

## LEGEND: EXISTING PROPERTY LINE \_\_\_ W \_\_\_ W \_\_\_ W \_\_\_ EXISTING WATERMAIN EXISTING V&VB EXISTING VALVE CHAMBER EXISTING SANITARY SEWER AND MAINTENANCE HOLE EXISTING STORM SEWER AND MAINTENANCE HOLE — ST — ST — ST — **EXISTING GRADE** EXISTING OVERHEAD HYDRO **EXISTING GAS** — G — G — G — — в — в — в — EXISTING BELL 4m x 10m CONSTRUCTION MUD MAT PROPOSED SILT FENCE AS PER OPSD 219.110 \_\_\_\_\_ SILT SACK PER DETAIL D1 STRUCTURE TO BE REMOVED

#### **EROSION AND SEDIMENT CONTROL MEASURES:**

- CONTRACTOR IS RESPONSIBLE FOR ALL INSTALLATION, MONITORING, REPAIR AND REMOVAL OF ALL EROSION AND SEDIMENT CONTROL FEATURES. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES, TO PROVIDE FOR PROTECTION OF THE AREA DRAINAGE SYSTEM AND THE RECEIVING WATERCOURSE, DURING CONSTRUCTION ACTIVITIES. THE CONTRACTOR ACKNOWLEDGES THAT FAILURE TO IMPLEMENT APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURE MAY BE SUBJECT TO PENALTIES IMPOSED BY ANY APPLICABLE REGULATORY AGENCY.
- SEDIMENT AND EROSION CONTROL PLAN OBJECTIVES:
   PREVENT SOIL EROSION. THIS CAN RESULT FROM STREAMING RAIN WATER OR WIND
- EROSION DURING CONSTRUCTION,
   PREVENT SEDIMENT DEPOSITS IN THE SEWER PIPES AND NEARBY COLLECTING
- STREAMS (AS APPLICABLE),
   PREVENT AIR POLLUTION FROM PARTICULATE MATTER AND DUST.

### 1. PRIOR TO START OF CONSTRUCTION:

### PRIOR TO THE REMOVAL OF ANY VEGETATIVE COVER, MOVING OF SOIL AND

- CONSTRUCTION:
- INSTALL SILT FENCE (AS PER OPSD 219.110) ALONG DITCHES IMMEDIATELY DOWNSTREAM FROM AREAS TO BE DISTURBED (SEE PLAN FOR LOCATION).
- DOWNSTREAM FROM AREAS TO BE DISTURBED (SEE PLAN FOR LOCATION).
   INSTALL FILTER CLOTH ON DOWNSTREAM MANHOLE COVERS.
- INSTALL SILTSACK FILTERS IN ALL CONCRETE CATCH BASINS STRUCTURES.
   INSPECT MEASURES IMMEDIATELY AFTER INSTALLATION.
- THE CONTRACTOR MUST SET UP THE MEASURES INDICATED ON THE PLAN, INSPECT THEM FREQUENTLY AND CLEAN AND REPAIR OR REPLACE THE DETERIORATED STRUCTURES. AT THE END OF THE CONSTRUCTION PERIOD, THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE TEMPORARY STRUCTURES AND

### 2. DURING CONSTRUCTION:

REPAIR WHEN NECESSARY.

RECONDITIONING THE AFFECTED AREAS

- SEDIMENT AND EROSION CONTROL MEASURES TO BE CONSTRUCTED AS PER OPSS
- WHEN SEDIMENT AND EROSION CONTROL MEASURES MUST BE REMOVED TO COMPLETE A PORTION OF THE WORK, THE SAME MEASURES MUST BE REINSTATED UPON THE WORK'S COMPLETION.
- WORK TO BE DONE IN THE VICINITY OF MAJOR WATERWAYS TO BE CARRIED OUT FROM JULY AND SEPTEMBER ONLY.
- MINIMIZE THE EXTENT OF DISTURBED AREAS AND THE DURATION OF EXPOSURE.
- PROTECT DISTURBED AREAS FROM RUNOFF.
  PROVIDE TEMPORARY COVER SUCH AS SEEDING OR MULCHING IF DISTURBED AREA
- WILL NOT BE REHABILITATED SHORTLY.

  INSPECT STRAW BALE FLOW CHECK DAMS, SILT FENCES, SILT SACKS, AND CATCH BASIN SUMPS REGULARLY AND AFTER EVERY MAJOR STORM EVENT. CLEAN AND
- PLAN TO BE REVIEWED AND REVISED AS REQUIRED DURING CONSTRUCTION.
  EROSION CONTROL FENCING TO BE ALSO INSTALLED AROUND THE BASE OF ALL
- DO NOT LOCATE TOPSOIL PILES AND EXCAVATION MATERIAL CLOSER THAN 2.5m FROM ANY PAVED SURFACE, OR ONE WHICH IS TO BE PAVED BEFORE THE PILE IS REMOVED. ALL TOPSOIL PILES ARE TO BE SEEDED IF THEY ARE TO REMAIN ON SITE LONG ENOUGH FOR SEEDS TO GROW (LONGER THAN 30 DAYS). WHEN STORING SOIL ON SITE IN PILES THE CONTRACTOR MUST COVER EACH PILE WITH TARPS, STRAW OR A GEOTEXTILE FABRIC TO AVOID FINE PARTICLE TRANSPORT BY WIND AND/OR STREAMING RAIN WATER.
- CONTROL WIND-BLOWN DUST OFF SITE TO ACCEPTABLE LEVELS BY SEEDING TOPSOIL PILES AND OTHER AREAS TEMPORARILY (PROVIDE WATERING AS REQUIRED). FOR DUST CONTROL, CONTRACTOR TO APPLY CALCIUM CHLORIDE (TYPE I OPSS 2501 AND CAN/CGSB-15-1) AND WATER WITH EQUIPMENT APPROVED BY THE OWNER'S REPRESENTATIVE AT RATE IN ACCORDANCE TO OPSS 506 WHEN DIRECTED BY OWNER'S REPRESENTATIVE.

  ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE LINTIL ALL DISTURBED.
- ALL EROSION CONTROL STRUCTURE TO REMAIN IN PLACE UNTIL ALL DISTURBED GROUND SURFACES HAVE BEEN STABILIZED EITHER BY PAVING OR RESTORATION OF VEGETATIVE GROUND COVER. SEDIMENT CAPTURE SILT SACKS MUST BE MAINTAINED AND CANNOT BE REMOVED UNTIL ALL LANDSCAPING AREAS ARE COMPLETED.
- NO ALTERNATE METHODS OF EROSION PROTECTION SHALL BE PERMITTED UNLESS APPROVES BY THIS CONSULTING ENGINEER AND THE TOWN DEPARTMENT OF PUBLIC WORKS.
- CONTRACTOR RESPONSIBLE FOR MUNICIPAL ROADWAY AND SIDEWALK TO BE CLEANED OF ALL SEDIMENT FROM VEHICULAR TRACKING ETC. AT THE END OF EACH WORK DAY.
- DURING WET CONDITIONS, TIRES OF ALL VEHICLES/EQUIPMENT LEAVING THE SITE ARE TO BE SCRAPED.
- ANY MUD/MATERIAL TRACKED ONTO THE ROAD SHALL BE REMOVED IMMEDIATELY BY HAND OR RUBBER TIRE LOADER.
- TAKE ALL NECESSARY STEPS TO PREVENT BUILDING MATERIAL, CONSTRUCTION DEBRIS OR WASTE BEING SPILLED OR TRACKED ONTO ABUTTING PROPERTIES OR PUBLIC STREETS DURING CONSTRUCTION AND PROCEED IMMEDIATELY TO CLEAN UP ANY AREAS SO AFFECTED.
- PROVIDE GRAVEL ENTRANCE WHEREVER EQUIPMENT LEAVES THE SITE TO PROVIDE MUD TRACKING ONTO PAVED SURFACES. GRAVEL BED SHALL BE A MINIMUM OF 10m LONG, 4m WIDE, AND 0.15m DEEP AND SHALL CONSIST OF COARSE MATERIAL. MAINTAIN GRAVEL ENTRANCE IN CLEAN CONDITION.

### 3. AFTER CONSTRUCTION:

- PROVIDE PERMANENT COVER CONSISTING OF TOPSOIL AND SEED TO DISTURBED
- ALL SEDIMENT AND EROSION CONTROL MEASURES TO BE REMOVED BY THE CONTRACTOR FOLLOWING THE COMPLETION OF WORK AND AFTER DISTURBED AREAS HAVE BEEN REHABILITATED AND STABILIZED, THIS INCLUDES REMOVE STRAW BALE FLOW CHECK DAMS, SILT FENCES AND FILTER CLOTHS ON CATCH BASINS AND MANUAL E COVERS.
- MANHOLE COVERS.

   INSPECT AND CLEAN CATCH BASIN SUMPS AND STORM SEWERS.

### NOTES: REMOVALS AND DEMOLITION

- PRE-REMOVAL, THE CONTRACTOR MUST VISIT THE PREMISES IN ORDER TO BE FULLY AWARE OF EXISTING CONDITIONS ON SITE, INCLUDING ALL ELEMENTS TO BE REMOVED AND DEMOLISHED. NO CLAIM WILL BE ACCEPTED DUE TO A POOR
- EVALUATION OF THE WORK TO BE COMPLETED.

  THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND THE REQUEST FOR INTERRUPTION OF PUBLIC UTILITY SERVICES, SUCH AS GAS, TELEPHONE, POWER, CABLE, SEWERS, WATERMAIN, ETC. BEFORE PROCEEDING WITH WORK, COORDINATE
- WITH ALL APPLICABLE UTILITY COMPANIES.

  3. FIRE HYDRANTS TO BE TAGGED AND BAGGED AND/OR PROTECTED AS INDICATED ON DRAWING.

  4. CURB, ASPHALT, SIDEWALK, AND GRANULAR BASE TO BE EXCAVATED WITHIN LIMITS
- OF DEMOLITION REMOVAL. THE CONTRACTOR MUST CARRY OUT NECESSARY SAW CUTS.

  5. SEWER / WATERMAIN PIPES TO BE ABANDONED MUST BE CUT, FILL WITH
- UNSHRINKABLE CONCRETE CONFORMING TO OPSS 1359, AND CAPPED.

  6. REMOVE AND DISPOSE SEWERS AS INDICATED. PLUG ANY SERVICE LATERALS TO BE ABANDONED.
- THE CONTRACTOR MUST ENTIRELY REMOVE THE DEMOLITION WRECKAGE FROM
  THE CONSTRUCTION SITE OFFSITE IN ACCORDANCE WITH THE REQUIREMENTS OF
  THE MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE (MOECC).
   a. THE CONTRACTOR MUST DISCARD RECYCLABLE DEMOLITION MATERIALS IN
- COLLABORATION WITH A REGIONAL RECYCLING COMPANY.

  b. ALL OTHER DEMOLITION MATERIALS MUST BE DISPOSED OFF-SITE AT AUTHORIZED LICENSED LANDFILLS AND IN CONFORMITY WITH THE APPLICABLE LAWS AND REGULATIONS. THE CONTRACTOR MUST BE ABLE TO PROVIDE,
- UPON REQUEST, COPIES OF THE DISPOSAL TICKETS TO THE OWNER'S REPRESENTATIVE.

  8. SURFACES AND WORKS LOCATED OUTSIDE OF THE CONSTRUCTION WORK LIMIT MUST BE REINSTATED AS THEY WERE BEFORE BEGINNING OF WORK. CONTRACTOR
- IS RESPONSIBLE TO MAKE GOOD ON ANY DAMAGES TO EXISTING CURB AND ASPHALT NOT SCHEDULED FOR REMOVAL.
- 9. ALL MATERIALS, PRODUCTS AND OTHERS COMING FROM THE DEMOLITION BELONG
  TO THE CONTRACTOR, UNLESS SPECIFIED OTHERWISE.
   10. THE CONTRACTOR MUST COMPLETE ALL REMOVALS AS SHOWN ON THE DRAWINGS
- AND AS REQUIRED TO MAKE THE WORK COMPLETE.

