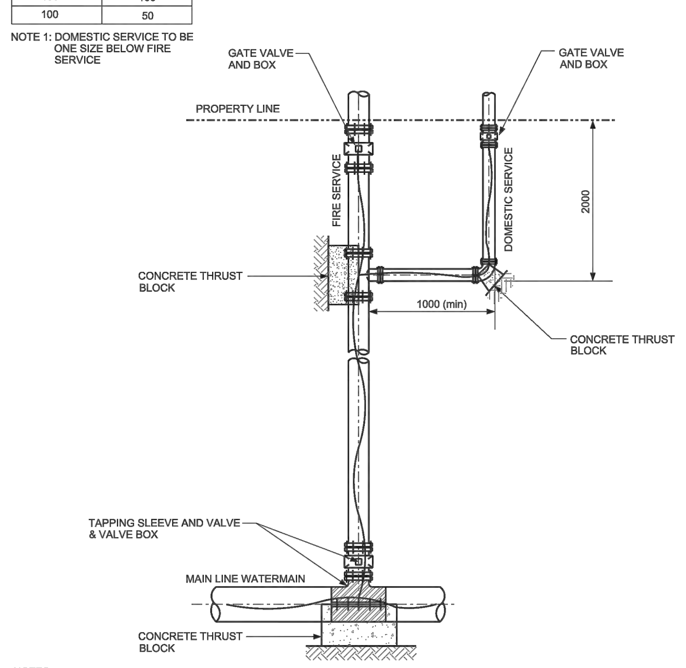
All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING — DROP STRUCTURES OF MAINTENANCE HOLES — REV 2 — APR 2014 — T-1003.01 — NTS — SHEET 1

DOMESTIC OFF FIRELINE

FIRE SERVICE SIZE (mm)	MAXIMUM DOMESTIC SIZE (mm)
200	150
150	100
100	50

NOTE 1: DOMESTIC SERVICE TO BE ONE SIZE BELOW FIRE SERVICE

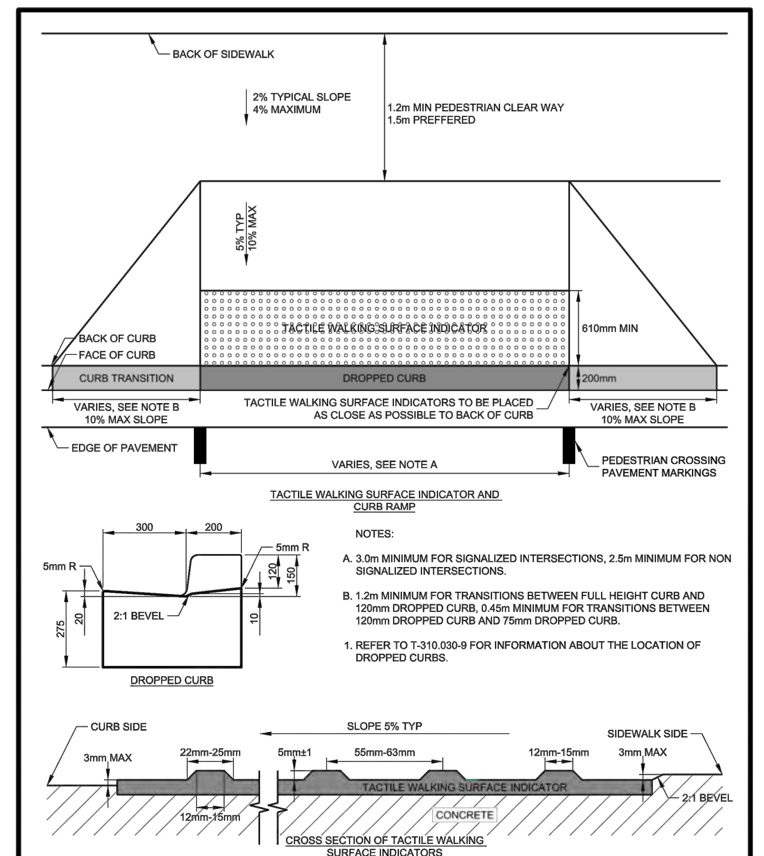


NOTES :

1. WHERE NO METALLIC PIPE IS USED, A RWU90, 10 GUAGE COPPER TRACER WIRE TO BE INSTALLED WITH THE PIPE AND BE BROUGHT TO THE SURFACE AT ALL VALVE BOX BOXES.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING — COMBINE FIRE AND DOMESTIC WATER CONNECTION — REV 0 — APR 2013 — T-1104.02-3 — NTS — SHEET 1

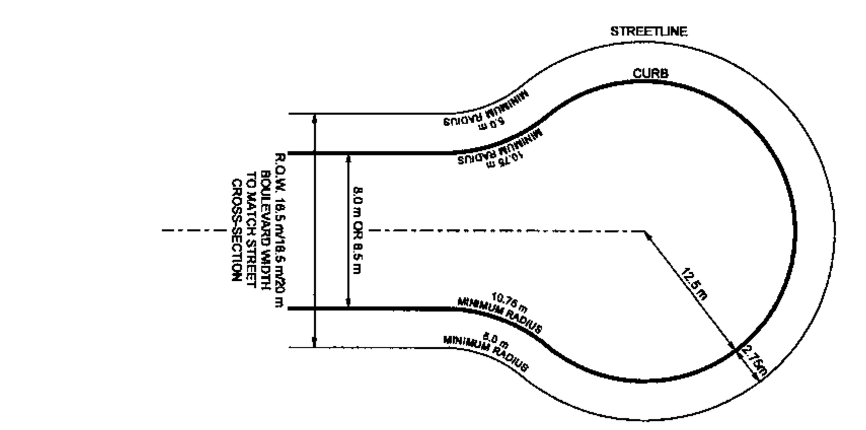


NOTES:

A. 3.0m MINIMUM FOR SIGNALIZED INTERSECTIONS, 2.5m MINIMUM FOR NON SIGNALIZED INTERSECTIONS.
B. 1.2m MINIMUM FOR TRANSITIONS BETWEEN FULL HEIGHT CURB AND 120mm DROPPED CURB, 0.45m MINIMUM FOR TRANSITIONS BETWEEN 120mm DROPPED CURB AND 75mm DROPPED CURB.
1. REFER TO T-310.030-9 FOR INFORMATION ABOUT THE LOCATION OF DROPPED CURBS.

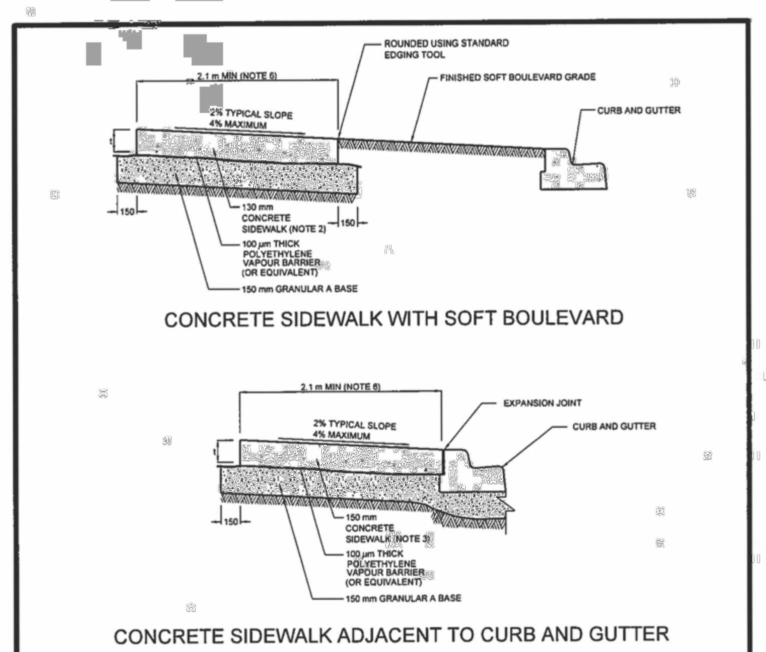
All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — TACTILE WALKING SURFACE INDICATOR AND CURB RAMP DETAIL — REV 1 — NOV 2016 — T-310.030-10 — NTS — SHEET 1



NOTES: DRAWING TO BE READ IN CONJUNCTION WITH CITY OF TORONTO POLICY AND STANDARDS FOR PUBLIC LOCAL RESIDENTIAL STREETS AND PRIVATE STREETS

TORONTO — SCALE: N.T.S. — DATE: NOVEMBER, 2006 — DRAFTING: — TURNING CIRCLE FOR LOCAL RESIDENTIAL STREETS — DRAWING NUMBER: DIPS - 5 — SHEET: 1

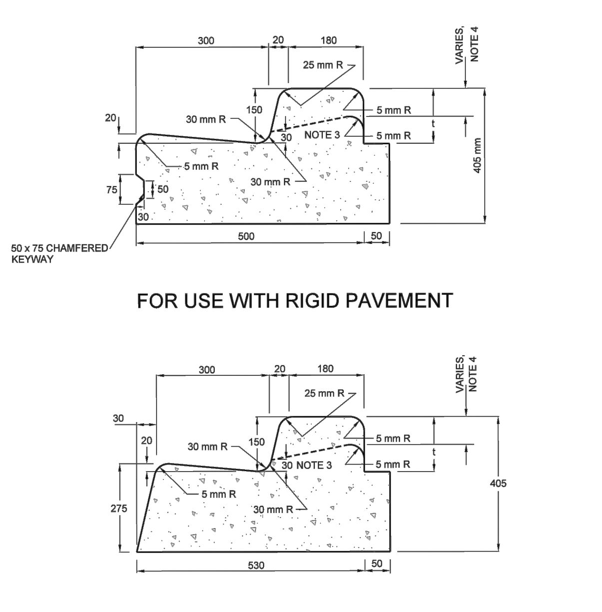


NOTES:

1. FOR CONCRETE SIDEWALK ABUTTING CURB OR CURB AND GUTTER REFER TO T-600.05-1 AND T-600.11-1.
2. SIDEWALK THICKNESS 130 mm EXCEPT ACROSS COMMERCIAL, INDUSTRIAL AND HIGH DENSITY RESIDENTIAL DRIVEWAY WHERE THICKNESS SHALL BE 180 mm.
3. SIDEWALK THICKNESS 150 mm EXCEPT ACROSS COMMERCIAL, INDUSTRIAL AND HIGH DENSITY RESIDENTIAL DRIVEWAY WHERE THICKNESS SHALL BE 180 mm.
4. t = THICKNESS OF SIDEWALK.
5. JOINTS SHALL BE ACCORDING TO T-310.010-1.
6. ON LOCAL ROADS, THE MINIMUM SIDEWALK WIDTH CAN BE REDUCED TO 1.8 m EXCEPT FOR NEW DEVELOPMENTS, WHICH MUST ADHERE TO THE TORONTO GREEN STANDARDS AND DIPS.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — CONCRETE SIDEWALK WITH SOFT BOULEVARD OR CONCRETE SIDEWALK ADJACENT TO CURB — REV 4 — SEP 2017 — T-310.010-2 — NTS — SHEET 1

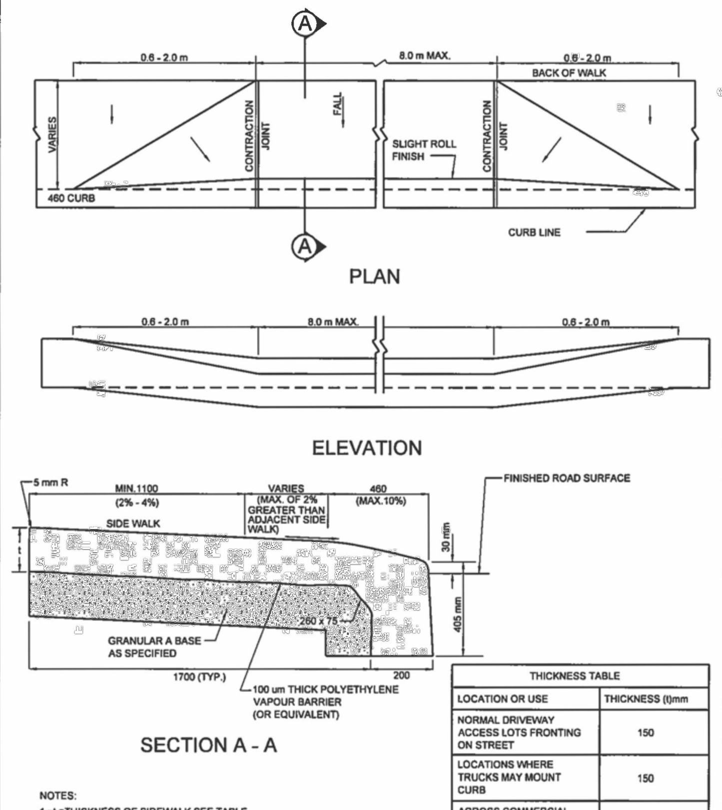


NOTES:

1. EXPANSION/CONTRACTION JOINTS SHALL BE SPACED 6 m APART OR COINCIDE WITH JOINTS IN ADJACENT SIDEWALK AND CONCRETE ROAD BASE.
2. t =130 mm, 150 mm OR 180 mm TO SUIT CONCRETE SIDEWALK, CONCRETE BOULEVARD OR CONCRETE DRIVEWAY MEASURED FROM THE TOP OF CURB DEPRESSION.
3. 10 mm FOR SIDEWALK RAMPS AND DISABILITY ACCESSES.
4. ENTRANCE TERMINATION ACCORDING TO DRAWING T-350.01. DROP CURB AT ENTRANCE, TYP. 70-100 mm, DEPENDS ON SITE CONDITION AS SPECIFIED.
5. 2-15 M REINFORCING BARS FOR INDUSTRIAL DRIVEWAYS, 50 mm CONCRETE COVER, TO BE EXTENDED 600 mm BEYOND WIDTH OF DRIVEWAY ON EACH END.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — CONCRETE CURB AND GUTTER — REV 3 — NOV 2014 — T-600.05-1 — NTS — SHEET 1



THICKNESS TABLE

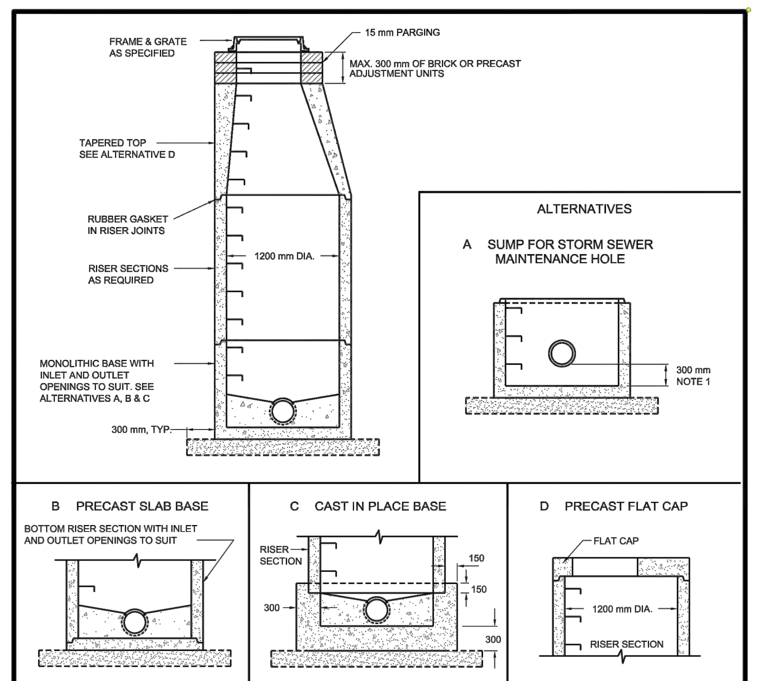
LOCATION OR USE	THICKNESS (t)mm
NORMAL DRIVEWAY ACCESS LOTS FRONTING ON STREET	150
LOCATIONS WHERE TRUCKS MAY MOUNT CURB	150
ACROSS COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL DRIVEWAYS	180

NOTES:

1. t =THICKNESS OF SIDEWALK SEE TABLE.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING — VEHICLE ENTRANCE IN COMBINED CURB AND SIDEWALK — REV 3 — NOV 2014 — T-310.050-1 — NTS — SHEET 1

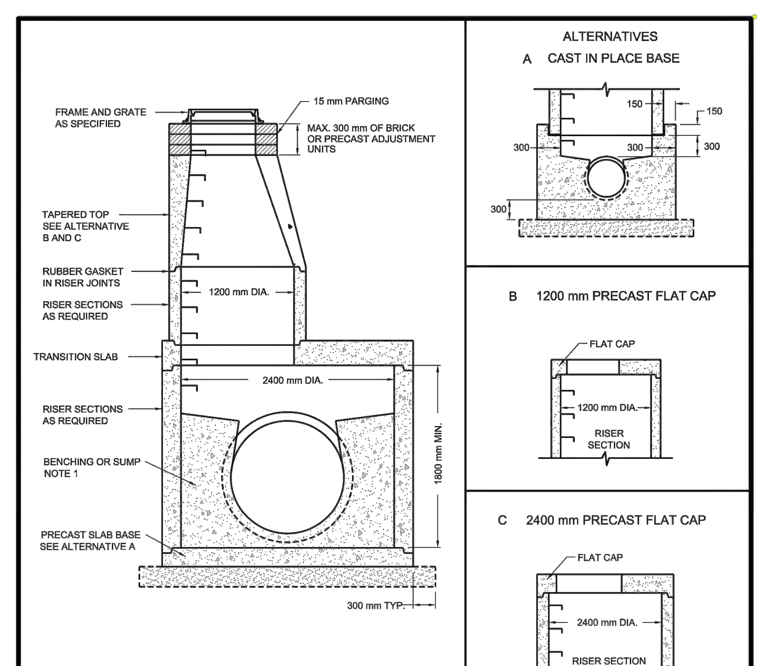


NOTES:

1. THE SUMP IS MEASURED FROM THE LOWEST INVERT.
2. 150 mm OF COMPACTED GRANULAR A OR UNSHRINKABLE FILL TO BE PLACED ALL AROUND THE MAINTENANCE HOLE.
3. PRECAST CONCRETE COMPONENTS ACCORDING TO OPSD 701.030, OPSD 701.031 AND OPSD 701.032.
4. STRUCTURES EXCEEDING 5.0m IN DEPTH TO INCLUDE SAFETY PLATFORM ACCORDING TO OPSD 404.020
5. PIPE SUPPORT ACCORDING TO T-708.020.
6. FOR BENCHING DETAILS, MAXIMUM PIPE HOLE DIAMETERS AND FLOW CONFIGURATIONS, SEE T-701.021.
7. ALL DIMENSIONS ARE NOMINAL.
8. PARGING SHALL BE 1:3 MORTAR MIX.
9. WATERPROOFING OVER PARGING TO BE TWO HEAVY COATS OF BITUMEN.
10. WHERE PIPES JOIN AT MAINTENANCE HOLE, JOINTS ARE TO BE WATERTIGHT WITH THE APPROVED SEAL.
11. FIRST STEP TO BE 75 mm TO 300 mm BELOW FRAME. LAST STEP TO BE 300 mm ABOVE BENCHING OR 600mm ABOVE INVERT IF NO BENCHING.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING — PRECAST MAINTENANCE HOLE 1200 mm DIAMETER — REV 3 — APR 2014 — T-701.010 — NTS — SHEET 1



NOTES:

1. FOR SUMP DETAIL SEE T-701.010.
2. 150 mm OF COMPACTED GRANULAR A OR UNSHRINKABLE FILL TO BE PLACED ALL AROUND THE MAINTENANCE HOLE.
3. PRECAST CONCRETE COMPONENTS ACCORDING TO OPSD 701.060, OPSD 701.061, OPSD 703.013 AND OPSD 703.023.
4. STRUCTURES EXCEEDING 5.0 m IN DEPTH TO INCLUDE SAFETY PLATFORM ACCORDING TO OPSD 404.020.
5. PIPE SUPPORT ACCORDING TO T-708.020.
6. FOR BENCHING DETAILS, MAXIMUM PIPE HOLE DIAMETERS AND FLOW CONFIGURATIONS, SEE T-701.021.
7. ALL DIMENSIONS ARE NOMINAL.
8. PARGING SHALL BE 1:3 MORTAR MIX.
9. WATERPROOFING OVER PARGING TO BE TWO HEAVY COATS OF BITUMEN.
10. WHERE PIPES JOIN AT MAINTENANCE HOLE, JOINTS ARE TO BE WATERTIGHT WITH THE APPROVED SEAL.
11. FIRST STEP TO BE 75 mm TO 300 mm BELOW FRAME. LAST STEP TO BE 300 mm ABOVE BENCHING OR 600 mm ABOVE INVERT IF NO BENCHING.

All dimensions are in millimetres unless otherwise shown.

TORONTO — ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING — PRECAST MAINTENANCE HOLE 2400 mm DIAMETER — REV 3 — APR 2014 — T-701.013 — NTS — SHEET 1

TORONTO BENCH MARK No. 12319654373

ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARK No. 12319654373 HAVING A PUBLISHED ELEVATION OF 192.989 METRES.

SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

No.	DATE	REVISIONS	INITIAL	SIGNED
2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

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Tel: (905) 738-6100
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E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER — H. O. TOZCU — NOV.29/2019 — PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER OF DEVELOPMENT ENGINEERING — DATE: ____________

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
DETAILS

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018–4685
SCALE	N.T.S.			DRAWING NUMBER		DET-1	
DATE	MARCH 2019					REF FILES:	

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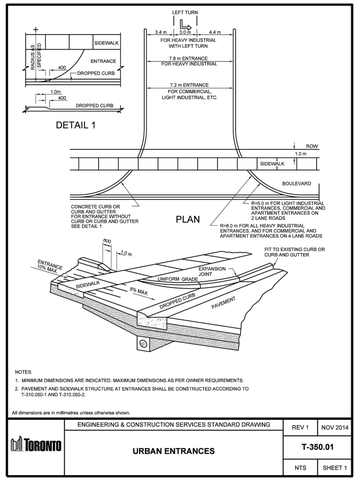
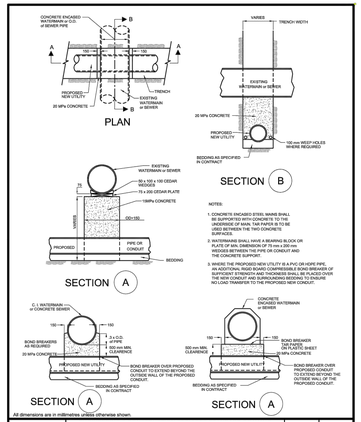


NOTES:
1. MINIMUM DIMENSIONS ARE INDICATED. MAXIMUM DIMENSIONS AS PER OWNER REQUIREMENTS.
2. PAVEMENT AND SIDEWALK STRUCTURE AT ENTRANCES SHALL BE CONSTRUCTED ACCORDING TO T-310.030-1 AND T-310.050-2.

All dimensions are in millimetres unless otherwise shown.

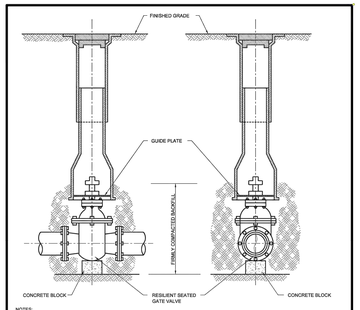
ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING	REV 1	NOV 2014
URBAN ENTRANCES	**T-350.01**	
	NTS	SHEET 1



NOTES:
1. CONCRETE ENCASED STEEL WRAPS SHALL BE INSTALLED AT EACH END AND AT THE MIDDLE OF MAIN. TAR PAPER IS TO BE USED BETWEEN THE TWO CONCRETE SURFACES.
2. WATERMAINS SHALL HAVE A BEARING BLOCK OR 50 x 100 x 100 CEDAR WEDGE AND 75 x 200 CEDAR WEDGES BETWEEN THE PIPE OR CONDUIT AND THE CONCRETE SUPPORT.
3. WHERE THE PROPOSED NEW UTILITY IS A PVC OR HDPE PIPE, AN ADDITIONAL RIGID BOARD COMPRESSIBLE BOND BREAKER OF 50 PLASTIC SHEET SHALL BE INSTALLED ON TOP OF THE PIPE OR THE NEW CONDUIT AND SURROUNDING BEDDING TO ENSURE NO LOAD TRANSFER TO THE PROPOSED NEW CONDUIT.

All dimensions are in millimetres unless otherwise shown.

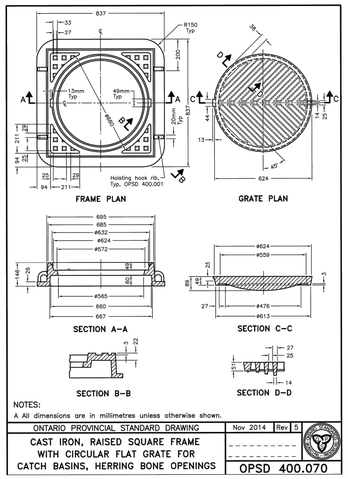
ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING	REV 3	JAN 2015
TYPICAL DETAIL FOR SUPPORTING WATER AND SEWER PIPE OVER NEW WATERMAIN OR SEWER	**T-1007.01-4**	
	NTS	SHEET 1



NOTES:
1. USE 105 mm SLIDE VALVE BOX ON WATER SERVICE VALVE(INCLUDING TAPPING VALVES) WHICH ARE 100 mm IN SIZE AND LARGER UP TO AND INCLUDING 300 mm IN SIZE.
2. USE 152 mm SLIDE VALVE BOX ON WATERMAIN VALVES LESS THAN 400 mm IN SIZE.
3. VALVE BOXES SHALL BE CENTERED OVER THE OPERATING NUT AND REST ABOVE THE VALVE WITH SUPPORTS.
4. DRILL A HOLE THROUGH EXTENSION STEM AND THREAD IN BOLT TO TIGHTEN THE EXTENSION STEM TO THE OPERATING NUT.
5. VALVE BOX SHALL BE ADEQUATELY BRACED WHILE BACKFILLING AND SHALL REMAIN CENTERED AROUND OPERATING NUT.
6. VALVE BOXES SHALL BE USED ON ALL WATER SERVICE VALVES UNLESS THEY ARE LOCATED IN A DITCH OR INACCESSIBLE AREA. IN THIS CASE, THE VALVE IS BURIED AND A SECOND VALVE IS INSTALLED AT THE PROPERTY LINE WITH A VALVE BOX ON IT.

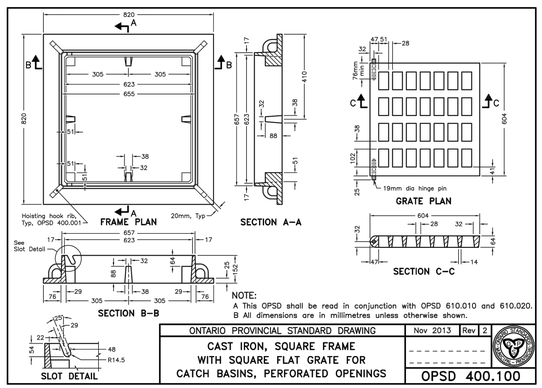
All dimensions are in millimetres unless otherwise shown.

ENGINEERING AND CONSTRUCTION SERVICES STANDARD DRAWING	REV 2	APR 2013
WATERMAIN VALVE IN BOX AND SERVICE VALVE IN BOX DETAIL	**T-1101.02-2**	
	NTS	SHEET 1



NOTES:
A All dimensions are in millimetres unless otherwise shown.

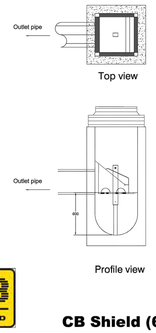
ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 5
CAST IRON, RAISED SQUARE FRAME WITH CIRCULAR FLAT GRATE FOR CATCH BASINS, HERRING BONE OPENINGS	OPSD 400.070	



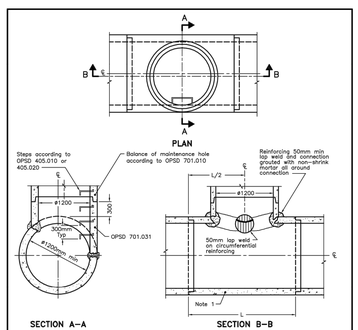
NOTE:
A This OPSD shall be read in conjunction with OPSD 610.010 and 610.020.
B All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2013	Rev 2
CAST IRON, SQUARE FRAME WITH SQUARE FLAT GRATE FOR CATCH BASINS, PERFORATED OPENINGS	OPSD 400.100	

Notes
1. CB Shield can be installed at any time. In a non frozen condition.
2. The frame and cover should be well aligned with the catchbasin for proper installation
3. The catchbasin sump must be clean before installation
4. The grate should be at the same level as the standing water in the sump.



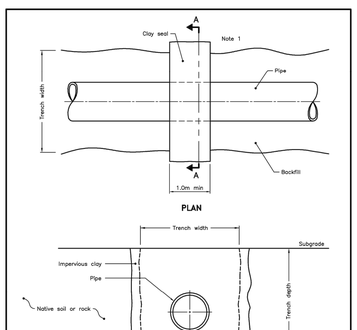
CB Shield (600mm Sump)



NOTES:
1 Sewer pipe shall be according to CAN/CSA A257.2, class to match that of the higher class adjacent pipe.
A Bedding for MH tee to match pipe bedding either side of tee.
B Granular backfill shall be placed to a minimum thickness of 300mm all around the maintenance hole tee.
C Minimum steel in connection shall equal area of steel in pipe.
D Structures exceeding 5.0m in depth shall include safety platform according to OPSD 404.020.
E All dimensions are nominal.
F All dimensions are in millimetres unless otherwise shown.

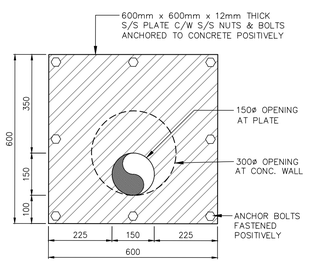
LEGEND:
L = Standard length of pipe

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2014	Rev 3
PRECAST CONCRETE MAINTENANCE HOLE MANUFACTURED TEE	OPSD 707.010	



NOTES:
1. Key into undisturbed trench soil.
A Clay seal shall extend from bottom of trench excavation to the subgrade.
B Clay seal shall be located so that no pipe joints are within the clay seal material.
C All dimensions are in metres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING	Nov 2016	Rev 2
CLAY SEAL FOR PIPE TRENCHES	OPSD 802.095	



DETAIL OF 150mm DIA. OPENING ORIFICE PLATE
N.T.S.

TORONTO BENCH MARK No. 12319654373
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARK No. 12319654373 HAVING A PUBLISHED ELEVATION OF 192.989 METRES.

SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

No.	DATE	REVISIONS	INITIAL	SIGNED
2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

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E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER H. O. TOZZO NOV.29/2019 PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER OF DEVELOPMENT ENGINEERING DATE: _____

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
DETAILS

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018–4685
SCALE	N.T.S.			DRAWING NUMBER	DET-2		
DATE	MARCH 2019					REF FILES:	

A.0 FILTER MEDIA

- Pre-mixed from an approved vendor;
- Filter media composition (by weight):
  - Sand - 75 to 85%
  - Fines - 2 to 5%
  - Organic Matter - 8 to 12%
  - P-Index value 12 to 30 ppm
  - Soluble Salts <2.0mmhos/cm
  - Cationic exchange capacity >5 meq/100 g
  - pH - 5.5 to 7.5
  - Infiltration rate > 120 mm/hr, max. 300mm/hr
- Materials testing by an independent testing lab is required to confirm filter media composition. Sample to be collected at supply site by a Geotechnical engineer using standard protocols. If issues arise with the performance of an installation, then samples should be collected from the constructed facility for further testing.
- Depth of filter minimum recommended depth 1.0 - 1.25m but varies with site conditions.
- Bioretention with trees - minimum depth 1.0m. Total volume 30m³/tree or 20m³/tree for trees sharing soil.
- Capacity - Volumetric computation should be based on surface area and depth.
- Refer to TS 5.19 - Construction Specification for Growing Media

A.1 GRAVEL STORAGE

- Depth - Min. 300 mm.
- Materia - 50 mm dia. washed clear stone.
- Capacity - Volumetric computation based on depth.
- Choker Layer: 100 mm pea gravel layer between filter media and gravel storage layers.

A.2 MULCH

- Depth - 75 mm.
- Materia - Shredded hardwood bark mulch.

