



DRAWING NOT TO BE USED FOR CONSTRUCTION

GENERAL NOTES:

- ALL DIMENSIONS INDICATED ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SPECIFIED.
- JELLYFISH STRUCTURE INLET AND OUTLET PIPE SIZE AND ORIENTATION SHOWN FOR INFORMATIONAL PURPOSES ONLY.
- UNLESS OTHERWISE NOTED, BYPASS INFRASTRUCTURE, SUCH AS ALL UPSTREAM DIVERSION STRUCTURES, CONNECTING STRUCTURES, OR PIPE CONDUITS CONNECTING TO COMPLETE THE JELLYFISH SYSTEM SHALL BE PROVIDED AND ADDRESSED SEPARATELY.
- DRAWING FOR INFORMATION PURPOSES ONLY. REFER TO ENGINEER'S SITE UTILITY PLAN FOR STRUCTURE ORIENTATION.
- NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

JELLYFISH STRUCTURE & DESIGN NOTES:

- 457 MM (18") MAINTENANCE ACCESS WALL TO BE USED FOR CLEANOUT AND ACCESS BELOW CARTRIDGE DECK.
- CARTRIDGE ORIENTATION OF THE JELLYFISH MANHOLE STRUCTURE TO EXTEND TO DESIGN FINISH GRADE. DEPTHS IN EXCESS OF 3.85 M (12') MAY REQUIRE THE DESIGN AND INSTALLATION OF INTERMEDIATE SAFETY GRATES OR OTHER STRUCTURAL ELEMENTS.
- CARTRIDGE AND GRADE RINGS, OR DOORS OR DOOR RISERS, OR BOTH, SHALL BE GROUTED FOR WATER TIGHTNESS.
- STRUCTURE SHALL MEET ASHTO M30 ASSUMING EARTH COVER OF 0.3 AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET ASHTO M306 LOAD RATING AND BE CAST WITH THE BIRRIAL LOAD.
- ALL STRUCTURAL SECTIONS AND PARTS TO MEET OR EXCEED ASTM C-418, ASTM C-443, AND ASTM C-1107 CORRESPONDING TO ASHTO SPECIFICATIONS, AND ANY OTHER SITE OR LOCAL STANDARDS.
- CONCRETE RISER SECTIONS FROM BOTTOM TO TOP WILL BE ADDED AS REQUIRED INCLUDING TRANSITION PIECES TO SMALLER DIAMETER RISERS FOR SURFACE ACCESSES WHERE MARKED BY SERVICE DEPTH.
- IF MINIMUM DEPTH FROM TOP OF CARTRIDGE DECK TO BOTTOM OF STRUCTURE TOP SLAB CANNOT BE ACHIEVED DUE TO PIPING INVERT ELEVATIONS OR OTHER SITE CONSTRAINTS, ALTERNATIVE MATCH CONFIGURATIONS MAY BE AVAILABLE. HATCH DOORS SHOULD BE SIZED TO PROVIDE FULL ACCESS ABOVE THE CARTRIDGES TO ACCOMMODATE MAINTENANCE.
- STEPS TO BE APPROXIMATELY 300 MM (12") APART AND DIMENSIONS MUST MEET LOCAL STANDARDS. STEPS MUST BE INSTALLED AFTER CARTRIDGE DECK IS IN PLACE.
- CONFIGURATION OF INLET AND OUTLET PIPE CAN VARY TO MEET SITE NEEDS. IT IS THE RESPONSIBILITY OF OTHERS TO PROPERLY PROTECT THE TREATMENT DEVICE, AND KEEP THE DEVICE OPEN DURING CONSTRUCTION. FILTER CARTRIDGES SHALL NOT BE INSTALLED UNTIL THE PROJECT SITE IS CLEAN AND FREE OF DEBRIS. BY OTHERS, THE PROJECT SITE INCLUDES ANY SURFACE THAT CONTRIBUTES STORM DRAINAGE TO THE TREATMENT DEVICE. CARTRIDGES SHALL BE FURNISHED NEW AT THE TIME OF FINAL ACCEPTANCE. THIS DRAWING MUST BE VIEWED IN CONJUNCTION WITH THE STANDARD JELLYFISH SPECIFICATION AND STORMWATER QUALITY FILTER TREATMENT JELLYFISH DOCUMENTS.

