

Date	No.	Description
20 MAY 2022	RZA	
17 DEC 2021	RZA & SPA	
20 AUG 2020	RZA & SPA	

Date	No.	Description
20 MAY 2022	RZA	
17 DEC 2021	RZA & SPA	
20 AUG 2020	RZA & SPA	

CONSTRUCTION NOTES:

- ALL MATERIAL FOR SEWER, FORCEMAIN, WATERMAIN, HYDRANTS AND APPURTENANCES SHALL BE ACCORDING TO CITY OF TORONTO MATERIAL MANUFACTURER SPECIFICATIONS AS REQUIRED BY CHAPTER 5, MATERIAL SPECIFICATIONS FROM DESIGN CRITERIA FOR SEWERS AND WATERMANS MANUAL.
- UTILITY SEPARATION SHALL BE ACCORDING TO APPENDIX 'D' OF THE CITY OF TORONTO DESIGN CRITERIA FOR SEWERS AND WATERMANS MANUAL.
- SERVICE CONNECTIONS AND UTILITY CUTS MADE IN ROAD PAVEMENTS SHALL BE BACKFILLED WITH UNSHRINKABLE FILL ACCORDING TO TS 4.60.
- 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 100 MM OF TOPSOIL AND SHALL BE SODDED ACCORDING TO TS 5.00 AND TS 5.10.
- ALL EXISTING UTILITIES SHOWN ON DRAWINGS (PLAN AND PROFILE) ARE FOR REFERENCE PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ANY UTILITY AND SHALL BE LIABLE FOR ALL OR ANY DAMAGE.
- 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.
- 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.
- 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.
- 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 IS TO BE COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- CONTRACTOR TO PROVIDE ADEQUATE SUPPORT DURING CONSTRUCTION BETWEEN THE NEW WATERMAIN AND EXISTING GAS MAINS. MAINTAIN 300MM MINIMUM VERTICAL CLEARANCES BETWEEN NEW WATERMAIN AND EXISTING GAS MAINS. MINIMUM 600 MM VERTICAL CLEARANCE BETWEEN NEW WATERMAIN AND GAS MAINS LARGER THAN 300 MM DIAMETER.
- ALL EXISTING WATERMANS AND SEWER PIPES LARGER THAN 300 MM DIAMETER SHALL BE SUPPORTED ACCORDING TO DRAWING T-1007.01-4.
- ALL DIMENSIONS ARE EXPRESSED IN METRES (M) AND PIPE SIZES ARE EXPRESSED IN MILLIMETRES (MM) UNLESS OTHERWISE NOTED.

SANITARY AND STORM SEWERS:

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

WATERMANS:

- NEW WATERMANS SHALL BE MINIMUM DR 18 CLASS 235 (AWWA) C900-07.
- EMBEDMENT MATERIAL FOR FLEXIBLE PIPE SHALL BE ACCORDING TO OPSD 802.010 AND USING GRANULAR A BEDDING MATERIAL ACCORDING TO TS 1010 AND COMPACTED TO MINIMUM 98% OF MAXIMUM DRY DENSITY.
- MINIMUM COVER ON WATERMANS SHALL BE 1.8 METRE MINIMUM. ALL WATERMANS SHALL BE CONSTRUCTED ACCORDING TO T-1105.01.
- ALL HYDRANTS SHALL BE CONSTRUCTED ACCORDING TO T-1105.01.
- HYDRANT LEADS SHALL BE MINIMUM DR 18 CLASS 235 (AWWA) C900-07.
- ALL SERVICE CONNECTIONS SHALL BE CONSTRUCTED ACCORDING TO T-1104.01, T-1104.02-1, AND T-1105.02-2.
- SINGLE WATER SERVICE CONNECTIONS SHALL BE A MINIMUM 19 MM DIA. TYPE 'K' SOFT COPPER ACCORDING TO T-1104.01. WHEN SERVICE LENGTH EXCEEDS 30 M, THE DIAMETER SHALL BE 25 MM DIA.
- ALL CURB AND VALVE BOXES TO BE LOCATED AT STREET LINE.
- MECHANICAL THRUST RESTRAINTS SHALL BE INSTALLED AT ALL FITTINGS, BENDS, TEES, CROSSES, REDUCERS AND VALVES FOR ALL WATERMAIN MECHANICAL RESTRAINTS AT JOINTS SHALL BE INSTALLED AT EVERY PIPE JOINT 6.1 M OF EITHER SIDE OF THE VALVE FOR WATERMANS 100 MM DIAMETER OR LARGER.
- ALL TEES, PLUGS, HORIZONTAL, VERTICAL BENDS, REDUCERS AND HYDRANTS TO HAVE CONCRETE THRUST BLOCKS ACCORDING TO T-1103.01 AND T-1103.020.
- WATERMANS MUST FOLLOW THE ONTARIO MINISTRY OF THE ENVIRONMENT PROCEDURE T-6-1 THAT GOVERN THE SEPARATION OF SEWERS AND WATERMANS. A MINIMUM VERTICAL CLEARANCE OF 0.30 M WHEN CROSSING OVER AND 0.5 M WHEN CROSSING UNDER SEWERS AND ALL OTHER UTILITIES IS REQUIRED. MUST ALSO MAINTAIN 2.5 M HORIZONTAL SEPARATION WITH SEWERS.
- ALL VALVES LESS THAN 400 MM WILL BE IN A VALVE AND BOX ACCORDING TO T-1101.02-2. ALL VALVES 400 MM AND LARGER SHALL BE IN A CHAMBER.
- 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.
- TRACER WIRE INSTALLATION SHALL BE ACCORDING TO T-1106.05.
- HYDROSTATIC PRESSURE TEST AND LEAKAGE TESTING OF THE WATERMAIN SHALL BE ACCORDING TO TS 441.