A.3 UNDERDRAIN (OPTIONAL)

- Required where native soil infiltration rates are <15mm/hr or adjacent to structures.
- Min. 200mm dia. perforated pipe installed 100mm above the bottom of the gravel storage layer.
- Connect to storm sewer and not connected to storm sewer.
- Cleanout at upstream end of runs >6m in length.
- Refer to OPSS 405 - Construction Specification for Subsurface Pipe.

A.4 GEOTEXTILE

- Material - Woven monofilament or non-woven needle punched fabric.
- Refer to OPSS 1860 Material Specification for Geotextiles.

A.5 PLANTING

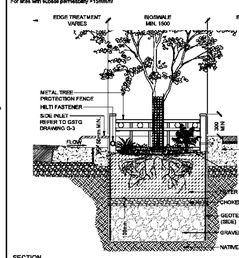
- Plant material selection and arrangement considerations:
- Plant material selection and arrangement should consider the site context.
- Native plant material should be selected wherever possible.
- Plant materials should be selected for their tolerance of salt and urban conditions. Shade should also be considered for herbaceous material planted under trees and shrubs in naturalized areas.
- Planting design should provide variety in seasonal colour and winter interest.
- Plant material should be arranged or grouped by relative height texture and aesthetic attributes.
- Refer to the OSTQ Vegetation Selection Tool for an appropriate palette;
- Refer to Construction Specification for Planting (TS 5.34).

A.6 IDENTIFICATION MEDALLION

- To be installed on curb. Refer to g.uideline drawing G-1.

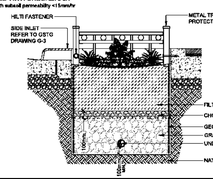
NOTE: SCARIFY BASE OF EXCAVATION

BIOSWALE WITHOUT UNDERDRAIN
For sites with subsoil permeability >15mm/hr

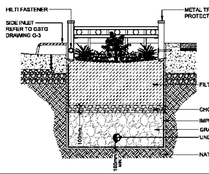


SECTION

BIOSWALE WITH UNDERDRAIN
For sites with subsoil permeability <15mm/hr



BIOSWALE WITH UNDERDRAIN AND IMPERVIOUS LINER

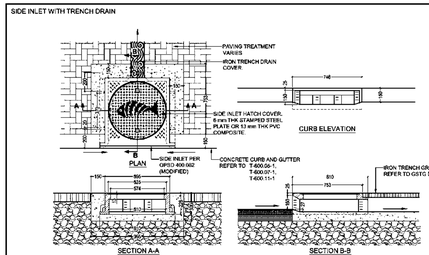


All dimensions are in millimetres unless otherwise shown.

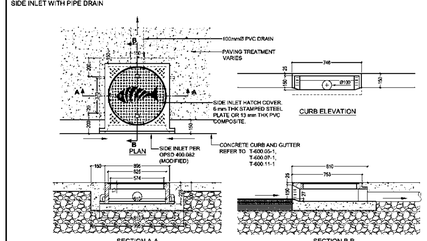
CITY OF TORONTO GUIDELINE DRAWING	REV 0	APR 2017
BIOSWALE (URBAN) SECTIONS	WQ-7.1d	
	NTS	1 OF 1

TGS Priority - Water Quantity, Quality & Efficiency

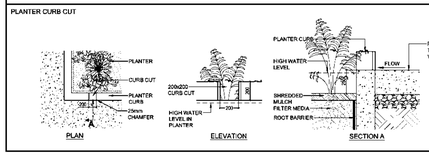
SIDE INLET WITH TRENCH DRAIN



SIDE INLET WITH PIPE DRAIN

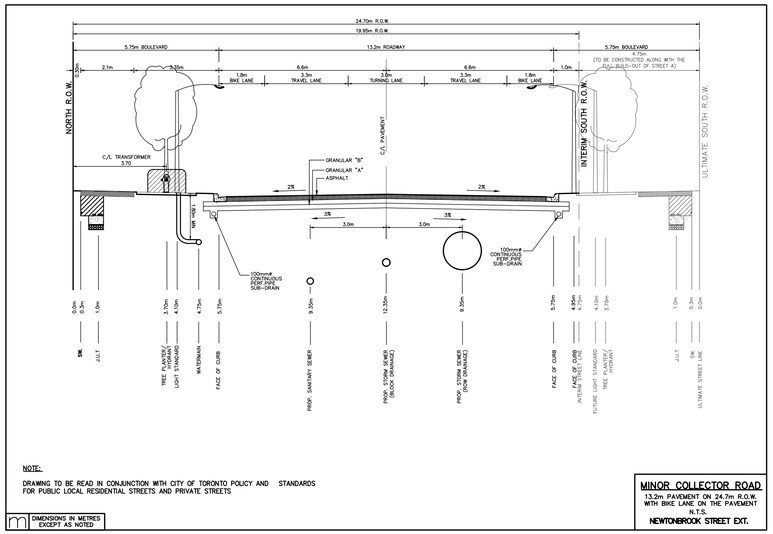


PLANTER CURB CUT



All dimensions are in millimetres unless otherwise shown.

CITY OF TORONTO GUIDELINE DRAWING	REV 0	APR 2017
SIDE INLETS	G-3	
	NTS	1 OF 1

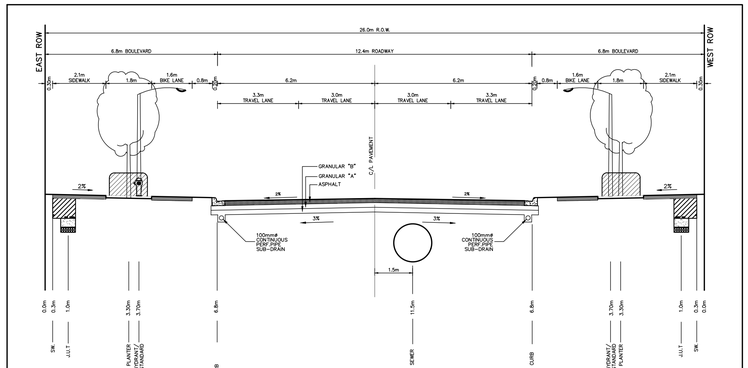


NOTE:

DRAWING TO BE READ IN CONJUNCTION WITH CITY OF TORONTO POLICY AND STANDARDS FOR PUBLIC LOCAL RESIDENTIAL STREETS AND PRIVATE STREETS

MINOR COLLECTOR ROAD
13.2m PAVEMENT ON 24.7m R.O.W.
WITH BIKE LANE ON THE PAVEMENT
N.T.S.
NEWTONBROOK STREET EXT.