  11. THE CONTRACTOR MUST PROTECT AND MAINTAIN IN SERVICE THE EXISTING WORKS WHICH MUST REMAIN IN PLACE. IF THEY ARE DAMAGED, THE CONTRACTOR MUST IMMEDIATELY MAKE THE REPLACEMENTS AND NECESSARY REPAIRS TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AND WITHOUT ADDITIONAL
- EXPENSE TO THE OWNER.

  12. THE CONTRACTOR MUST NOT PERFORM ANY TREE CUTTING DURING THE CORE MIGRATORY BIRDS NESTING PERIOD, WHICH IS APRIL 15 TO AUGUST 15.

# TURNER FLEISCHER

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TOPOGRAPHIC INFORMATION & BENCHMARK

SURVEY COMPLETED BY ANNIS, O'SULLIVAN, VOLLEBEKK
LTD. ON MARCH 28, 2023. ELEVATIONS SHOWN ARE
GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC

DATUM, DERIVED FROM CONTROL MONUMENT NO. 01968007



2 2023-10-23 RE-ISSUED FOR SPA 1 2023-05-01 ISSUED FOR SPA # DATE DI

> Loblaw Companies Limited

3845 CAMBRIAN RD

BARRHAVEN, ONTARIO

DRAWING

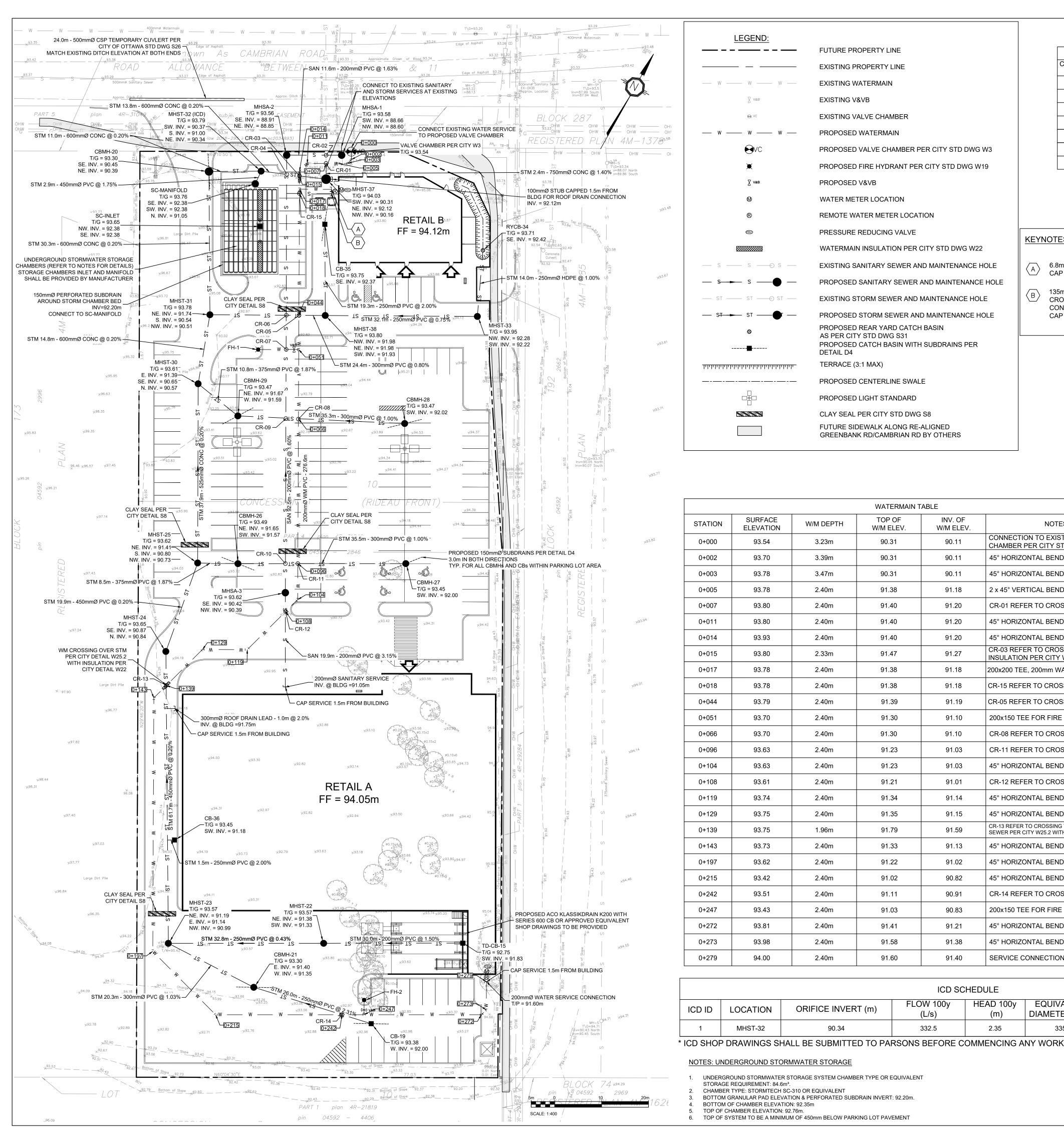
EROSION/SEDIMENT CONTROL & REMOVALS PLAN

478575
PROJECT DATE
2023-02-27
DRAWN BY
BV
CHECKED BY
MT
SCALE

As indicated



C101



LE	EGEND:	
		FUTURE PROPERTY LINE
		EXISTING PROPERTY LINE
W	- W W	EXISTING WATERMAIN
	∑ V&B	EXISTING V&VB
	<b>€</b> VC	EXISTING VALVE CHAMBER
w	- w w	PROPOSED WATERMAIN
	€VC	PROPOSED VALVE CHAMBER PER CITY STD DWG W3
	*	PROPOSED FIRE HYDRANT PER CITY STD DWG W19
	∑ v&B	PROPOSED V&VB
	<b>W</b>	WATER METER LOCATION
	®	REMOTE WATER METER LOCATION
	₽RU	PRESSURE REDUCING VALVE
	*********	WATERMAIN INSULATION PER CITY STD DWG W22
— s —	- s —— s —	EXISTING SANITARY SEWER AND MAINTENANCE HOLE
— S—►	- s — — —	PROPOSED SANITARY SEWER AND MAINTENANCE HOLE
ST	- ST <u></u> → ST —	EXISTING STORM SEWER AND MAINTENANCE HOLE
— S <del>T →</del>	- st — — —	PROPOSED STORM SEWER AND MAINTENANCE HOLE
	<i>⊙</i>	PROPOSED REAR YARD CATCH BASIN AS PER CITY STD DWG S31 PROPOSED CATCH BASIN WITH SUBDRAINS PER DETAIL D4
դուրդուրդուր	- դորդորդորդուրդուրդու	TERRACE (3:1 MAX)
		PROPOSED CENTERLINE SWALE
		PROPOSED LIGHT STANDARD
		CLAY SEAL PER CITY STD DWG S8
		FUTURE SIDEWALK ALONG RE-ALIGNED GREENBANK RD/CAMBRIAN RD BY OTHERS

WATERMAIN TABLE

W/M ELEV.

90.31

90.31

90.31

91.40

91.40

91.40

91.47

91.38

91.38

91.39

91.30

91.30

91.23

91.23

91.21

91.34

91.35

91.79

91.33

91.22

91.02

91.11

91.03

91.41

91.58

91.60

INV. OF

W/M ELEV.

91.20

91.20

91.18

91.19

91.10

91.10

91.03

91.03

91.14

91.15

91.59

91.02

90.82

90.83

91.21

91.38

91.40

FLOW 100y

332.5

ICD SCHEDULE

HEAD 100y

(m)

2.35

CROSSING TABLE									
CROSSING No.	PIPE ELEV. AT CROSSING	PIPE ELEV. AT CROSSING	CLEARANCE	CROSSING No.	PIPE ELEV. AT CROSSING	PIPE ELEV. AT CROSSING	CLEARANCE		
CR-01	STM, TOP. 90.95	WM, INV. 91.20	0.25m	CR-08	WM, TOP. 91.30	STM, INV. 91.80	0.50m		
CR-02	SAN, TOP. 88.91	STM, INV. 90.09	1.18m	CR-09	SAN, TOP. 90.00	STM, INV. 91.77	1.77m		
CR-03	STM, TOP. 91.02	WM, INV. 91.27	0.25m	CR-10	SAN, TOP. 90.49	STM, INV. 91.75	1.26m		
CR-04	SAN, TOP. 89.17	STM, INV. 90.35	1.18m	CR-11	WM, TOP. 91.23	STM, INV. 91.80	0.57m		
CR-05	WM, TOP. 91.39	STM, INV. 91.89	0.50m	CR-12	SAN, TOP. 90.75	WM., INV. 91.01	0.26m		
CR-06	SAN, TOP. 89.65	STM, INV. 91.87	2.22m	CR-13	STM, TOP. 91.34	WM, INV. 91.59	0.25m		
CR-07	SAN, TOP. 89.76	FH LAT., INV. 91.15	1.39m	CR-14	WM, TOP. 91.11	STM., INV. 91.85	0.74m		
				CR-15	WM, TOP. 91.40	SAN., INV. 91.98	0.58m		

### **KEYNOTES:**

NOTES

CHAMBER PER CITY STD DETAIL W3

CR-01 REFER TO CROSSING TABLE

CR-03 REFER TO CROSSING TABLE,

CR-15 REFER TO CROSSING TABLE

CR-05 REFER TO CROSSING TABLE

CR-08 REFER TO CROSSING TABLE

CR-11 REFER TO CROSSING TABLE

CR-12 REFER TO CROSSING TABLE

CR-13 REFER TO CROSSING TABLE, CROSSING OVER STM

SEWER PER CITY W25.2 WITH INSULATION PER CITY W22

45° HORIZONTAL BEND

CR-14 REFER TO CROSSING TABLE

200x150 TEE FOR FIRE HYDRANT LATERAL

**EQUIVALENT** 

DIAMETER (mm)

SERVICE CONNECTION, CAPPED 1.5m FROM BLDG

**MODEL\*** 

SEE D2 ON DWG C104

200x150 TEE FOR FIRE HYDRANT LATERAL

INSULATION PER CITY W22 REQUIRED

200x200 TEE, 200mm WATER SERVICE CONNECTION

45° HORIZONTAL BEND

45° HORIZONTAL BEND

2 x 45° VERTICAL BENDS

45° HORIZONTAL BEND

45° HORIZONTAL BEND

CONNECTION TO EXISTING SERVICE WITH VALVE

- 6.8m WM SERVICE 200mmØ T/P = 91.72m CAP 1.5m FROM BUILDING
- 135mmØ SAN SERVICE 9.5m INV. @ BLDG =92.12m CROSS OVER WM WITH MIN. 0.5m CLEARANCE CONNECT TO SAN SEWER PER CITY DETAIL S11.1 CAP 1.5m FROM BUILDING

### NOTES: SEWER

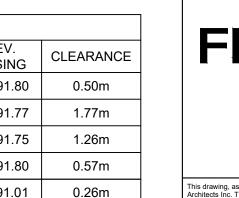
- CONTRACTOR TO CONFIRM ELEVATION OF EXISTING STORM AND SANITARY SEWERS AT PROPOSED CONNECTION POINTS AND REPORT ANY DISCREPANCIES TO THE ENGINEER BEFORE COMMENCING ANY WORK
- ALL WORK SHALL BE PERFORMED, AS APPLICABLE IN ACCORDANCE WITH OPSS 407
- 3. ALL STORM AND SANITARY SEWERS INSTALLED BELOW THE GROUNDWATER TABLE ELEVATION (±92.20m) SHALL BE WATERTIGHT AND INFILTRATION TESTS SHALL BE **CARRIED OUT ACCORDING TO OPSS.MUNI 410.**
- CLAY SEALS SHALL BE ACCORDING CITY OF OTTAWA STD DETAIL S8 AND EXTENDED AT LEAST 1.0m ABOVE THE GROUNDWATER TABLE ELEVATION. PIPE MATERIAL TO BE PVC SDR-35 AND CONFORMING TO OPSS 1841, UNLESS INDICATED OTHERWISE PVC SEWERS TO BE INSTALLED PER OPSD 802.010 (MODIFIED). BEDDING AND COVER MATERIALS TO BE OPSS 1010 GRANULAR 'A'
- CRUSHER-RUN LIMESTONE BEDDING COMPACTED TO 95% SPMDD. ALL SEWERS WITH LESS THAN 1.5 METERS OF COVER ARE SUBJECTED TO
- INSULATION PER CITY OF OTTAWA STD DETAIL S35 PIPE BACKFILL MATERIAL TO BE APPROVED NATIVE MATERIAL OR SELECT
- SUBGRADE MATERIAL IN CONFORMANCE WITH OPSS 212 8. ALL MAINTENANCE HOLES AND CATCH BASIN MAINTENANCE HOLES TO BE 1200mmØ
- AS PER OPSD 701.010, UNLESS INDICATED OTHERWISE. MAINTENANCE HOLES AND CATCH BASIN MAINTENANCE HOLES TO BE INSTALLED PER OPSS 407.
- ALL CATCH BASINS TO BE 600x600mm AS PER OPSD 705.010, UNLESS INDICATED OTHERWISE, CATCH BASINS TO BE INSTALLED PER OPSS 407
- 10. EXCAVATING. BACKFILLING. AND COMPACTING REQUIRED FOR MAINTENANCE HOLES CATCH BASIN MAINTENANCE HOLES, AND CATCH BASINS TO BE COMPLETED AS PER OPSS 402. THEY ARE TO BE BACKFILLED WITH OPSS GRANULAR 'B' COMPACTED TO 98% SPMDD. JOINTS BETWEEN SECTIONS TO BE WRAPPED WITH NON-WOVEN
- 11. FOR SANITARY STRUCTURES: CAST IRON MAINTENANCE HOLE COVER AS PER OPSD
- 401.010 TYPE 'A'. 12. FOR STORM STRUCTURES: CAST IRON CATCH BASIN MAINTENANCE HOLE COVER AS PER OPSD 401.010 TYPE 'B' AND CAST IRON CATCH BASIN COVER AS PER OPSD
- 13. SANITARY MAINTENANCE HOLES REQUIRE BENCHING AS PER OPSD 701.021. 14. THE CONTRACTOR IS RESPONSIBLE FOR MAKING OR ARRANGING ALL CONNECTIONS TO THE EXISTING SEWERS AS PER MUNICIPAL REQUIREMENTS. PRIOR TO CONNECTION, THE CONTRACTOR MUST PROVIDE, TO THE CONSULTANT / ENGINEER AND THE CITY FOR APPROVAL, ALL TEST RESULTS PERFORMED ON THE INTERNAL
- 15. ADVISE THE CITY PUBLIC WORKS AT LEAST 72 HOURS IN ADVANCE BEFORE ANY CONNECTION TO THE CITY SERVICES. CO-ORDINATE WITH CITY AS REQUIRED.
- 16. TERMINATE AND PLUG ALL SERVICE CONNECTIONS AT 1.0 m FROM EDGE OF THE
- 17. ALL SEWERS TO BE C.C.T.V. INSPECTED BY THE CONTRACTOR AS PER OPSS 409. TWO COPIES OF THE INSPECTION REPORT MUST BE PROVIDED TO THE CONSULTANT AND THE C.C.T.V. INSPECTION IN DVD FORMAT ONLY.

### NOTES: WATERMAIN

- 1. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m BELOW FINISHED GRADE. WHERE THE MINIMUM COVER OF 2.4m IS NOT REACHED, THERMAL
- INSULATION IS REQUIRED AS PER CITY OF OTTAWA DETAIL W22. 2. WATERMAIN PIPE MATERIALS TO BE CLASS PVC DR-18, OR APPROVED EQUIVALENT, UNLESS INDICATED OTHERWISE.
- WATERMAIN TO BE CONSTRUCTED AS PER OPSS 441 AND OPSD 802.010. WATERMAIN BEDDING AND COVER MATERIAL TO BE OPSS 1010 GRANULAR 'A' CRUSHER-RUN
- LIMESTONE COMPACTED TO 95% SPMDD. 4. A CONTINUOUS 12 GAUGE COPPER TRACER WIRE MUST BE INSTALLED OVER ALL
- WATERMAINS. TRACER WIRE SHALL BE TIED TO ALL FIRE HYDRANTS.
- INSTALLATION OF A WATERMAIN PIPE CROSSING A SEWER PIPE SHALL BE AS PER CITY OF OTTAWA DETAILS W25 AND W25.2.
- 6. IF WATERMAIN PIPE MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
- CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS AS PER OPSD 1109.011. THRUST BLOCKS AND RESTRAINING AS PER OPSD 1103.010 AND OPSD 1103.020. HYDRANT INSTALLATION AS PER OPSD 1105.010 AND OPSS 441. HYDRANT TO
- a. HYDRANTS MUST HAVE THREE EXITS (TWO 65.5 mm AND ONE 100.0 mm 'STORZ' OF STAINLESS STEEL) WITHOUT DRAIN. FIRE HYDRANTS MUST BE INSTALLED SUCH THAT THE 'STORZ' EXIT POINTS TOWARDS THE BUILDING IT WILL SERVICE. THE CONTRACTOR MUST ENSURE THAT THE BREAKAWAY FLANGE IS
- LOCATED ABOVE THE FINISHED GROUND (APPROXIMATELY 150 mm). FIRE FLOW TESTS FOLLOWED BY COLOUR CODING OF HYDRANTS (AS PER NFPA-291) SHALL BE CARRIED OUT PRIOR TO SUBSTANTIAL COMPLETION OF THE WORK.
- 10. WATERMAIN AND HYDRANT CONTROL VALVES IN THE 100 300 mm RANGE WILL BE RESILIENT SEATING GATE VALVES (AWWA C509) WITH MECHANICAL JOINT CONNECTIONS. VALVES WILL OPERATE COUNTER-CLOCKWISE TO OPEN WITH A NON-RISING STEM. VALVES WILL BE COMPLETE WITH THE STANDARD AWWA 50 mm
- OPERATING NUT. VALVES TO BE INSTALLED AS PER OPSS 441. 11. PIPE FITTINGS (BENDS, TEES, CROSSES, REDUCERS, ETC.) WILL BE MECHANICAL
- JOINT (AWWA C-111) WITH CEMENT MORTAR LINING (AWWA C-104). 12. COUPLERS MUST BE COMPRESSION TYPE WITH MINIMUM PRESSURE RATING OF 1035
- kPa. COUPLERS MUST BE MUELLER 11-12940. 13. VALVE BOXES MUST BE COMPLETE (FULLY METALLIC) 3 PIECE SLIDING TYPE WITH GUIDE PLATES.
- 14. WATERMAINS MUST BE THOROUGHLY FLUSHED AND CLEANED TO REMOVE ALL DIRT
- AND DEBRIS PRIOR TO THE DISINFECTION PROCESS. 15. ALL WATERMAINS SHALL BE HYDROSTATICALLY AND BACTERIOLOGICALLY TESTED AS PER PROVINCIAL AND MUNICIPAL REGULATIONS. IT IS THE CONTRACTOR'S
- RESPONSIBILITY TO ENSURE THAT ALL REQUIREMENTS ARE FOLLOWED. 16. THE DISINFECTION PROCEDURE WHICH FOLLOWS INITIAL FLUSHING AND CLEANING CONSISTS OF CHLORINATION, FINAL FLUSHING AND BACTERIOLOGICAL TESTING. DISINFECTION MUST BE PERFORMED BY THE CONTRACTOR USING METHODS APPROVED BY THE CITY AND IN ACCORDANCE WITH MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE GUIDELINES. DOSAGE MUST BE 100 ppm WITH A MINIMUM RESIDUAL OF 25 ppm AFTER 24 HOURS. DISINFECTANT MUST BE SUPPLIED BY THE
- WITNESSED BY CITY PERSONNEL. 17. ALL DISINFECTANT WATER IS TO BE REMOVED FROM THE NEW WATERMAINS AND REPLACED WITH DISTRIBUTION SYSTEM WATER PRIOR TO PRESSURE TESTING OF
- 18. PRESSURE TESTING OF ALL WATERMAINS AND APPURTENANCES INSTALLED BY THE CONTRACTOR MUST BE PERFORMED BY THE CONTRACTOR USING METHODS MEETING THE APPROVAL OF THE CITY. TESTING AND RESULTS MUST BE WITNESSED

CONTRACTOR AND MUST BE ANSI APPROVED. TESTING AND TEST RESULTS MUST BE

- BY CITY PERSONNEL. 19. MAINS AND SERVICES MUST BE PRESSURE TESTED AT 1035 kPa (150 psi) IN
- ACCORDANCE WITH AWWA C-600-82 (MINIMUM REQUIREMENT). 20. LEAKAGE TESTS MUST BE CONDUCTED AS PER AWWA C-600-82 (MINIMUM
- 21. ONCE THE DISINFECTION AND PRESSURE TESTING RESULTS HAVE BEEN APPROVED, THE CONTRACTOR MUST ENSURE THAT ALL WATERMAIN PIPES ARE FLUSHED UNTIL THE CHLORINE LEVEL IN THE WATER IS SIMILAR TO THE LEVEL OF CHLORINE IN THE MUNICIPAL WATERMAIN NETWORK IN THE AREA.
- 22. BACTERIOLOGICAL TESTING MUST CONSIST OF TWO SAMPLINGS TWENTY FOUR HOURS APART. IF BACTERIOLOGICAL SAMPLES ARE SATISFACTORY THE
- WATERMAIN MAY BE PLACED ON LINE. 23. ALL WATERMAIN VALVES TO BE OPERATED BY THE CITY OF OTTAWA ONLY.



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**TURNER** 

awings not specifically marked 'For Construction' must assume full responsibility and bear costs rany corrections or damages resulting from his work.



OPOGRAPHIC INFORMATION & BENCHMARK SURVEY COMPLETED BY ANNIS O'SULLIVAN VOLLEBEKK LTD. ON MARCH 28, 2023, ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM CONTROL MONUMENT NO. 01968007 HAVING AN ELEVATION OF 99.742m.



2023-10-23 RE-ISSUED FOR SPA 2023-05-01 ISSUED FOR SPA Loblaw Companies Limited

3845 CAMBRIAN RD

BARRHAVEN, ONTARIO

SITE SERVICING PLAN

478575 2023-02-27 B. VILLENEUVE CHECKED BY 100553987 2023-10-23 As indicated

NOTES: UNDERGROUND STORMWATER STORAGE

SURFACE

**ELEVATION** 

93.54

93.70

93.80

93.80

93.93

93.80

93.78

93.78

93.79

93.70

93.70

93.63

93.63

93.61

93.74

93.75

93.75

93.73

93.62

93.42

93.51

93.43

93.81

93.98

94.00

W/M DEPTH

3.23m

3.39m

3.47m

2.40m

2.40m

2.40m

2.33m

2.40m

1.96m

2.40m

2.40m

2.40m

2.40m

2.40m

2.40m

2.40m

2.40m

ORIFICE INVERT (m)

STATION

0+000

0+002

0+003

0+005

0+007

0+011

0+014

0+015

0+017

0+018

0+044

0+051

0+066

0+096

0+104

0+108

0+119

0+129

0+139

0+143

0+197

0+215

0+242

0+247

0+272

0+273

0+279

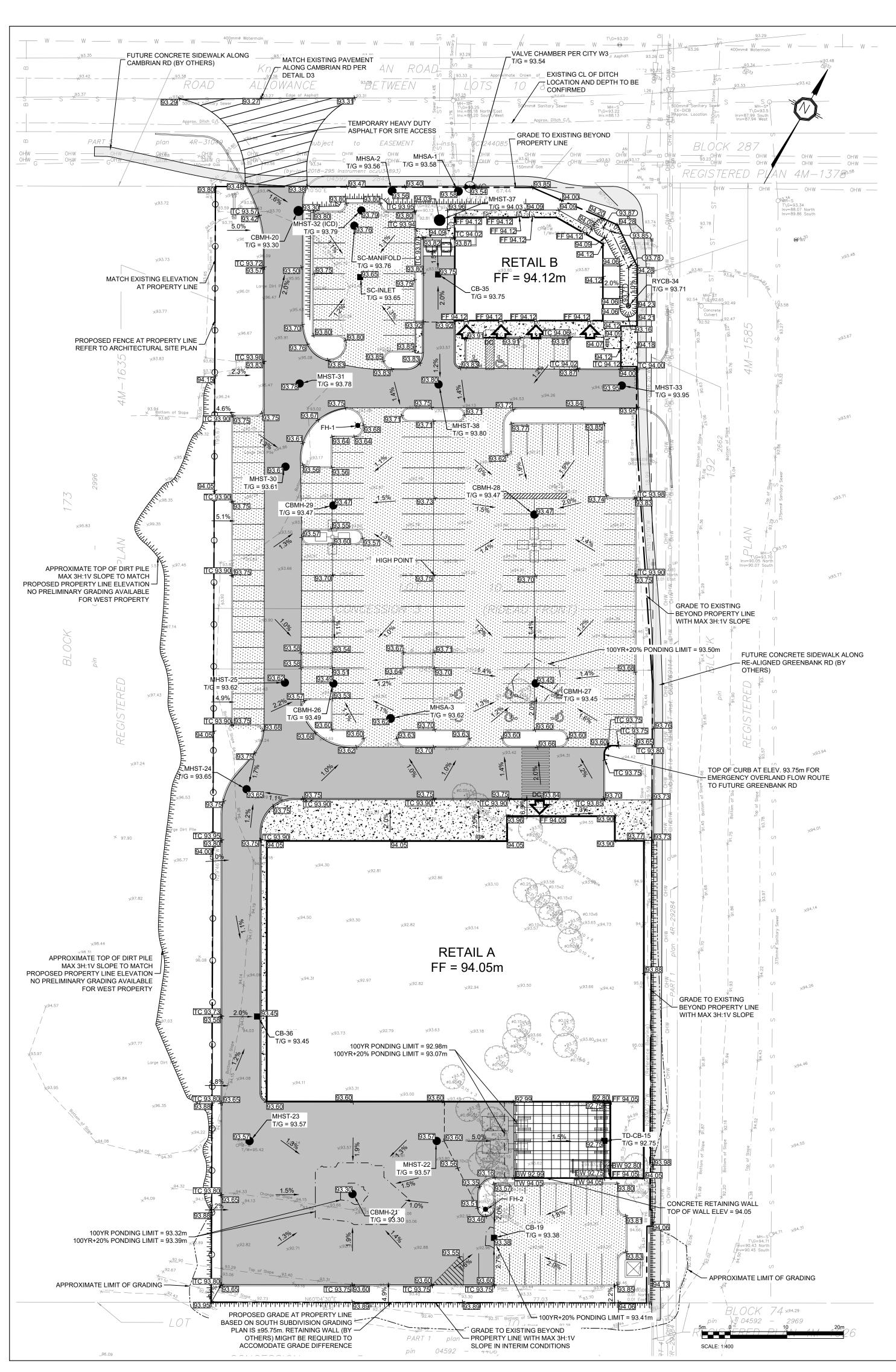
ICD ID

- UNDERGROUND STORMWATER STORAGE SYSTEM CHAMBER TYPE OR EQUIVALENT
- STORAGE REQUIREMENT: 84.6m3. CHAMBER TYPE: STORMTECH SC-310 OR EQUIVALENT

LOCATION

MHST-32

- BOTTOM GRANULAR PAD ELEVATION & PERFORATED SUBDRAIN INVERT: 92.20m. BOTTOM OF CHAMBER ELEVATION: 92.35m
- TOP OF CHAMBER ELEVATION: 92.76m.
- TOP OF SYSTEM TO BE A MINIMUM OF 450mm BELOW PARKING LOT PAVEMENT



LEGEND:	
	FUTURE PROPERTY LINE
	EXISTING PROPERTY LINE
	PROPOSED DITCH/SWALE CENTERLINE
-դորդորդուրդուրդուրդուրդուրդուրդուրդ	TERRACE (3:1 MAX)
99.99 *	EXISTING GRADE
<del>ر</del> 99.99	PROPOSED GRADE
<del>ب</del> TW 99.99	PROPOSED TOP OF WALL GRADE
<sub>4</sub> BW 99.99	PROPOSED BOTTOM OF WALL GRADE
<sub>ال</sub> [FF 99.99]	PROPOSED FINISHED FLOOR ELEVATION
TC 99.99)	PROPOSED TOP OF CURB ELEVATION
<sub>4</sub> (99.99)	PROPOSED CENTRELINE OF DITCH/SWALE GRADE
9.9%	PROPOSED SLOPE DIRECTION AND PERCENTAGE
€VC	PROPOSED VALVE CHAMBER PER CITY STD DWG W3
	PROPOSED STORM MAINTENANCE HOLE
	PROPOSED SANITARY MAINTENANCE HOLE
•	PROPOSED CATCH BASIN
<b>Ø</b>	PROPOSED REAR YARD CATCH BASIN AS PER CITY STD DWG S31
	PROPOSED LIGHT DUTY PAVEMENT
	PROPOSED HEAVY DUTY PAVEMENT
	PROPOSED TEMPORARY HEAVY DUTY PAVEMENT
\$\frac{1}{2}(\text{ref})	PROPOSED CONCRETE SIDEWALK
	PROPOSED CONCRETE STRUCTURAL SLAB PER STRUCTURAL
	PROPOSED CONCRETE CURB
DC	PROPOSED DEPRESSED CONCRETE CURB WITH TWSI PER CITY STD DWG SC7.3
	PROPOSED LIGHT STANDARD
	APPROXIMATE LIMIT OF GRADING ON NEIGHBOURING PROPERTY
	FUTURE SIDEWALK ALONG RE-ALIGNED GREENBANK RD/CAMBRIAN RD BY OTHERS
<del></del>	PROPOSED FENCE AT PROPERTY LINE REFER TO ARCHITECTURAL SITE PLAN

PAVEMENT STRUCTURES							
MATERIAL	LIGHT DUTY	HEAVY DUTY	COMPACTION				
SURFACE LAYER : HL3	65 mm	40 mm	≥ 96%*				
BASE LAYER : HL8		60 mm	≥ 96%*				
GRANULAR BASE : OPSS.MUNI 1010 GRANULAR A	150 mm	150 mm	100%**				
GRANULAR SUB-BASE : OPSS.MUNI 1010 GRANULAR B	300 mm	450 mm	100%**				

\*MINIMUM PAVEMENT COMPACTION BASED ON MARSHALL DENSITY TEST

\*\*OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY

SOURCE: GEOTECHNICAL INVESTIGATION, WEST OF CAMBRIAN ROAD AND GREENBANK ROAD, BARRHAVEN, ONTARIO, BY TORONTO INSPECTION LTD, DATED NOVEMBER 13, 2018

### NOTES: GENERAL

- 1. THE CONTRACTOR MUST CONFORM TO ALL LAWS, CODES, ORDINANCES, AND REGULATIONS ADOPTED BY FEDERAL, PROVINCIAL OR MUNICIPAL GOVERNMENT COUNCILS AND GOVERNMENT AGENCIES, APPLYING TO WORK TO BE CARRIED OUT. WHEREVER STANDARDS, LAWS AND/OR REGULATIONS ARE MENTIONED THEY
- REFER TO THEIR CURRENT VERSIONS, MODIFICATIONS INCLUDED. 2. ALL MATERIALS AND CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS (OPSS AND OPSD), THE ONTARIO MINISTRY OF ENVIRONMENT AND CLIMATE CHANGE, THE ONTARIO MINISTRY OF NATURAL RESOURCES, APPLICABLE CONSERVATION AUTHORITIES, THE MUNICIPAL STANDARD SPECIFICATIONS AND DRAWINGS, AND ALL OTHER GOVERNING AUTHORITIES AS THEY APPLY, UNLESS
- OTHERWISE INDICATED. 3. ALL MATERIAL SUPPLIED AND PLACED FOR PARKING LOT AND ACCESS ROAD CONSTRUCTION SHALL BE TO OPSS STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED. CONSTRUCTION TO OPSS 206, 310 & 314. MATERIALS TO OPSS 1001, 1003 & 1010.
- 4. THE LOCATION OF EXISTING UNDERGROUND MUNICIPAL SERVICES AND PUBLIC UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES (ON-SITE AND OFF-SITE) PRIOR TO ANY EXCAVATION WORK. DAMAGE TO ANY EXISTING SERVICES AND/OR EXISTING UTILITIES DURING CONSTRUCTION. WHETHER OR NOT SHOWN ON THE DRAWINGS MUST BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- 5. THE CONTRACTOR SHALL DETERMINE THE EXACT INVERT (GEODETIC ELEVATION), DIAMETER AND CONSTRUCTION MATERIAL OF THE EXISTING CONDUITS AT THE PROPOSED CONNECTIONS. THEY SHALL ALSO CARRY OUT, IF NECESSARY, EXPLORATORY DIGS IN ORDER TO DETERMINE THE EXACT LOCATION AND INVERTS OF EXISTING DUCK BANKS. THIS INFORMATION SHALL IMMEDIATELY BE PROVIDED TO THE CONSULTANT PRIOR TO START UNDERTAKING ANY MUNICIPAL SERVICES WORK AND A 48 HOUR PERIOD MUST BE ALLOCATED TO THE CONSULTANT FOR DESIGN REVIEW
- 6. AT PROPOSED UTILITY CONNECTION POINTS AND CROSSINGS (I.E. STORM SEWER, SANITARY SEWER WATER FTC.) THE CONTRACTOR SHALL DETERMINE THE PRECISE LOCATION AND DEPTH OF EXISTING UTILITIES AND REPORT ANY DISCREPANCIES OR CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
- 7. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES. 8. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL WORK AND ACTIVITIES WITH OTHERS TRADES AND CONTRACTORS. 9. THE CONTRACTOR IS THE ONLY PERSON IN CHARGE OF SAFETY ON THE BUILDING
- SITE. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE PROTECTION OF THE WORKERS, OTHER PERSONNEL AND THE GENERAL PUBLIC, PROTECTION OF MATERIALS. AS WELL AS MAINTAINING IN GOOD CONDITION THE COMPLETED WORKS AND WORKS TO BE COMPLETED. THE CONTRACTOR MUST PROVIDE AT ANY TIME: a. A SUFFICIENT NUMBER OF FENCES, BARRIERS, POSTERS, GUARDS AND
- OTHERS TO ENSURE SAFETY; NECESSARY CONVENIENCES FOR THE COMPLETION OF WORK SUCH AS
- HEATING, LIGHTING, VENTILATION ETC. 10. CONTRACTOR IS RESPONSIBLE TO OBTAIN THE VARIOUS PERMITS/APPROVALS REQUIRED TO COMPLETE ALL THE WORKS AND ACTIVITIES AND BEAR COST OF THE SAME, SUCH AS BUT NOT LIMITED TO; ROAD CUT PERMITS, SEWER PERMITS, WATER PERMIT, ETC. AND THEIR ASSOCIATED COSTS.
- 11. ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. 12. JOB BENCH MARK - CONFIRM WITH PARSONS PRIOR TO UTILIZATION. THE CONTRACTOR MUST MAINTAIN BENCHMARKS AND LANDMARK REFERENCES AS IS. OTHERWISE THESE REFERENCES WILL BE REPOSITIONED BY A CERTIFIED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- 13. ALL GROUND SURFACES SHALL BE EVENLY GRADED WITHOUT PONDING AREAS AND LOW POINTS EXCEPT WHERE APPROVED SWALE OR CATCH BASIN OUTLETS ARE PROVIDED.
- 14. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, DEWATERING OF EXCAVATIONS COULD BE REQUIRED. IT IS ASSUMED THAT GROUNDWATER MAY BE CONTROLLED BY SUMP AND PUMPING METHODS. THE CONTRACTOR SHALL OBTAIN A PERMIT TO TAKE WATER IF SITE CONDITIONS REQUIRE TAKING MORE THAN A TOTAL OF 400 000 L/DAY.
- 15. STRIP AND REMOVE ALL TOPSOIL FROM IMPROVED AREAS. SITE PREPARATION INCLUDES CLEARING, GRUBBING, STRIPPING OF TOPSOIL, DEMOLITION, REMOVAL OF UNSUITABLE MATERIALS, CUT, FILL AND ROUGH GRADING OF ALL AREAS TO RECEIVE FINISHED SURFACES. 16. ABUTTING PROPERTY GRADE TO BE MATCHED.
- 17. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT. PAVEMENT REINSTATEMENT SHALL BE WITH STEP JOINTS OF 300mm WIDTH MINIMUM.
- 18. CURBS TO BE BARRIER, CONSTRUCTED AS PER OPSD 600.110, EXCEPT WHERE INDICATED OTHERWISE, ELEVATION AT TOP OF CONCRETE CURBS TO BE 150 mm ABOVE THE ASPHALT, UNLESS OTHERWISE INDICATED ON THE DRAWINGS. 19. DEPRESSED CURBS TO BE MOUNTABLE, CONSTRUCTED AS PER OPSD 600.100.
- 20. LIGHT DUTY AND HEAVY DUTY ASPHALT PAVEMENTS TO BE CONSTRUCTED AS PER TABLE ON DRAWING C103.
- 21. TRANSITION BETWEEN EXISTING AND PROPOSED PAVEMENT SHALL BE
- CONSTRUCTED AS PER DETAIL D3 ON DRAWING C104. 22. RESTORE PAVEMENT STRUCTURE AND SURFACES ON EXISTING ROADS TO A CONDITION AT LEAST EQUAL TO ORIGINAL AND TO THE SATISFACTION OF THE
- MUNICIPAL AUTHORITIES. 23. CLEANLINESS ON THE SITE, INCLUDES THE CONTRACTOR SHALL CLEAN ROADWAYS AT HIS OWN COST AS DIRECTED BY THE OWNER'S REPRESENTATIVE, MATERIALS AND EQUIPMENT MUST BE LAID OUT IN AN ORGANIZED AND SAFE MANNER, AND ALL MATERIAL, EQUIPMENT AND TEMPORARY STRUCTURES WHICH ARE NO LONGER NECESSARY FOR THE EXECUTION OF THE CONTRACT MUST BE REMOVED FROM THE
- 24. CONTRACTOR TO ENSURE MITIGATION MEASURES ARE IMPLEMENTED TO REDUCED THE RISK OF GROUND CONTAMINATION FROM PETROLEUM PRODUCTS. 25. THE CONTRACTOR MUST ENSURE THE FOLLOWING MEASURES ARE IMPLEMENTED
- REGARDING THE HANDLING OF CONCRETE: a. CONCRETE SHOULD EITHER BE MIXED AWAY FROM THE SITE OR SHOULD BE PREPARED ON PAVED SURFACES IF ONLY SMALL QUANTITIES ARE REQUIRED
- EXCESS CONCRETE MUST BE DISPOSED OFF-SITE AT A LOCATION THAT MEETS
- ALL REGULATORY REQUIREMENTS: THE WASHING OF CONCRETE TRUCKS AND OTHER EQUIPMENT USED FOR MIXING CONCRETE SHOULD NOT BE CARRIED OUT WITHIN 30 METERS OF A
- WATERCOURSE OR WETLAND AND SHOULD TAKE PLACE OUTSIDE OF THE ALL CONCRETE TRUCKS SHOULD COLLECT THEIR WASH WATER AND RECYCLE IT BACK INTO THEIR TRUCKS FOR DISPOSAL OFF-SITE AT A LOCATION MEETING
- ALL REGULATORY REQUIREMENTS. 26. THE CONTRACTOR SHALL ENSURE THAT ALL EXCAVATED SURPLUS MATERIALS THAT WILL BE REQUIRED TO BE DISPOSED OFFSITE BE STOCKPILED TEMPORALLY FOR
- SAMPLING PRIOR BEING LOADED OFFSITE. 27. MINIMIZE DISTURBANCE TO EXISTING VEGETATION DURING THE EXECUTION OF ALL
- 28. TRENCHING, BACKFILLING AND COMPACTING MUST CONFORM TO OPSS 401. 29. DEWATERING OF PIPELINE, UTILITY AND ASSOCIATED STRUCTURE EXCAVATIONS TO
- BE COMPLETED AS PER OPSS 517. 30. THE CONTRACTOR MUST CONTROL SURFACE RUNOFF FROM PRECIPITATION
- DURING CONSTRUCTION. 31. FOR ALL GEOTECHNICAL WORK, CONTRACTOR TO REFER TO "GEOTECHNICAL INVESTIGATION WEST OF CAMBRIAN ROAD AND GREENBANK ROAD, BARRHAVEN,
- ONTARIO, BY TORONTO INSPECTION LTD. DATED NOVEMBER 13, 2018" 32. REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE DIRECTED FROM THE ENGINEER. EXCAVATE AND REMOVE ALL ORGANIC MATERIAL AND DEBRIS LOCATED WITHIN THE PROPOSED BUILDING, PARKING AND ROADWAY
- 33. THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OFF ALL AREAS DISTURBED DURING CONSTRUCTION TO EXISTING CONDITIONS OR BETTER AND ALL ASSOCIATED WORKS TO THE SATISFACTION OF THE CONSULTANT AND MUNICIPAL AUTHORITIES. ASPHALT REINSTATEMENT MUST BE IN ACCORDANCE WITH OPSS 310. LANDSCAPE AREAS TO BE REINSTATED WITH 150 mm OF TOPSOIL AND SOD IN ACCORDANCE WITH OPSS 802 AND OPSS 803.
- 34. DURING THE CONSTRUCTION PERIOD THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING TEMPORARY TRAFFIC SIGNAGE, INCLUDING TRAFFIC SIGNS, TRAFFIC MARKINGS AND TEMPORARY TRAFFIC LIGHTS, AND FLAGMEN, AS REQUIRED BY THE OWNER, THE CONSULTANT, THE MUNICIPALITY, THE MTO, AND OTHER GOVERNING AUTHORITIES.
- 35. CONSTRUCT SIDEWALK EXPANSION JOINTS & CONTROL JOINTS AS PER OPSD
- 36. CONSTRUCT CONCRETE SIDEWALK AS PER OPSD 310.020 AND OPSS 351. TACTILE WALKING SURFACE INDICATORS PER OPSS 351. 37. DISPOSE OF CONTAMINATED MATERIALS AT APPROPRIATE OFF-SITE FACILITY THAT
- MEETS ALL REGULATORY REQUIREMENTS. 38. BE PREPARED TO INTERCEPT, CLEAN UP, AND DISPOSE OF SPILLS OR RELEASES THAT MAY OCCUR WHETHER ON LAND OR WATER. MAINTAIN MATERIALS AND
- EQUIPMENT REQUIRED FOR CLEANUP OF SPILLS OR RELEASES READILY 39. PROMPTLY REPORT SPILLS AND RELEASES POTENTIALLY CAUSING DAMAGE TO ENVIRONMENT TO: AUTHORITY HAVING JURISDICTION OR INTEREST IN SPILL OR RELEASE INCLUDING CONSERVATION AUTHORITY, WATER SUPPLY AUTHORITIES,
- DRAINAGE AUTHORITY, ROAD AUTHORITY, AND FIRE DEPARTMENT. 40. DECONTAMINATE EQUIPMENT AFTER WORKING IN POTENTIALLY CONTAMINATED WORK AREAS AND PRIOR TO SUBSEQUENT WORK OR TRAVEL ON CLEAN AREAS. 41. DO NOT DISCHARGE DECONTAMINATED WATER, OR SURFACE WATER RUNOFF, OR
- GROUNDWATER WHICH MAY HAVE COME IN CONTACT WITH POTENTIALLY CONTAMINATED MATERIAL, OFF SITE OR TO MUNICIPAL SEWERS. 42. CONTRACTOR IS TO SUBMIT A TRAFFIC MANAGEMENT PLAN FOR APPROVAL ONE (1) WEEK PRIOR TO ANY WORK WITHIN THE ROW LIMITS TO MEET THE REQUIREMENTS OF MTO BOOK 7. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT ALL
- REQUIREMENTS OF THE MTO BOOK 7. 43. CITY PUBLIC WORKS DEPARTMENT TO BE CONTACTED MINIMUM 7 DAYS PRIOR TO PLANNED DATE FOR CONNECTION TO EXISTING STORM SEWERS, SANITARY SEWERS, AND WATERMAIN. CONNECTION TO EXISTING TO TAKE PLACE IN THE PRESENCE OF APPROPRIATE CITY OF OTTAWA STAFF.

# TURNER FLEISCHER

67 Lesmill Road Toronto, ON, M3B 2T8

T 416 425 2222

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1223 MICHAEL STREET, SUITE 100, OTTAWA, ONTARIO K1J 7T2 Tel: 613-738-4160 Fax: 613-739-7105

TOPOGRAPHIC INFORMATION & BENCHMARK SURVEY COMPLETED BY ANNIS O'SHILLIVAN VOLLEBEKK

LTD ON MARCH 28, 2023, ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM CONTROL MONUMENT NO. 01968007 HAVING AN ELEVATION OF 99.742m.



2023-10-23 RE-ISSUED FOR SPA 2023-05-01 ISSUED FOR SPA

3845 CAMBRIAN RD

Loblaw

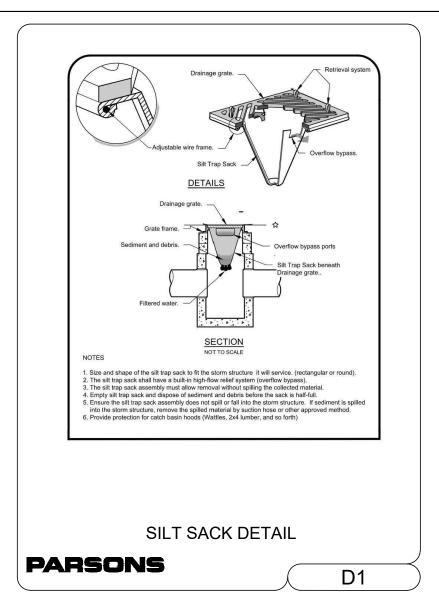
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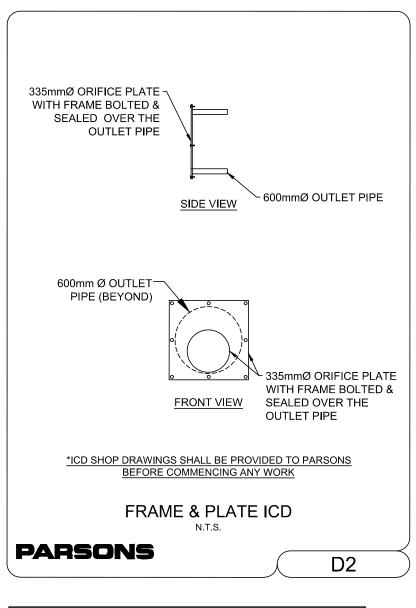
Companies

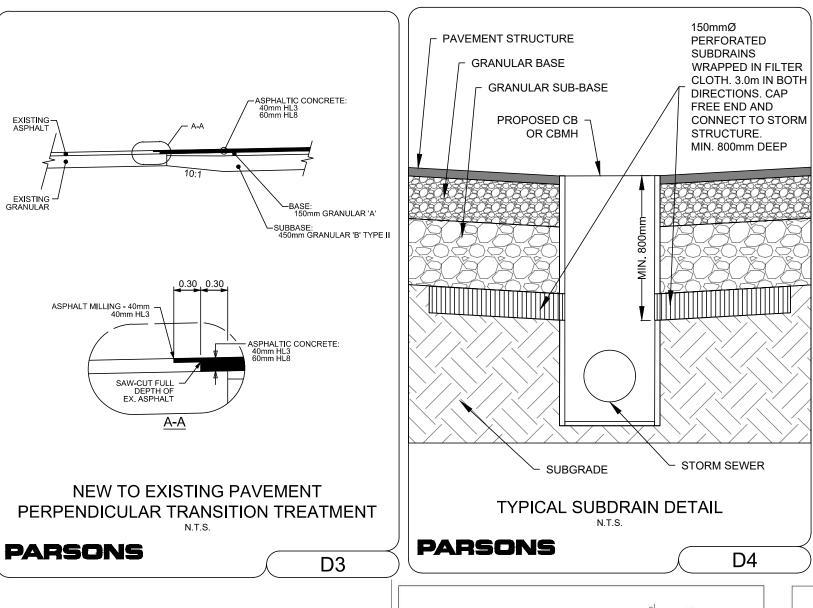
BARRHAVEN, ONTARIO

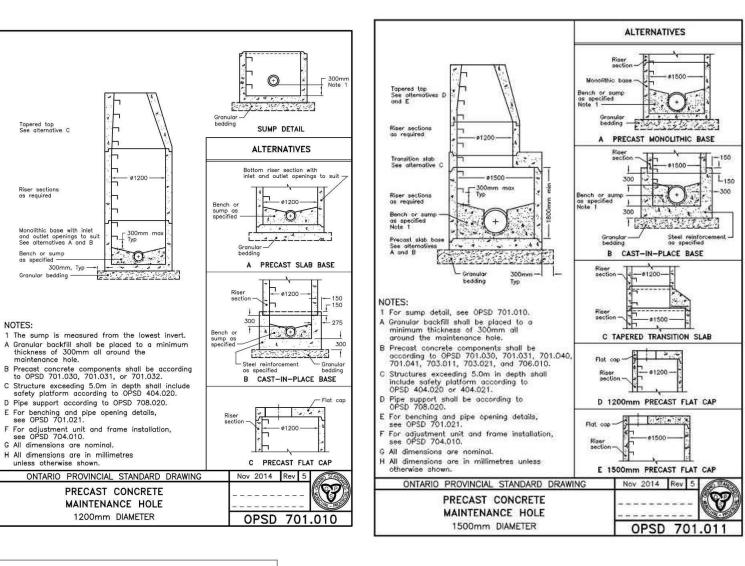
**GRADING PLAN** 

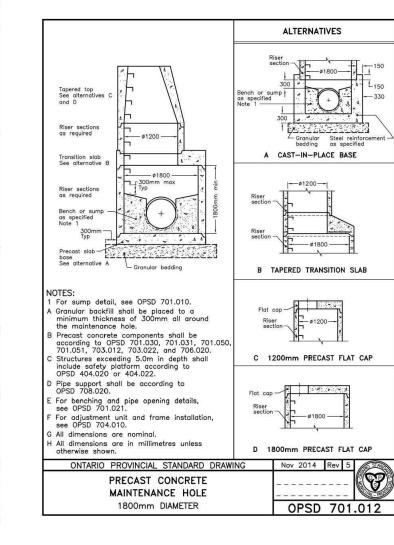
478575 2023-02-27 CHECKED BY B. VILLENEUVE 100553987 2023-10-23 As indicated

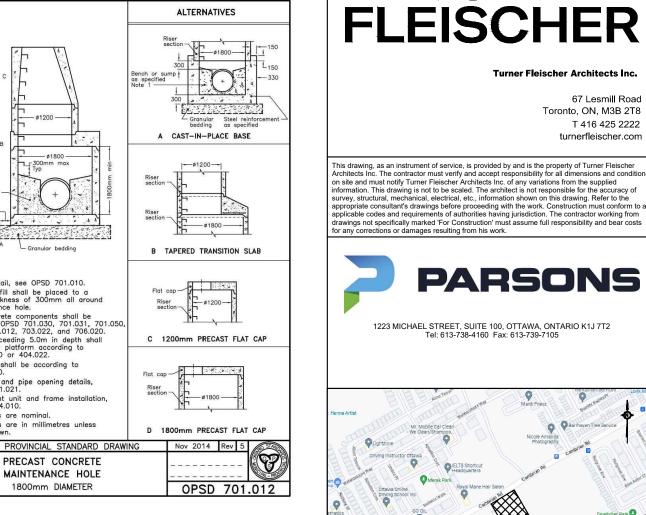












**TURNER** 

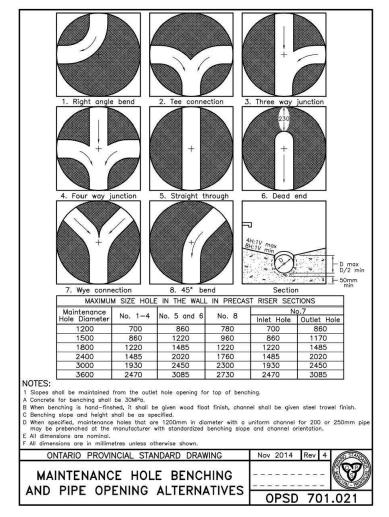
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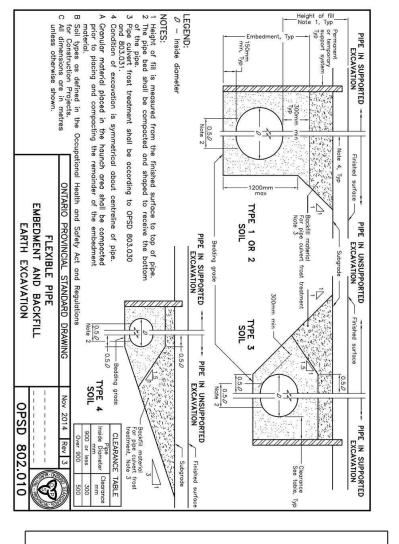
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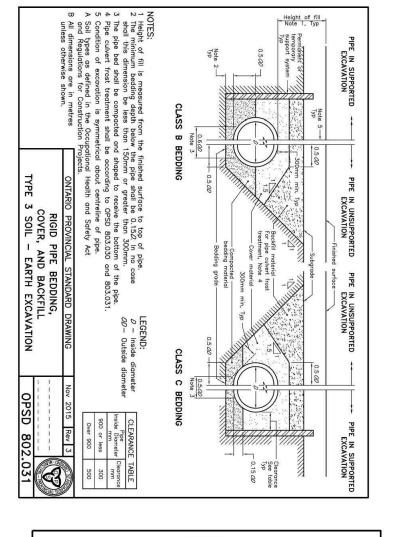
T 416 425 2222

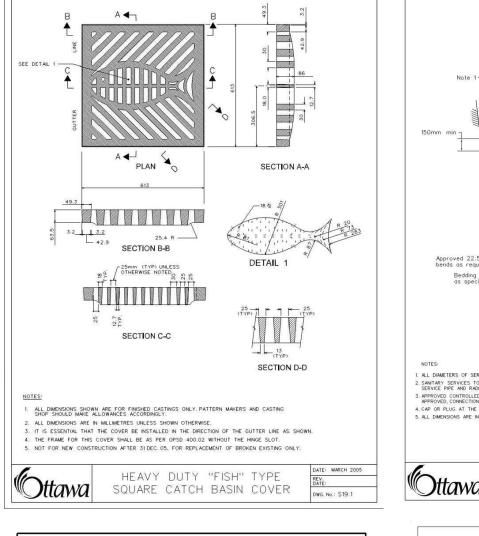
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Toronto, ON, M3B 2T8

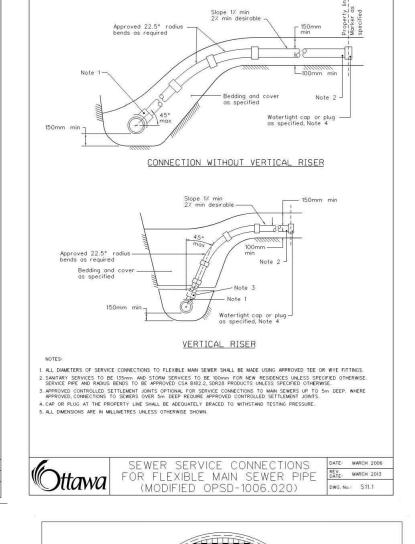


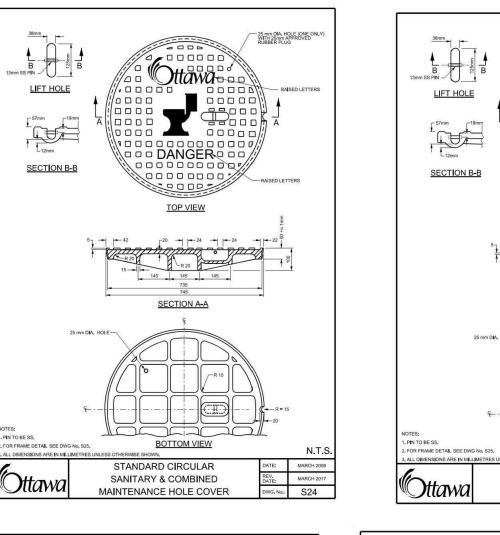






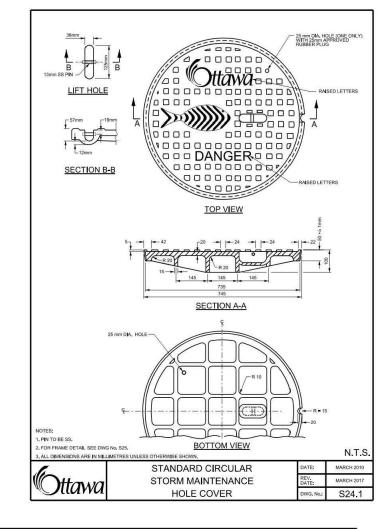
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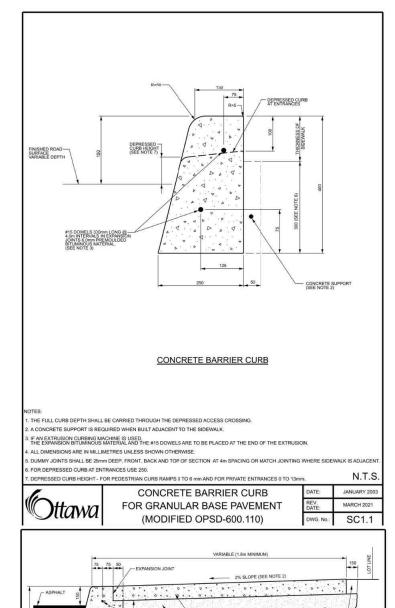




150mm overlap, Typ

115 - 600 - 115





#15 DOWELS 300mm LONG @4.0m INTERVALS.
 EXPANSION JOINTS 6.0mm PREMOULDED
 BITUMINOUS MATERIAL.

TYPICAL SIDEWALK SECTION

2% SLOPE (SEE NOTE 2)

#15 DOWELS 300mm LONG @4.0m INTERVALS IN EXPANSION JOINTS 6.0mm PREMOULDED BITUMINOUS MATERIAL.

SECTION AT PRIVATE ENTRANCE AND PEDESTRIAN RAMPS

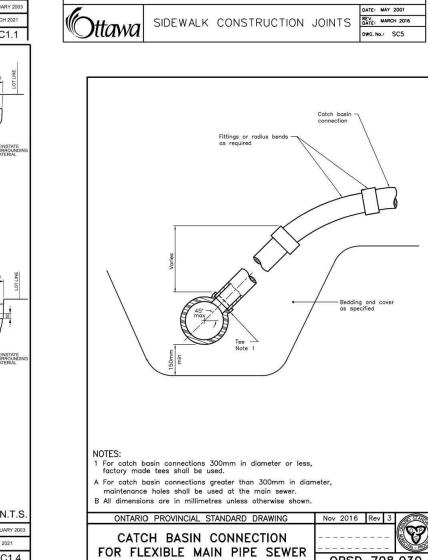
CONCRETE BARRIER CURB

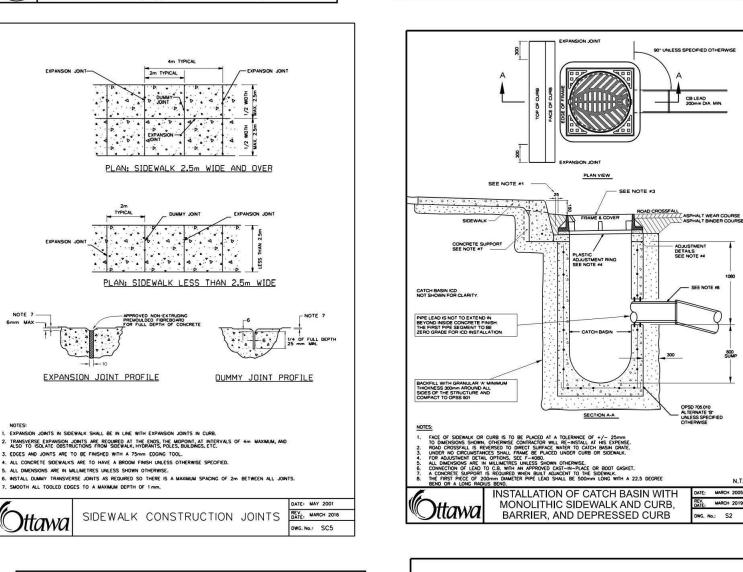
WITH SIDEWALK

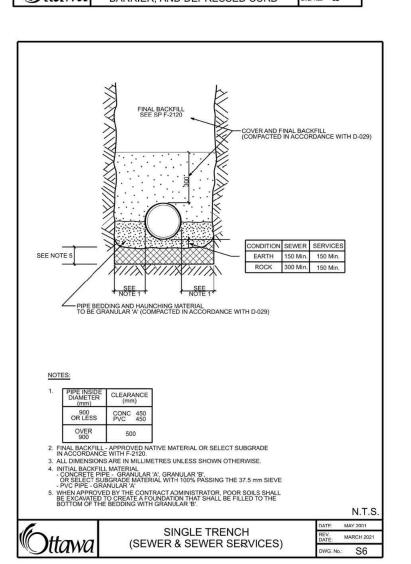
HE MAXIMUM SLOPE IS NOT TO EXCEED 2%. OR CURB RAMPS, SLOPE OF 2% TO 5%, MAXIMUM 8%...

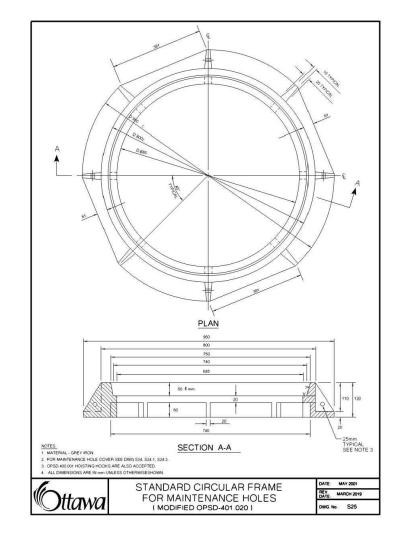
PANSION AND DUMMY JOINTS AS PER SC5

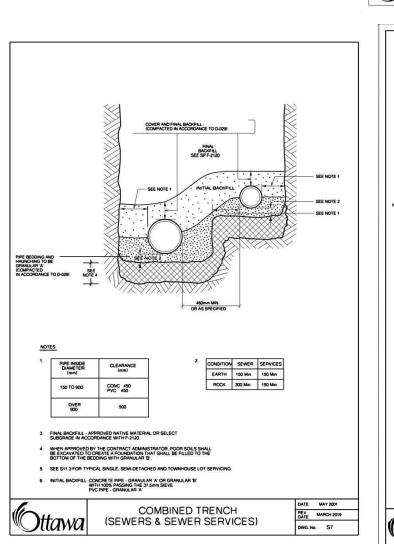
REINFORCING MESH 150x150mm MW9.1xMW9

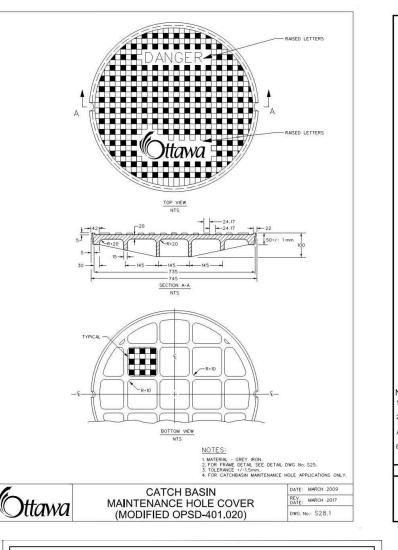


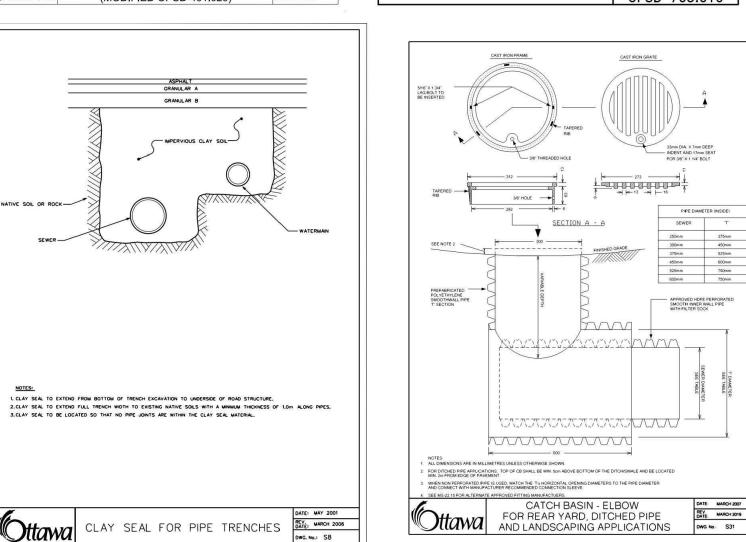












115 - 600 - 115

SECTION A-A

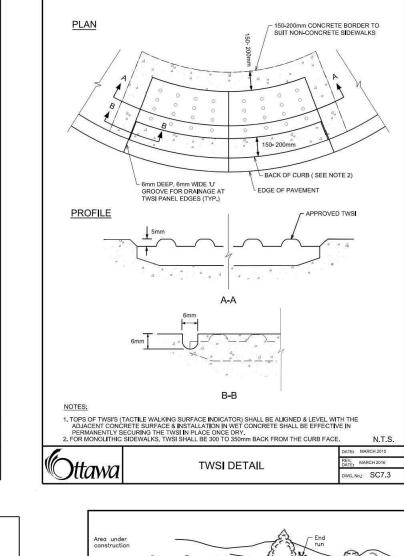
PRECAST CONCRETE CATCH BASIN

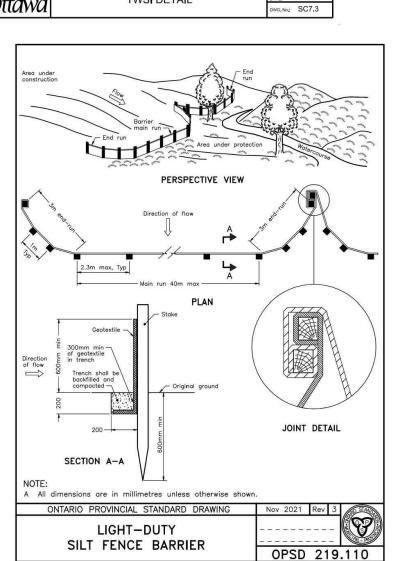
600x600mm

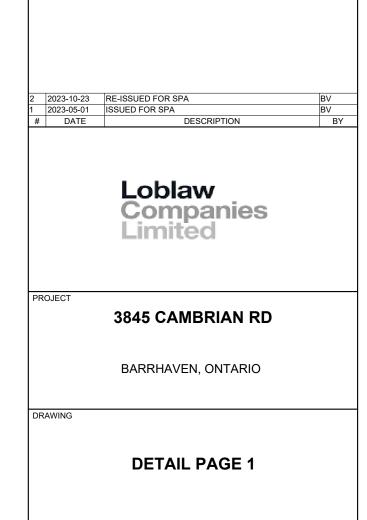
utlet hole size 525mm diameter maximum,

entre reinforcing in base slab and walls

Granular backfill shall be placed to 1 minimum thickness of 300mm all round the catch basin.







B. VILLENEUVE

100553987

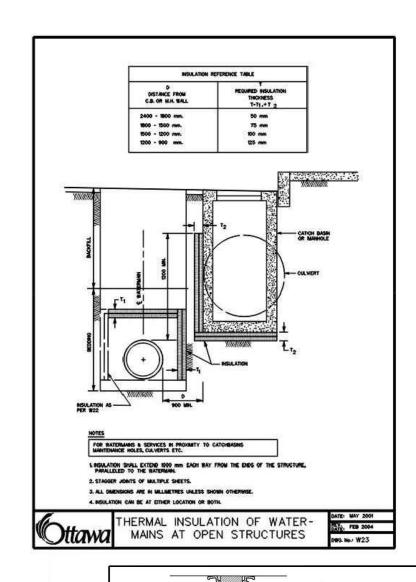
2023-10-23

478575

2023-02-27

CHECKED BY

As indicated



610mm EXTENSION AS REQUIRED

FOR AUXILIARY, SERVICES AND ISOLATION VALVES.

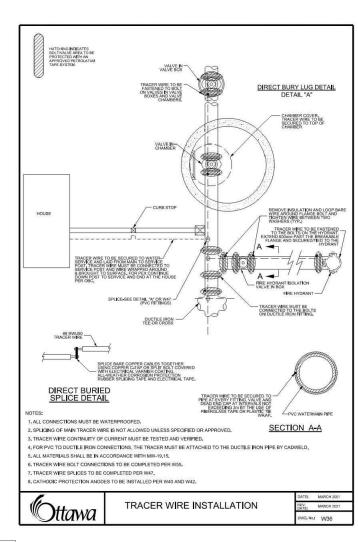
**Ottawa** 

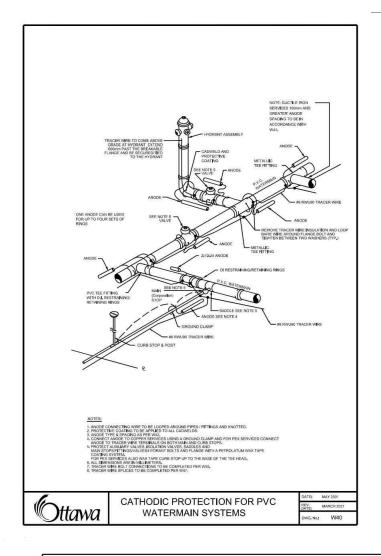
SECTION A - A

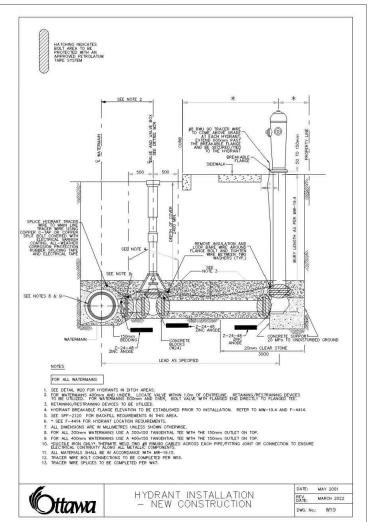
VALVE BOX CAP

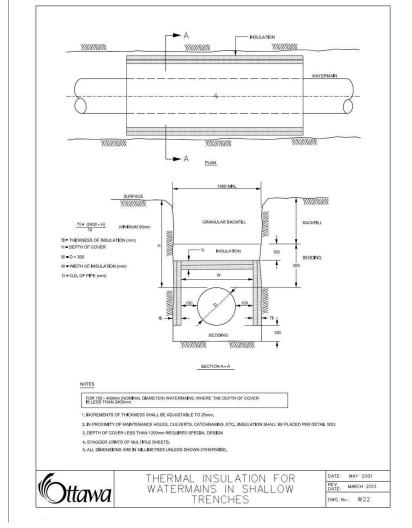
ADJUSTABLE ROAD LEVELER
(ALTERNATIVE)

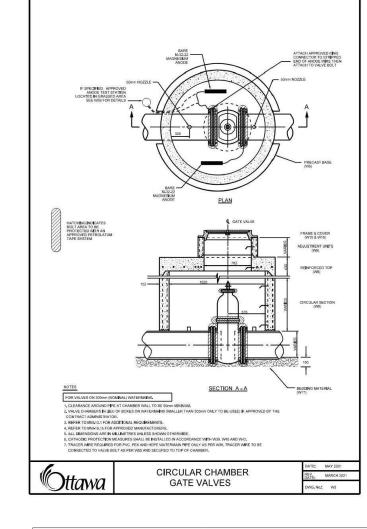
VALVE BOX ASSEMBLY











EDGE OF TRAVELLED ROAD (PAVED OR GRAVEL)

PLAN VIEW B

GRAN 'A' COMPACTED 100%

SECTION A-A

SEE NOTE 7

GRANULAR A COMPACTED IN ACCORDANCE WITH 0-029

TRAVELLED PORTION TOP EDGE OF SHOULDER CROWN OF DRIVEWAY TYSLOPE

SECTION B-B

1. APPROVED NEW CULVERT MATERIAL ONLY, WIN. 500mm UNLESS SPECIFIED OTHERWISE, DITCH AND CULVERT TO BE SIZED ACCORDING TO SEMER DESIGN GUIDELINE MANUAL.

ID SETTER DESAIN QUILLERS MANUAL.

1. LENGTH OF CULVERTS IS DEPENDENT UPON THE DEPTH OF DITCH AND WOTH OF ENTRANCE.

3. ENTRANCE CLLVERTS GREATER THAN 900mm DIA OR MULTIPLE CLLVERTS MUST BE APPROVED PRIOR TO INSTALLATION, CULVERTS OVER 12m. LONG AND HEADMALS REQUER REPROVAL AND PETRAT BY THE CITY.

OVER 12th LOUR MAY HAVE SHEAR APPROVAL AND PERMIT BY THE CITY.

A. N FROST SUSCEPTIBLE SOLS SPECIAL BEDONIC CONDITIONS WILL BE REQUIRED.

5. REMOVE ALL ORGANICS FROM SES SLOPES AND DITCH BOTTOM PRORE TO PLACING CULVERT AND GRANULARS.

6. CULVERT TO BE COUNTERSURK DIZ OF ITS DUMETER BELOW PROSHED DITCH NIVET.

7. WHERE SPECIFED, APPROVED DITCHED PRE TO BE AT A MANIAUM GRADE OF 0.5% AND BE NON-PERFORATED TYPE UNDER CULVERTS.

8. SEE MS 22.15 FOR APPROVED PRODUCTS. UNLESS STHERMS STATED IN THE CONTRACT, CONSTRUCTION AS PER OPSS 421.

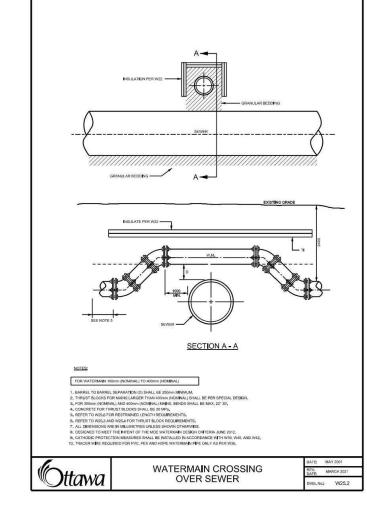
9. ALL DIRECHSIONS ARE IN MILLMETRES UNLESS SHOWN OTHERWISE.

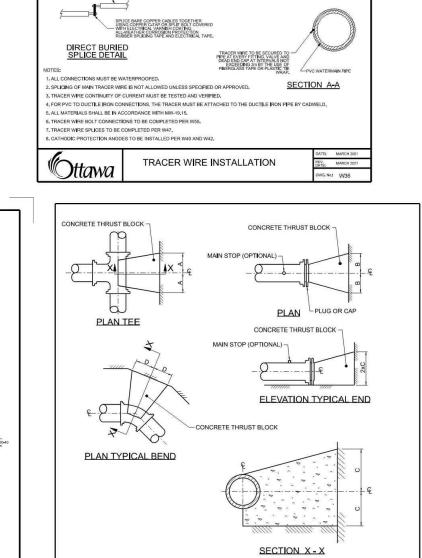
DETAIL - RURAL

GRANULAR 'A' COMPACTED TO 95% MAXIMUM DRY DENSITY

TOP OF PRIVATE ENTRANCE

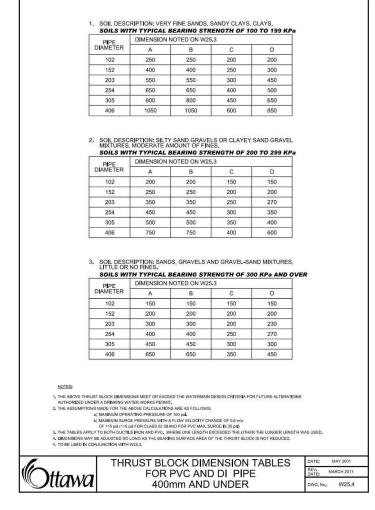
ROAD SHOULDER

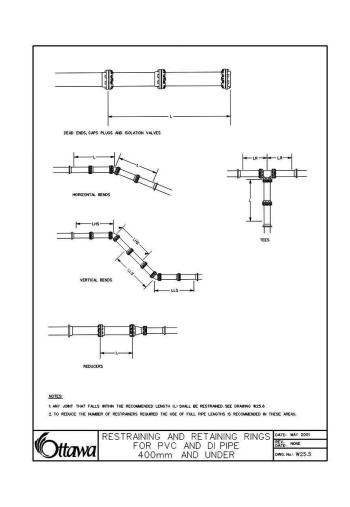


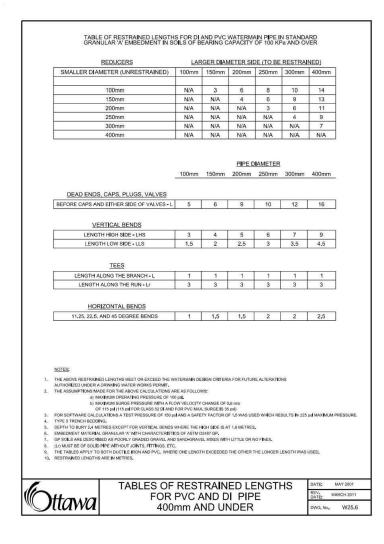


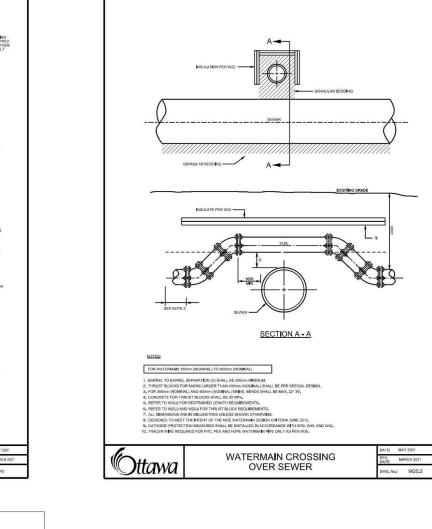
CONCRETE THRUST BLOCKS

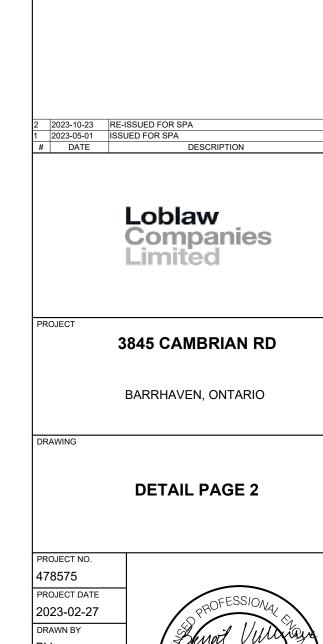
FOR PVC AND DI PIPE











As indicated

B. VILLENEUVE 100553987 2023-10-23

C105

TURNER FLEISCHER

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1223 MICHAEL STREET, SUITE 100, OTTAWA, ONTARIO K1J 7T2 Tel: 613-738-4160 Fax: 613-739-7105

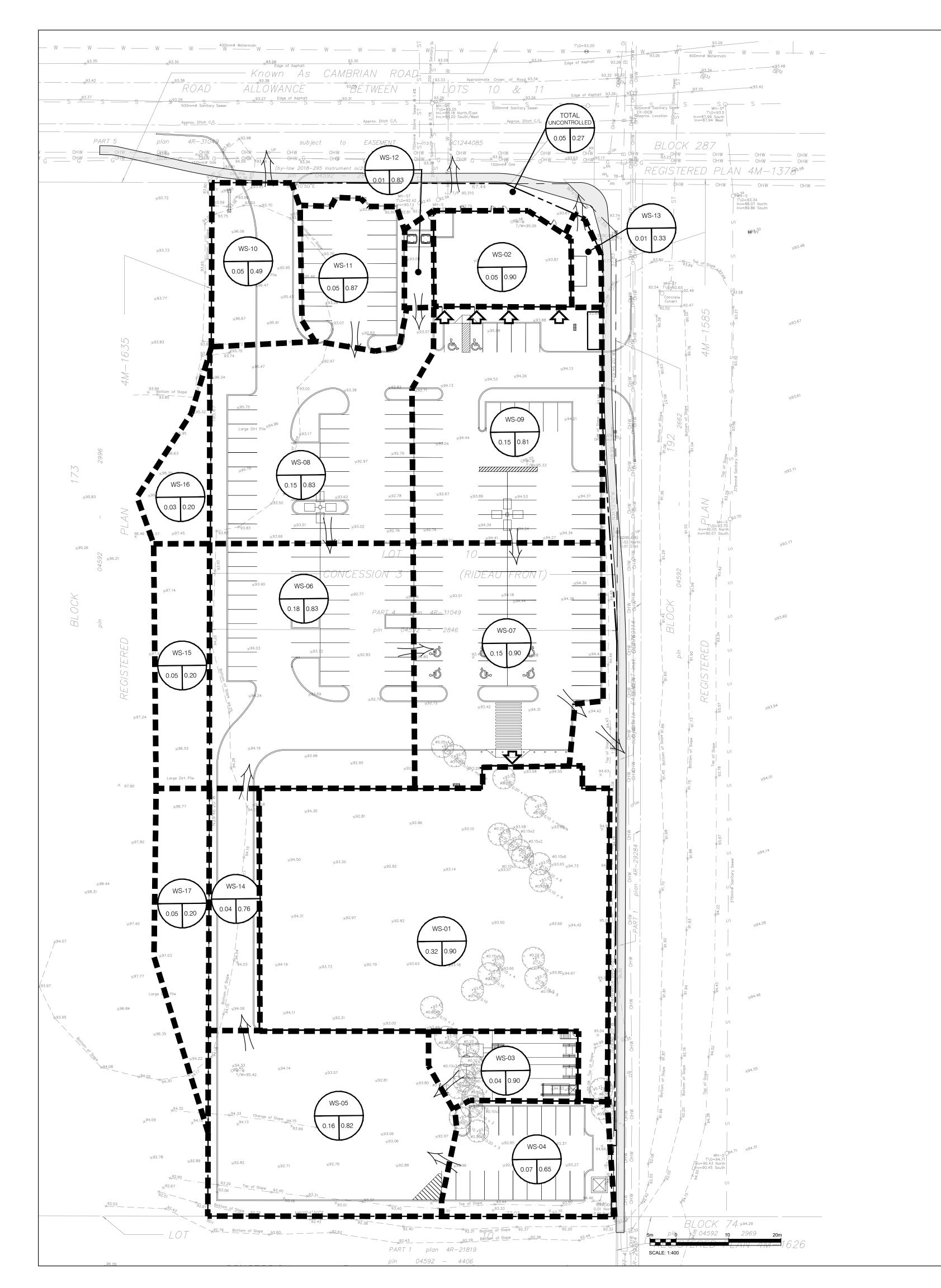
SUBJECT SITE

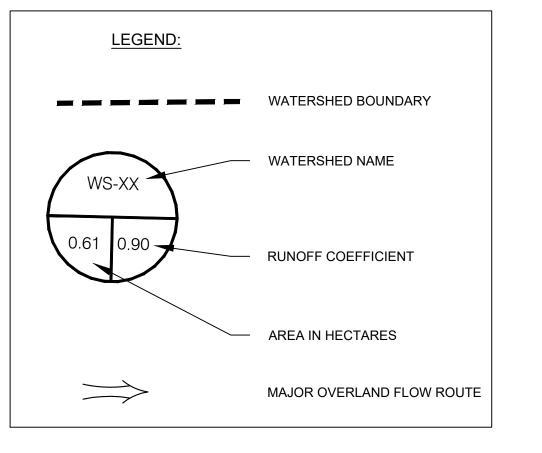
**PARSONS** 

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2 2023-10-23 RE-ISSUED FOR SPA 1 2023-05-01 ISSUED FOR SPA # DATE DESCRIPTI

> Loblaw Companies Limited

3845 CAMBRIAN RD

BARRHAVEN, ONTARIO

DRAWING

POST-DEVELOPMENT DRAINAGE AREAS

478575
PROJECT DATE
2023-02-27
DRAWN BY
BV
CHECKED BY

As indicated



C106