NEW WATERMAIN SHALL BE ISOLATED ACCORDING TO T-1104.03-3 OR T-1104.03-4 UNTIL BACTERIOLOGICAL TESTS ARE SATISFACTORILY COMPLETED.

- PROVISIONS FOR FLUSHING THE WATER MAIN PRIOR TO TESTING AND SO FORTH MUST BE PROVIDED WITH AT LEAST A 50 MM OUTLET ON 100 MM 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 50 MM DIAMETER MINIMUM OR A HYDRANT.
- DISINFECTION OF THE WATERMAIN SHALL BE ACCORDING TO TS 7.00 AND SHALL INCLUDE ALL NEW WATER SERVICES 100 MM DIA AND LARGER.
- 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.
- 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.
- CITY IN-SERVICE WATER VALVES, CURB STOPS, FIRE HYDRANTS CAN ONLY BE OPERATED BY TORONTO WATER STAFF.
- ALL NEW WATERMANS SHALL BE INSULATED WHERE THE COVER IS LESS THAN 1.65 M ACCORDING TO T-708.01-4.
- THE CONTRACTOR SHALL CONNECT OR RECONNECT ALL STRAY CURRENT DRAINAGE CABLES CONNECTED TO THE TTC ELECTRIFIED RAIL SYSTEM ENCOUNTERED DURING WATERMAIN CONSTRUCTION.

CONTACT INFORMATION:

- 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.
- 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 MS EMILY ASSUNCAO 416-393-3302 AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- NOTIFY TORONTO WATER, WATER TREATMENT AND SUPPLY AT 416-397-0187 OR SEND AN E-MAIL MESSAGE TO TRUKWATER@TORONTO.CA TWO WEEKS PRIOR TO EXCAVATION NEAR THE <SIZE> MM TRANSMISSION WATERMAIN SO THAT A TORONTO WATER INSPECTOR MAY BE PRESENT.
- 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.

OTHER NOTES:

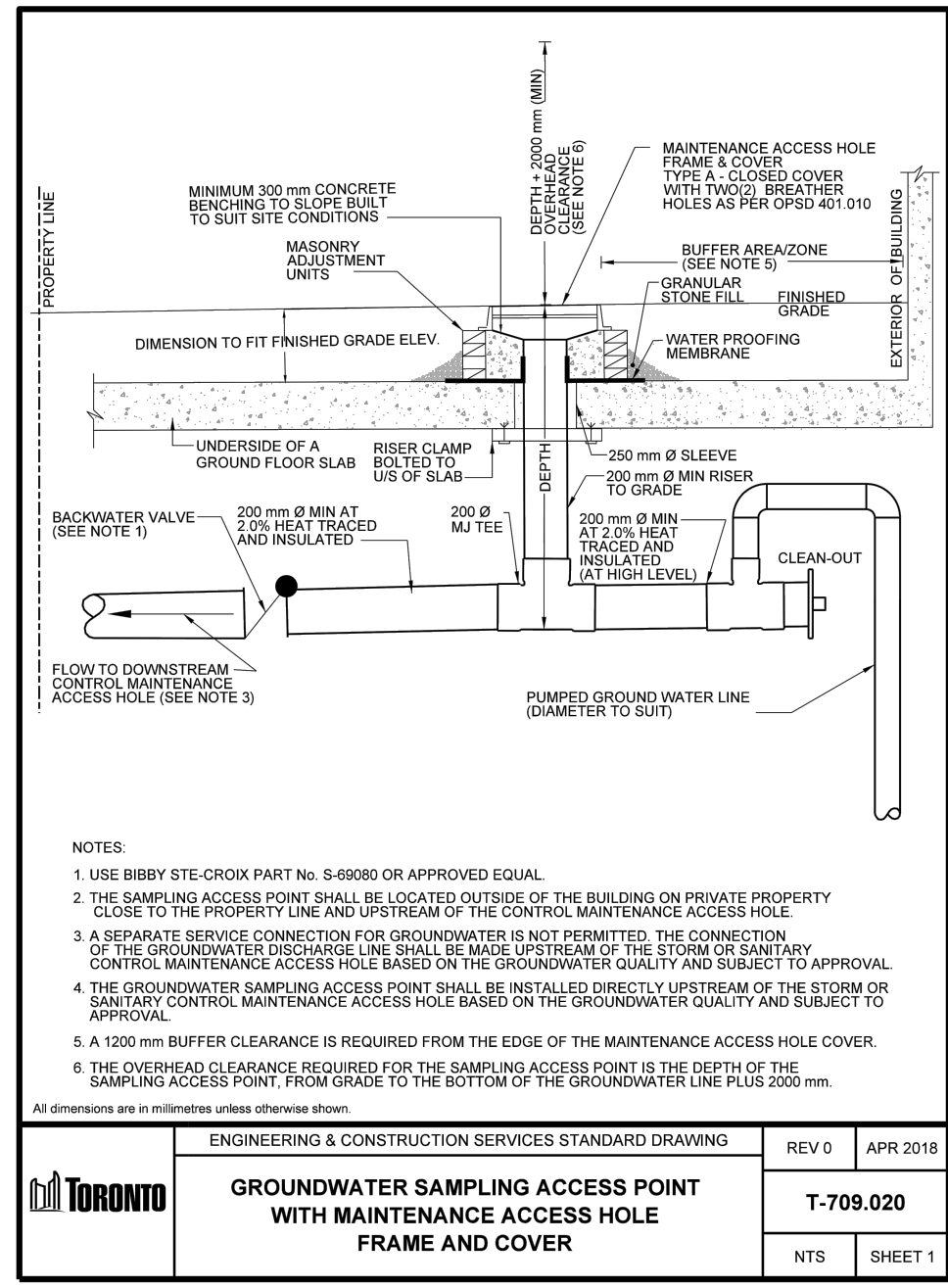
PRIOR TO COMMENCING ANY WORK WITHIN THE MUNICIPAL RIGHT-OF-WAY THE CONTRACTOR, DEVELOPER, OR CONSULTANT WILL OBTAIN ALL NECESSARY ROAD OCCUPANCY PERMITS FROM THE CITY'S RIGHT-OF-WAY MANAGEMENT UNIT CONTACT 416-392-7877.

ORIGINAL DATA SOURCE:

- INFORMATION ABOUT SANITARY AND SEWER NETWORK OBTAINED FROM THE CITY OF TORONTO FILES NO. T-135 DAVISVILLE AVENUE, DATED MAY 1923 AND B-353 BAYVIEW STREET.
- LEGAL BOUNDARY OBTAINED FROM KRCMAR TOPOGRAPHIC SURVEY, DATED AUGUST 29, 2019

LEGISLATION, REGULATION AND CODES:

- 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.
- 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 CONTRACTOR AS DEFINED IN THE ACT.
- ALL TEMPORARY TRAFFIC CONTROL AND SIGNAGE DURING CONSTRUCTION SHALL BE ACCORDING TO THE CURRENT ONTARIO TRAFFIC MANUAL BOOK 2: TEMPORARY CONDITIONS FIELD EDITION.



REVISION	DATE	DESCRIPTION
REV 0	APR 2018	ENGINEERING & CONSTRUCTION SERVICES STANDARD DRAWING
REV 1	T-709.020	GROUNDWATER SAMPLING ACCESS POINT WITH MAINTENANCE ACCESS HOLE
REV 2	NTS	FRAME AND COVER



BENCHMARK
ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE RELATED TO CITY OF TORONTO BENCH MARK NO. CMA53001 HAVING AN ELEVATION OF 149.222 METRES.

Bayview Davisville
Toronto, Ontario
for
Medallion Properties Inc.

201113 1:200 BJJ CHG
PROJECT SCALE DRAWN REVIEWED

201113 1:200 BJJ CHG
PROJECT SCALE DRAWN REVIEWED

SW2

Note: This drawing is the property of the Architect and may not be reproduced or used without the expressed consent of the Architect. The Contractor is responsible for checking and verifying all levels and dimensions and shall report all discrepancies to the Architect and obtain clarification prior to commencing work.

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 - North York District DATE: