

**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
DEVELOPMENT, 1140 TERRY FOX DRIVE**

Appendix A Water Supply Servicing
November 19, 2019

Appendix A **WATER SUPPLY SERVICING**

A.1 DOMESTIC WATER DEMAND ESTIMATE

Kanata Fernbank LCBO - Domestic Water Demand Estimates

- Based on Petroff Partnership Architects Site Plan November 7, 2019 (160401317)

Building ID	Area (m ²)	Population	Daily Rate of Demand ¹	Avg Day Demand		Max Day Demand ²		Peak Hour Demand ²	
				(L/min)	(L/s)	(L/min)	(L/s)	(L/min)	(L/s)
BLDG W LCBO	743	-	28,000	1.4	0.02	2.2	0.04	3.9	0.07
BLDG X	664	-	28,000	1.3	0.02	1.9	0.03	3.5	0.06
BLDG Y	478	-	28,000	0.9	0.02	1.4	0.02	2.5	0.04
Total Site :				3.7	0.06	5.5	0.09	9.9	0.16

1. 28,000 L/gross ha/day is used to calculate water demand for Shopping Centres.

2. The City of Ottawa water demand criteria used to estimate peak demand rates for residential areas are as follows:

maximum day demand rate = 1.5 x average day demand rate

peak hour demand rate = 1.8 x maximum day demand rate

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A.2 FIRE FLOW REQUIREMENTS PER OBC

Step	Task	Notes						Value Used	Req'd Fire Flow (L/min)
1	Determine Type of Construction	Ordinary Construction						1	-
2	Determine Ground Floor Area of One Unit	-						743	-
	Determine Number of Adjoining Units	-						1	-
3	Determine Height in Storeys	Does not include floors >50% below grade or open attic space						1	-
4	Determine Required Fire Flow	(F = 220 x C x A ^{1/2}). Round to nearest 1000 L/min						-	6000
5	Determine Occupancy Charge	Limited Combustible						-15%	5100
6	Determine Sprinkler Reduction	Conforms to NFPA 13						-30%	0
		Standard Water Supply						-10%	
		Not Fully Supervised or N/A						0%	
		% Coverage of Sprinkler System						0%	
7	Determine Increase for Exposures (Max. 75%)	Direction	Exposure Distance (m)	Exposed Length (m)	Exposed Height (Stories)	Length-Height Factor (m x stories)	Construction of Adjacent Wall	-	-
		North	> 45	29	1	0-30	Wood Frame or Non-Combustible	0%	1275
		East	10.1 to 20	23	1	0-30	Wood Frame or Non-Combustible	12%	
		South	10.1 to 20	29	2	31-60	Wood Frame or Non-Combustible	13%	
		West	> 45	29	1	0-30	Wood Frame or Non-Combustible	0%	
8	Determine Final Required Fire Flow	Total Required Fire Flow in L/min, Rounded to Nearest 1000L/min							6000
		Total Required Fire Flow in L/s							100.0
		Required Duration of Fire Flow (hrs)							2.00
		Required Volume of Fire Flow (m³)							720

Step	Task	Notes	Value Used	Req'd Fire Flow (L/min)					
1	Determine Type of Construction	Ordinary Construction	1	-					
2	Determine Ground Floor Area of One Unit	-	664	-					
	Determine Number of Adjoining Units	-	1	-					
3	Determine Height in Storeys	Does not include floors >50% below grade or open attic space	1	-					
4	Determine Required Fire Flow	(F = 220 x C x A ^{1/2}). Round to nearest 1000 L/min	-	6000					
5	Determine Occupancy Charge	Limited Combustible	-15%	5100					
6	Determine Sprinkler Reduction	Conforms to NFPA 13	-30%	0					
		Standard Water Supply	-10%						
		Not Fully Supervised or N/A	0%						
		% Coverage of Sprinkler System	0%						
7	Determine Increase for Exposures (Max. 75%)	Direction	Exposure Distance (m)	Exposed Length (m)	Exposed Height (Stories)	Length-Height Factor (m x stories)	Construction of Adjacent Wall	-	-
		North	> 45	14	1	0-30	Wood Frame or Non-Combustible	0%	1020
		East	> 45	27	1	0-30	Wood Frame or Non-Combustible	0%	
		South	20.1 to 30	14	2	0-30	Wood Frame or Non-Combustible	8%	
		West	10.1 to 20	27	1	0-30	Wood Frame or Non-Combustible	12%	
8	Determine Final Required Fire Flow	Total Required Fire Flow in L/min, Rounded to Nearest 1000L/min							6000
		Total Required Fire Flow in L/s							100.0
		Required Duration of Fire Flow (hrs)							2.00
		Required Volume of Fire Flow (m³)							720

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Appendix A Water Supply Servicing
November 19, 2019

A.3 BOUNDARY CONDITIONS

Boundary Conditions for 1140 Terry Fox Drive

Date Provided

September-19

Scenario	Demand	
	L/min	L/s
Average Daily Demand	3.6	0.06
Maximum Daily Demand	5.4	0.09
Peak Hour	9.6	0.16
Fire Flow Demand #1	6000	100

of connections

1

Location:



Results:

Connection 1 - 1140 Terry Fox Drive

Demand Scenario	Head (m)	Pressure ¹ (psi)
Maximum HGL	162.1	91.7
Peak Hour	157.0	84.4
Max Day plus Fire 1	154.8	81.4

¹ Ground Elevation = 97.6 m

Notes:

1. Pressure reducing valves are required since pressures are greater than 80 psi.

Disclaimer

The boundary condition information is based on current operation of the city water distribution system. The computer model simulation is based on the best information available at the time. The operation of the water distribution system can change on a regular basis, resulting in a variation in boundary conditions. The physical properties of watermains deteriorate over time, as such must be assumed in the absence of actual field test data. The variation in physical watermain properties can therefore alter the results of the computer model simulation. Fire Flow analysis is a reflection of available flow in the watermain; there may be additional restrictions that occur between the watermain and the hydrant that the model cannot take into account.

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Appendix A Water Supply Servicing
November 19, 2019

A.4 WATERMAIN HYDRAULIC ANALYSIS RESULTS

Hydraulic Model Results - Average Day Analysis

Junction Results

ID	Demand	Elevation	Head	Pressure	
	(L/s)	(m)	(m)	(psi)	(Kpa)
1	0.06	97.71	162.1	91.54	631.15

Pipe Results

ID	From Node	To Node	Length	Diameter	Roughness	Flow	Velocity
			(m)	(mm)		(L/s)	(m/s)
10	1000	1	115.68	204	110	0.06	0

Hydraulic Model Results -Peak Hour Analysis

Junction Results

ID	Demand	Elevation	Head	Pressure	
	(L/s)	(m)	(m)	(psi)	(Kpa)
1	0.16	97.71	157.00	84.29	581.16

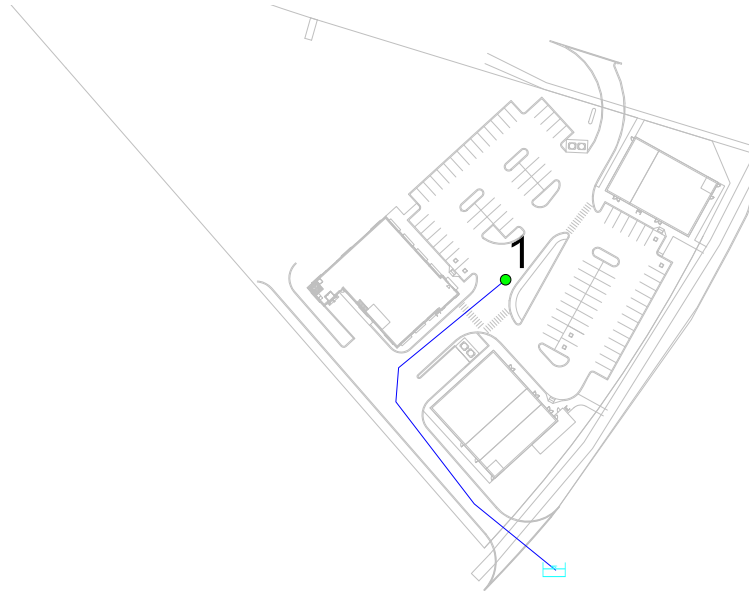
Pipe Results

ID	From Node	To Node	Length	Diameter	Roughness	Flow	Velocity
			(m)	(mm)		(L/s)	(m/s)
10	1000	1	115.68	204	110	0.16	0.00

Hydraulic Model Results -Fire Flow Analysis

ID	Static Demand	Static Pressure		Static Head	Fire-Flow Demand	Residual Pressure		Available Flow at Hydrant	Available Flow Pressure	
	(L/s)	(psi)	(Kpa)	(m)	(L/s)	(psi)	(Kpa)	(L/s)	(psi)	(Kpa)
1	0.09	81.16	559.58	154.80	100	71.72	494.50	274.53	20	137.90

160401317-2019-10-08-JUNCTION ID



JUNCTION (MOTYPE)

- Active
- Domain

TANK (MOTYPE)

- Active Tank
- Domain Tank
- Active Reservoir
- Domain Reservoir

PIPE (MOTYPE)

- Active Pipe
- Domain Pipe
- Active Check Valve
- Domain Check Valve

PUMP (MOTYPE)

- Active
- Domain

VALVE (MOTYPE)

- Active
- Domain

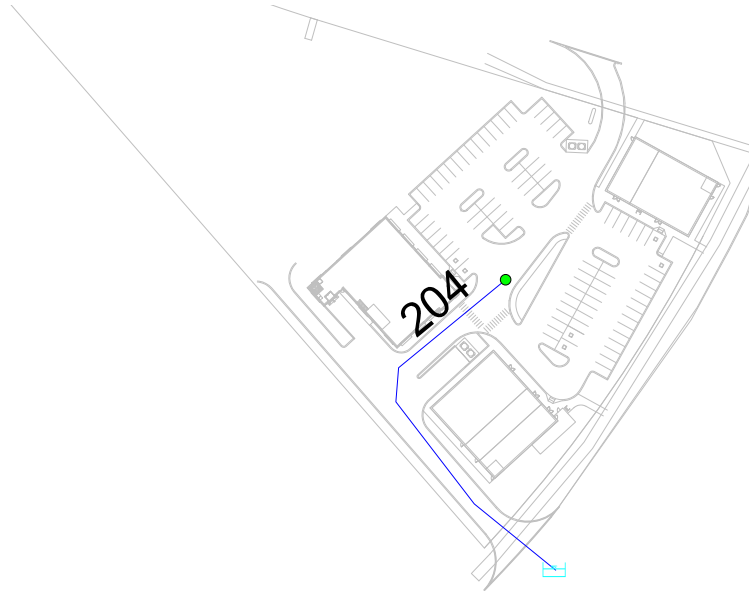
ACAD-160401317-SP.dxf

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ANNO1

■

160401317-2019-10-08 - PIPE DIAMETER



TEXT



JUNCTION (MOTYPE)

- Active
- Domain

TANK (MOTYPE)

- Active Tank
- Domain Tank
- Active Reservoir
- Domain Reservoir

PIPE (MOTYPE)

- Active Pipe
- Domain Pipe
- Active Check Valve
- Domain Check Valve

PUMP (MOTYPE)

- Active
- Domain

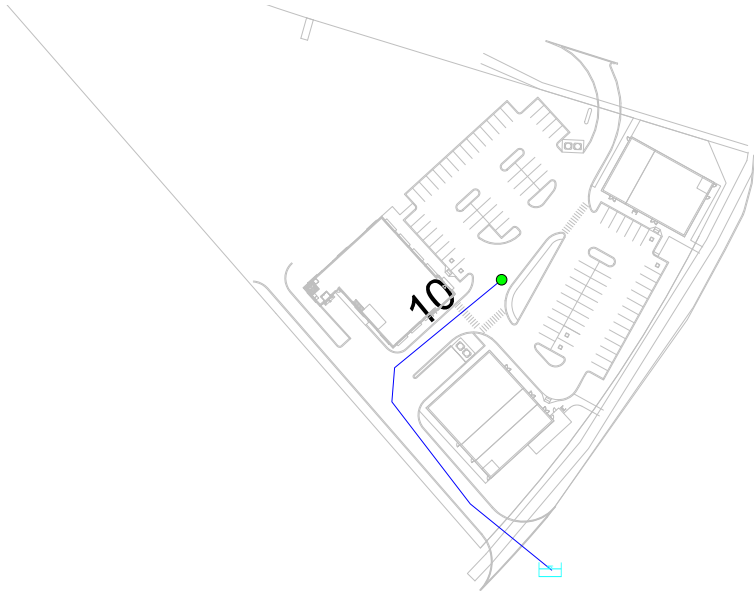
VALVE (MOTYPE)

- Active
- Domain

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160401317-2019-10-08- PIPE ID



JUNCTION (MOTYPE)

- Active
- Domain

TANK (MOTYPE)

- Active Tank
- Domain Tank
- Active Reservoir
- Domain Reservoir

PIPE (MOTYPE)

- Active Pipe
- Domain Pipe
- Active Check Valve
- Domain Check Valve

PUMP (MOTYPE)

- Active
- Domain

VALVE (MOTYPE)

- Active
- Domain

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ANNO1

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**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
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Appendix B Wastewater Servicing
November 19, 2019

Appendix B WASTEWATER SERVICING

B.1 SANITARY SEWER DESIGN SHEET



**COMMERCIAL DEVELOPMENT - 1140
TERRY FOX DRIVE**

FILE NUMBER: 160401317

(City of Ottawa)

DESIGN PARAMETERS

LOCATION			RESIDENTIAL AREA AND POPULATION								COMMERCIAL		INDUSTRIAL (L)		INDUSTRIAL (H)		INSTITUTIONAL		GREEN / UNUSED		C+H	INFILTRATION			TOTAL	PIPE									
AREA ID NUMBER	FROM M.H.	TO M.H.	AREA	SINGLE	UNITS TOWN	APT	POP.	CUMULATIVE POP.	PEAK FACT.	PEAK FLOW	AREA	ACCU AREA	AREA	ACCU AREA	AREA	ACCU AREA	AREA	ACCU AREA	AREA	ACCU AREA	PEAK FLOW	TOTAL AREA	ACCU AREA	INFILT FLOW	FLOW	LENGTH	DIA	MATERIAL	CLASS	SLOPE	CAP. (FULL)	CAP. V PEAK FLOW	VEL. (FULL)	VEL. (ACT.)	
			(ha)					(ha)		(l/s)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(ha)	(l/s)	(ha)	(ha)	(l/s)	(l/s)	(m)	(mm)			(%)	(l/s)	(%)	(m/s)	(m/s)	
	SAN STUB Y	4	0.00	0	0	0	0	0.00	0	3.80	0.0	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.05	0.05	0.0	0.0	6.4	135	PVC	DR 28	1.00	11.5	0.35%	0.80	0.15
G4A, C4A C3B, C3A, G3A G2A	4	3	0.00	0	0	0	0	0.00	0	3.80	0.0	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.24	0.24	0.0	0.1	23.5	200	PVC	SDR 35	1.00	33.5	0.34%	1.05	0.20	
	3	2	0.00	0	0	0	0	0.00	0	3.80	0.0	0.14	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	0.48	0.59	0.1	0.3	62.9	200	PVC	SDR 35	0.40	21.1	1.65%	0.67	0.20	
	2	1	0.00	0	0	0	0	0.00	0	3.80	0.0	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	0.14	0.73	0.1	0.4	43.4	200	PVC	SDR 35	0.40	21.1	1.87%	0.67	0.22	
	1	SAN STUB	0.00	0	0	0	0	0.00	0	3.80	0.0	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.1	0.00	0.73	0.1	0.4	7.1	250	PVC	SDR 35	0.25	30.3	1.31%	0.61	0.18	
																											250								

**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
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Appendix C Stormwater Management
November 19, 2019

Appendix C STORMWATER MANAGEMENT

C.1 STORM SEWER DESIGN SHEET

 Stantec	COMMERCIAL DEVELOPMENT - 1140 TERRY FOX DRIVE				STORM SEWER DESIGN SHEET (City of Ottawa)							DESIGN PARAMETERS																												
	DATE: 2019-11-19											I = a / (t+b) ^c (As per City of Ottawa Guidelines, 2012)																												
	REVISION: 1											a = 732.951 998.071 1174.184 1735.688 MANNING'S n = 0.013 BEDDING CLASS = B																												
	DESIGNED BY: MJS																																							
CHECKED BY: TR				FILE NUMBER: 160401317				b = 6.199 6.053 6.014 6.014 MINIMUM COVER: 2.00 m																																
								c = 0.810 0.814 0.816 0.820 TIME OF ENTRY 10 min																																
LOCATION					DRAINAGE AREA																				PIPE SELECTION															
AREA ID NUMBER	FROM M.H.	TO M.H.	AREA (2-YEAR) (ha)	AREA (5-YEAR) (ha)	AREA (10-YEAR) (ha)	AREA (100-YEAR) (ha)	AREA (ROOF) (ha)	C (2-YEAR) (-)	C (5-YEAR) (-)	C (10-YEAR) (-)	C (100-YEAR) (-)	A x C (2-YEAR) (ha)	ACCUM AxC (2YR) (ha)	A x C (5-YEAR) (ha)	ACCUM. AxC (5YR) (ha)	A x C (10-YEAR) (ha)	ACCUM. AxC (10YR) (ha)	A x C (100-YEAR) (ha)	ACCUM. AxC (100YR) (ha)	T of C (min)	I ₂ -YEAR (mm/h)	I ₅ -YEAR (mm/h)	I ₁₀ -YEAR (mm/h)	I ₁₀₀ -YEAR (mm/h)	Q _{CONTROL} (L/s)	ACCUM. Q _{CONTROL} (L/s)	Q _{ACT} (CIA/360) (L/s)	LENGTH (m)	PIPE WIDTH OR DIAMETER (mm)	PIPE HEIGHT (mm)	PIPE SHAPE (-)	MATERIAL (-)	CLASS (-)	SLOPE %	Q _{CAP} (FULL) (L/s)	% FULL (-)	VEL. (FULL) (m/s)	VEL. (ACT) (m/s)	TIME OF FLOW (min)	
R103A	BLDG Y 103	103 102	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.00	76.81	104.19	122.14	178.56	0.0	0.0	0.0	7.5	150	150	CIRCULAR	PVC	-	1.00	15.3	0.00%	0.86	0.00	0.00
			0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.00	76.81	104.19	122.14	178.56	0.0	0.0	0.0	22.3	250	250	CIRCULAR	PVC	-	0.50	42.7	0.00%	0.86	0.00
	501	102	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	10.00	76.81	104.19	122.14	178.56	0.0	0.0	0.0	22.0	200	200	CIRCULAR	PVC	-	1.00	33.3	0.00%	1.05	0.00	0.00
F102A, R102B, R102A, F102B	102	101	0.00	0.00	0.00	0.45	0.14	0.00	0.00	0.00	0.81	0.000	0.000	0.000	0.000	0.000	0.000	0.368	0.368	10.00	76.81	104.19	122.14	178.56	0.0	0.0	182.5	62.9	450	450	CIRCULAR	CONCRETE	-	0.50	210.3	86.80%	1.28	1.30	0.81	
Upstream Commercial and Cope	100	101	0.00	0.00	0.00	4.50	0.00	0.00	0.00	0.00	0.88	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.938	3.938	23.05	47.59	64.20	75.10	109.53	0.0	0.0	1197.9	51.6	1500	1500	CIRCULAR	CONCRETE	-	0.11	2445.8	48.98%	1.34	1.14	0.76
F101A, F101B	101	STM OUTLET	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.73	0.000	0.000	0.000	0.000	0.000	0.000	0.119	4.424	23.81	46.62	62.87	73.54	107.24	0.0	0.0	1318.0	38.4	1500	1500	CIRCULAR	CONCRETE	-	0.11	2445.8	53.89%	1.34	1.17	0.55	
																					24.36																			

Notes: Exterior flows from the upstream commercial site have been added to accurately demonstrate total flows through the 1500mm dimeter storm sewer

**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
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Appendix C Stormwater Management
November 19, 2019

C.2 PCSWMM MODEL INPUT (3HR 100YR CHI)

[TITLE]

```

[OPTIONS]
;;Options      Value
-----
FLOW_UNITS     LPS
INFILTRATION   HORTON
FLOW_ROUTING   DYNWAVE
LINK_OFFSETS   ELEVATION
MIN_SLOPE      0
ALLOW_PONDING  YES
SKIP_STEADY_STATE NO
START_DATE     10/31/2010
START_TIME     00:00:00
REPORT_START_DATE 10/31/2010
REPORT_START_TIME 00:00:00
END_DATE       10/31/2010
END_TIME       06:00:00
SWEEP_START    01/01
SWEEP_END      12/31
DRY_DAYS       0
REPORT_STEP    00:01:00
WET_STEP       00:01:00
DRY_STEP       01:00:00
ROUTING_STEP   1
RULE_STEP      00:00:00
INERTIAL_DAMPING PARTIAL
NORMAL_FLOW_LIMITED BOTH
FORCE_MAIN_EQUATION H-W
VARIABLE_STEP  0
LENGTHENING_STEP 0
MIN_SURFAREA   0
MAX_TRIALS     8
HEAD_TOLERANCE 0.0015
SYS_FLOW_TOL   5
LAT_FLOW_TOL   5
MINIMUM_STEP   0.5
THREADS        6

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[EVAPORATION]
;;Type      Parameters
-----
CONSTANT    0.0
DRY_ONLY    NO

```

[RAINGAGES]

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160401317-2019-11-14-3HR-100YR-CHI.inp
;;
;;Name      Rain Type   Time Intrvl  Snow Catch  Data Source
-----
R1          INTENSITY  0:10      1.0        TIMESERIES 100CHI

[SUBCATCHMENTS]
;;
;;Name      Raingage      Outlet      Total Area  Pcnt. Imperv  width  Pcnt. Slope  Curb Length  Snow Pack
-----
;CB105A
105         R1             CB105A      0.1         100          49.441  1          0
;CB106A
105B        R1             CB106A      0.17598    100          90.932  1          0
;CB107A
107         R1             CB107A      0.07495    100          33.408  1          0
;CB108A
108         R1             CB108A      0.32112    100          152.508 1          0
;CB108B
108A        R1             CB108B      0.25258    100          94.338  1          0
;CB108C
108B        R1             CB108C      0.19042    100          91.548  1          0
;CB109A
109         R1             CB109A      0.22101    100          107.657 1          0
;CB109B
109A        R1             CB109B      0.29528    100          132.146 1          0
;CB110C
110         R1             CB110C      0.20815    100          102.446 1          0
;CB110D
110A        R1             CB110D      0.19495    100          93.717  1          0
;CB110A
110B        R1             CB110A      0.28        100          50        1          0
;CB110B
110C        R1             CB110B      0.22        100          104.762  1          0
;CB111D
111         R1             CB111D      0.13        100          52        1          0

```

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160401317-2019-11-14-3HR-100YR-CHI.inp							
;CB111A 111A	R1	CB111A	0.29	100	49.743	1	0
;CB111C 111B	R1	CB111C	0.05015	100	33.407	1	0
;CB111B 111C	R1	CB111B	0.02537	100	18.029	1	0
;CB111G 111D	R1	CB111G	0.19941	100	78.133	1	0
;CB111F 111E	R1	CB111F	0.15629	100	79.622	1	0
;CB111E 111F	R1	CB111E	0.14828	100	67.975	1	0
;RfA BLDG_A	R1	RfA	1.42777	100	170.064	1	0
;RfB BLDG_B	R1	RfB	0.13	100	49.242	1	0
;RFC BLDG_C	R1	RFC	0.14	100	49.47	1	0
;RfD BLDG_D	R1	RfD	0.04201	100	44.835	1	0
;RfE BLDG_E	R1	RfE	0.04564	100	44.509	1	0
C1003A	R1	C1003A-S	0.35539	64.286	111	3	0
C1006A	R1	C1006A-S	0.387162	71.429	86.85	3	0
C1008A	R1	C1008A-S	0.642134	74.286	219	3	0
C1009A	R1	C1009A-S	0.50132	74.286	200.5	3	0
C1023A	R1	C1023A-S	7.398994	71.429	370	1	0
C1051A	R1	C1051A-S	0.228589	71.429	169.4	3	0
C1052A	R1	C1052A-S	0.27544	71.429	103.4	3	0
C1052B	R1	C1052B-S	0.327942	71.429	126.6	3	0

Page 3

160401317-2019-11-14-3HR-100YR-CHI.inp							
C1056A	R1	C1056A-S	0.23358	71.429	118.7	3	0
C2000A	R1	C2000A-S	0.558415	72.857	218.37	3	0
C2001A	R1	C2001A-S	0.41434	72.857	149.3	3	0
C2002A	R1	C2002A-S	0.298038	71.429	73.2	3	0
C2004A	R1	C2004A-S	0.284792	71.429	67.4	3	0
C2004B	R1	C2004B-S	0.348974	71.429	79.1	3	0
C2005A	R1	C2005A-S	0.378419	71.429	92.2	3	0
C2006A	R1	C2006A-S	0.32423	71.429	91.3	3	0
C2006B	R1	C2006B-S	0.550539	71.429	161.7	3	0
C2008A	R1	C2008A-S	0.214769	71.429	57.5	3	0
C2009A	R1	C2009A-S	0.106255	71.429	25	3	0
C2009B	R1	C2009B-S	0.233537	71.429	56.2	3	0
C2049A	R1	C2049A-S	2.841597	71.429	240	1	0
CM97A	R1	CM97A-S	0.40529	71.429	185.7	3	0
F101A	R1	CB503-S	0.153456	74.286	97	1	0
F1021A	R1	F1021A-S	0.924522	28.571	187.9	1	0
F102A	R1	F102A-S	0.234894	85.714	55	1.5	0
F102B	R1	F102B-S	0.218303	88.571	54	1	0
F102C	R1	F102C-S	0.009287	100	11.1	1	0
F2006A	R1	F2006A-S	1.352307	28.571	180	1	0
;xSTUB FUT1	R1	STM103	0.66912	100	301.528	1	0
L1000A	R1	L1000A-S	0.236847	38.571	113	3	0
L1001A	R1	L1001A-S	0.256966	71.429	101.6	3	0

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L1002A	R1	160401317-2019-11-14-3HR-100YR-CHI.inp L1002A-S	0.256725	71.429	131.8	3	0
L1007A	R1	L1007A-S	0.701972	38.571	412.4	3	0
L1010A	R1	L1010A-S	0.176688	52.857	89.35	3	0
L1010B	R1	L1010B-S	0.580048	28.571	353.5	3	0
L1011A	R1	L1011A-S	0.150384	52.857	129.2	3	0
L1011B	R1	L1011B-S	0.242178	38.571	111	3	0
L1012A	R1	L1012A-S	0.152579	52.857	85.2	3	0
L1015B	R1	L1015A-S	0.114146	52.857	44.8	3	0
L1016A	R1	L1016A-S	0.44936	71.429	192.6	3	0
L1017A	R1	L1017A-S	0.350163	71.429	101	3	0
L1019A	R1	L1019A-S	0.326371	71.429	133.2	3	0
L1019B	R1	L1019B-S	0.639583	24.286	390	3	0
L1019C	R1	L1019C-S	0.145407	38.571	80.9	3	0
L1020A	R1	L1020A-S	0.267442	71.429	106.7	3	0
L1020B	R1	L1020B-S	0.119028	52.857	84.4	3	0
L1020C	R1	L1020C-S	0.140024	52.857	77.3	3	0
L1022A	R1	L1022A-S	3.139053	71.429	707	3	0
L1024A	R1	L1024A-S	0.539467	71.429	213.2	3	0
L1024B	R1	L1024B-S	0.697428	38.571	378.2	3	0
L1026A	R1	L1026A-S	0.178043	71.429	93.1	3	0
L1027A	R1	L1027A-S	0.399233	71.429	180	3	0
L1027B	R1	L1027B-S0	0.145042	71.429	66.9	3	0
L1027C	R1	L1027C-S	0.51627	38.571	339.4	3	0
L1029A	R1	L1029A-S	0.378072	71.429	152.9	3	0

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L1030A	R1	160401317-2019-11-14-3HR-100YR-CHI.inp L1030A-S	0.34646	71.429	149.5	3	0
L1031A	R1	L1031A-S	0.37403	71.429	160.6	3	0
L1032A	R1	L1032A-S	0.247285	71.429	162.7	3	0
L1032B	R1	L1032B-S	0.410234	38.571	221	3	0
L1034A	R1	L1034A-S	0.218536	71.429	92.7	3	0
L1036A	R1	L1036A-S	0.437266	71.429	207.3	3	0
L1038A	R1	L1038A-S	0.182814	71.429	105.9	3	0
L1039A	R1	L1039A-S	0.24429	71.429	145.9	3	0
L1039B	R1	L1039B-S	0.170706	38.571	92	3	0
L1050A	R1	L1050A-S	0.280594	71.429	188.2	3	0
L1050B	R1	L1050B-S	0.373675	38.571	186.6	3	0
L1051B	R1	L1051B-S	0.483685	38.571	318.8	3	0
L1053A	R1	L1053A-S	0.267763	71.429	140.3	3	0
L1053B	R1	L1053B-S	0.598175	38.571	301	3	0
L1054A	R1	L1054A-S	0.483922	71.429	213.5	3	0
L1057A	R1	L1057A-S	0.315281	71.429	101.1	3	0
L1058A	R1	L1058A-S	0.287441	71.429	144.9	3	0
L1059A	R1	L1059A-S0	0.217088	71.429	73.2	3	0
L2007A	R1	L2007A-S	0.561554	27.143	304.5	3	0
L2010A	R1	L2010A-S2	0.153747	52.857	82.5	3	0
L2010B	R1	L2010B-S	0.325291	35.714	206.5	3	0
L2011A	R1	L2011A-S	0.545144	71.429	214	3	0
L2013A	R1	L2013A-S	0.510709	71.429	171.3	3	0
L2015A	R1	L2015A-S	0.274975	71.429	119.3	3	0

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L2016A	R1	160401317-2019-11-14-3HR-100YR-CHI.inp L2016A-S	0.048034	52.857	38.6	3	0
L2016B	R1	L2016B-S	0.155458	38.571	103.2	3	0
L2017A	R1	L2017A-S	0.260152	71.429	101.8	3	0
L2017B	R1	L2017B-S	0.240933	71.429	103.3	3	0
L2018A	R1	L2018A-S	0.133638	52.857	67.4	3	0
L2018B	R1	L2018B-S	0.573762	38.571	295.2	3	0
L2019A	R1	L2019A-S	0.261141	71.429	85.1	3	0
L2019B	R1	L2019B-S	0.377194	38.571	214.1	3	0
L2021A	R1	L2021A-S	0.214583	64.286	83.9	3	0
L2021B	R1	L2021B-S	0.592748	38.571	351.5	3	0
L2023A	R1	L2023A-S	0.350407	71.429	162.5	3	0
L2024A	R1	L2024A-S	0.285358	71.429	92.3	3	0
L2024B	R1	L2024B-S	0.285821	71.429	118.9	3	0
L2026A	R1	L2026A-S	0.336837	71.429	134.2	3	0
L2026B	R1	L2026B-S	0.157621	71.429	46.7	3	0
L2027A	R1	L2027A-S	0.407624	71.429	126.3	3	0
L2027B	R1	L2027B-S	0.356497	38.571	210	3	0
L2029A	R1	L2029A-S	0.516685	71.429	215.4	3	0
L2029B	R1	L2029B-S	0.780227	28.571	240.6	3	0
L2030A	R1	L2030A-S	0.209082	71.429	67.6	3	0
L2030B	R1	L2030B-S	0.14309	38.571	93.1	3	0
L2031A	R1	L2031A-S	0.210723	71.429	63.4	3	0
L2031B	R1	L2031B-S	0.217725	71.429	95	3	0
L2032A	R1	L2032A-S	0.284473	71.429	76.1	3	0

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L2032B	R1	160401317-2019-11-14-3HR-100YR-CHI.inp L2032B-S	0.441091	27.143	257.7	3	0
L2033A	R1	L2033A-S	0.484485	77.143	197.71	3	0
L2033B	R1	L2033B-S	0.243693	77.143	140.6	3	0
L2036A	R1	L2036A-S	0.066601	52.857	41.3	3	0
L2037A	R1	L2037A-S	0.358166	77.143	162.1	3	0
L2038A	R1	L2038A-S	0.34789	77.143	145	3	0
L2039A	R1	L2039A-S	0.278712	77.143	109.8	3	0
L2039B	R1	L2039B-S	0.215241	77.143	92.9	3	0
L2040A	R1	L2040A-S	0.079812	52.857	42.7	3	0
L2041A	R1	L2041A-S	0.202925	77.143	84.8	3	0
L2042A	R1	L2042A-S	0.31806	77.143	103.6	3	0
L2043A	R1	L2043A-S	0.14173	77.143	52.7	3	0
L2043B	R1	L2043B-S	0.197467	77.143	72.1	3	0
L2044A	R1	L2044A-S	0.1277	72.857	118.2	3	0
L2044B	R1	L2044B-S	0.431445	35.714	241.7	3	0
L2044C	R1	L2044C-S	0.640474	38.571	386.2	3	0
L2046A	R1	L2046A-S	0.488665	72.857	196.4	3	0
L2047A	R1	L2047A-S	0.308466	72.857	242.8	3	0
LM97A	R1	LM97A-S	0.672578	35.714	404.2	3	0
R102A	R1	R102A-S	0.066424	100	54	1	0
R102B	R1	R102B-S	0.07439	100	56	1	0
R103A	R1	R103A-S	0.047843	100	52	1	0
;CB103 ST103	R1	CB103	0.18	100	45.934	1	0

;CB102

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STM102	R1	CB102	0.281	100	55.681	1	0
;POND							
ULT-POND	R1	POND	3.2434	40	400	1	0
UNC1	R1	POND	0.587792	38.571	285	3	0
UNC2	R1	OF8	0.414754	38.571	245	3	0
UNC-2	R1	CB102	0.035	20	47	1.5	0
UNC3	R1	OF9	0.326506	38.571	195	3	0
UNC-3	R1	pond	0.022829	0	81.1	1	0
;OUT36							
UNC-4	R1	OF3	0.0406	60	9.2	1	0
UNC-5	R1	OF10	0.0393	22.857	50	1.5	0
UNC-6	R1	CB103	0.015	22.857	45	1.5	0
[SUBAREAS]							
;;Subcatchment							
;							
105	0.013	0.025	1.57	4.67	0	OUTLET	
105B	0.013	0.025	1.57	4.67	0	OUTLET	
107	0.013	0.025	1.57	4.67	0	OUTLET	
108	0.013	0.025	1.57	4.67	0	OUTLET	
108A	0.013	0.025	1.57	4.67	0	OUTLET	
108B	0.013	0.025	1.57	4.67	0	OUTLET	
109	0.013	0.025	1.57	4.67	0	OUTLET	
109A	0.013	0.025	1.57	4.67	0	OUTLET	
110	0.013	0.025	1.57	4.67	0	OUTLET	
110A	0.013	0.025	1.57	4.67	0	OUTLET	
110B	0.013	0.025	1.57	4.67	0	OUTLET	
110C	0.013	0.025	1.57	4.67	0	OUTLET	
111	0.013	0.025	1.57	4.67	0	OUTLET	
111A	0.013	0.025	1.57	4.67	0	OUTLET	
111B	0.013	0.025	1.57	4.67	0	OUTLET	
111C	0.013	0.025	1.57	4.67	0	OUTLET	
111D	0.013	0.025	1.57	4.67	0	OUTLET	
111E	0.013	0.025	1.57	4.67	0	OUTLET	
111F	0.013	0.025	1.57	4.67	0	OUTLET	
BLDG_A	0.013	0.025	1.57	4.67	0	OUTLET	
BLDG_B	0.013	0.025	1.57	4.67	0	OUTLET	
BLDG_C	0.013	0.025	1.57	4.67	0	OUTLET	

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BLDG_D	0.013	0.025	1.57	4.67	0	OUTLET	
BLDG_E	0.013	0.025	1.57	4.67	0	OUTLET	
C1003A	0.013	0.025	1.57	4.67	0	OUTLET	
C1006A	0.013	0.025	1.57	4.67	0	OUTLET	
C1008A	0.013	0.025	1.57	4.67	0	OUTLET	
C1009A	0.013	0.025	1.57	4.67	0	OUTLET	
C1023A	0.013	0.25	1.57	4.67	0	OUTLET	
C1051A	0.013	0.025	1.57	4.67	0	OUTLET	
C1052A	0.013	0.025	1.57	4.67	0	OUTLET	
C1052B	0.013	0.025	1.57	4.67	0	OUTLET	
C1056A	0.013	0.025	1.57	4.67	0	OUTLET	
C2000A	0.013	0.025	1.57	4.67	0	OUTLET	
C2001A	0.013	0.025	1.57	4.67	0	OUTLET	
C2002A	0.013	0.025	1.57	4.67	0	OUTLET	
C2004A	0.013	0.025	1.57	4.67	0	OUTLET	
C2004B	0.013	0.025	1.57	4.67	0	OUTLET	
C2005A	0.013	0.025	1.57	4.67	0	OUTLET	
C2006A	0.013	0.025	1.57	4.67	0	OUTLET	
C2006B	0.013	0.025	1.57	4.67	0	OUTLET	
C2008A	0.013	0.025	1.57	4.67	0	OUTLET	
C2009A	0.013	0.025	1.57	4.67	0	OUTLET	
C2009B	0.013	0.025	1.57	4.67	0	OUTLET	
C2049A	0.013	0.25	1.57	4.67	0	OUTLET	
CM97A	0.013	0.025	1.57	4.67	0	OUTLET	
F101A	0.013	0.025	1.57	4.67	0	OUTLET	
F1021A	0.013	0.25	1.57	4.67	0	OUTLET	
F102A	0.013	0.025	1.57	4.67	0	OUTLET	
F102B	0.013	0.025	1.57	4.67	0	OUTLET	
F102C	0.013	0.025	1.57	4.67	0	OUTLET	
F2006A	0.013	0.25	1.57	4.67	0	OUTLET	
FUT1	0.013	0.025	1.57	4.67	0	OUTLET	
L1000A	0.013	0.025	1.57	4.67	0	OUTLET	
L1001A	0.013	0.025	1.57	4.67	0	OUTLET	
L1002A	0.013	0.025	1.57	4.67	0	OUTLET	
L1007A	0.013	0.025	1.57	4.67	0	OUTLET	
L1010A	0.013	0.025	1.57	4.67	0	OUTLET	
L1010B	0.013	0.025	1.57	4.67	0	OUTLET	
L1011A	0.013	0.025	1.57	4.67	0	OUTLET	
L1011B	0.013	0.025	1.57	4.67	0	OUTLET	
L1012A	0.013	0.025	1.57	4.67	0	OUTLET	
L1015B	0.013	0.025	1.57	4.67	0	OUTLET	
L1016A	0.013	0.025	1.57	4.67	0	OUTLET	
L1017A	0.013	0.025	1.57	4.67	0	OUTLET	
L1019A	0.013	0.025	1.57	4.67	0	OUTLET	
L1019B	0.013	0.025	1.57	4.67	0	OUTLET	
L1019C	0.013	0.025	1.57	4.67	0	OUTLET	
L1020A	0.013	0.025	1.57	4.67	0	OUTLET	
L1020B	0.013	0.025	1.57	4.67	0	OUTLET	

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			160401317-2019-11-14-3HR-100YR-CHI.inp			
L1020C	0.013	0.025	1.57	4.67	0	OUTLET
L1022A	0.013	0.025	1.57	4.67	0	OUTLET
L1024A	0.013	0.025	1.57	4.67	0	OUTLET
L1024B	0.013	0.025	1.57	4.67	0	OUTLET
L1026A	0.013	0.025	1.57	4.67	0	OUTLET
L1027A	0.013	0.025	1.57	4.67	0	OUTLET
L1027B	0.013	0.025	1.57	4.67	0	OUTLET
L1027C	0.013	0.025	1.57	4.67	0	OUTLET
L1029A	0.013	0.025	1.57	4.67	0	OUTLET
L1030A	0.013	0.025	1.57	4.67	0	OUTLET
L1031A	0.013	0.025	1.57	4.67	0	OUTLET
L1032A	0.013	0.025	1.57	4.67	0	OUTLET
L1032B	0.013	0.025	1.57	4.67	0	OUTLET
L1034A	0.013	0.025	1.57	4.67	0	OUTLET
L1036A	0.013	0.025	1.57	4.67	0	OUTLET
L1038A	0.013	0.025	1.57	4.67	0	OUTLET
L1039A	0.013	0.025	1.57	4.67	0	OUTLET
L1039B	0.013	0.025	1.57	4.67	0	OUTLET
L1050A	0.013	0.025	1.57	4.67	0	OUTLET
L1050B	0.013	0.025	1.57	4.67	0	OUTLET
L1051B	0.013	0.025	1.57	4.67	0	OUTLET
L1053A	0.013	0.025	1.57	4.67	0	OUTLET
L1053B	0.013	0.025	1.57	4.67	0	OUTLET
L1054A	0.013	0.025	1.57	4.67	0	OUTLET
L1057A	0.013	0.025	1.57	4.67	0	OUTLET
L1058A	0.013	0.025	1.57	4.67	0	OUTLET
L1059A	0.013	0.025	1.57	4.67	0	OUTLET
L2007A	0.013	0.025	1.57	4.67	0	OUTLET
L2010A	0.013	0.025	1.57	4.67	0	OUTLET
L2010B	0.013	0.025	1.57	4.67	0	OUTLET
L2011A	0.013	0.025	1.57	4.67	0	OUTLET
L2013A	0.013	0.025	1.57	4.67	0	OUTLET
L2015A	0.013	0.025	1.57	4.67	0	OUTLET
L2016A	0.013	0.025	1.57	4.67	0	OUTLET
L2016B	0.013	0.025	1.57	4.67	0	OUTLET
L2017A	0.013	0.025	1.57	4.67	0	OUTLET
L2017B	0.013	0.025	1.57	4.67	0	OUTLET
L2018A	0.013	0.025	1.57	4.67	0	OUTLET
L2018B	0.013	0.025	1.57	4.67	0	OUTLET
L2019A	0.013	0.025	1.57	4.67	0	OUTLET
L2019B	0.013	0.025	1.57	4.67	0	OUTLET
L2021A	0.013	0.025	1.57	4.67	0	OUTLET
L2021B	0.013	0.025	1.57	4.67	0	OUTLET
L2023A	0.013	0.025	1.57	4.67	0	OUTLET
L2024A	0.013	0.025	1.57	4.67	0	OUTLET
L2024B	0.013	0.025	1.57	4.67	0	OUTLET
L2026A	0.013	0.025	1.57	4.67	0	OUTLET
L2026B	0.013	0.025	1.57	4.67	0	OUTLET

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			160401317-2019-11-14-3HR-100YR-CHI.inp			
L2027A	0.013	0.025	1.57	4.67	0	OUTLET
L2027B	0.013	0.025	1.57	4.67	0	OUTLET
L2029A	0.013	0.025	1.57	4.67	0	OUTLET
L2029B	0.013	0.025	1.57	4.67	0	OUTLET
L2030A	0.013	0.025	1.57	4.67	0	OUTLET
L2030B	0.013	0.025	1.57	4.67	0	OUTLET
L2031A	0.013	0.025	1.57	4.67	0	OUTLET
L2031B	0.013	0.025	1.57	4.67	0	OUTLET
L2032A	0.013	0.025	1.57	4.67	0	OUTLET
L2032B	0.013	0.025	1.57	4.67	0	OUTLET
L2033A	0.013	0.025	1.57	4.67	0	OUTLET
L2033B	0.013	0.025	1.57	4.67	0	OUTLET
L2036A	0.013	0.025	1.57	4.67	0	OUTLET
L2037A	0.013	0.025	1.57	4.67	0	OUTLET
L2038A	0.013	0.025	1.57	4.67	0	OUTLET
L2039A	0.013	0.025	1.57	4.67	0	OUTLET
L2039B	0.013	0.025	1.57	4.67	0	OUTLET
L2040A	0.013	0.025	1.57	4.67	0	OUTLET
L2041A	0.013	0.025	1.57	4.67	0	OUTLET
L2042A	0.013	0.025	1.57	4.67	0	OUTLET
L2043A	0.013	0.025	1.57	4.67	0	OUTLET
L2043B	0.013	0.025	1.57	4.67	0	OUTLET
L2044A	0.013	0.025	1.57	4.67	0	OUTLET
L2044B	0.013	0.025	1.57	4.67	0	OUTLET
L2044C	0.013	0.025	1.57	4.67	0	OUTLET
L2046A	0.013	0.025	1.57	4.67	0	OUTLET
L2047A	0.013	0.025	1.57	4.67	0	OUTLET
LM97A	0.013	0.025	1.57	4.67	0	OUTLET
R102A	0.013	0.025	1.57	4.67	0	OUTLET
R102B	0.013	0.025	1.57	4.67	0	OUTLET
R103A	0.013	0.025	1.57	4.67	0	OUTLET
ST103	0.013	0.025	1.57	4.67	0	OUTLET
STM102	0.013	0.025	1.57	4.67	0	OUTLET
ULT-POND	0.013	0.25	1.57	4.67	0	OUTLET
UNC1	0.013	0.025	1.57	4.67	0	OUTLET
UNC2	0.013	0.025	1.57	4.67	0	OUTLET
UNC-2	0.013	0.025	1.57	4.67	0	PERVIOUS 100
UNC3	0.013	0.025	1.57	4.67	0	OUTLET
UNC-3	0.013	0.025	1.57	4.67	0	PERVIOUS 100
UNC-4	0.013	0.025	1.57	4.67	0	OUTLET
UNC-5	0.013	0.025	1.57	4.67	0	PERVIOUS 100
UNC-6	0.013	0.025	1.57	4.67	0	PERVIOUS 100

[INFILTRATION]					
;;Subcatchment	MaxRate	MinRate	Decay	DryTime	MaxInfil
;;					
105	76.2	13.2	4.14	7	0
105B	76.2	13.2	4.14	7	0

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107	76.2	13.2	4.14	7	0
108	76.2	13.2	4.14	7	0
108A	76.2	13.2	4.14	7	0
108B	76.2	13.2	4.14	7	0
109	76.2	13.2	4.14	7	0
109A	76.2	13.2	4.14	7	0
110	76.2	13.2	4.14	7	0
110A	76.2	13.2	4.14	7	0
110B	76.2	13.2	4.14	7	0
110C	76.2	13.2	4.14	7	0
111	76.2	13.2	4.14	7	0
111A	76.2	13.2	4.14	7	0
111B	76.2	13.2	4.14	7	0
111C	76.2	13.2	4.14	7	0
111D	76.2	13.2	4.14	7	0
111E	76.2	13.2	4.14	7	0
111F	76.2	13.2	4.14	7	0
BLDG_A	76.2	13.2	4.14	7	0
BLDG_B	76.2	13.2	4.14	7	0
BLDG_C	76.2	13.2	4.14	7	0
BLDG_D	76.2	13.2	4.14	7	0
BLDG_E	76.2	13.2	4.14	7	0
C1003A	76.2	13.2	4.14	7	0
C1006A	76.2	13.2	4.14	7	0
C1008A	76.2	13.2	4.14	7	0
C1009A	76.2	13.2	4.14	7	0
C1023A	76.2	13.2	4.14	7	0
C1051A	76.2	13.2	4.14	7	0
C1052A	76.2	13.2	4.14	7	0
C1052B	76.2	13.2	4.14	7	0
C1056A	76.2	13.2	4.14	7	0
C2000A	76.2	13.2	4.14	7	0
C2001A	76.2	13.2	4.14	7	0
C2002A	76.2	13.2	4.14	7	0
C2004A	76.2	13.2	4.14	7	0
C2004B	76.2	13.2	4.14	7	0
C2005A	76.2	13.2	4.14	7	0
C2006A	76.2	13.2	4.14	7	0
C2006B	76.2	13.2	4.14	7	0
C2008A	76.2	13.2	4.14	7	0
C2009A	76.2	13.2	4.14	7	0
C2009B	76.2	13.2	4.14	7	0
C2049A	76.2	13.2	4.14	7	0
CM97A	76.2	13.2	4.14	7	0
F101A	76.2	13.2	4.14	7	0
F1021A	76.2	13.2	4.14	7	0
F102A	76.2	13.2	4.14	7	0
F102B	76.2	13.2	4.14	7	0

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F102C	76.2	13.2	4.14	7	0
F2006A	76.2	13.2	4.14	7	0
FUT1	76.2	13.2	4.14	7	0
L1000A	76.2	13.2	4.14	7	0
L1001A	76.2	13.2	4.14	7	0
L1002A	76.2	13.2	4.14	7	0
L1007A	76.2	13.2	4.14	7	0
L1010A	76.2	13.2	4.14	7	0
L1010B	76.2	13.2	4.14	7	0
L1011A	76.2	13.2	4.14	7	0
L1011B	76.2	13.2	4.14	7	0
L1012A	76.2	13.2	4.14	7	0
L1015B	76.2	13.2	4.14	7	0
L1016A	76.2	13.2	4.14	7	0
L1017A	76.2	13.2	4.14	7	0
L1019A	76.2	13.2	4.14	7	0
L1019B	76.2	13.2	4.14	7	0
L1019C	76.2	13.2	4.14	7	0
L1020A	76.2	13.2	4.14	7	0
L1020B	76.2	13.2	4.14	7	0
L1020C	76.2	13.2	4.14	7	0
L1022A	76.2	13.2	4.14	7	0
L1024A	76.2	13.2	4.14	7	0
L1024B	76.2	13.2	4.14	7	0
L1026A	76.2	13.2	4.14	7	0
L1027A	76.2	13.2	4.14	7	0
L1027B	76.2	13.2	4.14	7	0
L1027C	76.2	13.2	4.14	7	0
L1029A	76.2	13.2	4.14	7	0
L1030A	76.2	13.2	4.14	7	0
L1031A	76.2	13.2	4.14	7	0
L1032A	76.2	13.2	4.14	7	0
L1032B	76.2	13.2	4.14	7	0
L1034A	76.2	13.2	4.14	7	0
L1036A	76.2	13.2	4.14	7	0
L1038A	76.2	13.2	4.14	7	0
L1039A	76.2	13.2	4.14	7	0
L1039B	76.2	13.2	4.14	7	0
L1050A	76.2	13.2	4.14	7	0
L1050B	76.2	13.2	4.14	7	0
L1051B	76.2	13.2	4.14	7	0
L1053A	76.2	13.2	4.14	7	0
L1053B	76.2	13.2	4.14	7	0
L1054A	76.2	13.2	4.14	7	0
L1057A	76.2	13.2	4.14	7	0
L1058A	76.2	13.2	4.14	7	0
L1059A	76.2	13.2	4.14	7	0
L2007A	76.2	13.2	4.14	7	0

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L2010A	76.2	13.2	4.14	7	0
L2010B	76.2	13.2	4.14	7	0
L2011A	76.2	13.2	4.14	7	0
L2013A	76.2	13.2	4.14	7	0
L2015A	76.2	13.2	4.14	7	0
L2016A	76.2	13.2	4.14	7	0
L2016B	76.2	13.2	4.14	7	0
L2017A	76.2	13.2	4.14	7	0
L2017B	76.2	13.2	4.14	7	0
L2018A	76.2	13.2	4.14	7	0
L2018B	76.2	13.2	4.14	7	0
L2019A	76.2	13.2	4.14	7	0
L2019B	76.2	13.2	4.14	7	0
L2021A	76.2	13.2	4.14	7	0
L2021B	76.2	13.2	4.14	7	0
L2023A	76.2	13.2	4.14	7	0
L2024A	76.2	13.2	4.14	7	0
L2024B	76.2	13.2	4.14	7	0
L2026A	76.2	13.2	4.14	7	0
L2026B	76.2	13.2	4.14	7	0
L2027A	76.2	13.2	4.14	7	0
L2027B	76.2	13.2	4.14	7	0
L2029A	76.2	13.2	4.14	7	0
L2029B	76.2	13.2	4.14	7	0
L2030A	76.2	13.2	4.14	7	0
L2030B	76.2	13.2	4.14	7	0
L2031A	76.2	13.2	4.14	7	0
L2031B	76.2	13.2	4.14	7	0
L2032A	76.2	13.2	4.14	7	0
L2032B	76.2	13.2	4.14	7	0
L2033A	76.2	13.2	4.14	7	0
L2033B	76.2	13.2	4.14	7	0
L2036A	76.2	13.2	4.14	7	0
L2037A	76.2	13.2	4.14	7	0
L2038A	76.2	13.2	4.14	7	0
L2039A	76.2	13.2	4.14	7	0
L2039B	76.2	13.2	4.14	7	0
L2040A	76.2	13.2	4.14	7	0
L2041A	76.2	13.2	4.14	7	0
L2042A	76.2	13.2	4.14	7	0
L2043A	76.2	13.2	4.14	7	0
L2043B	76.2	13.2	4.14	7	0
L2044A	76.2	13.2	4.14	7	0
L2044B	76.2	13.2	4.14	7	0
L2044C	76.2	13.2	4.14	7	0
L2046A	76.2	13.2	4.14	7	0
L2047A	76.2	13.2	4.14	7	0
LM97A	76.2	13.2	4.14	7	0

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R102A	76.2	13.2	4.14	7	0
R102B	76.2	13.2	4.14	7	0
R103A	76.2	13.2	4.14	7	0
ST103	76.2	13.2	4.14	7	0
STM102	76.2	13.2	4.14	7	0
ULT-POND	76.2	13.2	4.14	7	0
UNC1	76.2	13.2	4.14	7	0
UNC2	76.2	13.2	4.14	7	0
UNC-2	76.2	13.2	4.14	7	0
UNC3	76.2	13.2	4.14	7	0
UNC-3	76.2	13.2	4.14	7	0
UNC-4	76.2	13.2	4.14	7	0
UNC-5	76.2	13.2	4.14	7	0
UNC-6	76.2	13.2	4.14	7	0

[JUNCTIONS]	Invert Elev.	Max. Depth	Init. Depth	Surcharge Depth	Ponded Area
PD_OUTFALL	94.53	2.82	0.47	0	0
STM101	94.461	3.748	0.539	0	0
STM102	95.349	2.73	0	0	0
STM103	95.414	2.545	0	0	0
STM104	95.171	2.958	0	0	0
STM104-1	93.153	4.587	1.847	0	0
STM105	95.271	3.148	0	0	0
STM106	95.336	3.083	0	0	0
STM107	95.585	3.064	0	0	0
STM108	95.602	2.667	0	0	0
STM109	95.669	2.42	0	0	0
STM110	95.727	2.772	0	0	0
STM111	95.859	2.418	0	0	0
X105A	95.206	3.433	0	0	0
x107A	95.524	2.825	0	0	0
X110A	95.686	2.853	0	0	0
X111A	95.83	2.445	0	0	0
XCB108A	95.521	2.668	0	0	0
XCB108B	95.556	2.653	0	0	0
XCB108C	95.598	2.581	0	0	0
XCB109A	95.633	2.506	0	0	0
XCB111E	95.775	2.72	0	0	0
XCB111F	95.811	2.51	0	0	0
XCB111G	95.849	2.404	0	0	0
xRfA	96.142	2.067	0	0	0
xRfB	96.85	2	0	0	0
xRfC	96.6	1.985	0	0	0
xRfD	96.48	1.918	0	0	0
xRfE	96.57	1.91	0	0	0

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XROOFE	95.834	2.351	0	0	0				
[OUTFALLS]									
;;	Invert	Outfall		Stage/Table	Tide				
;;Name	Elev.	Type		Time Series	Gate	Route	To		
;;									
OF1	96	TIMESERIES		DynBC-100yr3hrCHI	NO				
OF10	0	FREE			NO				
OF2	94.546	TIMESERIES		DynBC-100yr3hrCHI	NO				
;;MJ									
OF3	94.461	FREE			NO				
OF6	100.71	TIMESERIES		DynBC-100yr3hrCHI	NO				
OF7	100.29	FIXED		97.5	NO				
OF8	98.6	TIMESERIES		DynBC-100yr3hrCHI	NO				
OF9	99.9	TIMESERIES		DynBC-100yr3hrCHI	NO				
POND6_MJ	100.62	FIXED		97.5	NO				
POND6_MN	93.764	FIXED		97.5	NO				
SU87	100.8	FREE			NO				
[STORAGE]									
;;	Invert	Max.	Init.	Storage	Curve				
;;Name	Elev.	Depth	Depth	Curve	Params				
Infiltration parameters									
;;									
1000	94.234	3.72	0.766	FUNCTIONAL	1.13	0	0	0	0
1001	94.091	3.881	0.909	FUNCTIONAL	1.13	0	0	0	0
1002	94.196	4.093	0.804	FUNCTIONAL	1.13	0	0	0	0
1003	94.25	3.858	0.75	FUNCTIONAL	1.13	0	0	0	0
1004	94.296	4.194	0.704	FUNCTIONAL	1.13	0	0	0	0
1005	94.491	3.952	0.929	FUNCTIONAL	1.13	0	0	0	0
1006	94.764	4.175	0.236	FUNCTIONAL	1.13	0	0	0	0
;;1500mm									
1007	95.665	3.273	0	FUNCTIONAL	1.13	0	0	0	0
;;1200mm									
1008	96.621	3.188	0	FUNCTIONAL	1.13	0	0	0	0
;;1200mm									
1009	97.289	3.028	0	FUNCTIONAL	1.13	0	0	0	0
;;3000mm									
1010	95.385	3.842	0	FUNCTIONAL	1.13	0	0	0	0
;;2400mm									
1011	95.529	3.71	0	FUNCTIONAL	1.13	0	0	0	0
;;1800mm									
1012	95.907	3.642	0	FUNCTIONAL	1.13	0	0	0	0
;;1800mm									
1013	96.018	3.619	0	FUNCTIONAL	1.13	0	0	0	0
;;1800mm									
1014	96.507	3.846	0	FUNCTIONAL	1.13	0	0	0	0

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;;1200mm									
1015	97.893	2.97	0	FUNCTIONAL	1.13	0	0	0	0
;;1500mm									
1016	95.782	3.209	0	FUNCTIONAL	1.13	0	0	0	0
;;1500mm									
1017	96.402	3.186	0	FUNCTIONAL	1.13	0	0	0	0
;;1500mm									
1018	96.471	3.17	0	FUNCTIONAL	1.13	0	0	0	0
;;1200mm									
1019	96.987	3.125	0	FUNCTIONAL	1.13	0	0	0	0
;;1200mm									
1020	97.407	2.916	0	FUNCTIONAL	1.13	0	0	0	0
;;1200mm									
1020N	97.407	2.916	0	FUNCTIONAL	1.13	0	0	0	0
1024	94.686	3.536	0.314	FUNCTIONAL	1.13	0	0	0	0
1025	94.888	3.509	0.112	FUNCTIONAL	1.13	0	0	0	0
1026	95.359	3.329	0	FUNCTIONAL	1.13	0	0	0	0
1027	95.697	3.427	0	FUNCTIONAL	1.13	0	0	0	0
1028	95.983	3.167	0	FUNCTIONAL	1.13	0	0	0	0
1029	96.334	3.067	0	FUNCTIONAL	1.13	0	0	0	0
1030	96.616	3.15	0	FUNCTIONAL	1.13	0	0	0	0
1031	97.08	2.783	0	FUNCTIONAL	1.13	0	0	0	0
1032	95.125	3.497	0.096	FUNCTIONAL	1.13	0	0	0	0
1033	95.231	3.771	0.042	FUNCTIONAL	1.13	0	0	0	0
1034	95.889	3.315	0	FUNCTIONAL	1.13	0	0	0	0
1035	95.975	3.164	0	FUNCTIONAL	1.13	0	0	0	0
1036	96.245	3.309	0	FUNCTIONAL	1.13	0	0	0	0
1037	96.426	3.223	0	FUNCTIONAL	1.13	0	0	0	0
1038	96.595	2.887	0	FUNCTIONAL	1.13	0	0	0	0
1039	95.84	3.784	0	FUNCTIONAL	1.13	0	0	0	0
;;2400mm									
1050	96.002	4.236	0	FUNCTIONAL	1.13	0	0	0	0
;;1200mm									
1051	97.132	3.3	0	FUNCTIONAL	1.13	0	0	0	0
;;1800mm									
1052	96.473	3.56	0	FUNCTIONAL	1.13	0	0	0	0
;;1500mm									
1053	96.666	3.532	0	FUNCTIONAL	1.13	0	0	0	0
1054	96.739	3.904	0	FUNCTIONAL	1.13	0	0	0	0
1055	96.847	3.711	0	FUNCTIONAL	1.13	0	0	0	0
1056	96.594	3.35	0	FUNCTIONAL	1.13	0	0	0	0
1057	96.853	3.487	0	FUNCTIONAL	1.13	0	0	0	0
1058	97.138	3.368	0	FUNCTIONAL	1.13	0	0	0	0
1059	97.08	4.207	0	FUNCTIONAL	1.13	0	0	0	0
2000	96.181	4.779	1.319	FUNCTIONAL	1.13	0	0	0	0
2001	96.243	4.729	1.257	FUNCTIONAL	1.13	0	0	0	0
;;2400mm									
2002	96.75	4.055	0.75	FUNCTIONAL	1.13	0	0	0	0

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;2400mm	96.809	3.914	0.691	FUNCTIONAL	1.13	0	0	0	0
2003									
;3000mm	96.931	3.751	0.569	FUNCTIONAL	1.13	0	0	0	0
2004									
;3000mm	97.201	3.716	0	FUNCTIONAL	1.13	0	0	0	0
2005	97.52	3.42	0	FUNCTIONAL	1.13	0	0	0	0
2005A									
;2400mm	97.594	3.673	0	FUNCTIONAL	1.13	0	0	0	0
2006									
;1500mm	97.818	3.496	0	FUNCTIONAL	1.13	0	0	0	0
2007									
;1500mm	98.097	3.168	0	FUNCTIONAL	1.13	0	0	0	0
2008									
;1200mm	98.382	2.734	0	FUNCTIONAL	1.13	0	0	0	0
2009									
;3000mm	97.081	3.989	0.419	FUNCTIONAL	1.13	0	0	0	0
2010									
;1500mm	97.444	3.421	0.056	FUNCTIONAL	1.13	0	0	0	0
2011									
;1500mm	97.76	3.477	0	FUNCTIONAL	1.13	0	0	0	0
2012									
;1500mm	98.155	3.402	0	FUNCTIONAL	1.13	0	0	0	0
2013									
;1800mm	98.248	3.469	0	FUNCTIONAL	1.13	0	0	0	0
2014									
;1800mm	98.644	3.651	0	FUNCTIONAL	1.13	0	0	0	0
2015									
;1200mm	99.192	2.883	0	FUNCTIONAL	1.13	0	0	0	0
2016									
;1500mm	99.044	3.354	0	FUNCTIONAL	1.13	0	0	0	0
2017									
;3000mm	96.866	4.449	0.634	FUNCTIONAL	1.13	0	0	0	0
2018									
;1800mm	97.769	4.071	0	FUNCTIONAL	1.13	0	0	0	0
2019									
;1200mm	98.516	3.18	0	FUNCTIONAL	1.13	0	0	0	0
2020									
;1200mm	98.653	3.047	0	FUNCTIONAL	1.13	0	0	0	0
2021									
;1800mm	98.337	3.389	0	FUNCTIONAL	1.13	0	0	0	0
2022									
;1500mm	98.456	3.597	0	FUNCTIONAL	1.13	0	0	0	0
2023									
;1500mm	98.709	3.347	0	FUNCTIONAL	1.13	0	0	0	0
2024									
;1200mm	99.057	3.093	0	FUNCTIONAL	1.13	0	0	0	0
2025									
;1500mm									

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2026	99.314	3.136	0	FUNCTIONAL	1.13	0	0	0	0
;1200mm	99.71	2.971	0	FUNCTIONAL	1.13	0	0	0	0
2027									
;2400mm	97.021	4.431	0.479	FUNCTIONAL	1.13	0	0	0	0
2028									
;3000mm	97.16	4.422	0.34	FUNCTIONAL	1.13	0	0	0	0
2029									
;1800mm	97.637	3.508	0	FUNCTIONAL	1.13	0	0	0	0
2030									
;1200mm	98.176	2.845	0	FUNCTIONAL	1.13	0	0	0	0
2031									
;2400mm	97.583	4.098	0	FUNCTIONAL	1.13	0	0	0	0
2032									
;1200mm	98.516	3.095	0	FUNCTIONAL	1.13	0	0	0	0
2033									
;1200mm	98.694	2.95	0	FUNCTIONAL	1.13	0	0	0	0
2034									
;1200mm	99.08	2.968	0	FUNCTIONAL	1.13	0	0	0	0
2035									
;1800mm	97.702	4.027	0	FUNCTIONAL	1.13	0	0	0	0
2036									
;1200mm	98.998	3.074	0	FUNCTIONAL	1.13	0	0	0	0
2037									
;1200mm	99.527	2.912	0	FUNCTIONAL	1.13	0	0	0	0
2038									
;1200mm	98.674	3.035	0	FUNCTIONAL	1.13	0	0	0	0
2039									
;1500mm	98.074	3.724	0	FUNCTIONAL	1.13	0	0	0	0
2040									
;1200mm	99.062	3.01	0	FUNCTIONAL	1.13	0	0	0	0
2041									
;1200mm	99.597	2.95	0	FUNCTIONAL	1.13	0	0	0	0
2042									
;1200mm	99.264	2.656	0	FUNCTIONAL	1.13	0	0	0	0
2043									
;1500mm	97.51	3.343	0	FUNCTIONAL	1.13	0	0	0	0
2044									
;1200mm	97.652	3.047	0	FUNCTIONAL	1.13	0	0	0	0
2045									
;1200mm	97.723	3.219	0	FUNCTIONAL	1.13	0	0	0	0
2046									
;1200mm	97.945	2.902	0	FUNCTIONAL	1.13	0	0	0	0
2047	94.635	4.141	2.865	FUNCTIONAL	1.13	0	0	0	0
301									
C1003A-S	96.52	1.78	0	FUNCTIONAL	0	0	0	0	0
C1003A-S1	98.09	0.4	0	FUNCTIONAL	0	0	0	0	0
C1006A-S	96.88	1.83	0	FUNCTIONAL	0	0	0	0	0
C1006A-S1	98.49	0.4	0	FUNCTIONAL	0	0	0	0	0

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C1008A-S	97.29	1.78	0	FUNCTIONAL	0	0	0	0	0
C1008A-S1	98.92	0.4	0	FUNCTIONAL	0	0	0	0	0
C1009A-S	98.29	1.78	0	FUNCTIONAL	0	0	0	0	0
C1009A-S1	99.86	0.4	0	FUNCTIONAL	0	0	0	0	0
C1023A-S	96.71	1.93	0	TABULAR	C1023A-V			0	0
C1051A-S	98.9	1.78	0	FUNCTIONAL	0	0	0	0	0
C1052A-S	98.53	1.78	0	FUNCTIONAL	0	0	0	0	0
C1052A-S1	100.15	0.4	0	FUNCTIONAL	0	0	0	0	0
C1052A-S2	99.99	0.4	0	FUNCTIONAL	0	0	0	0	0
C1052B-S	98.55	1.78	0	FUNCTIONAL	0	0	0	0	0
C1052B-S1	100.09	0.4	0	FUNCTIONAL	0	0	0	0	0
C1056A-S	98.43	1.78	0	FUNCTIONAL	0	0	0	0	0
C1056A-S1	100.22	0.4	0	FUNCTIONAL	0	0	0	0	0
C2000A-S	99	1.78	0	FUNCTIONAL	0	0	0	0	0
C2000A-S1	100.94	0.4	0	FUNCTIONAL	0	0	0	0	0
C2001A-S	99.23	1.78	0	FUNCTIONAL	0	0	0	0	0
C2002A-S	99.17	1.78	0	FUNCTIONAL	0	0	0	0	0
C2002A-S1	100.82	0.4	0	FUNCTIONAL	0	0	0	0	0
C2002A-S2	100.78	0.4	0	FUNCTIONAL	0	0	0	0	0
C2004A-S	99.12	1.78	0	FUNCTIONAL	0	0	0	0	0
C2004A-S1	100.71	0.4	0	FUNCTIONAL	0	0	0	0	0
C2004B-S	99	1.78	0	FUNCTIONAL	0	0	0	0	0
C2004B-S1	100.38	0.4	0	FUNCTIONAL	0	0	0	0	0
C2005A-S	98.91	1.78	0	FUNCTIONAL	0	0	0	0	0
C2006A-S	99.64	1.78	0	FUNCTIONAL	0	0	0	0	0
C2006A-S1	101.31	0.4	0	FUNCTIONAL	0	0	0	0	0
C2006B-S	99.38	1.78	0	FUNCTIONAL	0	0	0	0	0
C2006B-S1	100.92	0.4	0	FUNCTIONAL	0	0	0	0	0
C2008A-S	99.66	1.78	0	FUNCTIONAL	0	0	0	0	0
C2009A-S	99.78	1.78	0	FUNCTIONAL	0	0	0	0	0
C2009A-S1	101.43	0.4	0	FUNCTIONAL	0	0	0	0	0
C2009B-S	99.73	1.78	0	FUNCTIONAL	0	0	0	0	0
C2009B-S1	101.22	0.4	0	FUNCTIONAL	0	0	0	0	0
C2049A-S	98.85	1.83	0	TABULAR	C2049A-V			0	0
CB102	95.306	2.294	0	FUNCTIONAL	0	3.74	0	0	0
CB103	95.41	2.36	0	FUNCTIONAL	0	32.186	0	0	0
CB105A	95.543	2.616	0	FUNCTIONAL	0	19.02	0	0	0
CB106A	96.12	1.83	0	FUNCTIONAL	0	47.934	0	0	0
CB107A	96.57	1.63	0	FUNCTIONAL	0	6.053	0	0	0
CB108A	95.8	2.15	0	FUNCTIONAL	0	62.484	0	0	0
CB108B	96.012	1.918	0	FUNCTIONAL	0	60.808	0	0	0
CB108C	95.886	2.024	0	FUNCTIONAL	0	28.779	0	0	0
CB109A	95.918	1.972	0	FUNCTIONAL	0	30.191	0	0	0
CB109B	96.077	1.793	0	FUNCTIONAL	0	31.82	0	0	0
CB110A	96.21	2.37	0	FUNCTIONAL	0	23.356	0	0	0
CB110B	96.25	2.28	0	FUNCTIONAL	0	26.779	0	0	0
CB110C	96.37	1.58	0	FUNCTIONAL	0	47.456	0	0	0
CB110D	96.41	1.52	0	FUNCTIONAL	0	58.02	0	0	0

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CB111A	96.25	1.58	0	FUNCTIONAL	0	35.097	0	0	0
CB111B	96.54	1.45	0	FUNCTIONAL	0	8.518	0	0	0
CB111C	96.41	1.59	0	FUNCTIONAL	0	15.17	0	0	0
CB111D	96.31	1.84	0	FUNCTIONAL	0	9.149	0	0	0
CB111E	96.45	1.46	0	FUNCTIONAL	0	32.957	0	0	0
CB111F	96.49	1.4	0	FUNCTIONAL	0	36.566	0	0	0
CB111G	96.52	1.33	0	FUNCTIONAL	0	27.333	0	0	0
CB503-S	95.53	1.73	0	TABULAR	CB503-IC			0	0
CM97A-S	99.5	1.78	0	FUNCTIONAL	0	0	0	0	0
CM97A-S1	101.2	0.4	0	FUNCTIONAL	0	0	0	0	0
F1021A-S	97.67	1.78	0	FUNCTIONAL	0	1.13	0	0	0
F102A-S	95.92	1.73	0	TABULAR	F102A-IC			0	0
F102B-S	95.87	1.73	0	TABULAR	F102B-IC			0	0
F102C-S	95.37	1.68	0	TABULAR	F102C-IC			0	0
F2006A-S	99.44	2.3	0	FUNCTIONAL	0	1.13	0	0	0
L1000A-S	95.6	2.1	0	FUNCTIONAL	0	0	0	0	0
L1001A-S	96.53	1.78	0	FUNCTIONAL	0	0	0	0	0
L1001A-S1	98.07	0.4	0	FUNCTIONAL	0	0	0	0	0
L1001A-S2	98.18	0.4	0	FUNCTIONAL	0	0	0	0	0
L1002A-S	96.48	1.83	0	FUNCTIONAL	0	0	0	0	0
L1007A-S	97.55	1.79	0	FUNCTIONAL	0	0	0	0	0
L1010A-S	97.2	1.78	0	FUNCTIONAL	0	0	0	0	0
L1010A-S1	99.07	0.4	0	FUNCTIONAL	0	0	0	0	0
L1010A-S2	98.78	0.4	0	FUNCTIONAL	0	0	0	0	0
L1010B-S	96.69	2.56	0	FUNCTIONAL	0	0	0	0	0
L1011A-S	97.65	1.78	0	FUNCTIONAL	0	0	0	0	0
L1011A-S1	99.63	0.4	0	FUNCTIONAL	0	0	0	0	0
L1011B-S	97.08	2.56	0	FUNCTIONAL	0	0	0	0	0
L1012A-S	98.05	1.78	0	FUNCTIONAL	0	0	0	0	0
L1015A-S	99.37	1.78	0	FUNCTIONAL	0	0	0	0	0
L1015A-S1	101.1	0.4	0	FUNCTIONAL	0	0	0	0	0
L1015A-S2	100.85	0.4	0	FUNCTIONAL	0	0	0	0	0
L1016A-S	97.48	1.78	0	FUNCTIONAL	0	0	0	0	0
L1016A-S1	99.54	0.4	0	FUNCTIONAL	0	0	0	0	0
L1017A-S	98.01	1.78	0	FUNCTIONAL	0	0	0	0	0
L1017A-S1	99.81	0.4	0	FUNCTIONAL	0	0	0	0	0
L1019A-S	98.25	1.78	0	FUNCTIONAL	0	0	0	0	0
L1019A-S1	100.12	0.4	0	FUNCTIONAL	0	0	0	0	0
L1019B-S	97.58	2.4	0	FUNCTIONAL	0	0	0	0	0
L1019C-S	98.27	1.76	0	FUNCTIONAL	0	0	0	0	0
L1020A-S	98.62	1.78	0	FUNCTIONAL	0	0	0	0	0
L1020A-S1	100.45	0.4	0	FUNCTIONAL	0	0	0	0	0
L1020B-S	98.87	1.78	0	FUNCTIONAL	0	0	0	0	0
L1020B-S1	100.4	0.4	0	FUNCTIONAL	0	0	0	0	0
L1020C-S	98.46	1.78	0	FUNCTIONAL	0	0	0	0	0
L1020C-S1	100.04	0.4	0	FUNCTIONAL	0	0	0	0	0
L1022A-S	98.56	1.88	0	TABULAR	L1022A-V			0	0
L1024A-S	96.58	1.78	0	FUNCTIONAL	0	0	0	0	0

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L1024A-S1	98.28	0.4	0	FUNCTIONAL	0	0	0	0	0
L1024B-S	96.14	2.43	0	FUNCTIONAL	0	0	0	0	0
L1026A-S	96.8	1.78	0	FUNCTIONAL	0	0	0	0	0
L1026A-S1	98.66	0.4	0	FUNCTIONAL	0	0	0	0	0
L1027A-S	97.05	1.78	0	FUNCTIONAL	0	0	0	0	0
L1027B-S	97.44	1.78	0	FUNCTIONAL	0	0	0	0	0
L1027B-S0	98.82	0.4	0	FUNCTIONAL	0	0	0	0	0
L1027B-S1	99.14	0.4	0	FUNCTIONAL	0	0	0	0	0
L1027C-S	96.79	2.55	0	FUNCTIONAL	0	0	0	0	0
L1029A-S	97.54	1.78	0	FUNCTIONAL	0	0	0	0	0
L1029A-S1	99.4	0.4	0	FUNCTIONAL	0	0	0	0	0
L1030A-S	97.84	1.78	0	FUNCTIONAL	0	0	0	0	0
L1030A-S1	99.74	0.4	0	FUNCTIONAL	0	0	0	0	0
L1031A-S	98.21	1.78	0	FUNCTIONAL	0	0	0	0	0
L1032A-S	96.9	1.78	0	FUNCTIONAL	0	0	0	0	0
L1032A-S1	98.96	0.4	0	FUNCTIONAL	0	0	0	0	0
L1032B-S	96.35	2.56	0	FUNCTIONAL	0	0	0	0	0
L1034A-S	97.52	1.78	0	FUNCTIONAL	0	0	0	0	0
L1034A-S1	99.2	0.4	0	FUNCTIONAL	0	0	0	0	0
L1036A-S	97.62	1.78	0	FUNCTIONAL	0	0	0	0	0
L1038A-S	98.02	1.78	0	FUNCTIONAL	0	0	0	0	0
L1038A-S1	99.64	0.4	0	FUNCTIONAL	0	0	0	0	0
L1039A-S	97.58	1.78	0	FUNCTIONAL	0	0	0	0	0
L1039A-S1	99.44	0.4	0	FUNCTIONAL	0	0	0	0	0
L1039B-S	97.01	2.55	0	FUNCTIONAL	0	0	0	0	0
L1050A-S	97.98	1.78	0	FUNCTIONAL	0	0	0	0	0
L1050B-S	97.55	2.59	0	FUNCTIONAL	0	0	0	0	0
L1051B-S	98.33	2.59	0	FUNCTIONAL	0	0	0	0	0
L1053A-S	98.7	1.78	0	FUNCTIONAL	0	0	0	0	0
L1053A-S1	100.6	0.4	0	FUNCTIONAL	0	0	0	0	0
L1053B-S	98.09	2.53	0	FUNCTIONAL	0	0	0	0	0
L1054A-S	99.04	1.78	0	FUNCTIONAL	0	0	0	0	0
L1057A-S	98.69	1.78	0	FUNCTIONAL	0	0	0	0	0
L1057A-S1	100.37	0.4	0	FUNCTIONAL	0	0	0	0	0
L1058A-S	98.87	1.78	0	FUNCTIONAL	0	0	0	0	0
L1059A-S	99.4	1.78	0	FUNCTIONAL	0	0	0	0	0
L1059A-S0	100.78	0.4	0	FUNCTIONAL	0	0	0	0	0
L1059A-S1	100.96	0.4	0	FUNCTIONAL	0	0	0	0	0
L2007A-S	99.23	2.59	0	FUNCTIONAL	0	0	0	0	0
L2010A-S	100.92	0.4	0	FUNCTIONAL	0	0	0	0	0
L2010A-S1	101.17	0.4	0	FUNCTIONAL	0	0	0	0	0
L2010A-S2	99.2	1.78	0	FUNCTIONAL	0	0	0	0	0
L2010B-S	98.59	2.56	0	FUNCTIONAL	0	0	0	0	0
L2011A-S	99.33	1.78	0	FUNCTIONAL	0	0	0	0	0
L2011A-S1	101.46	0.4	0	FUNCTIONAL	0	0	0	0	0
L2013A-S	99.88	1.78	0	FUNCTIONAL	0	0	0	0	0
L2015A-S	100.44	1.78	0	FUNCTIONAL	0	0	0	0	0
L2015A-S1	101.99	0.4	0	FUNCTIONAL	0	0	0	0	0

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L2016A-S	100.63	1.78	0	FUNCTIONAL	0	0	0	0	0
L2016A-S1	102.22	0.4	0	FUNCTIONAL	0	0	0	0	0
L2016B-S	100.03	2.52	0	FUNCTIONAL	0	0	0	0	0
L2017A-S	100.79	1.78	0	FUNCTIONAL	0	0	0	0	0
L2017A-S1	102.41	0.4	0	FUNCTIONAL	0	0	0	0	0
L2017B-S	100.66	1.78	0	FUNCTIONAL	0	0	0	0	0
L2017B-S1	102.06	0.4	0	FUNCTIONAL	0	0	0	0	0
L2017B-S2	102.27	0.4	0	FUNCTIONAL	0	0	0	0	0
L2018A-S	99.61	1.78	0	FUNCTIONAL	0	0	0	0	0
L2018A-S1	101.29	0.4	0	FUNCTIONAL	0	0	0	0	0
L2018B-S	99	2.52	0	FUNCTIONAL	0	0	0	0	0
L2019A-S	99.72	1.78	0	FUNCTIONAL	0	0	0	0	0
L2019A-S1	101.62	0.4	0	FUNCTIONAL	0	0	0	0	0
L2019B-S	99.13	2.53	0	FUNCTIONAL	0	0	0	0	0
L2021A-S	100.23	1.78	0	FUNCTIONAL	0	0	0	0	0
L2021B-S	99.63	2.54	0	FUNCTIONAL	0	0	0	0	0
L2023A-S	100.15	1.78	0	FUNCTIONAL	0	0	0	0	0
L2024A-S	100.55	1.78	0	FUNCTIONAL	0	0	0	0	0
L2024A-S1	102.12	0.4	0	FUNCTIONAL	0	0	0	0	0
L2024B-S	100.43	1.78	0	FUNCTIONAL	0	0	0	0	0
L2024B-S1	102	0.4	0	FUNCTIONAL	0	0	0	0	0
L2026A-S	100.83	1.78	0	FUNCTIONAL	0	0	0	0	0
L2026A-S1	102.48	0.4	0	FUNCTIONAL	0	0	0	0	0
L2026B-S	100.64	1.78	0	FUNCTIONAL	0	0	0	0	0
L2026B-S1	102.18	0.4	0	FUNCTIONAL	0	0	0	0	0
L2027A-S	100.88	1.78	0	FUNCTIONAL	0	0	0	0	0
L2027A-S1	102.62	0.4	0	FUNCTIONAL	0	0	0	0	0
L2027A-S2	102.71	0.4	0	FUNCTIONAL	0	0	0	0	0
L2027A-S3	102.28	0.4	0	FUNCTIONAL	0	0	0	0	0
L2027B-S	100.83	2.3	0	FUNCTIONAL	0	0	0	0	0
L2029A-S	99.79	1.78	0	FUNCTIONAL	0	0	0	0	0
L2029B-S	99.65	2.48	0	FUNCTIONAL	0	0	0	0	0
L2030A-S	99.66	1.78	0	FUNCTIONAL	0	0	0	0	0
L2030B-S	99.11	2.53	0	FUNCTIONAL	0	0	0	0	0
L2031A-S	99.64	1.78	0	FUNCTIONAL	0	0	0	0	0
L2031A-S1	101.28	0.4	0	FUNCTIONAL	0	0	0	0	0
L2031B-S	99.49	1.78	0	FUNCTIONAL	0	0	0	0	0
L2031B-S1	101.22	0.4	0	FUNCTIONAL	0	0	0	0	0
L2031B-S2	101.14	0.4	0	FUNCTIONAL	0	0	0	0	0
L2032A-S	99.91	1.78	0	FUNCTIONAL	0	0	0	0	0
L2032A-S1	101.57	0.4	0	FUNCTIONAL	0	0	0	0	0
L2032B-S	99.3	2.53	0	FUNCTIONAL	0	0	0	0	0
L2033A-S	99.99	1.78	0	FUNCTIONAL	0	0	0	0	0
L2033B-S	99.94	1.78	0	FUNCTIONAL	0	0	0	0	0
L2033B-S1	101.57	0.4	0	FUNCTIONAL	0	0	0	0	0
L2034A-S1	101.98	0.4	0	FUNCTIONAL	0	0	0	0	0
L2036A-S	100.09	1.78	0	FUNCTIONAL	0	0	0	0	0
L2036A-S1	101.54	0.4	0	FUNCTIONAL	0	0	0	0	0

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L2037A-S	99.97	1.78	0	FUNCTIONAL	0	0	0	0
L2038A-S	100.45	1.78	0	FUNCTIONAL	0	0	0	0
L2039A-S	100	1.78	0	FUNCTIONAL	0	0	0	0
L2039A-S1	101.62	0.4	0	FUNCTIONAL	0	0	0	0
L2039A-S2	101.59	0.4	0	FUNCTIONAL	0	0	0	0
L2039B-S	100.11	1.78	0	FUNCTIONAL	0	0	0	0
L2039B-S1	101.75	0.4	0	FUNCTIONAL	0	0	0	0
L2040A-S	100.12	1.78	0	FUNCTIONAL	0	0	0	0
L2040A-S1	101.65	0.4	0	FUNCTIONAL	0	0	0	0
L2041A-S	100.19	1.78	0	FUNCTIONAL	0	0	0	0
L2042A-S	100.44	1.78	0	FUNCTIONAL	0	0	0	0
L2042A-S1	101.97	0.4	0	FUNCTIONAL	0	0	0	0
L2043A-S	100.14	1.78	0	FUNCTIONAL	0	0	0	0
L2043A-S1	101.82	0.4	0	FUNCTIONAL	0	0	0	0
L2043B-S	100.32	1.78	0	FUNCTIONAL	0	0	0	0
L2043B-S1	102.01	0.4	0	FUNCTIONAL	0	0	0	0
L2044A-S	99.28	1.78	0	FUNCTIONAL	0	0	0	0
L2044A-S1	100.87	0.4	0	FUNCTIONAL	0	0	0	0
L2044B-S	98.71	1.98	0	FUNCTIONAL	0	0	0	0
L2044C-S	98.74	2.55	0	FUNCTIONAL	0	0	0	0
L2046A-S	99.22	1.78	0	FUNCTIONAL	0	0	0	0
L2046A-S1	100.97	0.4	0	FUNCTIONAL	0	0	0	0
L2047A-S	99.08	1.78	0	FUNCTIONAL	0	0	0	0
L2047A-S1	100.97	0.4	0	FUNCTIONAL	0	0	0	0
LM97A-S	99.27	2.24	0	FUNCTIONAL	0	0	0	0
M97	95.958	5.16	1.542	FUNCTIONAL	1.13	0	0	0
M98	95.504	5.049	1.996	FUNCTIONAL	1.13	0	0	0
P1	93.5	3.9	1.5	FUNCTIONAL	1.13	0	0	0
P2	94.156	3.019	0.844	FUNCTIONAL	1.13	0	0	0
P3	94.18	2.919	0.82	FUNCTIONAL	1.13	0	0	0
POND	92.7	4.3	2.3	TABULAR	UltimatePond		0	0
R102A-S	96.1	5.2	0	FUNCTIONAL	0	1	0	0
R102B-S	95.95	5.35	0	FUNCTIONAL	0	1	0	0
R103A-S	96.36	4.94	0	FUNCTIONAL	0	1	0	0
RfA	101	0.15	0	TABULAR	Rf-A-Stor		0	0
RfB	101	0.15	0	TABULAR	Rf-B-Stor		0	0
RfC	101	0.15	0	TABULAR	Rf-C-Stor		0	0
RfD	101	0.15	0	TABULAR	Rf-D-Stor		0	0
RfE	101	0.15	0	TABULAR	Rf-E-Stor		0	0
STM101-1	94.179	4.411	0.821	FUNCTIONAL	1.13	0	0	0
STM102-1	95.31	2.21	0	FUNCTIONAL	1.13	0	0	0
STM103-1	95.864	2.006	0	FUNCTIONAL	1.13	0	0	0
[CONDUITS]								
;;	Inlet	Outlet		Manning	Inlet	Outlet	Init.	
;; Max.								
;; Name	Node	Node	Length	N	Offset	Offset	Flow	
Flow								

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;;-----								
1000-P3	1000	P3	43.886	0.013	94.234	94.19	0	0
1001-1000	1001	1000	6.263	0.013	94.391	94.384	0	0
1002-1001	1002	1001	94.706	0.013	94.495	94.401	0	0
1003-1002	1003	1002	43.666	0.013	94.55	94.506	0	0
1004-1003	1004	1003	42.475	0.013	94.595	94.553	0	0
1005-1004	1005	1004	42.457	0.013	94.788	94.745	0	0
1006-1005	1006	1005	61.725	0.013	95.061	94.938	0	0
1007-1006	1007	1006	43.146	0.013	95.962	95.811	0	0
1008-1007	1008	1007	110.078	0.013	96.918	96.037	0	0
1009-1008	1009	1008	51.833	0.013	97.586	97.068	0	0
1010-1006	1010	1006	86.639	0.013	95.385	95.211	0	0
1011-1010	1011	1010	47.221	0.013	95.826	95.685	0	0
1012-1011	1012	1011	75.773	0.013	96.204	95.901	0	0
1013-1012	1013	1012	8.9	0.013	96.315	96.279	0	0
1014-1013	1014	1013	64.21	0.013	96.807	96.39	0	0
1015-1014	1015	1020	52.798	0.013	98.19	97.847	0	0
1016-1010	1016	1010	39.702	0.013	95.989	95.91	0	0
1017-1016	1017	1016	104.33	0.013	96.533	96.064	0	0
1018-1017	1018	1017	8.793	0.013	96.678	96.638	0	0
1019-1018	1019	1018	107.995	0.013	97.194	96.708	0	0
1020-1014	1020	1014	102.278	0.013	97.772	97.107	0	0
1020-1019	1020N	1019	44.249	0.013	97.707	97.419	0	0
1051-1050	1051	1050	58.47	0.013	97.207	96.827	0	0

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1052-1050	1052	1050	114.476	0.013	96.624	96.452	0	0
1053-1050	1053	1050	42.585	0.013	96.666	96.602	0	0
2000-M98	2000	M98	76.562	0.013	96.481	96.404	0	0
2001-2000	2001	2000	58.855	0.013	96.543	96.484	0	0
2002-2001	2002	2001	56.687	0.013	97.05	96.993	0	0
2003-2002	2003	2002	55.947	0.013	97.109	97.053	0	0
2004-2003	2004	2003	119	0.013	97.231	97.112	0	0
2005-2004	2005	2004	119.994	0.013	97.501	97.381	0	0
2005A-2005	2005A	2005	22.89	0.013	97.824	97.801	0	0
2006-2005	2006	2005	93.159	0.013	97.894	97.801	0	0
2006-2005A	2006	2005A	70.269	0.013	97.924	97.854	0	0
2007-2006	2007	2006	49.425	0.013	98.148	98.074	0	0
2008-2007	2008	2007	64.506	0.013	98.427	98.298	0	0
2009-2008	2009	2008	64.506	0.013	98.706	98.577	0	0
2010-2001	2010	2001	88.244	0.013	97.081	96.993	0	0
2011-2010	2011	2010	42.127	0.013	97.669	97.606	0	0
2012-2011	2012	2011	41.397	0.013	97.985	97.819	0	0
2013-2012	2013	2012	95.697	0.013	98.38	97.997	0	0
2014-2013	2014	2013	15.849	0.013	98.473	98.41	0	0
2015-2014	2015	2014	91.349	0.013	98.869	98.503	0	0
2016-2015	2016	2015	38.256	0.013	99.492	99.244	0	0
2017-2015	2017	2015	97.36	0.013	99.344	99.15	0	0
2018-2010	2018	2010	81.729	0.013	97.166	97.084	0	0
2019-2018	2019	2018	78.026	0.013	98.069	97.991	0	0

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2020-2019	2020	2019	35.874	0.013	98.816	98.744	0	0
2021-2020	2021	2020	9.654	0.013	98.953	98.891	0	0
2022-2019	2022	2019	12.229	0.013	98.637	98.619	0	0
2023-2022	2023	2022	76.102	0.013	98.756	98.642	0	0
2024-2023	2024	2023	88.991	0.013	99.009	98.831	0	0
2025-2024	2025	2024	9.587	0.013	99.357	99.309	0	0
2026-2017	2026	2017	97.36	0.013	99.614	99.419	0	0
2026-2025	2026	2025	75.267	0.013	99.763	99.387	0	0
2027-2026	2027	2026	128.579	0.013	100.01	99.689	0	0
2028-2018	2028	2018	5.34	0.013	97.321	97.316	0	0
2029-2028	2029	2028	108.394	0.013	97.46	97.351	0	0
2030-2029	2030	2029	102.442	0.013	97.937	97.835	0	0
2031-2030	2031	2030	81.965	0.013	98.476	98.312	0	0
2032-2029	2032	2029	82.003	0.013	97.883	97.76	0	0
2033-2032	2033	2032	113.357	0.013	98.816	98.533	0	0
2034-2033	2034	2033	11.667	0.013	99.013	98.966	0	0
2035-2034	2035	2034	84.97	0.013	99.383	99.043	0	0
2036-2032	2036	2032	43.983	0.013	98.002	97.958	0	0
2037-2036	2037	2036	83.351	0.013	99.218	98.677	0	0
2038-2037	2038	2037	69.863	0.013	99.822	99.368	0	0
2039-2036	2039	2036	105.73	0.013	98.975	98.552	0	0
2040-2036	2040	2036	48.268	0.013	98.374	98.302	0	0
2041-2040	2041	2040	83.102	0.013	99.365	98.824	0	0
2042-2041	2042	2041	70.836	0.013	99.9	99.44	0	0

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2043-2040	2043	2040	107.231	0.013	99.296	98.599	0	0
2044-2001	2044	2001	44.505	0.013	97.735	97.668	0	0
2045-2044	2045	2044	44.637	0.013	97.952	97.885	0	0
2046-2045	2046	2045	44.887	0.013	98.023	97.956	0	0
2047-2046	2047	2046	73.275	0.013	98.245	98.098	0	0
301-M97	301	M97	78.335	0.013	96.644	96.408	0	0
C1003A-S1-CB102	C1003A-S1	CB102	68.3	0.013	98.15	98.08	0	0
C1003A-S1-L1002A-S	C1003A-S1	L1002A-S	36.1	0.013	98.09	97.86	0	0
C1003A-S-C1003A-S1	C1003A-S	C1003A-S1	35.5	0.013	97.9	98.09	0	0
C1006A-S1-C1003A-S	C1006A-S1	C1003A-S	64.9	0.013	98.49	97.9	0	0
C1006A-S-C1006A-S1	C1006A-S	C1006A-S1	30.2	0.013	98.26	98.49	0	0
C1008A-S1-L1010A-S2	C1008A-S1	L1010A-S2	13.7	0.013	98.92	98.8	0	0
C1008A-S-C1008A-S1	C1008A-S	C1008A-S1	39.4	0.013	98.67	98.92	0	0
C1009A-S1-C1008A-S	C1009A-S1	C1008A-S	70.4	0.013	99.86	98.67	0	0
C1009A-S-C1009A-S1	C1009A-S	C1009A-S1	40	0.013	99.67	99.86	0	0
C1051A-S-C1052B-S1	C1051A-S	C1052B-S1	21.5	0.013	100.28	100.37	0	0
C1052A-S1-C1052A-S	C1052A-S1	C1052A-S	24.5	0.013	100.15	99.91	0	0
C1052A-S-C1052A-S2	C1052A-S	C1052A-S2	27.3	0.013	99.91	99.99	0	0
C1052B-S1-C1052B-S	C1052B-S1	C1052B-S	45.7	0.013	100.23	99.93	0	0
C1052B-S-C1052A-S1	C1052B-S	C1052A-S1	30	0.013	99.93	100.15	0	0
C139	L2018B-S	L2018A-S	5	0.025	101.22	101.12	0	0
C156	L1010B-S	L1010A-S	5	0.025	98.95	98.85	0	0
C18	C1052A-S2	L1031A-S	50.5	0.013	99.99	99.59	0	0
C2000A-S1-C2000A-S	C2000A-S1	C2000A-S	58.3	0.013	100.94	100.38	0	0

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C2000A-S1-C2001A-S	C2000A-S1	C2001A-S	44.2	0.013	100.94	100.61	0	0
C2000A-S-POND6_MJ	C2000A-S	POND6_MJ	8.4	0.013	100.51	100.62	0	0
C2001A-S-C2002A-S1	C2001A-S	C2002A-S1	32.2	0.013	100.61	100.83	0	0
C2002A-S1-C2002A-S	C2002A-S1	C2002A-S	39.2	0.013	100.82	100.55	0	0
C2002A-S2-C2004A-S	C2002A-S2	C2004A-S	46.9	0.013	100.78	100.5	0	0
C2002A-S-C2002A-S2	C2002A-S	C2002A-S2	33.1	0.013	100.55	100.78	0	0
C2004A-S1-C2004B-S	C2004A-S1	C2004B-S	45.4	0.013	100.71	100.38	0	0
C2004A-S-C2004A-S1	C2004A-S	C2004A-S1	20.9	0.013	100.5	100.71	0	0
C2004B-S1-C1009A-S	C2004B-S1	C1009A-S	69.4	0.013	100.38	99.67	0	0
C2004B-S1-C1051A-S	C2004B-S1	C1051A-S	50.2	0.013	100.55	100.28	0	0
C2004B-S-C2004B-S1	C2004B-S	C2004B-S1	46.3	0.013	100.38	100.53	0	0
C2005A-S-C2004B-S1	C2005A-S	C2004B-S1	45.2	0.013	100.29	100.38	0	0
C2006A-S1-L1015A-S1	C2006A-S1	L1015A-S1	25.2	0.013	101.31	101.18	0	0
C2006A-S1-L2031B-S2	C2006A-S1	L2031B-S2	24.4	0.013	101.31	101.19	0	0
C2006A-S-C2006B-S	C2006A-S	C2006B-S	49.3	0.013	101.02	100.76	0	0
C2006B-S1-C2005A-S	C2006B-S1	C2005A-S	50.9	0.013	100.92	100.29	0	0
C2006B-S-C2006B-S1	C2006B-S	C2006B-S1	31.5	0.013	100.76	100.92	0	0
C2008A-S-L1015A-S1	C2008A-S	L1015A-S1	26.9	0.013	101.04	101.1	0	0
C2009A-S1-C2009A-S	C2009A-S1	C2009A-S	17.5	0.013	101.43	101.16	0	0
C2009A-S1-C2009B-S	C2009A-S1	C2009B-S	35.2	0.013	101.43	101.11	0	0
C2009A-S-SU87	C2009A-S	SU87	23.4	0.013	101.16	100.8	0	0
C2009B-S1-C2008A-S	C2009B-S1	C2008A-S	18	0.013	101.22	101.04	0	0
C2009B-S-C2009B-S1	C2009B-S	C2009B-S1	22.5	0.013	101.11	101.22	0	0
C3	CB503-S	POND	37.309	0.013	97.06	97.2	0	0

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C30	C1052B-S1	L1050A-S	62.5	0.013	100.09	99.36	0	0
C31	L1053A-S	C1052B-S	18	0.013	100.08	99.93	0	0
C32	L1053A-S1	L1053A-S	52.2	0.013	100.6	100.08	0	0
C33	L1054A-S	L1053A-S1	35.5	0.013	100.42	100.6	0	0
C34	L1059A-S0	L1054A-S	72	0.013	100.78	100.42	0	0
C35	L1059A-S1	L1059A-S0	35.9	0.013	100.96	100.78	0	0
C36	C1056A-S	C1052A-S2	27	0.013	99.81	100.01	0	0
C37	C1056A-S1	C1056A-S	32.4	0.013	100.22	99.81	0	0
C38	L1057A-S	C1056A-S1	20.7	0.013	100.07	100.22	0	0
C39	L1057A-S1	L1057A-S	29.9	0.013	100.37	100.07	0	0
C4	STM104-1	STM101-1	51.6	0.013	95.1	95.044	0	0
C40	L1058A-S	L1057A-S1	25	0.013	100.25	100.37	0	0
C41	L1059A-S1	L1058A-S	47.5	0.013	100.96	100.25	0	0
C7	xRfB	X110A	27.8	0.013	96.85	95.686	0	0
CM97A-S1-CM97A-S	CM97A-S1	CM97A-S	65.5	0.013	101.2	100.88	0	0
CM97A-S-C2000A-S	CM97A-S	C2000A-S	60.5	0.013	100.88	100.38	0	0
F1021A-S-L1011A-S	F1021A-S	L1011A-S	10	0.025	99.4	99.2	0	0
F2006A-S-C2006A-S	F2006A-S	C2006A-S	5	0.025	101.44	101.29	0	0
L1000A-S-POND	L1000A-S	POND	5	0.013	97.4	97.3	0	0
L1001A-S1-L1001A-S	L1001A-S1	L1001A-S	32.1	0.013	98.07	97.91	0	0
L1001A-S2-L1001A-S	L1001A-S2	L1001A-S	27	0.013	98.18	97.91	0	0
L1001A-S-POND	L1001A-S	POND	32.9	0.013	98.16	97.2	0	0
L1002A-S1-L1001A-S1	L1002A-S	L1001A-S1	30.8	0.013	97.86	98.07	0	0
L1007A-S-L1010A-S2	L1007A-S	L1010A-S2	5	0.013	99.04	98.94	0	0

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L1010A-S1-L1010A-S	L1010A-S1	L1010A-S	52.1	0.013	99.07	98.58	0	0
L1010A-S2-C1006A-S	L1010A-S2	C1006A-S	59.7	0.013	98.78	98.26	0	0
L1010A-S-L1010A-S2	L1010A-S	L1010A-S2	34.8	0.013	98.58	98.78	0	0
L1011A-S1-L1011A-S	L1011A-S1	L1011A-S	51.3	0.013	99.63	99.03	0	0
L1011A-S-L1010A-S1	L1011A-S	L1010A-S1	35.2	0.013	99.03	99.2	0	0
L1011B-S-L1011A-S	L1011B-S	L1011A-S	5	0.025	99.34	99.24	0	0
L1012A-S-L1011A-S1	L1012A-S	L1011A-S1	30.06	0.013	99.43	99.63	0	0
L1015A-S1-L1015A-S	L1015A-S1	L1015A-S	30.6	0.013	101.1	100.75	0	0
L1015A-S2-L1020A-S1	L1015A-S2	L1020A-S1	100	0.013	100.85	100.45	0	0
L1015A-S-L1015A-S2	L1015A-S	L1015A-S2	15.3	0.013	100.75	100.85	0	0
L1016A-S1-L1016A-S	L1016A-S1	L1016A-S	68.2	0.013	99.54	98.86	0	0
L1016A-S-L1010A-S1	L1016A-S	L1010A-S1	32.3	0.013	98.86	99.07	0	0
L1017A-S1-L1017A-S	L1017A-S1	L1017A-S	53	0.013	99.81	99.39	0	0
L1017A-S-L1016A-S1	L1017A-S	L1016A-S1	20.5	0.013	99.39	99.54	0	0
L1019A-S1-L1019A-S	L1019A-S1	L1019A-S	39.2	0.013	100.12	99.63	0	0
L1019A-S-L1017A-S1	L1019A-S	L1017A-S1	28.1	0.013	99.63	99.81	0	0
L1019B-S-L1010B-S	L1019B-S	L1010B-S	177	0.025	99.63	98.95	0	0
L1019C-S-L1019A-S	L1019C-S	L1011B-S	110	0.025	99.73	99.34	0	0
L1020A-S1-L1020A-S	L1020A-S1	L1020A-S	38.5	0.013	100.45	100	0	0
L1020A-S1-L1020B-S	L1020A-S1	L1020B-S	20.6	0.013	100.45	100.25	0	0
L1020A-S-L1019A-S1	L1020A-S	L1019A-S1	17	0.013	100	100.12	0	0
L1020B-S1-L1020C-S	L1020B-S1	L1020C-S	47	0.013	100.4	99.84	0	0
L1020B-S-L1020B-S1	L1020B-S	L1020B-S1	24.2	0.013	100.25	100.4	0	0
L1020C-S1-L1012A-S	L1020C-S1	L1012A-S	50.5	0.013	100.04	99.43	0	0

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L1020C-S-L1020C-S1 L1020C-S	L1020C-S1	30.8	0.013	99.84	100.04	0	0	
L1024A-S1L1024A-S L1024A-S1	L1024A-S	76.6	0.013	98.28	97.96	0	0	
L1024A-SL1001A-S2 L1024A-S	L1001A-S2	41	0.013	97.96	98.18	0	0	
L1024B-S-L1001A-S2 L1024B-S	L1001A-S2	5	0.025	98.28	98.18	0	0	
L1026A-S1L1026A-S L1026A-S1	L1026A-S	33.3	0.013	98.66	98.18	0	0	
L1026A-SL1024A-S1 L1026A-S	L1024A-S1	13.6	0.013	98.18	98.28	0	0	
L1027A-SL1026A-S1 L1027A-S	L1026A-S1	44.4	0.013	98.43	98.66	0	0	
L1027B-S1L1027B-S L1027B-S1	L1027B-S0	35.4	0.013	99.14	98.82	0	0	
L1027B-SL1027A-S L1027B-S0	L1027A-S	43.2	0.013	98.82	98.43	0	0	
L1027C-S-L1032B-S L1027C-S	L1032B-S	112	0.025	99.04	98.61	0	0	
L1029A-S1L1029A-S L1029A-S1	L1029A-S	32.3	0.013	99.4	98.92	0	0	
L1029A-SL1027B-S1 L1029A-S	L1027B-S1	44.2	0.013	98.92	99.14	0	0	
L1030A-S1L1030A-S L1030A-S1	L1030A-S	37.6	0.013	99.74	99.22	0	0	
L1030A-SL1029A-S1 L1030A-S	L1029A-S1	37.2	0.013	99.22	99.4	0	0	
L1031A-SL1030A-S1 L1031A-S	L1030A-S1	29.8	0.013	99.59	99.74	0	0	
L1032A-S1L1032A-S L1032A-S1	L1032A-S	54.3	0.013	98.96	98.28	0	0	
L1032A-SL1024A-S1 L1032A-S	L1024A-S1	27.1	0.013	98.28	98.39	0	0	
L1032B-S-L1032A-S L1032B-S	L1032A-S	5	0.025	98.61	98.51	0	0	
L1034A-S1L1034A-S L1034A-S1	L1034A-S	39.7	0.013	99.2	98.9	0	0	
L1034A-SL1032A-S1 L1034A-S	L1032A-S1	13.2	0.013	98.9	98.96	0	0	
L1036A-SL1034A-S1 L1036A-S	L1034A-S1	40	0.013	99	99.2	0	0	
L1038A-S1L1036A-S L1038A-S1	L1036A-S	63.7	0.013	99.64	99	0	0	
L1038A-S1L1038A-S L1038A-S1	L1038A-S	32.3	0.013	99.64	99.4	0	0	
L1038A-SL1039A-S1 L1038A-S	L1039A-S1	14	0.013	99.4	99.44	0	0	

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L1039A-S1L1039A-S L1039A-S1	L1039A-S	45.3	0.013	99.44	98.96	0	0	
L1039A-SL1032A-S1 L1039A-S	L1032A-S1	27.6	0.013	98.96	99.08	0	0	
L1039B-S-L1039A-S L1039B-S	L1039A-S	5	0.025	99.26	99.16	0	0	
L1050A-SL1039A-S1 L1050A-S	L1039A-S1	31.7	0.013	99.36	99.49	0	0	
L1050B-S-L1050A-S L1050B-S	L1050A-S	5	0.025	99.84	99.74	0	0	
L1051B-S-C1051A-S L1051B-S	C1051A-S	5	0.025	100.62	100.52	0	0	
L1053A-S-C1052B-S L1053B-S	C1056A-S	5	0.025	100.32	100.22	0	0	
L2007A-S-C2008A-S L2007A-S	C2008A-S	5	0.025	101.52	101.42	0	0	
L2010A-S1-L2010A-S L2010A-S1	L2010A-S	14	0.013	101.17	101.03	0	0	
L2010A-S2-C2002A-S1 L2010A-S2	C2002A-S1	43.5	0.013	100.58	100.82	0	0	
L2010A-S-L2010A-S2 L2010A-S	L2010A-S2	43.9	0.013	100.92	100.58	0	0	
L2010B-S-L2010A-S2 L2010B-S	L2010A-S2	5	0.025	100.85	100.75	0	0	
L2011A-S1-L2011A-S L2011A-S1	L2011A-S	83.9	0.013	101.46	100.71	0	0	
L2011A-S-L2010A-S L2011A-S	L2010A-S	34.5	0.013	100.71	100.92	0	0	
L2013A-S-L2011A-S1 L2013A-S	L2011A-S1	40.2	0.013	101.26	101.46	0	0	
L2015A-S1-L2013A-S L2015A-S1	L2013A-S	66.5	0.013	101.99	101.26	0	0	
L2015A-S-L2015A-S1 L2015A-S	L2015A-S1	28.7	0.013	101.82	101.99	0	0	
L2016A-S1-L2016A-S L2016A-S1	L2016A-S	26.7	0.013	102.22	102.01	0	0	
L2016A-S1-L2017B-S1 L2016A-S1	L2017B-S1	14.4	0.013	102.23	102.11	0	0	
L2016B-S-L2016A-S L2016B-S	L2016A-S	5	0.025	102.25	102.15	0	0	
L2017A-S1-L2017A-S L2017A-S1	L2017A-S	28.3	0.013	102.41	102.17	0	0	
L2017A-S-L2017B-S2 L2017A-S	L2017B-S2	19.7	0.013	102.17	102.27	0	0	
L2017B-S1-L2015A-S L2017B-S1	L2015A-S	34.1	0.013	102.1	101.82	0	0	
L2017B-S1-L2021A-S L2017B-S1	L2021A-S	42.2	0.013	102.1	101.61	0	0	

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L2017B-S2-L2017B-S L2017B-S2	L2017B-S	28	0.013	102.27	102.04	0	0		
L2017B-S-L2017B-S1 L2017B-S	L2017B-S1	29.2	0.013	102.04	102.13	0	0		
L2018A-S1-L2018A-S L2018A-S1	L2018A-S	42.9	0.013	101.29	100.99	0	0		
L2018A-S-L2010A-S1 L2018A-S	L2010A-S1	26.5	0.013	100.99	101.17	0	0		
L2019A-S1-L2019A-S L2019A-S1	L2019A-S	47.4	0.013	101.62	101.1	0	0		
L2019A-S-L2018A-S1 L2019A-S	L2018A-S1	39	0.013	101.1	101.29	0	0		
L2019B-S-L2019A-S L2019B-S	L2019A-S	5	0.025	101.36	101.26	0	0		
L2021A-S-L2019A-S1 L2021A-S	L2019A-S1	41.5	0.013	101.61	101.76	0	0		
L2021B-S-L2021A-S L2021B-S	L2021A-S	5	0.025	101.87	101.77	0	0		
L2023A-S-L2019A-S1 L2023A-S	L2019A-S1	24.3	0.013	101.53	101.62	0	0		
L2024A-S1-L2024B-S L2024A-S1	L2024B-S	41.5	0.013	102.12	101.81	0	0		
L2024A-S-L2024A-S1 L2024A-S	L2024A-S1	26.9	0.013	101.93	102.12	0	0		
L2024B-S1-L2023A-S L2024B-S1	L2023A-S	57.9	0.013	102	101.53	0	0		
L2024B-S-L2024B-S1 L2024B-S	L2024B-S1	18.9	0.013	101.81	102	0	0		
L2026A-S1-L2026A-S L2026A-S1	L2026A-S	35.6	0.013	102.48	102.21	0	0		
L2026A-S1-L2027A-S3 L2026A-S1	L2027A-S3	20.6	0.013	102.48	102.36	0	0		
L2026A-S-L2017A-S1 L2026A-S	L2017A-S1	32.4	0.013	102.21	102.41	0	0		
L2026B-S1-L2024A-S L2026B-S1	L2024A-S	33.1	0.013	102.18	101.93	0	0		
L2026B-S-L2026B-S1 L2026B-S	L2026B-S1	24.2	0.013	102.02	102.18	0	0		
L2027A-S1-L2027A-S L2027A-S1	L2027A-S	65.4	0.013	102.62	102.26	0	0		
L2027A-S1-L2038A-S L2027A-S1	L2038A-S	51.9	0.013	102.62	101.83	0	0		
L2027A-S2-L2027A-S1 L2027A-S2	L2027A-S1	17.3	0.013	102.71	102.62	0	0		
L2027A-S2-L2042A-S L2027A-S2	L2042A-S	77.5	0.013	102.71	101.82	0	0		
L2027A-S3-L2026B-S L2027A-S3	L2026B-S	34.5	0.013	102.28	102.02	0	0		

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L2027A-S-L2027A-S3 L2027A-S	L2027A-S3	16.6	0.013	102.26	102.28	0	0		
L2027B-S-L2027A-S L2027B-S	L2027A-S	10	0.025	102.83	102.38	0	0		
L2029A-S-L2018A-S1 L2029A-S	L2018A-S1	38.9	0.013	101.17	101.35	0	0		
L2029B-S-L2032A-S L2029B-S	L2036A-S1	5	0.025	101.83	101.73	0	0		
L2030A-S-L2031A-S1 L2030A-S	L2031A-S1	22.5	0.013	101.04	101.28	0	0		
L2030B-S-L2030A-S L2030B-S	L2030A-S	5	0.025	101.34	101.24	0	0		
L2031A-S1-L2031A-S L2031A-S1	L2031A-S	34.5	0.013	101.28	101.02	0	0		
L2031A-S-L2031B-S1 L2031A-S	L2031B-S1	29.9	0.013	101.02	101.22	0	0		
L2031B-S1-L2031B-S L2031B-S1	L2031B-S	38.8	0.013	101.22	100.87	0	0		
L2031B-S2-C2006A-S L2031B-S2	C2006A-S	36	0.013	101.14	101.02	0	0		
L2031B-S-L2031B-S2 L2031B-S	L2031B-S2	31.1	0.013	100.87	101.14	0	0		
L2032A-S1-L2029A-S L2032A-S1	L2029A-S	70.7	0.013	101.57	101.17	0	0		
L2032A-S1-L2030A-S L2032A-S1	L2030A-S	48.3	0.013	101.57	101.04	0	0		
L2032A-S-L2032A-S1 L2032A-S	L2032A-S1	40.3	0.013	101.29	101.57	0	0		
L2032B-S-L2032A-S L2032B-S	L2032A-S	5	0.025	101.53	101.43	0	0		
L2033A-S-L2033B-S1 L2033A-S	L2033B-S1	20.9	0.013	101.37	101.57	0	0		
L2033B-S1-L2033B-S L2033B-S1	L2033B-S	24.6	0.013	101.57	101.32	0	0		
L2033B-S-L2036A-S1 L2033B-S	L2036A-S1	35.9	0.013	101.32	101.54	0	0		
L2034A-S1-L2037A-S L2034A-S1	L2037A-S	43.6	0.013	101.98	101.35	0	0		
L2036A-S1-L2032A-S L2036A-S1	L2032A-S	41.7	0.013	101.54	101.29	0	0		
L2036A-S-L2036A-S1 L2036A-S	L2036A-S1	22.6	0.013	101.47	101.56	0	0		
L2037A-S-L2039A-S2 L2037A-S	L2039A-S2	43.2	0.013	101.35	101.59	0	0		
L2038A-S-L2034A-S1 L2038A-S	L2034A-S1	28	0.013	101.83	101.98	0	0		
L2039A-S1-L2039A-S L2039A-S1	L2039A-S	25.9	0.013	101.62	101.38	0	0		

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L2039A-S2-L2036A-S	L2039A-S2	L2036A-S	22.4	0.013	101.59	101.47	0	0
L2039A-S-L2039A-S2	L2039A-S	L2039A-S2	33.3	0.013	101.38	101.59	0	0
L2039B-S1-L2033A-S	L2039B-S1	L2033A-S	77.1	0.013	101.75	101.37	0	0
L2039B-S1-L2039B-S	L2039B-S1	L2039B-S	38.8	0.013	101.75	101.49	0	0
L2039B-S-L2039A-S1	L2039B-S	L2039A-S1	16.8	0.013	101.49	101.62	0	0
L2040A-S1-L2040A-S	L2040A-S1	L2040A-S	21.8	0.013	101.65	101.5	0	0
L2040A-S-L2039A-S2	L2040A-S	L2039A-S2	22.5	0.013	101.5	101.61	0	0
L2041A-S-L2040A-S1	L2041A-S	L2040A-S1	38.5	0.013	101.57	101.73	0	0
L2042A-S1-L2041A-S	L2042A-S1	L2041A-S	44.2	0.013	101.97	101.57	0	0
L2042A-S-L2042A-S1	L2042A-S	L2042A-S1	29.9	0.013	101.82	101.97	0	0
L2043A-S1-L2043A-S	L2043A-S1	L2043A-S	20.7	0.013	101.82	101.52	0	0
L2043A-S-L2040A-S1	L2043A-S	L2040A-S1	36.5	0.013	101.52	101.65	0	0
L2043B-S1-L2039B-S1	L2043B-S1	L2039B-S1	31.3	0.013	102.01	101.91	0	0
L2043B-S1-L2043B-S	L2043B-S1	L2043B-S	44.9	0.013	102.01	101.7	0	0
L2043B-S-L2043A-S1	L2043B-S	L2043A-S1	24.3	0.013	101.7	101.82	0	0
L2044A-S1-L2044A-S	L2044A-S1	L2044A-S	27.8	0.013	100.87	100.66	0	0
L2044A-S-C2002A-S1	L2044A-S	C2002A-S1	31.4	0.013	100.66	100.85	0	0
L2044B-S-OF7	L2044B-S	OF7	5	0.025	100.39	100.29	0	0
L2044C-S-L2044A-S	L2044C-S	L2044A-S	5	0.025	100.99	100.89	0	0
L2046A-S1-L2046A-S	L2046A-S1	L2046A-S	61.9	0.013	100.97	100.6	0	0
L2046A-S1-L2047A-S	L2046A-S1	L2047A-S	51	0.013	100.97	100.46	0	0
L2046A-S-L2044A-S1	L2046A-S	L2044A-S1	36.3	0.013	100.6	100.87	0	0
L2047A-S1-L2047A-S	L2047A-S1	L2047A-S	70.9	0.013	100.97	100.46	0	0
LM97A-S-C2000A-S	LM97A-S	C2000A-S	10	0.025	101.21	101.01	0	0

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M97-M98	M97	M98	78.036	0.013	96.258	96.104	0	0
M98-M99	M98	POND6_MN	26.9	0.013	95.804	95.764	0	0
outlet	PD_OUTFALL	OF2	30.6	0.013	94.75	94.7	0	0
P2-P1	P2	P1	6.53	0.013	94.156	94.15	0	0
P3-P2	P3	P2	13.976	0.013	94.18	94.166	0	0
P8IN-HI	P1	POND	11.194	0.013	95.349	95.3	0	0
P8IN-LO	P1	POND	8.45	0.013	93.834	93.75	0	0
Pipe_10	1050	1039	26.695	0.013	96.2	96.16	0	0
Pipe_26	1054	1053	89.098	0.013	97.039	96.816	0	0
Pipe_27	1055	1054	13.148	0.013	97.147	97.114	0	0
Pipe_28	1059	1055	67.774	0.013	97.38	97.177	0	0
Pipe_29	1059	1058	11.552	0.013	97.52	97.468	0	0
Pipe_30	1058	1057	33.671	0.013	97.438	97.303	0	0
Pipe_31	1057	1056	91.957	0.013	97.153	96.969	0	0
Pipe_32	1056	1052	12.027	0.013	96.894	96.87	0	0
Pipe_33	1034	1033	59.319	0.013	96.114	95.906	0	0
Pipe_34	1035	1034	15.815	0.013	96.275	96.219	0	0
Pipe_35	1036	1035	68.642	0.013	96.545	96.305	0	0
Pipe_36	1037	1036	10.282	0.013	96.726	96.695	0	0
Pipe_37	1038	1037	39.63	0.013	96.895	96.756	0	0
Pipe_43	1026	1025	47.833	0.013	95.534	95.438	0	0
Pipe_44	1027	1026	112.641	0.013	96.022	95.684	0	0
Pipe_45	1028	1027	17.431	0.013	96.308	96.247	0	0
Pipe_46	1029	1028	80.318	0.013	96.659	96.338	0	0

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Pipe_46_(1)	1030	1029	68.229	0.013	96.962	96.689	0	0
Pipe_47	1031	1030	48.074	0.013	97.424	97.112	0	0
Pipe_5	1024	1000	100.422	0.013	94.985	94.834	0	0
Pipe_6	1025	1024	31.981	0.013	95.063	95.015	0	0
Pipe_7	1032	1025	58.065	0.013	95.375	95.288	0	0
Pipe_8	1033	1032	23.829	0.013	95.532	95.497	0	0
Pipe_9	1039	1033	85.488	0.013	96.14	96.01	0	0
PIPE1	xRfD	STM111	12.41	0.013	96.48	96.35	0	0
PIPE10	CB106A	STM105	13.76	0.013	96.12	95.98	0	0
PIPE11	STM105	X105A	49.38	0.013	95.271	95.206	0	0
PIPE13	STM103	CB103	4.1	0.013	95.414	95.41	0	0
PIPE14	CB103	STM102	29.77	0.013	95.41	95.379	0	0
PIPE15	STM102	CB102	42.48	0.013	95.349	95.306	0	0
PIPE16	CB102	STM101	20.508	0.013	95.306	95.285	0	0
PIPE17	STM101	STM104-1	12.9	0.013	95.14	95.126	0	0
PIPE19	STM104	STM101	35.07	0.013	95.171	95.135	0	0
PIPE2	CB111B	CB111C	13.14	0.013	96.54	96.41	0	0
PIPE24	xRfA	STM108	22.74	0.013	96.142	96.117	0	0
PIPE25	CB108C	XCB108C	12.43	0.013	95.886	95.872	0	0
PIPE26	CB109A	XCB109A	12.39	0.013	95.918	95.903	0	0
PIPE27	XCB109A	STM108	31.28	0.013	95.633	95.602	0	0
PIPE28	XCB108C	XCB108B	42.23	0.013	95.598	95.556	0	0
PIPE29	CB108B	XCB108B	12.5	0.013	96.012	95.997	0	0
PIPE3	STM107	x107A	51.32	0.013	95.585	95.524	0	0

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PIPE30	XCB108B	XCB108A	34.78	0.013	95.556	95.521	0	0
PIPE31	STM108	XCB108C	3.75	0.013	95.602	95.598	0	0
PIPE32	CB109B	STM109	12.49	0.013	96.077	96.063	0	0
PIPE33	STM109	XCB109A	35.16	0.013	95.669	95.633	0	0
PIPE34	CB111G	XCB111G	28.93	0.013	96.52	96.23	0	0
PIPE35	XCB111G	XROOFE	14.02	0.013	95.849	95.834	0	0
PIPE36	XROOFE	X111A	3.41	0.013	95.834	95.83	0	0
PIPE38	STM111	XCB111G	10.71	0.013	95.859	95.849	0	0
PIPE39	CB111A	X111A	12.79	0.013	96.25	96.12	0	0
PIPE4	xRfC	STM110	37.11	0.013	96.6	96.225	0	0
PIPE40	xRfE	XROOFE	40.74	0.013	96.57	96.16	0	0
PIPE41	CB111F	XCB111F	28.97	0.013	96.49	96.2	0	0
PIPE42	X111A	XCB111F	17.8	0.013	95.83	95.811	0	0
PIPE43	XCB111F	XCB111E	34.67	0.013	95.811	95.775	0	0
PIPE45	CB111D	XCB111E	12.82	0.013	96.31	96.18	0	0
PIPE46	CB111E	XCB111E	28.97	0.013	96.45	96.16	0	0
PIPE47	XCB111E	STM110	39.52	0.013	95.775	95.727	0	0
PIPE5	x107A	STM106	31.26	0.013	95.524	95.486	0	0
PIPE51	CB110B	STM110	12.97	0.013	96.25	96.12	0	0
PIPE52	CB110D	STM110	28.99	0.013	96.41	96.12	0	0
PIPE54	STM110	X110A	37.49	0.013	95.727	95.686	0	0
PIPE56	CB110A	X110A	9.56	0.013	96.21	96.114	0	0
PIPE57	CB110C	X110A	28.78	0.013	96.37	96.08	0	0
PIPE58	X110A	STM107	36.88	0.013	95.686	95.645	0	0

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PIPE60	CB111C	XCB111F	45.42	0.013	96.41	96.18	0	0
PIPE61	X105A	STM104	27.22	0.013	95.206	95.171	0	0
PIPE62	CB105A	X105A	19.4	0.013	96.12	95.521	0	0
PIPE63	CB107A	X107A	5.43	0.013	96.57	96.51	0	0
PIPE7	CB108A	XCB108A	12.61	0.013	95.8	95.786	0	0
PIPE8	XCB108A	STM106	35.06	0.013	95.521	95.486	0	0
PIPE9	STM106	STM105	50.45	0.013	95.336	95.271	0	0
STM101-1-P1	STM101-1	P1	54.9	0.013	94.48	94.42	0	0
STM102-101	STM102-1	STM101-1	62.931	0.013	95.877	95.562	0	0
STM103-102	STM103-1	STM102-1	22.336	0.013	96.188	96.076	0	0

[ORIFICES]

;; ;;Name	Inlet Node	Outlet Node	Orifice Type	Crest Height	Disch. Coeff.	Flap Gate	Open/Close Time
C1003A-01	C1003A-S	1003	SIDE	96.61	0.572	NO	0
C1003A-02	C1003A-S	1003	SIDE	96.52	0.572	NO	0
C1006A-01	C1006A-S	1006	SIDE	96.97	0.572	NO	0
C1006A-02	C1006A-S	1006	SIDE	96.88	0.572	NO	0
C1008A-01	C1008A-S	1008	SIDE	97.38	0.61	NO	0
C1008A-02	C1008A-S	1008	SIDE	97.29	0.61	NO	0
C1009A-01	C1009A-S	1009	SIDE	98.37	0.572	NO	0
C1009A-02	C1009A-S	1009	SIDE	98.29	0.572	NO	0
C1051A-01	C1051A-S	1051	SIDE	98.9	0.572	NO	0
C1051A-02	C1051A-S	1051	SIDE	98.9	0.572	NO	0
C1052A-01	C1052A-S	1052	SIDE	98.53	0.572	NO	0
C1052A-02	C1052A-S	1052	SIDE	98.53	0.572	NO	0
C1052B-01	C1052B-S	1052	SIDE	98.55	0.572	NO	0
C1052B-02	C1052B-S	1052	SIDE	98.55	0.572	NO	0
C1056A-01	C1056A-S	1056	SIDE	98.43	0.572	NO	0
C1056A-02	C1056A-S	1056	SIDE	98.43	0.572	NO	0
C2000A-01	C2000A-S	2000	SIDE	99.09	0.572	NO	0
C2000A-02	C2000A-S	2000	SIDE	99	0.572	NO	0
C2001A-01	C2001A-S	2001	SIDE	99.31	0.572	NO	0
C2001A-02	C2001A-S	2001	SIDE	99.23	0.572	NO	0
C2002A-01	C2002A-S	2002	SIDE	99.25	0.572	NO	0
C2002A-02	C2002A-S	2002	SIDE	99.17	0.572	NO	0
C2004A-01	C2004A-S	2004	SIDE	99.2	0.572	NO	0

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C2004A-02	C2004A-S	2004	SIDE	99.12	0.572	NO	0
C2004B-01	C2004B-S	2004	SIDE	99.07	0.572	NO	0
C2004B-02	C2004B-S	2004	SIDE	99	0.572	NO	0
C2005A-01	C2005A-S	2005	SIDE	98.91	0.572	NO	0
C2005A-02	C2005A-S	2005	SIDE	98.91	0.572	NO	0
C2006A-01	C2006A-S	2006	SIDE	99.64	0.572	NO	0
C2006A-02	C2006A-S	2006	SIDE	99.64	0.572	NO	0
C2006B-01	C2006B-S	2005A	SIDE	99.38	0.572	NO	0
C2006B-02	C2006B-S	2005A	SIDE	99.38	0.572	NO	0
C2008A-01	C2008A-S	2008	SIDE	99.66	0.572	NO	0
C2008A-02	C2008A-S	2008	SIDE	99.66	0.572	NO	0
C2009A-01	C2009A-S	2009	SIDE	99.78	0.572	NO	0
C2009A-02	C2009A-S	2009	SIDE	99.78	0.572	NO	0
C2009B-01	C2009B-S	2009	SIDE	99.73	0.572	NO	0
C2009B-02	C2009B-S	2009	SIDE	99.73	0.572	NO	0
CB503-IC	CB503-S	STM101-1	SIDE	95.53	0.61	NO	0
CM97A-01	CM97A-S	M97	SIDE	99.58	0.572	NO	0
CM97A-02	CM97A-S	M97	SIDE	99.5	0.572	NO	0
F102A-IC	F102A-S	STM102-1	SIDE	95.92	0.61	NO	0
F102B-IC	F102B-S	STM102-1	SIDE	95.87	0.61	NO	0
F102C-IC	F102C-S	STM101-1	SIDE	95.37	0.61	NO	0
L1000A-01	L1000A-S	1000	SIDE	95.6	0.572	NO	0
L1001A-01	L1001A-S	1001	SIDE	96.53	0.572	NO	0
L1001A-02	L1001A-S	1001	SIDE	96.53	0.572	NO	0
L1002A-01	L1002A-S	1002	SIDE	96.48	0.572	NO	0
L1002A-02	L1002A-S	1002	SIDE	96.48	0.572	NO	0
L1007A-01	L1007A-S	1007	SIDE	97.55	0.572	NO	0
L1010A-01	L1010A-S	1010	SIDE	97.2	0.572	NO	0
L1010A-02	L1010A-S	1010	SIDE	97.2	0.572	NO	0
L1010B-01	L1010B-S	1010	SIDE	96.69	0.572	NO	0
L1011A-01	L1011A-S	1011	SIDE	97.65	0.572	NO	0
L1011A-02	L1011A-S	1011	SIDE	97.65	0.572	NO	0
L1011B-01	L1011B-S	1011	SIDE	97.08	0.572	NO	0
L1012A-01	L1012A-S	1012	SIDE	98.05	0.572	NO	0
L1012A-02	L1012A-S	1012	SIDE	98.05	0.572	NO	0
L1015A-01	L1015A-S	1015	SIDE	99.37	0.572	NO	0
L1015A-02	L1015A-S	1015	SIDE	99.37	0.572	NO	0
L1016A-01	L1016A-S	1016	SIDE	97.48	0.572	NO	0
L1016A-02	L1016A-S	1016	SIDE	97.48	0.572	NO	0
L1017A-01	L1017A-S	1018	SIDE	98.01	0.572	NO	0
L1017A-02	L1017A-S	1018	SIDE	98.01	0.572	NO	0
L1019A-01	L1019A-S	1019	SIDE	98.25	0.572	NO	0
L1019A-02	L1019A-S	1019	SIDE	98.25	0.572	NO	0
L1019B-01	L1019B-S	1019	SIDE	97.58	0.61	NO	0
L1019C-01	L1019C-S	1019	SIDE	98.27	0.572	NO	0
L1020A-01	L1020A-S	1020N	SIDE	98.62	0.572	NO	0
L1020A-02	L1020A-S	1020N	SIDE	98.62	0.572	NO	0
L1020B-01	L1020B-S	1020	SIDE	98.87	0.572	NO	0

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L1020B-02	L1020B-S	1020	SIDE	98.87	0.572	NO 0
L1020C-01	L1020C-S	1020	SIDE	98.46	0.572	NO 0
L1020C-02	L1020C-S	1020	SIDE	98.46	0.572	NO 0
L1024A-01	L1024A-S	1024	SIDE	96.58	0.572	NO 0
L1024A-02	L1024A-S	1024	SIDE	96.58	0.572	NO 0
L1024B-01	L1024B-S	1024	SIDE	96.14	0.572	NO 0
L1026A-01	L1026A-S	1026	SIDE	96.8	0.572	NO 0
L1026A-02	L1026A-S	1026	SIDE	96.8	0.572	NO 0
L1027A-01	L1027A-S	1027	SIDE	97.05	0.572	NO 0
L1027A-02	L1027A-S	1027	SIDE	97.05	0.572	NO 0
L1027B-01	L1027B-S	1027	SIDE	97.44	0.572	NO 0
L1027B-02	L1027B-S	1027	SIDE	97.44	0.572	NO 0
L1027C-01	L1027C-S	1027	SIDE	96.79	0.61	NO 0
L1029A-01	L1029A-S	1029	SIDE	97.54	0.572	NO 0
L1029A-02	L1029A-S	1029	SIDE	97.54	0.572	NO 0
L1030A-01	L1030A-S	1030	SIDE	97.84	0.572	NO 0
L1030A-02	L1030A-S	1030	SIDE	97.84	0.572	NO 0
L1031A-01	L1031A-S	1031	SIDE	98.21	0.572	NO 0
L1031A-02	L1031A-S	1031	SIDE	98.21	0.572	NO 0
L1032A-01	L1032A-S	1032	SIDE	96.9	0.572	NO 0
L1032A-02	L1032A-S	1032	SIDE	96.9	0.572	NO 0
L1032B-01	L1032B-S	1032	SIDE	96.35	0.572	NO 0
L1034A-01	L1034A-S	1034	SIDE	97.52	0.572	NO 0
L1034A-02	L1034A-S	1034	SIDE	97.52	0.572	NO 0
L1036A-01	L1036A-S	1036	SIDE	97.62	0.572	NO 0
L1036A-02	L1036A-S	1036	SIDE	97.62	0.572	NO 0
L1038A-01	L1038A-S	1038	SIDE	98.02	0.572	NO 0
L1038A-02	L1038A-S	1038	SIDE	98.02	0.572	NO 0
L1039A-01	L1039A-S	1039	SIDE	97.58	0.572	NO 0
L1039A-02	L1039A-S	1039	SIDE	97.58	0.572	NO 0
L1039B-01	L1039B-S	1039	SIDE	97.01	0.572	NO 0
L1050A-01	L1050A-S	1050	SIDE	97.98	0.572	NO 0
L1050A-02	L1050A-S	1050	SIDE	97.98	0.572	NO 0
L1050B-01	L1050B-S	1050	SIDE	97.55	0.572	NO 0
L1051B-01	L1051B-S	1051	SIDE	98.33	0.61	NO 0
L1053A-01	L1053A-S	1053	SIDE	98.7	0.572	NO 0
L1053A-02	L1053A-S	1053	SIDE	98.7	0.572	NO 0
L1053B-01	L1053B-S	1053	SIDE	98.09	0.572	NO 0
L1054A-01	L1054A-S	1054	SIDE	99.04	0.572	NO 0
L1054A-02	L1054A-S	1054	SIDE	99.04	0.572	NO 0
L1057A-01	L1057A-S	1057	SIDE	98.69	0.572	NO 0
L1057A-02	L1057A-S	1057	SIDE	98.69	0.572	NO 0
L1058A-01	L1058A-S	1058	SIDE	98.87	0.572	NO 0
L1058A-02	L1058A-S	1058	SIDE	98.87	0.572	NO 0
L1059A-01	L1059A-S	1059	SIDE	99.4	0.572	NO 0
L1059A-02	L1059A-S	1059	SIDE	99.4	0.572	NO 0
L2007A-01	L2007A-S	2007	SIDE	99.23	0.572	NO 0
L2010A-01	L2010A-S2	2010	SIDE	99.2	0.572	NO 0

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L2010A-02	L2010A-S2	2010	SIDE	99.2	0.572	NO 0
L2010B-01	L2010B-S	2010	SIDE	98.59	0.572	NO 0
L2011A-01	L2011A-S	2011	SIDE	99.33	0.572	NO 0
L2011A-02	L2011A-S	2011	SIDE	99.33	0.572	NO 0
L2013A-01	L2013A-S	2013	SIDE	99.88	0.572	NO 0
L2013A-02	L2013A-S	2013	SIDE	99.88	0.572	NO 0
L2015A-01	L2015A-S	2015	SIDE	100.44	0.572	NO 0
L2015A-02	L2015A-S	2015	SIDE	100.44	0.572	NO 0
L2016A-01	L2016A-S	2016	SIDE	100.63	0.572	NO 0
L2016A-02	L2016A-S	2016	SIDE	100.63	0.572	NO 0
L2016B-01	L2016B-S	2016	SIDE	100.03	0.572	NO 0
L2017A-01	L2017A-S	2017	SIDE	100.79	0.572	NO 0
L2017A-02	L2017A-S	2017	SIDE	100.79	0.572	NO 0
L2017B-01	L2017B-S	2017	SIDE	100.66	0.572	NO 0
L2017B-02	L2017B-S	2017	SIDE	100.66	0.572	NO 0
L2018A-01	L2018A-S	2018	SIDE	99.61	0.572	NO 0
L2018A-02	L2018A-S	2018	SIDE	99.61	0.572	NO 0
L2018B-01	L2018B-S	2018	SIDE	99	0.572	NO 0
L2019A-01	L2019A-S	2019	SIDE	99.72	0.572	NO 0
L2019A-02	L2019A-S	2019	SIDE	99.72	0.572	NO 0
L2019B-01	L2019B-S	2019	SIDE	99.13	0.572	NO 0
L2021A-01	L2021A-S	2021	SIDE	100.23	0.572	NO 0
L2021A-02	L2021A-S	2021	SIDE	100.23	0.572	NO 0
L2021B-01	L2021B-S	2021	SIDE	99.63	0.572	NO 0
L2023A-01	L2023A-S	2023	SIDE	100.15	0.572	NO 0
L2023A-02	L2023A-S	2023	SIDE	100.15	0.572	NO 0
L2024A-01	L2024A-S	2024	SIDE	100.55	0.572	NO 0
L2024A-02	L2024A-S	2024	SIDE	100.55	0.572	NO 0
L2024B-01	L2024B-S	2024	SIDE	100.43	0.572	NO 0
L2024B-02	L2024B-S	2024	SIDE	100.43	0.572	NO 0
L2026A-01	L2026A-S	2026	SIDE	100.83	0.572	NO 0
L2026A-02	L2026A-S	2026	SIDE	100.83	0.572	NO 0
L2026B-01	L2026B-S	2026	SIDE	100.64	0.572	NO 0
L2026B-02	L2026B-S	2026	SIDE	100.64	0.572	NO 0
L2027A-01	L2027A-S	2027	SIDE	100.88	0.572	NO 0
L2027A-02	L2027A-S	2027	SIDE	100.88	0.572	NO 0
L2027B-01	L2027B-S	2027	SIDE	100.83	0.572	NO 0
L2029A-01	L2029A-S	2029	SIDE	99.79	0.572	NO 0
L2029A-02	L2029A-S	2029	SIDE	99.79	0.572	NO 0
L2029B-01	L2029B-S	2029	SIDE	99.65	0.572	NO 0
L2030A-01	L2030A-S	2030	SIDE	99.66	0.572	NO 0
L2030A-02	L2030A-S	2030	SIDE	99.66	0.572	NO 0
L2030B-01	L2030B-S	2030	SIDE	99.11	0.572	NO 0
L2031A-01	L2031A-S	2031	SIDE	99.64	0.572	NO 0
L2031A-02	L2031A-S	2031	SIDE	99.64	0.572	NO 0
L2031B-01	L2031B-S	2031	SIDE	99.49	0.65	NO 0
L2031B-02	L2031B-S	2031	SIDE	99.49	0.65	NO 0
L2032A-01	L2032A-S	2032	SIDE	99.91	0.572	NO 0

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L2032A-02	L2032A-S	2032	SIDE	99.91	0.572	NO	0
L2032B-01	L2032B-S	2032	SIDE	99.3	0.572	NO	0
L2033A-01	L2033A-S	2033	SIDE	99.99	0.572	NO	0
L2033A-02	L2033A-S	2033	SIDE	99.99	0.572	NO	0
L2033B-01	L2033B-S	2033	SIDE	99.94	0.572	NO	0
L2033B-02	L2033B-S	2033	SIDE	99.94	0.572	NO	0
L2036A-01	L2036A-S	2036	SIDE	100.09	0.572	NO	0
L2036A-02	L2036A-S	2036	SIDE	100.09	0.572	NO	0
L2037A-01	L2037A-S	2037	SIDE	99.97	0.572	NO	0
L2037A-02	L2037A-S	2037	SIDE	99.97	0.572	NO	0
L2038A-01	L2038A-S	2038	SIDE	100.45	0.572	NO	0
L2038A-02	L2038A-S	2038	SIDE	100.45	0.572	NO	0
L2039A-01	L2039A-S	2039	SIDE	100	0.572	NO	0
L2039A-02	L2039A-S	2039	SIDE	100	0.572	NO	0
L2039B-01	L2039B-S	2039	SIDE	100.11	0.572	NO	0
L2039B-02	L2039B-S	2039	SIDE	100.11	0.572	NO	0
L2040A-01	L2040A-S	2040	SIDE	100.12	0.572	NO	0
L2040A-02	L2040A-S	2040	SIDE	100.12	0.572	NO	0
L2041A-01	L2041A-S	2041	SIDE	100.19	0.572	NO	0
L2041A-02	L2041A-S	2041	SIDE	100.19	0.572	NO	0
L2042A-01	L2042A-S	2042	SIDE	100.44	0.572	NO	0
L2042A-02	L2042A-S	2042	SIDE	100.44	0.572	NO	0
L2043A-01	L2043A-S	2043	SIDE	100.14	0.572	NO	0
L2043A-02	L2043A-S	2043	SIDE	100.14	0.572	NO	0
L2043B-01	L2043B-S	2043	SIDE	100.32	0.572	NO	0
L2043B-02	L2043B-S	2043	SIDE	100.32	0.572	NO	0
L2044A-01	L2044A-S	2044	SIDE	99.28	0.572	NO	0
L2044A-02	L2044A-S	2044	SIDE	99.28	0.572	NO	0
L2044B-01	L2044B-S	2044	SIDE	98.71	0.572	NO	0
L2044C-01	L2044C-S	2044	SIDE	98.74	0.572	NO	0
L2046A-01	L2046A-S	2045	SIDE	99.22	0.572	NO	0
L2046A-02	L2046A-S	2045	SIDE	99.22	0.572	NO	0
L2047A-01	L2047A-S	2047	SIDE	99.08	0.572	NO	0
L2047A-02	L2047A-S	2047	SIDE	99.08	0.572	NO	0
LM97A-01	LM97A-S	M97	SIDE	99.27	0.61	NO	0
PND_OUTLET	POND	PD_OUTFALL	SIDE	95	0.61	NO	0
R102A-IC	R102A-S	STM101-1	SIDE	96.1	0.61	NO	0
R102B-IC	R102B-S	STM101-1	SIDE	95.95	0.65	NO	0
R103-IC	R103A-S	STM103-1	SIDE	96.36	0.61	NO	0
W3	POND	PD_OUTFALL	SIDE	95.2	0.61	NO	0
[WEIRS]							
;;							
	Inlet	Outlet	weir	Crest	Disch.	Flap End	End
;;Name	Node	Node	Type	Height	Coeff.	Gate Con.	Coeff.
Surcharge	Roadwidth	RoadSurf	Coeff. Curve				
;;							

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C1023A-W YES	0	C1023A-S PAVED	C1003A-S	ROADWAY	98.44	1.6	NO	0	0
C2049A-W YES	0	C2049A-S PAVED	C2005A-S	ROADWAY	100.58	1.6	NO	0	0
L1022A-W YES	0	L1022A-S PAVED	L1020C-S	ROADWAY	100.29	1.6	NO	0	0
W1 YES		POND	OF1	TRAPEZOIDAL	96	1.7	NO	0	0
W2 YES		POND	PD_OUTFALL	TRANSVERSE	95.65	1.7	NO	0	0
W4 YES		L2047A-S	OF6	V-NOTCH	100.71	1.7	NO	0	0
[OUTLETS]									
;;		Inlet	Outlet	Outflow	Outlet	Qcoeff/			
;;Flap		Node	Node	Height	Type	QTable		Qexpon	
;;Name									
;;Gate									
;;-----									
C1023A-O NO		C1023A-S	1002	96.71	TABULAR/HEAD	C1023A-Q			
C2049A-O NO		C2049A-S	2005	98.85	TABULAR/HEAD	C2049A-Q			
F1021A-O NO		F1021A-S	1011	97.67	TABULAR/HEAD	F1021A-Q			
F2006A-O NO		F2006A-S	2005A	99.44	TABULAR/HEAD	F2006A-Q			
L1022A-O NO		L1022A-S	1014	98.56	TABULAR/HEAD	L1022A-Q			
L1027B-A1 NO		L1027B-S0	L1027B-S	98.82	TABULAR/HEAD	CAP_1.0%			
L1027B-A2 NO		L1027B-S0	L1027B-S	98.82	TABULAR/HEAD	CAP_1.0%			
L1059A-A1 NO		L1059A-S0	L1059A-S	100.78	TABULAR/HEAD	CAP_0.5%			
L1059A-A2 NO		L1059A-S0	L1059A-S	100.78	TABULAR/HEAD	CAP_0.5%			
RfB OL1 NO		RfB	xRfB	101	TABULAR/DEPTH	RoofB			
RfA RfA NO		RfA	xRfA	101	TABULAR/DEPTH	RoofA			
RfC RfC NO		RfC	xRfC	101	TABULAR/DEPTH	RoofC			
RfD									

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RfD NO ;RfE RfE NO	RfD	160401317-2019-11-14-3HR-100YR-CHI.inp				RoofD
		xRfD	101	TABULAR/DEPTH		
	RfE	xRfE	101	TABULAR/DEPTH		RoofE
[XSECTIONS] ;;Link	Shape	Geom1	Geom2	Geom3	Geom4	Barrels
1000-P3	CIRCULAR	1.8	0	0	0	1
1001-1000	CIRCULAR	1.65	0	0	0	1
1002-1001	CIRCULAR	1.65	0	0	0	1
1003-1002	CIRCULAR	1.65	0	0	0	1
1004-1003	CIRCULAR	1.65	0	0	0	1
1005-1004	CIRCULAR	1.5	0	0	0	1
1006-1005	CIRCULAR	1.35	0	0	0	1
1007-1006	CIRCULAR	0.6	0	0	0	1
1008-1007	CIRCULAR	0.525	0	0	0	1
1009-1008	CIRCULAR	0.375	0	0	0	1
1010-1006	CIRCULAR	1.2	0	0	0	1
1011-1010	CIRCULAR	0.9	0	0	0	1
1012-1011	CIRCULAR	0.825	0	0	0	1
1013-1012	CIRCULAR	0.75	0	0	0	1
1014-1013	CIRCULAR	0.675	0	0	0	1
1015-1014	CIRCULAR	0.3	0	0	0	1
1016-1010	CIRCULAR	0.675	0	0	0	1
1017-1016	CIRCULAR	0.6	0	0	0	1
1018-1017	CIRCULAR	0.525	0	0	0	1
1019-1018	CIRCULAR	0.525	0	0	0	1
1020-1014	CIRCULAR	0.375	0	0	0	1
1020-1019	CIRCULAR	0.3	0	0	0	1
1051-1050	CIRCULAR	0.375	0	0	0	1
1052-1050	CIRCULAR	0.75	0	0	0	1
1053-1050	CIRCULAR	0.6	0	0	0	1
2000-M98	CIRCULAR	1.8	0	0	0	1
2001-2000	CIRCULAR	1.8	0	0	0	1
2002-2001	CIRCULAR	1.35	0	0	0	1
2003-2002	CIRCULAR	1.35	0	0	0	1
2004-2003	CIRCULAR	1.35	0	0	0	1
2005-2004	CIRCULAR	1.2	0	0	0	1
2005A-2005	CIRCULAR	0.9	0	0	0	1
2006-2005	CIRCULAR	0.9	0	0	0	1
2006-2005A	CIRCULAR	0.9	0	0	0	1
2007-2006	CIRCULAR	0.75	0	0	0	1
2008-2007	CIRCULAR	0.6	0	0	0	1
2009-2008	CIRCULAR	0.45	0	0	0	1
2010-2001	CIRCULAR	1.35	0	0	0	1
2011-2010	CIRCULAR	0.825	0	0	0	1

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2012-2011	CIRCULAR	0.675	0	0	0	1
2013-2012	CIRCULAR	0.675	0	0	0	1
2014-2013	CIRCULAR	0.675	0	0	0	1
2015-2014	CIRCULAR	0.675	0	0	0	1
2016-2015	CIRCULAR	0.3	0	0	0	1
2017-2015	CIRCULAR	0.6	0	0	0	1
2018-2010	CIRCULAR	1.35	0	0	0	1
2019-2018	CIRCULAR	0.825	0	0	0	1
2020-2019	CIRCULAR	0.45	0	0	0	1
2021-2020	CIRCULAR	0.375	0	0	0	1
2022-2019	CIRCULAR	0.675	0	0	0	1
2023-2022	CIRCULAR	0.675	0	0	0	1
2024-2023	CIRCULAR	0.6	0	0	0	1
2025-2024	CIRCULAR	0.3	0	0	0	1
2026-2017	CIRCULAR	0.525	0	0	0	1
2026-2025	CIRCULAR	0.3	0	0	0	1
2027-2026	CIRCULAR	0.45	0	0	0	1
2028-2018	CIRCULAR	1.2	0	0	0	1
2029-2028	CIRCULAR	1.2	0	0	0	1
2030-2029	CIRCULAR	0.825	0	0	0	1
2031-2030	CIRCULAR	0.45	0	0	0	1
2032-2029	CIRCULAR	0.9	0	0	0	1
2033-2032	CIRCULAR	0.45	0	0	0	1
2034-2033	CIRCULAR	0.3	0	0	0	1
2035-2034	CIRCULAR	0.3	0	0	0	1
2036-2032	CIRCULAR	0.825	0	0	0	1
2037-2036	CIRCULAR	0.45	0	0	0	1
2038-2037	CIRCULAR	0.3	0	0	0	1
2039-2036	CIRCULAR	0.375	0	0	0	1
2040-2036	CIRCULAR	0.525	0	0	0	1
2041-2040	CIRCULAR	0.375	0	0	0	1
2042-2041	CIRCULAR	0.3	0	0	0	1
2043-2040	CIRCULAR	0.3	0	0	0	1
2044-2001	CIRCULAR	0.675	0	0	0	1
2045-2044	CIRCULAR	0.525	0	0	0	1
2046-2045	CIRCULAR	0.525	0	0	0	1
2047-2046	CIRCULAR	0.45	0	0	0	1
301-M97	CIRCULAR	1.95	0	0	0	1
C1003A-S1-CB102	IRREGULAR	Cope	0	0	0	1
C1003A-S1-L1002A-S	IRREGULAR	18mROW	0	0	0	1
C1003A-S-C1003A-S1	IRREGULAR	Cope	0	0	0	1
C1006A-S1-C1003A-S	IRREGULAR	Cope	0	0	0	1
C1006A-S-C1006A-S1	IRREGULAR	Cope	0	0	0	1
C1008A-S1-L1010A-S2	IRREGULAR	Cope	0	0	0	1
C1008A-S-C1008A-S1	IRREGULAR	Cope	0	0	0	1
C1009A-S1-C1008A-S	IRREGULAR	Cope	0	0	0	1
C1009A-S-C1009A-S1	IRREGULAR	Cope	0	0	0	1
C1051A-S-C1052B-S1	IRREGULAR	Rouncey	0	0	0	1

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C1052A-S1-C1052A-S	IRREGULAR	Rouncey	0	0	0	1
C1052A-S-C1052A-S2	IRREGULAR	Rouncey	0	0	0	1
C1052B-S1-C1052B-S	IRREGULAR	Rouncey	0	0	0	1
C1052B-S-C1052A-S1	IRREGULAR	Rouncey	0	0	0	1
C139	TRIANGULAR	0.3	2	0	0	1
C156	TRIANGULAR	0.3	2	0	0	1
C18	IRREGULAR	18mROW	0	0	0	1
C2000A-S1-C2000A-S	IRREGULAR	Cope	0	0	0	1
C2000A-S1-C2001A-S	IRREGULAR	Cope	0	0	0	1
C2000A-S-POND6_MJ	IRREGULAR	Walkway	0	0	0	1
C2001A-S-C2002A-S1	IRREGULAR	Cope	0	0	0	1
C2002A-S1-C2002A-S	IRREGULAR	Cope	0	0	0	1
C2002A-S2-C2004A-S	IRREGULAR	Cope	0	0	0	1
C2002A-S-C2002A-S2	IRREGULAR	Cope	0	0	0	1
C2004A-S1-C2004B-S	IRREGULAR	Cope	0	0	0	1
C2004A-S-C2004A-S1	IRREGULAR	Cope	0	0	0	1
C2004B-S1-C1009A-S	IRREGULAR	Cope	0	0	0	1
C2004B-S1-C1051A-S	IRREGULAR	Rouncey	0	0	0	1
C2004B-S-C2004B-S1	IRREGULAR	Cope	0	0	0	1
C2005A-S-C2004B-S1	IRREGULAR	Rouncey	0	0	0	1
C2006A-S1-L1015A-S1	IRREGULAR	Rouncey	0	0	0	1
C2006A-S1-L2031B-S2	IRREGULAR	Rouncey	0	0	0	1
C2006A-S-C2006B-S	IRREGULAR	Rouncey	0	0	0	1
C2006B-S1-C2005A-S	IRREGULAR	Rouncey	0	0	0	1
C2006B-S-C2006B-S1	IRREGULAR	Rouncey	0	0	0	1
C2008A-S-L1015A-S1	IRREGULAR	Rouncey	0	0	0	1
C2009A-S1-C2009A-S	IRREGULAR	Rouncey	0	0	0	1
C2009A-S1-C2009B-S	IRREGULAR	Rouncey	0	0	0	1
C2009A-S-SU87	IRREGULAR	Rouncey	0	0	0	1
C2009B-S1-C2008A-S	IRREGULAR	Rouncey	0	0	0	1
C2009B-S-C2009B-S1	IRREGULAR	Rouncey	0	0	0	1
C3	TRAPEZOIDAL	0.1	6	1	1	1
C30	IRREGULAR	18mROW	0	0	0	1
C31	IRREGULAR	18mROW	0	0	0	1
C32	IRREGULAR	18mROW	0	0	0	1
C33	IRREGULAR	18mROW	0	0	0	1
C34	IRREGULAR	18mROW	0	0	0	1
C35	IRREGULAR	18mROW	0	0	0	1
C36	IRREGULAR	18mROW	0	0	0	1
C37	IRREGULAR	18mROW	0	0	0	1
C38	IRREGULAR	18mROW	0	0	0	1
C39	IRREGULAR	18mROW	0	0	0	1
C4	CIRCULAR	1.5	0	0	0	1
C40	IRREGULAR	18mROW	0	0	0	1
C41	IRREGULAR	18mROW	0	0	0	1
C7	CIRCULAR	0.25	0	0	0	1
CM97A-S1-CM97A-S	IRREGULAR	Cope	0	0	0	1
CM97A-S-C2000A-S	IRREGULAR	Cope	0	0	0	1

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F1021A-S-L1011A-S	TRAPEZOIDAL	0.05	5	0.03	0.03	1
F2006A-S-C2006A-S	TRAPEZOIDAL	0.05	5	3	3	1
L1000A-S-POND	TRIANGULAR	0.3	2	0	0	1
L1001A-S1L1001A-S	IRREGULAR	18mROW	0	0	0	1
L1001A-S2L1001A-S	IRREGULAR	18mROW	0	0	0	1
L1001A-S-POND	IRREGULAR	Walkway	0	0	0	1
L1002A-SL1001A-S1	IRREGULAR	18mROW	0	0	0	1
L1007A-S-L1010A-S2	TRIANGULAR	0.3	2	0	0	1
L1010A-S1-L1010A-S	IRREGULAR	18mROW	0	0	0	1
L1010A-S2-C1006A-S	IRREGULAR	Cope	0	0	0	1
L1010A-S-L1010A-S2	IRREGULAR	18mROW	0	0	0	1
L1011A-S1-L1011A-S	IRREGULAR	18mROW	0	0	0	1
L1011A-S-L1010A-S1	IRREGULAR	18mROW	0	0	0	1
L1011B-S-L1011A-S	TRIANGULAR	0.3	2	0	0	1
L1012A-S-L1011A-S1	IRREGULAR	18mROW	0	0	0	1
L1015A-S1-L1015A-S	IRREGULAR	18mROW	0	0	0	1
L1015A-S2-L1020A-S1	IRREGULAR	18mROW	0	0	0	1
L1015A-S-L1015A-S2	IRREGULAR	18mROW	0	0	0	1
L1016A-S1-L1016A-S	IRREGULAR	18mROW	0	0	0	1
L1016A-S-L1010A-S1	IRREGULAR	18mROW	0	0	0	1
L1017A-S1-L1017A-S	IRREGULAR	18mROW	0	0	0	1
L1017A-S-L1016A-S1	IRREGULAR	18mROW	0	0	0	1
L1019A-S1-L1019A-S	IRREGULAR	18mROW	0	0	0	1
L1019A-S-L1017A-S1	IRREGULAR	18mROW	0	0	0	1
L1019B-S-L1010B-S	TRIANGULAR	0.3	2	0	0	1
L1019C-S-L1019A-S	TRIANGULAR	0.3	2	0	0	1
L1020A-S1-L1020A-S	IRREGULAR	18mROW	0	0	0	1
L1020A-S1-L1020B-S	IRREGULAR	18mROW	0	0	0	1
L1020A-S-L1019A-S1	IRREGULAR	18mROW	0	0	0	1
L1020B-S1-L1020C-S	IRREGULAR	18mROW	0	0	0	1
L1020B-S-L1020B-S1	IRREGULAR	18mROW	0	0	0	1
L1020C-S1-L1012A-S	IRREGULAR	18mROW	0	0	0	1
L1020C-S-L1020C-S1	IRREGULAR	18mROW	0	0	0	1
L1024A-S1L1024A-S	IRREGULAR	18mROW	0	0	0	1
L1024A-SL1001A-S2	IRREGULAR	18mROW	0	0	0	1
L1024B-S-L1001A-S2	TRIANGULAR	0.3	2	0	0	1
L1026A-S1L1026A-S	IRREGULAR	18mROW	0	0	0	1
L1026A-SL1024A-S1	IRREGULAR	18mROW	0	0	0	1
L1027A-SL1026A-S1	IRREGULAR	18mROW	0	0	0	1
L1027B-S1L1027B-S	IRREGULAR	18mROW	0	0	0	1
L1027B-SL1027A-S	IRREGULAR	18mROW	0	0	0	1
L1027C-S-L1032B-S	TRIANGULAR	0.3	2	0	0	1
L1029A-S1L1029A-S	IRREGULAR	18mROW	0	0	0	1
L1029A-SL1027B-S1	IRREGULAR	18mROW	0	0	0	1
L1030A-S1L1030A-S	IRREGULAR	18mROW	0	0	0	1
L1030A-SL1029A-S1	IRREGULAR	18mROW	0	0	0	1
L1031A-SL1030A-S1	IRREGULAR	18mROW	0	0	0	1
L1032A-S1L1032A-S	IRREGULAR	18mROW	0	0	0	1

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L1032A-SL1024A-S1	IRREGULAR	18mROW	0	0	0	1
L1032B-S-L1032A-S	TRIANGULAR	0.3	2	0	0	1
L1034A-S1L1034A-S	IRREGULAR	18mROW	0	0	0	1
L1034A-SL1032A-S1	IRREGULAR	18mROW	0	0	0	1
L1036A-SL1034A-S1	IRREGULAR	18mROW	0	0	0	1
L1038A-S1L1036A-S	IRREGULAR	18mROW	0	0	0	1
L1038A-S1L1038A-S	IRREGULAR	18mROW	0	0	0	1
L1038A-SL1039A-S1	IRREGULAR	18mROW	0	0	0	1
L1039A-S1L1039A-S	IRREGULAR	18mROW	0	0	0	1
L1039A-SL1032A-S1	IRREGULAR	18mROW	0	0	0	1
L1039B-S-L1039A-S	TRIANGULAR	0.3	2	0	0	1
L1050A-SL1039A-S1	IRREGULAR	18mROW	0	0	0	1
L1050B-S-L1050A-S	TRIANGULAR	0.3	2	0	0	1
L1051B-S-C1051A-S	TRIANGULAR	0.3	2	0	0	1
L1053A-S-C1052B-S	TRIANGULAR	0.3	2	0	0	1
L2007A-S-C2008A-S	TRIANGULAR	0.3	2	0	0	1
L2010A-S1-L2010A-S	IRREGULAR	18mROW	0	0	0	1
L2010A-S2-C2002A-S1	IRREGULAR	18mROW	0	0	0	1
L2010A-S-L2010A-S2	IRREGULAR	18mROW	0	0	0	1
L2010B-S-L2010A-S2	TRIANGULAR	0.3	2	0	0	1
L2011A-S1-L2011A-S	IRREGULAR	18mROW	0	0	0	1
L2011A-S-L2010A-S	IRREGULAR	18mROW	0	0	0	1
L2013A-S-L2011A-S1	IRREGULAR	18mROW	0	0	0	1
L2015A-S1-L2013A-S	IRREGULAR	18mROW	0	0	0	1
L2015A-S-L2015A-S1	IRREGULAR	18mROW	0	0	0	1
L2016A-S1-L2016A-S	IRREGULAR	18mROW	0	0	0	1
L2016A-S1-L2017B-S1	IRREGULAR	18mROW	0	0	0	1
L2016B-S-L2016A-S	TRIANGULAR	0.3	2	0	0	1
L2017A-S1-L2017A-S	IRREGULAR	18mROW	0	0	0	1
L2017A-S-L2017B-S2	IRREGULAR	18mROW	0	0	0	1
L2017B-S1-L2015A-S	IRREGULAR	18mROW	0	0	0	1
L2017B-S1-L2021A-S	IRREGULAR	18mROW	0	0	0	1
L2017B-S2-L2017B-S	IRREGULAR	18mROW	0	0	0	1
L2017B-S-L2017B-S1	IRREGULAR	18mROW	0	0	0	1
L2018A-S1-L2018A-S	IRREGULAR	18mROW	0	0	0	1
L2018A-S-L2010A-S1	IRREGULAR	18mROW	0	0	0	1
L2019A-S1-L2019A-S	IRREGULAR	18mROW	0	0	0	1
L2019A-S-L2018A-S1	IRREGULAR	18mROW	0	0	0	1
L2019B-S-L2019A-S	TRIANGULAR	0.3	2	0	0	1
L2021A-S-L2019A-S1	IRREGULAR	18mROW	0	0	0	1
L2021B-S-L2021A-S	TRIANGULAR	0.3	2	0	0	1
L2023A-S-L2019A-S1	IRREGULAR	18mROW	0	0	0	1
L2024A-S1-L2024B-S	IRREGULAR	18mROW	0	0	0	1
L2024A-S-L2024A-S1	IRREGULAR	18mROW	0	0	0	1
L2024B-S1-L2023A-S	IRREGULAR	18mROW	0	0	0	1
L2024B-S-L2024B-S1	IRREGULAR	18mROW	0	0	0	1
L2026A-S1-L2026A-S	IRREGULAR	18mROW	0	0	0	1
L2026A-S1-L2027A-S3	IRREGULAR	18mROW	0	0	0	1

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L2026A-S-L2017A-S1	IRREGULAR	18mROW	0	0	0	1
L2026B-S1-L2024A-S	IRREGULAR	18mROW	0	0	0	1
L2026B-S-L2026B-S1	IRREGULAR	18mROW	0	0	0	1
L2027A-S1-L2027A-S	IRREGULAR	18mROW	0	0	0	1
L2027A-S1-L2038A-S	IRREGULAR	18mROW	0	0	0	1
L2027A-S2-L2027A-S1	IRREGULAR	18mROW	0	0	0	1
L2027A-S2-L2042A-S	IRREGULAR	18mROW	0	0	0	1
L2027A-S3-L2026B-S	IRREGULAR	18mROW	0	0	0	1
L2027A-S-L2027A-S3	IRREGULAR	18mROW	0	0	0	1
L2027B-S-L2027A-S	TRIANGULAR	0.3	2	0	0	1
L2029A-S-L2018A-S1	IRREGULAR	18mROW	0	0	0	1
L2029B-S-L2032A-S	TRIANGULAR	0.3	2	0	0	1
L2030A-S-L2031A-S1	IRREGULAR	18mROW	0	0	0	1
L2030B-S-L2030A-S	TRIANGULAR	0.3	2	0	0	1
L2031A-S1-L2031A-S	IRREGULAR	18mROW	0	0	0	1
L2031A-S-L2031B-S1	IRREGULAR	18mROW	0	0	0	1
L2031B-S1-L2031B-S	IRREGULAR	18mROW	0	0	0	1
L2031B-S2-C2006A-S	IRREGULAR	Rouncey	0	0	0	1
L2031B-S-L2031B-S2	IRREGULAR	18mROW	0	0	0	1
L2032A-S1-L2029A-S	IRREGULAR	18mROW	0	0	0	1
L2032A-S1-L2030A-S	IRREGULAR	18mROW	0	0	0	1
L2032A-S-L2032A-S1	IRREGULAR	18mROW	0	0	0	1
L2032B-S-L2032A-S	TRIANGULAR	0.3	2	0	0	1
L2033A-S-L2033B-S1	IRREGULAR	18mROW	0	0	0	1
L2033B-S1-L2033B-S	IRREGULAR	18mROW	0	0	0	1
L2033B-S-L2036A-S1	IRREGULAR	18mROW	0	0	0	1
L2034A-S1-L2037A-S	IRREGULAR	18mROW	0	0	0	1
L2036A-S1-L2032A-S	IRREGULAR	18mROW	0	0	0	1
L2036A-S-L2036A-S1	IRREGULAR	18mROW	0	0	0	1
L2037A-S-L2039A-S2	IRREGULAR	18mROW	0	0	0	1
L2038A-S-L2034A-S1	IRREGULAR	18mROW	0	0	0	1
L2039A-S1-L2039A-S	IRREGULAR	18mROW	0	0	0	1
L2039A-S2-L2036A-S	IRREGULAR	18mROW	0	0	0	1
L2039A-S-L2039A-S2	IRREGULAR	18mROW	0	0	0	1
L2039B-S1-L2033A-S	IRREGULAR	18mROW	0	0	0	1
L2039B-S1-L2039B-S	IRREGULAR	18mROW	0	0	0	1
L2039B-S-L2039A-S1	IRREGULAR	18mROW	0	0	0	1
L2040A-S1-L2040A-S	IRREGULAR	18mROW	0	0	0	1
L2040A-S-L2039A-S2	IRREGULAR	18mROW	0	0	0	1
L2041A-S-L2040A-S1	IRREGULAR	18mROW	0	0	0	1
L2042A-S1-L2041A-S	IRREGULAR	18mROW	0	0	0	1
L2042A-S-L2042A-S1	IRREGULAR	18mROW	0	0	0	1
L2043A-S1-L2043A-S	IRREGULAR	18mROW	0	0	0	1
L2043A-S-L2040A-S1	IRREGULAR	18mROW	0	0	0	1
L2043B-S1-L2039B-S1	IRREGULAR	18mROW	0	0	0	1
L2043B-S1-L2043B-S	IRREGULAR	18mROW	0	0	0	1
L2043B-S-L2043A-S1	IRREGULAR	18mROW	0	0	0	1
L2044A-S1-L2044A-S	IRREGULAR	18mROW	0	0	0	1

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L2044A-S-C2002A-S1	IRREGULAR	18mROW	0	0	0	1
L2044B-S-OF7	TRIANGULAR	0.3	2	0	0	1
L2044C-S-L2044A-S	TRIANGULAR	0.3	2	0	0	1
L2046A-S1-L2046A-S	IRREGULAR	18mROW	0	0	0	1
L2046A-S1-L2047A-S	IRREGULAR	18mROW	0	0	0	1
L2046A-S-L2044A-S1	IRREGULAR	18mROW	0	0	0	1
L2047A-S1-L2047A-S	IRREGULAR	18mROW	0	0	0	1
LM97A-S-C2000A-S	IRREGULAR	walkway	0	0	0	1
M97-M98	CIRCULAR	2.1	0	0	0	1
M98-M99	CIRCULAR	2.4	0	0	0	1
outlet	CIRCULAR	1.05	0	0	0	1
P2-P1	CIRCULAR	1.8	0	0	0	1
P3-P2	CIRCULAR	1.8	0	0	0	1
P8IN-HI	RECT_CLOSED	1.2	2.4	0	0	1
P8IN-LO	CIRCULAR	2.1	0	0	0	1
Pipe_10	CIRCULAR	0.9	0	0	0	1
Pipe_26	CIRCULAR	0.45	0	0	0	1
Pipe_27	CIRCULAR	0.375	0	0	0	1
Pipe_28	CIRCULAR	0.375	0	0	0	1
Pipe_29	CIRCULAR	0.3	0	0	0	1
Pipe_30	CIRCULAR	0.3	0	0	0	1
Pipe_31	CIRCULAR	0.45	0	0	0	1
Pipe_32	CIRCULAR	0.525	0	0	0	1
Pipe_33	CIRCULAR	0.525	0	0	0	1
Pipe_34	CIRCULAR	0.45	0	0	0	1
Pipe_35	CIRCULAR	0.45	0	0	0	1
Pipe_36	CIRCULAR	0.3	0	0	0	1
Pipe_37	CIRCULAR	0.3	0	0	0	1
Pipe_43	CIRCULAR	0.825	0	0	0	1
Pipe_44	CIRCULAR	0.675	0	0	0	1
Pipe_45	CIRCULAR	0.45	0	0	0	1
Pipe_46	CIRCULAR	0.45	0	0	0	1
Pipe_46_(1)	CIRCULAR	0.45	0	0	0	1
Pipe_47	CIRCULAR	0.3	0	0	0	1
Pipe_5	CIRCULAR	1.2	0	0	0	1
Pipe_6	CIRCULAR	1.2	0	0	0	1
Pipe_7	CIRCULAR	0.975	0	0	0	1
Pipe_8	CIRCULAR	0.9	0	0	0	1
Pipe_9	CIRCULAR	0.9	0	0	0	1
PIPE1	CIRCULAR	0.25	0	0	0	1
PIPE10	CIRCULAR	0.2	0	0	0	1
PIPE11	CIRCULAR	0.9	0	0	0	1
PIPE13	CIRCULAR	0.75	0	0	0	1
PIPE14	CIRCULAR	0.75	0	0	0	1
PIPE15	CIRCULAR	0.75	0	0	0	1
PIPE16	CIRCULAR	0.75	0	0	0	1
PIPE17	RECT_CLOSED	0.9	1.8	0	0	1
PIPE19	RECT_CLOSED	0.9	1.8	0	0	1

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PIPE2	CIRCULAR	0.2	0	0	0	1
PIPE24	CIRCULAR	0.25	0	0	0	1
PIPE25	CIRCULAR	0.2	0	0	0	1
PIPE26	CIRCULAR	0.2	0	0	0	1
PIPE27	CIRCULAR	0.75	0	0	0	1
PIPE28	CIRCULAR	0.75	0	0	0	1
PIPE29	CIRCULAR	0.2	0	0	0	1
PIPE3	CIRCULAR	0.75	0	0	0	1
PIPE30	CIRCULAR	0.75	0	0	0	1
PIPE31	CIRCULAR	0.75	0	0	0	1
PIPE32	CIRCULAR	0.2	0	0	0	1
PIPE33	CIRCULAR	0.75	0	0	0	1
PIPE34	CIRCULAR	0.2	0	0	0	1
PIPE35	CIRCULAR	0.75	0	0	0	1
PIPE36	CIRCULAR	0.75	0	0	0	1
PIPE38	CIRCULAR	0.75	0	0	0	1
PIPE39	CIRCULAR	0.2	0	0	0	1
PIPE4	CIRCULAR	0.25	0	0	0	1
PIPE40	CIRCULAR	0.25	0	0	0	1
PIPE41	CIRCULAR	0.2	0	0	0	1
PIPE42	CIRCULAR	0.75	0	0	0	1
PIPE43	CIRCULAR	0.75	0	0	0	1
PIPE45	CIRCULAR	0.2	0	0	0	1
PIPE46	CIRCULAR	0.2	0	0	0	1
PIPE47	CIRCULAR	0.75	0	0	0	1
PIPE5	CIRCULAR	0.75	0	0	0	1
PIPE51	CIRCULAR	0.2	0	0	0	1
PIPE52	CIRCULAR	0.2	0	0	0	1
PIPE54	CIRCULAR	0.75	0	0	0	1
PIPE56	CIRCULAR	0.2	0	0	0	1
PIPE57	CIRCULAR	0.2	0	0	0	1
PIPE58	CIRCULAR	0.75	0	0	0	1
PIPE60	CIRCULAR	0.3	0	0	0	1
PIPE61	CIRCULAR	0.9	0	0	0	1
PIPE62	CIRCULAR	0.2	0	0	0	1
PIPE63	CIRCULAR	0.2	0	0	0	1
PIPE7	CIRCULAR	0.2	0	0	0	1
PIPE8	CIRCULAR	0.75	0	0	0	1
PIPE9	CIRCULAR	0.9	0	0	0	1
STM101-1-P1	CIRCULAR	1.5	0	0	0	1
STM102-101	CIRCULAR	0.45	0	0	0	1
STM103-102	CIRCULAR	0.25	0	0	0	1
C1003A-01	CIRCULAR	0.178	0	0	0	
C1003A-02	CIRCULAR	0.178	0	0	0	
C1006A-01	CIRCULAR	0.152	0	0	0	
C1006A-02	CIRCULAR	0.152	0	0	0	
C1008A-01	CIRCULAR	0.2	0	0	0	
C1008A-02	CIRCULAR	0.2	0	0	0	

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C1009A-01	CIRCULAR	0.178	0	0	0
C1009A-02	CIRCULAR	0.178	0	0	0
C1051A-01	CIRCULAR	0.127	0	0	0
C1051A-02	CIRCULAR	0.127	0	0	0
C1052A-01	CIRCULAR	0.152	0	0	0
C1052A-02	CIRCULAR	0.152	0	0	0
C1052B-01	CIRCULAR	0.152	0	0	0
C1052B-02	CIRCULAR	0.152	0	0	0
C1056A-01	CIRCULAR	0.127	0	0	0
C1056A-02	CIRCULAR	0.127	0	0	0
C2000A-01	CIRCULAR	0.178	0	0	0
C2000A-02	CIRCULAR	0.178	0	0	0
C2001A-01	CIRCULAR	0.152	0	0	0
C2001A-02	CIRCULAR	0.152	0	0	0
C2002A-01	CIRCULAR	0.127	0	0	0
C2002A-02	CIRCULAR	0.127	0	0	0
C2004A-01	CIRCULAR	0.127	0	0	0
C2004A-02	CIRCULAR	0.127	0	0	0
C2004B-01	CIRCULAR	0.152	0	0	0
C2004B-02	CIRCULAR	0.152	0	0	0
C2005A-01	CIRCULAR	0.152	0	0	0
C2005A-02	CIRCULAR	0.152	0	0	0
C2006A-01	CIRCULAR	0.152	0	0	0
C2006A-02	CIRCULAR	0.152	0	0	0
C2006B-01	CIRCULAR	0.178	0	0	0
C2006B-02	CIRCULAR	0.178	0	0	0
C2008A-01	CIRCULAR	0.108	0	0	0
C2008A-02	CIRCULAR	0.108	0	0	0
C2009A-01	CIRCULAR	0.127	0	0	0
C2009A-02	CIRCULAR	0.127	0	0	0
C2009B-01	CIRCULAR	0.127	0	0	0
C2009B-02	CIRCULAR	0.127	0	0	0
CB503-IC	CIRCULAR	0.2	0	0	0
CM97A-01	CIRCULAR	0.178	0	0	0
CM97A-02	CIRCULAR	0.152	0	0	0
F102A-IC	CIRCULAR	0.2	0	0	0
F102B-IC	CIRCULAR	0.2	0	0	0
F102C-IC	CIRCULAR	0.2	0	0	0
L1000A-01	CIRCULAR	0.152	0	0	0
L1001A-01	CIRCULAR	0.108	0	0	0
L1001A-02	CIRCULAR	0.108	0	0	0
L1002A-01	CIRCULAR	0.127	0	0	0
L1002A-02	CIRCULAR	0.127	0	0	0
L1007A-01	CIRCULAR	0.178	0	0	0
L1010A-01	CIRCULAR	0.083	0	0	0
L1010A-02	CIRCULAR	0.083	0	0	0
L1010B-01	CIRCULAR	0.178	0	0	0
L1011A-01	CIRCULAR	0.083	0	0	0

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L1011A-02	CIRCULAR	0.083	0	0	0
L1011B-01	CIRCULAR	0.127	0	0	0
L1012A-01	CIRCULAR	0.083	0	0	0
L1012A-02	CIRCULAR	0.083	0	0	0
L1015A-01	CIRCULAR	0.083	0	0	0
L1015A-02	CIRCULAR	0.083	0	0	0
L1016A-01	CIRCULAR	0.127	0	0	0
L1016A-02	CIRCULAR	0.127	0	0	0
L1017A-01	CIRCULAR	0.127	0	0	0
L1017A-02	CIRCULAR	0.127	0	0	0
L1019A-01	CIRCULAR	0.108	0	0	0
L1019A-02	CIRCULAR	0.108	0	0	0
L1019B-01	CIRCULAR	0.2	0	0	0
L1019C-01	CIRCULAR	0.102	0	0	0
L1020A-01	CIRCULAR	0.102	0	0	0
L1020A-02	CIRCULAR	0.102	0	0	0
L1020B-01	CIRCULAR	0.083	0	0	0
L1020B-02	CIRCULAR	0.083	0	0	0
L1020C-01	CIRCULAR	0.083	0	0	0
L1020C-02	CIRCULAR	0.083	0	0	0
L1024A-01	CIRCULAR	0.178	0	0	0
L1024A-02	CIRCULAR	0.178	0	0	0
L1024B-01	CIRCULAR	0.178	0	0	0
L1026A-01	CIRCULAR	0.083	0	0	0
L1026A-02	CIRCULAR	0.083	0	0	0
L1027A-01	CIRCULAR	0.127	0	0	0
L1027A-02	CIRCULAR	0.127	0	0	0
L1027B-01	CIRCULAR	0.083	0	0	0
L1027B-02	CIRCULAR	0.083	0	0	0
L1027C-01	CIRCULAR	0.2	0	0	0
L1029A-01	CIRCULAR	0.127	0	0	0
L1029A-02	CIRCULAR	0.127	0	0	0
L1030A-01	CIRCULAR	0.108	0	0	0
L1030A-02	CIRCULAR	0.108	0	0	0
L1031A-01	CIRCULAR	0.127	0	0	0
L1031A-02	CIRCULAR	0.127	0	0	0
L1032A-01	CIRCULAR	0.095	0	0	0
L1032A-02	CIRCULAR	0.095	0	0	0
L1032B-01	CIRCULAR	0.178	0	0	0
L1034A-01	CIRCULAR	0.095	0	0	0
L1034A-02	CIRCULAR	0.095	0	0	0
L1036A-01	CIRCULAR	0.127	0	0	0
L1036A-02	CIRCULAR	0.127	0	0	0
L1038A-01	CIRCULAR	0.083	0	0	0
L1038A-02	CIRCULAR	0.083	0	0	0
L1039A-01	CIRCULAR	0.102	0	0	0
L1039A-02	CIRCULAR	0.102	0	0	0
L1039B-01	CIRCULAR	0.127	0	0	0

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L1050A-01	CIRCULAR	0.127	0	0	0	0
L1050A-02	CIRCULAR	0.127	0	0	0	0
L1050B-01	CIRCULAR	0.127	0	0	0	0
L1051B-01	CIRCULAR	0.2	0	0	0	0
L1053A-01	CIRCULAR	0.102	0	0	0	0
L1053A-02	CIRCULAR	0.102	0	0	0	0
L1053B-01	CIRCULAR	0.178	0	0	0	0
L1054A-01	CIRCULAR	0.152	0	0	0	0
L1054A-02	CIRCULAR	0.127	0	0	0	0
L1057A-01	CIRCULAR	0.108	0	0	0	0
L1057A-02	CIRCULAR	0.108	0	0	0	0
L1058A-01	CIRCULAR	0.102	0	0	0	0
L1058A-02	CIRCULAR	0.102	0	0	0	0
L1059A-01	CIRCULAR	0.095	0	0	0	0
L1059A-02	CIRCULAR	0.095	0	0	0	0
L2007A-01	CIRCULAR	0.178	0	0	0	0
L2010A-01	CIRCULAR	0.095	0	0	0	0
L2010A-02	CIRCULAR	0.095	0	0	0	0
L2010B-01	CIRCULAR	0.152	0	0	0	0
L2011A-01	CIRCULAR	0.152	0	0	0	0
L2011A-02	CIRCULAR	0.152	0	0	0	0
L2013A-01	CIRCULAR	0.152	0	0	0	0
L2013A-02	CIRCULAR	0.152	0	0	0	0
L2015A-01	CIRCULAR	0.102	0	0	0	0
L2015A-02	CIRCULAR	0.102	0	0	0	0
L2016A-01	CIRCULAR	0.127	0	0	0	0
L2016A-02	CIRCULAR	0.127	0	0	0	0
L2016B-01	CIRCULAR	0.083	0	0	0	0
L2017A-01	CIRCULAR	0.102	0	0	0	0
L2017A-02	CIRCULAR	0.102	0	0	0	0
L2017B-01	CIRCULAR	0.095	0	0	0	0
L2017B-02	CIRCULAR	0.095	0	0	0	0
L2018A-01	CIRCULAR	0.083	0	0	0	0
L2018A-02	CIRCULAR	0.083	0	0	0	0
L2018B-01	CIRCULAR	0.178	0	0	0	0
L2019A-01	CIRCULAR	0.102	0	0	0	0
L2019A-02	CIRCULAR	0.102	0	0	0	0
L2019B-01	CIRCULAR	0.127	0	0	0	0
L2021A-01	CIRCULAR	0.083	0	0	0	0
L2021A-02	CIRCULAR	0.083	0	0	0	0
L2021B-01	CIRCULAR	0.178	0	0	0	0
L2023A-01	CIRCULAR	0.127	0	0	0	0
L2023A-02	CIRCULAR	0.127	0	0	0	0
L2024A-01	CIRCULAR	0.102	0	0	0	0
L2024A-02	CIRCULAR	0.102	0	0	0	0
L2024B-01	CIRCULAR	0.102	0	0	0	0
L2024B-02	CIRCULAR	0.102	0	0	0	0
L2026A-01	CIRCULAR	0.127	0	0	0	0

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L2026A-02	CIRCULAR	0.127	0	0	0	0
L2026B-01	CIRCULAR	0.083	0	0	0	0
L2026B-02	CIRCULAR	0.083	0	0	0	0
L2027A-01	CIRCULAR	0.127	0	0	0	0
L2027A-02	CIRCULAR	0.127	0	0	0	0
L2027B-01	CIRCULAR	0.152	0	0	0	0
L2029A-01	CIRCULAR	0.152	0	0	0	0
L2029A-02	CIRCULAR	0.152	0	0	0	0
L2029B-01	CIRCULAR	0.152	0	0	0	0
L2030A-01	CIRCULAR	0.095	0	0	0	0
L2030A-02	CIRCULAR	0.095	0	0	0	0
L2030B-01	CIRCULAR	0.083	0	0	0	0
L2031A-01	CIRCULAR	0.095	0	0	0	0
L2031A-02	CIRCULAR	0.095	0	0	0	0
L2031B-01	CIRCULAR	0.095	0	0	0	0
L2031B-02	CIRCULAR	0.095	0	0	0	0
L2032A-01	CIRCULAR	0.102	0	0	0	0
L2032A-02	CIRCULAR	0.102	0	0	0	0
L2032B-01	CIRCULAR	0.152	0	0	0	0
L2033A-01	CIRCULAR	0.152	0	0	0	0
L2033A-02	CIRCULAR	0.152	0	0	0	0
L2033B-01	CIRCULAR	0.108	0	0	0	0
L2033B-02	CIRCULAR	0.108	0	0	0	0
L2036A-01	CIRCULAR	0.083	0	0	0	0
L2036A-02	CIRCULAR	0.083	0	0	0	0
L2037A-01	CIRCULAR	0.127	0	0	0	0
L2037A-02	CIRCULAR	0.127	0	0	0	0
L2038A-01	CIRCULAR	0.127	0	0	0	0
L2038A-02	CIRCULAR	0.127	0	0	0	0
L2039A-01	CIRCULAR	0.102	0	0	0	0
L2039A-02	CIRCULAR	0.102	0	0	0	0
L2039B-01	CIRCULAR	0.095	0	0	0	0
L2039B-02	CIRCULAR	0.095	0	0	0	0
L2040A-01	CIRCULAR	0.083	0	0	0	0
L2040A-02	CIRCULAR	0.083	0	0	0	0
L2041A-01	CIRCULAR	0.095	0	0	0	0
L2041A-02	CIRCULAR	0.095	0	0	0	0
L2042A-01	CIRCULAR	0.108	0	0	0	0
L2042A-02	CIRCULAR	0.108	0	0	0	0
L2043A-01	CIRCULAR	0.083	0	0	0	0
L2043A-02	CIRCULAR	0.083	0	0	0	0
L2043B-01	CIRCULAR	0.095	0	0	0	0
L2043B-02	CIRCULAR	0.095	0	0	0	0
L2044A-01	CIRCULAR	0.083	0	0	0	0
L2044A-02	CIRCULAR	0.083	0	0	0	0
L2044B-01	CIRCULAR	0.178	0	0	0	0
L2044C-01	CIRCULAR	0.178	0	0	0	0
L2046A-01	CIRCULAR	0.152	0	0	0	0

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L2046A-02	CIRCULAR	0.152	0	0	0
L2047A-01	CIRCULAR	0.108	0	0	0
L2047A-02	CIRCULAR	0.108	0	0	0
LM97A-01	CIRCULAR	0.2	0	0	0
PND_OUTLET	RECT_CLOSED	0.2	0.25	0	0
R102A-IC	CIRCULAR	0.2	0	0	0
R102B-IC	CIRCULAR	0.2	0	0	0
R103-IC	CIRCULAR	0.2	0	0	0
W3	RECT_CLOSED	0.45	0.5	0	0
C1023A-W	RECT_OPEN	0.2	30	0	0
C2049A-W	RECT_OPEN	0.1	18	0	0
L1022A-W	RECT_OPEN	0.15	18	0	0
W1	TRAPEZOIDAL	0.15	17	3	3
W2	RECT_OPEN	0.7	0.9	0	0
W4	TRIANGULAR	0.2	50	0	0

[TRANSECTS]

NC 0.025	0.025	0.013								
X1 18mROW	7	4.75	13.25	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GR 0.4	0	0.15	4.75	0	4.75	0.128	9	0	13.25	
GR 0.15	13.25	0.4	18							
NC 0.025	0.025	0.013								
X1 Cope	7	8.35	18.65	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GR 0.4	0	0.234	8.35	0.084	8.35	0.197	12.1	0	18.65	
GR 0.15	18.65	0.4	26							
NC 0.025	0.025	0.013								
X1 Rouncey	7	7.5	18.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GR 0.4	0	0.15	7.5	0	7.5	0.165	13	0	18.5	
GR 0.15	18.5	0.4	26							
NC 0.025	0.025	0.013								
X1 Walkway	4	1.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GR 0.25	0	0	1.5	0	4.5	0.25	6			

[LOSSES]

::Link	Inlet	Outlet	Average	Flap Gate	SeepageRate
1002-1001	0	0.529	0	NO	0
1003-1002	0	1.344	0	NO	0
1004-1003	0	0.034	0	NO	0
1005-1004	0	0.042	0	NO	0
1006-1005	0	0.034	0	NO	0
1007-1006	0	0.034	0	NO	0
1008-1007	0	0.034	0	NO	0
1009-1008	0	0.042	0	NO	0

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1010-1006	0	1.344	0	NO	0
1011-1010	0	0.022	0	NO	0
1012-1011	0	0.072	0	NO	0
1013-1012	0	0.365	0	NO	0
1014-1013	0	0.405	0	NO	0
1015-1014	0	0.021	0	NO	0
1016-1010	0	1.233	0	NO	0
1017-1016	0	0.034	0	NO	0
1018-1017	0	0.322	0	NO	0
1019-1018	0	0.384	0	NO	0
1020-1019	0	0.042	0	NO	0
1051-1050	0	1.26	0	NO	0
1052-1050	0	1.344	0	NO	0
1053-1050	0	0.034	0	NO	0
2000-M98	0	1.344	0	NO	0
2001-2000	0	0.034	0	NO	0
2002-2001	0	0.022	0	NO	0
2003-2002	0	0.034	0	NO	0
2004-2003	0	0.022	0	NO	0
2005-2004	0	1.344	0	NO	0
2005A-2005	0	0.022	0	NO	0
2006-2005	0	0.022	0	NO	0
2006-2005A	0	0.022	0	NO	0
2007-2006	0	0.072	0	NO	0
2008-2007	0	0.034	0	NO	0
2009-2008	0	0.022	0	NO	0
2010-2001	0	1.233	0	NO	0
2011-2010	0	1.344	0	NO	0
2012-2011	0	0.034	0	NO	0
2013-2012	0	0.034	0	NO	0
2014-2013	0	0.486	0	NO	0
2015-2014	0	0.588	0	NO	0
2016-2015	0	1.344	0	NO	0
2017-2015	0	0.022	0	NO	0
2018-2010	0	0.022	0	NO	0
2019-2018	0	1.344	0	NO	0
2020-2019	0	0.022	0	NO	0
2021-2020	0	0.103	0	NO	0
2022-2019	0	1.344	0	NO	0
2023-2022	0	0.103	0	NO	0
2024-2023	0	0.022	0	NO	0
2025-2024	0	0.405	0	NO	0
2026-2017	0	0.021	0	NO	0
2026-2025	0	0.405	0	NO	0
2027-2026	0	1.344	0	NO	0
2028-2018	0	0.55	0	NO	0
2029-2028	0	0.309	0	NO	0
2030-2029	0	1.344	0	NO	0

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2031-2030	0	0.022	0	NO	0
2032-2029	0	0.022	0	NO	0
2033-2032	0	1.344	0	NO	0
2034-2033	0	0.365	0	NO	0
2035-2034	0	0.47	0	NO	0
2036-2032	0	0.022	0	NO	0
2037-2036	0	1.344	0	NO	0
2038-2037	0	0.022	0	NO	0
2039-2036	0	1.344	0	NO	0
2040-2036	0	0.022	0	NO	0
2041-2040	0	1.344	0	NO	0
2042-2041	0	0.022	0	NO	0
2043-2040	0	1.344	0	NO	0
2044-2001	0	1.344	0	NO	0
2045-2044	0	0.061	0	NO	0
2046-2045	0	0.061	0	NO	0
2047-2046	0	0.061	0	NO	0
301-M97	0	0.022	0	NO	0
C4	0	0.02	0	NO	0
C7	0	1.344	0	NO	0
M97-M98	0	1.323	0	NO	0
outlet	0	0	0	YES	0
P8IN-HI	0	1	0	NO	0
P8IN-LO	0	1	0	YES	0
PIPE1	0	1.344	0	NO	0
PIPE10	0	1.344	0	NO	0
PIPE11	0	0.08	0	NO	0
PIPE13	0	0.08	0	NO	0
PIPE14	0	0.08	0	NO	0
PIPE15	0	0.08	0	NO	0
PIPE16	0	1.344	0	NO	0
PIPE17	0	0.02	0	NO	0
PIPE19	0	0.08	0	NO	0
PIPE2	0	1.344	0	NO	0
PIPE24	0	1.344	0	NO	0
PIPE25	0	1.344	0	NO	0
PIPE26	0	1.344	0	NO	0
PIPE27	0	0.08	0	NO	0
PIPE28	0	0.08	0	NO	0
PIPE29	0	1.344	0	NO	0
PIPE3	0	0.08	0	NO	0
PIPE30	0	0.08	0	NO	0
PIPE31	0	0.08	0	NO	0
PIPE32	0	1.344	0	NO	0
PIPE33	0	0.08	0	NO	0
PIPE34	0	1.344	0	NO	0
PIPE35	0	0.08	0	NO	0
PIPE36	0	0.08	0	NO	0

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PIPE38	0	0.08	0	NO	0
PIPE39	0	1.344	0	NO	0
PIPE4	0	1.344	0	NO	0
PIPE40	0	1.344	0	NO	0
PIPE41	0	1.344	0	NO	0
PIPE42	0	0.08	0	NO	0
PIPE43	0	0.08	0	NO	0
PIPE45	0	1.344	0	NO	0
PIPE46	0	1.344	0	NO	0
PIPE47	0	0.08	0	NO	0
PIPE5	0	0.08	0	NO	0
PIPE51	0	1.344	0	NO	0
PIPE52	0	1.344	0	NO	0
PIPE54	0	0.08	0	NO	0
PIPE56	0	1.344	0	NO	0
PIPE57	0	1.344	0	NO	0
PIPE58	0	1.344	0	NO	0
PIPE60	0	1.344	0	NO	0
PIPE61	0	0.08	0	NO	0
PIPE62	0	1.344	0	NO	0
PIPE63	0	1.3	0	NO	0
PIPE7	0	1.344	0	NO	0
PIPE8	0	1.344	0	NO	0
PIPE9	0	0.08	0	NO	0
STM101-1-P1	0	1.344	0	NO	0
STM102-101	0	1.32	0	NO	0
STM103-102	0	0.02	0	NO	0

[INFLOWS]

Node	Parameter	Time Series	Param Type	Units Factor	Scale Factor	Baseline Value	Baseline Pattern
301	FLOW	Novatech_100C_MN	FLOW	1.0	1	0	
CM97A-S1	FLOW	Novatech_100C_MJ	FLOW	1.0	1	0	

[CURVES]

Name	Type	X-Value	Y-Value
C1023A-Q	Rating	0	0
C1023A-Q		1.38	1412.8
C1023A-Q		1.73	1582.3
C1023A-Q		1.78	1604.9
C2049A-Q	Rating	0	0
C2049A-Q		1.38	585.4
C2049A-Q		1.73	655.7
C2049A-Q		1.78	665

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CAP_0.5%	Rating	0	0
CAP_0.5%		0.015	11
CAP_0.5%		0.023	17
CAP_0.5%		0.03	21
CAP_0.5%		0.045	31
CAP_0.5%		0.06	40
CAP_0.5%		0.075	48
CAP_1.0%	Rating	0	0
CAP_1.0%		0.015	9
CAP_1.0%		0.023	15
CAP_1.0%		0.03	19
CAP_1.0%		0.045	27
CAP_1.0%		0.06	36
CAP_1.0%		0.075	43
F1021A-Q	Rating	0	0
F1021A-Q		1.38	90.6
F1021A-Q		1.73	1000
F1021A-Q		1.78	1000
F2006A-Q	Rating	0	0
F2006A-Q		1.38	125.7
F2006A-Q		1.73	1000
F2006A-Q		1.78	1000
L1022A-Q	Rating	0	0
L1022A-Q		1.38	504.6
L1022A-Q		1.73	565.2
L1022A-Q		1.78	573.2
;Roof A Control Curve, based on Zurn Roof Drain			
RoofA	Rating	0	0
RoofA		0.025	18.696
RoofA		0.05	37.884
RoofA		0.075	56.088
RoofA		0.1	74.784
RoofA		0.15	74.784
RoofB	Rating	0	0
RoofB		0.025	1.596
RoofB		0.05	3.234
RoofB		0.075	4.788
RoofB		0.1	6.384
RoofB		0.15	6.384
RoofC	Rating	0	0
RoofC		0.025	1.786

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RoofC		0.05	3.619
RoofC		0.075	5.358
RoofC		0.1	7.144
RoofC		0.15	7.144
RoofD	Rating	0	0
RoofD		0.025	0.532
RoofD		0.05	1.078
RoofD		0.075	1.596
RoofD		0.1	2.128
RoofD		0.15	2.128
RoofE	Rating	0	0
RoofE		0.025	0.608
RoofE		0.05	1.232
RoofE		0.075	1.824
RoofE		0.1	2.432
RoofE		0.15	2.432
ROOFW-O	Rating	0	0
ROOFW-O		0.025	1.152
ROOFW-O		0.05	2.304
ROOFW-O		0.075	3.456
ROOFW-O		0.1	4.608
ROOFW-O		0.125	5.76
ROOFW-O		0.15	6.912
ROOFX-O	Rating	0	0
ROOFX-O		0.025	1.152
ROOFX-O		0.05	2.304
ROOFX-O		0.075	3.456
ROOFX-O		0.1	4.608
ROOFX-O		0.125	5.76
ROOFX-O		0.15	6.912
ROOFY-O	Rating	0	0
ROOFY-O		0.025	0.768
ROOFY-O		0.05	1.536
ROOFY-O		0.075	2.304
ROOFY-O		0.1	3.072
ROOFY-O		0.125	3.84
ROOFY-O		0.15	4.608
C1023A-V	Storage	0	0
C1023A-V		1.38	0
C1023A-V		1.73	2385
C1023A-V		1.731	0
C1023A-V		1.78	0

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C2049A-V	Storage	0	0
C2049A-V		1.38	0
C2049A-V		1.73	1025
C2049A-V		1.731	0
C2049A-V		1.78	0
CB503-IC	Storage	0	0
CB503-IC		1.38	0
CB503-IC		1.53	49
CB503-IC		1.73	0
CB503-IC		1.731	0
F102A-IC	Storage	0	0
F102A-IC		1.38	0
F102A-IC		1.68	386
F102A-IC		1.73	386
F102A-IC		1.731	0
F102B-IC	Storage	0	0
F102B-IC		1.38	0
F102B-IC		1.68	608.67
F102B-IC		1.73	608.67
F102B-IC		1.731	0
F102C-IC	Storage	0	0
F102C-IC		1.49	0
F102C-IC		1.91	70
F102C-IC		1.911	0
L1022A-V	Storage	0	0
L1022A-V		1.38	0
L1022A-V		1.73	2760
L1022A-V		1.731	0
L1022A-V		1.78	0
Rf-A-Stor	Storage	0	0
Rf-A-Stor		0.025	11424
Rf-A-Stor		0.05	11424
Rf-A-Stor		0.075	11424
Rf-A-Stor		0.15	11424
Rf-B-Stor	Storage	0	0
Rf-B-Stor		0.025	985.12
Rf-B-Stor		0.05	985.12
Rf-B-Stor		0.075	985.12
Rf-B-Stor		0.15	985.12

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Rf-C-Stor	Storage	0	0
Rf-C-Stor		0.025	1081
Rf-C-Stor		0.05	1081
Rf-C-Stor		0.075	1081
Rf-C-Stor		0.15	1081
Rf-D-Stor	Storage	0	0
Rf-D-Stor		0.025	336
Rf-D-Stor		0.05	336
Rf-D-Stor		0.075	336
Rf-D-Stor		0.15	336
Rf-E-Stor	Storage	0	0
Rf-E-Stor		0.025	368
Rf-E-Stor		0.05	368
Rf-E-Stor		0.075	368
Rf-E-Stor		0.15	368
ROOFW	Storage	0	0
ROOFW		0.025	15.84444444
ROOFW		0.05	63.37777778
ROOFW		0.075	142.6
ROOFW		0.1	253.5111111
ROOFW		0.125	396.1111111
ROOFW		0.15	570.4
ROOFX	Storage	0	0
ROOFX		0.025	13.86666667
ROOFX		0.05	55.46666667
ROOFX		0.075	124.8
ROOFX		0.1	221.8666667
ROOFX		0.125	346.6666667
ROOFX		0.15	499.2
ROOFY	Storage	0	0
ROOFY		0.025	9.844444444
ROOFY		0.05	39.37777778
ROOFY		0.075	88.6
ROOFY		0.1	157.5111111
ROOFY		0.125	246.1111111
ROOFY		0.15	354.4
UltimatePond	Storage	0	644
UltimatePond		0.3	2657
UltimatePond		0.8	3678
UltimatePond		1.3	5592
UltimatePond		1.4	6028
UltimatePond		2	8645

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**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
DEVELOPMENT, 1140 TERRY FOX DRIVE**

Appendix C Stormwater Management
November 19, 2019

C.3 PCSWMM MODEL OUTPUT (3HR 100YR CHI)

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Element Count

Number of rain gages 1
 Number of subcatchments ... 160
 Number of nodes 377
 Number of links 596
 Number of pollutants 0
 Number of land uses 0

Raingage Summary

Name	Data Source	Data Type	Recording Interval
R1	100CHI	INTENSITY	10 min.

Subcatchment Summary

Name	Area	width	%Imperv	%Slope	Rain Gage	Outlet
105	0.10	49.44	100.00	1.0000	R1	CB105A
105B	0.18	90.93	100.00	1.0000	R1	CB106A
107	0.07	33.41	100.00	1.0000	R1	CB107A
108	0.32	152.51	100.00	1.0000	R1	CB108A
108A	0.25	94.34	100.00	1.0000	R1	CB108B
108B	0.19	91.55	100.00	1.0000	R1	CB108C
109	0.22	107.66	100.00	1.0000	R1	CB109A
109A	0.30	132.15	100.00	1.0000	R1	CB109B
110	0.21	102.45	100.00	1.0000	R1	CB110C
110A	0.19	93.72	100.00	1.0000	R1	CB110D
110B	0.28	50.00	100.00	1.0000	R1	CB110A
110C	0.22	104.76	100.00	1.0000	R1	CB110B
111	0.13	52.00	100.00	1.0000	R1	CB111D
111A	0.29	49.74	100.00	1.0000	R1	CB111A
111B	0.05	33.41	100.00	1.0000	R1	CB111C
111C	0.03	18.03	100.00	1.0000	R1	CB111B
111D	0.20	78.13	100.00	1.0000	R1	CB111G

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111E	0.16	79.62	100.00	1.0000	R1	CB111F
111F	0.15	67.97	100.00	1.0000	R1	CB111E
BLDG_A	1.43	170.06	100.00	1.0000	R1	RfA
BLDG_B	0.13	49.24	100.00	1.0000	R1	RfB
BLDG_C	0.14	49.47	100.00	1.0000	R1	RfC
BLDG_D	0.04	44.84	100.00	1.0000	R1	RfD
BLDG_E	0.05	44.51	100.00	1.0000	R1	RfE
C1003A	0.36	111.00	64.29	3.0000	R1	C1003A-S
C1006A	0.39	86.85	71.43	3.0000	R1	C1006A-S
C1008A	0.64	219.00	74.29	3.0000	R1	C1008A-S
C1009A	0.50	200.50	74.29	3.0000	R1	C1009A-S
C1023A	7.40	370.00	71.43	1.0000	R1	C1023A-S
C1051A	0.23	169.40	71.43	3.0000	R1	C1051A-S
C1052A	0.28	103.40	71.43	3.0000	R1	C1052A-S
C1052B	0.33	126.60	71.43	3.0000	R1	C1052B-S
C1056A	0.23	118.70	71.43	3.0000	R1	C1056A-S
C2000A	0.56	218.37	72.86	3.0000	R1	C2000A-S
C2001A	0.41	149.30	72.86	3.0000	R1	C2001A-S
C2002A	0.30	73.20	71.43	3.0000	R1	C2002A-S
C2004A	0.28	67.40	71.43	3.0000	R1	C2004A-S
C2004B	0.35	79.10	71.43	3.0000	R1	C2004B-S
C2005A	0.38	92.20	71.43	3.0000	R1	C2005A-S
C2006A	0.32	91.30	71.43	3.0000	R1	C2006A-S
C2006B	0.55	161.70	71.43	3.0000	R1	C2006B-S
C2008A	0.21	57.50	71.43	3.0000	R1	C2008A-S
C2009A	0.11	25.00	71.43	3.0000	R1	C2009A-S
C2009B	0.23	56.20	71.43	3.0000	R1	C2009B-S
C2049A	2.84	240.00	71.43	1.0000	R1	C2049A-S
CM97A	0.41	185.70	71.43	3.0000	R1	CM97A-S
F101A	0.15	97.00	74.29	1.0000	R1	CB503-S
F1021A	0.92	187.90	28.57	1.0000	R1	F1021A-S
F102A	0.23	55.00	85.71	1.5000	R1	F102A-S
F102B	0.22	54.00	88.57	1.0000	R1	F102B-S
F102C	0.01	11.10	100.00	1.0000	R1	F102C-S
F2006A	1.35	180.00	28.57	1.0000	R1	F2006A-S
FUT1	0.67	301.53	100.00	1.0000	R1	STM103
L1000A	0.24	113.00	38.57	3.0000	R1	L1000A-S
L1001A	0.26	101.60	71.43	3.0000	R1	L1001A-S
L1002A	0.26	131.80	71.43	3.0000	R1	L1002A-S
L1007A	0.70	412.40	38.57	3.0000	R1	L1007A-S
L1010A	0.18	89.35	52.86	3.0000	R1	L1010A-S
L1010B	0.58	353.50	28.57	3.0000	R1	L1010B-S
L1011A	0.15	129.20	52.86	3.0000	R1	L1011A-S
L1011B	0.24	111.00	38.57	3.0000	R1	L1011B-S
L1012A	0.15	85.20	52.86	3.0000	R1	L1012A-S
L1015B	0.11	44.80	52.86	3.0000	R1	L1015A-S
L1016A	0.45	192.60	71.43	3.0000	R1	L1016A-S
L1017A	0.35	101.00	71.43	3.0000	R1	L1017A-S

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L1019A	0.33	133.20	71.43	3.0000	R1
L1019B	0.64	390.00	24.29	3.0000	R1
L1019C	0.15	80.90	38.57	3.0000	R1
L1020A	0.27	106.70	71.43	3.0000	R1
L1020B	0.12	84.40	52.86	3.0000	R1
L1020C	0.14	77.30	52.86	3.0000	R1
L1022A	3.14	707.00	71.43	3.0000	R1
L1024A	0.54	213.20	71.43	3.0000	R1
L1024B	0.70	378.20	38.57	3.0000	R1
L1026A	0.18	93.10	71.43	3.0000	R1
L1027A	0.40	180.00	71.43	3.0000	R1
L1027B	0.15	66.90	71.43	3.0000	R1
L1027C	0.52	339.40	38.57	3.0000	R1
L1029A	0.38	152.90	71.43	3.0000	R1
L1030A	0.35	149.50	71.43	3.0000	R1
L1031A	0.37	160.60	71.43	3.0000	R1
L1032A	0.25	162.70	71.43	3.0000	R1
L1032B	0.41	221.00	38.57	3.0000	R1
L1034A	0.22	92.70	71.43	3.0000	R1
L1036A	0.44	207.30	71.43	3.0000	R1
L1038A	0.18	105.90	71.43	3.0000	R1
L1039A	0.24	145.90	71.43	3.0000	R1
L1039B	0.17	92.00	38.57	3.0000	R1
L1050A	0.28	188.20	71.43	3.0000	R1
L1050B	0.37	186.60	38.57	3.0000	R1
L1051B	0.48	318.80	38.57	3.0000	R1
L1053A	0.27	140.30	71.43	3.0000	R1
L1053B	0.60	301.00	38.57	3.0000	R1
L1054A	0.48	213.50	71.43	3.0000	R1
L1057A	0.32	101.10	71.43	3.0000	R1
L1058A	0.29	144.90	71.43	3.0000	R1
L1059A	0.22	73.20	71.43	3.0000	R1
L2007A	0.56	304.50	27.14	3.0000	R1
L2010A	0.15	82.50	52.86	3.0000	R1
L2010B	0.33	206.50	35.71	3.0000	R1
L2011A	0.55	214.00	71.43	3.0000	R1
L2013A	0.51	171.30	71.43	3.0000	R1
L2015A	0.27	119.30	71.43	3.0000	R1
L2016A	0.05	38.60	52.86	3.0000	R1
L2016B	0.16	103.20	38.57	3.0000	R1
L2017A	0.26	101.80	71.43	3.0000	R1
L2017B	0.24	103.30	71.43	3.0000	R1
L2018A	0.13	67.40	52.86	3.0000	R1
L2018B	0.57	295.20	38.57	3.0000	R1
L2019A	0.26	85.10	71.43	3.0000	R1
L2019B	0.38	214.10	38.57	3.0000	R1
L2021A	0.21	83.90	64.29	3.0000	R1
L2021B	0.59	351.50	38.57	3.0000	R1

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L2023A	0.35	162.50	71.43	3.0000	R1
L2024A	0.29	92.30	71.43	3.0000	R1
L2024B	0.29	118.90	71.43	3.0000	R1
L2026A	0.34	134.20	71.43	3.0000	R1
L2026B	0.16	46.70	71.43	3.0000	R1
L2027A	0.41	126.30	71.43	3.0000	R1
L2027B	0.36	210.00	38.57	3.0000	R1
L2029A	0.52	215.40	71.43	3.0000	R1
L2029B	0.78	240.60	28.57	3.0000	R1
L2030A	0.21	67.60	71.43	3.0000	R1
L2030B	0.14	93.10	38.57	3.0000	R1
L2031A	0.21	63.40	71.43	3.0000	R1
L2031B	0.22	95.00	71.43	3.0000	R1
L2032A	0.28	76.10	71.43	3.0000	R1
L2032B	0.44	257.70	27.14	3.0000	R1
L2033A	0.48	197.71	77.14	3.0000	R1
L2033B	0.24	140.60	77.14	3.0000	R1
L2036A	0.07	41.30	52.86	3.0000	R1
L2037A	0.36	162.10	77.14	3.0000	R1
L2038A	0.35	145.00	77.14	3.0000	R1
L2039A	0.28	109.80	77.14	3.0000	R1
L2039B	0.22	92.90	77.14	3.0000	R1
L2040A	0.08	42.70	52.86	3.0000	R1
L2041A	0.20	84.80	77.14	3.0000	R1
L2042A	0.32	103.60	77.14	3.0000	R1
L2043A	0.14	52.70	77.14	3.0000	R1
L2043B	0.20	72.10	77.14	3.0000	R1
L2044A	0.13	118.20	72.86	3.0000	R1
L2044B	0.43	241.70	35.71	3.0000	R1
L2044C	0.64	386.20	38.57	3.0000	R1
L2046A	0.49	196.40	72.86	3.0000	R1
L2047A	0.31	242.80	72.86	3.0000	R1
LM97A	0.67	404.20	35.71	3.0000	R1
R102A	0.07	54.00	100.00	1.0000	R1
R102B	0.07	56.00	100.00	1.0000	R1
R103A	0.05	52.00	100.00	1.0000	R1
ST103	0.18	45.93	100.00	1.0000	R1
STM102	0.28	55.68	100.00	1.0000	R1
ULT-POND	3.24	400.00	40.00	1.0000	R1
UNC1	0.59	285.00	38.57	3.0000	R1
UNC2	0.41	245.00	38.57	3.0000	R1
UNC-2	0.04	47.00	20.00	1.5000	R1
UNC3	0.33	195.00	38.57	3.0000	R1
UNC-3	0.02	81.10	0.00	1.0000	R1
UNC-4	0.04	9.20	60.00	1.0000	R1
UNC-5	0.04	50.00	22.86	1.5000	R1
UNC-6	0.01	45.00	22.86	1.5000	R1

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Node Summary

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
PD_OUTFALL	JUNCTION	94.53	2.82	0.0	
STM101	JUNCTION	94.46	3.75	0.0	
STM102	JUNCTION	95.35	2.73	0.0	
STM103	JUNCTION	95.41	2.54	0.0	
STM104	JUNCTION	95.17	2.96	0.0	
STM104-1	JUNCTION	93.15	4.59	0.0	
STM105	JUNCTION	95.27	3.15	0.0	
STM106	JUNCTION	95.34	3.08	0.0	
STM107	JUNCTION	95.58	3.06	0.0	
STM108	JUNCTION	95.60	2.67	0.0	
STM109	JUNCTION	95.67	2.42	0.0	
STM110	JUNCTION	95.73	2.77	0.0	
STM111	JUNCTION	95.86	2.42	0.0	
X105A	JUNCTION	95.21	3.43	0.0	
X107A	JUNCTION	95.52	2.82	0.0	
X110A	JUNCTION	95.69	2.85	0.0	
X111A	JUNCTION	95.83	2.44	0.0	
XCB108A	JUNCTION	95.52	2.67	0.0	
XCB108B	JUNCTION	95.56	2.65	0.0	
XCB108C	JUNCTION	95.60	2.58	0.0	
XCB109A	JUNCTION	95.63	2.51	0.0	
XCB111E	JUNCTION	95.78	2.72	0.0	
XCB111F	JUNCTION	95.81	2.51	0.0	
XCB111G	JUNCTION	95.85	2.40	0.0	
xRfA	JUNCTION	96.14	2.07	0.0	
xRfB	JUNCTION	96.85	2.00	0.0	
xRfC	JUNCTION	96.60	1.99	0.0	
xRfD	JUNCTION	96.48	1.92	0.0	
xRfE	JUNCTION	96.57	1.91	0.0	
XROOFE	JUNCTION	95.83	2.35	0.0	
OF1	OUTFALL	96.00	0.00	0.0	
OF10	OUTFALL	0.00	0.00	0.0	
OF2	OUTFALL	94.55	1.20	0.0	
OF3	OUTFALL	94.46	0.00	0.0	
OF6	OUTFALL	100.71	0.00	0.0	
OF7	OUTFALL	100.29	0.30	0.0	
OF8	OUTFALL	98.60	0.00	0.0	
OF9	OUTFALL	99.90	0.00	0.0	
POND6_MJ	OUTFALL	100.62	0.25	0.0	
POND6_MN	OUTFALL	93.76	4.40	0.0	
SU87	OUTFALL	100.80	0.40	0.0	

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1000	STORAGE	94.23	3.72	0.0	
1001	STORAGE	94.09	3.88	0.0	
1002	STORAGE	94.20	4.09	0.0	
1003	STORAGE	94.25	3.86	0.0	
1004	STORAGE	94.30	4.19	0.0	
1005	STORAGE	94.49	3.95	0.0	
1006	STORAGE	94.76	4.17	0.0	
1007	STORAGE	95.66	3.27	0.0	
1008	STORAGE	96.62	3.19	0.0	
1009	STORAGE	97.29	3.03	0.0	
1010	STORAGE	95.38	3.84	0.0	
1011	STORAGE	95.53	3.71	0.0	
1012	STORAGE	95.91	3.64	0.0	
1013	STORAGE	96.02	3.62	0.0	
1014	STORAGE	96.51	3.85	0.0	
1015	STORAGE	97.89	2.97	0.0	
1016	STORAGE	95.78	3.21	0.0	
1017	STORAGE	96.40	3.19	0.0	
1018	STORAGE	96.47	3.17	0.0	
1019	STORAGE	96.99	3.13	0.0	
1020	STORAGE	97.41	2.92	0.0	
1020N	STORAGE	97.41	2.92	0.0	
1024	STORAGE	94.69	3.54	0.0	
1025	STORAGE	94.89	3.51	0.0	
1026	STORAGE	95.36	3.33	0.0	
1027	STORAGE	95.70	3.43	0.0	
1028	STORAGE	95.98	3.17	0.0	
1029	STORAGE	96.33	3.07	0.0	
1030	STORAGE	96.62	3.15	0.0	
1031	STORAGE	97.08	2.78	0.0	
1032	STORAGE	95.13	3.50	0.0	
1033	STORAGE	95.23	3.77	0.0	
1034	STORAGE	95.89	3.31	0.0	
1035	STORAGE	95.97	3.16	0.0	
1036	STORAGE	96.25	3.31	0.0	
1037	STORAGE	96.43	3.22	0.0	
1038	STORAGE	96.59	2.89	0.0	
1039	STORAGE	95.84	3.78	0.0	
1050	STORAGE	96.00	4.24	0.0	
1051	STORAGE	97.13	3.30	0.0	
1052	STORAGE	96.47	3.56	0.0	
1053	STORAGE	96.67	3.53	0.0	
1054	STORAGE	96.74	3.90	0.0	
1055	STORAGE	96.85	3.71	0.0	
1056	STORAGE	96.59	3.35	0.0	
1057	STORAGE	96.85	3.49	0.0	
1058	STORAGE	97.14	3.37	0.0	
1059	STORAGE	97.08	4.21	0.0	

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2000	STORAGE	96.18	4.78	0.0
2001	STORAGE	96.24	4.73	0.0
2002	STORAGE	96.75	4.05	0.0
2003	STORAGE	96.81	3.91	0.0
2004	STORAGE	96.93	3.75	0.0
2005	STORAGE	97.20	3.72	0.0
2005A	STORAGE	97.52	3.42	0.0
2006	STORAGE	97.59	3.67	0.0
2007	STORAGE	97.82	3.50	0.0
2008	STORAGE	98.10	3.17	0.0
2009	STORAGE	98.38	2.73	0.0
2010	STORAGE	97.08	3.99	0.0
2011	STORAGE	97.44	3.42	0.0
2012	STORAGE	97.76	3.48	0.0
2013	STORAGE	98.16	3.40	0.0
2014	STORAGE	98.25	3.47	0.0
2015	STORAGE	98.64	3.65	0.0
2016	STORAGE	99.19	2.88	0.0
2017	STORAGE	99.04	3.35	0.0
2018	STORAGE	96.87	4.45	0.0
2019	STORAGE	97.77	4.07	0.0
2020	STORAGE	98.52	3.18	0.0
2021	STORAGE	98.65	3.05	0.0
2022	STORAGE	98.34	3.39	0.0
2023	STORAGE	98.46	3.60	0.0
2024	STORAGE	98.71	3.35	0.0
2025	STORAGE	99.06	3.09	0.0
2026	STORAGE	99.31	3.14	0.0
2027	STORAGE	99.71	2.97	0.0
2028	STORAGE	97.02	4.43	0.0
2029	STORAGE	97.16	4.42	0.0
2030	STORAGE	97.64	3.51	0.0
2031	STORAGE	98.18	2.85	0.0
2032	STORAGE	97.58	4.10	0.0
2033	STORAGE	98.52	3.09	0.0
2034	STORAGE	98.69	2.95	0.0
2035	STORAGE	99.08	2.97	0.0
2036	STORAGE	97.70	4.03	0.0
2037	STORAGE	99.00	3.07	0.0
2038	STORAGE	99.53	2.91	0.0
2039	STORAGE	98.67	3.03	0.0
2040	STORAGE	98.07	3.72	0.0
2041	STORAGE	99.06	3.01	0.0
2042	STORAGE	99.60	2.95	0.0
2043	STORAGE	99.26	2.66	0.0
2044	STORAGE	97.51	3.34	0.0
2045	STORAGE	97.65	3.05	0.0
2046	STORAGE	97.72	3.22	0.0

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2047	STORAGE	97.94	2.90	0.0
301	STORAGE	94.64	4.14	0.0
C1003A-S	STORAGE	96.52	1.78	0.0
C1003A-S1	STORAGE	98.09	0.40	0.0
C1006A-S	STORAGE	96.88	1.83	0.0
C1006A-S1	STORAGE	98.49	0.40	0.0
C1008A-S	STORAGE	97.29	1.78	0.0
C1008A-S1	STORAGE	98.92	0.40	0.0
C1009A-S	STORAGE	98.29	1.78	0.0
C1009A-S1	STORAGE	99.86	0.40	0.0
C1023A-S	STORAGE	96.71	1.93	0.0
C1051A-S	STORAGE	98.90	1.78	0.0
C1052A-S	STORAGE	98.53	1.78	0.0
C1052A-S1	STORAGE	100.15	0.40	0.0
C1052A-S2	STORAGE	99.99	0.40	0.0
C1052B-S	STORAGE	98.55	1.78	0.0
C1052B-S1	STORAGE	100.09	0.40	0.0
C1056A-S	STORAGE	98.43	1.78	0.0
C1056A-S1	STORAGE	100.22	0.40	0.0
C2000A-S	STORAGE	99.00	1.78	0.0
C2000A-S1	STORAGE	100.94	0.40	0.0
C2001A-S	STORAGE	99.23	1.78	0.0
C2002A-S	STORAGE	99.17	1.78	0.0
C2002A-S1	STORAGE	100.82	0.40	0.0
C2002A-S2	STORAGE	100.78	0.40	0.0
C2004A-S	STORAGE	99.12	1.78	0.0
C2004A-S1	STORAGE	100.71	0.40	0.0
C2004B-S	STORAGE	99.00	1.78	0.0
C2004B-S1	STORAGE	100.38	0.40	0.0
C2005A-S	STORAGE	98.91	1.78	0.0
C2006A-S	STORAGE	99.64	1.78	0.0
C2006A-S1	STORAGE	101.31	0.40	0.0
C2006B-S	STORAGE	99.38	1.78	0.0
C2006B-S1	STORAGE	100.92	0.40	0.0
C2008A-S	STORAGE	99.66	1.78	0.0
C2009A-S	STORAGE	99.78	1.78	0.0
C2009A-S1	STORAGE	101.43	0.40	0.0
C2009B-S	STORAGE	99.73	1.78	0.0
C2009B-S1	STORAGE	101.22	0.40	0.0
C2049A-S	STORAGE	98.85	1.83	0.0
CB102	STORAGE	95.31	2.29	0.0
CB103	STORAGE	95.41	2.36	0.0
CB105A	STORAGE	95.54	2.62	0.0
CB106A	STORAGE	96.12	1.83	0.0
CB107A	STORAGE	96.57	1.63	0.0
CB108A	STORAGE	95.80	2.15	0.0
CB108B	STORAGE	96.01	1.92	0.0
CB108C	STORAGE	95.89	2.02	0.0

Yes

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CB109A	STORAGE	95.92	1.97	0.0	
CB109B	STORAGE	96.08	1.79	0.0	
CB110A	STORAGE	96.21	2.37	0.0	
CB110B	STORAGE	96.25	2.28	0.0	
CB110C	STORAGE	96.37	1.58	0.0	
CB110D	STORAGE	96.41	1.52	0.0	
CB111A	STORAGE	96.25	1.58	0.0	
CB111B	STORAGE	96.54	1.45	0.0	
CB111C	STORAGE	96.41	1.59	0.0	
CB111D	STORAGE	96.31	1.84	0.0	
CB111E	STORAGE	96.45	1.46	0.0	
CB111F	STORAGE	96.49	1.40	0.0	
CB111G	STORAGE	96.52	1.33	0.0	
CB503-S	STORAGE	95.53	1.73	0.0	
CM97A-S	STORAGE	99.50	1.78	0.0	
CM97A-S1	STORAGE	101.20	0.40	0.0	Yes
F1021A-S	STORAGE	97.67	1.78	0.0	
F102A-S	STORAGE	95.92	1.73	0.0	
F102B-S	STORAGE	95.87	1.73	0.0	
F102C-S	STORAGE	95.37	1.68	0.0	
F2006A-S	STORAGE	99.44	2.30	0.0	
L1000A-S	STORAGE	95.60	2.10	0.0	
L1001A-S	STORAGE	96.53	1.78	0.0	
L1001A-S1	STORAGE	98.07	0.40	0.0	
L1001A-S2	STORAGE	98.18	0.40	0.0	
L1002A-S	STORAGE	96.48	1.83	0.0	
L1007A-S	STORAGE	97.55	1.79	0.0	
L1010A-S	STORAGE	97.20	1.78	0.0	
L1010A-S1	STORAGE	99.07	0.40	0.0	
L1010A-S2	STORAGE	98.78	0.40	0.0	
L1010B-S	STORAGE	96.69	2.56	0.0	
L1011A-S	STORAGE	97.65	1.78	0.0	
L1011A-S1	STORAGE	99.63	0.40	0.0	
L1011B-S	STORAGE	97.08	2.56	0.0	
L1012A-S	STORAGE	98.05	1.78	0.0	
L1015A-S	STORAGE	99.37	1.78	0.0	
L1015A-S1	STORAGE	101.10	0.40	0.0	
L1015A-S2	STORAGE	100.85	0.40	0.0	
L1016A-S	STORAGE	97.48	1.78	0.0	
L1016A-S1	STORAGE	99.54	0.40	0.0	
L1017A-S	STORAGE	98.01	1.78	0.0	
L1017A-S1	STORAGE	99.81	0.40	0.0	
L1019A-S	STORAGE	98.25	1.78	0.0	
L1019A-S1	STORAGE	100.12	0.40	0.0	
L1019B-S	STORAGE	97.58	2.40	0.0	
L1019C-S	STORAGE	98.27	1.76	0.0	
L1020A-S	STORAGE	98.62	1.78	0.0	
L1020A-S1	STORAGE	100.45	0.40	0.0	

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L1020B-S	STORAGE	98.87	1.78	0.0	
L1020B-S1	STORAGE	100.40	0.40	0.0	
L1020C-S	STORAGE	98.46	1.78	0.0	
L1020C-S1	STORAGE	100.04	0.40	0.0	
L1022A-S	STORAGE	98.56	1.88	0.0	
L1024A-S	STORAGE	96.58	1.78	0.0	
L1024A-S1	STORAGE	98.28	0.40	0.0	
L1024B-S	STORAGE	96.14	2.43	0.0	
L1026A-S	STORAGE	96.80	1.78	0.0	
L1026A-S1	STORAGE	98.66	0.40	0.0	
L1027A-S	STORAGE	97.05	1.78	0.0	
L1027B-S	STORAGE	97.44	1.78	0.0	
L1027B-S0	STORAGE	98.82	0.40	0.0	
L1027B-S1	STORAGE	99.14	0.40	0.0	
L1027C-S	STORAGE	96.79	2.55	0.0	
L1029A-S	STORAGE	97.54	1.78	0.0	
L1029A-S1	STORAGE	99.40	0.40	0.0	
L1030A-S	STORAGE	97.84	1.78	0.0	
L1030A-S1	STORAGE	99.74	0.40	0.0	
L1031A-S	STORAGE	98.21	1.78	0.0	
L1032A-S	STORAGE	96.90	1.78	0.0	
L1032A-S1	STORAGE	98.96	0.40	0.0	
L1032B-S	STORAGE	96.35	2.56	0.0	
L1034A-S	STORAGE	97.52	1.78	0.0	
L1034A-S1	STORAGE	99.20	0.40	0.0	
L1036A-S	STORAGE	97.62	1.78	0.0	
L1038A-S	STORAGE	98.02	1.78	0.0	
L1038A-S1	STORAGE	99.64	0.40	0.0	
L1039A-S	STORAGE	97.58	1.78	0.0	
L1039A-S1	STORAGE	99.44	0.40	0.0	
L1039B-S	STORAGE	97.01	2.55	0.0	
L1050A-S	STORAGE	97.98	1.78	0.0	
L1050B-S	STORAGE	97.55	2.59	0.0	
L1051B-S	STORAGE	98.33	2.59	0.0	
L1053A-S	STORAGE	98.70	1.78	0.0	
L1053A-S1	STORAGE	100.60	0.40	0.0	
L1053B-S	STORAGE	98.09	2.53	0.0	
L1054A-S	STORAGE	99.04	1.78	0.0	
L1057A-S	STORAGE	98.69	1.78	0.0	
L1057A-S1	STORAGE	100.37	0.40	0.0	
L1058A-S	STORAGE	98.87	1.78	0.0	
L1059A-S	STORAGE	99.40	1.78	0.0	
L1059A-S0	STORAGE	100.78	0.40	0.0	
L1059A-S1	STORAGE	100.96	0.40	0.0	
L2007A-S	STORAGE	99.23	2.59	0.0	
L2010A-S	STORAGE	100.92	0.40	0.0	
L2010A-S1	STORAGE	101.17	0.40	0.0	
L2010A-S2	STORAGE	99.20	1.78	0.0	

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L2010B-S	STORAGE	98.59	2.56	0.0
L2011A-S	STORAGE	99.33	1.78	0.0
L2011A-S1	STORAGE	101.46	0.40	0.0
L2013A-S	STORAGE	99.88	1.78	0.0
L2015A-S	STORAGE	100.44	1.78	0.0
L2015A-S1	STORAGE	101.99	0.40	0.0
L2016A-S	STORAGE	100.63	1.78	0.0
L2016A-S1	STORAGE	102.22	0.40	0.0
L2016B-S	STORAGE	100.03	2.52	0.0
L2017A-S	STORAGE	100.79	1.78	0.0
L2017A-S1	STORAGE	102.41	0.40	0.0
L2017B-S	STORAGE	100.66	1.78	0.0
L2017B-S1	STORAGE	102.06	0.40	0.0
L2017B-S2	STORAGE	102.27	0.40	0.0
L2018A-S	STORAGE	99.61	1.78	0.0
L2018A-S1	STORAGE	101.29	0.40	0.0
L2018B-S	STORAGE	99.00	2.52	0.0
L2019A-S	STORAGE	99.72	1.78	0.0
L2019A-S1	STORAGE	101.62	0.40	0.0
L2019B-S	STORAGE	99.13	2.53	0.0
L2021A-S	STORAGE	100.23	1.78	0.0
L2021B-S	STORAGE	99.63	2.54	0.0
L2023A-S	STORAGE	100.15	1.78	0.0
L2024A-S	STORAGE	100.55	1.78	0.0
L2024A-S1	STORAGE	102.12	0.40	0.0
L2024B-S	STORAGE	100.43	1.78	0.0
L2024B-S1	STORAGE	102.00	0.40	0.0
L2026A-S	STORAGE	100.83	1.78	0.0
L2026A-S1	STORAGE	102.48	0.40	0.0
L2026B-S	STORAGE	100.64	1.78	0.0
L2026B-S1	STORAGE	102.18	0.40	0.0
L2027A-S	STORAGE	100.88	1.78	0.0
L2027A-S1	STORAGE	102.62	0.40	0.0
L2027A-S2	STORAGE	102.71	0.40	0.0
L2027A-S3	STORAGE	102.28	0.40	0.0
L2027B-S	STORAGE	100.83	2.30	0.0
L2029A-S	STORAGE	99.79	1.78	0.0
L2029B-S	STORAGE	99.65	2.48	0.0
L2030A-S	STORAGE	99.66	1.78	0.0
L2030B-S	STORAGE	99.11	2.53	0.0
L2031A-S	STORAGE	99.64	1.78	0.0
L2031A-S1	STORAGE	101.28	0.40	0.0
L2031B-S	STORAGE	99.49	1.78	0.0
L2031B-S1	STORAGE	101.22	0.40	0.0
L2031B-S2	STORAGE	101.14	0.40	0.0
L2032A-S	STORAGE	99.91	1.78	0.0
L2032A-S1	STORAGE	101.57	0.40	0.0
L2032B-S	STORAGE	99.30	2.53	0.0

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L2033A-S	STORAGE	99.99	1.78	0.0
L2033B-S	STORAGE	99.94	1.78	0.0
L2033B-S1	STORAGE	101.57	0.40	0.0
L2034A-S1	STORAGE	101.98	0.40	0.0
L2036A-S	STORAGE	100.09	1.78	0.0
L2036A-S1	STORAGE	101.54	0.40	0.0
L2037A-S	STORAGE	99.97	1.78	0.0
L2038A-S	STORAGE	100.45	1.78	0.0
L2039A-S	STORAGE	100.00	1.78	0.0
L2039A-S1	STORAGE	101.62	0.40	0.0
L2039A-S2	STORAGE	101.59	0.40	0.0
L2039B-S	STORAGE	100.11	1.78	0.0
L2039B-S1	STORAGE	101.75	0.40	0.0
L2040A-S	STORAGE	100.12	1.78	0.0
L2040A-S1	STORAGE	101.65	0.40	0.0
L2041A-S	STORAGE	100.19	1.78	0.0
L2042A-S	STORAGE	100.44	1.78	0.0
L2042A-S1	STORAGE	101.97	0.40	0.0
L2043A-S	STORAGE	100.14	1.78	0.0
L2043A-S1	STORAGE	101.82	0.40	0.0
L2043B-S	STORAGE	100.32	1.78	0.0
L2043B-S1	STORAGE	102.01	0.40	0.0
L2044A-S	STORAGE	99.28	1.78	0.0
L2044A-S1	STORAGE	100.87	0.40	0.0
L2044B-S	STORAGE	98.71	1.98	0.0
L2044C-S	STORAGE	98.74	2.55	0.0
L2046A-S	STORAGE	99.22	1.78	0.0
L2046A-S1	STORAGE	100.97	0.40	0.0
L2047A-S	STORAGE	99.08	1.78	0.0
L2047A-S1	STORAGE	100.97	0.40	0.0
LM97A-S	STORAGE	99.27	2.24	0.0
M97	STORAGE	95.96	5.16	0.0
M98	STORAGE	95.50	5.05	0.0
P1	STORAGE	93.50	3.90	0.0
P2	STORAGE	94.16	3.02	0.0
P3	STORAGE	94.18	2.92	0.0
POND	STORAGE	92.70	4.30	0.0
R102A-S	STORAGE	96.10	5.20	0.0
R102B-S	STORAGE	95.95	5.35	0.0
R103A-S	STORAGE	96.36	4.94	0.0
RfA	STORAGE	101.00	0.15	0.0
RfB	STORAGE	101.00	0.15	0.0
RfC	STORAGE	101.00	0.15	0.0
RfD	STORAGE	101.00	0.15	0.0
RfE	STORAGE	101.00	0.15	0.0
STM101-1	STORAGE	94.18	4.41	0.0
STM102-1	STORAGE	95.31	2.21	0.0
STM103-1	STORAGE	95.86	2.01	0.0

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Link Summary

Name	From Node	To Node	Type	Length	%Slope	Roughness
1000-P3	1000	P3	CONDUIT	43.9	0.1003	0.0130
1001-1000	1001	1000	CONDUIT	6.3	0.1118	0.0130
1002-1001	1002	1001	CONDUIT	94.7	0.0993	0.0130
1003-1002	1003	1002	CONDUIT	43.7	0.1008	0.0130
1004-1003	1004	1003	CONDUIT	42.5	0.0989	0.0130
1005-1004	1005	1004	CONDUIT	42.5	0.1013	0.0130
1006-1005	1006	1005	CONDUIT	61.7	0.1993	0.0130
1007-1006	1007	1006	CONDUIT	43.1	0.3500	0.0130
1008-1007	1008	1007	CONDUIT	110.1	0.8004	0.0130
1009-1008	1009	1008	CONDUIT	51.8	0.9994	0.0130
1010-1006	1010	1006	CONDUIT	86.6	0.2008	0.0130
1011-1010	1011	1010	CONDUIT	47.2	0.2986	0.0130
1012-1011	1012	1011	CONDUIT	75.8	0.3999	0.0130
1013-1012	1013	1012	CONDUIT	8.9	0.4045	0.0130
1014-1013	1014	1013	CONDUIT	64.2	0.6494	0.0130
1015-1014	1015	1020	CONDUIT	52.8	0.6497	0.0130
1016-1010	1016	1010	CONDUIT	39.7	0.1990	0.0130
1017-1016	1017	1016	CONDUIT	104.3	0.4495	0.0130
1018-1017	1018	1017	CONDUIT	8.8	0.4549	0.0130
1019-1018	1019	1018	CONDUIT	108.0	0.4500	0.0130
1020-1014	1020	1014	CONDUIT	102.3	0.6502	0.0130
1020-1019	1020N	1019	CONDUIT	44.2	0.6509	0.0130
1051-1050	1051	1050	CONDUIT	58.5	0.6499	0.0130
1052-1050	1052	1050	CONDUIT	114.5	0.1503	0.0130
1053-1050	1053	1050	CONDUIT	42.6	0.1503	0.0130
2000-M98	2000	M98	CONDUIT	76.6	0.1006	0.0130
2001-2000	2001	2000	CONDUIT	58.9	0.1002	0.0130
2002-2001	2002	2001	CONDUIT	56.7	0.1006	0.0130
2003-2002	2003	2002	CONDUIT	55.9	0.1001	0.0130
2004-2003	2004	2003	CONDUIT	119.0	0.1000	0.0130
2005-2004	2005	2004	CONDUIT	120.0	0.1000	0.0130
2005A-2005	2005A	2005	CONDUIT	22.9	0.1005	0.0130
2006-2005	2006	2005	CONDUIT	93.2	0.0998	0.0130
2006-2005A	2006	2005A	CONDUIT	70.3	0.0996	0.0130
2007-2006	2007	2006	CONDUIT	49.4	0.1497	0.0130
2008-2007	2008	2007	CONDUIT	64.5	0.2000	0.0130
2009-2008	2009	2008	CONDUIT	64.5	0.2000	0.0130
2010-2001	2010	2001	CONDUIT	88.2	0.0997	0.0130
2011-2010	2011	2010	CONDUIT	42.1	0.1495	0.0130
2012-2011	2012	2011	CONDUIT	41.4	0.4010	0.0130
2013-2012	2013	2012	CONDUIT	95.7	0.4002	0.0130

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2014-2013	2014	2013	CONDUIT	15.8	0.3975	0.0130
2015-2014	2015	2014	CONDUIT	91.3	0.4007	0.0130
2016-2015	2016	2015	CONDUIT	38.3	0.6483	0.0130
2017-2015	2017	2015	CONDUIT	97.4	0.1993	0.0130
2018-2010	2018	2010	CONDUIT	81.7	0.1003	0.0130
2019-2018	2019	2018	CONDUIT	78.0	0.1000	0.0130
2020-2019	2020	2019	CONDUIT	35.9	0.2007	0.0130
2021-2020	2021	2020	CONDUIT	9.7	0.6422	0.0130
2022-2019	2022	2019	CONDUIT	12.2	0.1472	0.0130
2023-2022	2023	2022	CONDUIT	76.1	0.1498	0.0130
2024-2023	2024	2023	CONDUIT	89.0	0.2000	0.0130
2025-2024	2025	2024	CONDUIT	9.6	0.5007	0.0130
2026-2017	2026	2017	CONDUIT	97.4	0.2003	0.0130
2026-2025	2026	2025	CONDUIT	75.3	0.4996	0.0130
2027-2026	2027	2026	CONDUIT	128.6	0.2497	0.0130
2028-2018	2028	2018	CONDUIT	5.3	0.0936	0.0130
2029-2028	2029	2028	CONDUIT	108.4	0.1006	0.0130
2030-2029	2030	2029	CONDUIT	102.4	0.0996	0.0130
2031-2030	2031	2030	CONDUIT	82.0	0.2001	0.0130
2032-2029	2032	2029	CONDUIT	82.0	0.1500	0.0130
2033-2032	2033	2032	CONDUIT	113.4	0.2497	0.0130
2034-2033	2034	2033	CONDUIT	11.7	0.4028	0.0130
2035-2034	2035	2034	CONDUIT	85.0	0.4001	0.0130
2036-2032	2036	2032	CONDUIT	44.0	0.1000	0.0130
2037-2036	2037	2036	CONDUIT	83.4	0.6491	0.0130
2038-2037	2038	2037	CONDUIT	69.9	0.6499	0.0130
2039-2036	2039	2036	CONDUIT	105.7	0.4001	0.0130
2040-2036	2040	2036	CONDUIT	48.3	0.1492	0.0130
2041-2040	2041	2040	CONDUIT	83.1	0.6510	0.0130
2042-2041	2042	2041	CONDUIT	70.8	0.6494	0.0130
2043-2040	2043	2040	CONDUIT	107.2	0.6500	0.0130
2044-2001	2044	2001	CONDUIT	44.5	0.1505	0.0130
2045-2044	2045	2044	CONDUIT	44.6	0.1501	0.0130
2046-2045	2046	2045	CONDUIT	44.9	0.1493	0.0130
2047-2046	2047	2046	CONDUIT	73.3	0.2006	0.0130
301-M97	301	M97	CONDUIT	78.3	0.3013	0.0130
C1003A-S1-CB102	C1003A-S1	CB102	CONDUIT	68.3	0.1025	0.0130
C1003A-S1-L1002A-S	C1003A-S1	L1002A-S	CONDUIT	36.1	0.6371	0.0130
C1003A-S-C1003A-S1	C1003A-S	C1003A-S1	CONDUIT	35.5	-0.5352	0.0130
C1006A-S1-C1003A-S	C1006A-S1	C1003A-S	CONDUIT	64.9	0.9091	0.0130
C1006A-S-C1006A-S1	C1006A-S	C1006A-S1	CONDUIT	30.2	-0.7616	0.0130
C1008A-S1-L1010A-S2	C1008A-S1	L1010A-S2	CONDUIT	13.7	0.8759	0.0130
C1008A-S-C1008A-S1	C1008A-S	C1008A-S1	CONDUIT	39.4	-0.6345	0.0130
C1009A-S1-C1008A-S	C1009A-S1	C1008A-S	CONDUIT	70.4	1.6906	0.0130
C1009A-S-C1009A-S1	C1009A-S	C1009A-S1	CONDUIT	40.0	-0.4750	0.0130
C1051A-S-C1052B-S1	C1051A-S	C1052B-S1	CONDUIT	21.5	-0.4186	0.0130
C1052A-S1-C1052A-S	C1052A-S1	C1052A-S	CONDUIT	24.5	0.9796	0.0130
C1052A-S-C1052A-S2	C1052A-S	C1052A-S2	CONDUIT	27.3	-0.2930	0.0130

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C1052B-S1-C1052B-S	C1052B-S1	CONDUIT	45.7	0.6565	0.0130
C1052B-S-C1052A-S1	C1052A-S1	CONDUIT	30.0	-0.7334	0.0130
C139	L2018B-S	CONDUIT	5.0	2.0004	0.0250
C156	L1010B-S	CONDUIT	5.0	2.0004	0.0250
C18	C1052A-S2	CONDUIT	50.5	0.7921	0.0130
C2000A-S1-C2000A-S	C2000A-S	CONDUIT	58.3	0.9606	0.0130
C2000A-S1-C2001A-S	C2001A-S	CONDUIT	44.2	0.7466	0.0130
C2000A-S-POND6_MJ	POND6_MJ	CONDUIT	8.4	-1.3096	0.0130
C2001A-S-C2002A-S1	C2002A-S1	CONDUIT	32.2	-0.6832	0.0130
C2002A-S1-C2002A-S	C2002A-S	CONDUIT	39.2	0.6888	0.0130
C2002A-S2-C2004A-S	C2004A-S	CONDUIT	46.9	0.5970	0.0130
C2002A-S-C2002A-S2	C2002A-S2	CONDUIT	33.1	-0.6949	0.0130
C2004A-S1-C2004B-S	C2004B-S	CONDUIT	45.4	0.7269	0.0130
C2004A-S-C2004A-S1	C2004A-S1	CONDUIT	20.9	-1.0048	0.0130
C2004B-S1-C1009A-S	C1009A-S	CONDUIT	69.4	1.0231	0.0130
C2004B-S1-C1051A-S	C1051A-S	CONDUIT	50.2	0.5379	0.0130
C2004B-S-C2004B-S1	C2004B-S1	CONDUIT	46.3	-0.3240	0.0130
C2005A-S-C2004B-S1	C2004B-S1	CONDUIT	45.2	-0.1991	0.0130
C2006A-S1-L1015A-S1	L1015A-S1	CONDUIT	25.2	0.5159	0.0130
C2006A-S1-L2031B-S2	L2031B-S2	CONDUIT	24.4	0.4918	0.0130
C2006A-S-C2006B-S	C2006B-S	CONDUIT	49.3	0.5274	0.0130
C2006B-S1-C2005A-S	C2005A-S	CONDUIT	50.9	1.2378	0.0130
C2006B-S-C2006B-S1	C2006B-S1	CONDUIT	31.5	-0.5079	0.0130
C2008A-S-L1015A-S1	L1015A-S1	CONDUIT	26.9	-0.2230	0.0130
C2009A-S1-C2009A-S	C2009A-S	CONDUIT	17.5	1.5430	0.0130
C2009A-S1-C2009B-S	C2009B-S	CONDUIT	35.2	0.9091	0.0130
C2009A-S-SU87	SU87	CONDUIT	23.4	1.5386	0.0130
C2009B-S1-C2008A-S	C2008A-S	CONDUIT	18.0	1.0001	0.0130
C2009B-S-C2009B-S1	C2009B-S1	CONDUIT	22.5	-0.4889	0.0130
C3	CB503-S	POND	37.3	-0.3752	0.0130
C30	C1052B-S1	L1050A-S	62.5	1.1681	0.0130
C31	L1053A-S	C1052B-S	18.0	0.8334	0.0130
C32	L1053A-S1	L1053A-S	52.2	0.9962	0.0130
C33	L1054A-S	L1053A-S1	35.5	-0.5070	0.0130
C34	L1059A-S0	L1054A-S	72.0	0.5000	0.0130
C35	L1059A-S1	L1059A-S0	35.9	0.5014	0.0130
C36	C1056A-S	C1052A-S2	27.0	-0.7408	0.0130
C37	C1056A-S1	C1056A-S	32.4	1.2655	0.0130
C38	L1057A-S	C1056A-S1	20.7	-0.7247	0.0130
C39	L1057A-S1	L1057A-S	29.9	1.0034	0.0130
C4	STM104-1	STM101-1	51.6	0.1085	0.0130
C40	L1058A-S	L1057A-S1	25.0	-0.4800	0.0130
C41	L1059A-S1	L1058A-S	47.5	1.4949	0.0130
C7	XRFB	X110A	27.8	4.1907	0.0130
CM97A-S1-CM97A-S	CM97A-S1	CM97A-S	65.5	0.4886	0.0130
CM97A-S-C2000A-S	CM97A-S	C2000A-S	60.5	0.8265	0.0130
F1021A-S-L1011A-S	F1021A-S	L1011A-S	10.0	2.0004	0.0250
F2006A-S-C2006A-S	F2006A-S	C2006A-S	5.0	3.0014	0.0250

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L1000A-S-POND	L1000A-S	POND	5.0	2.0004	0.0130
L1001A-S1-L1001A-S	L1001A-S1	CONDUIT	32.1	0.4984	0.0130
L1001A-S2-L1001A-S	L1001A-S2	CONDUIT	27.0	1.0001	0.0130
L1001A-S-POND	L1001A-S	POND	32.9	2.9192	0.0130
L1002A-S1-L1001A-S1	L1002A-S	L1001A-S1	30.8	-0.6818	0.0130
L1007A-S-L1010A-S2	L1007A-S	L1010A-S2	5.0	2.0004	0.0130
L1010A-S1-L1010A-S	L1010A-S1	L1010A-S	52.1	0.9405	0.0130
L1010A-S2-C1006A-S	L1010A-S2	C1006A-S	59.7	0.8711	0.0130
L1010A-S-L1010A-S2	L1010A-S	L1010A-S2	34.8	-0.5747	0.0130
L1011A-S1-L1011A-S	L1011A-S1	L1011A-S	51.3	1.1697	0.0130
L1011A-S-L1010A-S1	L1011A-S	L1010A-S1	35.2	-0.4830	0.0130
L1011B-S-L1011A-S	L1011B-S	L1011A-S	5.0	2.0004	0.0250
L1012A-S-L1011A-S1	L1012A-S	L1011A-S1	30.1	-0.6654	0.0130
L1015A-S1-L1015A-S	L1015A-S1	L1015A-S	30.6	1.1439	0.0130
L1015A-S2-L1020A-S1	L1015A-S2	L1020A-S1	100.0	0.4000	0.0130
L1015A-S-L1015A-S2	L1015A-S	L1015A-S2	15.3	-0.6536	0.0130
L1016A-S1-L1016A-S	L1016A-S1	L1016A-S	68.2	0.9971	0.0130
L1016A-S-L1010A-S1	L1016A-S	L1010A-S1	32.3	-0.6502	0.0130
L1017A-S1-L1017A-S	L1017A-S1	L1017A-S	53.0	0.7925	0.0130
L1017A-S-L1016A-S1	L1017A-S	L1016A-S1	20.5	-0.7317	0.0130
L1019A-S1-L1019A-S	L1019A-S1	L1019A-S	39.2	1.2501	0.0130
L1019A-S-L1017A-S1	L1019A-S	L1017A-S1	28.1	-0.6406	0.0130
L1019B-S-L1010B-S	L1019B-S	L1010B-S	177.0	0.3842	0.0250
L1019C-S-L1019A-S	L1019C-S	L1011B-S	110.0	0.3545	0.0250
L1020A-S1-L1020A-S	L1020A-S1	L1020A-S	38.5	1.1689	0.0130
L1020A-S1-L1020B-S	L1020A-S1	L1020B-S	20.6	0.9709	0.0130
L1020A-S-L1019A-S1	L1020A-S	L1019A-S1	17.0	-0.7059	0.0130
L1020B-S1-L1020C-S	L1020B-S1	L1020C-S	47.0	1.1916	0.0130
L1020B-S-L1020B-S1	L1020B-S	L1020B-S1	24.2	-0.6198	0.0130
L1020C-S1-L1012A-S	L1020C-S1	L1012A-S	50.5	1.2080	0.0130
L1020C-S-L1020C-S1	L1020C-S	L1020C-S1	30.8	-0.6494	0.0130
L1024A-S1-L1024A-S	L1024A-S1	L1024A-S	76.6	0.4178	0.0130
L1024A-S-L1001A-S2	L1024A-S	L1001A-S2	41.0	-0.5366	0.0130
L1024B-S-L1001A-S2	L1024B-S	L1001A-S2	5.0	2.0004	0.0250
L1026A-S1-L1026A-S	L1026A-S1	L1026A-S	33.3	1.4416	0.0130
L1026A-S-L1024A-S1	L1026A-S	L1024A-S1	13.6	-0.7353	0.0130
L1027A-S-L1026A-S1	L1027A-S	L1026A-S1	44.4	-0.5180	0.0130
L1027B-S-L1027B-S	L1027B-S	L1027B-S0	35.4	0.9040	0.0130
L1027B-S-L1027A-S	L1027B-S	L1027A-S	43.2	0.9028	0.0130
L1027C-S-L1032B-S	L1027C-S	L1032B-S	112.0	0.3839	0.0250
L1029A-S1-L1029A-S	L1029A-S1	L1029A-S	32.3	1.4862	0.0130
L1029A-S-L1027B-S1	L1029A-S	L1027B-S1	44.2	-0.4977	0.0130
L1030A-S1-L1030A-S	L1030A-S1	L1030A-S	37.6	1.3831	0.0130
L1030A-S-L1029A-S1	L1030A-S	L1029A-S1	37.2	-0.4839	0.0130
L1031A-S-L1030A-S1	L1031A-S	L1030A-S1	29.8	-0.5034	0.0130
L1032A-S1-L1032A-S	L1032A-S1	L1032A-S	54.3	1.2524	0.0130
L1032A-S-L1024A-S1	L1032A-S	L1024A-S1	27.1	-0.4059	0.0130
L1032B-S-L1032A-S	L1032B-S	L1032A-S	5.0	2.0004	0.0250

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L1034A-S1-L1034A-S	L1034A-S1	L1034A-S	CONDUIT	39.7	0.7557 0.0130
L1034A-S1-L1032A-S1	L1034A-S	L1032A-S1	CONDUIT	13.2	-0.4546 0.0130
L1036A-S1-L1034A-S1	L1036A-S	L1034A-S1	CONDUIT	40.0	-0.5000 0.0130
L1038A-S1-L1036A-S	L1038A-S1	L1036A-S	CONDUIT	63.7	1.0048 0.0130
L1038A-S1-L1038A-S	L1038A-S1	L1038A-S	CONDUIT	32.3	0.7431 0.0130
L1038A-S1-L1039A-S1	L1038A-S	L1039A-S1	CONDUIT	14.0	-0.2857 0.0130
L1039A-S1-L1039A-S	L1039A-S1	L1039A-S	CONDUIT	45.3	1.0597 0.0130
L1039A-S1-L1032A-S1	L1039A-S	L1032A-S1	CONDUIT	27.6	-0.4348 0.0130
L1039B-S-L1039A-S	L1039B-S	L1039A-S	CONDUIT	5.0	2.0004 0.0250
L1050A-S1-L1039A-S1	L1050A-S	L1039A-S1	CONDUIT	31.7	-0.4101 0.0130
L1050B-S-L1050A-S	L1050B-S	L1050A-S	CONDUIT	5.0	2.0004 0.0250
L1051B-S-L1051A-S	L1051B-S	C1051A-S	CONDUIT	5.0	2.0004 0.0250
L1053A-S-L1052B-S	L1053B-S	C1056A-S	CONDUIT	5.0	2.0004 0.0250
L2007A-S-L2008A-S	L2007A-S	C2008A-S	CONDUIT	5.0	2.0004 0.0250
L2010A-S1-L2010A-S	L2010A-S1	L2010A-S	CONDUIT	14.0	1.0001 0.0130
L2010A-S2-C2002A-S1	L2010A-S2	C2002A-S1	CONDUIT	43.5	-0.5517 0.0130
L2010A-S-L2010A-S2	L2010A-S	L2010A-S2	CONDUIT	43.9	0.7745 0.0130
L2010B-S-L2010A-S2	L2010B-S	L2010A-S2	CONDUIT	5.0	2.0004 0.0250
L2011A-S1-L2011A-S	L2011A-S1	L2011A-S	CONDUIT	83.9	0.8940 0.0130
L2011A-S-L2010A-S	L2011A-S	L2010A-S	CONDUIT	34.5	-0.6087 0.0130
L2013A-S-L2011A-S1	L2013A-S	L2011A-S1	CONDUIT	40.2	-0.4975 0.0130
L2015A-S1-L2013A-S	L2015A-S1	L2013A-S	CONDUIT	66.5	1.0978 0.0130
L2015A-S-L2015A-S1	L2015A-S	L2015A-S1	CONDUIT	28.7	-0.5923 0.0130
L2016A-S1-L2016A-S	L2016A-S1	L2016A-S	CONDUIT	26.7	0.7865 0.0130
L2016A-S1-L2017B-S1	L2016A-S1	L2017B-S1	CONDUIT	14.4	0.8334 0.0130
L2016B-S-L2016A-S	L2016B-S	L2016A-S	CONDUIT	5.0	2.0004 0.0250
L2017A-S1-L2017A-S	L2017A-S1	L2017A-S	CONDUIT	28.3	0.8481 0.0130
L2017A-S-L2017B-S2	L2017A-S	L2017B-S2	CONDUIT	19.7	-0.5076 0.0130
L2017B-S1-L2015A-S	L2017B-S1	L2015A-S	CONDUIT	34.1	0.8211 0.0130
L2017B-S1-L2021A-S	L2017B-S1	L2021A-S	CONDUIT	42.2	1.1612 0.0130
L2017B-S2-L2017B-S	L2017B-S2	L2017B-S	CONDUIT	28.0	0.8215 0.0130
L2017B-S-L2017B-S1	L2017B-S	L2017B-S1	CONDUIT	29.2	-0.3082 0.0130
L2018A-S1-L2018A-S	L2018A-S1	L2018A-S	CONDUIT	42.9	0.6993 0.0130
L2018A-S-L2010A-S1	L2018A-S	L2010A-S1	CONDUIT	26.5	-0.6793 0.0130
L2019A-S1-L2019A-S	L2019A-S1	L2019A-S	CONDUIT	47.4	1.0971 0.0130
L2019A-S-L2018A-S1	L2019A-S	L2018A-S1	CONDUIT	39.0	-0.4872 0.0130
L2019B-S-L2019A-S	L2019B-S	L2019A-S	CONDUIT	5.0	2.0004 0.0250
L2021A-S-L2019A-S1	L2021A-S	L2019A-S1	CONDUIT	41.5	-0.3614 0.0130
L2021B-S-L2021A-S	L2021B-S	L2021A-S	CONDUIT	5.0	2.0004 0.0250
L2023A-S-L2019A-S1	L2023A-S	L2019A-S1	CONDUIT	24.3	-0.3704 0.0130
L2024A-S1-L2024B-S	L2024A-S1	L2024B-S	CONDUIT	41.5	0.7470 0.0130
L2024A-S-L2024A-S1	L2024A-S	L2024A-S1	CONDUIT	26.9	-0.7063 0.0130
L2024B-S1-L2023A-S	L2024B-S1	L2023A-S	CONDUIT	57.9	0.8118 0.0130
L2024B-S-L2024B-S1	L2024B-S	L2024B-S1	CONDUIT	18.9	-1.0053 0.0130
L2026A-S1-L2026A-S	L2026A-S1	L2026A-S	CONDUIT	35.6	0.7584 0.0130
L2026A-S1-L2027A-S3	L2026A-S1	L2027A-S3	CONDUIT	20.6	0.5825 0.0130
L2026A-S-L2017A-S1	L2026A-S	L2017A-S1	CONDUIT	32.4	-0.6173 0.0130
L2026B-S1-L2024A-S	L2026B-S1	L2024A-S	CONDUIT	33.1	0.7553 0.0130

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L2026B-S-L2026B-S1	L2026B-S	CONDUIT	24.2	-0.6612	0.0130
L2027A-S1-L2027A-S	L2027A-S1	CONDUIT	65.4	0.5505	0.0130
L2027A-S1-L2038A-S	L2027A-S1	CONDUIT	51.9	1.5223	0.0130
L2027A-S2-L2027A-S1	L2027A-S2	CONDUIT	17.3	0.5202	0.0130
L2027A-S2-L2042A-S	L2027A-S2	CONDUIT	77.5	1.1485	0.0130
L2027A-S3-L2026B-S	L2027A-S3	CONDUIT	34.5	0.7536	0.0130
L2027A-S-L2027A-S3	L2027A-S	CONDUIT	16.6	-0.1205	0.0130
L2027B-S-L2027A-S	L2027B-S	CONDUIT	10.0	4.5046	0.0250
L2029A-S-L2018A-S1	L2029A-S	CONDUIT	38.9	-0.4627	0.0130
L2029B-S-L2032A-S	L2029B-S	CONDUIT	5.0	2.0004	0.0250
L2030A-S-L2031A-S1	L2030A-S	CONDUIT	22.5	-1.0667	0.0130
L2030B-S-L2030A-S	L2030B-S	CONDUIT	5.0	2.0004	0.0250
L2031A-S1-L2031A-S	L2031A-S1	CONDUIT	34.5	0.7536	0.0130
L2031A-S-L2031B-S1	L2031A-S	CONDUIT	29.9	-0.6689	0.0130
L2031B-S1-L2031B-S	L2031B-S1	CONDUIT	38.8	0.9021	0.0130
L2031B-S2-C2006A-S	L2031B-S2	CONDUIT	36.0	0.3333	0.0130
L2031B-S-L2031B-S2	L2031B-S	CONDUIT	31.1	-0.8682	0.0130
L2032A-S1-L2029A-S	L2032A-S1	CONDUIT	70.7	0.5658	0.0130
L2032A-S1-L2030A-S	L2032A-S1	CONDUIT	48.3	1.0974	0.0130
L2032A-S-L2032A-S1	L2032A-S	CONDUIT	40.3	-0.6948	0.0130
L2032B-S-L2032A-S	L2032B-S	CONDUIT	5.0	2.0004	0.0250
L2033A-S-L2033B-S1	L2033A-S	CONDUIT	20.9	-0.9570	0.0130
L2033B-S1-L2033B-S	L2033B-S1	CONDUIT	24.6	1.0163	0.0130
L2033B-S-L2036A-S1	L2033B-S	CONDUIT	35.9	-0.6128	0.0130
L2034A-S1-L2037A-S	L2034A-S1	CONDUIT	43.6	1.4451	0.0130
L2036A-S1-L2032A-S	L2036A-S1	CONDUIT	41.7	0.5995	0.0130
L2036A-S-L2036A-S1	L2036A-S	CONDUIT	22.6	-0.3982	0.0130
L2037A-S-L2039A-S2	L2037A-S	CONDUIT	43.2	-0.5556	0.0130
L2038A-S-L2034A-S1	L2038A-S	CONDUIT	28.0	-0.5357	0.0130
L2039A-S1-L2039A-S	L2039A-S1	CONDUIT	25.9	0.9267	0.0130
L2039A-S2-L2036A-S	L2039A-S2	CONDUIT	22.4	0.5357	0.0130
L2039A-S-L2039A-S2	L2039A-S	CONDUIT	33.3	-0.6306	0.0130
L2039B-S1-L2033A-S	L2039B-S1	CONDUIT	77.1	0.4929	0.0130
L2039B-S1-L2039B-S	L2039B-S1	CONDUIT	38.8	0.6701	0.0130
L2039B-S-L2039A-S1	L2039B-S	CONDUIT	16.8	-0.7738	0.0130
L2040A-S1-L2040A-S	L2040A-S1	CONDUIT	21.8	0.6881	0.0130
L2040A-S-L2039A-S2	L2040A-S	CONDUIT	22.5	-0.4889	0.0130
L2041A-S-L2040A-S1	L2041A-S	CONDUIT	38.5	-0.4156	0.0130
L2042A-S1-L2041A-S	L2042A-S1	CONDUIT	44.2	0.9050	0.0130
L2042A-S-L2042A-S1	L2042A-S	CONDUIT	29.9	-0.5017	0.0130
L2043A-S1-L2043A-S	L2043A-S1	CONDUIT	20.7	1.4494	0.0130
L2043A-S-L2040A-S1	L2043A-S	CONDUIT	36.5	-0.3562	0.0130
L2043B-S1-L2039B-S1	L2043B-S1	CONDUIT	31.3	0.3195	0.0130
L2043B-S1-L2043B-S	L2043B-S1	CONDUIT	44.9	0.6904	0.0130
L2043B-S-L2043A-S1	L2043B-S	CONDUIT	24.3	-0.4938	0.0130
L2044A-S1-L2044A-S	L2044A-S1	CONDUIT	27.8	0.7554	0.0130
L2044A-S-C2002A-S1	L2044A-S	CONDUIT	31.4	-0.6051	0.0130
L2044B-S-OF7	L2044B-S	OF7	5.0	2.0004	0.0250

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C1051A-01	C1051A-S	1051	ORIFICE
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L2013A-01	L2013A-S	2013	ORIFICE
L2013A-02	L2013A-S	2013	ORIFICE
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L2015A-02	L2015A-S	2015	ORIFICE
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L2016A-02	L2016A-S	2016	ORIFICE
L2016B-01	L2016B-S	2016	ORIFICE
L2017A-01	L2017A-S	2017	ORIFICE
L2017A-02	L2017A-S	2017	ORIFICE
L2017B-01	L2017B-S	2017	ORIFICE
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L2018B-01	L2018B-S	2018	ORIFICE
L2019A-01	L2019A-S	2019	ORIFICE
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L2019B-01	L2019B-S	2019	ORIFICE
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L2026A-02	L2026A-S	2026	ORIFICE
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L2031A-01	L2031A-S	2031	ORIFICE
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L2046A-01	L2046A-S	2045	ORIFICE
L2046A-02	L2046A-S	2045	ORIFICE
L2047A-01	L2047A-S	2047	ORIFICE

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L2047A-O2	L2047A-S	160401317-2019-11-14-3HR-100YR-CHI.rpt	2047	ORIFICE
LM97A-O1	LM97A-S	M97	ORIFICE	
PND_OUTLET	POND	PD_OUTFALL	ORIFICE	
R102A-IC	R102A-S	STM101-1	ORIFICE	
R102B-IC	R102B-S	STM101-1	ORIFICE	
R103-IC	R103A-S	STM103-1	ORIFICE	
W3	POND	PD_OUTFALL	ORIFICE	
C1023A-W	C1023A-S	C1003A-S	WEIR	
C2049A-W	C2049A-S	C2005A-S	WEIR	
L1022A-W	L1022A-S	L1020C-S	WEIR	
W1	POND	OF1	WEIR	
W2	POND	PD_OUTFALL	WEIR	
W4	L2047A-S	OF6	WEIR	
C1023A-O	C1023A-S	1002	OUTLET	
C2049A-O	C2049A-S	2005	OUTLET	
F1021A-O	F1021A-S	1011	OUTLET	
F2006A-O	F2006A-S	2005A	OUTLET	
L1022A-O	L1022A-S	1014	OUTLET	
L1027B-A1	L1027B-SO	L1027B-S	OUTLET	
L1027B-A2	L1027B-SO	L1027B-S	OUTLET	
L1059A-A1	L1059A-SO	L1059A-S	OUTLET	
L1059A-A2	L1059A-SO	L1059A-S	OUTLET	
OL1	RfB	xRfB	OUTLET	
RfA	RfA	xRfA	OUTLET	
RfC	RfC	xRfC	OUTLET	
RfD	RfD	xRfD	OUTLET	
RfE	RfE	xRfE	OUTLET	

Cross Section Summary

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. width	No. of Barrels	Full Flow
1000-P3	CIRCULAR	1.80	2.54	0.45	1.80	1	3639.90
1001-1000	CIRCULAR	1.65	2.14	0.41	1.65	1	3047.29
1002-1001	CIRCULAR	1.65	2.14	0.41	1.65	1	2871.65
1003-1002	CIRCULAR	1.65	2.14	0.41	1.65	1	2893.42
1004-1003	CIRCULAR	1.65	2.14	0.41	1.65	1	2866.25
1005-1004	CIRCULAR	1.50	1.77	0.38	1.50	1	2249.76
1006-1005	CIRCULAR	1.35	1.43	0.34	1.35	1	2382.75
1007-1006	CIRCULAR	0.60	0.28	0.15	0.60	1	363.26
1008-1007	CIRCULAR	0.53	0.22	0.13	0.53	1	384.77
1009-1008	CIRCULAR	0.38	0.11	0.09	0.38	1	175.29
1010-1006	CIRCULAR	1.20	1.13	0.30	1.20	1	1747.30
1011-1010	CIRCULAR	0.90	0.64	0.23	0.90	1	989.29
1012-1011	CIRCULAR	0.82	0.53	0.21	0.82	1	907.77

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1013-1012	CIRCULAR	0.75	0.44	0.19	0.75	1	708.09
1014-1013	CIRCULAR	0.68	0.36	0.17	0.68	1	677.46
1015-1014	CIRCULAR	0.30	0.07	0.07	0.30	1	77.95
1016-1010	CIRCULAR	0.68	0.36	0.17	0.68	1	374.99
1017-1016	CIRCULAR	0.60	0.28	0.15	0.60	1	411.71
1018-1017	CIRCULAR	0.53	0.22	0.13	0.53	1	290.08
1019-1018	CIRCULAR	0.53	0.22	0.13	0.53	1	288.52
1020-1014	CIRCULAR	0.38	0.11	0.09	0.38	1	141.39
1020-1019	CIRCULAR	0.30	0.07	0.07	0.30	1	78.02
1051-1050	CIRCULAR	0.38	0.11	0.09	0.38	1	141.36
1052-1050	CIRCULAR	0.75	0.44	0.19	0.75	1	431.56
1053-1050	CIRCULAR	0.60	0.28	0.15	0.60	1	238.05
2000-M98	CIRCULAR	1.80	2.54	0.45	1.80	1	3645.57
2001-2000	CIRCULAR	1.80	2.54	0.45	1.80	1	3639.66
2002-2001	CIRCULAR	1.35	1.43	0.34	1.35	1	1692.59
2003-2002	CIRCULAR	1.35	1.43	0.34	1.35	1	1688.74
2004-2003	CIRCULAR	1.35	1.43	0.34	1.35	1	1687.94
2005-2004	CIRCULAR	1.20	1.13	0.30	1.20	1	1232.99
2005A-2005	CIRCULAR	0.90	0.64	0.23	0.90	1	573.88
2006-2005	CIRCULAR	0.90	0.64	0.23	0.90	1	572.02
2006-2005A	CIRCULAR	0.90	0.64	0.23	0.90	1	571.41
2007-2006	CIRCULAR	0.75	0.44	0.19	0.75	1	430.80
2008-2007	CIRCULAR	0.60	0.28	0.15	0.60	1	274.60
2009-2008	CIRCULAR	0.45	0.16	0.11	0.45	1	127.51
2010-2001	CIRCULAR	1.35	1.43	0.34	1.35	1	1685.60
2011-2010	CIRCULAR	0.82	0.53	0.21	0.82	1	555.14
2012-2011	CIRCULAR	0.68	0.36	0.17	0.68	1	532.33
2013-2012	CIRCULAR	0.68	0.36	0.17	0.68	1	531.82
2014-2013	CIRCULAR	0.68	0.36	0.17	0.68	1	530.01
2015-2014	CIRCULAR	0.68	0.36	0.17	0.68	1	532.11
2016-2015	CIRCULAR	0.30	0.07	0.07	0.30	1	77.86
2017-2015	CIRCULAR	0.60	0.28	0.15	0.60	1	274.10
2018-2010	CIRCULAR	1.35	1.43	0.34	1.35	1	1690.73
2019-2018	CIRCULAR	0.82	0.53	0.21	0.82	1	453.88
2020-2019	CIRCULAR	0.45	0.16	0.11	0.45	1	127.73
2021-2020	CIRCULAR	0.38	0.11	0.09	0.38	1	140.52
2022-2019	CIRCULAR	0.68	0.36	0.17	0.68	1	322.52
2023-2022	CIRCULAR	0.68	0.36	0.17	0.68	1	325.36
2024-2023	CIRCULAR	0.60	0.28	0.15	0.60	1	274.63
2025-2024	CIRCULAR	0.30	0.07	0.07	0.30	1	68.43
2026-2017	CIRCULAR	0.53	0.22	0.13	0.53	1	192.48
2026-2025	CIRCULAR	0.30	0.07	0.07	0.30	1	68.35
2027-2026	CIRCULAR	0.45	0.16	0.11	0.45	1	142.46
2028-2018	CIRCULAR	1.20	1.13	0.30	1.20	1	1193.06
2029-2028	CIRCULAR	1.20	1.13	0.30	1.20	1	1236.40
2030-2029	CIRCULAR	0.82	0.53	0.21	0.82	1	452.97
2031-2030	CIRCULAR	0.45	0.16	0.11	0.45	1	127.54
2032-2029	CIRCULAR	0.90	0.64	0.23	0.90	1	701.16

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2033-2032	CIRCULAR	0.45	0.16	0.11	0.45	1	142.46
2034-2033	CIRCULAR	0.30	0.07	0.07	0.30	1	61.38
2035-2034	CIRCULAR	0.30	0.07	0.07	0.30	1	61.17
2036-2032	CIRCULAR	0.82	0.53	0.21	0.82	1	454.04
2037-2036	CIRCULAR	0.45	0.16	0.11	0.45	1	229.71
2038-2037	CIRCULAR	0.30	0.07	0.07	0.30	1	77.96
2039-2036	CIRCULAR	0.38	0.11	0.09	0.38	1	110.91
2040-2036	CIRCULAR	0.53	0.22	0.13	0.53	1	166.11
2041-2040	CIRCULAR	0.38	0.11	0.09	0.38	1	141.48
2042-2041	CIRCULAR	0.30	0.07	0.07	0.30	1	77.93
2043-2040	CIRCULAR	0.30	0.07	0.07	0.30	1	77.97
2044-2001	CIRCULAR	0.68	0.36	0.17	0.68	1	326.17
2045-2044	CIRCULAR	0.53	0.22	0.13	0.53	1	166.63
2046-2045	CIRCULAR	0.53	0.22	0.13	0.53	1	166.16
2047-2046	CIRCULAR	0.45	0.16	0.11	0.45	1	127.71
301-M97	CIRCULAR	1.95	2.99	0.49	1.95	1	7810.95
C1003A-S1-CB102	Cope	0.40	4.56	0.18	26.00	1	3545.71
C1003A-S1-L1002A-S	18mROW	0.40	4.04	0.23	18.00	1	9201.95
C1003A-S-C1003A-S1	Cope	0.40	4.56	0.18	26.00	1	8102.70
C1006A-S1-C1003A-S	Cope	0.40	4.56	0.18	26.00	1	10560.31
C1006A-S-C1006A-S1	Cope	0.40	4.56	0.18	26.00	1	9665.65
C1008A-S1-L1010A-S2	Cope	0.40	4.56	0.18	26.00	1	10365.80
C1008A-S-C1008A-S1	Cope	0.40	4.56	0.18	26.00	1	8822.47
C1009A-S1-C1008A-S	Cope	0.40	4.56	0.18	26.00	1	14400.66
C1009A-S-C1009A-S1	Cope	0.40	4.56	0.18	26.00	1	7633.32
C1051A-S-C1052B-S1	Rouncey	0.40	5.37	0.20	26.00	1	9132.09
C1052A-S1-C1052A-S	Rouncey	0.40	5.37	0.20	26.00	1	13970.09
C1052A-S-C1052A-S2	Rouncey	0.40	5.37	0.20	26.00	1	7640.66
C1052B-S1-C1052B-S	Rouncey	0.40	5.37	0.20	26.00	1	11435.98
C1052B-S-C1052A-S1	Rouncey	0.40	5.37	0.20	26.00	1	12087.12
C139	TRIANGULAR	0.30	0.30	0.14	2.00	1	465.61
C156	TRIANGULAR	0.30	0.30	0.14	2.00	1	465.61
C18	18mROW	0.40	4.04	0.23	18.00	1	10260.21
C2000A-S1-C2000A-S	Cope	0.40	4.56	0.18	26.00	1	10855.10
C2000A-S1-C2001A-S	Cope	0.40	4.56	0.18	26.00	1	9570.09
C2000A-S-POND6_MJ	walkway	0.25	1.13	0.17	6.00	1	3037.37
C2001A-S-C2002A-S1	Cope	0.40	4.56	0.18	26.00	1	9154.88
C2002A-S1-C2002A-S	Cope	0.40	4.56	0.18	26.00	1	9191.96
C2002A-S2-C2004A-S	Cope	0.40	4.56	0.18	26.00	1	8557.77
C2002A-S-C2002A-S2	Cope	0.40	4.56	0.18	26.00	1	9232.50
C2004A-S1-C2004B-S	Cope	0.40	4.56	0.18	26.00	1	9442.76
C2004A-S-C2004A-S1	Cope	0.40	4.56	0.18	26.00	1	11102.27
C2004B-S1-C1009A-S	Cope	0.40	4.56	0.18	26.00	1	11202.76
C2004B-S1-C1051A-S	Rouncey	0.40	5.37	0.20	26.00	1	10351.41
C2004B-S-C2004B-S1	Cope	0.40	4.56	0.18	26.00	1	6304.06
C2005A-S-C2004B-S1	Rouncey	0.40	5.37	0.20	26.00	1	6298.23
C2006A-S1-L1015A-S1	Rouncey	0.40	5.37	0.20	26.00	1	10137.73
C2006A-S1-L2031B-S2	Rouncey	0.40	5.37	0.20	26.00	1	9898.39

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C2006A-S-C2006B-S	Rouncey	0.40	5.37	0.20	26.00	1	10250.20
C2006B-S1-C2005A-S	Rouncey	0.40	5.37	0.20	26.00	1	15703.42
C2006B-S-C2006B-S1	Rouncey	0.40	5.37	0.20	26.00	1	10059.44
C2008A-S-L1015A-S1	Rouncey	0.40	5.37	0.20	26.00	1	6666.01
C2009A-S1-C2009A-S	Rouncey	0.40	5.37	0.20	26.00	1	17532.95
C2009A-S1-C2009B-S	Rouncey	0.40	5.37	0.20	26.00	1	13457.95
C2009A-S-SU87	Rouncey	0.40	5.37	0.20	26.00	1	17507.95
C2009B-S1-C2008A-S	Rouncey	0.40	5.37	0.20	26.00	1	14114.88
C2009B-S-C2009B-S1	Rouncey	0.40	5.37	0.20	26.00	1	9869.02
C3	TRAPEZOIDAL	0.10	0.61	0.10	6.20	1	607.23
C30	18mROW	0.40	4.04	0.23	18.00	1	12459.52
C31	18mROW	0.40	4.04	0.23	18.00	1	10524.02
C32	18mROW	0.40	4.04	0.23	18.00	1	11506.47
C33	18mROW	0.40	4.04	0.23	18.00	1	8208.99
C34	18mROW	0.40	4.04	0.23	18.00	1	8151.78
C35	18mROW	0.40	4.04	0.23	18.00	1	8163.13
C36	18mROW	0.40	4.04	0.23	18.00	1	9922.11
C37	18mROW	0.40	4.04	0.23	18.00	1	12968.86
C38	18mROW	0.40	4.04	0.23	18.00	1	9813.66
C39	18mROW	0.40	4.04	0.23	18.00	1	11547.84
C4	CIRCULAR	1.50	1.77	0.38	1.50	1	2328.87
C40	18mROW	0.40	4.04	0.23	18.00	1	7987.08
C41	18mROW	0.40	4.04	0.23	18.00	1	14095.21
C7	CIRCULAR	0.25	0.05	0.06	0.25	1	121.74
CM97A-S1-CM97A-S	Cope	0.40	4.56	0.18	26.00	1	7741.43
CM97A-S-C2000A-S	Cope	0.40	4.56	0.18	26.00	1	10068.83
F1021A-S-L1011A-S	TRAPEZOIDAL	0.05	0.25	0.05	5.00	1	189.55
F2006A-S-C2006A-S	TRAPEZOIDAL	0.05	0.26	0.05	5.30	1	237.12
L1000A-S-POND	TRIANGULAR	0.30	0.30	0.14	2.00	1	895.39
L1001A-S1-L1001A-S	18mROW	0.40	4.04	0.23	18.00	1	8139.08
L1001A-S2-L1001A-S	18mROW	0.40	4.04	0.23	18.00	1	11528.58
L1001A-S-POND	walkway	0.25	1.13	0.17	6.00	1	4534.73
L1002A-SL1001A-S1	18mROW	0.40	4.04	0.23	18.00	1	9519.28
L1007A-S-L1010A-S2	TRIANGULAR	0.30	0.30	0.14	2.00	1	895.39
L1010A-S1-L1010A-S	18mROW	0.40	4.04	0.23	18.00	1	11180.31
L1010A-S2-C1006A-S	Cope	0.40	4.56	0.18	26.00	1	10336.82
L1010A-S-L1010A-S2	18mROW	0.40	4.04	0.23	18.00	1	8739.65
L1011A-S1-L1011A-S	18mROW	0.40	4.04	0.23	18.00	1	12468.00
L1011A-S-L1010A-S1	18mROW	0.40	4.04	0.23	18.00	1	8011.62
L1011B-S-L1011A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1	465.61
L1012A-S-L1011A-S1	18mROW	0.40	4.04	0.23	18.00	1	9403.52
L1015A-S1-L1015A-S	18mROW	0.40	4.04	0.23	18.00	1	12329.70
L1015A-S2-L1020A-S1	18mROW	0.40	4.04	0.23	18.00	1	7291.16
L1015A-S-L1015A-S2	18mROW	0.40	4.04	0.23	18.00	1	9320.17
L1016A-S1-L1016A-S	18mROW	0.40	4.04	0.23	18.00	1	11511.66
L1016A-S-L1010A-S1	18mROW	0.40	4.04	0.23	18.00	1	9295.61
L1017A-S1-L1017A-S	18mROW	0.40	4.04	0.23	18.00	1	10262.62
L1017A-S-L1016A-S1	18mROW	0.40	4.04	0.23	18.00	1	9861.42

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L1019A-S1-L1019A-S	18mROW	0.40	4.04	0.23	18.00	1 12889.52
L1019A-S-L1017A-S1	18mROW	0.40	4.04	0.23	18.00	1 9226.83
L1019B-S-L1010B-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 204.05
L1019C-S-L1019A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 196.02
L1020A-S1-L1020A-S	18mROW	0.40	4.04	0.23	18.00	1 12463.95
L1020A-S1-L1020B-S	18mROW	0.40	4.04	0.23	18.00	1 11359.43
L1020A-S-L1019A-S1	18mROW	0.40	4.04	0.23	18.00	1 9685.82
L1020B-S1-L1020C-S	18mROW	0.40	4.04	0.23	18.00	1 12584.19
L1020B-S-L1020B-S1	18mROW	0.40	4.04	0.23	18.00	1 9076.26
L1020C-S1-L1012A-S	18mROW	0.40	4.04	0.23	18.00	1 12670.68
L1020C-S-L1020C-S1	18mROW	0.40	4.04	0.23	18.00	1 9289.86
L1024A-S1-L1024A-S	18mROW	0.40	4.04	0.23	18.00	1 7451.22
L1024A-SL1001A-S2	18mROW	0.40	4.04	0.23	18.00	1 8444.76
L1024B-S-L1001A-S2	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L1026A-S1-L1026A-S	18mROW	0.40	4.04	0.23	18.00	1 13841.59
L1026A-SL1024A-S1	18mROW	0.40	4.04	0.23	18.00	1 9885.56
L1027A-SL1026A-S1	18mROW	0.40	4.04	0.23	18.00	1 8297.37
L1027B-SL1027B-S	18mROW	0.40	4.04	0.23	18.00	1 10960.92
L1027B-SL1027A-S	18mROW	0.40	4.04	0.23	18.00	1 10953.78
L1027C-S-L1032B-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 203.98
L1029A-SL1029A-S	18mROW	0.40	4.04	0.23	18.00	1 14054.27
L1029A-SL1027B-S1	18mROW	0.40	4.04	0.23	18.00	1 8133.32
L1030A-SL1030A-S	18mROW	0.40	4.04	0.23	18.00	1 13557.93
L1030A-SL1029A-S1	18mROW	0.40	4.04	0.23	18.00	1 8019.22
L1031A-SL1030A-S1	18mROW	0.40	4.04	0.23	18.00	1 8179.09
L1032A-SL1032A-S	18mROW	0.40	4.04	0.23	18.00	1 12901.39
L1032A-SL1024A-S1	18mROW	0.40	4.04	0.23	18.00	1 7344.77
L1032B-S-L1032A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L1034A-SL1034A-S	18mROW	0.40	4.04	0.23	18.00	1 10021.59
L1034A-SL1032A-S1	18mROW	0.40	4.04	0.23	18.00	1 7772.41
L1036A-SL1034A-S1	18mROW	0.40	4.04	0.23	18.00	1 8151.78
L1038A-SL1036A-S	18mROW	0.40	4.04	0.23	18.00	1 11555.70
L1038A-SL1038A-S	18mROW	0.40	4.04	0.23	18.00	1 9937.46
L1038A-SL1039A-S1	18mROW	0.40	4.04	0.23	18.00	1 6162.14
L1039A-SL1039A-S	18mROW	0.40	4.04	0.23	18.00	1 11867.21
L1039A-SL1032A-S1	18mROW	0.40	4.04	0.23	18.00	1 7601.57
L1039B-S-L1039A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L1050A-SL1039A-S1	18mROW	0.40	4.04	0.23	18.00	1 7382.59
L1050B-S-L1050A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L1051B-S-C1051A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L1053A-S-C1052B-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2007A-S-C2008A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2010A-S1-L2010A-S	18mROW	0.40	4.04	0.23	18.00	1 11528.58
L2010A-S2-C2002A-S1	18mROW	0.40	4.04	0.23	18.00	1 8563.06
L2010A-S-L2010A-S2	18mROW	0.40	4.04	0.23	18.00	1 10145.62
L2010B-S-L2010A-S2	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2011A-S1-L2011A-S	18mROW	0.40	4.04	0.23	18.00	1 10899.92
L2011A-S-L2010A-S	18mROW	0.40	4.04	0.23	18.00	1 8994.33

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L2013A-S-L2011A-S1	18mROW	0.40	4.04	0.23	18.00	1 8131.48
L2015A-S1-L2013A-S	18mROW	0.40	4.04	0.23	18.00	1 12078.93
L2015A-S-L2015A-S1	18mROW	0.40	4.04	0.23	18.00	1 8872.63
L2016A-S1-L2016A-S	18mROW	0.40	4.04	0.23	18.00	1 10224.11
L2016A-S1-L2017B-S1	18mROW	0.40	4.04	0.23	18.00	1 10524.02
L2016B-S-L2016A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2017A-S1-L2017A-S	18mROW	0.40	4.04	0.23	18.00	1 10616.59
L2017A-S-L2017B-S2	18mROW	0.40	4.04	0.23	18.00	1 8213.62
L2017B-S1-L2015A-S	18mROW	0.40	4.04	0.23	18.00	1 10446.58
L2017B-S1-L2021A-S	18mROW	0.40	4.04	0.23	18.00	1 12422.85
L2017B-S2-L2017B-S	18mROW	0.40	4.04	0.23	18.00	1 10448.58
L2017B-S-L2017B-S1	18mROW	0.40	4.04	0.23	18.00	1 6400.23
L2018A-S1-L2018A-S	18mROW	0.40	4.04	0.23	18.00	1 9640.56
L2018A-S-L2010A-S1	18mROW	0.40	4.04	0.23	18.00	1 9501.30
L2019A-S1-L2019A-S	18mROW	0.40	4.04	0.23	18.00	1 12075.09
L2019A-S-L2018A-S1	18mROW	0.40	4.04	0.23	18.00	1 8046.59
L2019B-S-L2019A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2021A-S-L2019A-S1	18mROW	0.40	4.04	0.23	18.00	1 6930.87
L2021B-S-L2021A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2023A-S-L2019A-S1	18mROW	0.40	4.04	0.23	18.00	1 7015.92
L2024A-S1-L2024B-S	18mROW	0.40	4.04	0.23	18.00	1 9963.86
L2024A-S-L2024A-S1	18mROW	0.40	4.04	0.23	18.00	1 9688.82
L2024B-S1-L2023A-S	18mROW	0.40	4.04	0.23	18.00	1 10386.80
L2024B-S-L2024B-S1	18mROW	0.40	4.04	0.23	18.00	1 11559.04
L2026A-S1-L2026A-S	18mROW	0.40	4.04	0.23	18.00	1 10039.87
L2026A-S1-L2027A-S3	18mROW	0.40	4.04	0.23	18.00	1 8798.84
L2026A-S-L2017A-S1	18mROW	0.40	4.04	0.23	18.00	1 9057.57
L2026B-S1-L2024A-S	18mROW	0.40	4.04	0.23	18.00	1 10019.06
L2026B-S-L2026B-S1	18mROW	0.40	4.04	0.23	18.00	1 9373.94
L2027A-S1-L2027A-S	18mROW	0.40	4.04	0.23	18.00	1 8553.24
L2027A-S1-L2038A-S	18mROW	0.40	4.04	0.23	18.00	1 14223.94
L2027A-S2-L2027A-S1	18mROW	0.40	4.04	0.23	18.00	1 8315.07
L2027A-S2-L2042A-S	18mROW	0.40	4.04	0.23	18.00	1 12354.45
L2027A-S3-L2026B-S	18mROW	0.40	4.04	0.23	18.00	1 10008.02
L2027A-S-L2027A-S3	18mROW	0.40	4.04	0.23	18.00	1 4001.53
L2027B-S-L2027A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 698.69
L2029A-S-L2018A-S1	18mROW	0.40	4.04	0.23	18.00	1 7842.03
L2029B-S-L2032A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2030A-S-L2031A-S1	18mROW	0.40	4.04	0.23	18.00	1 11906.71
L2030B-S-L2030A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2031A-S1-L2031A-S	18mROW	0.40	4.04	0.23	18.00	1 10008.02
L2031A-S-L2031B-S1	18mROW	0.40	4.04	0.23	18.00	1 9428.64
L2031B-S1-L2031B-S	18mROW	0.40	4.04	0.23	18.00	1 10949.44
L2031B-S2-C2006A-S	Rouncey	0.40	5.37	0.20	26.00	1 8149.05
L2031B-S-L2031B-S2	18mROW	0.40	4.04	0.23	18.00	1 10741.74
L2032A-S1-L2029A-S	18mROW	0.40	4.04	0.23	18.00	1 8671.39
L2032A-S1-L2030A-S	18mROW	0.40	4.04	0.23	18.00	1 12076.54
L2032A-S-L2032A-S1	18mROW	0.40	4.04	0.23	18.00	1 9609.41

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L2032B-S-L2032A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2033A-S-L2033B-S1	18mROW	0.40	4.04	0.23	18.00	1 11277.60
L2033B-S1-L2033B-S	18mROW	0.40	4.04	0.23	18.00	1 11621.94
L2033B-S-L2036A-S1	18mROW	0.40	4.04	0.23	18.00	1 9024.71
L2034A-S1-L2037A-S	18mROW	0.40	4.04	0.23	18.00	1 13858.45
L2036A-S1-L2032A-S	18mROW	0.40	4.04	0.23	18.00	1 8926.29
L2036A-S-L2036A-S1	18mROW	0.40	4.04	0.23	18.00	1 7275.01
L2037A-S-L2039A-S2	18mROW	0.40	4.04	0.23	18.00	1 8592.75
L2038A-S-L2034A-S1	18mROW	0.40	4.04	0.23	18.00	1 8437.91
L2039A-S1-L2039A-S	18mROW	0.40	4.04	0.23	18.00	1 11097.62
L2039A-S2-L2036A-S	18mROW	0.40	4.04	0.23	18.00	1 8437.91
L2039A-S-L2039A-S2	18mROW	0.40	4.04	0.23	18.00	1 9154.97
L2039B-S1-L2033A-S	18mROW	0.40	4.04	0.23	18.00	1 8093.42
L2039B-S1-L2039B-S	18mROW	0.40	4.04	0.23	18.00	1 9437.14
L2039B-S-L2039A-S1	18mROW	0.40	4.04	0.23	18.00	1 10141.18
L2040A-S1-L2040A-S	18mROW	0.40	4.04	0.23	18.00	1 9562.85
L2040A-S-L2039A-S2	18mROW	0.40	4.04	0.23	18.00	1 8060.70
L2041A-S-L2040A-S1	18mROW	0.40	4.04	0.23	18.00	1 7431.84
L2042A-S1-L2041A-S	18mROW	0.40	4.04	0.23	18.00	1 10967.12
L2042A-S-L2042A-S1	18mROW	0.40	4.04	0.23	18.00	1 8165.40
L2043A-S1-L2043A-S	18mROW	0.40	4.04	0.23	18.00	1 13879.16
L2043A-S-L2040A-S1	18mROW	0.40	4.04	0.23	18.00	1 6880.05
L2043B-S1-L2039B-S1	18mROW	0.40	4.04	0.23	18.00	1 6516.19
L2043B-S1-L2043B-S	18mROW	0.40	4.04	0.23	18.00	1 9579.17
L2043B-S-L2043A-S1	18mROW	0.40	4.04	0.23	18.00	1 8101.31
L2044A-S1-L2044A-S	18mROW	0.40	4.04	0.23	18.00	1 10019.78
L2044A-S-C2002A-S1	18mROW	0.40	4.04	0.23	18.00	1 8967.70
L2044B-S-OF7	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2044C-S-L2044A-S	TRIANGULAR	0.30	0.30	0.14	2.00	1 465.61
L2046A-S1-L2046A-S	18mROW	0.40	4.04	0.23	18.00	1 8913.01
L2046A-S1-L2047A-S	18mROW	0.40	4.04	0.23	18.00	1 11528.58
L2046A-S-L2044A-S1	18mROW	0.40	4.04	0.23	18.00	1 9942.59
L2047A-S1-L2047A-S	18mROW	0.40	4.04	0.23	18.00	1 9777.61
LM97A-S-C2000A-S	walkway	0.25	1.13	0.17	6.00	1 3753.88
M97-M98	CIRCULAR	2.10	3.46	0.53	2.10	1 7703.07
M98-M99	CIRCULAR	2.40	4.52	0.60	2.40	1 9546.63
outlet	CIRCULAR	1.05	0.87	0.26	1.05	1 1103.90
P2-P1	CIRCULAR	1.80	2.54	0.45	1.80	1 3484.54
P3-P2	CIRCULAR	1.80	2.54	0.45	1.80	1 3638.30
P8IN-HI	RECT_CLOSED	1.20	2.88	0.40	2.40	1 7957.73
P8IN-LO	CIRCULAR	2.10	3.46	0.53	2.10	1 17289.12
Pipe_10	CIRCULAR	0.90	0.64	0.23	0.90	1 700.80
Pipe_26	CIRCULAR	0.45	0.16	0.11	0.45	1 142.64
Pipe_27	CIRCULAR	0.38	0.11	0.09	0.38	1 87.84
Pipe_28	CIRCULAR	0.38	0.11	0.09	0.38	1 95.96
Pipe_29	CIRCULAR	0.30	0.07	0.07	0.30	1 64.88
Pipe_30	CIRCULAR	0.30	0.07	0.07	0.30	1 61.23
Pipe_31	CIRCULAR	0.45	0.16	0.11	0.45	1 127.54

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Pipe_32	CIRCULAR	0.53	0.22	0.13	0.53	1 192.13
Pipe_33	CIRCULAR	0.53	0.22	0.13	0.53	1 254.68
Pipe_34	CIRCULAR	0.45	0.16	0.11	0.45	1 169.67
Pipe_35	CIRCULAR	0.45	0.16	0.11	0.45	1 168.60
Pipe_36	CIRCULAR	0.30	0.07	0.07	0.30	1 53.10
Pipe_37	CIRCULAR	0.30	0.07	0.07	0.30	1 57.27
Pipe_43	CIRCULAR	0.82	0.53	0.21	0.82	1 643.11
Pipe_44	CIRCULAR	0.68	0.36	0.17	0.68	1 460.49
Pipe_45	CIRCULAR	0.45	0.16	0.11	0.45	1 168.67
Pipe_46	CIRCULAR	0.45	0.16	0.11	0.45	1 180.25
Pipe_46_(1)	CIRCULAR	0.45	0.16	0.11	0.45	1 180.36
Pipe_47	CIRCULAR	0.30	0.07	0.07	0.30	1 77.91
Pipe_5	CIRCULAR	1.20	1.13	0.30	1.20	1 1511.90
Pipe_6	CIRCULAR	1.20	1.13	0.30	1.20	1 1510.51
Pipe_7	CIRCULAR	0.97	0.75	0.24	0.97	1 867.52
Pipe_8	CIRCULAR	0.90	0.64	0.23	0.90	1 693.84
Pipe_9	CIRCULAR	0.90	0.64	0.23	0.90	1 705.99
PIPE1	CIRCULAR	0.25	0.05	0.06	0.25	1 60.87
PIPE10	CIRCULAR	0.20	0.03	0.05	0.20	1 33.09
PIPE11	CIRCULAR	0.90	0.64	0.23	0.90	1 656.84
PIPE13	CIRCULAR	0.75	0.44	0.19	0.75	1 347.75
PIPE14	CIRCULAR	0.75	0.44	0.19	0.75	1 359.27
PIPE15	CIRCULAR	0.75	0.44	0.19	0.75	1 354.22
PIPE16	CIRCULAR	0.75	0.44	0.19	0.75	1 356.27
PIPE17	RECT_CLOSED	0.90	1.62	0.30	1.80	1 1839.85
PIPE19	RECT_CLOSED	0.90	1.62	0.30	1.80	1 1789.35
PIPE2	CIRCULAR	0.20	0.03	0.05	0.20	1 32.63
PIPE24	CIRCULAR	0.25	0.05	0.06	0.25	1 19.72
PIPE25	CIRCULAR	0.20	0.03	0.05	0.20	1 11.01
PIPE26	CIRCULAR	0.20	0.03	0.05	0.20	1 11.41
PIPE27	CIRCULAR	0.75	0.44	0.19	0.75	1 350.49
PIPE28	CIRCULAR	0.75	0.44	0.19	0.75	1 351.11
PIPE29	CIRCULAR	0.20	0.03	0.05	0.20	1 11.36
PIPE3	CIRCULAR	0.75	0.44	0.19	0.75	1 383.84
PIPE30	CIRCULAR	0.75	0.44	0.19	0.75	1 353.18
PIPE31	CIRCULAR	0.75	0.44	0.19	0.75	1 363.62
PIPE32	CIRCULAR	0.20	0.03	0.05	0.20	1 10.98
PIPE33	CIRCULAR	0.75	0.44	0.19	0.75	1 356.25
PIPE34	CIRCULAR	0.20	0.03	0.05	0.20	1 32.84
PIPE35	CIRCULAR	0.75	0.44	0.19	0.75	1 364.17
PIPE36	CIRCULAR	0.75	0.44	0.19	0.75	1 381.31
PIPE38	CIRCULAR	0.75	0.44	0.19	0.75	1 340.20
PIPE39	CIRCULAR	0.20	0.03	0.05	0.20	1 33.07
PIPE4	CIRCULAR	0.25	0.05	0.06	0.25	1 59.78
PIPE40	CIRCULAR	0.25	0.05	0.06	0.25	1 59.66
PIPE41	CIRCULAR	0.20	0.03	0.05	0.20	1 32.82
PIPE42	CIRCULAR	0.75	0.44	0.19	0.75	1 363.74
PIPE43	CIRCULAR	0.75	0.44	0.19	0.75	1 358.76

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PIPE45	CIRCULAR	0.20	0.03	0.05	0.20	1 33.03
PIPE46	CIRCULAR	0.20	0.03	0.05	0.20	1 32.82
PIPE47	CIRCULAR	0.75	0.44	0.19	0.75	1 388.01
PIPE5	CIRCULAR	0.75	0.44	0.19	0.75	1 388.17
PIPE51	CIRCULAR	0.20	0.03	0.05	0.20	1 32.84
PIPE52	CIRCULAR	0.20	0.03	0.05	0.20	1 32.81
PIPE54	CIRCULAR	0.75	0.44	0.19	0.75	1 368.18
PIPE56	CIRCULAR	0.20	0.03	0.05	0.20	1 32.87
PIPE57	CIRCULAR	0.20	0.03	0.05	0.20	1 32.93
PIPE58	CIRCULAR	0.75	0.44	0.19	0.75	1 371.22
PIPE60	CIRCULAR	0.30	0.07	0.07	0.30	1 68.82
PIPE61	CIRCULAR	0.90	0.64	0.23	0.90	1 649.19
PIPE62	CIRCULAR	0.20	0.03	0.05	0.20	1 57.65
PIPE63	CIRCULAR	0.20	0.03	0.05	0.20	1 34.48
PIPE7	CIRCULAR	0.20	0.03	0.05	0.20	1 10.93
PIPE8	CIRCULAR	0.75	0.44	0.19	0.75	1 351.77
PIPE9	CIRCULAR	0.90	0.64	0.23	0.90	1 649.84
STM101-1-P1	CIRCULAR	1.50	1.77	0.38	1.50	1 2337.04
STM102-101	CIRCULAR	0.45	0.16	0.11	0.45	1 201.72
STM103-102	CIRCULAR	0.25	0.05	0.06	0.25	1 42.11

Transect Summary

Transect 18mROW
Area:

0.0005	0.0021	0.0047	0.0084	0.0131
0.0189	0.0258	0.0336	0.0426	0.0526
0.0636	0.0757	0.0888	0.1030	0.1182
0.1345	0.1514	0.1682	0.1850	0.2023
0.2201	0.2386	0.2577	0.2774	0.2976
0.3185	0.3400	0.3621	0.3848	0.4080
0.4319	0.4564	0.4815	0.5072	0.5335
0.5604	0.5879	0.6160	0.6446	0.6739
0.7038	0.7343	0.7654	0.7971	0.8295
0.8624	0.8959	0.9300	0.9647	1.0000

Hrad:

0.0171	0.0343	0.0514	0.0685	0.0857
0.1028	0.1199	0.1371	0.1542	0.1713
0.1885	0.2056	0.2227	0.2399	0.2570
0.2741	0.3078	0.3414	0.3750	0.4078
0.4391	0.4690	0.4977	0.5251	0.5514
0.5768	0.6011	0.6246	0.6473	0.6692
0.6903	0.7108	0.7307	0.7499	0.7686
0.7868	0.8045	0.8217	0.8385	0.8548

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width:	0.8708	0.8864	0.9017	0.9166
	0.9455	0.9595	0.9733	0.9867
width:	0.0295	0.0590	0.0885	0.1181
	0.1771	0.2066	0.2361	0.2656
	0.3247	0.3542	0.3837	0.4132
	0.4722	0.4722	0.4722	0.4764
	0.5102	0.5271	0.5440	0.5609
	0.5947	0.6116	0.6284	0.6453
	0.6791	0.6960	0.7129	0.7298
	0.7636	0.7804	0.7973	0.8142
	0.8480	0.8649	0.8818	0.8987
	0.9324	0.9493	0.9662	0.9831
				1.0000

Transect Cope
Area:

0.0002	0.0009	0.0021	0.0037	0.0058
0.0084	0.0114	0.0149	0.0189	0.0233
0.0283	0.0341	0.0409	0.0486	0.0572
0.0668	0.0773	0.0887	0.1011	0.1147
0.1296	0.1459	0.1636	0.1825	0.2028
0.2237	0.2449	0.2666	0.2887	0.3114
0.3352	0.3601	0.3862	0.4133	0.4416
0.4710	0.5015	0.5331	0.5659	0.5998
0.6348	0.6709	0.7081	0.7464	0.7859
0.8265	0.8682	0.9110	0.9549	1.0000

Hrad:

0.0218	0.0436	0.0654	0.0872	0.1089
0.1307	0.1525	0.1743	0.1961	0.2179
0.2390	0.2570	0.2732	0.2890	0.3048
0.3209	0.3374	0.3544	0.3719	0.3888
0.4046	0.4198	0.4347	0.4494	0.4501
0.4868	0.5226	0.5576	0.5918	0.6250
0.6559	0.6846	0.7112	0.7362	0.7595
0.7814	0.8021	0.8216	0.8401	0.8577
0.8745	0.8906	0.9060	0.9208	0.9351
0.9489	0.9622	0.9752	0.9877	1.0000

width:

0.0102	0.0205	0.0307	0.0409	0.0512
0.0614	0.0716	0.0818	0.0921	0.1023
0.1176	0.1381	0.1585	0.1790	0.1994
0.2198	0.2403	0.2607	0.2834	0.3129
0.3424	0.3719	0.4014	0.4309	0.4527
0.4617	0.4708	0.4798	0.4889	0.5095
0.5341	0.5586	0.5831	0.6076	0.6321
0.6567	0.6812	0.7057	0.7302	0.7548
0.7793	0.8038	0.8283	0.8529	0.8774
0.9019	0.9264	0.9510	0.9755	1.0000

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Transect Rouncey

Area:	0.0004	0.0016	0.0036	0.0064	0.0099
	0.0143	0.0195	0.0254	0.0322	0.0397
	0.0481	0.0572	0.0672	0.0779	0.0894
	0.1017	0.1149	0.1288	0.1435	0.1595
	0.1770	0.1954	0.2145	0.2343	0.2548
	0.2760	0.2979	0.3206	0.3440	0.3680
	0.3928	0.4184	0.4446	0.4715	0.4992
	0.5276	0.5567	0.5865	0.6170	0.6483
	0.6802	0.7129	0.7463	0.7804	0.8152
	0.8507	0.8870	0.9239	0.9616	1.0000

Hrad:

	0.0193	0.0387	0.0580	0.0774	0.0967
	0.1161	0.1354	0.1548	0.1741	0.1934
	0.2128	0.2321	0.2515	0.2708	0.2902
	0.3095	0.3289	0.3482	0.3676	0.3857
	0.4090	0.4422	0.4736	0.5036	0.5322
	0.5595	0.5856	0.6106	0.6347	0.6578
	0.6801	0.7015	0.7223	0.7424	0.7618
	0.7807	0.7990	0.8168	0.8341	0.8510
	0.8674	0.8834	0.8991	0.9144	0.9294
	0.9441	0.9585	0.9726	0.9864	1.0000

width:

	0.0205	0.0410	0.0615	0.0821	0.1026
	0.1231	0.1436	0.1641	0.1846	0.2051
	0.2256	0.2462	0.2667	0.2872	0.3077
	0.3282	0.3487	0.3692	0.3944	0.4333
	0.4646	0.4831	0.5015	0.5200	0.5385
	0.5569	0.5754	0.5938	0.6123	0.6308
	0.6492	0.6677	0.6862	0.7046	0.7231
	0.7415	0.7600	0.7785	0.7969	0.8154
	0.8338	0.8523	0.8708	0.8892	0.9077
	0.9262	0.9446	0.9631	0.9815	1.0000

Transect Walkway

Area:	0.0135	0.0272	0.0412	0.0555	0.0700
	0.0848	0.0999	0.1152	0.1308	0.1467
	0.1628	0.1792	0.1959	0.2128	0.2300
	0.2475	0.2652	0.2832	0.3015	0.3200
	0.3388	0.3579	0.3772	0.3968	0.4167
	0.4368	0.4572	0.4779	0.4988	0.5200
	0.5415	0.5632	0.5852	0.6075	0.6300
	0.6528	0.6759	0.6992	0.7228	0.7467
	0.7708	0.7952	0.8199	0.8448	0.8700
	0.8955	0.9212	0.9472	0.9735	1.0000

Hrad:

	0.0290	0.0575	0.0854	0.1127	0.1396
	0.1659	0.1918	0.2172	0.2421	0.2666
	0.2907	0.3144	0.3376	0.3605	0.3830
	0.4051	0.4269	0.4484	0.4695	0.4903
	0.5107	0.5309	0.5508	0.5703	0.5896
	0.6087	0.6274	0.6460	0.6642	0.6822
	0.7000	0.7176	0.7349	0.7520	0.7689
	0.7856	0.8020	0.8183	0.8344	0.8503
	0.8660	0.8816	0.8970	0.9122	0.9272
	0.9421	0.9568	0.9713	0.9857	1.0000

width:

	0.5100	0.5200	0.5300	0.5400	0.5500
	0.5600	0.5700	0.5800	0.5900	0.6000
	0.6100	0.6200	0.6300	0.6400	0.6500
	0.6600	0.6700	0.6800	0.6900	0.7000
	0.7100	0.7200	0.7300	0.7400	0.7500
	0.7600	0.7700	0.7800	0.7900	0.8000
	0.8100	0.8200	0.8300	0.8400	0.8500
	0.8600	0.8700	0.8800	0.8900	0.9000
	0.9100	0.9200	0.9300	0.9400	0.9500
	0.9600	0.9700	0.9800	0.9900	1.0000

 NOTE: The summary statistics displayed in this report are
 based on results found at every computational time step,
 not just on results from each reporting time step.

Analysis Options

Flow Units LPS

Process Models:

Rainfall/Runoff YES

RDII NO

Snowmelt NO

Groundwater NO

Flow Routing YES

Ponding Allowed YES

Water Quality NO

Infiltration Method HORTON

Flow Routing Method DYNWAVE

Surcharge Method EXTRAN

Starting Date 10/31/2010 00:00:00

Ending Date 10/31/2010 06:00:00

Antecedent Dry Days 0.0

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Report Time Step 00:01:00
Wet Time Step 00:01:00
Dry Time Step 01:00:00
Routing Time Step 1.00 sec
Variable Time Step NO
Maximum Trials 8
Number of Threads 6
Head Tolerance 0.001500 m

```
*****
Runoff Quantity Continuity
*****
                        Volume      Depth
                        hectare-m    mm
-----
Total Precipitation ..... 4.631      71.667
Evaporation Loss ..... 0.000      0.000
Infiltration Loss ..... 1.055      16.328
Surface Runoff ..... 3.517      54.428
Final Storage ..... 0.066      1.017
Continuity Error (%) ..... -0.149
```

```
*****
Flow Routing Continuity
*****
                        Volume      Volume
                        hectare-m    10^6 ltr
-----
Dry Weather Inflow ..... 0.000      0.000
Wet Weather Inflow ..... 3.517      35.172
Groundwater Inflow ..... 0.000      0.000
RDII Inflow ..... 0.000      0.000
External Inflow ..... 2.407      24.072
External Outflow ..... 4.394      43.944
Flooding Loss ..... 0.000      0.000
Evaporation Loss ..... 0.000      0.000
Exfiltration Loss ..... 0.000      0.000
Initial Stored Volume .... 1.351      13.513
Final Stored Volume ..... 2.888      28.878
Continuity Error (%) ..... -0.090
```

```
*****
Highest Continuity Errors
*****
Node 2034 (5.65%)
Node L1010A-S2 (-4.21%)
Node L1020A-S1 (4.18%)
Node L2036A-S1 (-4.17%)
Node L1059A-S0 (-3.03%)
```

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Highest Flow Instability Indexes

Link F102C-IC (91)
Link CB503-IC (68)
Link L1000A-01 (63)
Link F102B-IC (9)
Link 1001-1000 (3)

```
*****
Routing Time Step Summary
*****
Minimum Time Step : 1.00 sec
Average Time Step : 1.00 sec
Maximum Time Step : 1.00 sec
Percent in Steady State : 0.00
Average Iterations per Step : 2.06
Percent Not Converging : 0.37
```

```
*****
Subcatchment Runoff Summary
*****
```

Total Runoff Subcatchment ltr	Peak Runoff LPS	Runoff Coeff	Total Precip mm	Total Runon mm	Total Evap mm	Total Infil mm	Imperv Runoff mm	Perv Runoff mm	Total Runoff mm	10^6
105			71.67	0.00	0.00	0.00	70.17	0.00	70.17	
0.07	49.60	0.979	71.67	0.00	0.00	0.00	70.17	0.00	70.17	
105B			71.67	0.00	0.00	0.00	70.17	0.00	70.17	
0.12	87.28	0.979	71.67	0.00	0.00	0.00	70.17	0.00	70.17	
107			71.67	0.00	0.00	0.00	70.17	0.00	70.17	
0.05	37.17	0.979	71.67	0.00	0.00	0.00	70.17	0.00	70.17	
108			71.67	0.00	0.00	0.00	70.17	0.00	70.17	
0.23	159.27	0.979	71.67	0.00	0.00	0.00	70.16	0.00	70.16	
108A			71.67	0.00	0.00	0.00	70.16	0.00	70.16	
0.18	125.26	0.979	71.67	0.00	0.00	0.00	70.17	0.00	70.17	
108B			71.67	0.00	0.00	0.00	70.17	0.00	70.17	

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0.13	94.45	0.979							
109			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.16	109.62	0.979							
109A			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.21	146.45	0.979							
110			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.15	103.24	0.979							
110A			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.14	96.69	0.979							
110B			71.67	0.00	0.00	0.00	70.12	0.00	70.12
0.20	138.34	0.978							
110C			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.15	109.12	0.979							
111			71.67	0.00	0.00	0.00	70.16	0.00	70.16
0.09	64.47	0.979							
111A			71.67	0.00	0.00	0.00	70.11	0.00	70.11
0.20	143.20	0.978							
111B			71.67	0.00	0.00	0.00	70.19	0.00	70.19
0.04	24.87	0.979							
111C			71.67	0.00	0.00	0.00	70.19	0.00	70.19
0.02	12.58	0.979							
111D			71.67	0.00	0.00	0.00	70.16	0.00	70.16
0.14	98.90	0.979							
111E			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.11	77.52	0.979							
111F			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.10	73.54	0.979							
BLDG_A			71.67	0.00	0.00	0.00	70.08	0.00	70.08
1.00	698.44	0.978							
BLDG_B			71.67	0.00	0.00	0.00	70.16	0.00	70.16
0.09	64.47	0.979							
BLDG_C			71.67	0.00	0.00	0.00	70.16	0.00	70.16
0.10	69.43	0.979							
BLDG_D			71.67	0.00	0.00	0.00	70.20	0.00	70.20
0.03	20.84	0.980							
BLDG_E			71.67	0.00	0.00	0.00	70.20	0.00	70.20
0.03	22.64	0.980							
C1003A			71.67	0.00	0.00	15.63	45.13	10.03	55.16
0.20	167.48	0.770							
C1006A			71.67	0.00	0.00	12.51	50.13	8.02	58.15
0.23	184.35	0.811							
C1008A			71.67	0.00	0.00	11.24	52.14	7.24	59.38
0.38	307.11	0.829							
C1009A			71.67	0.00	0.00	11.24	52.15	7.25	59.39
0.30	239.78	0.829							
C1023A			71.67	0.00	0.00	14.20	50.01	6.28	56.29
4.17	2687.54	0.785							
C1051A			71.67	0.00	0.00	12.48	50.15	8.06	58.22

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0.13	108.89	0.812							
C1052A			71.67	0.00	0.00	12.49	50.14	8.04	58.19
0.16	131.19	0.812							
C1052B			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.19	156.20	0.812							
C1056A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.14	111.26	0.812							
C2000A			71.67	0.00	0.00	11.87	51.15	7.65	58.79
0.33	266.53	0.820							
C2001A			71.67	0.00	0.00	11.87	51.14	7.64	58.79
0.24	197.76	0.820							
C2002A			71.67	0.00	0.00	12.50	50.13	8.03	58.16
0.17	141.92	0.811							
C2004A			71.67	0.00	0.00	12.50	50.13	8.02	58.15
0.17	135.61	0.811							
C2004B			71.67	0.00	0.00	12.51	50.13	8.02	58.15
0.20	166.17	0.811							
C2005A			71.67	0.00	0.00	12.50	50.13	8.02	58.15
0.22	180.20	0.811							
C2006A			71.67	0.00	0.00	12.50	50.13	8.03	58.17
0.19	154.41	0.812							
C2006B			71.67	0.00	0.00	12.50	50.14	8.03	58.17
0.32	262.19	0.812							
C2008A			71.67	0.00	0.00	12.50	50.13	8.03	58.16
0.12	102.28	0.812							
C2009A			71.67	0.00	0.00	12.50	50.13	8.02	58.15
0.06	50.60	0.811							
C2009B			71.67	0.00	0.00	12.50	50.13	8.02	58.15
0.14	111.21	0.811							
C2049A			71.67	0.00	0.00	13.63	50.06	6.85	56.91
1.62	1107.16	0.794							
CM97A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.24	193.05	0.812							
F101A			71.67	0.00	0.00	11.24	52.15	7.24	59.39
0.09	73.39	0.829							
F1021A			71.67	0.00	0.00	34.17	20.05	17.03	37.09
0.34	221.46	0.517							
F102A			71.67	0.00	0.00	6.25	60.13	4.02	64.15
0.15	114.16	0.895							
F102B			71.67	0.00	0.00	5.00	62.13	3.22	65.34
0.14	106.49	0.912							
F102C			71.67	0.00	0.00	0.00	70.21	0.00	70.21
0.01	4.61	0.980							
F2006A			71.67	0.00	0.00	35.31	20.05	15.89	35.94
0.49	285.28	0.502							
FUT1			71.67	0.00	0.00	0.00	70.17	0.00	70.17
0.47	331.87	0.979							
L1000A			71.67	0.00	0.00	26.89	27.08	17.24	44.33

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0.10	107.37	0.619							
L1001A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.15	122.39	0.812							
L1002A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.15	122.29	0.812							
L1007A			71.67	0.00	0.00	26.88	27.08	17.27	44.35
0.31	318.33	0.619							
L1010A			71.67	0.00	0.00	20.62	37.11	13.26	50.37
0.09	81.88	0.703							
L1010B			71.67	0.00	0.00	31.26	20.06	20.06	40.12
0.23	258.97	0.560							
L1011A			71.67	0.00	0.00	20.60	37.11	13.29	50.40
0.08	69.71	0.703							
L1011B			71.67	0.00	0.00	26.89	27.08	17.24	44.32
0.11	109.78	0.618							
L1012A			71.67	0.00	0.00	20.62	37.11	13.27	50.38
0.08	70.71	0.703							
L1015B			71.67	0.00	0.00	20.63	37.11	13.24	50.35
0.06	52.88	0.703							
L1016A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.26	214.04	0.812							
L1017A			71.67	0.00	0.00	12.50	50.13	8.03	58.17
0.20	166.76	0.812							
L1019A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.19	155.45	0.812							
L1019B			71.67	0.00	0.00	33.14	17.05	21.26	38.30
0.24	283.58	0.534							
L1019C			71.67	0.00	0.00	26.88	27.08	17.26	44.34
0.06	65.93	0.619							
L1020A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.16	127.38	0.812							
L1020B			71.67	0.00	0.00	20.61	37.11	13.28	50.39
0.06	55.17	0.703							
L1020C			71.67	0.00	0.00	20.62	37.11	13.27	50.38
0.07	64.89	0.703							
L1022A			71.67	0.00	0.00	12.51	50.13	8.02	58.15
1.83	1494.68	0.811							
L1024A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.31	256.95	0.812							
L1024B			71.67	0.00	0.00	26.88	27.08	17.26	44.34
0.31	316.23	0.619							
L1026A			71.67	0.00	0.00	12.49	50.15	8.06	58.21
0.10	84.81	0.812							
L1027A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.23	190.16	0.812							
L1027B			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.08	69.09	0.812							
L1027C			71.67	0.00	0.00	26.87	27.08	17.28	44.36

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0.23	234.15	0.619							
L1029A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.22	180.08	0.812							
L1030A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.20	165.02	0.812							
L1031A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.22	178.16	0.812							
L1032A			71.67	0.00	0.00	12.48	50.15	8.06	58.21
0.14	117.79	0.812							
L1032B			71.67	0.00	0.00	26.88	27.08	17.26	44.34
0.18	186.01	0.619							
L1034A			71.67	0.00	0.00	12.49	50.15	8.05	58.19
0.13	104.09	0.812							
L1036A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.25	208.28	0.812							
L1038A			71.67	0.00	0.00	12.49	50.15	8.06	58.21
0.11	87.08	0.812							
L1039A			71.67	0.00	0.00	12.49	50.15	8.06	58.21
0.14	116.37	0.812							
L1039B			71.67	0.00	0.00	26.88	27.08	17.26	44.34
0.08	77.40	0.619							
L1050A			71.67	0.00	0.00	12.48	50.15	8.06	58.21
0.16	133.66	0.812							
L1050B			71.67	0.00	0.00	26.89	27.08	17.25	44.33
0.17	169.41	0.619							
L1051B			71.67	0.00	0.00	26.87	27.08	17.28	44.36
0.21	219.37	0.619							
L1053A			71.67	0.00	0.00	12.49	50.15	8.06	58.21
0.16	127.55	0.812							
L1053B			71.67	0.00	0.00	26.89	27.08	17.25	44.33
0.27	271.20	0.619							
L1054A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.28	230.50	0.812							
L1057A			71.67	0.00	0.00	12.50	50.14	8.04	58.18
0.18	150.16	0.812							
L1058A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.17	136.92	0.812							
L1059A			71.67	0.00	0.00	12.49	50.14	8.04	58.18
0.13	103.39	0.812							
L2007A			71.67	0.00	0.00	31.89	19.06	20.45	39.50
0.22	250.09	0.551							
L2010A			71.67	0.00	0.00	20.62	37.11	13.26	50.38
0.08	71.25	0.703							
L2010B			71.67	0.00	0.00	28.12	25.07	18.07	43.15
0.14	146.88	0.602							
L2011A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.32	259.65	0.812							
L2013A			71.67	0.00	0.00	12.50	50.14	8.04	58.18

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0.30	243.24	0.812							
L2015A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.16	130.98	0.812							
L2016A			71.67	0.00	0.00	20.61	37.11	13.29	50.40
0.02	22.27	0.703							
L2016B			71.67	0.00	0.00	26.87	27.08	17.28	44.36
0.07	70.51	0.619							
L2017A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.15	123.91	0.812							
L2017B			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.14	114.76	0.812							
L2018A			71.67	0.00	0.00	20.62	37.11	13.26	50.37
0.07	61.93	0.703							
L2018B			71.67	0.00	0.00	26.88	27.08	17.25	44.33
0.25	260.14	0.619							
L2019A			71.67	0.00	0.00	12.50	50.14	8.04	58.18
0.15	124.37	0.812							
L2019B			71.67	0.00	0.00	26.88	27.08	17.26	44.34
0.17	171.04	0.619							
L2021A			71.67	0.00	0.00	15.62	45.13	10.05	55.18
0.12	101.14	0.770							
L2021B			71.67	0.00	0.00	26.87	27.08	17.27	44.35
0.26	268.80	0.619							
L2023A			71.67	0.00	0.00	12.49	50.15	8.05	58.20
0.20	166.91	0.812							
L2024A			71.67	0.00	0.00	12.50	50.14	8.04	58.18
0.17	135.91	0.812							
L2024B			71.67	0.00	0.00	12.49	50.15	8.05	58.19
0.17	136.14	0.812							
L2026A			71.67	0.00	0.00	12.49	50.14	8.05	58.19
0.20	160.44	0.812							
L2026B			71.67	0.00	0.00	12.50	50.14	8.03	58.17
0.09	75.07	0.812							
L2027A			71.67	0.00	0.00	12.50	50.14	8.04	58.17
0.24	194.13	0.812							
L2027B			71.67	0.00	0.00	26.88	27.08	17.27	44.35
0.16	161.66	0.619							
L2029A			71.67	0.00	0.00	12.49	50.15	8.05	58.19
0.30	246.10	0.812							
L2029B			71.67	0.00	0.00	31.33	20.06	19.96	40.02
0.31	347.32	0.558							
L2030A			71.67	0.00	0.00	12.50	50.14	8.04	58.18
0.12	99.58	0.812							
L2030B			71.67	0.00	0.00	26.87	27.08	17.28	44.36
0.06	64.90	0.619							
L2031A			71.67	0.00	0.00	12.50	50.14	8.03	58.17
0.12	100.36	0.812							
L2031B			71.67	0.00	0.00	12.49	50.15	8.05	58.20

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0.13	103.71	0.812							
L2032A			71.67	0.00	0.00	12.50	50.13	8.03	58.16
0.17	135.47	0.812							
L2032B			71.67	0.00	0.00	31.89	19.05	20.46	39.51
0.17	196.47	0.551							
L2033A			71.67	0.00	0.00	9.99	54.15	6.44	60.60
0.29	232.68	0.846							
L2033B			71.67	0.00	0.00	9.99	54.16	6.45	60.61
0.15	117.04	0.846							
L2036A			71.67	0.00	0.00	20.61	37.11	13.27	50.39
0.03	30.87	0.703							
L2037A			71.67	0.00	0.00	9.99	54.16	6.45	60.60
0.22	172.02	0.846							
L2038A			71.67	0.00	0.00	9.99	54.15	6.44	60.60
0.21	167.08	0.846							
L2039A			71.67	0.00	0.00	9.99	54.15	6.44	60.60
0.17	133.86	0.846							
L2039B			71.67	0.00	0.00	9.99	54.16	6.45	60.60
0.13	103.37	0.846							
L2040A			71.67	0.00	0.00	20.62	37.11	13.26	50.38
0.04	36.99	0.703							
L2041A			71.67	0.00	0.00	9.99	54.15	6.44	60.60
0.12	97.46	0.846							
L2042A			71.67	0.00	0.00	9.99	54.15	6.44	60.58
0.19	152.75	0.845							
L2043A			71.67	0.00	0.00	9.99	54.15	6.44	60.59
0.09	68.07	0.845							
L2043B			71.67	0.00	0.00	9.99	54.15	6.44	60.59
0.12	94.84	0.845							
L2044A			71.67	0.00	0.00	11.86	51.16	7.67	58.82
0.08	60.96	0.821							
L2044B			71.67	0.00	0.00	28.13	25.08	18.06	43.13
0.19	194.77	0.602							
L2044C			71.67	0.00	0.00	26.87	27.08	17.27	44.35
0.28	290.45	0.619							
L2046A			71.67	0.00	0.00	11.87	51.15	7.65	58.79
0.29	233.24	0.820							
L2047A			71.67	0.00	0.00	11.86	51.16	7.66	58.82
0.18	147.23	0.821							
LM97A			71.67	0.00	0.00	28.13	25.07	18.07	43.14
0.29	303.66	0.602							
R102A			71.67	0.00	0.00	0.00	70.19	0.00	70.19
0.05	32.95	0.979							
R102B			71.67	0.00	0.00	0.00	70.19	0.00	70.19
0.05	36.90	0.979							
R103A			71.67	0.00	0.00	0.00	70.21	0.00	70.21
0.03	23.73	0.980							
ST103			71.67	0.00	0.00	0.00	70.14	0.00	70.14

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0.13	89.19	0.979							
STM102			71.67	0.00	0.00	0.00	70.12	0.00	70.12
0.20	139.00	0.978							
ULT-POND			71.67	0.00	0.00	29.42	28.06	13.59	41.65
1.35	848.13	0.581							
UNC1			71.67	0.00	0.00	26.89	27.08	17.25	44.33
0.26	266.47	0.619							
UNC2			71.67	0.00	0.00	26.87	27.08	17.27	44.35
0.18	188.08	0.619							
UNC-2			71.67	0.00	0.00	37.37	14.03	34.30	34.30
0.01	15.55	0.479							
UNC3			71.67	0.00	0.00	26.87	27.08	17.27	44.35
0.14	148.07	0.619							
UNC-3			71.67	0.00	0.00	43.70	0.00	28.20	28.20
0.01	9.75	0.394							
UNC-4			71.67	0.00	0.00	17.57	42.10	11.14	53.24
0.02	18.94	0.743							
UNC-5			71.67	0.00	0.00	36.39	16.04	35.16	35.16
0.01	17.55	0.491							
UNC-6			71.67	0.00	0.00	36.35	16.03	35.21	35.21
0.01	6.70	0.491							

Node Depth Summary

Node	Type	Average Depth Meters	Maximum Depth Meters	Maximum HGL Meters	Time of Max Occurrence days hr:min	Reported Max Depth Meters
PD_OUTFALL	JUNCTION	0.99	1.32	95.85	0 03:11	1.32
STM101	JUNCTION	1.29	1.46	95.93	0 03:10	1.46
STM102	JUNCTION	0.46	0.82	96.17	0 01:10	0.82
STM103	JUNCTION	0.41	0.81	96.22	0 01:10	0.81
STM104	JUNCTION	0.59	0.75	95.93	0 03:10	0.75
STM104-1	JUNCTION	2.59	2.77	95.93	0 03:10	2.77
STM105	JUNCTION	0.54	0.88	96.15	0 01:12	0.88
STM106	JUNCTION	0.50	0.94	96.28	0 01:11	0.94
STM107	JUNCTION	0.30	0.86	96.45	0 01:11	0.86
STM108	JUNCTION	0.29	0.83	96.43	0 01:11	0.81
STM109	JUNCTION	0.23	0.78	96.45	0 01:11	0.76
STM110	JUNCTION	0.22	0.92	96.64	0 01:11	0.91
STM111	JUNCTION	0.12	0.82	96.68	0 01:12	0.81
X105A	JUNCTION	0.58	0.81	96.01	0 01:11	0.80
X107A	JUNCTION	0.34	0.82	96.35	0 01:12	0.82
X110A	JUNCTION	0.25	0.92	96.60	0 01:11	0.92

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X111A	JUNCTION	0.14	0.85	96.68	0 01:11	0.84
XCB108A	JUNCTION	0.35	0.84	96.36	0 01:11	0.84
XCB108B	JUNCTION	0.33	0.84	96.40	0 01:11	0.83
XCB108C	JUNCTION	0.30	0.83	96.43	0 01:11	0.81
XCB109A	JUNCTION	0.27	0.80	96.44	0 01:11	0.78
XCB111E	JUNCTION	0.18	0.89	96.66	0 01:11	0.88
XCB111F	JUNCTION	0.15	0.86	96.67	0 01:11	0.86
XCB111G	JUNCTION	0.13	0.83	96.68	0 01:11	0.82
XRfA	JUNCTION	0.31	0.47	96.61	0 01:52	0.47
XRfB	JUNCTION	0.03	0.03	96.88	0 01:50	0.03
XRfC	JUNCTION	0.04	0.05	96.65	0 01:50	0.05
XRfD	JUNCTION	0.03	0.22	96.70	0 01:10	0.19
XRfE	JUNCTION	0.02	0.11	96.68	0 01:11	0.11
XR00FE	JUNCTION	0.14	0.84	96.68	0 01:11	0.84
OF1	OUTFALL	0.00	0.00	96.00	0 00:00	0.00
OF10	OUTFALL	0.00	0.00	0.00	0 00:00	0.00
OF2	OUTFALL	0.93	1.29	95.84	0 03:05	1.29
OF3	OUTFALL	0.00	0.00	94.46	0 00:00	0.00
OF6	OUTFALL	0.00	0.00	100.71	0 00:00	0.00
OF7	OUTFALL	0.00	0.18	100.47	0 01:10	0.18
OF8	OUTFALL	0.00	0.00	98.60	0 00:00	0.00
OF9	OUTFALL	0.00	0.00	99.90	0 00:00	0.00
POND6_MJ	OUTFALL	0.00	0.06	100.68	0 01:10	0.06
POND6_MN	OUTFALL	3.74	3.74	97.50	0 00:00	3.74
SU87	OUTFALL	0.00	0.00	100.80	0 00:00	0.00
1000	STORAGE	1.50	1.69	95.93	0 03:09	1.69
1001	STORAGE	1.64	1.83	95.93	0 03:09	1.83
1002	STORAGE	1.56	1.96	96.15	0 01:13	1.96
1003	STORAGE	1.51	2.00	96.25	0 01:14	2.00
1004	STORAGE	1.47	1.97	96.27	0 01:14	1.97
1005	STORAGE	1.28	1.81	96.30	0 01:14	1.81
1006	STORAGE	1.03	1.62	96.39	0 01:14	1.62
1007	STORAGE	0.36	0.92	96.59	0 01:14	0.92
1008	STORAGE	0.34	0.70	97.32	0 01:11	0.70
1009	STORAGE	0.32	0.57	97.86	0 01:10	0.57
1010	STORAGE	0.49	1.23	96.61	0 01:14	1.22
1011	STORAGE	0.43	1.20	96.73	0 01:14	1.20
1012	STORAGE	0.40	0.95	96.86	0 01:15	0.95
1013	STORAGE	0.40	0.95	96.97	0 01:15	0.95
1014	STORAGE	0.40	0.91	97.42	0 01:15	0.91
1015	STORAGE	0.30	0.44	98.33	0 01:10	0.44
1016	STORAGE	0.32	1.01	96.79	0 01:14	1.01
1017	STORAGE	0.20	0.64	97.05	0 01:15	0.64
1018	STORAGE	0.28	0.70	97.17	0 01:15	0.70
1019	STORAGE	0.26	0.61	97.59	0 01:10	0.61
1020	STORAGE	0.38	0.60	98.01	0 01:12	0.60
1020N	STORAGE	0.31	0.48	97.88	0 01:10	0.48
1024	STORAGE	1.09	1.49	96.18	0 01:12	1.49

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1025	STORAGE	0.89	1.36	96.25	0 01:12	1.36
1026	STORAGE	0.49	0.94	96.29	0 01:12	0.94
1027	STORAGE	0.40	0.88	96.58	0 01:12	0.88
1028	STORAGE	0.38	0.71	96.69	0 01:12	0.71
1029	STORAGE	0.39	0.82	97.15	0 01:16	0.82
1030	STORAGE	0.38	0.66	97.28	0 01:16	0.66
1031	STORAGE	0.36	0.60	97.68	0 01:12	0.60
1032	STORAGE	0.72	1.34	96.47	0 01:12	1.34
1033	STORAGE	0.63	1.35	96.58	0 01:12	1.35
1034	STORAGE	0.28	0.77	96.66	0 01:12	0.77
1035	STORAGE	0.33	0.71	96.68	0 01:13	0.71
1036	STORAGE	0.34	0.57	96.82	0 01:16	0.57
1037	STORAGE	0.31	0.46	96.88	0 01:10	0.46
1038	STORAGE	0.31	0.46	97.06	0 01:10	0.46
1039	STORAGE	0.44	1.19	97.03	0 01:11	1.19
1050	STORAGE	0.33	1.11	97.11	0 01:11	1.11
1051	STORAGE	0.14	1.06	98.19	0 01:10	1.06
1052	STORAGE	0.26	0.84	97.31	0 01:12	0.84
1053	STORAGE	0.10	0.54	97.20	0 01:11	0.54
1054	STORAGE	0.35	0.69	97.43	0 01:12	0.69
1055	STORAGE	0.32	0.59	97.43	0 01:12	0.59
1056	STORAGE	0.35	0.74	97.33	0 01:12	0.74
1057	STORAGE	0.35	0.60	97.46	0 01:13	0.60
1058	STORAGE	0.32	0.48	97.62	0 01:10	0.48
1059	STORAGE	0.32	0.49	97.57	0 01:10	0.49
2000	STORAGE	1.38	2.04	98.22	0 01:13	2.04
2001	STORAGE	1.32	2.06	98.30	0 01:13	2.06
2002	STORAGE	0.82	1.61	98.36	0 01:13	1.61
2003	STORAGE	0.77	1.59	98.40	0 01:13	1.59
2004	STORAGE	0.66	1.56	98.49	0 01:12	1.56
2005	STORAGE	0.49	1.55	98.75	0 01:12	1.55
2005A	STORAGE	0.40	1.25	98.77	0 01:12	1.25
2006	STORAGE	0.38	1.18	98.77	0 01:11	1.17
2007	STORAGE	0.39	0.98	98.79	0 01:11	0.97
2008	STORAGE	0.37	0.74	98.84	0 01:11	0.74
2009	STORAGE	0.35	0.67	99.05	0 01:10	0.67
2010	STORAGE	0.54	1.54	98.62	0 01:13	1.54
2011	STORAGE	0.39	1.33	98.78	0 01:13	1.33
2012	STORAGE	0.33	1.15	98.91	0 01:13	1.15
2013	STORAGE	0.33	1.06	99.22	0 01:12	1.06
2014	STORAGE	0.32	1.03	99.27	0 01:12	1.02
2015	STORAGE	0.30	0.81	99.45	0 01:11	0.81
2016	STORAGE	0.31	0.78	99.97	0 01:10	0.78
2017	STORAGE	0.38	0.78	99.82	0 01:11	0.77
2018	STORAGE	0.76	1.84	98.70	0 01:13	1.84
2019	STORAGE	0.43	1.07	98.84	0 01:13	1.07
2020	STORAGE	0.34	0.63	99.14	0 01:10	0.63
2021	STORAGE	0.33	0.58	99.24	0 01:10	0.58

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2022	STORAGE	0.37	0.78	99.12	0 01:14	0.78
2023	STORAGE	0.37	0.76	99.22	0 01:13	0.76
2024	STORAGE	0.35	0.65	99.36	0 01:12	0.65
2025	STORAGE	0.28	0.55	99.61	0 01:11	0.55
2026	STORAGE	0.37	0.72	100.03	0 01:10	0.72
2027	STORAGE	0.35	0.72	100.43	0 01:07	0.72
2028	STORAGE	0.62	1.71	98.73	0 01:14	1.71
2029	STORAGE	0.53	1.68	98.84	0 01:14	1.68
2030	STORAGE	0.40	1.22	98.86	0 01:14	1.22
2031	STORAGE	0.35	0.77	98.95	0 01:14	0.77
2032	STORAGE	0.45	1.40	98.98	0 01:14	1.40
2033	STORAGE	0.38	0.92	99.44	0 01:16	0.92
2034	STORAGE	0.30	0.74	99.44	0 01:16	0.74
2035	STORAGE	0.24	0.37	99.45	0 01:18	0.37
2036	STORAGE	0.43	1.33	99.03	0 01:14	1.33
2037	STORAGE	0.26	0.53	99.53	0 01:11	0.53
2038	STORAGE	0.32	0.55	100.08	0 01:11	0.55
2039	STORAGE	0.34	0.71	99.39	0 01:17	0.71
2040	STORAGE	0.38	1.06	99.13	0 01:14	1.06
2041	STORAGE	0.33	0.56	99.62	0 01:11	0.56
2042	STORAGE	0.32	0.49	100.09	0 01:11	0.49
2043	STORAGE	0.09	0.60	99.87	0 01:18	0.60
2044	STORAGE	0.33	0.93	98.44	0 01:12	0.93
2045	STORAGE	0.37	0.86	98.51	0 01:13	0.86
2046	STORAGE	0.34	0.80	98.52	0 01:13	0.80
2047	STORAGE	0.33	0.60	98.55	0 01:13	0.60
301	STORAGE	2.97	3.98	98.61	0 01:15	3.98
C1003A-S	STORAGE	0.16	1.62	98.14	0 01:20	1.62
C1003A-S1	STORAGE	0.00	0.07	98.16	0 01:19	0.07
C1006A-S	STORAGE	0.21	1.73	98.61	0 01:13	1.73
C1006A-S1	STORAGE	0.01	0.11	98.60	0 01:13	0.11
C1008A-S	STORAGE	0.13	1.61	98.90	0 01:10	1.61
C1008A-S1	STORAGE	0.00	0.00	98.92	0 01:11	0.00
C1009A-S	STORAGE	0.14	1.59	99.88	0 01:10	1.59
C1009A-S1	STORAGE	0.00	0.02	99.88	0 01:12	0.02
C1023A-S	STORAGE	0.20	1.73	98.44	0 01:13	1.73
C1051A-S	STORAGE	0.10	1.55	100.45	0 01:10	1.55
C1052A-S	STORAGE	0.10	1.54	100.07	0 01:11	1.54
C1052A-S1	STORAGE	0.00	0.01	100.16	0 01:11	0.01
C1052A-S2	STORAGE	0.00	0.08	100.07	0 01:11	0.08
C1052B-S	STORAGE	0.14	1.61	100.16	0 01:12	1.61
C1052B-S1	STORAGE	0.00	0.06	100.15	0 01:10	0.06
C1056A-S	STORAGE	0.15	1.68	100.11	0 01:10	1.68
C1056A-S1	STORAGE	0.00	0.07	100.29	0 01:10	0.06
C2000A-S	STORAGE	0.17	1.71	100.71	0 01:10	1.71
C2000A-S1	STORAGE	0.00	0.00	100.94	0 00:00	0.00
C2001A-S	STORAGE	0.17	1.64	100.87	0 01:11	1.64
C2002A-S	STORAGE	0.20	1.63	100.80	0 01:22	1.63

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C2002A-S1	STORAGE	0.01	0.08	100.90	0	01:20	0.08
C2002A-S2	STORAGE	0.00	0.02	100.80	0	01:23	0.01
C2004A-S	STORAGE	0.14	1.60	100.72	0	01:10	1.60
C2004A-S1	STORAGE	0.00	0.01	100.72	0	01:11	0.01
C2004B-S	STORAGE	0.12	1.56	100.56	0	01:10	1.56
C2004B-S1	STORAGE	0.00	0.05	100.43	0	01:12	0.05
C2005A-S	STORAGE	0.12	1.53	100.44	0	01:10	1.53
C2006A-S	STORAGE	0.08	1.43	101.07	0	01:10	1.43
C2006A-S1	STORAGE	0.00	0.00	101.31	0	00:00	0.00
C2006B-S	STORAGE	0.13	1.60	100.98	0	01:10	1.60
C2006B-S1	STORAGE	0.00	0.05	100.97	0	01:11	0.05
C2008A-S	STORAGE	0.10	1.56	101.22	0	01:10	1.56
C2009A-S	STORAGE	0.04	0.68	100.46	0	01:10	0.68
C2009A-S1	STORAGE	0.00	0.00	101.43	0	00:00	0.00
C2009B-S	STORAGE	0.09	1.51	101.24	0	01:10	1.51
C2009B-S1	STORAGE	0.00	0.02	101.24	0	01:10	0.02
C2049A-S	STORAGE	0.18	1.73	100.58	0	01:12	1.73
CB102	STORAGE	0.50	0.80	96.10	0	01:10	0.80
CB103	STORAGE	0.41	0.81	96.22	0	01:10	0.81
CB105A	STORAGE	0.51	0.85	96.39	0	01:10	0.84
CB106A	STORAGE	0.06	0.63	96.75	0	01:10	0.63
CB107A	STORAGE	0.03	0.29	96.86	0	01:10	0.29
CB108A	STORAGE	0.20	1.26	97.06	0	01:12	1.26
CB108B	STORAGE	0.13	0.94	96.95	0	01:12	0.94
CB108C	STORAGE	0.11	1.06	96.95	0	01:10	1.06
CB109A	STORAGE	0.12	1.22	97.14	0	01:10	1.22
CB109B	STORAGE	0.16	1.65	97.73	0	01:11	1.65
CB110A	STORAGE	0.12	1.60	97.81	0	01:11	1.60
CB110B	STORAGE	0.09	1.22	97.47	0	01:10	1.22
CB110C	STORAGE	0.09	0.87	97.24	0	01:12	0.87
CB110D	STORAGE	0.08	0.70	97.11	0	01:12	0.70
CB111A	STORAGE	0.12	1.42	97.67	0	01:12	1.41
CB111B	STORAGE	0.01	0.16	96.70	0	01:13	0.15
CB111C	STORAGE	0.03	0.28	96.69	0	01:13	0.28
CB111D	STORAGE	0.05	0.86	97.17	0	01:10	0.84
CB111E	STORAGE	0.06	0.69	97.14	0	01:11	0.69
CB111F	STORAGE	0.06	0.69	97.18	0	01:11	0.69
CB111G	STORAGE	0.09	1.12	97.64	0	01:11	1.11
CB503-S	STORAGE	0.31	1.00	96.53	0	01:10	1.00
CM97A-S	STORAGE	0.14	1.47	100.97	0	01:10	1.47
CM97A-S1	STORAGE	0.02	0.08	101.28	0	01:14	0.08
F1021A-S	STORAGE	0.20	1.43	99.10	0	01:10	1.43
F102A-S	STORAGE	0.10	1.51	97.43	0	01:10	1.51
F102B-S	STORAGE	0.11	1.47	97.34	0	01:10	1.47
F102C-S	STORAGE	0.41	0.56	95.93	0	03:10	0.56
F2006A-S	STORAGE	0.21	1.44	100.88	0	01:10	1.44
L1000A-S	STORAGE	0.30	1.90	97.50	0	01:10	1.90
L1001A-S	STORAGE	0.20	1.63	98.16	0	01:18	1.63

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L1001A-S1	STORAGE	0.01	0.09	98.16	0	01:18	0.09
L1001A-S2	STORAGE	0.01	0.08	98.26	0	01:12	0.08
L1002A-S	STORAGE	0.20	1.68	98.16	0	01:18	1.68
L1007A-S	STORAGE	0.14	1.67	99.22	0	01:10	1.67
L1010A-S	STORAGE	0.29	1.73	98.93	0	01:10	1.73
L1010A-S1	STORAGE	0.00	0.04	99.11	0	01:17	0.04
L1010A-S2	STORAGE	0.01	0.14	98.92	0	01:10	0.14
L1010B-S	STORAGE	0.15	2.52	99.21	0	01:10	2.52
L1011A-S	STORAGE	0.21	1.59	99.24	0	01:11	1.59
L1011A-S1	STORAGE	0.00	0.00	99.63	0	00:00	0.00
L1011B-S	STORAGE	0.13	2.43	99.51	0	01:10	2.43
L1012A-S	STORAGE	0.13	1.51	99.56	0	01:10	1.51
L1015A-S	STORAGE	0.13	1.59	100.96	0	01:10	1.59
L1015A-S1	STORAGE	0.00	0.08	101.18	0	01:10	0.08
L1015A-S2	STORAGE	0.00	0.10	100.95	0	01:11	0.10
L1016A-S	STORAGE	0.22	1.63	99.11	0	01:16	1.63
L1016A-S1	STORAGE	0.00	0.05	99.59	0	01:12	0.05
L1017A-S	STORAGE	0.17	1.59	99.60	0	01:12	1.59
L1017A-S1	STORAGE	0.00	0.06	99.87	0	01:11	0.06
L1019A-S	STORAGE	0.20	1.62	99.87	0	01:10	1.62
L1019A-S1	STORAGE	0.00	0.06	100.18	0	01:11	0.06
L1019B-S	STORAGE	0.13	2.32	99.90	0	01:10	2.32
L1019C-S	STORAGE	0.11	1.62	99.89	0	01:10	1.62
L1020A-S	STORAGE	0.16	1.57	100.19	0	01:10	1.57
L1020A-S1	STORAGE	0.00	0.06	100.51	0	01:12	0.06
L1020B-S	STORAGE	0.15	1.57	100.44	0	01:15	1.57
L1020B-S1	STORAGE	0.00	0.04	100.44	0	01:15	0.04
L1020C-S	STORAGE	0.14	1.50	99.96	0	01:18	1.50
L1020C-S1	STORAGE	0.00	0.00	100.04	0	00:00	0.00
L1022A-S	STORAGE	0.25	1.73	100.29	0	01:12	1.73
L1024A-S	STORAGE	0.19	1.69	98.27	0	01:13	1.69
L1024A-S1	STORAGE	0.01	0.11	98.39	0	01:12	0.11
L1024B-S	STORAGE	0.17	2.37	98.51	0	01:10	2.37
L1026A-S	STORAGE	0.19	1.59	98.39	0	01:11	1.59
L1026A-S1	STORAGE	0.00	0.03	98.69	0	01:11	0.03
L1027A-S	STORAGE	0.21	1.64	98.69	0	01:12	1.64
L1027B-S	STORAGE	0.12	1.40	98.84	0	01:10	1.40
L1027B-S0	STORAGE	0.00	0.04	98.86	0	01:10	0.04
L1027B-S1	STORAGE	0.00	0.05	99.19	0	01:17	0.05
L1027C-S	STORAGE	0.13	2.49	99.28	0	01:10	2.49
L1029A-S	STORAGE	0.20	1.65	99.19	0	01:16	1.65
L1029A-S1	STORAGE	0.00	0.06	99.46	0	01:14	0.06
L1030A-S	STORAGE	0.21	1.63	99.47	0	01:13	1.63
L1030A-S1	STORAGE	0.00	0.06	99.80	0	01:12	0.06
L1031A-S	STORAGE	0.16	1.61	99.82	0	01:11	1.61
L1032A-S	STORAGE	0.19	1.63	98.53	0	01:10	1.63
L1032A-S1	STORAGE	0.00	0.08	99.04	0	01:11	0.08
L1032B-S	STORAGE	0.13	2.47	98.82	0	01:10	2.47

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L1034A-S	STORAGE	0.14	1.52	99.04	0 01:10	1.52
L1034A-S1	STORAGE	0.00	0.03	99.23	0 01:11	0.03
L1036A-S	STORAGE	0.19	1.61	99.23	0 01:10	1.61
L1038A-S	STORAGE	0.13	1.50	99.52	0 01:10	1.50
L1038A-S1	STORAGE	0.00	0.00	99.64	0 00:00	0.00
L1039A-S	STORAGE	0.17	1.60	99.18	0 01:11	1.60
L1039A-S1	STORAGE	0.00	0.08	99.52	0 01:10	0.08
L1039B-S	STORAGE	0.10	2.36	99.37	0 01:10	2.36
L1050A-S	STORAGE	0.15	1.61	99.59	0 01:10	1.61
L1050B-S	STORAGE	0.18	2.47	100.02	0 01:10	2.47
L1051B-S	STORAGE	0.11	2.45	100.78	0 01:10	2.45
L1053A-S	STORAGE	0.12	1.46	100.16	0 01:13	1.46
L1053A-S1	STORAGE	0.00	0.06	100.66	0 01:11	0.06
L1053B-S	STORAGE	0.16	2.44	100.53	0 01:10	2.44
L1054A-S	STORAGE	0.18	1.62	100.66	0 01:10	1.62
L1057A-S	STORAGE	0.16	1.60	100.29	0 01:10	1.60
L1057A-S1	STORAGE	0.00	0.05	100.42	0 01:10	0.05
L1058A-S	STORAGE	0.16	1.56	100.43	0 01:10	1.56
L1059A-S	STORAGE	0.10	1.41	100.81	0 01:10	1.41
L1059A-S0	STORAGE	0.00	0.06	100.84	0 01:10	0.06
L1059A-S1	STORAGE	0.00	0.00	100.96	0 00:00	0.00
L2007A-S	STORAGE	0.14	2.49	101.72	0 01:10	2.49
L2010A-S	STORAGE	0.01	0.08	101.00	0 01:17	0.08
L2010A-S1	STORAGE	0.01	0.09	101.26	0 01:11	0.09
L2010A-S2	STORAGE	0.30	1.70	100.90	0 01:20	1.70
L2010B-S	STORAGE	0.10	2.41	101.00	0 01:10	2.41
L2011A-S	STORAGE	0.23	1.67	101.00	0 01:18	1.67
L2011A-S1	STORAGE	0.00	0.03	101.49	0 01:12	0.03
L2013A-S	STORAGE	0.17	1.61	101.49	0 01:10	1.61
L2015A-S	STORAGE	0.18	1.60	102.04	0 01:10	1.60
L2015A-S1	STORAGE	0.00	0.05	102.04	0 01:11	0.05
L2016A-S	STORAGE	0.04	1.31	101.94	0 01:10	1.31
L2016A-S1	STORAGE	0.00	0.00	102.22	0 00:00	0.00
L2016B-S	STORAGE	0.16	2.35	102.38	0 01:10	2.35
L2017A-S	STORAGE	0.13	1.55	102.34	0 01:10	1.55
L2017A-S1	STORAGE	0.00	0.02	102.43	0 01:11	0.02
L2017B-S	STORAGE	0.15	1.56	102.22	0 01:10	1.56
L2017B-S1	STORAGE	0.04	0.09	102.15	0 01:11	0.09
L2017B-S2	STORAGE	0.00	0.06	102.33	0 01:10	0.06
L2018A-S	STORAGE	0.24	1.66	101.27	0 01:10	1.66
L2018A-S1	STORAGE	0.01	0.10	101.39	0 01:12	0.10
L2018B-S	STORAGE	0.15	2.42	101.42	0 01:10	2.42
L2019A-S	STORAGE	0.25	1.68	101.40	0 01:11	1.68
L2019A-S1	STORAGE	0.00	0.09	101.71	0 01:11	0.09
L2019B-S	STORAGE	0.17	2.41	101.54	0 01:10	2.41
L2021A-S	STORAGE	0.24	1.64	101.87	0 01:10	1.63
L2021B-S	STORAGE	0.15	2.45	102.08	0 01:10	2.45
L2023A-S	STORAGE	0.16	1.56	101.71	0 01:14	1.56

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L2024A-S	STORAGE	0.20	1.66	102.21	0 01:12	1.66
L2024A-S1	STORAGE	0.00	0.08	102.20	0 01:12	0.08
L2024B-S	STORAGE	0.21	1.65	102.08	0 01:14	1.65
L2024B-S1	STORAGE	0.00	0.07	102.07	0 01:14	0.07
L2026A-S	STORAGE	0.15	1.60	102.43	0 01:10	1.60
L2026A-S1	STORAGE	0.00	0.00	102.48	0 00:00	0.00
L2026B-S	STORAGE	0.19	1.64	102.28	0 01:10	1.64
L2026B-S1	STORAGE	0.00	0.09	102.27	0 01:11	0.09
L2027A-S	STORAGE	0.12	1.53	102.41	0 01:10	1.53
L2027A-S1	STORAGE	0.00	0.00	102.62	0 00:00	0.00
L2027A-S2	STORAGE	0.00	0.00	102.71	0 00:00	0.00
L2027A-S3	STORAGE	0.00	0.09	102.37	0 01:10	0.09
L2027B-S	STORAGE	0.12	2.14	102.97	0 01:10	2.14
L2029A-S	STORAGE	0.17	1.61	101.40	0 01:11	1.61
L2029B-S	STORAGE	0.20	2.43	102.08	0 01:10	2.43
L2030A-S	STORAGE	0.24	1.65	101.31	0 01:16	1.65
L2030B-S	STORAGE	0.15	2.35	101.46	0 01:10	2.35
L2031A-S	STORAGE	0.17	1.57	101.21	0 01:11	1.57
L2031A-S1	STORAGE	0.00	0.03	101.31	0 01:17	0.03
L2031B-S	STORAGE	0.14	1.56	101.05	0 01:10	1.56
L2031B-S1	STORAGE	0.00	0.00	101.22	0 00:00	0.00
L2031B-S2	STORAGE	0.00	0.00	101.14	0 00:00	0.00
L2032A-S	STORAGE	0.28	1.72	101.63	0 01:10	1.72
L2032A-S1	STORAGE	0.00	0.05	101.62	0 01:10	0.05
L2032B-S	STORAGE	0.15	2.42	101.72	0 01:10	2.42
L2033A-S	STORAGE	0.17	1.64	101.63	0 01:12	1.63
L2033B-S	STORAGE	0.21	1.69	101.63	0 01:10	1.69
L2033B-S1	STORAGE	0.00	0.06	101.63	0 01:11	0.06
L2034A-S1	STORAGE	0.00	0.04	102.02	0 01:11	0.04
L2036A-S	STORAGE	0.11	1.54	101.63	0 01:11	1.54
L2036A-S1	STORAGE	0.01	0.09	101.63	0 01:10	0.08
L2037A-S	STORAGE	0.18	1.62	101.59	0 01:13	1.62
L2038A-S	STORAGE	0.15	1.58	102.03	0 01:10	1.57
L2039A-S	STORAGE	0.20	1.63	101.63	0 01:12	1.63
L2039A-S1	STORAGE	0.00	0.05	101.67	0 01:10	0.04
L2039A-S2	STORAGE	0.00	0.04	101.63	0 01:11	0.04
L2039B-S	STORAGE	0.15	1.56	101.67	0 01:10	1.56
L2039B-S1	STORAGE	0.00	0.00	101.75	0 00:00	0.00
L2040A-S	STORAGE	0.06	1.43	101.55	0 01:10	1.43
L2040A-S1	STORAGE	0.00	0.03	101.68	0 01:12	0.03
L2041A-S	STORAGE	0.18	1.55	101.74	0 01:13	1.55
L2042A-S	STORAGE	0.19	1.57	102.01	0 01:10	1.57
L2042A-S1	STORAGE	0.00	0.04	102.01	0 01:11	0.04
L2043A-S	STORAGE	0.15	1.54	101.68	0 01:10	1.54
L2043A-S1	STORAGE	0.00	0.03	101.85	0 01:10	0.03
L2043B-S	STORAGE	0.14	1.54	101.86	0 01:10	1.54
L2043B-S1	STORAGE	0.00	0.00	102.01	0 00:00	0.00
L2044A-S	STORAGE	0.22	1.65	100.93	0 01:10	1.65

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L2044A-S1	STORAGE	0.00	0.06	100.93	0	01:10	0.06
L2044B-S	STORAGE	0.11	1.86	100.57	0	01:10	1.86
L2044C-S	STORAGE	0.16	2.47	101.21	0	01:10	2.47
L2046A-S	STORAGE	0.17	1.64	100.86	0	01:11	1.64
L2046A-S1	STORAGE	0.00	0.00	100.97	0	00:00	0.00
L2047A-S	STORAGE	0.19	1.56	100.64	0	01:11	1.56
L2047A-S1	STORAGE	0.00	0.00	100.97	0	00:00	0.00
LM97A-S	STORAGE	0.13	1.98	101.25	0	01:10	1.98
M97	STORAGE	1.63	2.43	98.38	0	01:16	2.43
M98	STORAGE	2.00	2.09	97.60	0	01:11	2.09
P1	STORAGE	2.22	2.42	95.92	0	03:11	2.42
P2	STORAGE	1.56	1.77	95.92	0	03:10	1.77
P3	STORAGE	1.54	1.74	95.92	0	03:10	1.74
POND	STORAGE	3.00	3.22	95.92	0	03:12	3.22
R102A-S	STORAGE	0.03	0.25	96.35	0	01:10	0.25
R102B-S	STORAGE	0.03	0.27	96.22	0	01:10	0.27
R103A-S	STORAGE	0.02	0.19	96.55	0	01:10	0.19
RFA	STORAGE	0.05	0.07	101.07	0	01:52	0.07
RFB	STORAGE	0.05	0.08	101.08	0	01:50	0.08
RFC	STORAGE	0.05	0.08	101.08	0	01:50	0.08
RFD	STORAGE	0.05	0.07	101.07	0	01:50	0.07
RFE	STORAGE	0.05	0.07	101.07	0	01:45	0.07
STM101-1	STORAGE	1.54	1.75	95.93	0	03:10	1.75
STM102-1	STORAGE	0.58	1.04	96.35	0	01:10	1.04
STM103-1	STORAGE	0.32	0.51	96.38	0	01:10	0.51

Node Inflow Summary

Node	Type	Maximum Lateral Inflow LPS	Maximum Total Inflow LPS	Time of Max Occurrence days hr:min	Lateral Inflow volume 10^6 ltr	Total Inflow volume 10^6 ltr	Flow Balance Error Percent
PD_OUTFALL	JUNCTION	0.00	608.96	0 01:43	0	6.82	0.114
STM101	JUNCTION	0.00	1433.23	0 01:10	0	4.08	0.718
STM102	JUNCTION	0.00	422.40	0 01:09	0	0.584	0.932
STM103	JUNCTION	331.87	331.87	0 01:10	0.47	0.47	0.104
STM104	JUNCTION	0.00	984.57	0 01:12	0	3.33	0.793
STM104-1	JUNCTION	0.00	1426.96	0 01:11	0	4.05	1.051
STM105	JUNCTION	0.00	935.62	0 01:12	0	3.31	0.581
STM106	JUNCTION	0.00	881.58	0 01:12	0	3.19	0.274
STM107	JUNCTION	0.00	508.77	0 01:10	0	1.52	0.238
STM108	JUNCTION	0.00	193.45	0 01:12	0	1.12	0.152
STM109	JUNCTION	0.00	86.87	0 01:10	0	0.207	0.460

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STM110	JUNCTION	0.00	372.58	0 01:10	0	1.11	0.081
STM111	JUNCTION	0.00	16.30	0 01:10	0	0.0245	0.065
X105A	JUNCTION	0.00	976.24	0 01:12	0	3.35	0.514
X107A	JUNCTION	0.00	542.61	0 01:10	0	1.57	0.536
X110A	JUNCTION	0.00	507.67	0 01:10	0	1.52	0.277
X111A	JUNCTION	0.00	131.06	0 01:14	0	0.389	0.003
XCB108A	JUNCTION	0.00	365.44	0 01:12	0	1.64	0.415
XCB108B	JUNCTION	0.00	303.60	0 01:12	0	1.42	0.341
XCB108C	JUNCTION	0.00	247.06	0 01:12	0	1.25	0.169
XCB109A	JUNCTION	0.00	151.05	0 01:12	0	0.36	0.695
XCB111E	JUNCTION	0.00	264.47	0 01:08	0	0.745	-0.028
XCB111F	JUNCTION	0.00	191.85	0 01:15	0	0.551	-0.095
XCB111G	JUNCTION	0.00	63.82	0 01:10	0	0.164	-0.010
xRfA	JUNCTION	0.00	53.98	0 01:52	0	0.762	0.142
xRfB	JUNCTION	0.00	4.89	0 01:50	0	0.069	0.068
xRfC	JUNCTION	0.00	5.36	0 01:50	0	0.0753	0.136
xRfD	JUNCTION	0.00	10.81	0 01:10	0	0.0225	0.099
xRfE	JUNCTION	0.00	7.99	0 01:10	0	0.0251	0.206
XROOFE	JUNCTION	0.00	63.30	0 01:10	0	0.187	0.007
OF1	OUTFALL	0.00	0.00	0 00:00	0	0	0.000
OF10	OUTFALL	17.55	17.55	0 01:10	0.0138	0.0138	0.000
OF2	OUTFALL	0.00	606.22	0 01:43	0	6.81	0.000
OF3	OUTFALL	18.94	18.94	0 01:10	0.0216	0.0216	0.000
OF6	OUTFALL	0.00	0.00	0 00:00	0	0	0.000
OF7	OUTFALL	0.00	110.94	0 01:10	0	0.0471	0.000
OF8	OUTFALL	188.08	188.08	0 01:10	0.184	0.184	0.000
OF9	OUTFALL	148.07	148.07	0 01:10	0.145	0.145	0.000
POND6_MJ	OUTFALL	0.00	230.90	0 01:10	0	0.0843	0.000
POND6_MN	OUTFALL	0.00	12379.13	0 01:14	0	36.6	0.000
SU87	OUTFALL	0.00	0.00	0 00:00	0	0	0.000
1000	STORAGE	0.00	6006.41	0 01:12	0	15	0.332
1001	STORAGE	0.00	3856.64	0 01:15	0	9.96	0.365
1002	STORAGE	0.00	3797.06	0 01:15	0	9.87	0.899
1003	STORAGE	0.00	2134.32	0 01:15	0	5.51	0.995
1004	STORAGE	0.00	1981.36	0 01:15	0	5.21	0.933
1005	STORAGE	0.00	1990.46	0 01:10	0	5.2	0.249
1006	STORAGE	0.00	2011.18	0 01:10	0	5.22	0.570
1007	STORAGE	0.00	436.28	0 01:10	0	0.879	0.084
1008	STORAGE	0.00	358.05	0 01:10	0	0.69	0.500
1009	STORAGE	0.00	152.59	0 01:10	0	0.307	0.002
1010	STORAGE	0.00	1488.14	0 01:09	0	4.04	0.870
1011	STORAGE	0.00	979.38	0 01:10	0	2.67	0.017
1012	STORAGE	0.00	702.32	0 01:17	0	2.13	0.146
1013	STORAGE	0.00	665.34	0 01:17	0	2.05	0.011
1014	STORAGE	0.00	665.99	0 01:12	0	2.05	-0.020
1015	STORAGE	0.00	34.15	0 01:10	0	0.0711	0.543
1016	STORAGE	0.00	417.00	0 01:08	0	1.06	-0.090
1017	STORAGE	0.00	340.43	0 01:11	0	0.786	0.026

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1018		STORAGE	0.00	340.53	0	01:10	0	0.786	-0.060
1019		STORAGE	0.00	261.52	0	01:10	0	0.57	0.028
1020		STORAGE	0.00	100.86	0	01:11	0	0.23	0.036
1020N		STORAGE	0.00	50.99	0	01:10	0	0.142	0.003
1024		STORAGE	0.00	2133.44	0	01:12	0	5.07	1.337
1025		STORAGE	0.00	1883.52	0	01:12	0	4.44	0.241
1026		STORAGE	0.00	490.27	0	01:10	0	1.29	0.407
1027		STORAGE	0.00	458.40	0	01:10	0	1.19	0.580
1028		STORAGE	0.00	218.19	0	01:16	0	0.659	-0.036
1029		STORAGE	0.00	218.30	0	01:15	0	0.659	0.025
1030		STORAGE	0.00	137.92	0	01:12	0	0.409	0.084
1031		STORAGE	0.00	79.72	0	01:11	0	0.214	0.006
1032		STORAGE	0.00	1401.57	0	01:11	0	3.18	0.766
1033		STORAGE	0.00	1264.60	0	01:11	0	2.9	0.226
1034		STORAGE	0.00	171.22	0	01:15	0	0.449	0.146
1035		STORAGE	0.00	112.89	0	01:11	0	0.335	-0.002
1036		STORAGE	0.00	112.91	0	01:10	0	0.335	-0.017
1037		STORAGE	0.00	33.10	0	01:10	0	0.0859	0.069
1038		STORAGE	0.00	33.11	0	01:10	0	0.0863	0.008
1039		STORAGE	0.00	1123.89	0	01:10	0	2.45	0.044
1050		STORAGE	0.00	1027.87	0	01:10	0	2.24	0.127
1051		STORAGE	0.00	208.48	0	01:10	0	0.321	0.025
1052		STORAGE	0.00	407.40	0	01:14	0	0.911	-0.406
1053		STORAGE	0.00	292.26	0	01:10	0	0.708	0.116
1054		STORAGE	0.00	148.05	0	01:14	0	0.395	-0.500
1055		STORAGE	0.00	51.12	0	01:10	0	0.113	-0.497
1056		STORAGE	0.00	180.56	0	01:10	0	0.475	0.102
1057		STORAGE	0.00	99.51	0	01:10	0	0.289	-0.227
1058		STORAGE	0.00	50.90	0	01:10	0	0.145	0.004
1059		STORAGE	0.00	51.13	0	01:10	0	0.114	0.421
2000		STORAGE	0.00	4603.08	0	01:13	0	12.2	-0.002
2001		STORAGE	0.00	4446.30	0	01:13	0	11.8	-0.065
2002		STORAGE	0.00	1702.19	0	01:12	0	3.89	-0.000
2003		STORAGE	0.00	1638.31	0	01:11	0	3.66	-0.009
2004		STORAGE	0.00	1653.86	0	01:11	0	3.65	-0.188
2005		STORAGE	0.00	1495.14	0	01:10	0	3.28	0.081
2005A		STORAGE	0.00	499.11	0	01:09	0	0.979	0.018
2006		STORAGE	0.00	384.19	0	01:06	0	0.641	-0.270
2007		STORAGE	0.00	281.00	0	01:07	0	0.464	-0.242
2008		STORAGE	0.00	184.61	0	01:10	0	0.308	0.912
2009		STORAGE	0.00	127.82	0	01:10	0	0.196	0.443
2010		STORAGE	0.00	2319.75	0	01:20	0	6.69	-0.045
2011		STORAGE	0.00	591.35	0	01:12	0	1.7	0.049
2012		STORAGE	0.00	508.35	0	01:07	0	1.3	-0.315
2013		STORAGE	0.00	520.75	0	01:07	0	1.31	0.298
2014		STORAGE	0.00	424.86	0	01:09	0	0.991	-0.162
2015		STORAGE	0.00	425.65	0	01:10	0	0.992	0.094
2016		STORAGE	0.00	92.57	0	01:10	0	0.0932	0.813

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2017	STORAGE	0.00	283.11	0	01:10	0	0.743	0.023
2018	STORAGE	0.00	1673.89	0	01:16	0	4.71	-0.036
2019	STORAGE	0.00	481.17	0	01:10	0	1.28	0.358
2020	STORAGE	0.00	131.43	0	01:10	0	0.315	0.001
2021	STORAGE	0.00	131.44	0	01:10	0	0.315	0.002
2022	STORAGE	0.00	252.00	0	01:13	0	0.656	-0.308
2023	STORAGE	0.00	252.41	0	01:12	0	0.657	0.073
2024	STORAGE	0.00	174.02	0	01:12	0	0.449	0.196
2025	STORAGE	0.00	69.40	0	01:11	0	0.106	-0.167
2026	STORAGE	0.00	258.10	0	01:10	0	0.6	-0.201
2027	STORAGE	0.00	143.86	0	01:10	0	0.302	0.505
2028	STORAGE	0.00	1127.54	0	01:23	0	3.13	-0.159
2029	STORAGE	0.00	1109.24	0	01:19	0	3.13	-0.166
2030	STORAGE	0.00	161.73	0	01:08	0	0.461	-0.223
2031	STORAGE	0.00	94.55	0	01:11	0	0.256	0.520
2032	STORAGE	0.00	765.79	0	01:19	0	2.19	0.315
2033	STORAGE	0.00	176.07	0	01:19	0	0.508	-0.069
2034	STORAGE	0.00	18.24	0	01:02	0	0.00698	5.990
2035	STORAGE	0.00	4.20	0	01:16	0	0.00064	-39.728
2036	STORAGE	0.00	485.35	0	01:07	0	1.34	-0.019
2037	STORAGE	0.00	158.85	0	01:12	0	0.435	0.020
2038	STORAGE	0.00	78.95	0	01:10	0	0.2	0.007
2039	STORAGE	0.00	96.11	0	01:10	0	0.287	0.107
2040	STORAGE	0.00	211.77	0	01:09	0	0.56	0.154
2041	STORAGE	0.00	101.14	0	01:12	0	0.317	0.017
2042	STORAGE	0.00	57.10	0	01:10	0	0.185	0.004
2043	STORAGE	0.00	77.38	0	01:10	0	0.202	0.524
2044	STORAGE	0.00	378.09	0	01:07	0	0.936	0.284
2045	STORAGE	0.00	184.15	0	01:21	0	0.487	0.149
2046	STORAGE	0.00	61.81	0	01:22	0	0.182	0.224
2047	STORAGE	0.00	57.03	0	01:11	0	0.182	-0.350
301	STORAGE	7592.90	7592.90	0	01:16	24	24	0.001
C1003A-S	STORAGE	167.48	266.86	0	01:14	0.196	0.333	1.278
C1003A-S1	STORAGE	0.00	70.35	0	01:11	0	0.0349	0.973
C1006A-S	STORAGE	184.35	591.61	0	01:10	0.225	0.434	1.562
C1006A-S1	STORAGE	0.00	209.79	0	01:12	0	0.105	-2.694
C1008A-S	STORAGE	307.11	307.52	0	01:10	0.381	0.383	-0.259
C1008A-S1	STORAGE	0.00	0.34	0	01:10	0	8.5e-06	8.487
C1009A-S	STORAGE	239.78	244.68	0	01:10	0.298	0.308	-0.655
C1009A-S1	STORAGE	0.00	24.83	0	01:10	0	0.00351	90.472
C1023A-S	STORAGE	2687.54	2687.54	0	01:10	4.17	4.17	0.028
C1051A-S	STORAGE	108.89	198.02	0	01:10	0.133	0.169	-0.011
C1052A-S	STORAGE	131.19	199.46	0	01:10	0.16	0.184	-0.160
C1052A-S1	STORAGE	0.00	23.38	0	01:11	0	0.0012	66.586
C1052A-S2	STORAGE	0.00	239.41	0	01:10	0	0.0747	-0.000
C1052B-S	STORAGE	156.20	276.87	0	01:10	0.191	0.257	-0.669
C1052B-S1	STORAGE	0.00	90.40	0	01:10	0	0.027	3.315
C1056A-S	STORAGE	111.26	395.93	0	01:10	0.136	0.26	-0.134

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C1056A-S1	STORAGE	0.00	129.11	0	01:10	0	0.0455	1.470	ltr
C2000A-S	STORAGE	266.53	562.11	0	01:10	0.328	0.462	1.607	
C2000A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000	
C2001A-S	STORAGE	197.76	213.04	0	01:10	0.244	0.278	-0.484	
C2002A-S	STORAGE	141.92	168.50	0	01:10	0.173	0.23	-0.289	ltr
C2002A-S1	STORAGE	0.00	157.31	0	01:18	0	0.12	-1.317	
C2002A-S2	STORAGE	0.00	10.16	0	01:11	0	0.00165	81.149	
C2004A-S	STORAGE	135.61	135.61	0	01:10	0.166	0.166	-0.311	
C2004A-S1	STORAGE	0.00	11.66	0	01:10	0	0.000638	135.705	ltr
C2004B-S	STORAGE	166.17	333.32	0	01:08	0.203	0.205	0.181	
C2004B-S1	STORAGE	0.00	64.70	0	01:10	0	0.0175	18.900	
C2005A-S	STORAGE	180.20	231.60	0	01:10	0.22	0.239	-0.571	
C2006A-S	STORAGE	154.41	154.41	0	01:10	0.189	0.189	-1.350	ltr
C2006A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000	
C2006B-S	STORAGE	262.19	308.59	0	01:10	0.32	0.34	0.592	
C2006B-S1	STORAGE	0.00	84.94	0	01:10	0	0.0198	5.299	
C2008A-S	STORAGE	102.28	259.06	0	01:10	0.125	0.19	-0.582	ltr
C2009A-S	STORAGE	50.60	50.60	0	01:10	0.0618	0.0618	0.002	
C2009A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000	
C2009B-S	STORAGE	111.21	111.21	0	01:10	0.136	0.136	-0.120	
C2009B-S1	STORAGE	0.00	12.39	0	01:09	0	0.00204	31.012	ltr
C2049A-S	STORAGE	1107.16	1107.16	0	01:10	1.62	1.62	0.015	
CB102	STORAGE	154.56	576.83	0	01:10	0.209	0.787	1.844	
CB103	STORAGE	95.90	427.86	0	01:09	0.132	0.601	0.738	
CB105A	STORAGE	49.60	49.60	0	01:10	0.0702	0.0702	0.013	ltr
CB106A	STORAGE	87.28	87.28	0	01:10	0.123	0.123	0.003	
CB107A	STORAGE	37.17	37.17	0	01:10	0.0526	0.0526	0.001	
CB108A	STORAGE	159.27	159.27	0	01:10	0.225	0.225	0.232	
CB108B	STORAGE	125.26	125.26	0	01:10	0.177	0.177	0.058	ltr
CB108C	STORAGE	94.45	94.45	0	01:10	0.134	0.134	0.418	
CB109A	STORAGE	109.62	109.62	0	01:10	0.155	0.155	0.329	
CB109B	STORAGE	146.45	146.45	0	01:10	0.207	0.207	0.141	
CB110A	STORAGE	138.34	138.34	0	01:10	0.196	0.196	0.142	ltr
CB110B	STORAGE	109.12	109.12	0	01:10	0.154	0.154	0.250	
CB110C	STORAGE	103.24	103.24	0	01:10	0.146	0.146	0.047	
CB110D	STORAGE	96.69	96.69	0	01:10	0.137	0.137	-0.010	
CB111A	STORAGE	143.20	143.20	0	01:10	0.203	0.203	0.030	ltr
CB111B	STORAGE	12.58	12.58	0	01:10	0.0178	0.018	-0.003	
CB111C	STORAGE	24.87	37.46	0	01:10	0.0352	0.0532	1.371	
CB111D	STORAGE	64.47	64.47	0	01:10	0.0912	0.0912	0.479	
CB111E	STORAGE	73.54	73.54	0	01:10	0.104	0.104	0.587	ltr
CB111F	STORAGE	77.52	77.52	0	01:10	0.11	0.11	0.355	
CB111G	STORAGE	98.90	98.90	0	01:10	0.14	0.14	0.307	
CB503-S	STORAGE	73.39	73.39	0	01:10	0.0911	0.0913	0.659	
CM97A-S	STORAGE	193.05	238.72	0	01:10	0.236	0.331	-1.437	ltr
CM97A-S1	STORAGE	85.50	85.50	0	01:12	0.0932	0.0932	-2.365	
F1021A-S	STORAGE	221.46	221.46	0	01:10	0.343	0.343	0.001	
F102A-S	STORAGE	114.16	114.16	0	01:10	0.151	0.151	0.017	

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F102B-S	STORAGE	106.49	106.49	0	01:10	0.143	0.143	0.035
F102C-S	STORAGE	4.61	4.61	0	01:10	0.00652	0.00679	27.818
F2006A-S	STORAGE	285.28	285.28	0	01:10	0.486	0.486	0.001
L1000A-S	STORAGE	107.37	107.37	0	01:10	0.105	0.106	0.174
L1001A-S	STORAGE	122.39	249.70	0	01:10	0.15	0.31	0.405
L1001A-S1	STORAGE	0.00	170.32	0	01:10	0	0.126	-0.546
L1001A-S2	STORAGE	0.00	231.86	0	01:11	0	0.195	-2.568
L1002A-S	STORAGE	122.29	280.85	0	01:10	0.149	0.276	0.291
L1007A-S	STORAGE	318.33	318.33	0	01:10	0.311	0.311	-0.001
L1010A-S	STORAGE	81.88	495.58	0	01:07	0.089	0.264	0.673
L1010A-S1	STORAGE	0.00	73.20	0	01:10	0	0.0311	2.408
L1010A-S2	STORAGE	0.00	508.42	0	01:08	0	0.236	-4.042
L1010B-S	STORAGE	258.97	403.87	0	01:10	0.233	0.286	1.520
L1011A-S	STORAGE	69.71	395.09	0	01:25	0.0758	0.118	0.243
L1011A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L1011B-S	STORAGE	109.78	148.41	0	01:10	0.107	0.123	1.959
L1012A-S	STORAGE	70.71	70.71	0	01:10	0.0769	0.0769	0.014
L1015A-S	STORAGE	52.88	248.09	0	01:10	0.0575	0.137	1.187
L1015A-S1	STORAGE	0.00	197.75	0	01:10	0	0.0776	-1.375
L1015A-S2	STORAGE	0.00	193.69	0	01:10	0	0.0642	-2.700
L1016A-S	STORAGE	214.04	241.64	0	01:10	0.262	0.299	-0.173
L1016A-S1	STORAGE	0.00	78.85	0	01:10	0	0.0394	2.450
L1017A-S	STORAGE	166.76	217.42	0	01:10	0.204	0.254	-0.478
L1017A-S1	STORAGE	0.00	104.35	0	01:10	0	0.0509	2.557
L1019A-S	STORAGE	155.45	223.92	0	01:10	0.19	0.238	-0.090
L1019A-S1	STORAGE	0.00	90.68	0	01:10	0	0.0477	0.026
L1019B-S	STORAGE	283.58	283.58	0	01:10	0.245	0.245	0.519
L1019C-S	STORAGE	65.93	65.93	0	01:10	0.0645	0.0645	-1.933
L1020A-S	STORAGE	127.38	167.63	0	01:10	0.156	0.189	-0.490
L1020A-S1	STORAGE	0.00	181.52	0	01:11	0	0.0647	4.360
L1020B-S	STORAGE	55.17	94.56	0	01:12	0.06	0.0902	0.026
L1020B-S1	STORAGE	0.00	30.51	0	01:12	0	0.0103	5.761
L1020C-S	STORAGE	64.89	64.89	0	01:10	0.0705	0.0796	-0.333
L1020C-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L1022A-S	STORAGE	1494.68	1494.68	0	01:10	1.83	1.83	0.035
L1024A-S	STORAGE	256.95	555.40	0	01:10	0.314	0.534	0.770
L1024A-S1	STORAGE	0.00	336.67	0	01:10	0	0.183	-0.326
L1024B-S	STORAGE	316.23	316.23	0	01:10	0.309	0.309	-0.002
L1026A-S	STORAGE	84.81	103.51	0	01:09	0.104	0.119	-0.482
L1026A-S1	STORAGE	0.00	65.90	0	01:10	0	0.0109	11.422
L1027A-S	STORAGE	190.16	227.15	0	01:10	0.232	0.27	0.527
L1027B-S	STORAGE	0.00	40.35	0	01:03	0	0.0783	0.005
L1027B-S0	STORAGE	69.09	69.66	0	01:10	0.0844	0.112	-1.989
L1027B-S1	STORAGE	0.00	57.49	0	01:10	0	0.0301	3.347
L1027C-S	STORAGE	234.15	234.15	0	01:10	0.229	0.229	0.046
L1029A-S	STORAGE	180.08	226.15	0	01:10	0.22	0.28	-0.256
L1029A-S1	STORAGE	0.00	105.55	0	01:13	0	0.0606	1.044
L1030A-S	STORAGE	165.02	225.73	0	01:10	0.202	0.255	-0.264

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L1030A-S1	STORAGE	0.00	129.87	0	01:11	0	0.0541	1.362
L1031A-S	STORAGE	178.16	289.96	0	01:10	0.218	0.268	-0.130
L1032A-S	STORAGE	117.79	459.86	0	01:10	0.144	0.314	-0.121
L1032A-S1	STORAGE	0.00	201.31	0	01:10	0	0.105	0.680
L1032B-S	STORAGE	186.01	286.21	0	01:10	0.182	0.219	-0.574
L1034A-S	STORAGE	104.09	109.13	0	01:10	0.127	0.134	-0.449
L1034A-S1	STORAGE	0.00	47.11	0	01:09	0	0.00655	14.974
L1036A-S	STORAGE	208.28	208.28	0	01:10	0.254	0.256	-0.132
L1038A-S	STORAGE	87.08	87.08	0	01:10	0.106	0.107	-0.188
L1038A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L1039A-S	STORAGE	116.37	398.94	0	01:05	0.142	0.232	0.452
L1039A-S1	STORAGE	0.00	188.83	0	01:10	0	0.0801	-0.440
L1039B-S	STORAGE	77.40	77.40	0	01:10	0.0757	0.0757	-0.005
L1050A-S	STORAGE	133.66	534.25	0	01:05	0.163	0.248	-0.126
L1050B-S	STORAGE	169.41	169.41	0	01:10	0.166	0.166	-0.001
L1051B-S	STORAGE	219.37	219.37	0	01:10	0.215	0.215	0.003
L1053A-S	STORAGE	127.55	186.94	0	01:10	0.156	0.19	0.028
L1053A-S1	STORAGE	0.00	101.22	0	01:10	0	0.0306	2.158
L1053B-S	STORAGE	271.20	271.20	0	01:10	0.265	0.265	-0.001
L1054A-S	STORAGE	230.50	290.91	0	01:10	0.282	0.316	1.105
L1057A-S	STORAGE	150.16	208.83	0	01:10	0.183	0.206	-0.266
L1057A-S1	STORAGE	0.00	68.66	0	01:10	0	0.0233	2.475
L1058A-S	STORAGE	136.92	136.92	0	01:10	0.167	0.168	-0.189
L1059A-S	STORAGE	0.00	52.06	0	01:02	0	0.0969	0.004
L1059A-S0	STORAGE	103.39	103.39	0	01:10	0.126	0.126	-2.938
L1059A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2007A-S	STORAGE	250.09	250.09	0	01:10	0.222	0.222	0.001
L2010A-S	STORAGE	0.00	247.00	0	01:11	0	0.198	-0.393
L2010A-S1	STORAGE	0.00	252.52	0	01:10	0	0.198	0.133
L2010A-S2	STORAGE	71.25	258.05	0	01:10	0.0775	0.273	0.730
L2010B-S	STORAGE	146.88	146.88	0	01:10	0.14	0.141	0.007
L2011A-S	STORAGE	259.65	315.51	0	01:10	0.317	0.391	-0.380
L2011A-S1	STORAGE	0.00	64.25	0	01:10	0	0.00933	24.118
L2013A-S	STORAGE	243.24	267.05	0	01:10	0.297	0.321	-0.520
L2015A-S	STORAGE	130.98	169.01	0	01:10	0.16	0.182	-0.333
L2015A-S1	STORAGE	0.00	69.70	0	01:10	0	0.0245	6.173
L2016A-S	STORAGE	22.27	71.93	0	01:10	0.0242	0.0464	0.003
L2016A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2016B-S	STORAGE	70.51	70.51	0	01:10	0.069	0.069	0.004
L2017A-S	STORAGE	123.91	125.47	0	01:10	0.151	0.153	-0.373
L2017A-S1	STORAGE	0.00	36.09	0	01:10	0	0.00316	30.659
L2017B-S	STORAGE	114.76	181.92	0	01:10	0.14	0.166	0.075
L2017B-S1	STORAGE	0.00	106.76	0	01:10	0	0.0457	1.451
L2017B-S2	STORAGE	0.00	69.99	0	01:10	0	0.0266	0.295
L2018A-S	STORAGE	61.93	373.24	0	01:10	0.0673	0.319	-0.474
L2018A-S1	STORAGE	0.00	279.75	0	01:11	0	0.188	0.564
L2018B-S	STORAGE	260.14	260.14	0	01:10	0.254	0.256	0.058
L2019A-S	STORAGE	124.37	443.01	0	01:10	0.152	0.366	-0.109

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L2019A-S1	STORAGE	0.00	253.76	0	01:10	0	0.158	-0.054
L2019B-S	STORAGE	171.04	171.04	0	01:10	0.167	0.168	0.069
L2021A-S	STORAGE	101.14	340.69	0	01:04	0.118	0.222	-0.114
L2021B-S	STORAGE	268.80	268.80	0	01:10	0.263	0.263	0.016
L2023A-S	STORAGE	166.91	187.49	0	01:10	0.204	0.273	-0.711
L2024A-S	STORAGE	135.91	324.60	0	01:10	0.166	0.247	-0.115
L2024A-S1	STORAGE	0.00	182.71	0	01:11	0	0.0775	1.060
L2024B-S	STORAGE	136.14	217.41	0	01:12	0.166	0.243	-0.253
L2024B-S1	STORAGE	0.00	133.85	0	01:13	0	0.0698	2.640
L2026A-S	STORAGE	160.44	160.44	0	01:10	0.196	0.197	-0.210
L2026A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2026B-S	STORAGE	75.07	284.73	0	01:10	0.0917	0.189	1.143
L2026B-S1	STORAGE	0.00	220.21	0	01:10	0	0.081	0.265
L2027A-S	STORAGE	194.13	289.65	0	01:10	0.237	0.279	-0.123
L2027A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2027A-S2	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2027A-S3	STORAGE	0.00	210.61	0	01:10	0	0.0941	-2.224
L2027B-S	STORAGE	161.66	161.66	0	01:10	0.158	0.158	-0.003
L2029A-S	STORAGE	246.10	832.97	0	01:08	0.301	0.329	0.163
L2029B-S	STORAGE	347.32	347.32	0	01:10	0.312	0.312	0.001
L2030A-S	STORAGE	99.58	195.90	0	01:10	0.122	0.17	-0.238
L2030B-S	STORAGE	64.90	64.90	0	01:10	0.0635	0.0635	0.019
L2031A-S	STORAGE	100.36	100.36	0	01:10	0.123	0.128	-0.392
L2031A-S1	STORAGE	0.00	45.14	0	01:11	0	0.00749	10.438
L2031B-S	STORAGE	103.71	103.71	0	01:10	0.127	0.127	-0.010
L2031B-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2031B-S2	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2032A-S	STORAGE	135.47	375.66	0	01:08	0.165	0.281	0.913
L2032A-S1	STORAGE	0.00	199.31	0	01:09	0	0.0529	4.433
L2032B-S	STORAGE	196.47	196.47	0	01:10	0.174	0.181	0.134
L2033A-S	STORAGE	232.68	277.28	0	01:10	0.294	0.313	-0.016
L2033B-S	STORAGE	117.04	249.46	0	01:09	0.148	0.219	1.044
L2033B-S1	STORAGE	0.00	102.28	0	01:10	0	0.0243	2.002
L2034A-S1	STORAGE	0.00	51.87	0	01:10	0	0.0124	1.898
L2036A-S	STORAGE	30.87	97.46	0	01:10	0.0336	0.0631	-0.353
L2036A-S1	STORAGE	0.00	276.71	0	01:10	0	0.144	-4.006
L2037A-S	STORAGE	172.02	209.22	0	01:10	0.217	0.235	-0.056
L2038A-S	STORAGE	167.08	167.08	0	01:10	0.211	0.212	-0.199
L2039A-S	STORAGE	133.86	169.72	0	01:10	0.169	0.182	-0.184
L2039A-S1	STORAGE	0.00	44.29	0	01:10	0	0.0123	0.273
L2039A-S2	STORAGE	0.00	62.68	0	01:10	0	0.0153	7.765
L2039B-S	STORAGE	103.37	103.37	0	01:10	0.13	0.131	-0.062
L2039B-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000
L2040A-S	STORAGE	36.99	39.72	0	01:10	0.0402	0.043	0.243
L2040A-S1	STORAGE	0.00	34.07	0	01:10	0	0.00511	-1.666
L2041A-S	STORAGE	97.46	273.15	0	01:10	0.123	0.133	0.051
L2042A-S	STORAGE	152.75	152.75	0	01:10	0.193	0.193	-0.241
L2042A-S1	STORAGE	0.00	35.05	0	01:10	0	0.00918	5.187

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L2043A-S	STORAGE	68.07	86.63	0	01:10	0.0859	0.0929	-0.069	
L2043A-S1	STORAGE	0.00	28.37	0	01:10	0	0.00685	2.246	
L2043B-S	STORAGE	94.84	94.84	0	01:10	0.12	0.12	-0.140	
L2043B-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000	ltr
L2044A-S	STORAGE	60.96	254.14	0	01:10	0.0751	0.18	2.768	
L2044A-S1	STORAGE	0.00	73.98	0	01:10	0	0.0219	1.359	
L2044B-S	STORAGE	194.77	194.77	0	01:10	0.186	0.186	0.005	
L2044C-S	STORAGE	290.45	290.45	0	01:10	0.284	0.284	-0.000	
L2046A-S	STORAGE	233.24	295.82	0	01:10	0.287	0.306	0.057	
L2046A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000	ltr
L2047A-S	STORAGE	147.23	147.23	0	01:10	0.181	0.181	-0.127	
L2047A-S1	STORAGE	0.00	0.00	0	00:00	0	0	0.000	ltr
LM97A-S	STORAGE	303.66	303.66	0	01:10	0.29	0.29	0.007	
M97	STORAGE	0.00	7793.36	0	01:16	0	24.5	-0.002	
M98	STORAGE	0.00	12373.28	0	01:14	0	36.6	0.006	
P1	STORAGE	0.00	7674.48	0	01:11	0	19.4	0.254	
P2	STORAGE	0.00	6002.87	0	01:13	0	14.9	0.065	
P3	STORAGE	0.00	6004.33	0	01:12	0	14.9	0.179	
POND	STORAGE	1124.36	8739.09	0	01:10	1.62	33.4	0.031	
R102A-S	STORAGE	32.95	32.95	0	01:10	0.0466	0.0466	0.001	
R102B-S	STORAGE	36.90	36.90	0	01:10	0.0522	0.0522	0.001	
R103A-S	STORAGE	23.73	23.73	0	01:10	0.0336	0.0336	0.000	
RfA	STORAGE	698.44	698.44	0	01:10	1	1	0.004	
RfB	STORAGE	64.47	64.47	0	01:10	0.0912	0.0912	0.003	
RfC	STORAGE	69.43	69.43	0	01:10	0.0982	0.0982	0.003	
RfD	STORAGE	20.84	20.84	0	01:10	0.0295	0.0295	0.003	
RfE	STORAGE	22.64	22.64	0	01:10	0.032	0.032	0.003	
STM101-1	STORAGE	0.00	1729.00	0	01:10	0	4.54	0.820	
STM102-1	STORAGE	0.00	196.13	0	01:10	0	0.326	0.667	
STM103-1	STORAGE	0.00	23.73	0	01:06	0	0.0336	0.518	

Node Surge Summary

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Meters	Min. Depth Below Rim Meters
STM102	JUNCTION	0.07	0.041	1.909
STM103	JUNCTION	0.08	0.058	1.737
STM106	JUNCTION	0.06	0.040	2.143
STM107	JUNCTION	0.08	0.054	2.200
STM108	JUNCTION	0.05	0.065	1.837
STM109	JUNCTION	0.01	0.029	1.641

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STM110	JUNCTION	0.22	0.166	1.856
STM111	JUNCTION	0.10	0.068	1.600
X110A	JUNCTION	0.23	0.168	1.935
X111A	JUNCTION	0.13	0.096	1.599
XCB108A	JUNCTION	0.13	0.090	1.828
XCB108B	JUNCTION	0.11	0.089	1.814
XCB108C	JUNCTION	0.07	0.082	1.749
XCB109A	JUNCTION	0.04	0.054	1.702
XCB111E	JUNCTION	0.18	0.139	1.831
XCB111F	JUNCTION	0.15	0.112	1.648
XCB111G	JUNCTION	0.11	0.078	1.576
xRfA	JUNCTION	4.29	0.217	1.600
XROOFE	JUNCTION	0.13	0.093	1.508

Node Flooding Summary

No nodes were flooded.

Storage Volume Summary

Storage Unit	Average Volume 1000 m3	Avg Pcnt Full	Evap Loss	Exfil Pcnt Loss	Maximum Volume 1000 m3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow LPS
1000	0.002	40	0	0	0.002	45	0 03:09	6004.33
1001	0.002	42	0	0	0.002	47	0 03:09	3856.73
1002	0.002	38	0	0	0.002	48	0 01:13	3798.34
1003	0.002	39	0	0	0.002	52	0 01:14	2135.43
1004	0.002	35	0	0	0.002	47	0 01:14	1982.72
1005	0.001	32	0	0	0.002	46	0 01:14	1981.36
1006	0.001	25	0	0	0.002	39	0 01:14	1990.46
1007	0.000	11	0	0	0.001	28	0 01:14	431.56
1008	0.000	11	0	0	0.001	22	0 01:11	357.92
1009	0.000	11	0	0	0.001	19	0 01:10	152.57
1010	0.001	13	0	0	0.001	32	0 01:14	1470.75
1011	0.000	12	0	0	0.001	32	0 01:14	957.55
1012	0.000	11	0	0	0.001	26	0 01:15	709.85
1013	0.000	11	0	0	0.001	26	0 01:15	669.34
1014	0.000	10	0	0	0.001	24	0 01:15	665.34
1015	0.000	10	0	0	0.000	15	0 01:10	34.14
1016	0.000	10	0	0	0.001	31	0 01:14	417.89

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1017	0.000	6	0	0	0.001	20	0 01:15 337.53
1018	0.000	9	0	0	0.001	22	0 01:15 340.43
1019	0.000	8	0	0	0.001	19	0 01:10 261.35
1020	0.000	13	0	0	0.001	21	0 01:12 100.82
1020N	0.000	11	0	0	0.001	16	0 01:10 50.99
1024	0.001	31	0	0	0.002	42	0 01:12 2132.72
1025	0.001	25	0	0	0.002	39	0 01:12 1882.90
1026	0.001	15	0	0	0.001	28	0 01:12 488.78
1027	0.000	12	0	0	0.001	26	0 01:12 456.25
1028	0.000	12	0	0	0.001	22	0 01:12 219.04
1029	0.000	13	0	0	0.001	27	0 01:16 218.19
1030	0.000	12	0	0	0.001	21	0 01:16 137.42
1031	0.000	13	0	0	0.001	21	0 01:12 79.70
1032	0.001	20	0	0	0.002	38	0 01:12 1398.48
1033	0.001	17	0	0	0.002	36	0 01:12 1266.38
1034	0.000	8	0	0	0.001	23	0 01:12 180.26
1035	0.000	11	0	0	0.001	22	0 01:13 127.83
1036	0.000	10	0	0	0.001	17	0 01:16 112.89
1037	0.000	10	0	0	0.001	14	0 01:10 33.10
1038	0.000	11	0	0	0.001	16	0 01:10 33.10
1039	0.000	12	0	0	0.001	31	0 01:11 1121.88
1050	0.000	8	0	0	0.001	26	0 01:11 1025.94
1051	0.000	4	0	0	0.001	32	0 01:10 207.54
1052	0.000	7	0	0	0.001	24	0 01:12 413.26
1053	0.000	3	0	0	0.001	15	0 01:11 291.13
1054	0.000	9	0	0	0.001	18	0 01:12 148.82
1055	0.000	9	0	0	0.001	16	0 01:12 51.31
1056	0.000	10	0	0	0.001	22	0 01:12 194.33
1057	0.000	10	0	0	0.001	17	0 01:13 99.35
1058	0.000	9	0	0	0.001	14	0 01:10 50.89
1059	0.000	7	0	0	0.001	12	0 01:10 51.12
2000	0.002	29	0	0	0.002	43	0 01:13 4602.98
2001	0.001	28	0	0	0.002	44	0 01:13 4446.45
2002	0.001	20	0	0	0.002	40	0 01:13 1696.98
2003	0.001	20	0	0	0.002	41	0 01:13 1623.29
2004	0.001	18	0	0	0.002	42	0 01:12 1638.31
2005	0.001	13	0	0	0.002	42	0 01:12 1464.80
2005A	0.000	12	0	0	0.001	37	0 01:12 483.77
2006	0.000	10	0	0	0.001	32	0 01:11 370.25
2007	0.000	11	0	0	0.001	28	0 01:11 277.13
2008	0.000	12	0	0	0.001	23	0 01:11 183.36
2009	0.000	13	0	0	0.001	24	0 01:10 127.61
2010	0.001	13	0	0	0.002	39	0 01:13 2322.30
2011	0.000	11	0	0	0.002	39	0 01:13 591.21
2012	0.000	10	0	0	0.001	33	0 01:13 476.16
2013	0.000	10	0	0	0.001	31	0 01:12 508.35
2014	0.000	9	0	0	0.001	30	0 01:12 408.40
2015	0.000	8	0	0	0.001	22	0 01:11 424.86

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2016	0.000	11	0	0	0.001	27	0 01:10 92.09
2017	0.000	11	0	0	0.001	23	0 01:11 282.80
2018	0.001	17	0	0	0.002	41	0 01:13 1677.42
2019	0.000	10	0	0	0.001	26	0 01:13 473.14
2020	0.000	11	0	0	0.001	20	0 01:10 131.40
2021	0.000	11	0	0	0.001	19	0 01:10 131.43
2022	0.000	11	0	0	0.001	23	0 01:14 251.89
2023	0.000	10	0	0	0.001	21	0 01:13 252.00
2024	0.000	10	0	0	0.001	19	0 01:12 173.92
2025	0.000	9	0	0	0.001	18	0 01:11 69.37
2026	0.000	12	0	0	0.001	23	0 01:10 257.79
2027	0.000	12	0	0	0.001	24	0 01:07 143.89
2028	0.001	14	0	0	0.002	39	0 01:14 1140.70
2029	0.001	12	0	0	0.002	38	0 01:14 1127.54
2030	0.000	11	0	0	0.001	35	0 01:14 173.93
2031	0.000	12	0	0	0.001	27	0 01:14 99.63
2032	0.001	11	0	0	0.002	34	0 01:14 769.45
2033	0.000	12	0	0	0.001	30	0 01:16 176.95
2034	0.000	10	0	0	0.001	25	0 01:16 26.37
2035	0.000	8	0	0	0.000	12	0 01:18 3.55
2036	0.000	11	0	0	0.002	33	0 01:14 501.70
2037	0.000	9	0	0	0.001	17	0 01:11 161.30
2038	0.000	11	0	0	0.001	19	0 01:11 78.83
2039	0.000	11	0	0	0.001	24	0 01:17 102.77
2040	0.000	10	0	0	0.001	28	0 01:14 204.28
2041	0.000	11	0	0	0.001	19	0 01:11 103.44
2042	0.000	11	0	0	0.001	17	0 01:11 57.08
2043	0.000	3	0	0	0.001	23	0 01:18 82.65
2044	0.000	10	0	0	0.001	28	0 01:12 375.80
2045	0.000	12	0	0	0.001	28	0 01:13 189.47
2046	0.000	11	0	0	0.001	25	0 01:13 85.22
2047	0.000	11	0	0	0.001	21	0 01:13 61.81
301	0.003	72	0	0	0.004	96	0 01:15 7593.38
C1003A-S	0.000	0	0	0	0.000	0	0 00:00 153.68
C1003A-S1	0.000	0	0	0	0.000	0	0 00:00 49.64
C1006A-S	0.000	0	0	0	0.000	0	0 00:00 326.21
C1006A-S1	0.000	0	0	0	0.000	0	0 00:00 195.68
C1008A-S	0.000	0	0	0	0.000	0	0 00:00 205.52
C1008A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
C1009A-S	0.000	0	0	0	0.000	0	0 00:00 177.42
C1009A-S1	0.000	0	0	0	0.000	0	0 00:00 5.98
C1023A-S	0.017	4	0	0	0.417	100	0 01:13 1582.15
C1051A-S	0.000	0	0	0	0.000	0	0 00:00 168.70
C1052A-S	0.000	0	0	0	0.000	0	0 00:00 111.25
C1052A-S1	0.000	0	0	0	0.000	0	0 00:00 2.10
C1052A-S2	0.000	0	0	0	0.000	0	0 00:00 299.18
C1052B-S	0.000	0	0	0	0.000	0	0 00:00 167.32
C1052B-S1	0.000	0	0	0	0.000	0	0 00:00 81.52

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C1056A-S	0.000	0	0	0	0.000	0	0 00:00 321.14
C1056A-S1	0.000	0	0	0	0.000	0	0 00:00 122.15
C2000A-S	0.000	0	0	0	0.000	0	0 00:00 389.41
C2000A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
C2001A-S	0.000	0	0	0	0.000	0	0 00:00 113.41
C2002A-S	0.000	0	0	0	0.000	0	0 00:00 89.09
C2002A-S1	0.000	0	0	0	0.000	0	0 00:00 142.97
C2002A-S2	0.000	0	0	0	0.000	0	0 00:00 1.75
C2004A-S	0.000	0	0	0	0.000	0	0 00:00 90.12
C2004A-S1	0.000	0	0	0	0.000	0	0 00:00 0.62
C2004B-S	0.000	0	0	0	0.000	0	0 00:00 115.48
C2004B-S1	0.000	0	0	0	0.000	0	0 00:00 167.64
C2005A-S	0.000	0	0	0	0.000	0	0 00:00 170.93
C2006A-S	0.000	0	0	0	0.000	0	0 00:00 153.56
C2006A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
C2006B-S	0.000	0	0	0	0.000	0	0 00:00 239.94
C2006B-S1	0.000	0	0	0	0.000	0	0 00:00 69.62
C2008A-S	0.000	0	0	0	0.000	0	0 00:00 254.75
C2009A-S	0.000	0	0	0	0.000	0	0 00:00 50.56
C2009A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
C2009B-S	0.000	0	0	0	0.000	0	0 00:00 89.51
C2009B-S1	0.000	0	0	0	0.000	0	0 00:00 9.07
C2049A-S	0.006	4	0	0	0.176	98	0 01:12 655.06
CB102	0.002	22	0	0	0.003	35	0 01:10 574.88
CB103	0.013	17	0	0	0.026	34	0 01:10 422.40
CB105A	0.010	20	0	0	0.016	32	0 01:10 46.22
CB106A	0.003	3	0	0	0.030	34	0 01:10 54.59
CB107A	0.000	2	0	0	0.002	18	0 01:10 37.16
CB108A	0.012	9	0	0	0.079	59	0 01:12 63.05
CB108B	0.008	7	0	0	0.057	49	0 01:12 58.62
CB108C	0.003	5	0	0	0.031	53	0 01:10 58.79
CB109A	0.004	6	0	0	0.037	62	0 01:10 66.80
CB109B	0.005	9	0	0	0.052	92	0 01:11 86.87
CB110A	0.003	5	0	0	0.037	68	0 01:11 88.49
CB110B	0.002	4	0	0	0.033	53	0 01:10 67.79
CB110C	0.004	5	0	0	0.041	55	0 01:12 44.74
CB110D	0.004	5	0	0	0.041	46	0 01:12 40.23
CB111A	0.004	8	0	0	0.050	90	0 01:12 72.71
CB111B	0.000	1	0	0	0.001	11	0 01:13 12.58
CB111C	0.000	2	0	0	0.004	18	0 01:13 40.23
CB111D	0.001	3	0	0	0.008	46	0 01:10 55.90
CB111E	0.002	4	0	0	0.023	48	0 01:11 39.93
CB111F	0.002	4	0	0	0.025	49	0 01:11 41.28
CB111G	0.002	6	0	0	0.030	84	0 01:11 54.37
CB503-S	0.000	0	0	0	0.000	0	0 00:00 72.82
CM97A-S	0.000	0	0	0	0.000	0	0 00:00 234.74
CM97A-S1	0.000	0	0	0	0.000	0	0 00:00 73.22
F1021A-S	0.000	11	0	0	0.002	80	0 01:10 221.39

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F102A-S	0.000	0	0	0	0.011	14	0 01:10 88.84
F102B-S	0.000	0	0	0	0.008	7	0 01:10 85.32
F102C-S	0.000	0	0	0	0.000	0	0 00:00 4.58
F2006A-S	0.000	9	0	0	0.002	63	0 01:10 285.20
L1000A-S	0.000	0	0	0	0.000	0	0 00:00 107.34
L1001A-S	0.000	0	0	0	0.000	0	0 00:00 230.59
L1001A-S1	0.000	0	0	0	0.000	0	0 00:00 164.86
L1001A-S2	0.000	0	0	0	0.000	0	0 00:00 220.57
L1002A-S	0.000	0	0	0	0.000	0	0 00:00 150.88
L1007A-S	0.000	0	0	0	0.000	0	0 00:00 318.30
L1010A-S	0.000	0	0	0	0.000	0	0 00:00 344.83
L1010A-S1	0.000	0	0	0	0.000	0	0 00:00 387.05
L1010A-S2	0.000	0	0	0	0.000	0	0 00:00 426.79
L1010B-S	0.000	0	0	0	0.000	0	0 00:00 402.96
L1011A-S	0.000	0	0	0	0.000	0	0 00:00 52.11
L1011A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L1011B-S	0.000	0	0	0	0.000	0	0 00:00 147.26
L1012A-S	0.000	0	0	0	0.000	0	0 00:00 33.23
L1015A-S	0.000	0	0	0	0.000	0	0 00:00 227.83
L1015A-S1	0.000	0	0	0	0.000	0	0 00:00 196.08
L1015A-S2	0.000	0	0	0	0.000	0	0 00:00 181.52
L1016A-S	0.000	0	0	0	0.000	0	0 00:00 142.89
L1016A-S1	0.000	0	0	0	0.000	0	0 00:00 59.13
L1017A-S	0.000	0	0	0	0.000	0	0 00:00 158.02
L1017A-S1	0.000	0	0	0	0.000	0	0 00:00 82.94
L1019A-S	0.000	0	0	0	0.000	0	0 00:00 162.53
L1019A-S1	0.000	0	0	0	0.000	0	0 00:00 84.33
L1019B-S	0.000	0	0	0	0.000	0	0 00:00 271.48
L1019C-S	0.000	0	0	0	0.000	0	0 00:00 64.62
L1020A-S	0.000	0	0	0	0.000	0	0 00:00 141.67
L1020A-S1	0.000	0	0	0	0.000	0	0 00:00 165.16
L1020B-S	0.000	0	0	0	0.000	0	0 00:00 64.24
L1020B-S1	0.000	0	0	0	0.000	0	0 00:00 24.27
L1020C-S	0.000	0	0	0	0.000	0	0 00:00 33.13
L1020C-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L1022A-S	0.030	6	0	0	0.483	100	0 01:12 565.19
L1024A-S	0.000	0	0	0	0.000	0	0 00:00 381.99
L1024A-S1	0.000	0	0	0	0.000	0	0 00:00 308.01
L1024B-S	0.000	0	0	0	0.000	0	0 00:00 316.22
L1026A-S	0.000	0	0	0	0.000	0	0 00:00 66.35
L1026A-S1	0.000	0	0	0	0.000	0	0 00:00 23.87
L1027A-S	0.000	0	0	0	0.000	0	0 00:00 146.40
L1027B-S	0.000	0	0	0	0.000	0	0 00:00 31.96
L1027B-S0	0.000	0	0	0	0.000	0	0 00:00 68.96
L1027B-S1	0.000	0	0	0	0.000	0	0 00:00 50.09
L1027C-S	0.000	0	0	0	0.000	0	0 00:00 231.49
L1029A-S	0.000	0	0	0	0.000	0	0 00:00 137.73
L1029A-S1	0.000	0	0	0	0.000	0	0 00:00 103.69

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L1030A-S	0.000	0	0	0	0.000	0	0 00:00 163.78
L1030A-S1	0.000	0	0	0	0.000	0	0 00:00 122.22
L1031A-S	0.000	0	0	0	0.000	0	0 00:00 209.55
L1032A-S	0.000	0	0	0	0.000	0	0 00:00 373.21
L1032A-S1	0.000	0	0	0	0.000	0	0 00:00 257.03
L1032B-S	0.000	0	0	0	0.000	0	0 00:00 285.62
L1034A-S	0.000	0	0	0	0.000	0	0 00:00 100.34
L1034A-S1	0.000	0	0	0	0.000	0	0 00:00 20.56
L1036A-S	0.000	0	0	0	0.000	0	0 00:00 126.81
L1038A-S	0.000	0	0	0	0.000	0	0 00:00 89.44
L1038A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L1039A-S	0.000	0	0	0	0.000	0	0 00:00 222.56
L1039A-S1	0.000	0	0	0	0.000	0	0 00:00 288.51
L1039B-S	0.000	0	0	0	0.000	0	0 00:00 77.38
L1050A-S	0.000	0	0	0	0.000	0	0 00:00 232.07
L1050B-S	0.000	0	0	0	0.000	0	0 00:00 169.38
L1051B-S	0.000	0	0	0	0.000	0	0 00:00 219.33
L1053A-S	0.000	0	0	0	0.000	0	0 00:00 173.59
L1053A-S1	0.000	0	0	0	0.000	0	0 00:00 85.78
L1053B-S	0.000	0	0	0	0.000	0	0 00:00 271.15
L1054A-S	0.000	0	0	0	0.000	0	0 00:00 198.53
L1057A-S	0.000	0	0	0	0.000	0	0 00:00 186.93
L1057A-S1	0.000	0	0	0	0.000	0	0 00:00 63.57
L1058A-S	0.000	0	0	0	0.000	0	0 00:00 119.56
L1059A-S	0.000	0	0	0	0.000	0	0 00:00 41.93
L1059A-S0	0.000	0	0	0	0.000	0	0 00:00 102.35
L1059A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2007A-S	0.000	0	0	0	0.000	0	0 00:00 250.03
L2010A-S	0.000	0	0	0	0.000	0	0 00:00 241.77
L2010A-S1	0.000	0	0	0	0.000	0	0 00:00 247.00
L2010A-S2	0.000	0	0	0	0.000	0	0 00:00 203.47
L2010B-S	0.000	0	0	0	0.000	0	0 00:00 146.84
L2011A-S	0.000	0	0	0	0.000	0	0 00:00 116.05
L2011A-S1	0.000	0	0	0	0.000	0	0 00:00 17.95
L2013A-S	0.000	0	0	0	0.000	0	0 00:00 177.99
L2015A-S	0.000	0	0	0	0.000	0	0 00:00 121.20
L2015A-S1	0.000	0	0	0	0.000	0	0 00:00 44.73
L2016A-S	0.000	0	0	0	0.000	0	0 00:00 71.73
L2016A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2016B-S	0.000	0	0	0	0.000	0	0 00:00 70.49
L2017A-S	0.000	0	0	0	0.000	0	0 00:00 120.64
L2017A-S1	0.000	0	0	0	0.000	0	0 00:00 12.12
L2017B-S	0.000	0	0	0	0.000	0	0 00:00 150.91
L2017B-S1	0.000	0	0	0	0.000	0	0 00:00 100.62
L2017B-S2	0.000	0	0	0	0.000	0	0 00:00 68.25
L2018A-S	0.000	0	0	0	0.000	0	0 00:00 287.44
L2018A-S1	0.000	0	0	0	0.000	0	0 00:00 587.42
L2018B-S	0.000	0	0	0	0.000	0	0 00:00 260.09

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L2019A-S	0.000	0	0	0	0.000	0	0 00:00 293.61
L2019A-S1	0.000	0	0	0	0.000	0	0 00:00 239.35
L2019B-S	0.000	0	0	0	0.000	0	0 00:00 171.01
L2021A-S	0.000	0	0	0	0.000	0	0 00:00 229.83
L2021B-S	0.000	0	0	0	0.000	0	0 00:00 268.76
L2023A-S	0.000	0	0	0	0.000	0	0 00:00 177.87
L2024A-S	0.000	0	0	0	0.000	0	0 00:00 235.24
L2024A-S1	0.000	0	0	0	0.000	0	0 00:00 174.39
L2024B-S	0.000	0	0	0	0.000	0	0 00:00 186.17
L2024B-S1	0.000	0	0	0	0.000	0	0 00:00 127.06
L2026A-S	0.000	0	0	0	0.000	0	0 00:00 115.60
L2026A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2026B-S	0.000	0	0	0	0.000	0	0 00:00 254.90
L2026B-S1	0.000	0	0	0	0.000	0	0 00:00 212.93
L2027A-S	0.000	0	0	0	0.000	0	0 00:00 288.37
L2027A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2027A-S2	0.000	0	0	0	0.000	0	0 00:00 0.00
L2027A-S3	0.000	0	0	0	0.000	0	0 00:00 209.91
L2027B-S	0.000	0	0	0	0.000	0	0 00:00 161.62
L2029A-S	0.000	0	0	0	0.000	0	0 00:00 153.39
L2029B-S	0.000	0	0	0	0.000	0	0 00:00 347.22
L2030A-S	0.000	0	0	0	0.000	0	0 00:00 90.38
L2030B-S	0.000	0	0	0	0.000	0	0 00:00 64.88
L2031A-S	0.000	0	0	0	0.000	0	0 00:00 44.36
L2031A-S1	0.000	0	0	0	0.000	0	0 00:00 10.94
L2031B-S	0.000	0	0	0	0.000	0	0 00:00 50.20
L2031B-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2031B-S2	0.000	0	0	0	0.000	0	0 00:00 0.00
L2032A-S	0.000	0	0	0	0.000	0	0 00:00 252.66
L2032A-S1	0.000	0	0	0	0.000	0	0 00:00 118.67
L2032B-S	0.000	0	0	0	0.000	0	0 00:00 196.42
L2033A-S	0.000	0	0	0	0.000	0	0 00:00 146.30
L2033B-S	0.000	0	0	0	0.000	0	0 00:00 161.62
L2033B-S1	0.000	0	0	0	0.000	0	0 00:00 82.41
L2034A-S1	0.000	0	0	0	0.000	0	0 00:00 40.25
L2036A-S	0.000	0	0	0	0.000	0	0 00:00 54.22
L2036A-S1	0.000	0	0	0	0.000	0	0 00:00 272.20
L2037A-S	0.000	0	0	0	0.000	0	0 00:00 80.10
L2038A-S	0.000	0	0	0	0.000	0	0 00:00 130.81
L2039A-S	0.000	0	0	0	0.000	0	0 00:00 114.59
L2039A-S1	0.000	0	0	0	0.000	0	0 00:00 39.73
L2039A-S2	0.000	0	0	0	0.000	0	0 00:00 40.95
L2039B-S	0.000	0	0	0	0.000	0	0 00:00 88.45
L2039B-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2040A-S	0.000	0	0	0	0.000	0	0 00:00 32.32
L2040A-S1	0.000	0	0	0	0.000	0	0 00:00 180.69
L2041A-S	0.000	0	0	0	0.000	0	0 00:00 45.38
L2042A-S	0.000	0	0	0	0.000	0	0 00:00 92.13

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L2042A-S1	0.000	0	0	0	0.000	0	0 00:00 21.69
L2043A-S	0.000	0	0	0	0.000	0	0 00:00 66.94
L2043A-S1	0.000	0	0	0	0.000	0	0 00:00 24.28
L2043B-S	0.000	0	0	0	0.000	0	0 00:00 72.22
L2043B-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2044A-S	0.000	0	0	0	0.000	0	0 00:00 225.91
L2044A-S1	0.000	0	0	0	0.000	0	0 00:00 66.55
L2044B-S	0.000	0	0	0	0.000	0	0 00:00 194.75
L2044C-S	0.000	0	0	0	0.000	0	0 00:00 290.40
L2046A-S	0.000	0	0	0	0.000	0	0 00:00 114.92
L2046A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
L2047A-S	0.000	0	0	0	0.000	0	0 00:00 57.03
L2047A-S1	0.000	0	0	0	0.000	0	0 00:00 0.00
LM97A-S	0.000	0	0	0	0.000	0	0 00:00 303.57
M97	0.002	32	0	0	0.003	47	0 01:16 7793.80
M98	0.002	40	0	0	0.002	41	0 01:11 12379.13
P1	0.003	57	0	0	0.003	62	0 03:11 7664.77
P2	0.002	52	0	0	0.002	59	0 03:10 6002.22
P3	0.002	53	0	0	0.002	60	0 03:10 6002.87
POND	24.997	46	0	0	29.280	54	0 03:12 608.96
R102A-S	0.000	0	0	0	0.000	5	0 01:10 32.95
R102B-S	0.000	0	0	0	0.000	5	0 01:10 36.90
R103A-S	0.000	0	0	0	0.000	4	0 01:10 23.73
RfA	0.409	26	0	0	0.681	43	0 01:52 53.98
RfB	0.038	28	0	0	0.063	47	0 01:50 4.89
RfC	0.040	27	0	0	0.068	45	0 01:50 5.36
RfD	0.012	27	0	0	0.021	44	0 01:50 1.57
RfE	0.013	26	0	0	0.022	44	0 01:45 1.77
STM101-1	0.002	35	0	0	0.002	40	0 03:10 1722.37
STM102-1	0.001	26	0	0	0.001	47	0 01:10 195.50
STM103-1	0.000	16	0	0	0.001	26	0 01:10 23.62

 Outfall Loading Summary

Outfall Node	Flow Freq Pcnt	Avg Flow LPS	Max Flow LPS	Total Volume 10^6 ltr
OF1	0.00	0.00	0.00	0.000
OF10	17.00	3.76	17.55	0.014
OF2	100.00	315.19	606.22	6.808
OF3	51.10	1.96	18.94	0.022
OF6	0.00	0.00	0.00	0.000
OF7	2.48	88.06	110.94	0.047

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OF8	50.78	16.77	188.08	0.184
OF9	50.23	13.34	148.07	0.145
POND6_MJ	3.71	105.10	230.90	0.084
POND6_MN	99.55	1704.05	12379.13	36.640
SU87	0.00	0.00	0.00	0.000
System	34.08	2248.22	0.00	43.944

 Link Flow Summary

Link	Type	Maximum Flow LPS	Time of Max Occurrence days hr:min	Maximum Veloc m/sec	Max/ Full Flow	Max/ Full Depth
1000-P3	CONDUIT	6004.33	0 01:12	2.49	1.65	0.95
1001-1000	CONDUIT	3856.73	0 01:15	1.88	1.27	0.93
1002-1001	CONDUIT	3798.34	0 01:15	1.80	1.32	0.96
1003-1002	CONDUIT	2135.43	0 01:15	1.00	0.74	1.00
1004-1003	CONDUIT	1982.72	0 01:15	0.93	0.69	1.00
1005-1004	CONDUIT	1981.36	0 01:15	1.29	0.88	1.00
1006-1005	CONDUIT	1990.46	0 01:10	1.65	0.84	0.99
1007-1006	CONDUIT	431.56	0 01:12	1.79	1.19	0.98
1008-1007	CONDUIT	357.92	0 01:11	1.93	0.93	0.88
1009-1008	CONDUIT	152.57	0 01:11	1.82	0.87	0.72
1010-1006	CONDUIT	1470.75	0 01:10	1.49	0.84	0.99
1011-1010	CONDUIT	957.55	0 01:10	1.93	0.97	1.00
1012-1011	CONDUIT	709.85	0 01:17	1.85	0.78	0.90
1013-1012	CONDUIT	669.34	0 01:17	1.91	0.95	0.82
1014-1013	CONDUIT	665.34	0 01:17	2.14	0.98	0.88
1015-1014	CONDUIT	34.14	0 01:10	1.01	0.44	0.50
1016-1010	CONDUIT	417.89	0 01:15	1.28	1.11	1.00
1017-1016	CONDUIT	337.53	0 01:08	1.40	0.82	0.93
1018-1017	CONDUIT	340.43	0 01:11	1.76	1.17	0.85
1019-1018	CONDUIT	261.35	0 01:10	1.39	0.91	0.81
1020-1014	CONDUIT	100.82	0 01:12	1.27	0.71	0.73
1020-1019	CONDUIT	50.99	0 01:11	1.18	0.65	0.59
1051-1050	CONDUIT	207.54	0 01:10	1.93	1.47	0.94
1052-1050	CONDUIT	413.26	0 01:14	1.13	0.96	0.89
1053-1050	CONDUIT	291.13	0 01:10	1.37	1.22	0.87
2000-M98	CONDUIT	4602.98	0 01:13	2.08	1.26	0.81
2001-2000	CONDUIT	4446.45	0 01:13	1.76	1.22	0.97
2002-2001	CONDUIT	1696.98	0 01:12	1.20	1.00	0.97
2003-2002	CONDUIT	1623.29	0 01:12	1.15	0.96	0.96
2004-2003	CONDUIT	1638.31	0 01:11	1.26	0.97	0.95

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2005-2004	CONDUIT	1464.80	0	01:11	1.41	1.19	0.96
2005A-2005	CONDUIT	483.77	0	01:10	1.00	0.84	1.00
2006-2005	CONDUIT	267.32	0	01:11	0.58	0.47	0.99
2006-2005A	CONDUIT	105.30	0	01:27	0.35	0.18	0.97
2007-2006	CONDUIT	277.13	0	01:06	1.06	0.64	0.89
2008-2007	CONDUIT	183.36	0	01:07	1.21	0.67	0.75
2009-2008	CONDUIT	127.61	0	01:10	1.15	1.00	0.66
2010-2001	CONDUIT	2322.30	0	01:21	1.64	1.38	0.99
2011-2010	CONDUIT	591.21	0	01:15	1.18	1.06	1.00
2012-2011	CONDUIT	476.16	0	01:12	1.41	0.89	1.00
2013-2012	CONDUIT	508.35	0	01:07	1.64	0.96	1.00
2014-2013	CONDUIT	408.40	0	01:07	1.37	0.77	1.00
2015-2014	CONDUIT	424.86	0	01:09	1.47	0.80	0.93
2016-2015	CONDUIT	92.09	0	01:10	1.38	1.18	0.89
2017-2015	CONDUIT	282.80	0	01:11	1.37	1.03	0.68
2018-2010	CONDUIT	1677.42	0	01:16	1.17	0.99	1.00
2019-2018	CONDUIT	473.14	0	01:10	1.23	1.04	0.90
2020-2019	CONDUIT	131.40	0	01:10	1.22	1.03	0.64
2021-2020	CONDUIT	131.43	0	01:10	1.51	0.94	0.74
2022-2019	CONDUIT	251.89	0	01:14	1.15	0.78	0.59
2023-2022	CONDUIT	252.00	0	01:13	0.95	0.77	0.69
2024-2023	CONDUIT	173.92	0	01:12	1.01	0.63	0.61
2025-2024	CONDUIT	69.37	0	01:11	1.20	1.01	0.76
2026-2017	CONDUIT	188.39	0	01:11	1.07	0.98	0.78
2026-2025	CONDUIT	69.40	0	01:11	1.13	1.02	0.82
2027-2026	CONDUIT	143.89	0	01:09	1.02	1.01	0.85
2028-2018	CONDUIT	1140.70	0	01:23	1.01	0.96	1.00
2029-2028	CONDUIT	1127.54	0	01:23	1.00	0.91	1.00
2030-2029	CONDUIT	173.93	0	01:26	0.69	0.38	1.00
2031-2030	CONDUIT	99.63	0	01:23	1.03	0.78	1.00
2032-2029	CONDUIT	769.45	0	01:23	1.61	1.10	1.00
2033-2032	CONDUIT	176.95	0	01:21	1.21	1.24	1.00
2034-2033	CONDUIT	26.37	0	01:33	0.46	0.43	1.00
2035-2034	CONDUIT	4.20	0	01:16	0.10	0.07	0.61
2036-2032	CONDUIT	501.70	0	01:27	1.15	1.10	1.00
2037-2036	CONDUIT	161.30	0	01:13	1.46	0.70	0.72
2038-2037	CONDUIT	78.83	0	01:11	1.32	1.01	0.79
2039-2036	CONDUIT	102.77	0	01:23	1.12	0.93	1.00
2040-2036	CONDUIT	204.28	0	01:07	1.27	1.23	1.00
2041-2040	CONDUIT	103.44	0	01:13	1.32	0.73	0.73
2042-2041	CONDUIT	57.08	0	01:11	1.22	0.73	0.63
2043-2040	CONDUIT	82.65	0	01:27	1.23	1.06	1.00
2044-2001	CONDUIT	375.80	0	01:07	1.28	1.15	0.97
2045-2044	CONDUIT	189.47	0	01:21	1.07	1.14	1.00
2046-2045	CONDUIT	85.22	0	01:33	0.70	0.51	0.97
2047-2046	CONDUIT	61.81	0	01:22	0.89	0.48	0.81
301-M97	CONDUIT	7593.38	0	01:16	2.54	0.97	1.00
C1003A-S1-CB102	CHANNEL	0.07	0	01:19	0.06	0.00	0.02

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C1003A-S1-L1002A-S	CHANNEL	70.35	0	01:11	0.14	0.01	0.47
C1003A-S-C1003A-S1	CHANNEL	49.57	0	01:19	0.24	0.01	0.39
C1006A-S1-C1003A-S	CHANNEL	195.68	0	01:13	0.61	0.02	0.40
C1006A-S-C1006A-S1	CHANNEL	209.79	0	01:12	0.19	0.02	0.56
C1008A-S1-L1010A-S2	CHANNEL	0.34	0	01:10	0.01	0.00	0.15
C1008A-S-C1008A-S1	CHANNEL	0.00	0	01:11	0.00	0.00	0.29
C1009A-S1-C1008A-S	CHANNEL	4.04	0	01:12	0.33	0.00	0.31
C1009A-S-C1009A-S1	CHANNEL	24.83	0	01:10	0.14	0.00	0.29
C1051A-S-C1052B-S1	CHANNEL	90.40	0	01:10	0.19	0.01	0.30
C1052A-S1-C1052A-S	CHANNEL	1.13	0	01:11	0.18	0.00	0.21
C1052A-S-C1052A-S2	CHANNEL	77.70	0	01:10	0.27	0.01	0.29
C1052B-S1-C1052B-S	CHANNEL	0.00	0	00:00	0.00	0.00	0.29
C1052B-S-C1052A-S1	CHANNEL	23.38	0	01:11	0.12	0.00	0.30
C139	CONDUIT	163.75	0	01:10	1.20	0.35	0.68
C156	CONDUIT	304.72	0	01:10	1.40	0.65	0.85
C18	CHANNEL	148.86	0	01:11	0.20	0.01	0.38
C2000A-S1-C2000A-S	CHANNEL	0.00	0	00:00	0.00	0.00	0.42
C2000A-S1-C2001A-S	CHANNEL	0.00	0	00:00	0.00	0.00	0.32
C2000A-S-POND6_MJ	CHANNEL	230.90	0	01:10	0.47	0.08	0.52
C2001A-S-C2002A-S1	CHANNEL	44.94	0	01:20	0.44	0.00	0.38
C2002A-S1-C2002A-S	CHANNEL	66.06	0	01:20	0.27	0.01	0.40
C2002A-S2-C2004A-S	CHANNEL	0.87	0	01:21	0.23	0.00	0.27
C2002A-S-C2002A-S2	CHANNEL	10.16	0	01:11	0.14	0.00	0.32
C2004A-S1-C2004B-S	CHANNEL	0.28	0	01:11	0.15	0.00	0.23
C2004A-S-C2004A-S1	CHANNEL	11.66	0	01:10	0.15	0.00	0.28
C2004B-S1-C1009A-S	CHANNEL	32.61	0	01:12	0.30	0.00	0.32
C2004B-S1-C1051A-S	CHANNEL	0.00	0	00:00	0.00	0.00	0.21
C2004B-S-C2004B-S1	CHANNEL	167.64	0	01:08	0.45	0.03	0.35
C2005A-S-C2004B-S1	CHANNEL	59.89	0	01:10	0.20	0.01	0.25
C2006A-S1-L1015A-S1	CHANNEL	0.00	0	00:00	0.00	0.00	0.00
C2006A-S1-L2031B-S2	CHANNEL	0.00	0	00:00	0.00	0.00	0.00
C2006A-S-C2006B-S	CHANNEL	46.41	0	01:10	0.11	0.00	0.34
C2006B-S1-C2005A-S	CHANNEL	69.62	0	01:11	0.22	0.00	0.26
C2006B-S-C2006B-S1	CHANNEL	84.94	0	01:10	0.14	0.01	0.34
C2008A-S-L1015A-S1	CHANNEL	197.75	0	01:10	0.35	0.03	0.33
C2009A-S1-C2009A-S	CHANNEL	0.00	0	00:00	0.00	0.00	0.00
C2009A-S1-C2009B-S	CHANNEL	0.00	0	00:00	0.00	0.00	0.17
C2009A-S-SU87	CHANNEL	0.00	0	00:00	0.00	0.00	0.00
C2009B-S1-C2008A-S	CHANNEL	6.94	0	01:10	0.17	0.00	0.25
C2009B-S-C2009B-S1	CHANNEL	12.39	0	01:09	0.12	0.00	0.19
C3	CONDUIT	0.00	0	00:00	0.00	0.00	0.00
C30	CHANNEL	81.52	0	01:10	0.20	0.01	0.35
C31	CHANNEL	124.58	0	01:10	0.54	0.01	0.38
C32	CHANNEL	85.78	0	01:11	0.61	0.01	0.17
C33	CHANNEL	101.22	0	01:10	0.14	0.01	0.38
C34	CHANNEL	60.42	0	01:10	0.25	0.01	0.38
C35	CHANNEL	0.00	0	00:00	0.00	0.00	0.07
C36	CHANNEL	299.05	0	01:22	0.40	0.03	0.50

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C37	CHANNEL	122.15	0	01:10	0.19	0.01
C38	CHANNEL	129.11	0	01:10	0.19	0.01
C39	CHANNEL	63.57	0	01:10	0.17	0.01
C4	CONDUIT	1429.95	0	01:11	1.60	0.61
C40	CHANNEL	68.66	0	01:10	0.15	0.01
C41	CHANNEL	0.00	0	00:00	0.00	0.00
C7	CONDUIT	4.89	0	01:50	0.46	0.04
CM97A-S1-CM97A-S	CHANNEL	73.22	0	01:14	0.63	0.01
CM97A-S-C2000A-S	CHANNEL	108.62	0	01:10	0.26	0.01
F1021A-S-L1011A-S	CONDUIT	0.00	0	00:00	0.00	0.00
F2006A-S-C2006A-S	CONDUIT	0.00	0	00:00	0.00	0.00
L1000A-S-POND	CONDUIT	48.58	0	01:10	1.46	0.05
L1001A-S1-L1001A-S	CHANNEL	170.32	0	01:10	0.19	0.02
L1001A-S2-L1001A-S	CHANNEL	196.00	0	01:12	0.35	0.02
L1001A-S-POND	CHANNEL	2.75	0	01:18	0.28	0.00
L1002A-S1-L1001A-S1	CHANNEL	164.86	0	01:10	0.23	0.02
L1007A-S-L1010A-S2	CONDUIT	238.93	0	01:10	2.18	0.27
L1010A-S1-L1010A-S	CHANNEL	34.93	0	01:17	0.04	0.00
L1010A-S2-C1006A-S	CHANNEL	426.58	0	01:10	0.50	0.04
L1010A-S-L1010A-S2	CHANNEL	309.23	0	01:11	0.50	0.04
L1011A-S1-L1011A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L1011A-S-L1010A-S1	CHANNEL	387.03	0	01:25	0.54	0.05
L1011B-S-L1011A-S	CONDUIT	97.90	0	01:10	1.05	0.21
L1012A-S-L1011A-S1	CHANNEL	0.00	0	00:00	0.00	0.00
L1015A-S1-L1015A-S	CHANNEL	196.08	0	01:10	0.49	0.02
L1015A-S2-L1020A-S1	CHANNEL	181.52	0	01:11	0.92	0.02
L1015A-S-L1015A-S2	CHANNEL	193.69	0	01:10	0.26	0.02
L1016A-S1-L1016A-S	CHANNEL	59.13	0	01:12	0.17	0.01
L1016A-S-L1010A-S1	CHANNEL	62.87	0	01:10	0.12	0.01
L1017A-S1-L1017A-S	CHANNEL	82.94	0	01:11	0.19	0.01
L1017A-S-L1016A-S1	CHANNEL	78.85	0	01:10	0.20	0.01
L1019A-S1-L1019A-S	CHANNEL	84.33	0	01:11	0.18	0.01
L1019A-S-L1017A-S1	CHANNEL	104.35	0	01:10	0.14	0.01
L1019B-S-L1010B-S	CONDUIT	144.98	0	01:10	0.63	0.71
L1019C-S-L1019A-S	CONDUIT	38.65	0	01:10	0.43	0.20
L1020A-S1-L1020A-S	CHANNEL	86.41	0	01:12	0.21	0.01
L1020A-S1-L1020B-S	CHANNEL	78.75	0	01:12	0.18	0.01
L1020A-S-L1019A-S1	CHANNEL	90.68	0	01:10	0.19	0.01
L1020B-S1-L1020C-S	CHANNEL	24.27	0	01:15	0.20	0.00
L1020B-S-L1020B-S1	CHANNEL	30.51	0	01:12	0.13	0.00
L1020C-S1-L1012A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L1020C-S-L1020C-S1	CHANNEL	0.00	0	00:00	0.00	0.00
L1024A-S1-L1024A-S	CHANNEL	304.93	0	01:12	0.23	0.04
L1024A-S1-L1001A-S2	CHANNEL	222.49	0	01:12	0.37	0.03
L1024B-S-L1001A-S2	CONDUIT	221.04	0	01:10	3.03	0.47
L1026A-S1-L1026A-S	CHANNEL	21.58	0	01:11	0.22	0.00
L1026A-S1-L1024A-S1	CHANNEL	32.19	0	01:12	0.20	0.00
L1027A-S1-L1026A-S1	CHANNEL	65.90	0	01:10	0.12	0.01

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L1027B-S1-L1027B-S	CHANNEL	50.09	0	01:17	0.71	0.00
L1027B-S1-L1027A-S	CHANNEL	37.00	0	01:10	0.31	0.00
L1027C-S-L1032B-S	CONDUIT	100.21	0	01:10	0.58	0.49
L1029A-S1-L1029A-S	CHANNEL	103.69	0	01:14	0.21	0.01
L1029A-S1-L1027B-S1	CHANNEL	57.49	0	01:10	0.12	0.01
L1030A-S1-L1030A-S	CHANNEL	122.22	0	01:12	0.19	0.01
L1030A-S1-L1029A-S1	CHANNEL	105.55	0	01:13	0.14	0.01
L1031A-S1-L1030A-S1	CHANNEL	129.87	0	01:11	0.20	0.02
L1032A-S1-L1032A-S	CHANNEL	190.67	0	01:11	0.23	0.01
L1032A-S1-L1024A-S1	CHANNEL	328.05	0	01:10	0.32	0.04
L1032B-S-L1032A-S	CONDUIT	188.23	0	01:10	1.24	0.40
L1034A-S1-L1034A-S	CHANNEL	14.96	0	01:11	0.17	0.00
L1034A-S1-L1032A-S1	CHANNEL	56.99	0	01:07	0.30	0.01
L1036A-S1-L1034A-S1	CHANNEL	47.11	0	01:09	0.12	0.01
L1038A-S1-L1036A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L1038A-S1-L1038A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L1038A-S1-L1039A-S1	CHANNEL	56.43	0	01:06	0.33	0.01
L1039A-S1-L1039A-S	CHANNEL	180.32	0	01:10	0.25	0.02
L1039A-S1-L1032A-S1	CHANNEL	256.97	0	01:05	0.51	0.03
L1039B-S-L1039A-S	CONDUIT	28.78	0	01:10	0.78	0.06
L1050A-S1-L1039A-S1	CHANNEL	288.46	0	01:05	0.50	0.04
L1050B-S-L1050A-S	CONDUIT	119.58	0	01:10	1.11	0.26
L1051B-S-C1051A-S	CONDUIT	89.13	0	01:10	1.03	0.19
L1053A-S-C1052B-S	CONDUIT	174.50	0	01:10	1.22	0.37
L2007A-S-C2008A-S	CONDUIT	152.37	0	01:10	1.18	0.33
L2010A-S1-L2010A-S	CHANNEL	247.00	0	01:11	0.94	0.02
L2010A-S2-C2002A-S1	CHANNEL	157.31	0	01:18	0.14	0.02
L2010A-S-L2010A-S2	CHANNEL	157.03	0	01:17	0.15	0.02
L2010B-S-L2010A-S2	CONDUIT	76.55	0	01:10	1.24	0.16
L2011A-S1-L2011A-S	CHANNEL	11.40	0	01:12	0.17	0.00
L2011A-S-L2010A-S	CHANNEL	113.61	0	01:12	0.17	0.01
L2013A-S-L2011A-S1	CHANNEL	64.25	0	01:10	0.15	0.01
L2015A-S1-L2013A-S	CHANNEL	44.73	0	01:11	0.20	0.00
L2015A-S-L2015A-S1	CHANNEL	69.70	0	01:10	0.13	0.01
L2016A-S1-L2016A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2016A-S1-L2017B-S1	CHANNEL	0.00	0	00:00	0.00	0.00
L2016B-S-L2016A-S	CONDUIT	49.66	0	01:10	0.89	0.11
L2017A-S1-L2017A-S	CHANNEL	7.06	0	01:11	0.17	0.00
L2017A-S-L2017B-S2	CHANNEL	69.99	0	01:10	0.17	0.01
L2017B-S1-L2015A-S	CHANNEL	45.96	0	01:11	0.16	0.00
L2017B-S1-L2021A-S	CHANNEL	54.66	0	01:11	0.11	0.00
L2017B-S2-L2017B-S	CHANNEL	68.25	0	01:10	0.15	0.01
L2017B-S-L2017B-S1	CHANNEL	106.76	0	01:10	0.20	0.02
L2018A-S1-L2018A-S	CHANNEL	259.44	0	01:12	0.24	0.03
L2018A-S-L2010A-S1	CHANNEL	252.52	0	01:10	0.24	0.03
L2019A-S1-L2019A-S	CHANNEL	239.35	0	01:11	0.22	0.02
L2019A-S-L2018A-S1	CHANNEL	240.84	0	01:11	0.29	0.03
L2019B-S-L2019A-S	CONDUIT	121.82	0	01:10	1.11	0.26

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L2021A-S-L2019A-S1	CHANNEL	195.20	0	01:10	0.27	0.03
L2021B-S-L2021A-S	CONDUIT	171.93	0	01:10	1.22	0.37
L2023A-S-L2019A-S1	CHANNEL	99.37	0	01:15	0.19	0.01
L2024A-S1-L2024B-S	CHANNEL	174.39	0	01:12	0.19	0.02
L2024A-S-L2024A-S1	CHANNEL	182.71	0	01:11	0.19	0.02
L2024B-S1-L2023A-S	CHANNEL	127.06	0	01:14	0.24	0.01
L2024B-S-L2024B-S	CHANNEL	133.85	0	01:13	0.16	0.01
L2026A-S1-L2026A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2026A-S1-L2027A-S3	CHANNEL	0.00	0	00:00	0.00	0.00
L2026A-S-L2017A-S1	CHANNEL	36.09	0	01:10	0.13	0.00
L2026B-S1-L2024A-S	CHANNEL	212.93	0	01:11	0.21	0.02
L2026B-S-L2026B-S1	CHANNEL	220.21	0	01:10	0.23	0.02
L2027A-S1-L2027A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2027A-S1-L2038A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2027A-S2-L2027A-S1	CHANNEL	0.00	0	00:00	0.00	0.00
L2027A-S2-L2042A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2027A-S3-L2026B-S	CHANNEL	209.91	0	01:10	0.36	0.02
L2027A-S-L2027A-S3	CHANNEL	210.61	0	01:10	0.45	0.05
L2027B-S-L2027A-S	CONDUIT	95.52	0	01:10	1.42	0.14
L2029A-S-L2018A-S1	CHANNEL	587.41	0	01:08	0.64	0.07
L2029B-S-L2032A-S	CONDUIT	276.71	0	01:10	1.37	0.59
L2030A-S-L2031A-S1	CHANNEL	45.14	0	01:11	0.08	0.00
L2030B-S-L2030A-S	CONDUIT	44.03	0	01:10	0.86	0.09
L2031A-S1-L2031A-S	CHANNEL	10.94	0	01:17	0.15	0.00
L2031A-S-L2031B-S1	CHANNEL	0.00	0	00:00	0.00	0.00
L2031B-S1-L2031B-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2031B-S2-C2006A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2031B-S-L2031B-S2	CHANNEL	0.00	0	00:00	0.00	0.00
L2032A-S1-L2029A-S	CHANNEL	49.60	0	01:10	0.17	0.01
L2032A-S1-L2030A-S	CHANNEL	69.07	0	01:10	0.18	0.01
L2032A-S-L2032A-S1	CHANNEL	199.31	0	01:09	0.20	0.02
L2032B-S-L2032A-S	CONDUIT	126.08	0	01:10	1.12	0.27
L2033A-S-L2033B-S1	CHANNEL	82.41	0	01:11	0.18	0.01
L2033B-S1-L2033B-S	CHANNEL	102.28	0	01:10	0.10	0.01
L2033B-S-L2036A-S1	CHANNEL	132.44	0	01:09	0.24	0.01
L2034A-S1-L2037A-S	CHANNEL	40.25	0	01:11	0.19	0.00
L2036A-S1-L2032A-S	CHANNEL	115.27	0	01:08	0.25	0.01
L2036A-S-L2036A-S1	CHANNEL	67.63	0	01:10	0.38	0.01
L2037A-S-L2039A-S2	CHANNEL	22.33	0	01:11	0.13	0.00
L2038A-S-L2034A-S1	CHANNEL	51.87	0	01:10	0.13	0.01
L2039A-S1-L2039A-S	CHANNEL	39.73	0	01:10	0.06	0.00
L2039A-S2-L2036A-S	CHANNEL	20.64	0	01:11	0.16	0.00
L2039A-S-L2039A-S2	CHANNEL	62.68	0	01:10	0.13	0.01
L2039B-S1-L2033A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2039B-S1-L2039B-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2039B-S-L2039A-S1	CHANNEL	44.29	0	01:10	0.15	0.00
L2040A-S1-L2040A-S	CHANNEL	9.87	0	01:12	0.36	0.00
L2040A-S-L2039A-S2	CHANNEL	3.48	0	01:11	0.20	0.00

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L2041A-S-L2040A-S1	CHANNEL	180.68	0	01:10	0.33	0.02
L2042A-S1-L2041A-S	CHANNEL	21.69	0	01:11	0.16	0.00
L2042A-S-L2042A-S1	CHANNEL	35.05	0	01:10	0.12	0.00
L2043A-S1-L2043A-S	CHANNEL	24.28	0	01:11	0.12	0.00
L2043A-S-L2040A-S1	CHANNEL	33.42	0	01:10	0.14	0.00
L2043B-S1-L2039B-S1	CHANNEL	0.00	0	00:00	0.00	0.00
L2043B-S1-L2043B-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2043B-S-L2043A-S1	CHANNEL	28.37	0	01:10	0.11	0.00
L2044A-S1-L2044A-S	CHANNEL	73.98	0	01:10	0.13	0.01
L2044A-S-C2002A-S1	CHANNEL	117.46	0	01:10	0.13	0.01
L2044B-S-OF7	CONDUIT	110.94	0	01:10	1.09	0.24
L2044C-S-L2044A-S	CONDUIT	193.18	0	01:10	1.25	0.41
L2046A-S1-L2046A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2046A-S1-L2047A-S	CHANNEL	0.00	0	00:00	0.00	0.00
L2046A-S-L2044A-S1	CHANNEL	66.55	0	01:10	0.17	0.01
L2047A-S1-L2047A-S	CHANNEL	0.00	0	00:00	0.00	0.00
LM97A-S-C2000A-S	CHANNEL	187.02	0	01:10	1.29	0.05
M97-M98	CONDUIT	7793.80	0	01:16	2.47	1.01
M98-M99	CONDUIT	12379.13	0	01:14	3.47	1.30
outlet	CONDUIT	606.22	0	01:43	1.45	0.55
P2-P1	CONDUIT	6002.22	0	01:13	2.56	1.72
P3-P2	CONDUIT	6002.87	0	01:13	2.54	1.65
P8IN-HI	CONDUIT	1222.24	0	01:20	1.51	0.15
P8IN-LO	CONDUIT	6659.28	0	01:10	2.20	0.39
Pipe_10	CONDUIT	1025.94	0	01:11	1.62	1.46
Pipe_26	CONDUIT	148.82	0	01:14	1.19	1.04
Pipe_27	CONDUIT	51.31	0	01:14	0.60	0.58
Pipe_28	CONDUIT	51.12	0	01:10	0.84	0.53
Pipe_29	CONDUIT	9.20	0	01:10	0.39	0.14
Pipe_30	CONDUIT	41.69	0	01:10	1.02	0.68
Pipe_31	CONDUIT	99.35	0	01:14	0.99	0.78
Pipe_32	CONDUIT	194.33	0	01:19	1.39	1.01
Pipe_33	CONDUIT	180.26	0	01:15	1.25	0.71
Pipe_34	CONDUIT	127.83	0	01:15	1.29	0.75
Pipe_35	CONDUIT	112.89	0	01:11	1.23	0.67
Pipe_36	CONDUIT	33.10	0	01:11	0.95	0.62
Pipe_37	CONDUIT	33.10	0	01:10	0.92	0.58
Pipe_43	CONDUIT	488.78	0	01:13	1.37	0.76
Pipe_44	CONDUIT	456.25	0	01:10	1.63	0.99
Pipe_45	CONDUIT	219.04	0	01:13	1.62	1.30
Pipe_46	CONDUIT	218.19	0	01:16	1.46	1.21
Pipe_46_(1)	CONDUIT	137.42	0	01:15	1.17	0.76
Pipe_47	CONDUIT	79.70	0	01:12	1.34	1.02
Pipe_5	CONDUIT	2132.72	0	01:12	2.00	1.41
Pipe_6	CONDUIT	1882.90	0	01:12	1.70	1.25
Pipe_7	CONDUIT	1398.48	0	01:12	1.90	1.61
Pipe_8	CONDUIT	1266.38	0	01:12	1.99	1.83
Pipe_9	CONDUIT	1121.88	0	01:11	1.97	1.59

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PIPE1	CONDUIT	10.13	0	01:10	0.51	0.17
PIPE10	CONDUIT	54.59	0	01:10	1.75	1.65
PIPE11	CONDUIT	940.12	0	01:12	1.55	1.43
PIPE13	CONDUIT	331.96	0	01:09	1.01	0.95
PIPE14	CONDUIT	422.40	0	01:09	0.98	1.18
PIPE15	CONDUIT	422.33	0	01:10	0.96	1.19
PIPE16	CONDUIT	574.88	0	01:09	1.43	1.61
PIPE17	CONDUIT	1426.96	0	01:11	1.05	0.78
PIPE19	CONDUIT	1001.12	0	01:12	0.77	0.56
PIPE2	CONDUIT	12.58	0	01:10	0.65	0.39
PIPE24	CONDUIT	53.98	0	01:52	1.18	2.74
PIPE25	CONDUIT	58.79	0	01:10	1.87	5.34
PIPE26	CONDUIT	66.80	0	01:10	2.13	5.85
PIPE27	CONDUIT	152.76	0	01:12	0.39	0.44
PIPE28	CONDUIT	248.07	0	01:12	0.56	0.71
PIPE29	CONDUIT	58.62	0	01:08	1.87	5.16
PIPE3	CONDUIT	507.02	0	01:10	1.15	1.32
PIPE30	CONDUIT	303.95	0	01:12	0.69	0.86
PIPE31	CONDUIT	193.69	0	01:12	0.44	0.53
PIPE32	CONDUIT	86.87	0	01:10	2.77	7.91
PIPE33	CONDUIT	89.10	0	01:12	0.26	0.25
PIPE34	CONDUIT	54.37	0	01:10	1.73	1.66
PIPE35	CONDUIT	63.30	0	01:10	0.20	0.17
PIPE36	CONDUIT	58.64	0	01:14	0.21	0.15
PIPE38	CONDUIT	16.30	0	01:10	0.16	0.05
PIPE39	CONDUIT	72.71	0	01:12	2.31	2.20
PIPE4	CONDUIT	5.36	0	01:50	0.74	0.09
PIPE40	CONDUIT	6.55	0	01:10	0.54	0.11
PIPE41	CONDUIT	41.28	0	01:06	1.32	1.26
PIPE42	CONDUIT	131.36	0	01:14	0.31	0.36
PIPE43	CONDUIT	192.37	0	01:15	0.44	0.54
PIPE45	CONDUIT	55.90	0	01:08	1.78	1.69
PIPE46	CONDUIT	39.93	0	01:08	1.27	1.22
PIPE47	CONDUIT	263.72	0	01:10	0.60	0.68
PIPE5	CONDUIT	529.56	0	01:10	1.20	1.36
PIPE51	CONDUIT	67.79	0	01:09	2.16	2.06
PIPE52	CONDUIT	40.23	0	01:20	1.28	1.23
PIPE54	CONDUIT	372.88	0	01:10	0.84	1.01
PIPE56	CONDUIT	88.49	0	01:11	2.82	2.69
PIPE57	CONDUIT	44.74	0	01:09	1.42	1.36
PIPE58	CONDUIT	508.77	0	01:10	1.15	1.37
PIPE60	CONDUIT	40.23	0	01:06	0.93	0.58
PIPE61	CONDUIT	984.57	0	01:12	1.74	1.52
PIPE62	CONDUIT	46.22	0	01:04	1.68	0.80
PIPE63	CONDUIT	37.16	0	01:10	1.24	1.08
PIPE7	CONDUIT	63.05	0	01:10	2.01	5.77
PIPE8	CONDUIT	365.28	0	01:12	0.83	1.04
PIPE9	CONDUIT	882.04	0	01:12	1.39	1.36

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STM101-1-P1	CONDUIT	1722.37	0	01:10	1.06	0.74
STM102-101	CONDUIT	195.50	0	01:10	1.36	0.97
STM103-102	CONDUIT	23.62	0	01:03	0.90	0.56
C1003A-01	ORIFICE	75.68	0	01:20		1.00
C1003A-02	ORIFICE	78.00	0	01:20		1.00
C1006A-01	ORIFICE	57.42	0	01:13		1.00
C1006A-02	ORIFICE	59.06	0	01:13		1.00
C1008A-01	ORIFICE	101.18	0	01:10		1.00
C1008A-02	ORIFICE	104.34	0	01:10		1.00
C1009A-01	ORIFICE	75.25	0	01:10		1.00
C1009A-02	ORIFICE	77.34	0	01:10		1.00
C1051A-01	ORIFICE	39.15	0	01:10		1.00
C1051A-02	ORIFICE	39.15	0	01:10		1.00
C1052A-01	ORIFICE	55.62	0	01:11		1.00
C1052A-02	ORIFICE	55.62	0	01:11		1.00
C1052B-01	ORIFICE	56.95	0	01:12		1.00
C1052B-02	ORIFICE	56.95	0	01:12		1.00
C1056A-01	ORIFICE	40.86	0	01:10		1.00
C1056A-02	ORIFICE	40.86	0	01:10		1.00
C2000A-01	ORIFICE	78.13	0	01:10		1.00
C2000A-02	ORIFICE	80.39	0	01:10		1.00
C2001A-01	ORIFICE	55.96	0	01:11		1.00
C2001A-02	ORIFICE	57.45	0	01:11		1.00
C2002A-01	ORIFICE	39.08	0	01:22		1.00
C2002A-02	ORIFICE	40.12	0	01:22		1.00
C2004A-01	ORIFICE	38.70	0	01:10		1.00
C2004A-02	ORIFICE	39.75	0	01:10		1.00
C2004B-01	ORIFICE	54.65	0	01:10		1.00
C2004B-02	ORIFICE	55.99	0	01:10		1.00
C2005A-01	ORIFICE	55.52	0	01:10		1.00
C2005A-02	ORIFICE	55.52	0	01:10		1.00
C2006A-01	ORIFICE	53.58	0	01:10		1.00
C2006A-02	ORIFICE	53.58	0	01:10		1.00
C2006B-01	ORIFICE	77.50	0	01:10		1.00
C2006B-02	ORIFICE	77.50	0	01:10		1.00
C2008A-01	ORIFICE	28.50	0	01:10		1.00
C2008A-02	ORIFICE	28.50	0	01:10		1.00
C2009A-01	ORIFICE	25.28	0	01:10		1.00
C2009A-02	ORIFICE	25.28	0	01:10		1.00
C2009B-01	ORIFICE	38.65	0	01:10		1.00
C2009B-02	ORIFICE	38.65	0	01:10		1.00
CB503-IC	ORIFICE	72.82	0	01:10		1.00
CM97A-01	ORIFICE	71.87	0	01:10		1.00
CM97A-02	ORIFICE	54.25	0	01:10		1.00
F102A-IC	ORIFICE	88.84	0	01:12		1.00
F102B-IC	ORIFICE	85.32	0	01:12		1.00
F102C-IC	ORIFICE	4.58	0	01:03		1.00
L1000A-01	ORIFICE	62.00	0	01:05		1.00

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L1001A-01	ORIFICE	29.17	0	01:18	1.00
L1001A-02	ORIFICE	29.17	0	01:18	1.00
L1002A-01	ORIFICE	40.84	0	01:18	1.00
L1002A-02	ORIFICE	40.84	0	01:18	1.00
L1007A-01	ORIFICE	79.37	0	01:10	1.00
L1010A-01	ORIFICE	17.82	0	01:10	1.00
L1010A-02	ORIFICE	17.82	0	01:10	1.00
L1010B-01	ORIFICE	98.25	0	01:10	1.00
L1011A-01	ORIFICE	17.04	0	01:11	1.00
L1011A-02	ORIFICE	17.04	0	01:11	1.00
L1011B-01	ORIFICE	49.36	0	01:10	1.00
L1012A-01	ORIFICE	16.62	0	01:10	1.00
L1012A-02	ORIFICE	16.62	0	01:10	1.00
L1015A-01	ORIFICE	17.07	0	01:10	1.00
L1015A-02	ORIFICE	17.07	0	01:10	1.00
L1016A-01	ORIFICE	40.23	0	01:16	1.00
L1016A-02	ORIFICE	40.23	0	01:16	1.00
L1017A-01	ORIFICE	39.61	0	01:12	1.00
L1017A-02	ORIFICE	39.61	0	01:12	1.00
L1019A-01	ORIFICE	29.09	0	01:10	1.00
L1019A-02	ORIFICE	29.09	0	01:10	1.00
L1019B-01	ORIFICE	126.50	0	01:10	1.00
L1019C-01	ORIFICE	25.97	0	01:10	1.00
L1020A-01	ORIFICE	25.49	0	01:10	1.00
L1020A-02	ORIFICE	25.49	0	01:10	1.00
L1020B-01	ORIFICE	16.94	0	01:15	1.00
L1020B-02	ORIFICE	16.94	0	01:15	1.00
L1020C-01	ORIFICE	16.57	0	01:18	1.00
L1020C-02	ORIFICE	16.57	0	01:18	1.00
L1024A-01	ORIFICE	79.77	0	01:13	1.00
L1024A-02	ORIFICE	79.77	0	01:13	1.00
L1024B-01	ORIFICE	95.18	0	01:10	1.00
L1026A-01	ORIFICE	17.09	0	01:11	1.00
L1026A-02	ORIFICE	17.09	0	01:11	1.00
L1027A-01	ORIFICE	40.29	0	01:12	1.00
L1027A-02	ORIFICE	40.29	0	01:12	1.00
L1027B-01	ORIFICE	15.98	0	01:10	1.00
L1027B-02	ORIFICE	15.98	0	01:10	1.00
L1027C-01	ORIFICE	131.27	0	01:10	1.00
L1029A-01	ORIFICE	40.47	0	01:16	1.00
L1029A-02	ORIFICE	40.47	0	01:16	1.00
L1030A-01	ORIFICE	29.11	0	01:13	1.00
L1030A-02	ORIFICE	29.11	0	01:13	1.00
L1031A-01	ORIFICE	39.86	0	01:11	1.00
L1031A-02	ORIFICE	39.86	0	01:11	1.00
L1032A-01	ORIFICE	22.58	0	01:10	1.00
L1032A-02	ORIFICE	22.58	0	01:10	1.00
L1032B-01	ORIFICE	97.38	0	01:10	1.00

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L1034A-01	ORIFICE	21.77	0	01:10	1.00
L1034A-02	ORIFICE	21.77	0	01:10	1.00
L1036A-01	ORIFICE	39.91	0	01:10	1.00
L1036A-02	ORIFICE	39.91	0	01:10	1.00
L1038A-01	ORIFICE	16.56	0	01:10	1.00
L1038A-02	ORIFICE	16.56	0	01:10	1.00
L1039A-01	ORIFICE	25.79	0	01:11	1.00
L1039A-02	ORIFICE	25.79	0	01:11	1.00
L1039B-01	ORIFICE	48.60	0	01:10	1.00
L1050A-01	ORIFICE	39.87	0	01:10	1.00
L1050A-02	ORIFICE	39.87	0	01:10	1.00
L1050B-01	ORIFICE	49.80	0	01:10	1.00
L1051B-01	ORIFICE	130.20	0	01:10	1.00
L1053A-01	ORIFICE	24.60	0	01:13	1.00
L1053A-02	ORIFICE	24.60	0	01:13	1.00
L1053B-01	ORIFICE	96.65	0	01:10	1.00
L1054A-01	ORIFICE	57.22	0	01:10	1.00
L1054A-02	ORIFICE	40.10	0	01:10	1.00
L1057A-01	ORIFICE	28.91	0	01:10	1.00
L1057A-02	ORIFICE	28.91	0	01:10	1.00
L1058A-01	ORIFICE	25.45	0	01:10	1.00
L1058A-02	ORIFICE	25.45	0	01:10	1.00
L1059A-01	ORIFICE	20.96	0	01:10	1.00
L1059A-02	ORIFICE	20.96	0	01:10	1.00
L2007A-01	ORIFICE	97.66	0	01:10	1.00
L2010A-01	ORIFICE	23.10	0	01:20	1.00
L2010A-02	ORIFICE	23.10	0	01:20	1.00
L2010B-01	ORIFICE	70.29	0	01:10	1.00
L2011A-01	ORIFICE	58.02	0	01:18	1.00
L2011A-02	ORIFICE	58.02	0	01:18	1.00
L2013A-01	ORIFICE	56.88	0	01:10	1.00
L2013A-02	ORIFICE	56.88	0	01:10	1.00
L2015A-01	ORIFICE	25.75	0	01:10	1.00
L2015A-02	ORIFICE	25.75	0	01:10	1.00
L2016A-01	ORIFICE	35.87	0	01:10	1.00
L2016A-02	ORIFICE	35.87	0	01:10	1.00
L2016B-01	ORIFICE	20.83	0	01:10	1.00
L2017A-01	ORIFICE	25.33	0	01:10	1.00
L2017A-02	ORIFICE	25.33	0	01:10	1.00
L2017B-01	ORIFICE	22.08	0	01:10	1.00
L2017B-02	ORIFICE	22.08	0	01:10	1.00
L2018A-01	ORIFICE	17.46	0	01:10	1.00
L2018A-02	ORIFICE	17.46	0	01:10	1.00
L2018B-01	ORIFICE	96.34	0	01:10	1.00
L2019A-01	ORIFICE	26.40	0	01:11	1.00
L2019A-02	ORIFICE	26.40	0	01:11	1.00
L2019B-01	ORIFICE	49.19	0	01:10	1.00
L2021A-01	ORIFICE	17.32	0	01:10	1.00

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L2021A-02	ORIFICE	17.32	0	01:10	1.00
L2021B-01	ORIFICE	96.83	0	01:10	1.00
L2023A-01	ORIFICE	39.26	0	01:14	1.00
L2023A-02	ORIFICE	39.26	0	01:14	1.00
L2024A-01	ORIFICE	26.27	0	01:12	1.00
L2024A-02	ORIFICE	26.27	0	01:12	1.00
L2024B-01	ORIFICE	26.16	0	01:14	1.00
L2024B-02	ORIFICE	26.16	0	01:14	1.00
L2026A-01	ORIFICE	39.79	0	01:10	1.00
L2026A-02	ORIFICE	39.79	0	01:10	1.00
L2026B-01	ORIFICE	17.34	0	01:10	1.00
L2026B-02	ORIFICE	17.34	0	01:10	1.00
L2027A-01	ORIFICE	38.88	0	01:10	1.00
L2027A-02	ORIFICE	38.88	0	01:10	1.00
L2027B-01	ORIFICE	66.10	0	01:10	1.00
L2029A-01	ORIFICE	56.97	0	01:11	1.00
L2029A-02	ORIFICE	56.97	0	01:11	1.00
L2029B-01	ORIFICE	70.51	0	01:10	1.00
L2030A-01	ORIFICE	22.73	0	01:16	1.00
L2030A-02	ORIFICE	22.73	0	01:16	1.00
L2030B-01	ORIFICE	20.85	0	01:10	1.00
L2031A-01	ORIFICE	22.18	0	01:11	1.00
L2031A-02	ORIFICE	22.18	0	01:11	1.00
L2031B-01	ORIFICE	25.10	0	01:10	1.00
L2031B-02	ORIFICE	25.10	0	01:10	1.00
L2032A-01	ORIFICE	26.72	0	01:10	1.00
L2032A-02	ORIFICE	26.72	0	01:10	1.00
L2032B-01	ORIFICE	70.34	0	01:10	1.00
L2033A-01	ORIFICE	57.42	0	01:12	1.00
L2033A-02	ORIFICE	57.42	0	01:12	1.00
L2033B-01	ORIFICE	29.69	0	01:10	1.00
L2033B-02	ORIFICE	29.69	0	01:10	1.00
L2036A-01	ORIFICE	16.80	0	01:11	1.00
L2036A-02	ORIFICE	16.80	0	01:11	1.00
L2037A-01	ORIFICE	40.05	0	01:13	1.00
L2037A-02	ORIFICE	40.05	0	01:13	1.00
L2038A-01	ORIFICE	39.47	0	01:10	1.00
L2038A-02	ORIFICE	39.47	0	01:10	1.00
L2039A-01	ORIFICE	26.01	0	01:12	1.00
L2039A-02	ORIFICE	26.01	0	01:12	1.00
L2039B-01	ORIFICE	22.08	0	01:10	1.00
L2039B-02	ORIFICE	22.08	0	01:10	1.00
L2040A-01	ORIFICE	16.16	0	01:10	1.00
L2040A-02	ORIFICE	16.16	0	01:10	1.00
L2041A-01	ORIFICE	22.04	0	01:13	1.00
L2041A-02	ORIFICE	22.04	0	01:13	1.00
L2042A-01	ORIFICE	28.55	0	01:10	1.00
L2042A-02	ORIFICE	28.55	0	01:10	1.00

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L2043A-01	ORIFICE	16.76	0	01:10	1.00
L2043A-02	ORIFICE	16.76	0	01:10	1.00
L2043B-01	ORIFICE	21.93	0	01:10	1.00
L2043B-02	ORIFICE	21.93	0	01:10	1.00
L2044A-01	ORIFICE	17.39	0	01:10	1.00
L2044A-02	ORIFICE	17.39	0	01:10	1.00
L2044B-01	ORIFICE	83.81	0	01:10	1.00
L2044C-01	ORIFICE	97.22	0	01:10	1.00
L2046A-01	ORIFICE	57.46	0	01:11	1.00
L2046A-02	ORIFICE	57.46	0	01:11	1.00
L2047A-01	ORIFICE	28.52	0	01:11	1.00
L2047A-02	ORIFICE	28.52	0	01:11	1.00
LM97A-01	ORIFICE	116.55	0	01:10	1.00
PND_OUTLET	ORIFICE	97.78	0	01:24	1.00
R102A-IC	ORIFICE	32.95	0	01:10	1.00
R102B-IC	ORIFICE	36.90	0	01:10	1.00
R103-IC	ORIFICE	23.73	0	01:06	0.93
W3	ORIFICE	390.65	0	01:39	1.00
C1023A-W	WEIR	0.00	0	00:00	0.00
C2049A-W	WEIR	0.00	0	00:00	0.00
L1022A-W	WEIR	0.00	0	00:00	0.00
W1	WEIR	0.00	0	00:00	0.00
W2	WEIR	182.87	0	02:02	0.39
W4	WEIR	0.00	0	00:00	0.00
C1023A-O	DUMMY	1582.15	0	01:13	
C2049A-O	DUMMY	655.06	0	01:12	
F1021A-O	DUMMY	221.39	0	01:10	
F2006A-O	DUMMY	285.20	0	01:10	
L1022A-O	DUMMY	565.19	0	01:12	
L1027B-A1	DUMMY	20.17	0	01:03	
L1027B-A2	DUMMY	20.17	0	01:03	
L1059A-A1	DUMMY	26.03	0	01:02	
L1059A-A2	DUMMY	26.03	0	01:02	
OL1	DUMMY	4.89	0	01:50	
RfA	DUMMY	53.98	0	01:52	
RfC	DUMMY	5.36	0	01:50	
RfD	DUMMY	1.57	0	01:50	
RfE	DUMMY	1.77	0	01:45	

Flow Classification Summary

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class						Norm Ltd	Inlet Ctrl
		Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit		
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1000-P3	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1001-1000	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1002-1001	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1003-1002	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1004-1003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1005-1004	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
1006-1005	1.00	0.00	0.00	0.00	0.91	0.00	0.00	0.09	0.06	0.00
1007-1006	1.00	0.08	0.00	0.00	0.65	0.00	0.00	0.27	0.55	0.00
1008-1007	1.00	0.08	0.00	0.00	0.06	0.02	0.00	0.85	0.07	0.00
1009-1008	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
1010-1006	1.00	0.06	0.01	0.00	0.83	0.00	0.00	0.10	0.00	0.00
1011-1010	1.00	0.08	0.00	0.00	0.79	0.00	0.00	0.13	0.35	0.00
1012-1011	1.00	0.08	0.00	0.00	0.10	0.01	0.00	0.82	0.00	0.00
1013-1012	1.00	0.08	0.00	0.00	0.04	0.00	0.00	0.89	0.00	0.00
1014-1013	1.00	0.07	0.00	0.00	0.06	0.00	0.00	0.87	0.00	0.00
1015-1014	1.00	0.09	0.00	0.00	0.08	0.00	0.00	0.82	0.08	0.00
1016-1010	1.00	0.08	0.00	0.00	0.08	0.00	0.00	0.84	0.00	0.00
1017-1016	1.00	0.08	0.00	0.00	0.16	0.00	0.00	0.76	0.11	0.00
1018-1017	1.00	0.08	0.00	0.00	0.01	0.00	0.00	0.91	0.00	0.00
1019-1018	1.00	0.07	0.00	0.00	0.15	0.00	0.00	0.78	0.08	0.00
1020-1014	1.00	0.08	0.00	0.00	0.11	0.00	0.00	0.81	0.10	0.00
1020-1019	1.00	0.08	0.00	0.00	0.01	0.00	0.00	0.91	0.00	0.00
1051-1050	1.00	0.07	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00
1052-1050	1.00	0.08	0.00	0.00	0.08	0.00	0.00	0.84	0.00	0.00
1053-1050	1.00	0.07	0.00	0.00	0.05	0.00	0.00	0.88	0.00	0.00
2000-M98	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2001-2000	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2002-2001	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2003-2002	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2004-2003	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2005-2004	1.00	0.00	0.08	0.00	0.71	0.00	0.00	0.21	0.45	0.00
2005A-2005	1.00	0.08	0.00	0.00	0.11	0.00	0.00	0.81	0.00	0.00
2006-2005	1.00	0.08	0.00	0.00	0.16	0.00	0.00	0.76	0.01	0.00
2006-2005A	1.00	0.40	0.01	0.00	0.50	0.00	0.00	0.09	0.25	0.00
2007-2006	1.00	0.08	0.00	0.00	0.08	0.00	0.00	0.85	0.00	0.00
2008-2007	1.00	0.08	0.00	0.00	0.06	0.00	0.00	0.85	0.00	0.00
2009-2008	1.00	0.08	0.00	0.00	0.01	0.00	0.00	0.90	0.00	0.00
2010-2001	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2011-2010	1.00	0.08	0.00	0.00	0.11	0.00	0.00	0.81	0.00	0.00
2012-2011	1.00	0.09	0.00	0.00	0.13	0.00	0.00	0.79	0.02	0.00
2013-2012	1.00	0.08	0.00	0.00	0.10	0.00	0.00	0.82	0.03	0.00
2014-2013	1.00	0.08	0.01	0.00	0.13	0.00	0.00	0.78	0.00	0.00
2015-2014	1.00	0.08	0.00	0.00	0.11	0.00	0.00	0.81	0.01	0.00
2016-2015	1.00	0.08	0.00	0.00	0.02	0.00	0.00	0.89	0.01	0.00
2017-2015	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
2018-2010	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2019-2018	1.00	0.08	0.00	0.00	0.07	0.00	0.00	0.85	0.00	0.00

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2020-2019	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
2021-2020	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
2022-2019	1.00	0.09	0.00	0.00	0.00	0.00	0.00	0.91	0.00	0.00
2023-2022	1.00	0.08	0.00	0.00	0.84	0.00	0.00	0.08	0.57	0.00
2024-2023	1.00	0.08	0.00	0.00	0.14	0.00	0.00	0.78	0.02	0.00
2025-2024	1.00	0.15	0.00	0.00	0.00	0.00	0.00	0.85	0.00	0.00
2026-2017	1.00	0.08	0.00	0.00	0.12	0.00	0.00	0.80	0.01	0.00
2026-2025	1.00	0.82	0.00	0.00	0.06	0.00	0.00	0.12	0.00	0.00
2027-2026	1.00	0.08	0.00	0.00	0.14	0.00	0.00	0.78	0.04	0.00
2028-2018	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
2029-2028	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.10	0.00
2030-2029	1.00	0.08	0.00	0.00	0.12	0.00	0.00	0.80	0.00	0.00
2031-2030	1.00	0.08	0.00	0.00	0.07	0.00	0.00	0.85	0.01	0.00
2032-2029	1.00	0.08	0.00	0.00	0.10	0.00	0.00	0.82	0.00	0.00
2033-2032	1.00	0.08	0.00	0.00	0.04	0.00	0.00	0.88	0.00	0.00
2034-2033	1.00	0.14	0.01	0.00	0.13	0.00	0.02	0.70	0.01	0.00
2035-2034	1.00	0.17	0.03	0.00	0.08	0.00	0.01	0.71	0.06	0.00
2036-2032	1.00	0.08	0.00	0.00	0.24	0.00	0.00	0.68	0.00	0.00
2037-2036	1.00	0.08	0.00	0.00	0.03	0.00	0.00	0.89	0.00	0.00
2038-2037	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
2039-2036	1.00	0.08	0.00	0.00	0.05	0.00	0.00	0.87	0.00	0.00
2040-2036	1.00	0.08	0.00	0.00	0.08	0.00	0.00	0.84	0.00	0.00
2041-2040	1.00	0.08	0.00	0.00	0.03	0.00	0.00	0.88	0.00	0.00
2042-2041	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
2043-2040	1.00	0.07	0.00	0.00	0.06	0.00	0.00	0.87	0.00	0.00
2044-2001	1.00	0.07	0.00	0.00	0.07	0.00	0.00	0.86	0.00	0.00
2045-2044	1.00	0.08	0.00	0.00	0.14	0.00	0.00	0.79	0.00	0.00
2046-2045	1.00	0.08	0.01	0.00	0.89	0.00	0.00	0.02	0.68	0.00
2047-2046	1.00	0.08	0.00	0.00	0.09	0.00	0.00	0.83	0.02	0.00
301-M97	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
C1003A-S1-CB102	1.00	0.98	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
C1003A-S1-L1002A-S	1.00	0.17	0.02	0.00	0.09	0.00	0.00	0.72	0.04	0.00
C1003A-S-C1003A-S1	1.00	0.18	0.02	0.00	0.06	0.00	0.00	0.75	0.06	0.00
C1006A-S1-C1003A-S	1.00	0.18	0.01	0.00	0.06	0.00	0.00	0.75	0.06	0.00
C1006A-S-C1006A-S1	1.00	0.17	0.02	0.00	0.09	0.00	0.00	0.73	0.03	0.00
C1008A-S1-L1010A-S2	1.00	0.17	0.03	0.00	0.07	0.00	0.00	0.74	0.80	0.00
C1008A-S-C1008A-S1	1.00	0.17	0.03	0.00	0.02	0.00	0.00	0.78	0.80	0.00
C1009A-S1-C1008A-S	1.00	0.17	0.02	0.00	0.03	0.00	0.00	0.78	0.03	0.00
C1009A-S-C1009A-S1	1.00	0.17	0.02	0.00	0.04	0.00	0.00	0.77	0.03	0.00
C1051A-S-C1052B-S1	1.00	0.95	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.00
C1052A-S1-C1052A-S	1.00	0.17	0.02	0.00	0.02	0.00	0.00	0.78	0.02	0.00
C1052A-S-C1052A-S2	1.00	0.95	0.01	0.00	0.04	0.00	0.00	0.01	0.02	0.00
C1052B-S1-C1052B-S	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C1052B-S-C1052A-S1	1.00	0.17	0.02	0.00	0.05	0.00	0.00	0.75	0.05	0.00
C139	1.00	0.88	0.05	0.00	0.00	0.00	0.04	0.02	0.00	0.00
C156	1.00	0.95	0.02	0.00	0.00	0.00	0.00	0.03	0.79	0.00
C18	1.00	0.92	0.04	0.00	0.05	0.00	0.00	0.00	0.82	0.00
C2000A-S1-C2000A-S	1.00	0.92	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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C2000A-S1-C2001A-S	1.00	0.92	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C2000A-S-POND6_MJ	1.00	0.94	0.03	0.00	0.04	0.00	0.00	0.00	0.00	0.78
C2001A-S-C2002A-S1	1.00	0.87	0.01	0.00	0.07	0.00	0.00	0.00	0.05	0.07
C2002A-S1-C2002A-S	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.00	0.73	0.09
C2002A-S2-C2004A-S	1.00	0.17	0.02	0.00	0.03	0.00	0.00	0.00	0.77	0.03
C2002A-S-C2002A-S2	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.00	0.73	0.06
C2004A-S1-C2004B-S	1.00	0.17	0.02	0.00	0.02	0.00	0.00	0.00	0.78	0.02
C2004A-S-C2004A-S1	1.00	0.17	0.02	0.00	0.04	0.00	0.00	0.00	0.77	0.03
C2004B-S1-C1009A-S	1.00	0.17	0.01	0.00	0.04	0.00	0.00	0.00	0.77	0.04
C2004B-S1-C1051A-S	1.00	0.95	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C2004B-S-C2004B-S1	1.00	0.95	0.03	0.00	0.00	0.00	0.02	0.00	0.00	0.00
C2005A-S-C2004B-S1	1.00	0.17	0.01	0.00	0.05	0.00	0.00	0.00	0.77	0.02
C2006A-S1-L1015A-S1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C2006A-S1-L2031B-S2	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C2006A-S-C2006B-S	1.00	0.94	0.03	0.00	0.03	0.00	0.00	0.00	0.00	0.83
C2006B-S1-C2005A-S	1.00	0.17	0.01	0.00	0.04	0.00	0.00	0.00	0.77	0.04
C2006B-S-C2006B-S1	1.00	0.17	0.01	0.00	0.04	0.00	0.00	0.00	0.77	0.02
C2008A-S-L1015A-S1	1.00	0.17	0.00	0.00	0.04	0.00	0.00	0.00	0.78	0.01
C2009A-S1-C2009A-S	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C2009A-S1-C2009B-S	1.00	0.96	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C2009A-S-SU87	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C2009B-S1-C2008A-S	1.00	0.17	0.02	0.00	0.03	0.00	0.00	0.00	0.78	0.03
C2009B-S-C2009B-S1	1.00	0.17	0.01	0.00	0.03	0.00	0.00	0.00	0.79	0.01
C3	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C30	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.07
C31	1.00	0.92	0.01	0.00	0.05	0.00	0.01	0.00	0.02	0.00
C32	1.00	0.17	0.01	0.00	0.04	0.00	0.00	0.00	0.77	0.04
C33	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.00	0.74	0.04
C34	1.00	0.35	0.00	0.00	0.09	0.00	0.00	0.00	0.56	0.09
C35	1.00	0.35	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C36	1.00	0.92	0.03	0.00	0.00	0.00	0.05	0.00	0.00	0.00
C37	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.07
C38	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.02
C39	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.07
C4	1.00	0.10	0.00	0.00	0.82	0.00	0.00	0.00	0.08	0.00
C40	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.03
C41	1.00	0.92	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C7	1.00	0.07	0.00	0.00	0.92	0.02	0.00	0.00	0.92	0.00
CM97A-S1-CM97A-S	1.00	0.08	0.00	0.00	0.03	0.00	0.00	0.00	0.90	0.02
CM97A-S-C2000A-S	1.00	0.92	0.02	0.00	0.05	0.00	0.00	0.00	0.00	0.83
F1021A-S-L1011A-S	1.00	0.94	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F2006A-S-C2006A-S	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L1000A-S-POND	1.00	0.98	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
L1001A-SL1001A-S	1.00	0.17	0.01	0.00	0.10	0.00	0.00	0.00	0.72	0.03
L1001A-S2L1001A-S	1.00	0.17	0.00	0.00	0.11	0.00	0.00	0.00	0.72	0.11
L1001A-S-POND	1.00	0.98	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
L1002A-SL1001A-S1	1.00	0.17	0.01	0.00	0.10	0.00	0.00	0.00	0.72	0.06
L1007A-S-L1010A-S2	1.00	0.95	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00

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L1010A-S1-L1010A-S	1.00	0.83	0.11	0.00	0.06	0.00	0.00	0.00	0.81	0.00
L1010A-S2-C1006A-S	1.00	0.17	0.00	0.00	0.10	0.00	0.00	0.00	0.73	0.10
L1010A-S-L1010A-S2	1.00	0.17	0.00	0.00	0.17	0.00	0.00	0.00	0.66	0.09
L1011A-S1-L1011A-S	1.00	0.88	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L1011A-S-L1010A-S1	1.00	0.88	0.07	0.00	0.00	0.00	0.06	0.00	0.00	0.00
L1011B-S-L1011A-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
L1012A-S-L1011A-S1	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L1015A-S1-L1015A-S	1.00	0.18	0.00	0.00	0.07	0.00	0.00	0.00	0.76	0.07
L1015A-S2-L1020A-S1	1.00	0.18	0.00	0.00	0.78	0.03	0.00	0.00	0.77	0.00
L1015A-S-L1015A-S2	1.00	0.18	0.01	0.00	0.06	0.00	0.00	0.00	0.76	0.02
L1016A-S1-L1016A-S	1.00	0.17	0.02	0.00	0.10	0.00	0.00	0.00	0.71	0.10
L1016A-S-L1010A-S1	1.00	0.88	0.06	0.00	0.06	0.00	0.00	0.00	0.76	0.00
L1017A-S1-L1017A-S	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.74	0.07
L1017A-S-L1016A-S1	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.74	0.03
L1019A-S1-L1019A-S	1.00	0.17	0.01	0.00	0.10	0.00	0.00	0.00	0.73	0.10
L1019A-S-L1017A-S1	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.00	0.73	0.04
L1019B-S-L1010B-S	1.00	0.97	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.00
L1019C-S-L1019A-S	1.00	0.96	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.00
L1020A-S1-L1020A-S	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.07
L1020A-S1-L1020B-S	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.74	0.07
L1020A-S-L1019A-S1	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.02
L1020B-S1-L1020C-S	1.00	0.17	0.02	0.00	0.05	0.00	0.00	0.00	0.75	0.05
L1020B-S-L1020B-S1	1.00	0.17	0.02	0.00	0.06	0.00	0.00	0.00	0.74	0.03
L1020C-S1-L1012A-S	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L1020C-S-L1020C-S1	1.00	0.92	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L1024A-SL1024A-S	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.00	0.73	0.09
L1024A-SL1001A-S2	1.00	0.17	0.00	0.00	0.10	0.00	0.00	0.00	0.73	0.06
L1024B-S-L1001A-S2	1.00	0.17	0.80	0.00	0.00	0.03	0.00	0.00	0.82	0.00
L1026A-SL1026A-S	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.00	0.73	0.08
L1026A-SL1024A-S1	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.00	0.73	0.02
L1027A-SL1026A-S1	1.00	0.17	0.02	0.00	0.09	0.00	0.00	0.00	0.72	0.05
L1027B-SL1027B-S	1.00	0.07	0.12	0.00	0.40	0.40	0.00	0.00	0.22	0.00
L1027B-SL1027A-S	1.00	0.41	0.00	0.00	0.11	0.00	0.00	0.00	0.48	0.11
L1027C-S-L1032B-S	1.00	0.97	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
L1029A-SL1029A-S	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.00	0.72	0.09
L1029A-SL1027B-S1	1.00	0.17	0.02	0.00	0.09	0.00	0.00	0.00	0.72	0.04
L1030A-SL1030A-S	1.00	0.17	0.01	0.00	0.10	0.00	0.00	0.00	0.72	0.10
L1030A-SL1029A-S1	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.00	0.72	0.05
L1031A-SL1030A-S1	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.00	0.75	0.03
L1032A-SL1032A-S	1.00	0.17	0.00	0.00	0.10	0.00	0.00	0.00	0.73	0.10
L1032A-SL1024A-S1	1.00	0.90	0.03	0.00	0.00	0.00	0.08	0.00	0.00	0.00
L1032B-S-L1032A-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00
L1034A-SL1034A-S	1.00	0.17	0.02	0.00	0.05	0.00	0.00	0.00	0.76	0.05
L1034A-SL1032A-S1	1.00	0.17	0.00	0.00	0.07	0.00	0.00	0.00	0.76	0.01
L1036A-SL1034A-S1	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.00	0.73	0.06
L1038A-SL1036A-S	1.00	0.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L1038A-SL1038A-S	1.00	0.94	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L1038A-SL1039A-S1	1.00	0.17	0.00	0.00	0.06	0.00	0.00	0.00	0.77	0.01

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L1039A-S1-L1039A-S	1.00	0.17	0.00	0.00	0.09	0.00	0.00	0.74	0.09	0.00
L1039A-S1-L1032A-S1	1.00	0.91	0.03	0.00	0.00	0.00	0.06	0.00	0.00	0.00
L1039B-S-L1039A-S	1.00	0.97	0.01	0.00	0.00	0.00	0.00	0.02	0.80	0.00
L1050A-S1-L1039A-S1	1.00	0.92	0.03	0.00	0.00	0.00	0.05	0.00	0.00	0.00
L1050B-S-L1050A-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
L1051B-S-C1051A-S	1.00	0.98	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
L1053A-S-C1052B-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
L2007A-S-C2008A-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
L2010A-S1-L2010A-S	1.00	0.18	0.00	0.00	0.00	0.00	0.00	0.82	0.00	0.00
L2010A-S2-C2002A-S1	1.00	0.17	0.01	0.00	0.17	0.00	0.00	0.65	0.11	0.00
L2010A-S-L2010A-S2	1.00	0.17	0.01	0.00	0.16	0.00	0.00	0.65	0.16	0.00
L2010B-S-L2010A-S2	1.00	0.86	0.05	0.00	0.00	0.00	0.06	0.02	0.00	0.00
L2011A-S1-L2011A-S	1.00	0.17	0.02	0.00	0.10	0.00	0.00	0.71	0.10	0.00
L2011A-S-L2010A-S	1.00	0.17	0.01	0.00	0.11	0.00	0.00	0.71	0.07	0.00
L2013A-S-L2011A-S1	1.00	0.17	0.02	0.00	0.07	0.00	0.00	0.74	0.05	0.00
L2015A-S1-L2013A-S	1.00	0.17	0.02	0.00	0.07	0.00	0.00	0.74	0.07	0.00
L2015A-S-L2015A-S1	1.00	0.17	0.01	0.00	0.08	0.00	0.00	0.73	0.04	0.00
L2016A-S1-L2016A-S	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2016A-S1-L2017B-S1	1.00	0.94	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2016B-S-L2016A-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00
L2017A-S1-L2017A-S	1.00	0.17	0.02	0.00	0.04	0.00	0.00	0.77	0.04	0.00
L2017A-S-L2017B-S2	1.00	0.17	0.01	0.00	0.06	0.00	0.00	0.77	0.02	0.00
L2017B-S1-L2015A-S	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.73	0.09	0.00
L2017B-S1-L2021A-S	1.00	0.17	0.01	0.00	0.13	0.00	0.00	0.69	0.13	0.00
L2017B-S2-L2017B-S	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.76	0.07	0.00
L2017B-S-L2017B-S1	1.00	0.93	0.02	0.00	0.00	0.00	0.06	0.00	0.00	0.00
L2018A-S1-L2018A-S	1.00	0.17	0.01	0.00	0.13	0.00	0.00	0.69	0.13	0.00
L2018A-S-L2010A-S1	1.00	0.17	0.01	0.00	0.13	0.00	0.00	0.69	0.05	0.00
L2019A-S1-L2019A-S	1.00	0.86	0.05	0.00	0.09	0.00	0.00	0.00	0.82	0.00
L2019A-S-L2018A-S1	1.00	0.17	0.01	0.00	0.12	0.00	0.00	0.69	0.05	0.00
L2019B-S-L2019A-S	1.00	0.89	0.05	0.00	0.01	0.00	0.03	0.03	0.01	0.00
L2021A-S-L2019A-S1	1.00	0.86	0.05	0.00	0.00	0.00	0.09	0.00	0.00	0.00
L2021B-S-L2021A-S	1.00	0.92	0.05	0.00	0.00	0.00	0.00	0.03	0.80	0.00
L2023A-S-L2019A-S1	1.00	0.91	0.01	0.00	0.08	0.00	0.00	0.01	0.02	0.00
L2024A-S1-L2024B-S	1.00	0.17	0.02	0.00	0.09	0.00	0.00	0.72	0.09	0.00
L2024A-S-L2024A-S1	1.00	0.17	0.02	0.00	0.09	0.00	0.00	0.72	0.04	0.00
L2024B-S1-L2023A-S	1.00	0.17	0.02	0.00	0.07	0.00	0.00	0.75	0.07	0.00
L2024B-S-L2024B-S1	1.00	0.17	0.02	0.00	0.10	0.00	0.00	0.72	0.04	0.00
L2026A-S1-L2026A-S	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2026A-S1-L2027A-S3	1.00	0.99	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2026A-S-L2017A-S1	1.00	0.17	0.02	0.00	0.05	0.00	0.00	0.76	0.04	0.00
L2026B-S1-L2024A-S	1.00	0.17	0.01	0.00	0.10	0.00	0.00	0.72	0.10	0.00
L2026B-S-L2026B-S1	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.72	0.05	0.00
L2027A-S1-L2027A-S	1.00	0.95	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2027A-S1-L2038A-S	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2027A-S2-L2027A-S1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2027A-S2-L2042A-S	1.00	0.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2027A-S3-L2026B-S	1.00	0.17	0.00	0.00	0.10	0.00	0.00	0.73	0.10	0.00

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L2027A-S-L2027A-S3	1.00	0.17	0.00	0.00	0.05	0.00	0.00	0.78	0.00	0.00
L2027B-S-L2027A-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.03	0.80	0.00
L2029A-S-L2018A-S1	1.00	0.91	0.04	0.00	0.01	0.00	0.04	0.00	0.77	0.00
L2029B-S-L2032A-S	1.00	0.95	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
L2030A-S-L2031A-S1	1.00	0.17	0.02	0.00	0.11	0.00	0.00	0.70	0.07	0.00
L2030B-S-L2030A-S	1.00	0.91	0.06	0.00	0.00	0.00	0.00	0.02	0.80	0.00
L2031A-S1-L2031A-S	1.00	0.17	0.02	0.00	0.07	0.00	0.00	0.74	0.07	0.00
L2031A-S-L2031B-S1	1.00	0.91	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2031B-S1-L2031B-S	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2031B-S2-C2006A-S	1.00	0.97	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2031B-S-L2031B-S2	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2032A-S1-L2029A-S	1.00	0.17	0.02	0.00	0.07	0.00	0.00	0.74	0.07	0.00
L2032A-S1-L2030A-S	1.00	0.17	0.02	0.00	0.12	0.00	0.00	0.70	0.12	0.00
L2032A-S-L2032A-S1	1.00	0.17	0.02	0.00	0.14	0.00	0.00	0.67	0.10	0.00
L2032B-S-L2032A-S	1.00	0.87	0.04	0.00	0.01	0.00	0.06	0.02	0.00	0.00
L2033A-S-L2033B-S1	1.00	0.17	0.02	0.00	0.07	0.00	0.00	0.74	0.05	0.00
L2033B-S1-L2033B-S	1.00	0.17	0.02	0.00	0.10	0.00	0.00	0.71	0.06	0.00
L2033B-S-L2036A-S1	1.00	0.17	0.00	0.00	0.12	0.00	0.00	0.71	0.07	0.00
L2034A-S1-L2037A-S	1.00	0.17	0.01	0.00	0.08	0.00	0.00	0.73	0.08	0.00
L2036A-S1-L2032A-S	1.00	0.17	0.00	0.00	0.16	0.00	0.00	0.67	0.10	0.00
L2036A-S-L2036A-S1	1.00	0.92	0.00	0.00	0.06	0.00	0.00	0.01	0.04	0.00
L2037A-S-L2039A-S2	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.73	0.08	0.00
L2038A-S-L2034A-S1	1.00	0.17	0.01	0.00	0.06	0.00	0.00	0.76	0.03	0.00
L2039A-S1-L2039A-S	1.00	0.17	0.01	0.00	0.09	0.00	0.00	0.73	0.09	0.00
L2039A-S2-L2036A-S	1.00	0.18	0.01	0.00	0.05	0.00	0.00	0.76	0.05	0.00
L2039A-S-L2039A-S2	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.73	0.05	0.00
L2039B-S1-L2033A-S	1.00	0.91	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2039B-S1-L2039B-S	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2039B-S-L2039A-S1	1.00	0.17	0.01	0.00	0.06	0.00	0.00	0.76	0.03	0.00
L2040A-S1-L2040A-S	1.00	0.95	0.01	0.00	0.01	0.00	0.00	0.03	0.01	0.00
L2040A-S-L2039A-S2	1.00	0.96	0.01	0.00	0.01	0.00	0.00	0.02	0.01	0.00
L2041A-S-L2040A-S1	1.00	0.90	0.06	0.00	0.00	0.00	0.03	0.00	0.00	0.00
L2042A-S1-L2041A-S	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.73	0.08	0.00
L2042A-S-L2042A-S1	1.00	0.17	0.02	0.00	0.08	0.00	0.00	0.73	0.05	0.00
L2043A-S1-L2043A-S	1.00	0.17	0.01	0.00	0.06	0.00	0.00	0.75	0.06	0.00
L2043A-S-L2040A-S1	1.00	0.92	0.04	0.00	0.04	0.00	0.00	0.00	0.79	0.00
L2043B-S1-L2039B-S1	1.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2043B-S1-L2043B-S	1.00	0.93	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2043B-S-L2043A-S1	1.00	0.17	0.01	0.00	0.06	0.00	0.00	0.76	0.03	0.00
L2044A-S1-L2044A-S	1.00	0.17	0.01	0.00	0.12	0.00	0.00	0.70	0.07	0.00
L2044A-S-C2002A-S1	1.00	0.87	0.04	0.00	0.05	0.00	0.03	0.00	0.78	0.00
L2044B-S-OF7	1.00	0.98	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
L2044C-S-L2044A-S	1.00	0.96	0.01	0.00	0.00	0.00	0.00	0.03	0.80	0.00
L2046A-S1-L2046A-S	1.00	0.91	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2046A-S1-L2047A-S	1.00	0.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L2046A-S-L2044A-S1	1.00	0.17	0.01	0.00	0.07	0.00	0.00	0.74	0.07	0.00
L2047A-S1-L2047A-S	1.00	0.90	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LM97A-S-C2000A-S	1.00	0.97	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00

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M97-M98	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
M98-M99	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
outlet	1.00	0.00	0.00	0.00	0.82	0.00	0.00	0.18	0.00	0.00
P2-P1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
P3-P2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
P8IN-HI	1.00	0.18	0.00	0.00	0.78	0.00	0.00	0.04	0.00	0.00
P8IN-LO	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Pipe_10	1.00	0.07	0.00	0.00	0.71	0.00	0.00	0.21	0.04	0.00
Pipe_26	1.00	0.08	0.00	0.00	0.06	0.00	0.00	0.87	0.00	0.00
Pipe_27	1.00	0.10	0.00	0.00	0.14	0.00	0.00	0.76	0.00	0.00
Pipe_28	1.00	0.08	0.00	0.00	0.10	0.00	0.00	0.82	0.09	0.00
Pipe_29	1.00	0.54	0.31	0.00	0.00	0.00	0.14	0.00	0.00	0.00
Pipe_30	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
Pipe_31	1.00	0.08	0.00	0.00	0.08	0.00	0.00	0.84	0.01	0.00
Pipe_32	1.00	0.08	0.00	0.00	0.07	0.00	0.00	0.85	0.00	0.00
Pipe_33	1.00	0.08	0.00	0.00	0.08	0.00	0.00	0.83	0.02	0.00
Pipe_34	1.00	0.09	0.00	0.00	0.04	0.00	0.00	0.87	0.00	0.00
Pipe_35	1.00	0.08	0.00	0.00	0.04	0.00	0.00	0.88	0.02	0.00
Pipe_36	1.00	0.09	0.00	0.00	0.03	0.00	0.00	0.87	0.00	0.00
Pipe_37	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
Pipe_43	1.00	0.08	0.00	0.00	0.83	0.00	0.00	0.10	0.00	0.00
Pipe_44	1.00	0.08	0.00	0.00	0.78	0.00	0.00	0.15	0.71	0.00
Pipe_45	1.00	0.09	0.00	0.00	0.01	0.00	0.00	0.91	0.00	0.00
Pipe_46	1.00	0.08	0.00	0.00	0.09	0.00	0.00	0.83	0.00	0.00
Pipe_46_(1)	1.00	0.08	0.00	0.00	0.19	0.00	0.00	0.73	0.08	0.00
Pipe_47	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
Pipe_5	1.00	0.00	0.00	0.00	0.93	0.00	0.00	0.07	0.09	0.00
Pipe_6	1.00	0.06	0.02	0.00	0.92	0.00	0.00	0.00	0.00	0.00
Pipe_7	1.00	0.07	0.00	0.00	0.82	0.00	0.00	0.10	0.00	0.00
Pipe_8	1.00	0.08	0.00	0.00	0.83	0.00	0.00	0.09	0.00	0.00
Pipe_9	1.00	0.08	0.00	0.00	0.00	0.00	0.00	0.92	0.00	0.00
PIPE1	1.00	0.07	0.00	0.00	0.06	0.00	0.00	0.87	0.03	0.00
PIPE10	1.00	0.07	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00
PIPE11	1.00	0.08	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00
PIPE13	1.00	0.07	0.00	0.00	0.92	0.02	0.00	0.00	0.00	0.00
PIPE14	1.00	0.07	0.00	0.00	0.90	0.00	0.00	0.03	0.00	0.00
PIPE15	1.00	0.07	0.01	0.00	0.93	0.00	0.00	0.00	0.02	0.00
PIPE16	1.00	0.07	0.00	0.00	0.82	0.00	0.00	0.12	0.00	0.00
PIPE17	1.00	0.09	0.00	0.00	0.90	0.00	0.00	0.01	0.00	0.00
PIPE19	1.00	0.08	0.00	0.00	0.91	0.00	0.00	0.01	0.01	0.00
PIPE2	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.91	0.00
PIPE24	1.00	0.07	0.00	0.00	0.03	0.00	0.00	0.91	0.00	0.00
PIPE25	1.00	0.07	0.00	0.00	0.60	0.00	0.00	0.33	0.03	0.00
PIPE26	1.00	0.07	0.00	0.00	0.18	0.00	0.00	0.75	0.00	0.00
PIPE27	1.00	0.07	0.01	0.00	0.92	0.00	0.00	0.00	0.02	0.00
PIPE28	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00
PIPE29	1.00	0.07	0.00	0.00	0.05	0.00	0.00	0.88	0.00	0.00
PIPE3	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.02	0.00

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PIPE30	1.00	0.08	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00
PIPE31	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00
PIPE32	1.00	0.07	0.00	0.00	0.04	0.00	0.00	0.89	0.00	0.00
PIPE33	1.00	0.08	0.00	0.00	0.92	0.00	0.00	0.00	0.01	0.00
PIPE34	1.00	0.07	0.00	0.00	0.06	0.00	0.00	0.87	0.00	0.00
PIPE35	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.01	0.00
PIPE36	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.00
PIPE38	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.01	0.00
PIPE39	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.85	0.00	0.00
PIPE4	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.85	0.08	0.00
PIPE40	1.00	0.07	0.00	0.00	0.10	0.00	0.00	0.83	0.08	0.00
PIPE41	1.00	0.07	0.00	0.00	0.07	0.00	0.00	0.86	0.00	0.00
PIPE42	1.00	0.07	0.00	0.00	0.92	0.00	0.00	0.00	0.01	0.00
PIPE43	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.14	0.00
PIPE45	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.85	0.02	0.00
PIPE46	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.85	0.00	0.00
PIPE47	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.03	0.00
PIPE5	1.00	0.07	0.00	0.00	0.84	0.00	0.00	0.09	0.00	0.00
PIPE51	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.85	0.00	0.00
PIPE52	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.85	0.00	0.00
PIPE54	1.00	0.07	0.00	0.00	0.93	0.00	0.00	0.00	0.01	0.00
PIPE56	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.86	0.00	0.00
PIPE57	1.00	0.07	0.00	0.00	0.08	0.00	0.00	0.85	0.00	0.00
PIPE58	1.00	0.07	0.00	0.00	0.85	0.00	0.00	0.08	0.00	0.00
PIPE60	1.00	0.07	0.00	0.00	0.09	0.00	0.00	0.84	0.04	0.00
PIPE61	1.00	0.08	0.00	0.00	0.90	0.02	0.00	0.00	0.00	0.00
PIPE62	1.00	0.16	0.01	0.00	0.82	0.01	0.00	0.00	0.79	0.00
PIPE63	1.00	0.07	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00
PIPE7	1.00	0.07	0.00	0.00	0.82	0.00	0.00	0.11	0.00	0.00
PIPE8	1.00	0.08	0.00	0.00	0.85	0.00	0.00	0.07	0.00	0.00
PIPE9	1.00	0.08	0.00	0.00	0.92	0.00	0.00	0.00	0.03	0.00
STM101-1-P1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
STM102-101	1.00	0.09	0.00	0.00	0.79	0.00	0.00	0.13	0.61	0.00
STM103-102	1.00	0.09	0.00	0.00	0.04	0.00	0.00	0.87	0.01	0.00

Conduit Surcharge Summary

Conduit	----- Both Ends	Hours Full Upstream	----- Dnstream	Hours Above Full Normal Flow	Hours Capacity Limited
1000-P3	0.01	0.01	0.01	0.45	0.01
1001-1000	0.01	0.01	0.01	0.38	0.01
1002-1001	0.01	0.15	0.01	0.39	0.01

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1003-1002	0.01	0.20	0.01	0.01	0.01
1004-1003	0.16	0.16	0.20	0.01	0.01
1005-1004	0.13	0.13	0.16	0.01	0.01
1006-1005	0.01	0.01	0.13	0.01	0.01
1007-1006	0.01	0.11	0.01	0.29	0.01
1008-1007	0.01	0.01	0.11	0.01	0.01
1010-1006	0.01	0.11	0.01	0.01	0.01
1011-1010	0.01	0.01	0.11	0.01	0.01
1012-1011	0.01	0.01	0.01	0.01	0.01
1016-1010	0.11	0.22	0.11	0.24	0.11
1017-1016	0.01	0.01	0.22	0.01	0.01
1018-1017	0.01	0.01	0.01	0.23	0.01
1051-1050	0.01	0.26	0.01	0.21	0.01
1053-1050	0.01	0.01	0.01	0.32	0.01
2000-M98	0.01	0.01	0.01	0.37	0.01
2001-2000	0.01	0.01	0.01	0.35	0.01
2002-2001	0.01	0.01	0.01	0.03	0.01
2005-2004	0.01	0.10	0.01	0.29	0.01
2005A-2005	0.08	0.08	0.10	0.01	0.01
2006-2005	0.01	0.01	0.10	0.01	0.01
2006-2005A	0.01	0.01	0.04	0.01	0.01
2009-2008	0.01	0.01	0.01	0.01	0.01
2010-2001	0.01	0.33	0.01	0.49	0.01
2011-2010	0.33	0.38	0.33	0.34	0.33
2012-2011	0.34	0.34	0.38	0.01	0.01
2013-2012	0.26	0.26	0.34	0.01	0.01
2014-2013	0.23	0.23	0.24	0.01	0.01
2015-2014	0.01	0.01	0.20	0.01	0.01
2016-2015	0.01	0.12	0.01	0.10	0.01
2017-2015	0.01	0.01	0.01	0.14	0.01
2018-2010	0.30	0.30	0.32	0.01	0.07
2019-2018	0.01	0.01	0.01	0.15	0.01
2020-2019	0.01	0.01	0.01	0.16	0.01
2025-2024	0.01	0.01	0.01	0.09	0.01
2026-2025	0.01	0.01	0.01	0.09	0.01
2027-2026	0.01	0.01	0.01	0.11	0.01
2028-2018	0.30	0.33	0.30	0.01	0.30
2029-2028	0.28	0.28	0.30	0.01	0.01
2030-2029	0.21	0.21	0.28	0.01	0.01
2031-2030	0.09	0.09	0.21	0.01	0.01
2032-2029	0.28	0.29	0.28	0.37	0.27
2033-2032	0.01	0.48	0.01	0.48	0.01
2034-2033	0.44	0.44	0.48	0.01	0.01
2035-2034	0.01	0.01	0.34	0.01	0.01
2036-2032	0.29	0.29	0.29	0.36	0.27
2038-2037	0.01	0.01	0.01	0.18	0.01
2039-2036	0.12	0.12	0.22	0.01	0.01
2040-2036	0.29	0.30	0.29	0.44	0.29

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2043-2040	0.28	0.29	0.30	0.09	0.21
2044-2001	0.01	0.13	0.01	0.29	0.01
2045-2044	0.12	0.15	0.13	0.31	0.09
2046-2045	0.01	0.01	0.13	0.01	0.01
301-M97	0.16	0.16	0.18	0.01	0.01
C7	0.01	0.01	2.40	0.01	0.01
M97-M98	0.01	0.18	0.01	0.16	0.01
M98-M99	0.01	0.01	0.01	0.41	0.01
outlet	2.01	2.01	2.69	0.01	0.01
P2-P1	0.01	0.01	0.01	0.47	0.01
P3-P2	0.01	0.01	0.01	0.45	0.01
P8IN-LO	0.01	0.01	3.33	0.01	0.01
Pipe_10	0.01	0.04	0.01	0.34	0.01
Pipe_26	0.01	0.01	0.01	0.20	0.01
Pipe_32	0.01	0.01	0.01	0.01	0.01
Pipe_33	0.04	0.04	0.21	0.01	0.01
Pipe_45	0.01	0.01	0.01	0.52	0.01
Pipe_46	0.01	0.42	0.01	0.50	0.01
Pipe_46_(1)	0.01	0.01	0.29	0.01	0.01
Pipe_47	0.01	0.01	0.01	0.29	0.01
Pipe_5	0.01	0.01	0.01	0.36	0.01
Pipe_6	0.01	0.01	0.01	0.31	0.01
Pipe_7	0.01	0.16	0.01	0.40	0.01
Pipe_8	0.10	0.20	0.10	0.47	0.10
Pipe_9	0.01	0.01	0.01	0.36	0.01
PIPE1	0.01	0.01	0.11	0.01	0.01
PIPE10	0.01	0.44	0.01	0.38	0.01
PIPE11	0.01	0.01	0.01	0.41	0.01
PIPE13	0.08	0.08	0.08	0.01	0.07
PIPE14	0.07	0.08	0.07	0.12	0.07
PIPE15	0.08	0.09	0.08	0.12	0.08
PIPE16	0.01	0.08	0.01	0.16	0.01
PIPE2	0.01	0.01	0.12	0.01	0.01
PIPE24	0.05	4.29	0.05	4.94	0.05
PIPE25	0.51	0.71	0.51	0.86	0.51
PIPE26	0.47	0.74	0.47	0.89	0.47
PIPE27	0.04	0.04	0.07	0.01	0.01
PIPE28	0.07	0.07	0.11	0.01	0.01
PIPE29	0.29	0.88	0.29	1.09	0.29
PIPE3	0.10	0.16	0.10	0.37	0.10
PIPE30	0.11	0.11	0.13	0.01	0.01
PIPE31	0.07	0.07	0.07	0.01	0.01
PIPE32	0.34	0.86	0.34	1.10	0.34
PIPE33	0.01	0.01	0.04	0.01	0.01
PIPE34	0.31	0.52	0.31	0.49	0.31
PIPE35	0.11	0.11	0.13	0.01	0.01
PIPE36	0.13	0.13	0.13	0.01	0.01
PIPE38	0.10	0.10	0.11	0.01	0.01

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PIPE39	0.45	0.67	0.45	0.62	0.45
PIPE4	0.01	0.01	0.22	0.01	0.01
PIPE40	0.01	0.01	0.33	0.01	0.01
PIPE41	0.35	0.46	0.35	0.42	0.35
PIPE42	0.13	0.13	0.15	0.01	0.01
PIPE43	0.15	0.15	0.18	0.01	0.01
PIPE45	0.29	0.37	0.36	0.20	0.17
PIPE46	0.39	0.45	0.39	0.36	0.39
PIPE47	0.18	0.18	0.22	0.01	0.01
PIPE5	0.06	0.10	0.06	0.39	0.06
PIPE51	0.43	0.52	0.43	0.47	0.43
