Appendix A - Repair Requirements

Sewer Details															Pre-Lining Inspection																	
				Manholes					Size						Sewer Services	Lump Sum Anulus Grouting per Location		Patching			Removal of Intruding Connections		Removal Roots and Grease		Solid Debris Cutting / Other					Sewer Service Grouting - Man Entry for Sewers >750mm		External Point Repair (EPR) by Others	
DWG	Sewer Asset	Street Name	Location	Upstream	Depth	Downstream	Depth	Length	Height	Width	Shape	Flow Type	Material			Anulus Grouting	Description	Patch Tender <=1m	Patch Tender >=1m	Description	Intruf Conn Tender	Description	Root Tender	Description	Tender 1st 3m	Tender >3m (m)	Tender at Joints	Description		Service Grouting	Description	Distance	Description
11382	S-MA50003714	BIRCHDALE AV	1ST MH N OF KIRKDALE ST TO MH AT WALMER ST (CL)	S-MH50003204	4.14	S-MH50003205	3.91	93.1	450		CIRC	COMBINED	CO-CONCRETE	12							4	6.9 CNI @ 2.0S; 16.5 CNI @ 10.0S; 21.9 CNI @ 2.0S; 49.6 CNI @ 2.0S;	1.0	36.2 RM @ 2; 36.2 RF; @ 10; 40.1-47.2 RMJ/RFJ @ 9-3; 62.1 RM 25% @ 10.									
11383	S-MA50004192	CATON ST	MH AT HILLCREST AV TO MH AT ST MARYS RD	S-MH50003650	4.32	S-MH50003549	7.80	87.5	600		CIRC	COMBINED	CO-CONCRETE	0											1	13.5	5	7.5-9.8 EL @ 2-10; 10.9-14.3 EL @ 7-5; 16.9-19.9 EL @ 7-5; 24.4-26.5 EL @ 1-11; 29.3 EL @ 9-4; 30.9-32.9 EL @ 12-9; 43.1 EL @ 2-9; 44.0-45.1 EL @ 2-12; 49.5-51.9 EL 12-12; 52.6 EL @ 12-9; 53.6 EL @ 3-9; 54.0-56.6 EL @ 1-11; 59.1 EL @ 08; 62.0 EL @ 1-12; 63.5-65.3 EL @ 1-9;			9.0	EPR 68.4-77.4 DS
11384	S-MA50005183	CRESTWOOD CR (W LEG)	1ST MH N OF CRESTWOOD CR (S LEG) TO 2ND MH N OF CRESTWOOD CR (S LEG)	S-MH50004416	3.46	S-MH50004417	3.80	61.7	250		CIRC	SANITARY	CO-CONCRETE	6							1	17.5 CNI @ 2;					10				2.4	EPR 26.5-28.9 DS
11385	S-MA50005617	CORAL CR (W LEG)	1ST MH S OF COTTONWOOD RD TO MH AT COTTONWOOD RD	S-MH50004791	4.02	S-MH50004785	5.98	86.7	200		CIRC	SANITARY	CO-CONCRETE	9							4	8.5 CNI @ 10.0S; 28.5 CNI @ 10.0S; 38.3 CNI @ 2.0S; 59.7 CNI @ 10.0S;			1		12	12.8 EL(CN) @ 1; 13.4 EL; @ 2-5; 22.7 EL; @ 12-6; 22.7 EL; @ 7-9; 23.5 EL; @ 6-11; 23.8 EL; @ 7-2; 27.3-27.6 EL @ 3; 28.4 EL; @ 4-9; 30.8 EL; @ 12-12; 32.3 EMJ @ 7-4; 33.8 EL; @ 8-4; 45.1-46.6 EL @ 11-1; 50.9 EL; @ 8-6; 61.1 EL; @ 12-4.				
11386	S-MA50005700	AUTUMNWOOD DR	MH AT ERIE BV (LEG - S OF CL) TO MH SE OF MH AT ERIE BV (N LEG)	S-MH50004844	6.05	S-MH50004848	7.16	7.3	300		CIRC	SANITARY	CO-CONCRETE	0											1			4.2-6.4 DM @ 3-9.				