INSTALLATION NOTES:

- ANY EXISTING SLOTTED DEPTH AND/OR ANTI-VIBRATION PROVISIONS ARE TO REMAIN. SITE SPECIFIC DESIGN CONSIDERATIONS SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED). CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS WITH SHRINK GROUT WITH APPROVED WATER STOP OR FLEXIBLE BOOT.
- CONTRACTOR TO TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
- CARTRIDGE INSTALLATION BY BIRRIAL SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT BIRRIAL TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

OFFLINE LAYOUT

XXX.XX INFORMATION TO BE SUPPLIED BY ENGINEER OF RECORD

CROSS SECTION 1-1

JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF CARTRIDGE TYPE AND STYLE AS SHOWN. 1200MM (48") MANHOLE JELLYFISH PEAK TREATMENT CAPACITY IS 12 L/S @ 1.5 M (5.0 FT) DEPTH. TREATMENT FLOW RATE IS BASED ON 40% CARTRIDGE SELECTION.

CARTRIDGE DEPTH	15"	27"	40"	54"	
WATER QUALITY FLOW RATE (L/S)	5.07	7.44	9.81	12.17	
PEAK FLOW RATE (L/S)	3.38	4.84	6.21	7.68	
RETURN PERIOD OF PEAK FLOW (hrs)	97.28	67.21	42.21	27.14	
# OF CARTRIDGES REQUIRED (H/F / O/D)	8	5	4	3	
CARTRIDGE SIZE (mm)	150	150	150	150	
PIPE DATA	I.E.	MATL	DIA	SLOPE %	HGL
INLET #1					
INLET #2					
OUTLET					

SITE SPECIFIC DATA REQUIREMENTS

JELLYFISH MODEL	STRUCTURE ID	WATER QUALITY FLOW RATE (L/S)	PEAK FLOW RATE (L/S)	RETURN PERIOD OF PEAK FLOW (hrs)	# OF CARTRIDGES REQUIRED (H/F / O/D)	CARTRIDGE SIZE (mm)	PIPE DATA	I.E.	MATL	DIA	SLOPE %	HGL

ORIFICE PLATE DETAIL

3mm THICK ORIFICE PLATE (STAINLESS STEEL)

75mm AND 150mm TYP.

LAG SCREWS AND LEAD PLUGS (TYP.)

BURNSIDE NB 3.11

CONCRETE BARRIER CURB

100mm Note

150

250

5

Notes:

- When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
- For slipforming procedure a 5% batter is acceptable.
- Treatment at entrances shall be according to OPSD 351.010.
- Outlet treatment shall be according to the OPSD 610 Series.
- The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.
- All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2012 Rev 2 OPSD 600.110

BENCHMARK
ELEVATIONS ARE REFERRED TO THE CANADIAN GEODETIC VERTICAL DATUM (CGVD-1928: PRE 1978) AND ARE DERIVED FROM CITY OF MISSISSAUGA BENCHMARK MONUMENT No. 1065, HAVING A PUBLISHED ELEVATION OF 178.912 METRES.

NOT FOR CONSTRUCTION

No.	Issue / Revision	Date	Auth.
1	ISSUED FOR SITE PLAN APPROVAL	20/03/20	DN
2	RE-ISSUED FOR SITE PLAN APPROVAL	22/01/11	DN
3	RE-ISSUED FOR SITE PLAN APPROVAL	23/05/10	TR
4	RE-ISSUED FOR ZONING	24/04/03	TR
5	RE-ISSUED FOR ZONING	24/12/18	LG

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PROVINCE OF ONTARIO

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Drawing Title: **3475 NINTH LINE, MISSISSAUGA**

DETAIL PLAN

Drawn	Checked	Designed	Checked	Date	Drawing No.
LG	JM	LG	JM	23/07/17	
Project No.	300044049	Contract No.		Revision No.	0
Scale	CONTRACT NO.		REVISION NO.		D2
NOT TO SCALE					