PIPE52	0.43	0.61	0.43	0.56	0.43
PIPE54	0.22	0.22	0.23	0.01	0.10
PIPE56	0.43	0.57	0.43	0.52	0.43
PIPE57	0.45	0.62	0.45	0.58	0.45
PIPE58	0.08	0.23	0.08	0.40	0.08
PIPE60	0.01	0.01	0.24	0.01	0.01
PIPE61	0.01	0.01	0.01	0.43	0.01
PIPE62	0.08	0.08	4.93	0.01	0.01
PIPE63	0.01	0.15	0.01	0.11	0.01
PIPE7	0.64	1.11	0.64	1.30	0.64
PIPE8	0.06	0.13	0.06	0.10	0.06
PIPE9	0.01	0.06	0.01	0.39	0.01
STM101-1-P1	0.01	0.01	0.69	0.01	0.01
STM102-101	0.01	0.10	0.01	0.01	0.01
STM103-102	0.01	0.01	0.10	0.01	0.01

Analysis begun on: Fri Nov 15 10:53:11 2019
 Analysis ended on: Fri Nov 15 10:53:20 2019
 Total elapsed time: 00:00:09

**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
DEVELOPMENT, 1140 TERRY FOX DRIVE**

Appendix C Stormwater Management
November 19, 2019

C.4 STORM SEWER DESIGN SHEET EXCERPTS



Kanata Smart Centres
Commercial Site, Terry Fox & Cope Dr.
 DATE: February 14, 2014
 REVISION: July 9, 2014
 DESIGNED BY: aml
 CHECKED BY:

STORM SEWER DESIGN SHEET (City of Ottawa)

FILE NUMBER: 1604-00812

DESIGN PARAMETERS
 $I = a / (t+b)^c$ (As per City of Ottawa Guidelines, 2004)

	1:5 yr	1:10 yr	
a =	998.07	1174.184	MANNING'S n = 0.013
b =	6.053	6.014	MINIMUM COVER: 2.00 m
c =	0.814	0.816	TIME OF ENTRY 10 min

LOCATION			DRAINAGE AREA													PIPE SELECTION							
	FROM M.H.	TO M.H.	AREA	C	ACCUM. AREA	A x C	ACCUM. Ax C	T of C	I	Q _{ACT} (CIA/360)	Roof Area	Accum Roof Area	100 Year Roof Flow	Accum 100 Yr Roof Flow	Q _{TOTAL}	LENGTH	PIPE SIZE	SLOPE	Q _{CAP} (FULL)	Q _{ACT} Q _{CAP}	VEL. (FULL)	VEL. (ACT)	TIME OF FLOW
			(ha)	(-)	(ha)	(ha)	(ha)	(min)	(mm/h)	(L/s)	(ha)	(ha)	(L/s)	(L/s)	(L/s)	(m)	(mm)	%	(L/s)	(-)	(m/s)	(m/s)	(min)
RF103, ST 103A, ST103B	STM103	STM102	0.19	0.78	0.19	0.148	0.148	10.00	104.19	42.8	0.029	0.029	3.9	3.9	46.7	20.0	375	0.40	115.7	0.40	1.01	0.92	0.33
ST102A	STM102	EX STM103 TEE	0.07	0.57	0.26	0.040	0.188	10.33 10.77	102.49	53.5		0.029		3.9	57.4	26.6	375	0.40	115.7	0.50	1.01	0.99	0.44
FTR1	STUB	EX STM104	0.29	0.75	0.29	0.218	0.218	0.00 0.17	230.48	139.2		0.000		0.0	139.2	8.2	750	0.10	367.3	0.38	0.81	0.73	0.17
EX103, UNC2	EX STM103	EX STM102	0.21	0.81	0.47	0.170	0.357	10.77 11.46	100.32	99.6		0.000		0.0	99.6	33.8	750	0.10	367.3	0.27	0.81	0.66	0.70
102	EX STM102	EX STM101	0.23	0.90	0.70	0.205	0.563	11.46 12.68	97.04	151.7		0.000		0.0	151.7	58.6	750	0.10	367.3	0.41	0.81	0.76	1.21
	EX STM104	EX STM101			3.81	0.000	3.374	22.46 23.05	65.28	611.7		1.794		53.5	665.2	34.0	1800x900 BOX	0.10	1544.8	0.43	0.95	0.88	0.59
	EX STM101	HEADWALL			4.50	0.000	3.936	23.05 23.27	64.19	701.8		1.794		53.5	755.4	12.9	1800x900 BOX	0.11	1620.3	0.47	1.00	0.95	0.21
Total Area			4.50	ha							1.823	57.4											

**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
DEVELOPMENT, 1140 TERRY FOX DRIVE**

Appendix D Geotechnical Investigation
November 19, 2019

Appendix D **GEOTECHNICAL INVESTIGATION**

Geotechnical
Engineering

Environmental
Engineering

Hydrogeology

Geological
Engineering

Materials Testing

Building Science

Archaeological Services

Geotechnical Investigation

Proposed Commercial Development - Phase 2

Cope Drive

Ottawa, Ontario

Prepared For

SmartCentres

Paterson Group Inc.

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1.0 INTRODUCTION

Paterson Group (Paterson) was commissioned by SmartCentres to conduct a geotechnical investigation for Phase 2 of the proposed commercial development to be located along the north and south side of Cope Drive at the intersection of Terry Fox Drive in the City of Ottawa (refer to Figure 1 - Key Plan presented in Appendix 2).

The objective of the investigation was to:

- ☐ Determine the subsoil and groundwater conditions at this site by means of boreholes.
- ☐ provide geotechnical recommendations for the design of the proposed development including construction considerations which may affect its design.

The following report has been prepared specifically and solely for the aforementioned project which is described herein. It contains our findings and includes geotechnical recommendations pertaining to the design and construction of the subject development as they are understood at the time of writing this report.

Investigating the presence or potential presence of contamination on the subject property was not part of the scope of work of this present investigation. Therefore, the present report does not address environmental issues.

2.0 PROPOSED DEVELOPMENT

It is our understanding that the current phase of the proposed development, consists of four (4) commercial buildings of slab-on-grade construction. The remainder of the subject site will consist of car parking and access lanes with some landscaping areas. It is further understood that the subject site will be serviced by municipal water and sewer.

3.0 METHOD OF INVESTIGATION

3.1 Field Investigation

Field Program

The current field program for the geotechnical investigation was carried out on May 2 and 3, 2013. At that time, a total of four (4) boreholes were placed across the subject site to provide general coverage of the proposed development. Relevant boreholes and laboratory testing completed during previous geotechnical investigations for Phase 1 of the commercial development are also included in the present report. The locations of the test holes are shown on Drawing PG2950-1 - Test Hole Location Plan included in Appendix 2.

The boreholes were put down using a track-mounted auger drill rig operated by a two person crew. All fieldwork was conducted under the full-time supervision of personnel from Paterson's geotechnical division under the direction of a senior engineer. The testing procedure consisted of augering to the required depths and at the selected locations and sampling the overburden.

Sampling and In Situ Testing

Soil samples were collected from the boreholes using a 50 mm diameter split-spoon (SS) sampler or from the auger flights. All soil samples were visually inspected and initially classified on site. The split-spoon samples were placed in sealed plastic bags and transported to our laboratory for further examination and classification. The depths at which the split-spoon and auger samples were recovered from the test holes are shown as SS and AU, respectively, on the Soil Profile and Test Data sheets presented in Appendix 1.

The Standard Penetration Test (SPT) was conducted in conjunction with the recovery of the split-spoon samples. The SPT results are recorded as "N" values on the Soil Profile and Test Data sheets. The "N" value is the number of blows required to drive the split-spoon sampler 300 mm into the soil after a 150 mm initial penetration using a 63.5 kg hammer falling from a height of 760 mm.

Undrained shear strength testing was carried out in cohesive soils using a field vane apparatus.

Overburden thickness was also evaluated during the course of the investigation by dynamic cone penetration testing (DCPT) at BH 1 (PG2263) completed during our previous geotechnical investigation on the adjacent site. The DCPT consists of driving a steel drill rod, equipped with a 50 mm diameter cone at its tip, using a 63.5 kg hammer falling from a height of 760 mm. The number of blows required to drive the cone into the soil is recorded for each 300 mm increment.

The subsurface conditions observed in the test holes were recorded in detail in the field. The soil profiles are presented on the Soil Profile and Test Data sheets in Appendix 1 of this report.

Groundwater

Flexible standpipes were installed in the boreholes to permit monitoring of the groundwater levels subsequent to the completion of the sampling program.

Sample Storage

All samples will be stored in the laboratory for a period of one month after issuance of this report. They will then be discarded unless we are otherwise directed.

3.2 Field Survey

The test hole locations completed during the present geotechnical investigation were selected in the field by Paterson personnel taking into consideration site features and underground utilities. The ground surface elevations at the test hole locations were surveyed by Paterson personnel and referenced to a temporary benchmark (TBM), consisting of the finished floor slab of the existing Walmart located to the south of the subject site. A geodetic elevation of 98.25 m was provided for the TBM based on plans prepared by Stantec. The location of the TBM, test holes and the ground surface elevation at each test hole location are presented on Drawing PG2950-1 - Test Hole Location Plan in Appendix 2.

3.3 Laboratory Testing

The soil samples recovered from the subject site were examined in our laboratory to review the results of the field logging.

Five (5) Shelby tube samples were submitted for unidimensional consolidation testing, three (3) soil sample for Atterberg limits testing and one (1) soil sample was submitted for grain size analysis during the previous geotechnical investigations.

The results of the consolidation testing are presented in the Consolidation Test Results sheets presented in Appendix 1 and are further discussed in Sections 4 and 5.

3.4 Analytical Testing

One (1) soil sample was submitted for analytical testing to assess the corrosion potential for exposed ferrous metals and the potential of sulphate attacks against subsurface concrete structures. The samples were submitted to determine the concentration of sulphate and chloride, the resistivity and the pH of the samples. The results are presented in Appendix 1 and are discussed further in Subsection 6.7.

4.0 OBSERVATIONS

4.1 Surface Conditions

Generally, crushed stone fill and/or topsoil are noted at ground surface across the subject site. The ground surface is relatively flat and slightly lower than Terry Fox Drive and Cope Drive. The site is bordered to the west by a drainage ditch.

4.2 Subsurface Profile

Generally, the subsurface profile encountered at the borehole locations consists of crushed stone fill, silty sand/silty clay fill and/or topsoil underlain by a silty sand layer and/or brown silty clay crust. A grey silty clay layer was noted below the silty clay crust at each borehole location. A DCPT completed at BH 1 (PG2263) for a previous investigation encountered practical refusal at a 35.4 m depth. Reference should be made to the Soil Profile and Test Data sheets presented in Appendix 1 for details of the soil profiles encountered at the test hole locations.

Silty Clay

Generally, the upper portion of the silty clay layer has been weathered to a stiff to very stiff brown crust. Sand seams and silt pockets were also observed within the upper portion of the silty clay layer. The brown silty clay crust extends to depths varying between 1.8 and 2.7 m.

Grey silty clay was encountered below the weathered crust at all borehole locations. In situ shear vane tests conducted within the grey silty clay layer yielded undrained shear strength values ranging from 24 to 48 kPa. Generally, these values are indicative of a firm consistency.

Five (5) soil samples from relevant boreholes were subjected to unidimensional consolidation (odometer) testing during the previous geotechnical investigations. The test results are presented in Subsection 5.4 and on the Consolidation Test Results sheets in Appendix 1. The consolidation test results indicate that the silty clay is overconsolidated with overconsolidation ratios (OCR) for the tested samples varying between 1.5 and 2.4. The OCR is the ratio of the preconsolidation pressure to the effective pressure at the sample depth. This is further discussed in Subsection 5.3.

Three (3) silty clay samples collected from relevant boreholes completed for previous investigations were submitted for Atterberg Limits testing. The tested samples from the boreholes were classified as Inorganic Clays of Low Plasticity (CL). The results are summarized in Table 1 and presented on the Atterberg Limits Results sheets in Appendix 1.

Table 1 - Summary of Atterberg Limits Tests					
Sample PG1568	Moisture Content %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Classification
BH 1 TW 3 (PG1568)	35.2	25	17	8	CL
BH 1 TW3 (PG2263)	38.2	30	17	13	CL
BH 5 TW 4 (PG2263)	47.0	43	20	23	CL
Note: ☐ CL - Inorganic Clays of Low Plasticity					

Available Geological Mapping

Based on available geological mapping, the bedrock in this area mostly consists of interbedded limestone and dolomite of the Gull River formation with an overburden drift thickness of 30 to 40 m depth.

4.3 Groundwater

The measured groundwater levels in the piezometers at the borehole locations are presented in Table 2. It should be noted that surface water can become trapped with a backfilled borehole, which can lead to higher than normal groundwater level readings. Long-term groundwater levels can also be estimated based on the observed colour, moisture levels and consistency of the recovered soil samples. Based on these observations, it is estimated that the long-term groundwater can be expected between 1.5 to 2 m depth. It should be noted that groundwater levels are subject to seasonal fluctuations. Therefore, the groundwater level could vary at the time of construction.

Table 2 - Summary of Groundwater Level Readings				
Test Hole Number	Ground Elevation (m)	Groundwater Levels (m)		Recording Date
		Depth	Elevation	
BH 1-13	97.27	1.39	95.88	May 16, 2013
BH 2-13	97.67	1.68	95.99	May 16, 2013
BH 3-13	97.27	0.98	96.29	May 16, 2013
BH 4-13	98.17	1.56	96.61	May 16, 2013
Note: ☐ The ground surface elevations at the test hole locations were surveyed by Paterson personnel and referenced to a temporary benchmark (TBM), consisting of the finished floor slab of the existing Walmart located to the south of the subject site. A geodetic elevation of 98.25 m was provided for the TBM based on plans prepared by Stantec.				

5.0 DISCUSSION

5.1 Geotechnical Assessment

From a geotechnical perspective, the subject site is adequate for the proposed commercial buildings. It is expected that the proposed buildings can be supported by conventional shallow footings. Alternatively, the proposed buildings can be founded by concrete in-filled trenches extended to an undisturbed, stiff silty clay bearing surface. Due to the presence of the sensitive silty clay layer, the proposed development will be subjected to grade raise restrictions. Permissible grade raise recommendations are discussed in Subsection 5.3.

If higher than permissible grade raises are required, preloading with or without a surcharge, lightweight fill and/or other measures should be considered to reduce the risks of unacceptable long-term post construction total and differential settlements.

The above and other considerations are further discussed in the following sections.

5.2 Site Grading and Preparation

Stripping Depth

Topsoil and deleterious fill, such as those containing organic materials, should be stripped from under any buildings, paved areas, pipe bedding and other settlement sensitive structures.

Fill Placement

Fill used for grading beneath the building areas should consist, unless otherwise specified, of clean imported granular fill, such as Ontario Provincial Standard Specifications (OPSS) Granular A or Granular B Type II. This material should be tested and approved prior to delivery to the site. The fill should be placed in lifts no greater than 300 mm thick and compacted using suitable compaction equipment for the lift thickness. Fill placed beneath the building areas should be compacted to at least 98% of its standard Proctor maximum dry density (SPMDD).

Non-specified existing fill along with site-excavated soil can be used as general landscaping fill and beneath parking areas where settlement of the ground surface is of minor concern. In landscaped areas, these materials should be spread in thin lifts and at least compacted by the tracks of the spreading equipment to minimize voids. If these materials are to be used to build up the subgrade level for areas to be paved, they should be compacted in thin lifts to a minimum density of 95% of their respective SPMDD. Non-specified existing fill and site-excavated soils are not suitable for use as backfill against foundation walls unless a composite drainage blanket connected to a perimeter drainage system is provided.

5.3 Foundation Design

Bearing Resistance Values

Due to the relatively thin silty clay crust observed at the borehole locations, it is recommended to keep the footings as high as possible within the soil profile. To ensure footings are founded over an undisturbed, stiff silty clay bearing surface, it is recommended that footings be founded at a geodetic elevation of 96.0 m or higher. Strip footings, up to 3 m wide, and pad footings, up to 6 m wide, founded over an undisturbed, stiff silty clay bearing surface can be designed using the bearing resistance value at serviceability limit states (SLS) of **100 kPa** and a factored bearing resistance value at ultimate limit states (ULS) of **150 kPa**.

A geotechnical resistance factor of 0.5 was applied to the above noted bearing resistance value at ULS.

An undisturbed soil bearing surface consists of a surface from which all topsoil and deleterious materials, such as loose, frozen or disturbed soil, whether in situ or not, have been removed, in the dry, prior to the placement of concrete for footings.

Lateral Support

The bearing medium under footing-supported structures is required to be provided with adequate lateral support with respect to excavations and different foundation levels. Adequate lateral support is provided to a firm to stiff silty clay above the groundwater table when a plane extending down and out from the bottom edge of the footing at a minimum of 1.5H:1V passes only through in situ soil of the same or higher capacity as the bearing medium soil.

Settlement/Grade Raise

Consideration must also be given to potential settlements which could occur due to the presence of the silty clay deposit and the combined loads from the proposed footings, any groundwater lowering effects, and grade raise fill. The foundation loads to be considered for the settlement case are the continuously applied loads which consist of the unfactored dead loads and the portion of the unfactored live load that is considered to be continuously applied. For buildings, a minimum value of 50% of the live load is often recommended by Paterson.

Generally, the potential long term settlement is evaluated based on the compressibility characteristics of the silty clay. These characteristics are estimated in the laboratory by conducting unidimensional consolidation tests on undisturbed soil samples collected using Shelby tubes in conjunction with a piston sampler. Five (5) unidimensional consolidation tests, which are relevant to our current investigation, were carried out on selected shelly tube samples as part of our previous geotechnical investigation. The results of the consolidation tests are presented in Table 3 and in Appendix 1.

Value p'_c is the preconsolidation pressure of the sample and p'_o is the effective overburden pressure. The difference between these values is the available preconsolidation. The increase in stress on the soil due to the cumulative effects of the fill surcharge, the footing pressures, the slab loadings and the lowering of the groundwater should not exceed the available preconsolidation if unacceptable settlements are to be avoided.

The values C_{cr} and C_c are the recompression and compression indices, respectively, and are a measure of the compressibility of the soil due to stress increases below and above the preconsolidation pressures. The higher values for the C_c , as compared to the C_{cr} , illustrate the increased settlement potential above, as compared to below, the preconsolidation pressure.

Table 3 - Summary of Consolidation Test Results

Borehole No.	Sample	Depth (m)	p'_c (kPa)	p'_o (kPa)	C_{cr}	C_c	Q (*)
BH 1 (PG2263)	TW 3	3.3	84	44	0.010	0.543	A
BH 5 (PG2263)	TW 4	9.5	128	84	0.019	0.766	G
BH 1 (PG1568)	TW 3	5.1	98	54	0.001	0.462	A
BH 4 (PG1568)	TW 3	4.3	102	50	0.020	1.227	A
BH 5 (PG1568)	TW 2	3.3	97	40	0.016	1.387	A
* - Q - Quality assessment of sample - G: Good A: Acceptable P: Likely disturbed							

It should be noted that the values of p'_c , p'_o , C_{cr} and C_c are determined using standard engineering practices and are estimates only. In addition, natural variations within the soil deposit would also affect the results. Furthermore, the p'_o parameter is directly influenced by the groundwater level. While the groundwater levels were measured at the time of the fieldwork, the levels vary with time and this has an impact on the available preconsolidation. Lowering the groundwater level increases the p'_o and therefore reduces the available preconsolidation. Unacceptable settlements could be induced by a significant lowering of the groundwater level. The p'_o values for the consolidation tests are based on the long term groundwater level being at 0.5 m below the existing groundwater level.

The total and differential settlements will be dependent of the characteristics of the buildings. For design purposes, the total and differential settlements associated with the combination of grade raises and footing loading conditions using the bearing resistance values are estimated to be **25 and 20 mm**, respectively. A post-development groundwater lowering of 0.5 m was assumed.

The potential post construction total and differential settlements are dependent on the position of the long term groundwater level when building over deposits of compressible silty clay. While efforts can be made to reduce the impacts of the development on the long term level of the groundwater by placing clay dykes in the service trenches, reducing the sizes of paved areas, leaving green spaces to allow for groundwater recharge, limiting planting of trees to areas away from the buildings, it is not economically possible to control the level of the groundwater.

To reduce potential long term liabilities, consideration should be given to accounting for a larger groundwater lowering and to provide means to reduce long term groundwater lowering (e.g. clay dykes, restriction on planting around the dwellings, etc). It should be noted that building on silty clay deposits increases the likelihood of building movements and therefore of cracking. The use of steel reinforcement in foundations placed at key structural locations will tend to reduce foundation cracking as compared to unreinforced foundations.

Permissible grade raise recommendations based on available consolidation testing and in-situ undrained shear strength testing results are defined in Drawing PG2950-2 - Permissible Grade Raise Plan in Appendix 2.

5.4 Design for Earthquakes

Shear wave velocity testing was completed in close proximity to the subject site as part of the previous geotechnical investigation to accurately determine the applicable seismic site classification for the proposed buildings from Table 4.1.8.4.A of the Ontario Building Code 2012. The shear wave velocity testing was completed by Paterson personnel. The results of the shear wave velocity testing at two (2) shot locations are presented in Appendix 2.

Field Program

A shear wave test was completed immediately to the south of the subject site, as presented in Drawing PG2950-1 - Test Hole Location Plan presented in Appendix 2. Paterson field personnel placed 24 horizontal geophones in a straight line in roughly an east-west orientation. The 4.5 Hz. horizontal geophones were mounted to the surface by means of a 75 mm ground spike attached to the geophone land case. The geophones were spaced at 3 m intervals and were connected by a geophone spread cable to a Geode 24 Channel seismograph.

The seismograph was also connected to a computer laptop and a hammer trigger switch attached to a 12 pound dead blow hammer. The hammer trigger switch sends a start signal to the seismograph. The hammer is used to strike an I-Beam seated into the ground surface, which creates a polarized shear wave. The hammer shots are repeated between four (4) to eight (8) times at each shot location to improve signal to noise ratio. The shot locations are also completed in forward and reverse directions (i.e.- striking both sides of the I-Beam seated parallel to the geophone array). The shot locations are located at the centre of the geophone array and 3, 4.5 and 30 m away from the first and last geophone.

The methods of testing completed by Paterson are guided by the standard testing procedures used by the expert seismologists at Carleton University and Geological Survey of Canada (GSC).

Data Processing and Interpretation

Interpretation for the shear wave velocity results were completed by Paterson personnel. Shear wave velocity measurement was made using reflection/refraction methods. The interpretation is performed by recovering arrival times from direct and refracted waves. The interpretation is repeated at each shot location to provide an average shear wave velocity, V_{s30} , of the upper 30 m profile, immediately below the building's foundation. The layer intercept times, velocities from different layers and critical distances are interpreted from the shear wave records to compute the bedrock depth at each location. The bedrock velocity was interpreted using the main refractor wave velocity, which is considered a conservative estimate of the bedrock velocity due to the increasing quality of the bedrock with depth. It should be noted that as bedrock quality increases, the bedrock shear wave velocity also increases.

The overburden and bedrock velocities were calculated to be 150 and 2,049 m/s, respectively. However, the bedrock was noted to be greater than 30 m below ground surface. The V_{s30} was calculated using the standard equation for average shear wave velocity calculation from the Ontario Building Code (OBC) 2012.

$$V_{s30} = \frac{Depth_{OfInterest}(m)}{\sum \left(\frac{Depth_{Layer1}(m)}{Vs_{Layer1}(m/s)} + \frac{Depth_{Layer2}(m)}{Vs_{Layer2}(m/s)} \right)}$$

$$V_{s30} = \frac{30m}{\sum \left(\frac{30m}{150m/s} \right)}$$

$$V_{s30} = 150m/s$$

Based on the results of the seismic testing, the average shear wave velocity, V_{s30} , is 150 m/s for the subject site. Therefore, a **Site Class E** is applicable for foundation design within the subject site, as per Table 4.1.8.4.A of the OBC 2012. The soils underlying the subject site are not susceptible to liquefaction.

5.5 Slab on Grade Construction

With the removal of all topsoil and deleterious fill, containing organic matter, within the footprints of the proposed buildings, the undisturbed native soil surface will be considered to be an acceptable subgrade on which to commence backfilling for floor slab construction. Any soft areas should be removed and backfilled with appropriate backfill material. It is recommended that the upper 300 mm of sub-slab fill consist of OPSS Granular A crushed stone.

5.6 Service Pits - Jiffy Lube Building

Service Pit Perimeter Drainage

It is understood that below grade service pits will be constructed within the proposed Jiffy Lube building. It is recommended that a perimeter drainage system be placed at footing level of the proposed service pit and connected to a positive outlet, such as a gravity connection to the storm sewer or sump pit. Backfill against the exterior sides of the service pit walls should consist of free-draining, non frost susceptible granular materials. Alternatively, the service pit walls and base could be waterproofed using a suitable waterproofing product to prevent water infiltration into the service pit. It is recommended that the geotechnical consultant provide inspection services during the waterproofing installation to ensure the system is adequately installed.

Lateral Earth Pressures

The foundation walls can be designed using the information provided below. There are several combinations of backfill and retained soils that could be applicable for the service pit walls. However, the conditions could be well-represented by assuming the retained soil consists of a material with an angle of internal friction of 30 degrees and a dry unit weight of 20 kN/m³. A hydrostatic groundwater pressure should be added for the portion below the groundwater level.

Undrained conditions are anticipated (i.e. below the groundwater level). Therefore, the applicable effective unit weight of the retained soil should be 13 kN/m³, where applicable. A hydrostatic pressure should be added to the total static earth pressure when calculating the effective unit weight.

Two distinct conditions, static and seismic, should be reviewed for design calculations. The parameters for design calculations for the two conditions are presented below.

Static Conditions

The static horizontal earth pressure (p_o) could be calculated with a triangular earth pressure distribution equal to $K_o \cdot \gamma \cdot H$ where:

K_o = at-rest earth pressure coefficient of the applicable retained soil, 0.5

γ = unit weight of fill of the applicable retained soil (kN/m^3)

H = height of the wall (m)

An additional pressure with a magnitude equal to $K_o \cdot q$ and acting on the entire height of the wall should be added to the above diagram for any surcharge loading, q (kPa), that may be placed at ground surface adjacent to the wall. The surcharge pressure will only be applicable for static analyses and should not be used in conjunction with the seismic loading case.

Actual earth pressures could be higher than the “at-rest” case if care is not exercised during the compaction of the backfill materials to maintain a minimum separation of 0.3 m from the walls with the compaction equipment.

Seismic Conditions

The total seismic force (P_{AE}) includes both the earth force component (P_o) and the seismic component (ΔP_{AE}).

The seismic earth force (ΔP_{AE}) could be calculated using $0.375 \cdot a_c \cdot \gamma \cdot H^2/g$ where:

$a_c = (1.45 - a_{\max}/g)a_{\max}$

γ = unit weight of fill of the applicable retained soil (kN/m^3)

H = height of the wall (m)

g = gravity, 9.81 m/s^2

The peak ground acceleration, ($a_{\max}$), for the Ottawa area is $0.36g$ according to OBC 2012. The vertical seismic coefficient is assumed to be zero.

The earth force component (P_o) under seismic conditions could be calculated using $P_o = 0.5 K_o \gamma H^2$, where $K_o = 0.5$ for the soil conditions presented above.

The total earth force (P_{AE}) is considered to act at a height, h (m), from the base of the wall, where:

$$h = \{P_o \cdot (H/3) + \Delta P_{AE} \cdot (0.6 \cdot H)\} / P_{AE}$$

The earth forces calculated are unfactored. For the ULS case, the earth loads should be factored as live loads, as per OBC 2012.

5.7 Pavement Structure

For design purposes, the pavement structure presented in the following tables could be used for the design of car parking areas and access lanes.

Table 4 - Recommended Pavement Structure - Car Parking Areas	
Thickness (mm)	Material Description
50	Wear Course - HL 3 or Superpave 12.5 Asphaltic Concrete
150	BASE - OPSS Granular A Crushed Stone
300	SUBBASE - OPSS Granular B Type II
SUBGRADE - Either fill, in situ soil or OPSS Granular B Type I or II material placed over in situ soil or fill	

Table 5 - Recommended Pavement Structure - Access Lanes	
Thickness (mm)	Material Description
40	Wear Course - Superpave 12.5 Asphaltic Concrete
50	Binder Course - Superpave 19.0 Asphaltic Concrete
150	BASE - OPSS Granular A Crushed Stone
400	SUBBASE - OPSS Granular B Type II
SUBGRADE - Either fill, in situ soil or OPSS Granular B Type I or II material placed over in situ soil	

Minimum Performance Graded (PG) 58-34 asphalt cement should be used for this project.

If soft spots develop in the subgrade during compaction or due to construction traffic, the affected areas should be excavated and replaced with OPSS Granular B Type I or II material. Weak subgrade conditions may be experienced over service trench fill materials. This may require the use of a geotextile, thicker subbase or other measures that can be recommended at the time of construction as part of the field observation program.

The pavement granular base and subbase should be placed in maximum 300 mm thick lifts and compacted to a minimum of 100% of the material's SPMDD using suitable vibratory equipment.

Pavement Structure Drainage

Satisfactory performance of the pavement structure is largely dependent on keeping the contact zone between the subgrade material and the base stone in a dry condition. Failure to provide adequate drainage under conditions of heavy wheel loading can result in the fine subgrade soil being pumped into the voids in the stone subbase, thereby reducing its load carrying capacity.

Due to the impervious nature of the subgrade materials consideration should be given to installing subdrains during the pavement construction as per City of Ottawa standards. The subdrain inverts should be approximately 300 mm below subgrade level. The subgrade surface should be crowned to promote water flow to the drainage lines.

6.0 DESIGN AND CONSTRUCTION PRECAUTIONS

6.1 Foundation Drainage and Backfill

It is recommended that a perimeter foundation drainage system be provided for proposed structures. The system should consist of a 100 to 150 mm diameter, geotextile-wrapped, perforated, corrugated, plastic pipe, surrounded on all sides by 150 mm of 10 mm clear crushed stone, placed at the footing level around the exterior perimeter of the structure. The pipe should have a positive outlet, such as a gravity connection to the storm sewer.

Backfill against the exterior sides of the foundation walls should consist of free-draining, non frost susceptible granular materials. The site materials will be frost susceptible and, as such, are not recommended for re-use as backfill unless a composite drainage system (such as system Platon or Miradrain G100N) connected to a drainage system is provided.

It should be noted that if a trench style foundation is used for the proposed buildings, a two ply polyethylene liner should be placed against the outside trench face to limit frost adhesion potential between the foundation concrete and silty clay sidewalls.

It should also be noted that if a perimeter drainage system is not provided and frost susceptible silty clay is left at subgrade level below building's perimeter sidewalks, a potential for frost heave below the sidewalk is present. It is recommended to place a minimum 50 mm thick horizontal layer of SM rigid insulation at a minimum 600 mm depth below finished grade, extending from building face to at least 1 m beyond face of curb to limit frost heave action below the building's sidewalks.

6.2 Protection Against Frost Action

Perimeter footings of heated structures are required to be insulated against the deleterious effect of frost action. A minimum 1.5 m thick soil cover (or equivalent) should be provided in this regard. A minimum of 2.1 m thick soil cover (or equivalent) should be provided for other exterior unheated footings.

6.3 Excavation Side Slopes

The side slopes of excavations in the soil and fill overburden materials should be either cut back at acceptable slopes or should be retained by shoring systems from the start of the excavation until the structure is backfilled. It is assumed that sufficient room will be available for the greater part of the excavation to be undertaken by open-cut methods (i.e. unsupported excavations).

Above the groundwater level, for excavations to depths of approximately 3 m, the excavation side slopes should be stable in the short term at 1H:1V. Flatter slopes could be required for deeper excavations or for excavation below the groundwater level. Where such side slopes are not permissible or practical, temporary shoring should be used. The subsoil at this site is considered to be mainly a Type 2 or 3 soil according to the Occupational Health and Safety Act and Regulations for Construction Projects.

The slope cross-sections recommended above are for temporary slopes. Excavated soil should not be stockpiled directly at the top of excavations and heavy equipment should be kept away from the excavation sides.

Slopes in excess of 3 m in height should be periodically inspected by the geotechnical consultant in order to detect if the slopes are exhibiting signs of distress.

It is recommended that a trench box be used at all times to protect personnel working in trenches with steep or vertical sides. It is expected that services will be installed by "cut and cover" methods and excavations will not be left open for extended periods of time.

Excavation Base Stability

The base of supported excavations can fail by three (3) general modes:

- ☐ Shear failure within the ground caused by inadequate resistance to loads imposed by grade difference inside and outside of the excavation,
- ☐ Piping from water seepage through granular soils, and
- ☐ Heave of layered soils due to water pressures confined by intervening low permeability soils.

Shear failure of excavation bases is typically rare in granular soils if adequate lateral support is provided. Inadequate dewatering can cause instability in excavations made through granular or layered soils. The potential for base heave in cohesive soils should be determined for stability of flexible retaining systems.

The factor of safety with respect to base heave, FS_b , is:

$$FS_b = N_b s_u / \sigma_z$$

where:

N_b - stability factor dependent upon the geometry of the excavation and given in Figure 1 on the following page.

s_u - undrained shear strength of the soil below the base level

σ_z - total overburden and surcharge pressures at the bottom of the excavation

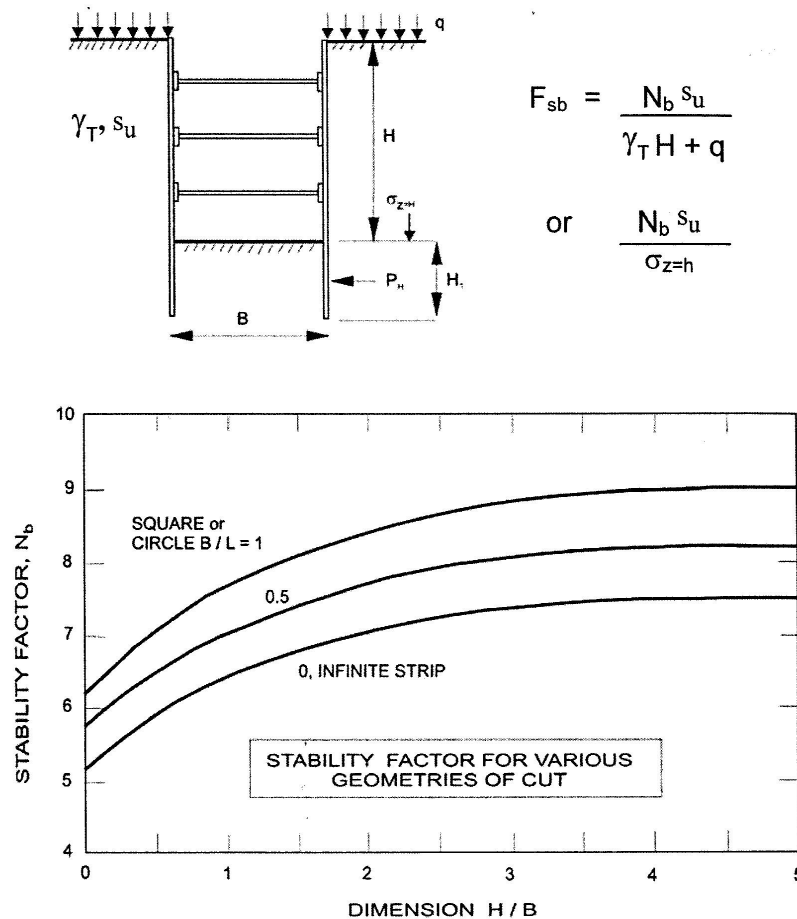


Figure 1 - Stability Factor for Various Geometries of Cut

In the case of soft to firm clays, a factor of safety of 2 is recommended for base stability.

6.4 Pipe Bedding and Backfill

Bedding and backfill materials should be in accordance with the most recent Material Specifications and Standard Detail Drawings from the Department of Public Works and Services, Infrastructure Services Branch of the City of Ottawa.

The pipe bedding for sewer and water pipes should consist of at least 150 mm of OPSS Granular A material. Where the bedding is located within the firm grey silty clay, the thickness of the bedding material should be increased to a minimum of 300 mm. The material should be placed in maximum 300 mm thick lifts and compacted to a minimum of 95% of its SPMDD. The bedding material should extend at least to the spring line of the pipe.

The cover material, which should consist of OPSS Granular A, should extend from the spring line of the pipe to at least 300 mm above the obvert of the pipe. The material should be placed in maximum 300 mm thick lifts and compacted to a minimum of 95% of its SPMDD.

It should generally be possible to re-use the moist (not wet) brown silty clay above the cover material if the excavation and filling operations are carried out in dry weather conditions. Wet silty clay materials will be difficult to re-use, as the high water contents make compacting impractical without an extensive drying period.

Where hard surface areas are considered above the trench backfill, the trench backfill material within the frost zone (about 1.8 m below finished grade) should match the soils exposed at the trench walls to minimize differential frost heaving. The trench backfill should be placed in maximum 300 mm thick loose lifts and compacted to a minimum of 95% of the material's SPMDD.

To reduce long-term lowering of the groundwater level at this site, clay seals should be provided in the service trenches. The seals should be at least 1.5 m long (in the trench direction) and should extend from trench wall to trench wall. Generally, the seals should extend from the frost line and fully penetrate the bedding, subbedding and cover material. The barriers should consist of relatively dry and compactable brown silty clay placed in maximum 225 mm thick loose layers and compacted to a minimum of 95% of the material's SPMDD. The clay seals should be placed at the site boundaries and at strategic locations at no more than 60 m intervals in the service trenches.

6.5 Groundwater Control

Due to the relatively impervious nature of the silty clay materials, it is anticipated that groundwater infiltration into the excavations should be low and controllable using open sumps. A perched groundwater condition may be encountered within the sandy silt deposit which may produce significant temporary groundwater infiltration levels. Pumping from open sumps should be sufficient to control the groundwater influx through the sides of shallow excavations.

A temporary MOE permit to take water (PTTW) will be required for this project if more than 50,000 L/day are to be pumped during the construction phase. At least 3 to 4 months should be allowed for completion of the application and issuance of the permit by the MOE. In our opinion, since the site excavations will be relatively shallow and in impervious materials, no significant water infiltration is expected. Therefore, a PTTW would only be as a precautionary measure.

The contractor should be prepared to direct water away from all bearing surfaces and subgrades, regardless of the source, to prevent disturbance to the founding medium.

6.6 Winter Construction

The subsoil conditions at this site mostly consist of frost susceptible materials. In presence of water and freezing conditions ice could form within the soil mass. Heaving and settlement upon thawing could occur. Precautions should be taken if winter construction is considered for this project.

In the event of construction during below zero temperatures, the founding stratum should be protected from freezing temperatures by the use of straw, propane heaters and tarpaulins or other suitable means. In this regard, the base of the excavations should be insulated from sub-zero temperatures immediately upon exposure and until such time as heat is adequately supplied to the building and the footings are protected with sufficient soil cover to prevent freezing at founding level.

The trench excavations should be carried out in a manner that will avoid the introduction of frozen materials into the trenches. As well, pavement construction is difficult during winter. The subgrade consists of frost susceptible soils which will experience total and differential frost heaving as the work takes place. In addition, the introduction of frost, snow or ice into the pavement materials, which is difficult to avoid, could adversely affect the performance of the pavement structure. Additional information could be provided, if required.

6.7 Corrosion Potential and Sulphate

The results of analytical testing show that the sulphate content is less than 0.1%. These results are indicative that Type 10 Portland cement (normal cement) would be appropriate for this site. The results of the chloride content, pH and resistivity indicate the presence of a non-aggressive to slightly aggressive environment for exposed ferrous metals at this site.

7.0 RECOMMENDATIONS

It is recommended that the following be carried out during the site development:

- ☐ Review detailed grading plan(s) from a geotechnical perspective.
- ☐ Observation of all bearing surfaces prior to the placement of concrete.
- ☐ Periodic observation of the condition of unsupported excavation side slopes in excess of 3 m in height, if applicable.
- ☐ Observation of all subgrades prior to placing backfilling materials.
- ☐ Field density tests to ensure that the specified level of compaction has been achieved.
- ☐ Sampling and testing of the bituminous concrete including mix design reviews.
- ☐ Suggest foundation alternatives based on the potential long term settlements.

A report confirming that these works have been conducted in general accordance with our recommendations could be issued upon request, following the completion of a satisfactory material testing and observation program by the geotechnical consultant.

8.0 STATEMENT OF LIMITATIONS

The recommendations made in this report are in accordance with our present understanding of the project. We request permission to review the grading plan once available. Also, our recommendations should be reviewed when the drawings and specifications are complete.

The client should be aware that any information pertaining to soils and all test hole logs are furnished as a matter of general information only and test hole descriptions or logs are not to be interpreted as descriptive of conditions at locations other than those of the test holes.

A soils investigation is a limited sampling of a site. Should any conditions at the site be encountered which differ from those at the test locations, we request that we be notified immediately in order to permit reassessment of our recommendations.

The present report applies only to the project described in this document. Use of this report for purposes other than those described herein or by person(s) other than Smart Centres or their agent(s) is not authorized without review by this firm for the applicability of our recommendations to the altered use of the report.

Paterson Group Inc.

David J. Gilbert, P.Eng.



Carlos P. Da Silva, P.Eng.

Report Distribution:

- ☐ SmartCentres (3 copies)
- ☐ Paterson Group (1 copy)

APPENDIX 1

SOIL PROFILE AND TEST DATA SHEETS

SYMBOLS AND TERMS

CONSOLIDATION TEST RESULTS

ATTERBERG LIMITS TESTING RESULTS

ANALYTICAL TESTING RESULTS

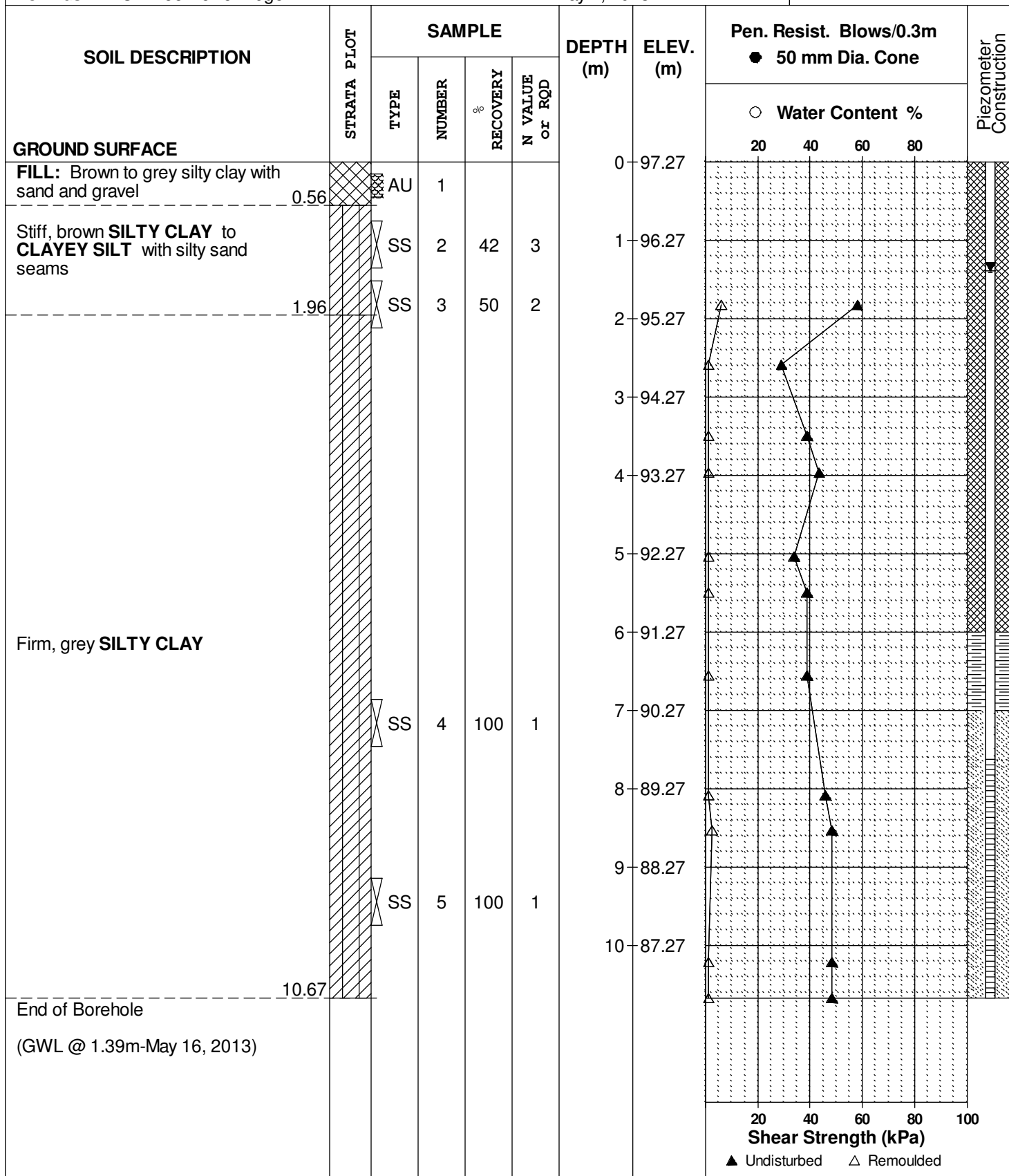
DATUM TBM - Finished floor level of Walmart. Geodetic elevation = 98.25m, as per plan prepared by Stantec Geomatics.
REMARKS 18T 0431401; 5013975

FILE NO. PG2950

HOLE NO. BH 1-13

BORINGS BY CME 55 Power Auger

DATE May 2, 2013



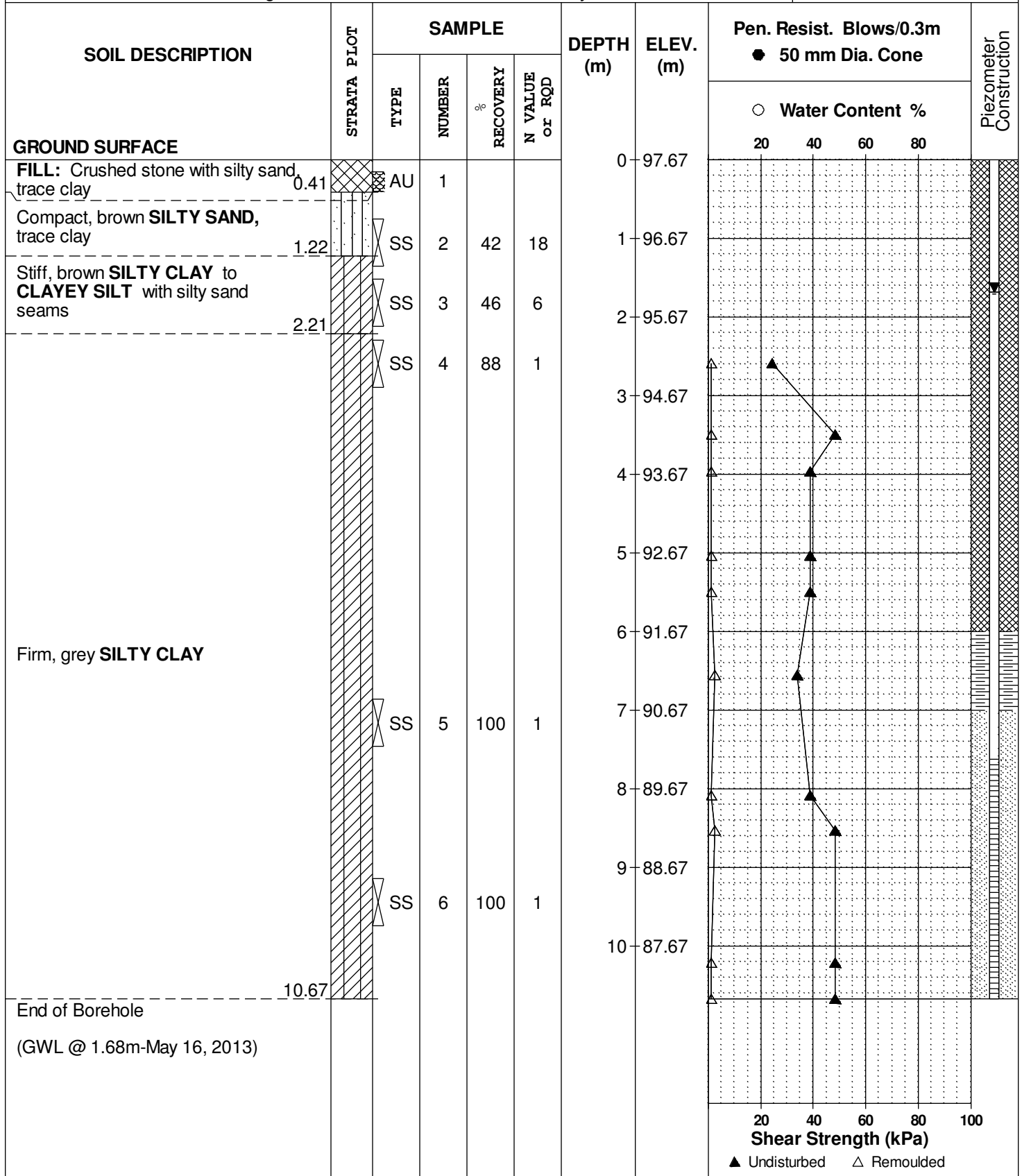
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REMARKS 18T 0431431; 5013938

FILE NO. PG2950

HOLE NO. BH 2-13

BORINGS BY CME 55 Power Auger

DATE May 2, 2013



SOIL PROFILE AND TEST DATA

**Geotechnical Investigation
Commercial Development - Kanata South Phase 2
Ottawa, Ontario**

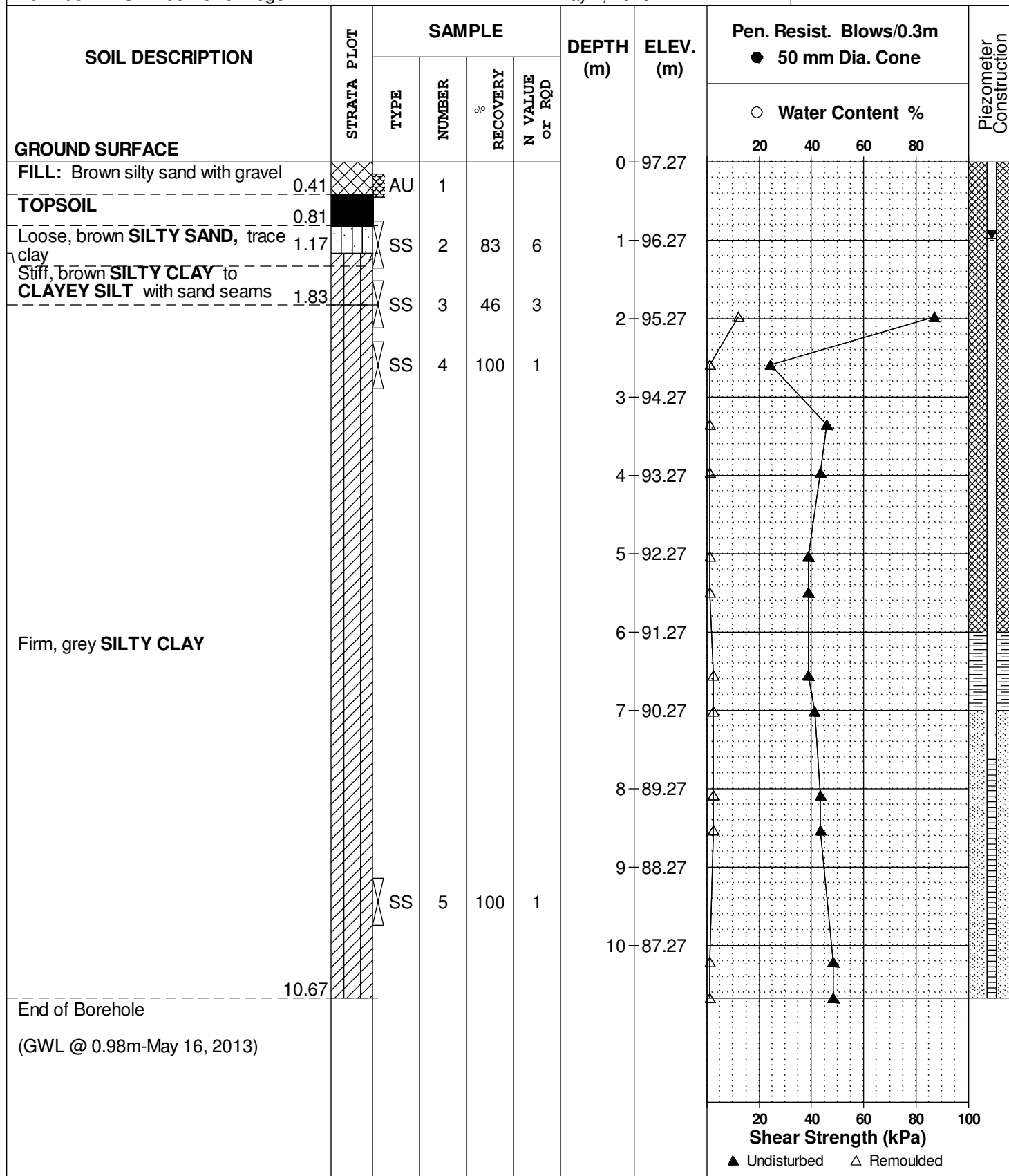
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REMARKS	18T 0431482; 5013993

FILE NO. **PG2950**

HOLE NO. **BH 3-13**

BORINGS BY CME 55 Power Auger

DATE May 2, 2013



SOIL PROFILE AND TEST DATA

**Geotechnical Investigation
Commercial Development - Kanata South Phase 2
Ottawa, Ontario**

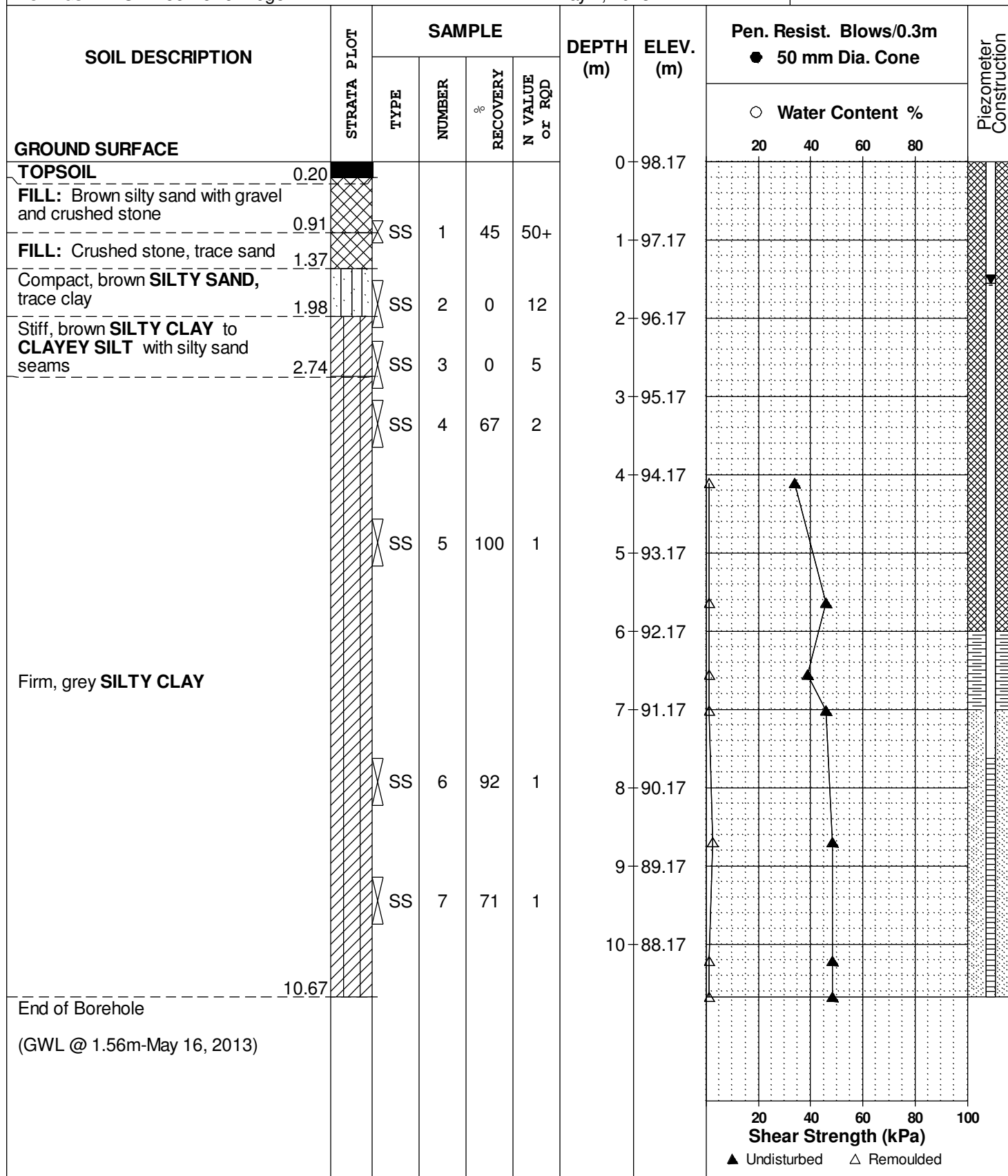
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REMARKS	18T 0431548; 5013965

FILE NO. PG2950

HOLE NO. **BH 4-13**

BORINGS BY CME 55 Power Auger

DATE May 2, 2013



DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

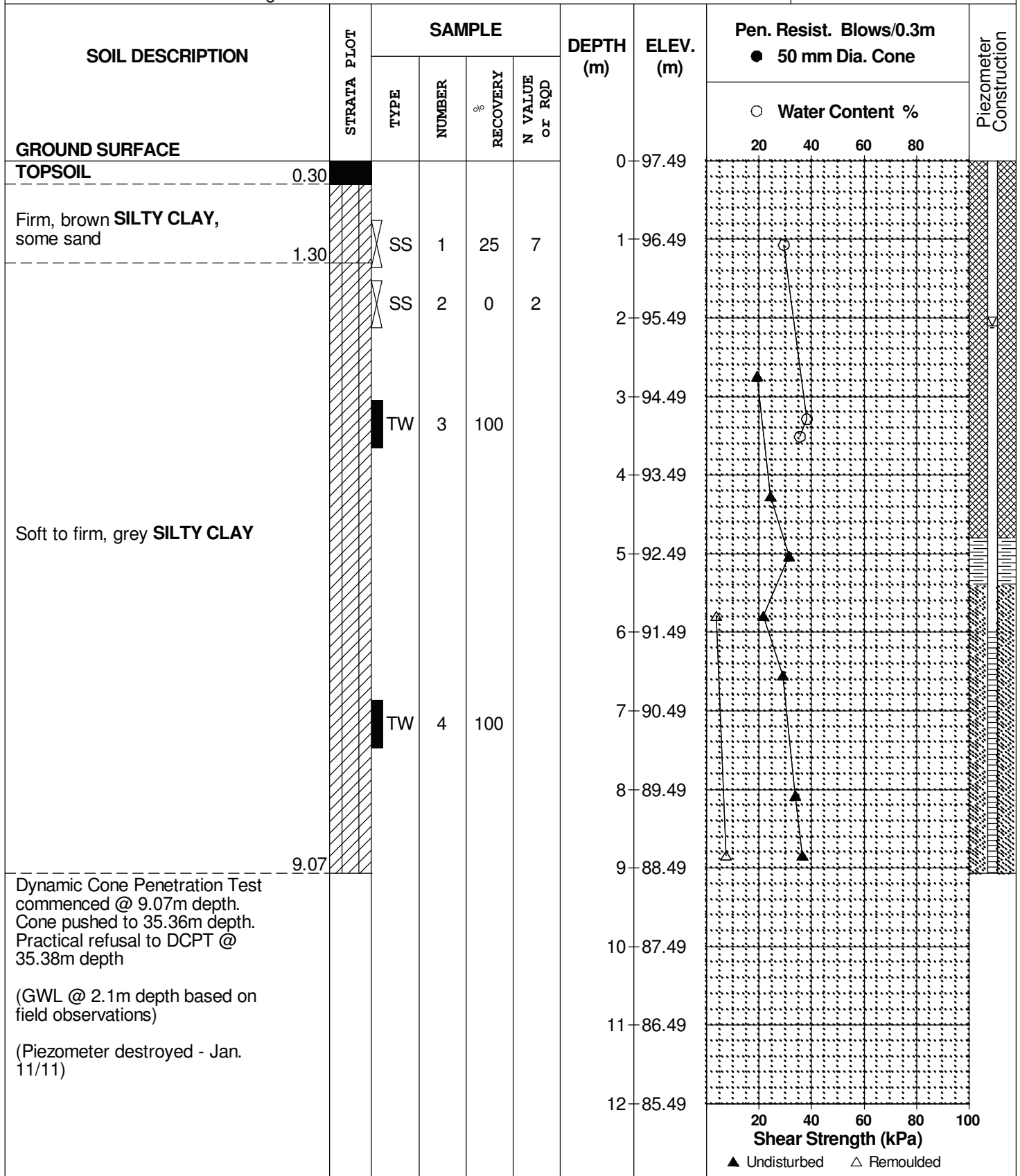
REMARKS

BORINGS BY CME 55 Power Auger

DATE 10 December 2010

FILE NO.
PG2263

HOLE NO.
BH 1



DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

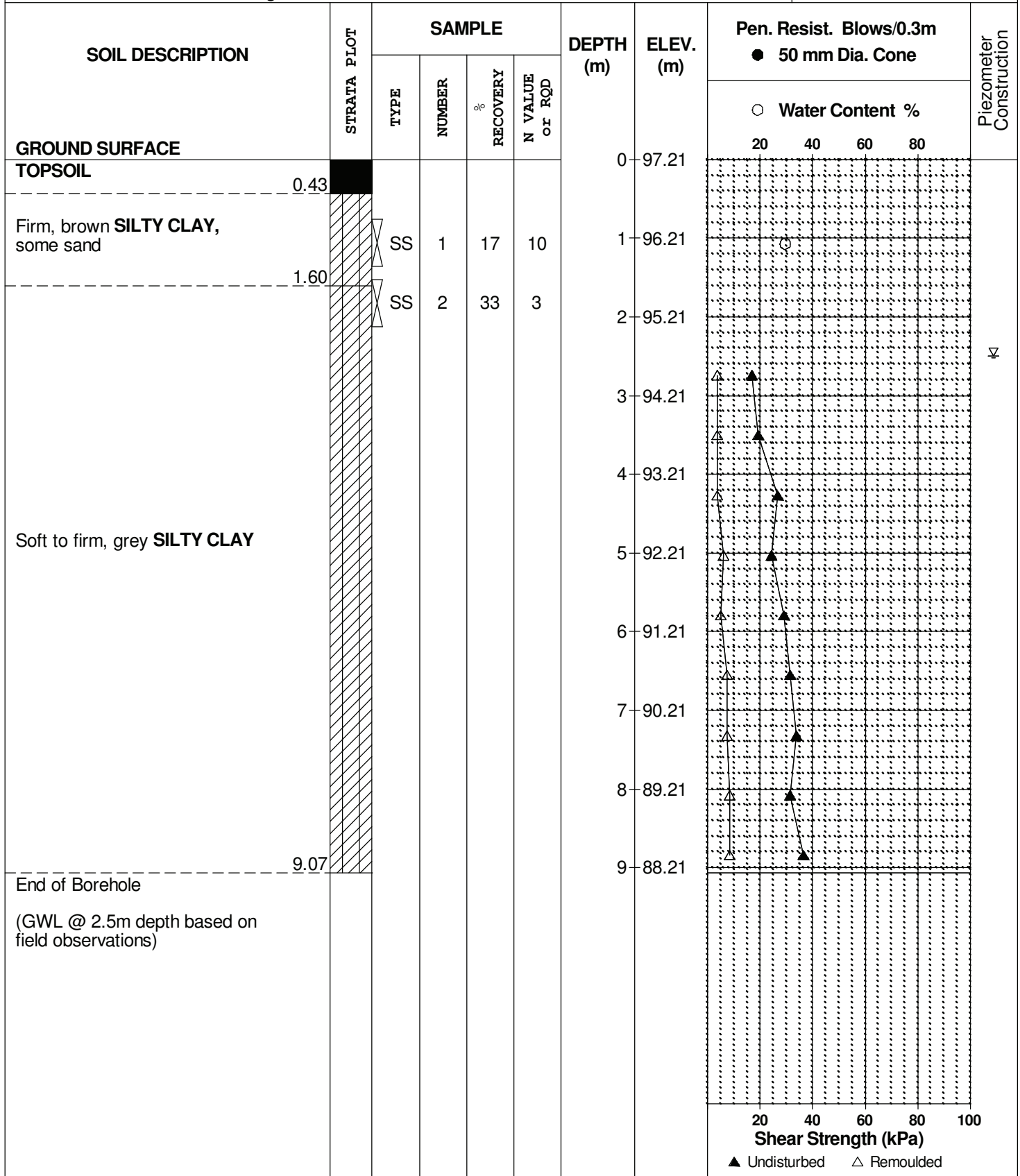
REMARKS

BORINGS BY CME 55 Power Auger

DATE 13 December 2010

FILE NO.
PG2263

HOLE NO.
BH 2



DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

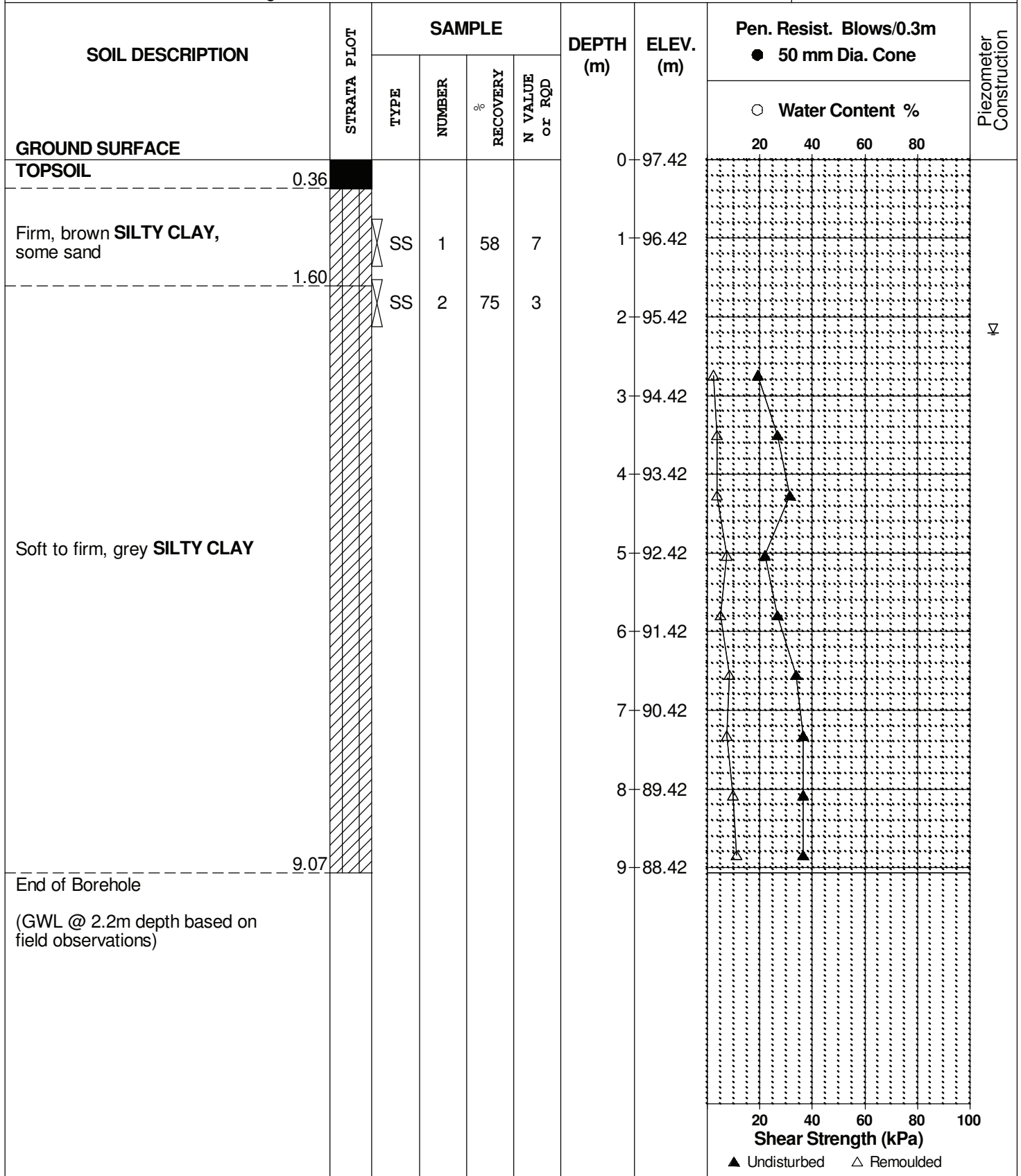
REMARKS

BORINGS BY CME 55 Power Auger

DATE 13 December 2010

FILE NO.
PG2263

HOLE NO.
BH 3



SOIL PROFILE AND TEST DATA

Geotechnical Investigation
Proposed Commercial Development - Fernbank Road
Ottawa, Ontario

DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

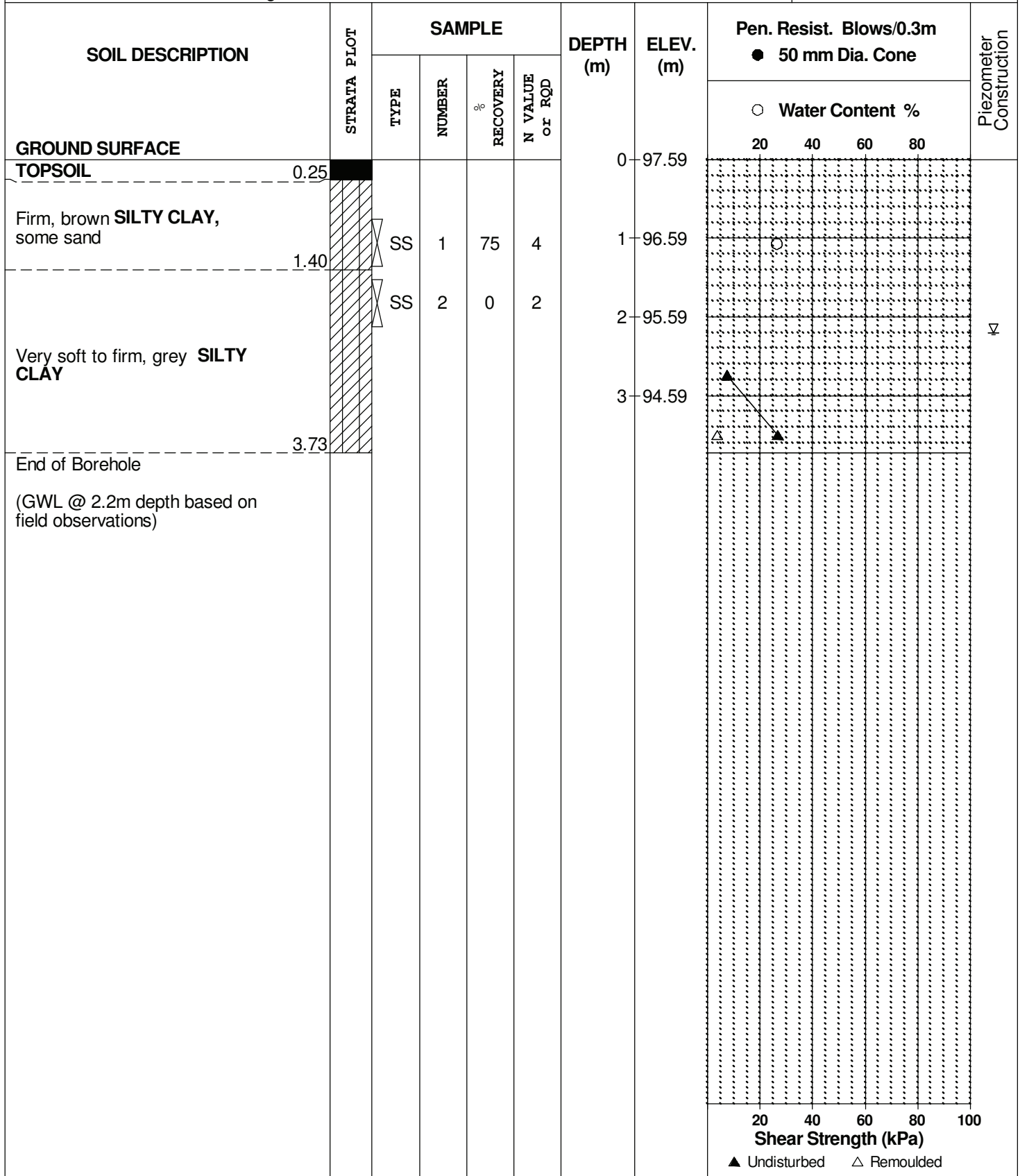
REMARKS

BORINGS BY CME 55 Power Auger

DATE 10 December 2010

FILE NO.
PG2263

HOLE NO.
BH 4



SOIL PROFILE AND TEST DATA

Geotechnical Investigation
Proposed Commercial Development - Fernbank Road
Ottawa, Ontario

DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

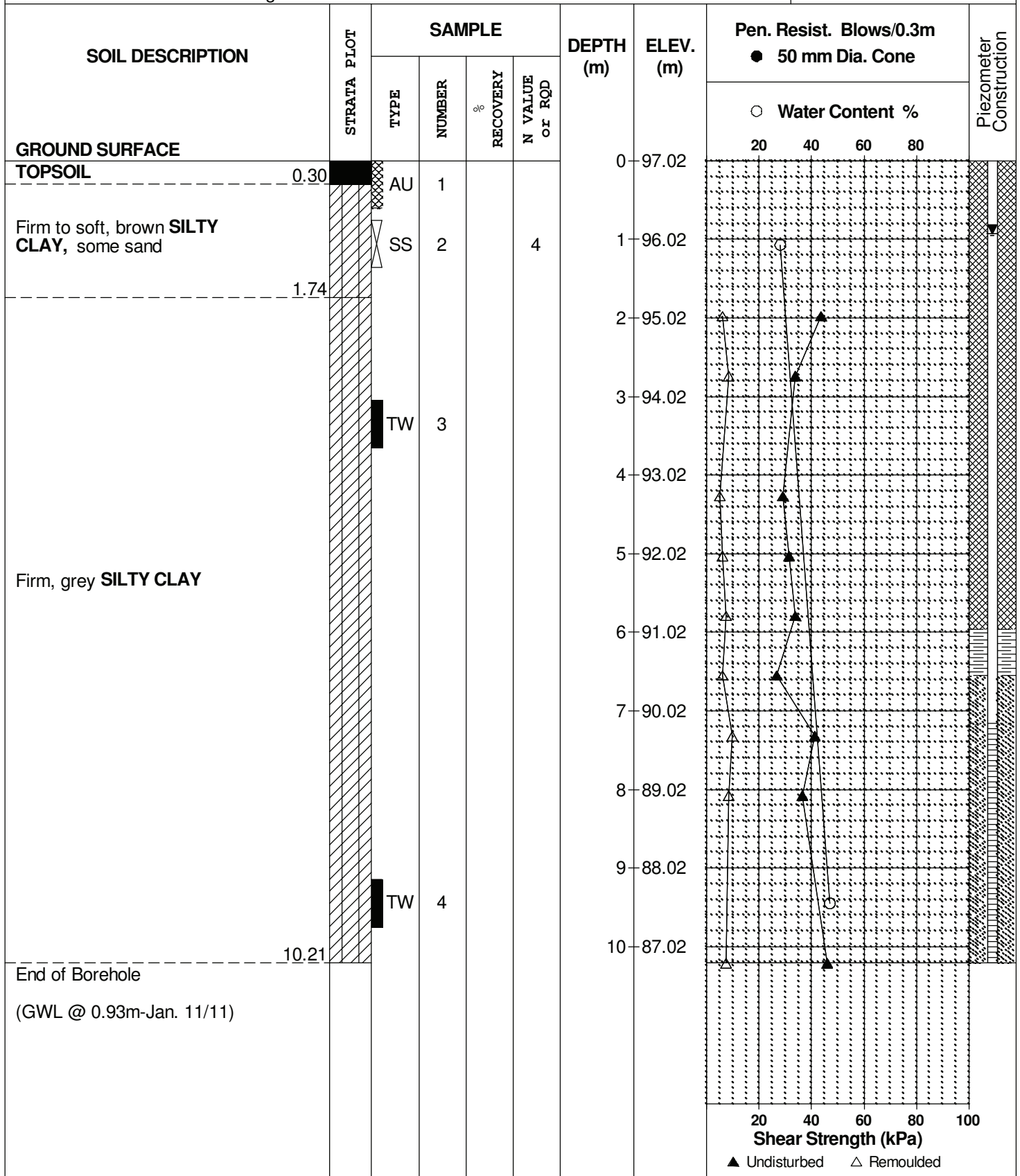
REMARKS

BORINGS BY CME 55 Power Auger

DATE 21 December 2010

FILE NO. PG2263

HOLE NO. BH 5



SOIL PROFILE AND TEST DATA

Geotechnical Investigation
Proposed Commercial Development - Fernbank Road
Ottawa, Ontario

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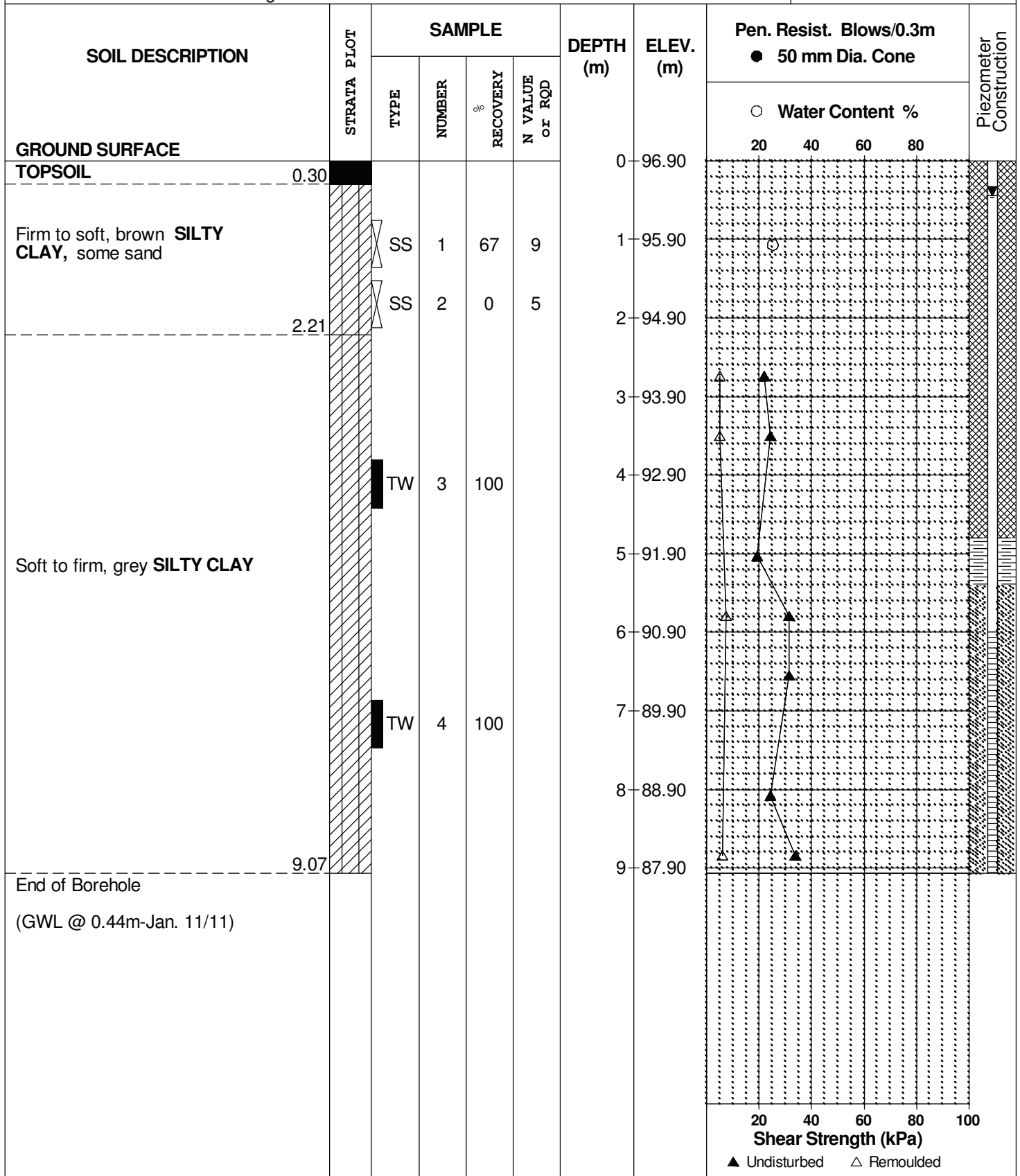
REMARKS

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DATE 9 December 2010

FILE NO. PG2263

HOLE NO. BH 6



DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

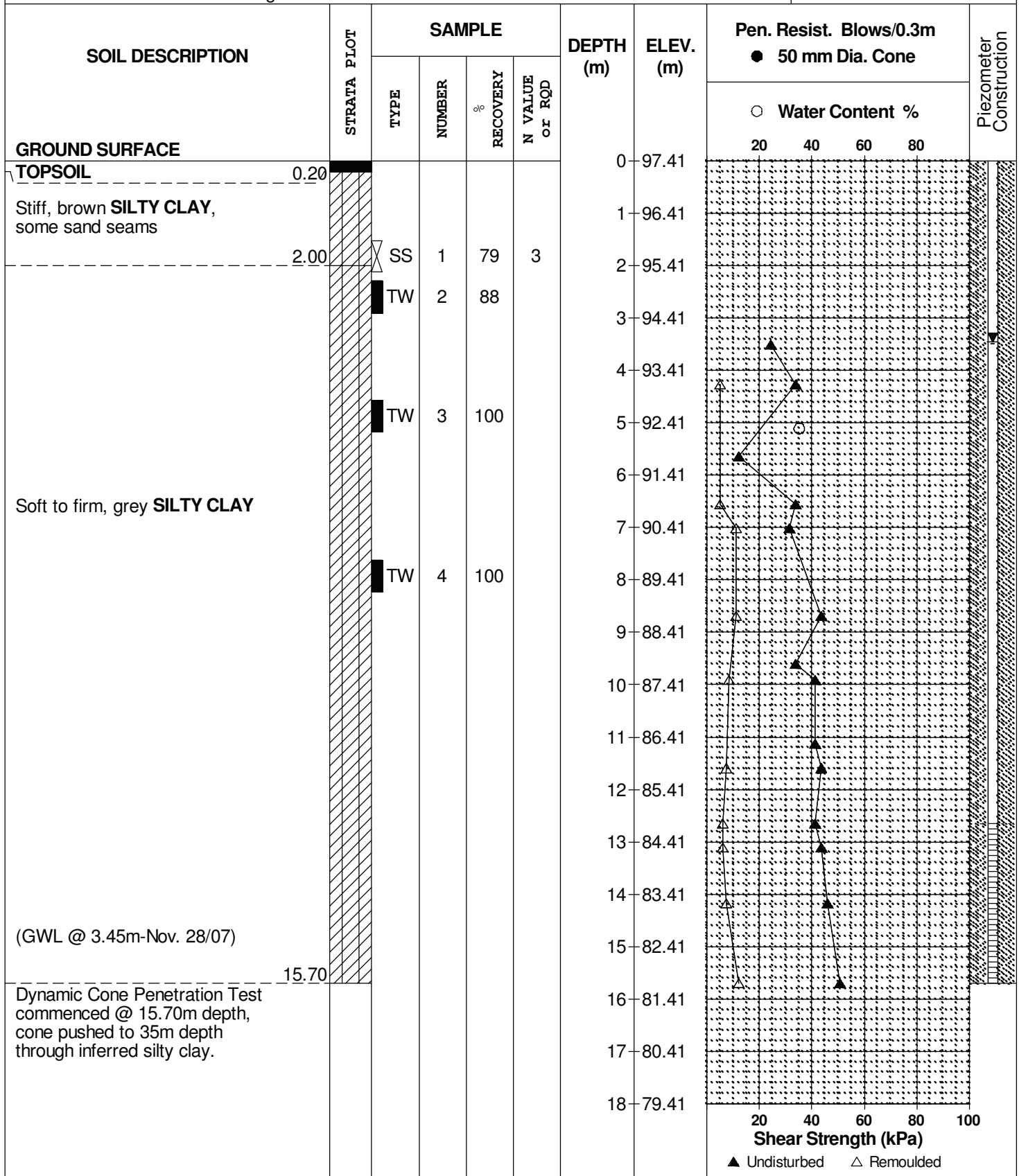
REMARKS

BORINGS BY CME 75 Power Auger

DATE 22 November 2007

FILE NO.
PG1568

HOLE NO.
BH 1



SOIL PROFILE AND TEST DATA

Geotechnical Investigation
Prop. Commercial Dev.-Terry Fox Dr. at Fernbank Rd.
Ottawa, Ontario

DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

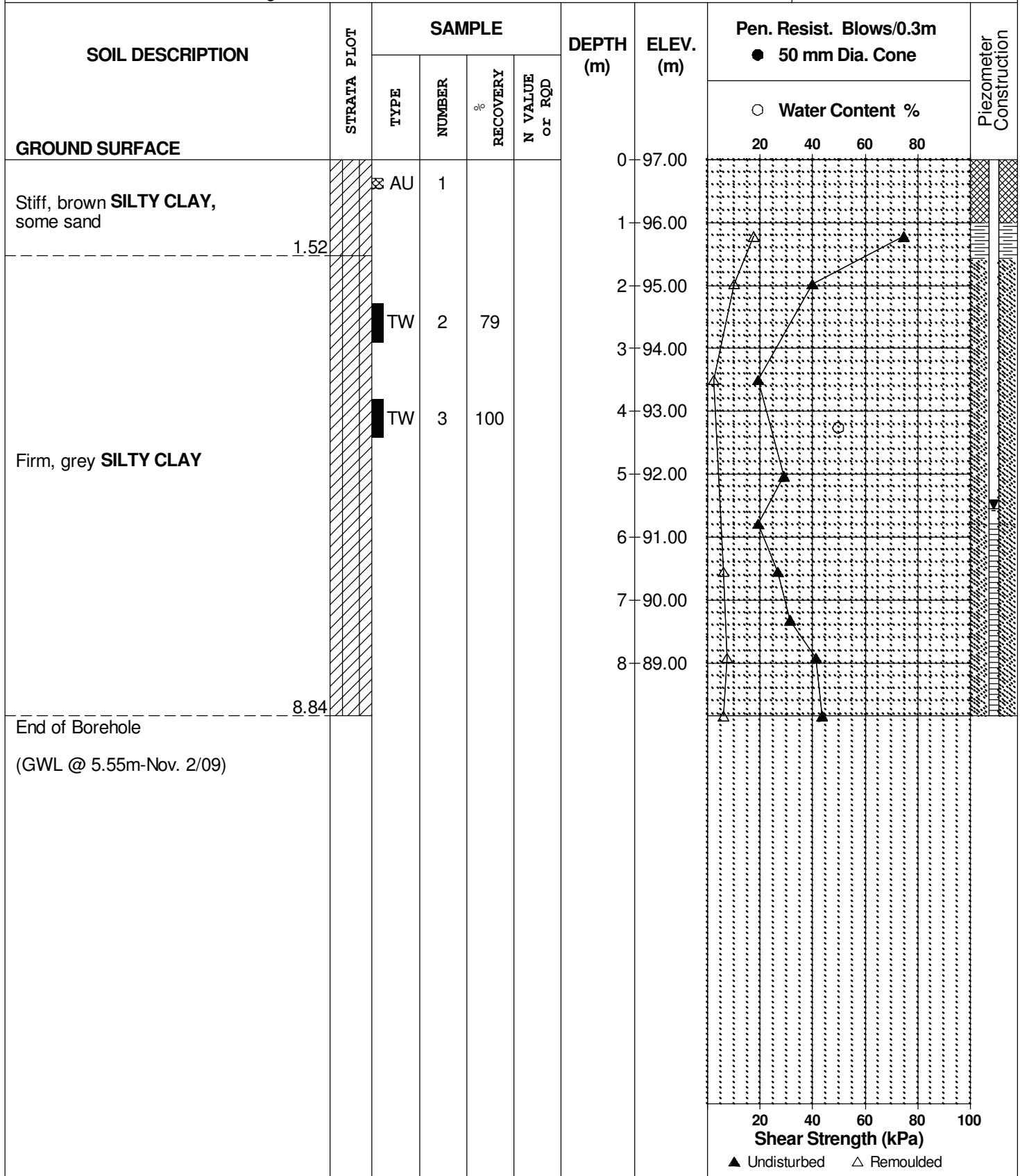
REMARKS

BORINGS BY CME 85 Power Auger

DATE 26 October 2009

FILE NO.
PG1568

HOLE NO.
BH 4



SOIL PROFILE AND TEST DATA

Geotechnical Investigation

Prop. Commercial Dev.-Terry Fox Dr. at Fernbank Rd.
Ottawa, Ontario

DATUM Ground surface elevations provided by Stantec Geomatics Ltd.

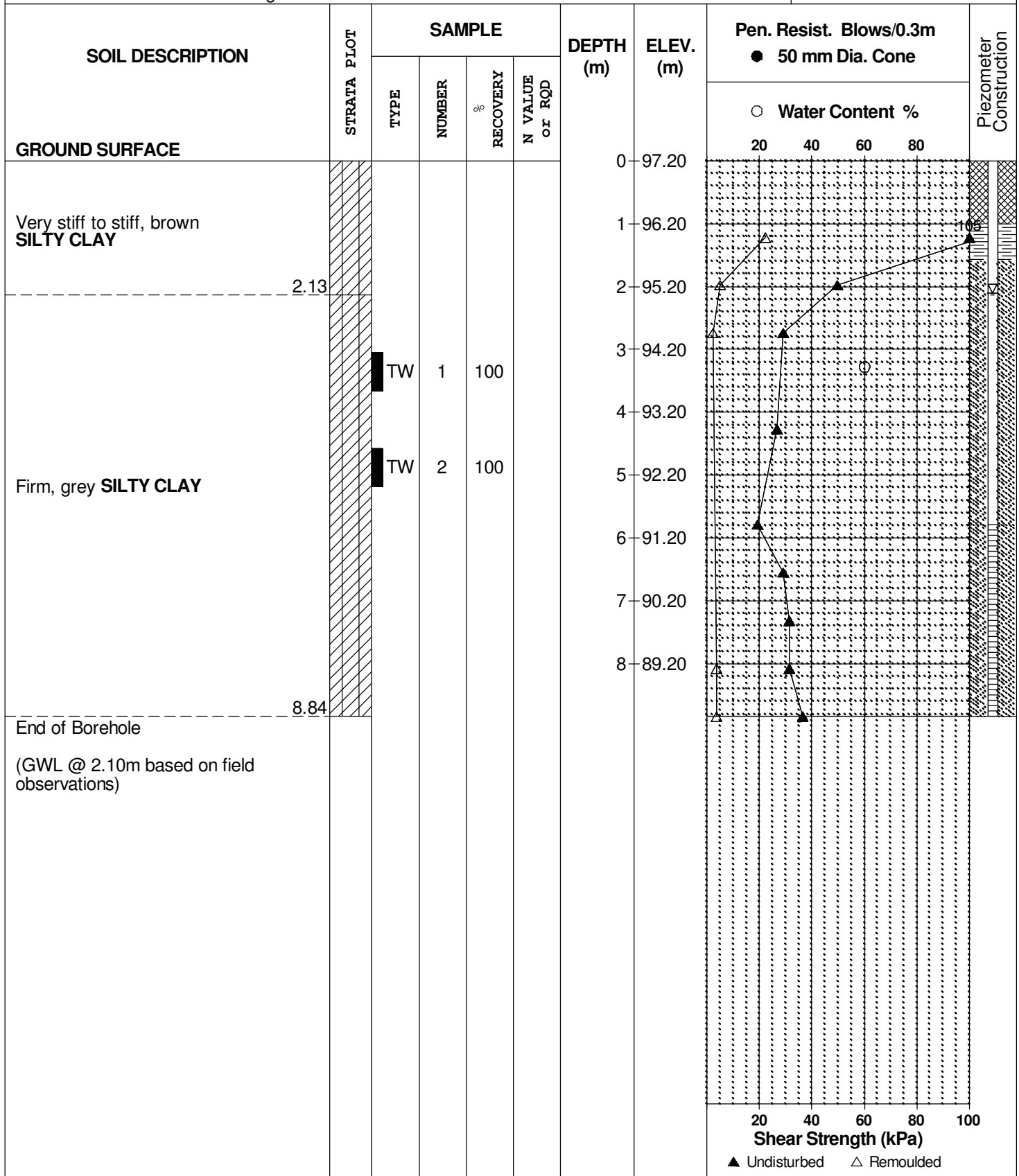
REMARKS

BORINGS BY CME 85 Power Auger

DATE 26 October 2009

FILE NO.
PG1568

HOLE NO.
BH 5



SYMBOLS AND TERMS

SOIL DESCRIPTION

Behavioural properties, such as structure and strength, take precedence over particle gradation in describing soils. Terminology describing soil structure are as follows:

Desiccated	-	having visible signs of weathering by oxidation of clay minerals, shrinkage cracks, etc.
Fissured	-	having cracks, and hence a blocky structure.
Varved	-	composed of regular alternating layers of silt and clay.
Stratified	-	composed of alternating layers of different soil types, e.g. silt and sand or silt and clay.
Well-Graded	-	Having wide range in grain sizes and substantial amounts of all intermediate particle sizes (see Grain Size Distribution).
Uniformly-Graded	-	Predominantly of one grain size (see Grain Size Distribution).

The standard terminology to describe the strength of cohesionless soils is the relative density, usually inferred from the results of the Standard Penetration Test (SPT) 'N' value. The SPT N value is the number of blows of a 63.5 kg hammer, falling 760 mm, required to drive a 51 mm O.D. split spoon sampler 300 mm into the soil after an initial penetration of 150 mm.

Relative Density	'N' Value	Relative Density %
Very Loose	<4	<15
Loose	4-10	15-35
Compact	10-30	35-65
Dense	30-50	65-85
Very Dense	>50	>85

The standard terminology to describe the strength of cohesive soils is the consistency, which is based on the undisturbed undrained shear strength as measured by the in situ or laboratory vane tests, penetrometer tests, unconfined compression tests, or occasionally by Standard Penetration Tests.

Consistency	Undrained Shear Strength (kPa)	'N' Value
Very Soft	<12	<2
Soft	12-25	2-4
Firm	25-50	4-8
Stiff	50-100	8-15
Very Stiff	100-200	15-30
Hard	>200	>30

SYMBOLS AND TERMS (continued)

SOIL DESCRIPTION (continued)

Cohesive soils can also be classified according to their “sensitivity”. The sensitivity is the ratio between the undisturbed undrained shear strength and the remoulded undrained shear strength of the soil.

Terminology used for describing soil strata based upon texture, or the proportion of individual particle sizes present is provided on the Textural Soil Classification Chart at the end of this information package.

ROCK DESCRIPTION

The structural description of the bedrock mass is based on the Rock Quality Designation (RQD).

The RQD classification is based on a modified core recovery percentage in which all pieces of sound core over 100 mm long are counted as recovery. The smaller pieces are considered to be a result of closely-spaced discontinuities (resulting from shearing, jointing, faulting, or weathering) in the rock mass and are not counted. RQD is ideally determined from NXL size core. However, it can be used on smaller core sizes, such as BX, if the bulk of the fractures caused by drilling stresses (called “mechanical breaks”) are easily distinguishable from the normal in situ fractures.

RQD %	ROCK QUALITY
90-100	Excellent, intact, very sound
75-90	Good, massive, moderately jointed or sound
50-75	Fair, blocky and seamy, fractured
25-50	Poor, shattered and very seamy or blocky, severely fractured
0-25	Very poor, crushed, very severely fractured

SAMPLE TYPES

SS	-	Split spoon sample (obtained in conjunction with the performing of the Standard Penetration Test (SPT))
TW	-	Thin wall tube or Shelby tube
PS	-	Piston sample
AU	-	Auger sample or bulk sample
WS	-	Wash sample
RC	-	Rock core sample (Core bit size AXT, BXL, etc.). Rock core samples are obtained with the use of standard diamond drilling bits.

SYMBOLS AND TERMS (continued)

GRAIN SIZE DISTRIBUTION

MC%	-	Natural moisture content or water content of sample, %
LL	-	Liquid Limit, % (water content above which soil behaves as a liquid)
PL	-	Plastic limit, % (water content above which soil behaves plastically)
PI	-	Plasticity index, % (difference between LL and PL)
Dxx	-	Grain size which xx% of the soil, by weight, is of finer grain sizes These grain size descriptions are not used below 0.075 mm grain size
D10	-	Grain size at which 10% of the soil is finer (effective grain size)
D60	-	Grain size at which 60% of the soil is finer
Cc	-	Concavity coefficient = $(D_{30})^2 / (D_{10} \times D_{60})$
Cu	-	Uniformity coefficient = D_{60} / D_{10}

Cc and Cu are used to assess the grading of sands and gravels:

Well-graded gravels have: $1 < Cc < 3$ and $Cu > 4$

Well-graded sands have: $1 < Cc < 3$ and $Cu > 6$

Sands and gravels not meeting the above requirements are poorly-graded or uniformly-graded.

Cc and Cu are not applicable for the description of soils with more than 10% silt and clay
(more than 10% finer than 0.075 mm or the #200 sieve)

CONSOLIDATION TEST

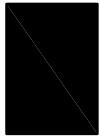
p'_o	-	Present effective overburden pressure at sample depth
p'_c	-	Preconsolidation pressure of (maximum past pressure on) sample
Ccr	-	Recompression index (in effect at pressures below p'_c)
Cc	-	Compression index (in effect at pressures above p'_c)
OC Ratio		Overconsolidation ratio = p'_c / p'_o
Void Ratio		Initial sample void ratio = volume of voids / volume of solids
Wo	-	Initial water content (at start of consolidation test)

PERMEABILITY TEST

k	-	Coefficient of permeability or hydraulic conductivity is a measure of the ability of water to flow through the sample. The value of k is measured at a specified unit weight for (remoulded) cohesionless soil samples, because its value will vary with the unit weight or density of the sample during the test.
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SYMBOLS AND TERMS (continued)

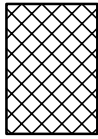
STRATA PLOT



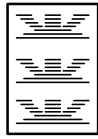
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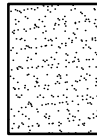
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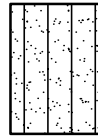
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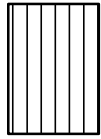
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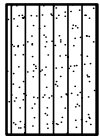
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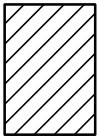
Silty Sand



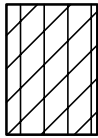
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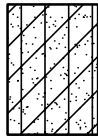
Sandy Silt



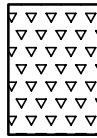
Clay



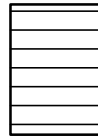
Silty Clay



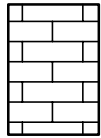
Clayey Silty Sand



Glacial Till



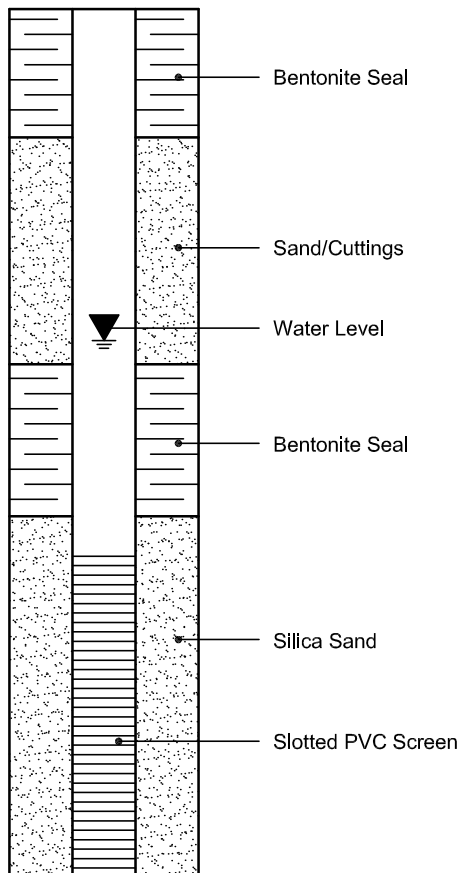
Shale



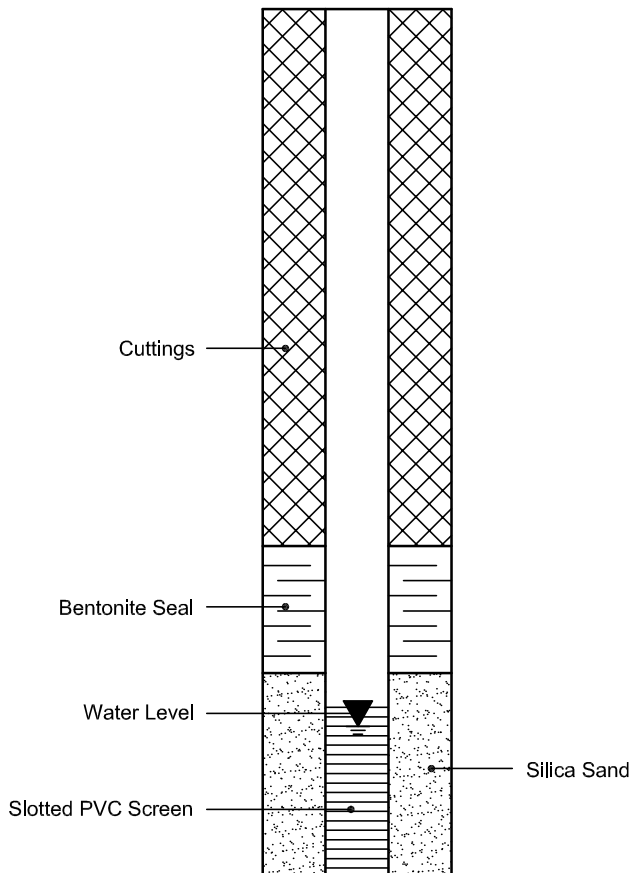
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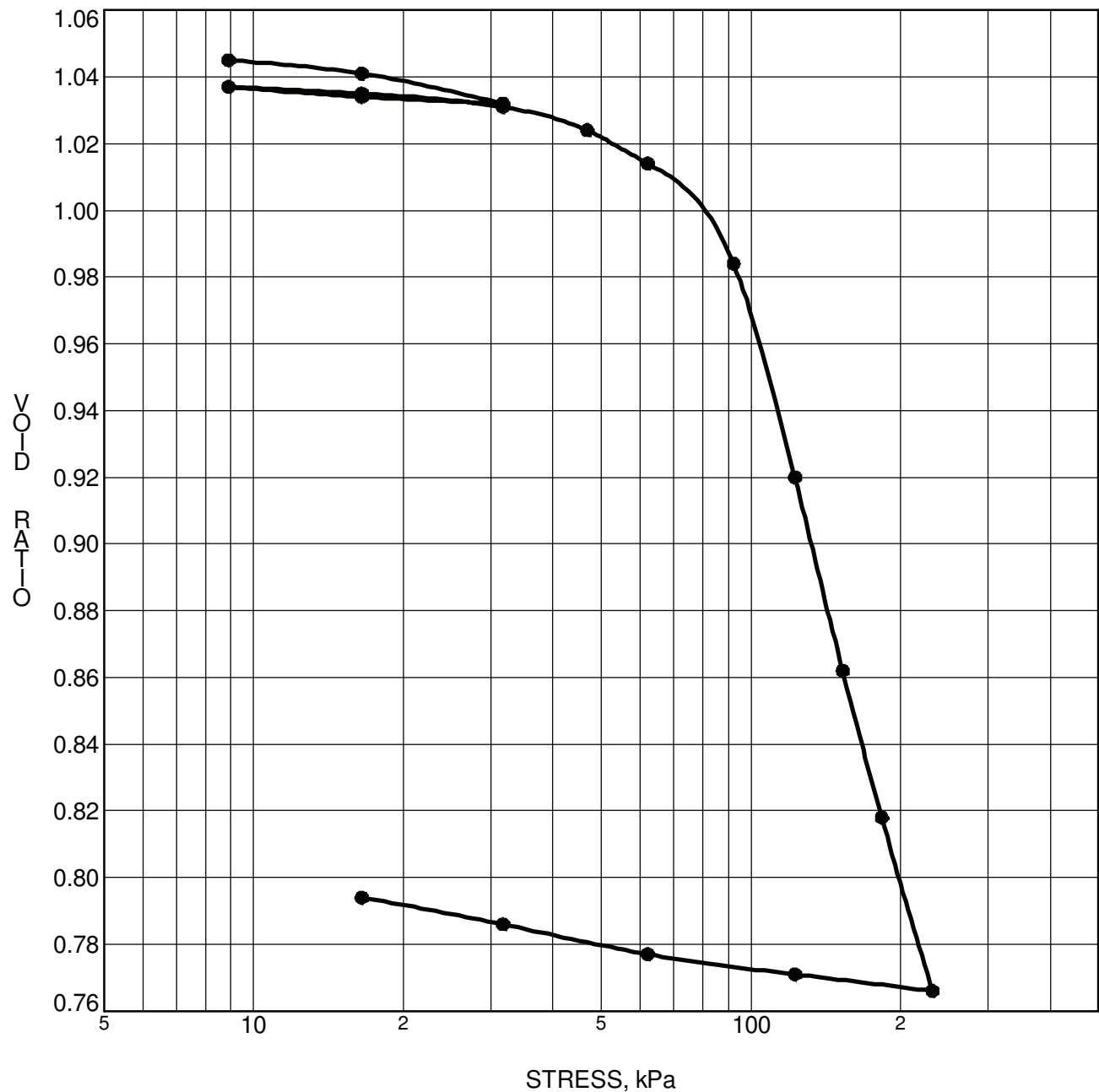
MONITORING WELL AND PIEZOMETER CONSTRUCTION

MONITORING WELL CONSTRUCTION



PIEZOMETER CONSTRUCTION





CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	BH 1	p'_o	44 kPa	C_{cr}	0.010
Sample No.	TW 3	p'_c	84 kPa	C_c	0.543
Sample Depth	3.29 m	OC Ratio	1.9	W_o	38.2 %
Sample Elev.	94.20 m	Void Ratio	1.051	Unit Wt.	18.2 kN/m³

CLIENT Smart Centres
 PROJECT Geotechnical Investigation - Proposed Commercial Development - Fernbank Road

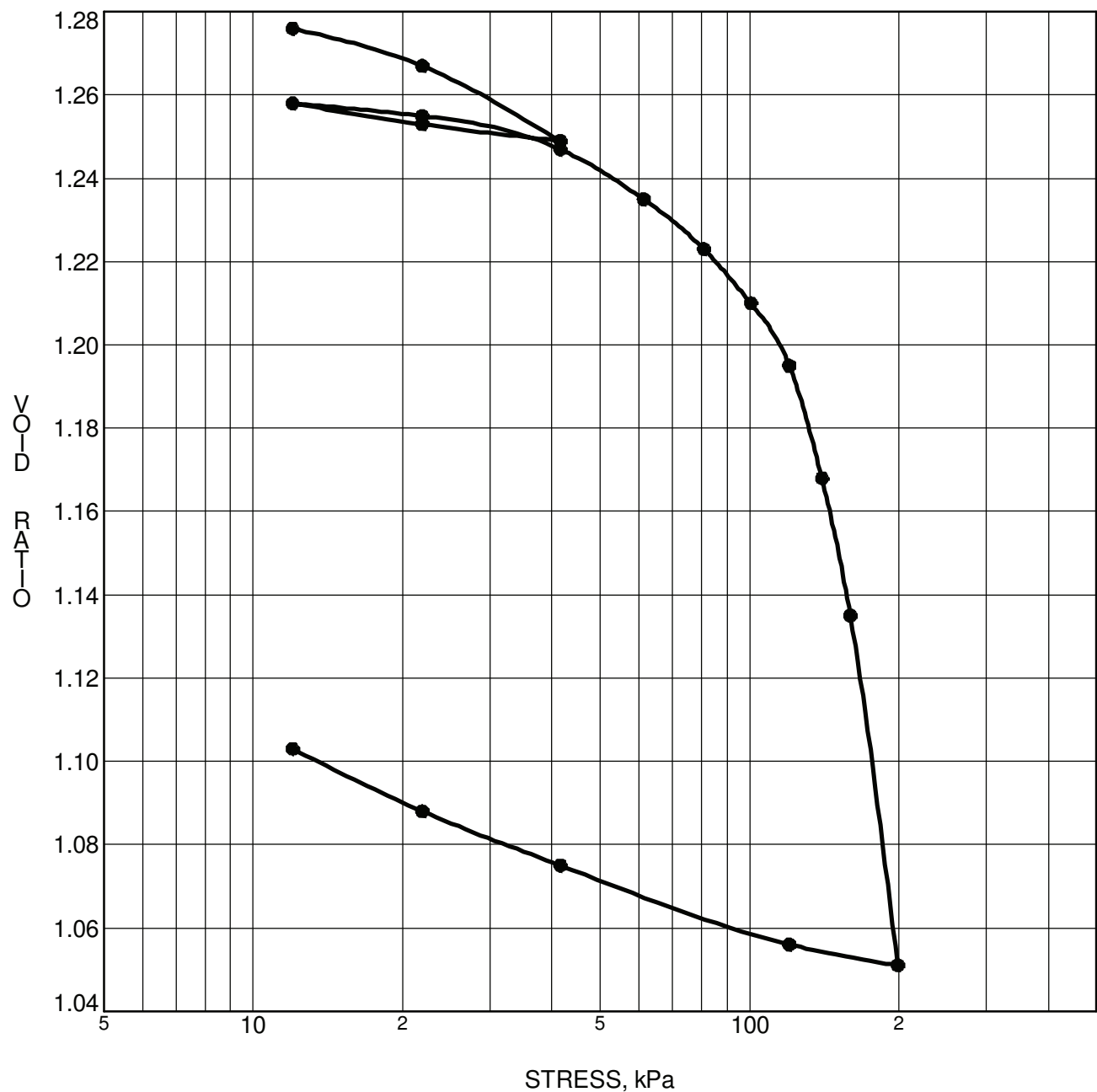
FILE NO. PG2263
 DATE 1/12/2011

patersongroup

Consulting
Engineers

28 Concouse Gate, Unit 1, Ottawa, Ontario K2E 7T7

**CONSOLIDATION
TEST**



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	BH 5	p'_o	84 kPa	C_{cr}	0.019
Sample No.	TW 4	p'_c	128 kPa	C_c	0.766
Sample Depth	9.45 m	OC Ratio	1.5	W_o	47.0 %
Sample Elev.	87.57 m	Void Ratio	1.292	Unit Wt.	17.3 kN/m³

CLIENT Smart Centres
 PROJECT Geotechnical Investigation - Proposed Commercial Development - Fernbank Road

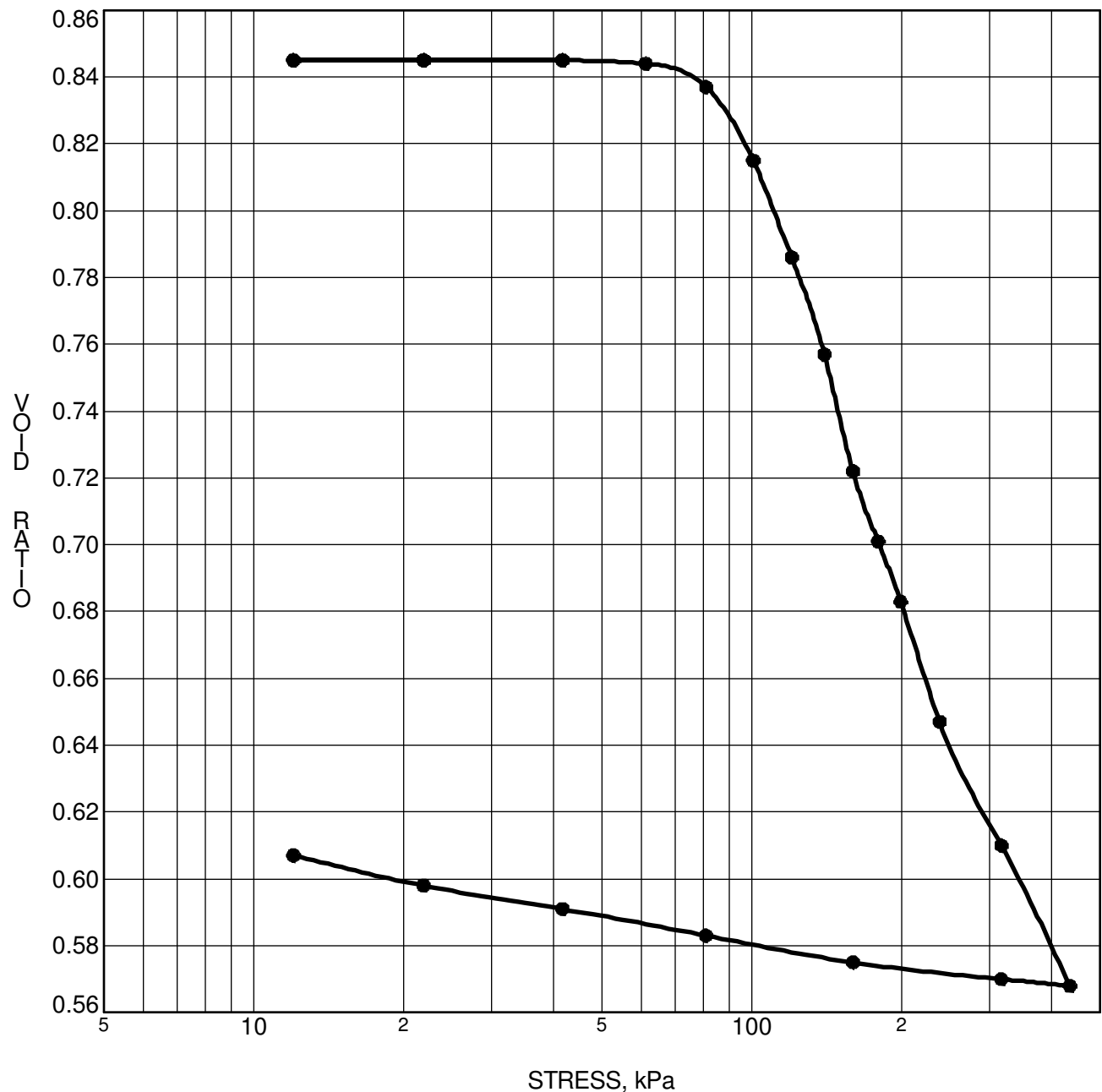
FILE NO. PG2263
 DATE 1/12/2011

patersongroup

Consulting
Engineers

28 Concouse Gate, Unit 1, Ottawa, Ontario K2E 7T7

**CONSOLIDATION
TEST**



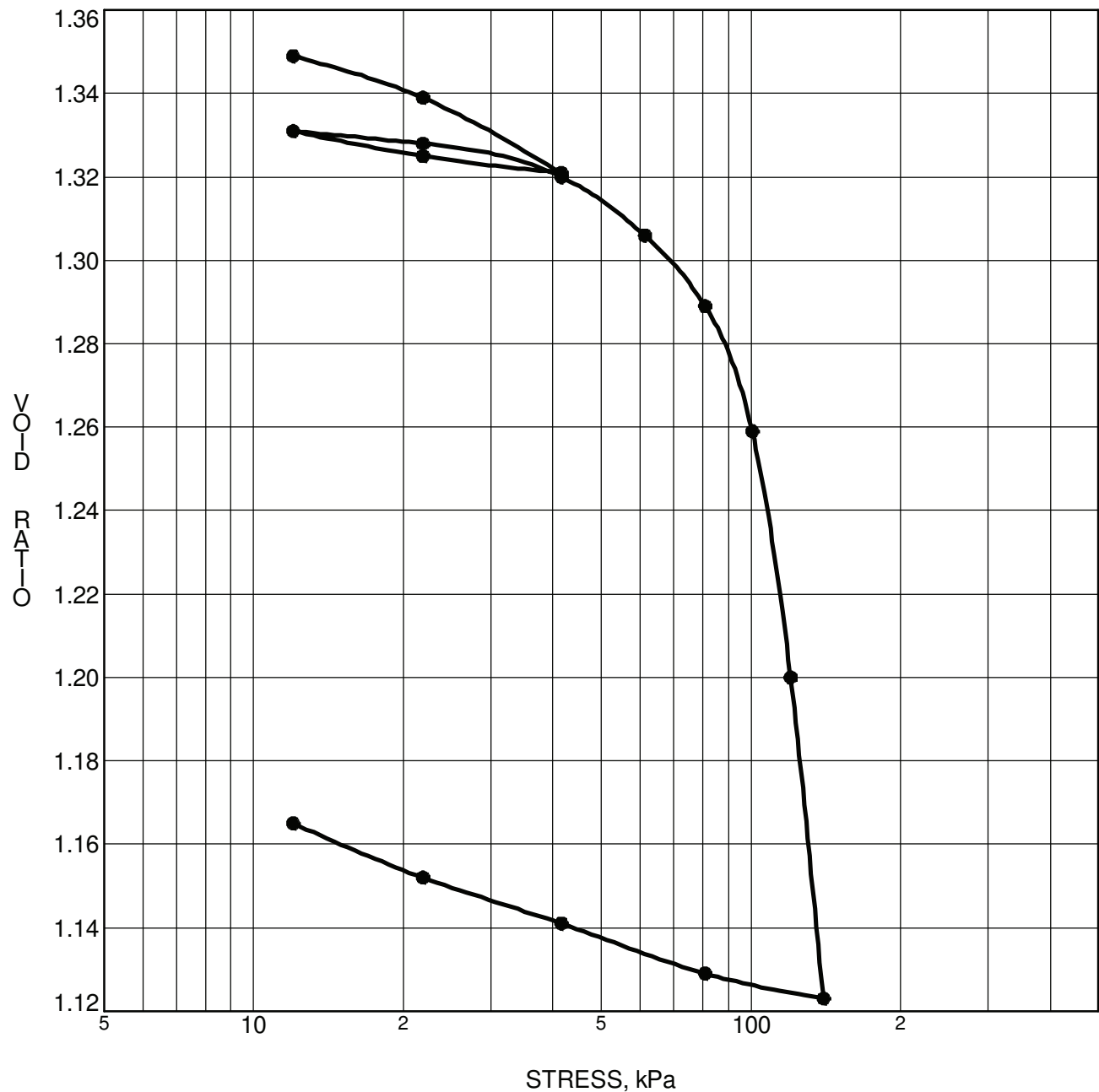
CONSOLIDATION TEST DATA SUMMARY					
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Sample No.	TW 3	p'_c	98 kPa	C_c	0.462
Sample Depth	5.11 m	OC Ratio	1.8	W_o	35.2 %
Sample Elev.	92.30 m	Void Ratio	0.846	Unit Wt.	18.9 kN/m³

CLIENT Smart Centres
 PROJECT Geotechnical Investigation - Prop. Commercial
Dev.-Terry Fox Dr. at Fernbank Rd.

FILE NO. PG1568
 DATE 03/12/2007

patersongroup Consulting Engineers
 154 Colonnade Road South, Ottawa, Ontario K2E 7J5

**CONSOLIDATION
TEST**



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	BH 4	p'_o	50 kPa	C_{cr}	0.020
Sample No.	TW 3	p'_c	102 kPa	C_c	1.227
Sample Depth	4.26 m	OC Ratio	2.0	W_o	49.8 %
Sample Elev.	92.74 m	Void Ratio	1.369	Unit Wt.	kN/m³

CLIENT Smart Centres

PROJECT Geotechnical Investigation - Prop. Commercial

Dev.-Terry Fox Dr. at Fernbank Rd.

FILE NO. PG1568

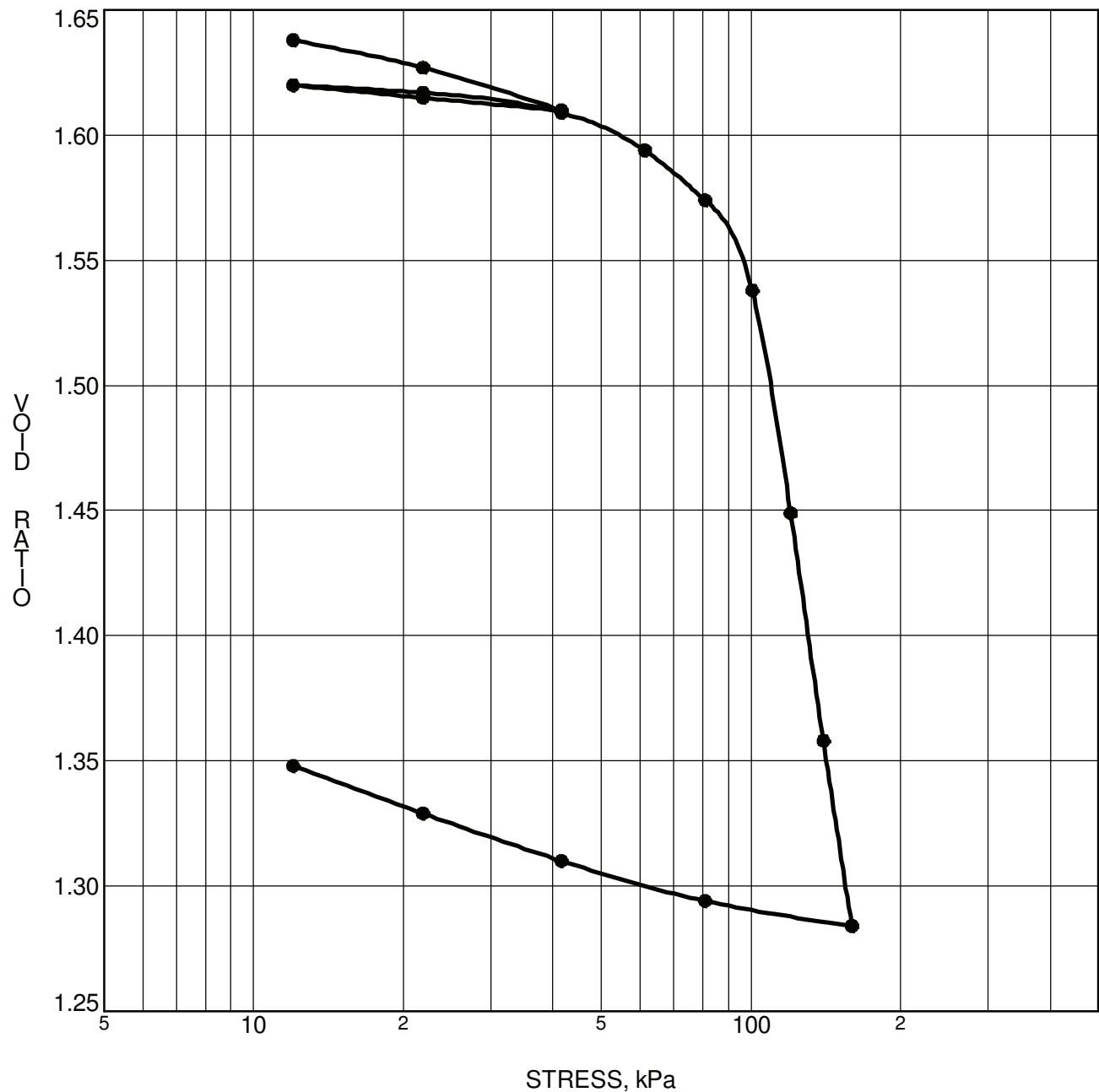
DATE 11/5/2009

patersongroup

Consulting
Engineers

28 Concouse Gate, Unit 1, Ottawa, Ontario K2E 7T7

**CONSOLIDATION
TEST**



CONSOLIDATION TEST DATA SUMMARY					
Borehole No.	BH 5	p'_o	40 kPa	C_{cr}	0.016
Sample No.	TW 2	p'_c	97 kPa	C_c	1.387
Sample Depth	3.28 m	OC Ratio	2.4	W_o	60.1 %
Sample Elev.	93.92 m	Void Ratio	1.652	Unit Wt.	16.3 kN/m³

CLIENT Smart Centres
 PROJECT Geotechnical Investigation - Prop. Commercial
Dev.-Terry Fox Dr. at Fernbank Rd.

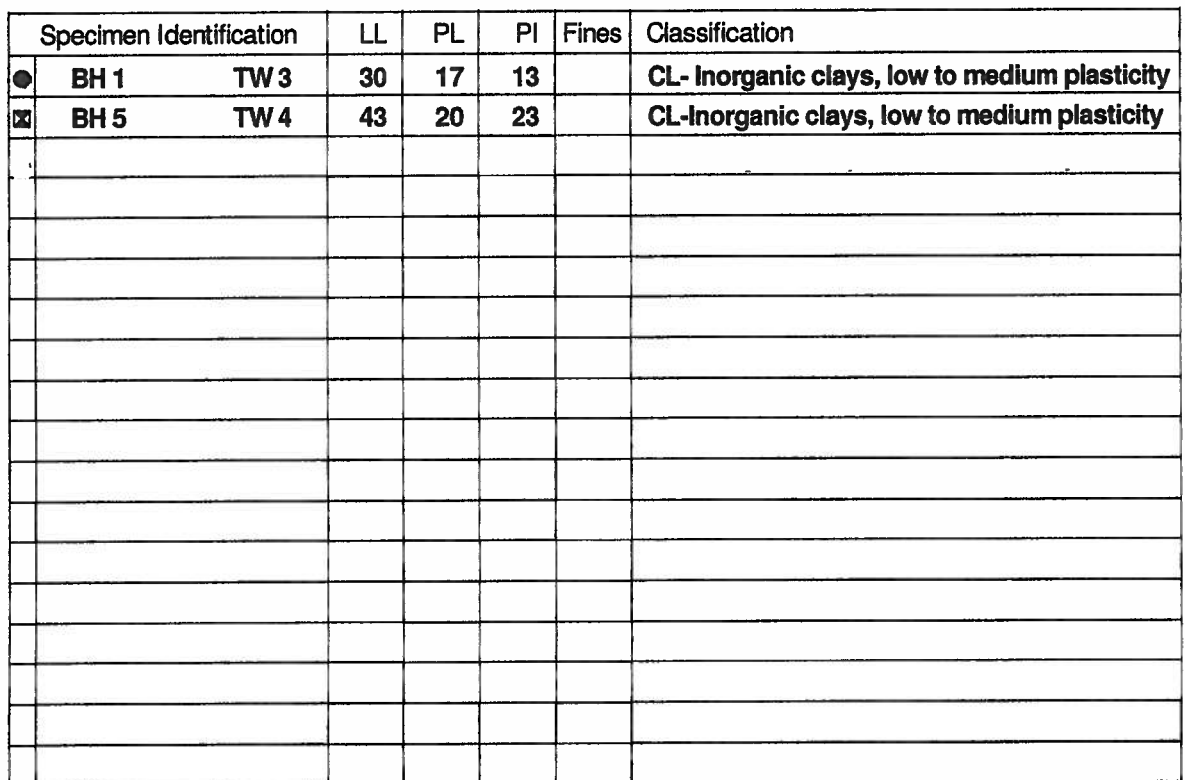
FILE NO. PG1568
 DATE 10/30/2009

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Engineers

28 Concouse Gate, Unit 1, Ottawa, Ontario K2E 7T7

**CONSOLIDATION
TEST**



FILE NO.	PG2263
DATE	17 Dec 10

patersongroup

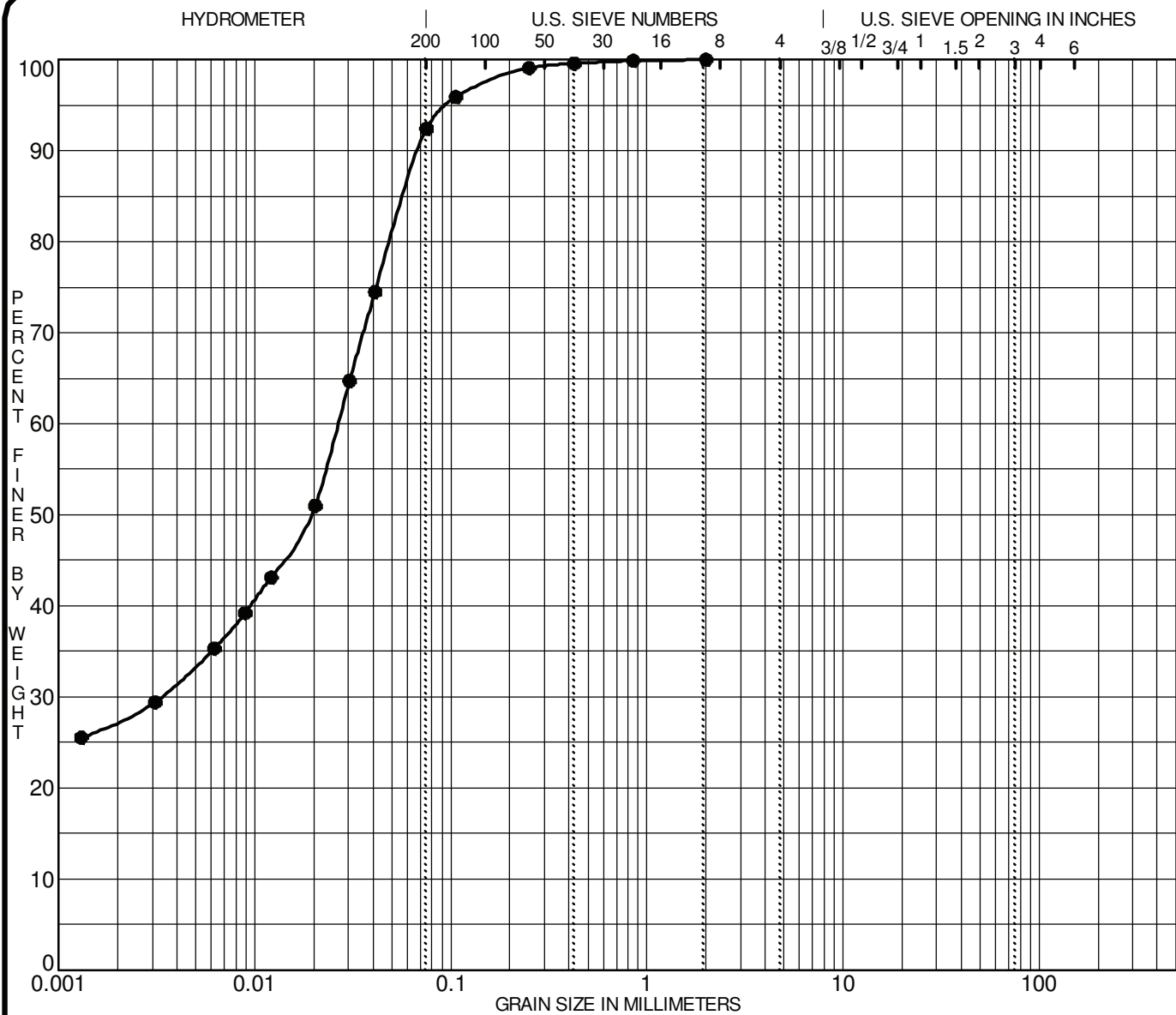
Consulting Engineers

ATTERBERG LIMITS'

28 Concourse Gate, Unit 1, Ottawa, Ontario K2E 7T7

[illegible]

28 Concourse Gate, Unit 1, Ottawa, Ontario K2E 7T7



SILT OR CLAY	SAND			GRAVEL		COBBLES
	fine	medium	coarse	fine	coarse	

Specimen Identification		Classification				MC%	LL	PL	PI	Cc	Cu
●	BH 1 TW 3	CL- Inorganic clays, low to medium plasticity					30	17	13		
Specimen Identification		D100	D60	D30	D10	%Gravel	%Sand	%Silt		%Clay	
●	BH 1 TW 3	2.00	0.03	0.003		0.0	7.6	92.4			

CLIENT Smart Centres

PROJECT Geotechnical Investigation - Proposed Commercial Development - Fernbank Road

FILE NO. PG2263

DATE 10 Dec 10

patersongroup

Consulting
Engineers

28 Concouse Gate, Unit 1, Ottawa, Ontario K2E 7T7

**GRAIN SIZE
DISTRIBUTION**

Certificate of Analysis

Client: **Paterson Group Consulting Engineers**
 Client PO: 13939

Project Description: PG2950

Report Date: 10-May-2013

Order Date: 7-May-2013

Client ID:	BH2 SS3	-	-	-
Sample Date:	05-May-13	-	-	-
Sample ID:	1319060-01	-	-	-
MDL/Units	Soil	-	-	-

Physical Characteristics

% Solids	0.1 % by Wt.	80.5	-	-	-
----------	--------------	------	---	---	---

General Inorganics

pH	0.05 pH Units	7.43	-	-	-
Resistivity	0.10 Ohm.m	25.8	-	-	-

Anions

Chloride	5 ug/g dry	120	-	-	-
Sulphate	5 ug/g dry	86	-	-	-

APPENDIX 2

FIGURE 1 - KEY PLAN

FIGURES 2 AND 3 - SHEAR WAVE VELOCITY PROFILES

DRAWING PG2950-1 - TEST HOLE LOCATION PLAN

DRAWING PG2950-2 - PERMISSIBLE GRADE RAISE PLAN

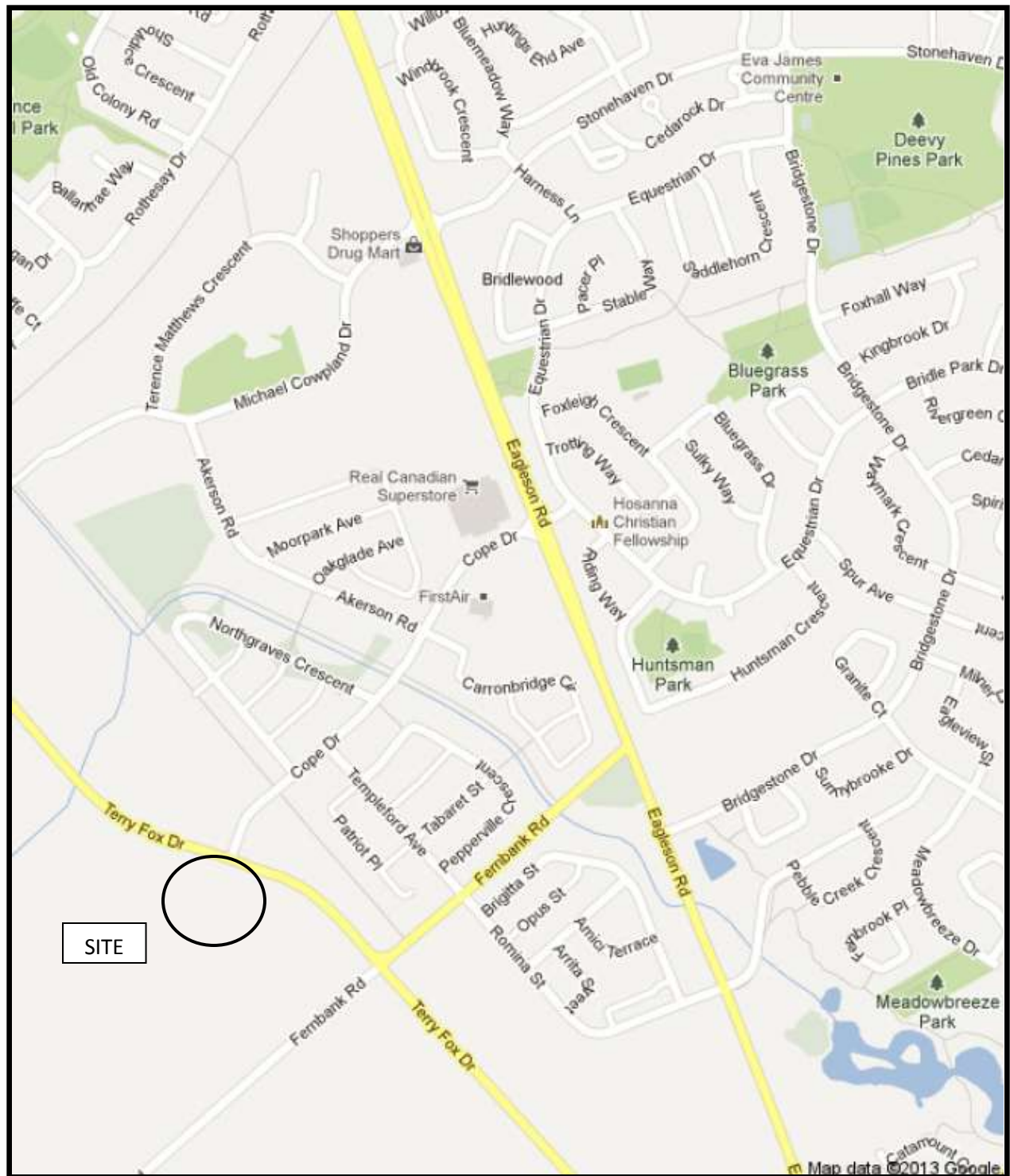


FIGURE 1

KEY PLAN

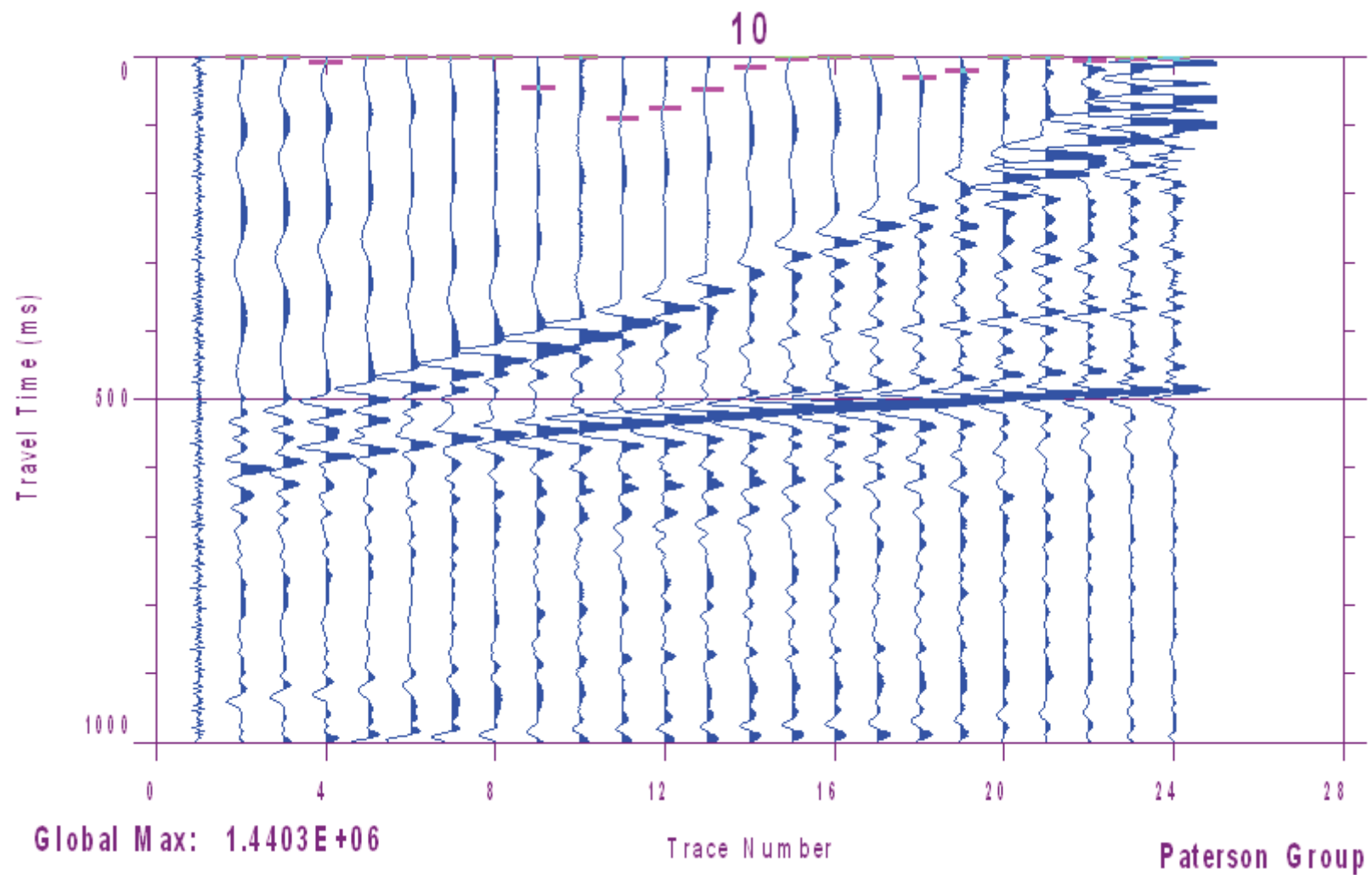


Figure 2 – Shear Wave Velocity Profile at Shot Location 72 m

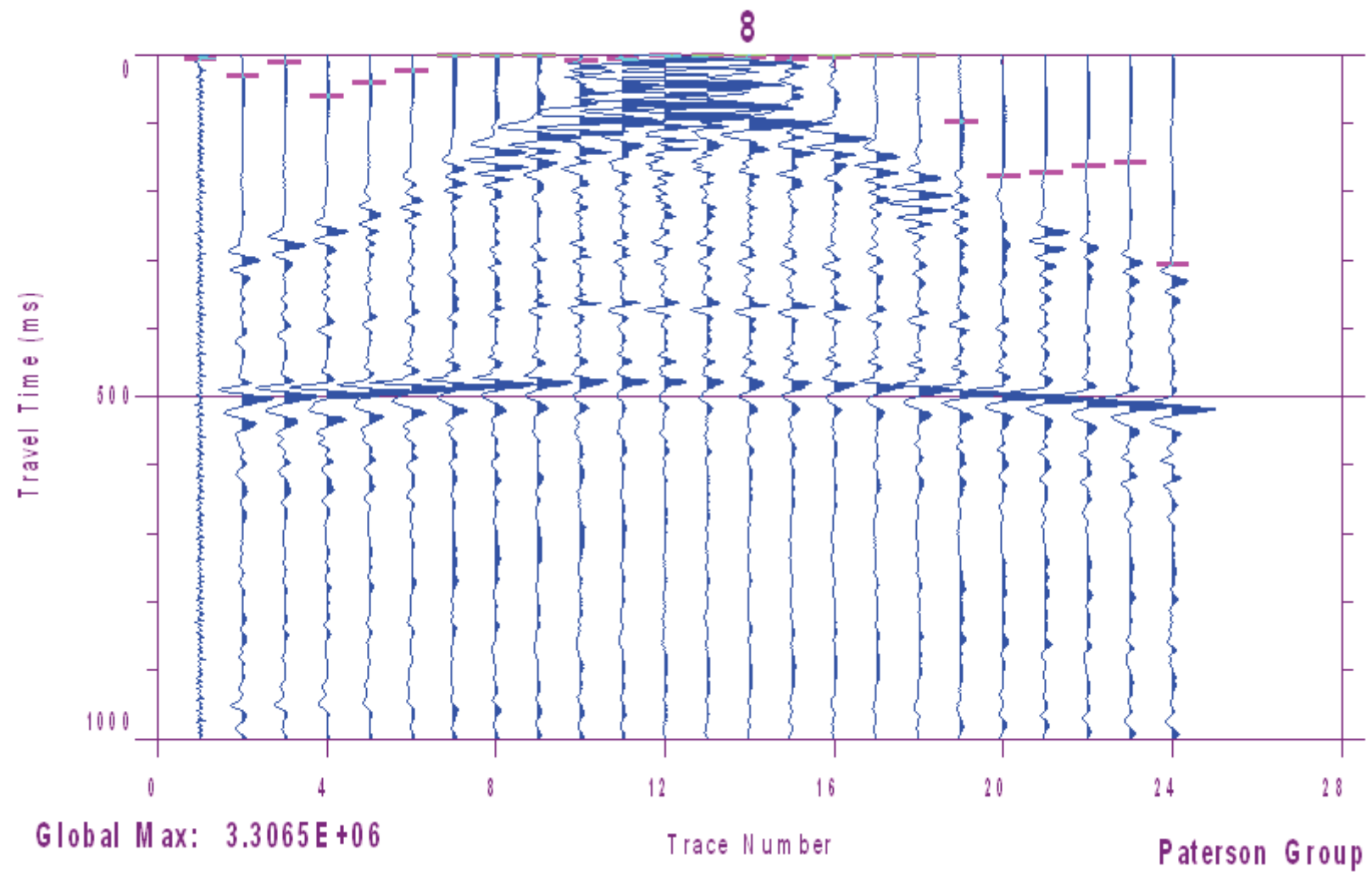
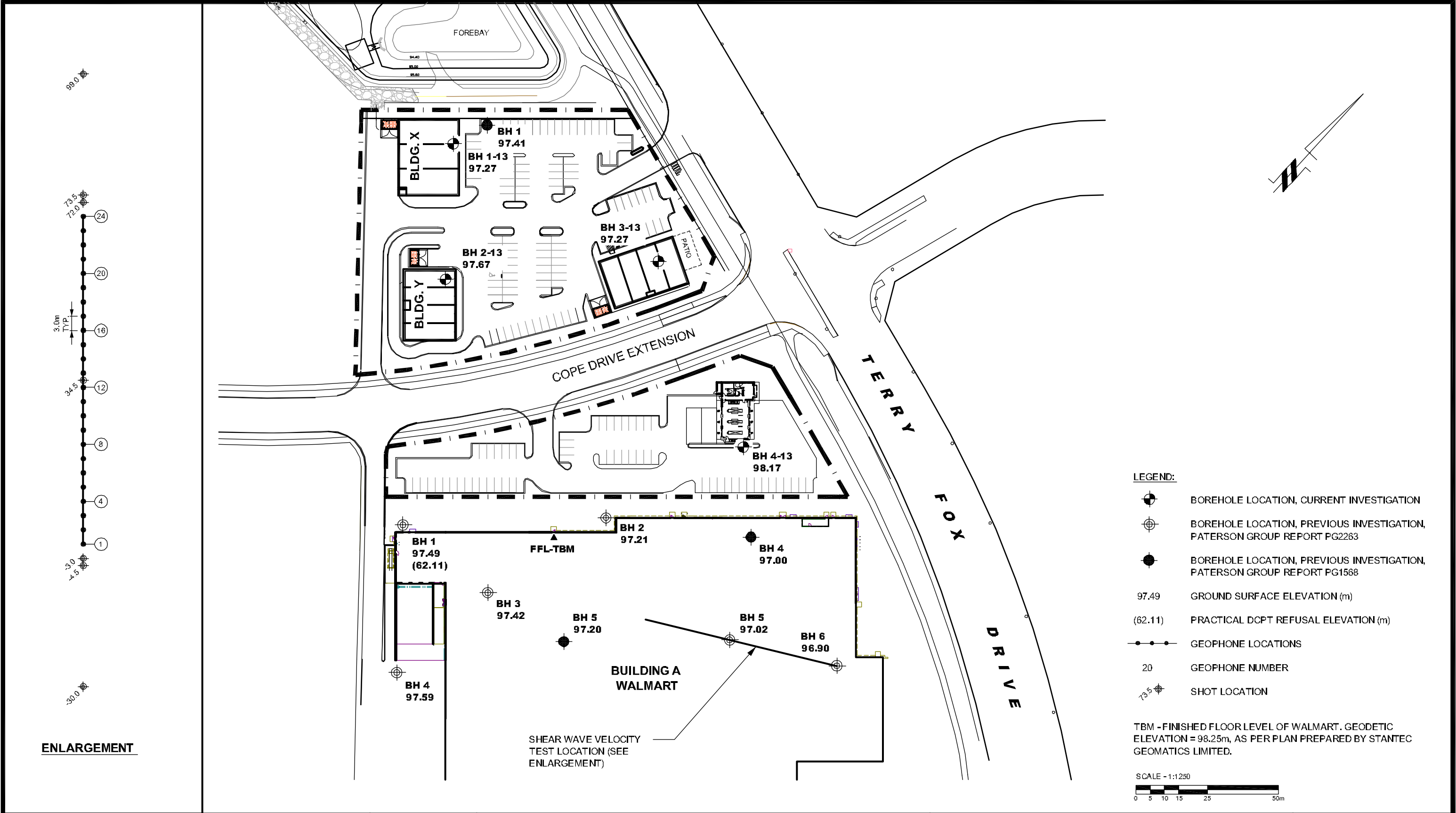


Figure 3 – Shear Wave Velocity Profile at Shot Location 34 m



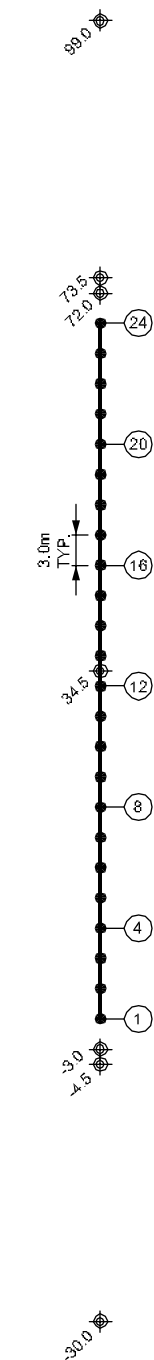
paterson group
consulting engineers
154 Colonnade Road South, Ottawa, Ontario K2E 7J5

Scale:	1:1250
Des.:	RG
Dwn:	MPG
Chkd:	DG

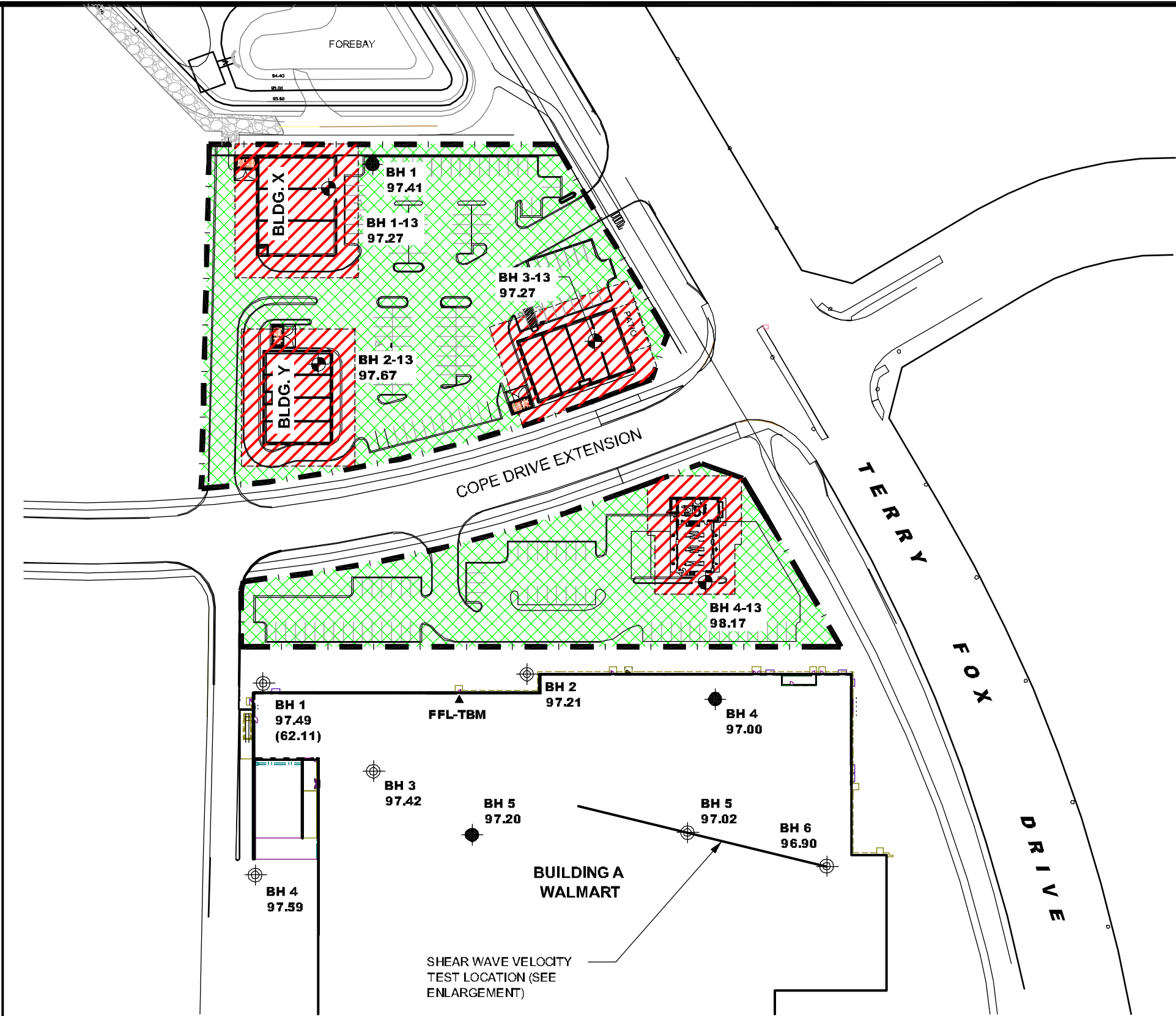
SMART CENTRES
GEOTECHNICAL INVESTIGATION
COMMERCIAL DEVELOPMENT - KANATA SOUTH PHASE 2
OTTAWA, ONTARIO

TEST HOLE LOCATION PLAN

Dwg. No.	PG2950-1
Report No.:	PG2950-1
Date:	05/2013



ENLARGEMENT



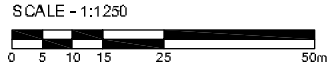
- UP TO GEODETIC ELEVATION OF 98.5m
- UP TO GEODETIC ELEVATION OF 99.0m

PERMISSIBLE GRADE RAISE RECOMMENDATIONS FOR BUILDING LOCATIONS BASED ON 80% OF AVAILABLE PRECONSOLIDATION PRESSURE, 0.5m GROUNDWATER LOWERING AND ANTICIPATED BUILDING LOADS.

PERMISSIBLE GRADE RECOMMENDATIONS FOR PARKING AREAS AND ACCESS LANES BASED ON 90% OF AVAILABLE PRECONSOLIDATION PRESSURE AND 0.5m GROUNDWATER LOWERING.

- LEGEND:**
- BOREHOLE LOCATION, CURRENT INVESTIGATION
 - BOREHOLE LOCATION, PREVIOUS INVESTIGATION, PATERSON GROUP REPORT PG2263
 - BOREHOLE LOCATION, PREVIOUS INVESTIGATION, PATERSON GROUP REPORT PG1568
 - 97.49 GROUND SURFACE ELEVATION (m)
 - (62.11) PRACTICAL DCPT REFUSAL ELEVATION (m)
 - GEOPHONE LOCATIONS
 - 20 GEOPHONE NUMBER
 - SHOT LOCATION

TBM - FINISHED FLOOR LEVEL OF WALMART. GEODETIC ELEVATION = 98.25m, AS PER PLAN PREPARED BY STANTEC GEOMATICS LIMITED.



**SERVICING REPORT AND STORMWATER MANAGEMENT REPORT – KANATA FERNBANK COMMERCIAL
DEVELOPMENT, 1140 TERRY FOX DRIVE**

Appendix E Drawings
November 19, 2019

Appendix E DRAWINGS