11387	S-MA50005718	WINAKWA RD	1ST MH W OF HEATHER RD TO MH AT AUTUMNWOOD DR	S-MH50004858	4.78	S-MH50004844	4.63	49.1	200		CIRC	SANITARY	CO-CONCRETE	0									1.0	38.5 RFJ;	1	7.6	1	7.9 EL @ 2; 26.9-32.4 EL @ 3 & 9; 37.8-38.5 EL @ 3 & 9; 39.3-43.7 EL @ 10-2					
11388	S-MA50005781	HEATHER RD (E LEG)	2ND MH S OF HEATHER RD (N LEG) TO 3RD MH S OF HEATHER RD (N LEG)	S-MH50004907	4.21	S-MH50004908	4.64	110.7	250		CIRC	SANITARY	CO-CONCRETE	18											1		5	47.2-48.0 EL @ 4 & 8; 48.0 OB (Gasket); 59.0 EL @ 2-5; 79.1 EL @ 2-9; 95.6 EMJ @ 8-4; 97.4 EM @ 8-4;			3.8	EPR 9.4-13.2 DS
11389	S-MA50006245	SPEERS RD (CL)	MH AT HALLIDAY BV (N LEG) TO MH AT HALLIDAY BV (S LEG)	S-MH50005323	3.00	S-MH50005324	3.57	73.8	200		CIRC	SANITARY	CO-CONCRETE	6											1	11.3		55.2-63.8 EL @ 10-2; 65.4-67.1 EL @ 10-2; 67.6-70.1 EL @ 10; 70.1-71.6 EL @ 9-3 (@RF 71.6-73.0)					
11390	S-MA50006280	VINCENT MASSEY BV (E LEG)	2ND MH S OF VINCENT MASSEY BV (N LEG) TO 3RD MH S OF VINCENT MASSEY BV (N LEG)	S-MH50005346	2.81	S-MH50005353	3.39	87.3	250		CIRC	SANITARY	CO-CONCRETE	10							2	29.0 CNI @ 1.0S; 32.6 CNI @ 10 US;			1		14	13.9 EL @ 12-5 DS; 15.7 EL @ 2-6 DS; 22.7 EL @ 8-9 DS; 29.0 EMJ @ 1-6 DS; 12.5 EL @ 10 US; 14.6 EL @ 9-4 US; 20.4 EL @ 10-6 3 US; 27.5 EL @ 7-3 US; 32.4-32.8 EL @ 9 US; 33.3 EL; @ 8-5 US; 35.1 EL @ 7-5 US; 36.7 EL @ 8-4 US; 44.0 EM @ 7-5 US; 47.7 EL @ 7-10 & 3-5 US; 49.2-49.7 EL @ 7-10 & 3-5 US; 52.1 EL @ 7-10 & 3-5 US;			2.0	EPR 0.0-2.0 DS
11391	S-MA50006296	BIBEAU BY (S LEG - N OF CL)	2ND MH W OF BIBEAU BY (E LEG) TO 3RD MH W OF BIBEAU BY (E LEG)	S-MH50005362	2.96	S-MH50005363	3.26	109.2	250		CIRC	SANITARY	CO-CONCRETE	8											1		27	12.3 EL @ 9-12 DS; 13.6 EL @ 7-5 DS; 14.8 EL; @ ON @ 2.0S; 17.8 EL; @ 1-4 DS; 21.5 EM; @ 9-5 DS; 22.7 EMJ @ 7-5 DS; 24.0 EMJ @ 1DS; 5.7 EL; @ 3-5 US; 7.3-8.0 EL @ 12-4 US; 9.7 EL(CN) 7-10 US; 10.4 EL @ 3 & 7 US; 12.6 EL(CN) 7-9 US; 13.0 EL @ 12-4 US; 17.2-17.5 EL @ 3-12 US; 19.1 EL; @ 3-9 US; 21.2-21.7 EL @ 3-7 US; 27.1 EL; @ 7-4 US; 27.5-27.9 EL @ 4-9 US; 29.7-30.4 EL @ 1-11 US; 32.0 EL; @ 8-3 US; 34.4 EL; @ 9-12 US; 44.4 EM(CN) 7-10 US; 52.1 EL; @ 1-7 US; 53.4 EM; @ 7-12 US; 59.7 EL(CN) 8-9 US; 63.8 EM; @ 8-4 US; 65.1 EL; @ 8-12 US; 72.4 EM; @ 8-12 US;					