DIMENSIONS IN METRES EXCEPT AS NOTED

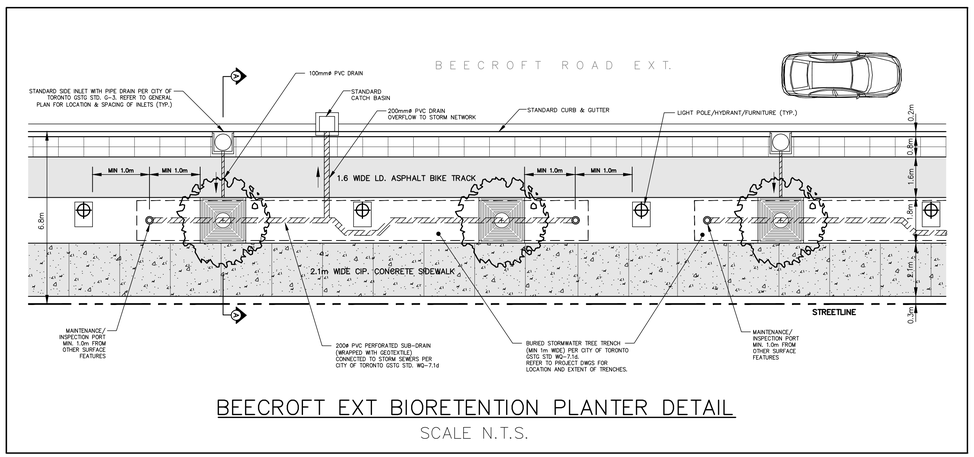


NOTES

1. PAVEMENT WIDTH IS DESIGNED TO ACCOMODATE 2 TRAVEL LANES WITH 2 PARKING LANE.
2. PAVEMENT WIDTH IS DESIGNED TO ACCOMMODATE PUBLIC TRANSIT.
3. PAVEMENT DESIGN SHALL CONFORM TO MINIMUM CITY STANDARDS AND/OR APPROVED GEOTECHNICAL REPORT.
4. ACTIVELY GROWING No. 1 NURSERY SOD TO BE LAID ON 150mm OF TOPSOIL, PROPERLY GRADED AND ROLLED.
5. DEPTH OF COVER ON ALL MUNICIPAL INFRASTRUCTURE SHALL CONFORM TO MINIMUM CITY STANDARDS.

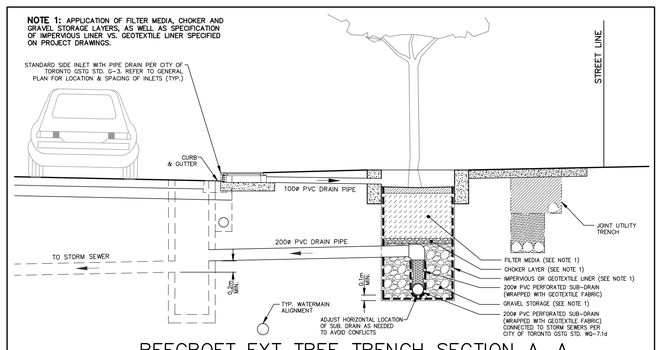
DIMENSIONS IN METRES EXCEPT AS NOTED

MINOR COLLECTOR ROAD
12.4m PAVEMENT ON 26.0m R.O.W.
WITH BIKE LANE
N.T.S.
BEECROFT ROAD EXT.



BEECROFT EXT BIORETENTION PLANTER DETAIL

SCALE N.T.S.

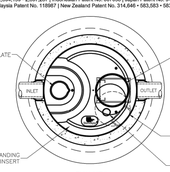


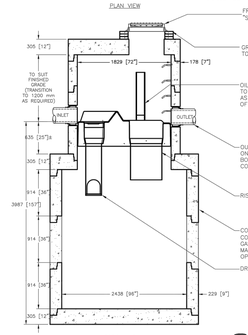
BEECROFT EXT TREE TRENCH SECTION A–A

SCALE N.T.S.

DRAWING NOT TO BE USED FOR CONSTRUCTION

THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING PATENTS:
United States Patent No. 5,753,115 • 5,849,181 • 6,068,765 • 6,371,690 • 7,362,219 • 7,666,303 | Australia Patent No. 729,096 • 779,401 • 2008,279,376 • 2008,288,900 |
Canadian Patent No. 2,208,338 • 2,327,766 • 2,694,159 • 2,697,287 | Indonesian Patent No. 007068 | Japan Patent No. 9-11476 • 3,581,233 • 5,555,160 |
Korea Patent No. 10-1451093 • 2015212 | Malaysia Patent No. 119587 | New Zealand Patent No. 314,645 • 583,583 • 583,009 | South African Patent No. 2010,00683 • 2010,01796 |





Stormceptor®

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imbrium
WATER MANAGEMENT SOLUTIONS
7037 Ridge Road, Suite 350, Hanover, MD 21076
866-740-3318 410-796-5505 866-376-8511 FAX

STC 3000 STANDARD MODEL	REV #	DATE	REVISION DESCRIPTION	BY	SHEET NUMBER
#####					1
					OF 1
DATE: ##########	SCALE: 50		PROJECT No.: ######	DRAWN: ###	CHECKED: ###

TORONTO BENCH MARK No. 12319654373
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE REFERRED TO THE CITY OF TORONTO BENCHMARK No. 12319654373 HAVING A PUBLISHED ELEVATION OF 192.989 METRES.

SURVSURVEY INFORMATION TAKEN FROM BOUNDARY AND TOPOGRAPHICAL SURVEY OF PART OF LOT 22 CONCESSION 1 WEST OF YONGE STREET, BY R. AVIS SURVEYING INC., DATED SEPTEMBER 21, 2018.

DIGITAL INFORMATION

No.	DATE	REVISIONS	INITIAL	SIGNED
2.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	
1.	JUL.31.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

SCHAEFFERS
CONSULTING ENGINEERS
SCHAEFFER & ASSOCIATES LTD.
6 Ronrose Drive, Concord, Ontario L4K 4R3
Tel: (905) 738-6100
Fax: (905) 738-6875
E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER H. O. TOZCU NOV.29/2019 PROVINCE OF ONTARIO

TORONTO Engineering and Construction Services

ACCEPTED TO BE IN ACCORDANCE WITH THE CITY OF TORONTO STANDARDS. THIS ACCEPTANCE IS NOT TO BE CONSTRUED AS VERIFICATION OF ENGINEERING CONTENT.

MANAGER OF DEVELOPMENT ENGINEERING DATE:

5800 YONGE STREET TIMES 5800 INC. CITY OF TORONTO DETAILS

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018–4685
SCALE	N.T.S.			DRAWING NUMBER	DET-3		
DATE	MARCH 2019					REF FILES:	

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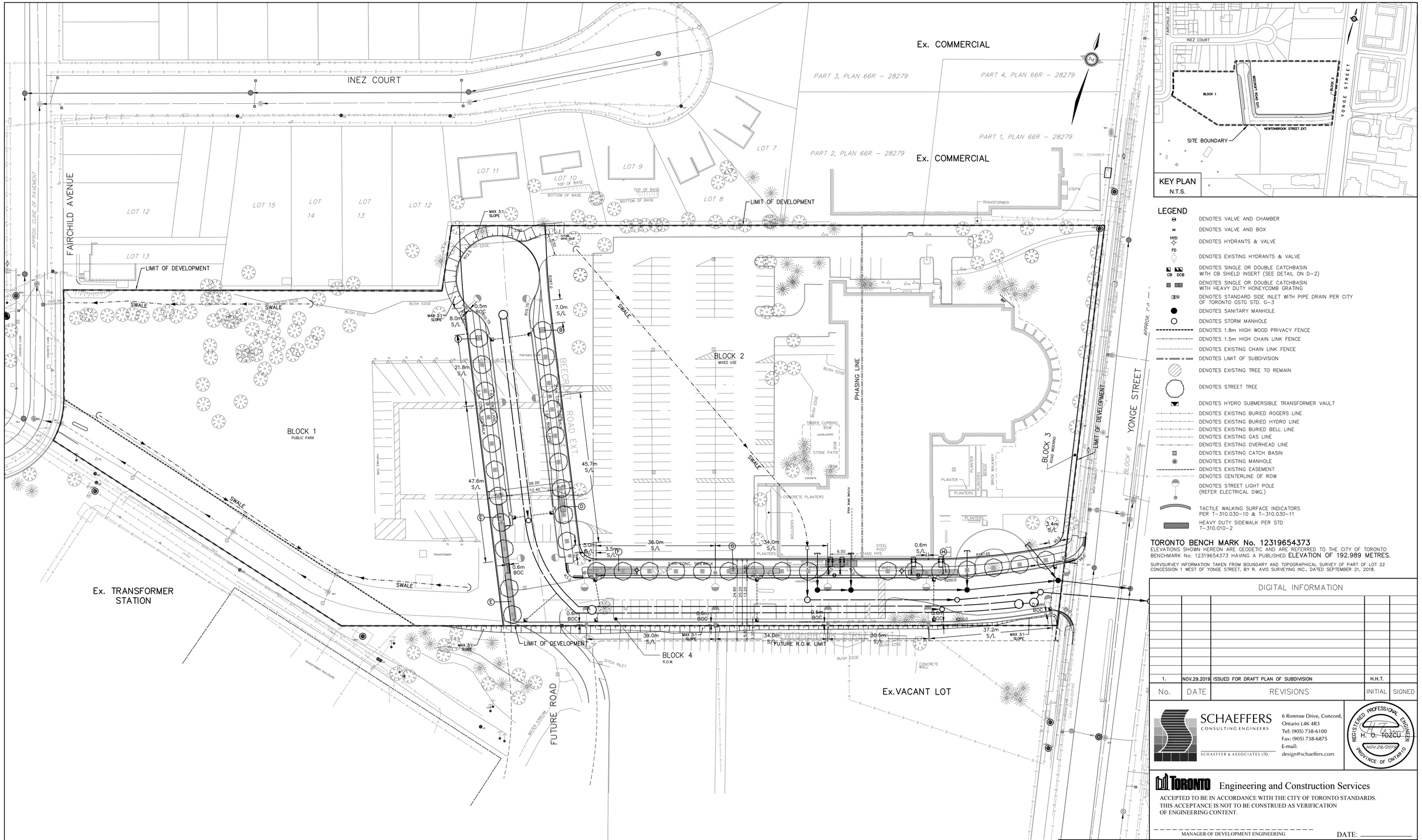

LEGEND

- DENOTES VALVE AND CHAMBER
- DENOTES VALVE AND BOX
- HYD — DENOTES HYDRANTS & VALVE
- FD — DENOTES EXISTING HYDRANTS & VALVE
- CB / DCB — DENOTES SINGLE OR DOUBLE CATCHBASIN WITH CB SHIELD INSERT (SEE DETAIL ON D-2)
- DENOTES SINGLE OR DOUBLE CATCHBASIN WITH HEAVY DUTY HONEYCOMB GRATING
- SI — DENOTES STANDARD SIDE INLET WITH PIPE DRAIN PER CITY OF TORONTO GSTG STD. G-3
- DENOTES SANITARY MANHOLE
- DENOTES STORM MANHOLE
- DENOTES 1.8m HIGH WOOD PRIVACY FENCE
- DENOTES 1.5m HIGH CHAIN LINK FENCE
- DENOTES EXISTING CHAIN LINK FENCE
- DENOTES LIMIT OF SUBDIVISION
- DENOTES EXISTING TREE TO REMAIN
- DENOTES STREET TREE
- DENOTES HYDRO SUBMERSIBLE TRANSFORMER VAULT
- DENOTES EXISTING BURIED ROGERS LINE
- DENOTES EXISTING BURIED HYDRO LINE
- DENOTES EXISTING BURIED BELL LINE
- DENOTES EXISTING GAS LINE
- DENOTES EXISTING OVERHEAD LINE
- DENOTES EXISTING CATCH BASIN
- DENOTES EXISTING MANHOLE
- DENOTES EXISTING EASEMENT
- DENOTES CENTERLINE OF ROW
- DENOTES STREET LIGHT POLE (REFER ELECTRICAL DWG.)
- TACTILE WALKING SURFACE INDICATORS PER T-310.030-10 & T-310.030-11
- HEAVY DUTY SIDEWALK PER STD T-310.010-2

TORONTO BENCH MARK No. 12319654373
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1.	NOV.29.2019	ISSUED FOR DRAFT PLAN OF SUBDIVISION	H.H.T.	

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6 Ronrose Drive, Concord, Ontario L4K 4R3
Tel: (905) 738-6100
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E-mail: design@schaeffers.com

REGISTERED PROFESSIONAL ENGINEER — H. H. TOZCU — NOV 29/2019 — PROVINCE OF ONTARIO

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MANAGER OF DEVELOPMENT ENGINEERING — DATE: _____

5800 YONGE STREET
TIMES 5800 INC.
CITY OF TORONTO
UTILITY COORDINATION PLAN

DESIGN	M.P.	DRAWN	M.P.	CHECKED	H.H.T.	PROJECT No.	2018-4685
SCALE	1:500			DRAWING NUMBER	UT-1		
DATE	MARCH 2019						

REF FILES:

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