11392	S-MA50006302	BIBEAU BY (S LEG - S OF CL)	MH AT BIBEAU BY (E LEG) TO 1ST MH W OF BIBEAU BY (E LEG)	S-MH50005368	2.85	S-MH50005369	3.12	89.1	250		CIRC	SANITARY	CO-CONCRETE	8							1	1.4 CNI @ 10 DS;	1.0	15.9 RM @ 10 DS; 18.4 RFJ @ 3 DS; 20.2 RFJ @ 12-4 DS; 22.0 RFJ @ 7-4 DS; 24.8 RFJ @ 11-4 DS; 27.5 RMJ @ 7-4 DS; 29.5 RMJ @ 3 DS; 33.8 RF(CN) @ 10 DS; 34.9 RFJ; @ 8-12 DS; 36.8 RF; @ 3 DS; 53.3 RFJ; @ 9-4 DS; 55.2 RFJ @ 9-4 DS	1		14	15.9 EL @ 1-5 DS; 17.0 EL; @ 1-5 DS; 17.0 EL; @ 1-5 DS; 17.0 EL;

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Sewer Details														Pre-Lining Inspection																		
				Manholes				Length	Size					Sewer Services	Lump Sum Anulus Grouting per Location		Patching			Removal of Intruding Connections		Removal Roots and Grease		Solid Debris Cutting / Other				Sewer Service Grouting - Main Entry for Sewers >750mm		External Point Repair (EPR) by Others	
DWG	Sewer Asset	Street Name	Location	Upstream	Depth	Downstream	Depth		Height	Width	Shape	Flow Type	Material		Anulus Grouting	Description	Patch Tender <1m	Patch Tender >1m	Description	Intrud Conn Tender	Description	Root Tender	Description	Tender 1st 3m	Tender >3m (m)	Tender at Joints	Description	Service Grouting	Description	Distance	Description
11431	S-MA60009977	MULVEY AV	1ST MH WEST OF COCKBURN TO MH AT COCKBURN	S-MH60008322	5.39	S-MH60008367	5.96	86.3	375		CIRC	COMBINED	VC-VITRIFIED CLAY	11								1.0	45.8 RF(CN) @ 1.00 DS;	1		4	34.6 ELj @ 7-10 DS; 36.4 ELj @ 2.00 DS; 55.6 ELj @ 12-4 DS; 55.8 EL @ 7-12 DS; 64.6-65.2 EL @ 3-12 DS;			0.8	EPR 74.6-75.4 DS
11432	S-MA60010195	CORYDON AV	MH ONTHURSO ST (E OF CL) TO 1ST MH W OF ROCKWOOD ST	S-MH60008531	3.88	S-MH60008527	4.14	81.1	375		CIRC	COMBINED	VC-VITRIFIED CLAY	6										1	3.8	10	8.7-9.8 EL @ 6-9 DS; 10.2-11.4 EL @ 3-10 DS; 18.1-19.1 EL @ 6-10 DS; 19.5 ELj @ 7-5 DS; 22.3 ELj @ 2-5 DS; 23.2-24.8 EL @ 3-9 DS; 24.8 EL; @ 6-12 DS; 25.6-26.3 EL @ 3-6 DS; 26.3-27.5 EL @ 3-9 DS; 30.0 ELj @ 3-6 DS; 56.3 ELj @ 9-6 DS; 59.2 ELj @ 9-6 DS; 60.8 EMj @ 7-5 DS; 65.5 ELj @ 6-12 DS; 78.5 ELj @ 2-10 DS; 78.7 ELj @ 2-10 DS;			0.7	EPR 2.6-3.3 DS
11433	S-MA60010755	OSBORNE ST	2ND MH N OF MULVEY AV (W OF CL) TO 1ST MH S OF JESSIE (W OF CL)	S-MH60008999	5.05	S-MH60009044	5.66	120.4	600		CIRC	COMBINED	CO-CONCRETE	15						2	37.9 CNI @ 12:00 US; 40.7 CNI @ 9:00 US	1.0	22.7-25.0 DEG @ 12:00 DS; 30.9-33.3 DEG @12:00 DS; 34.6-38.2 DEG @ 12:00 DS	1	1.6	9	15.0 ELj @ 12-5 DE; 20.0 ELj @ 3-6 DS; 26.0 EL @ 9-9 US; 32.2 ELj @ 12:00 US; 49.4 ELj @ 11-1 US; 56.7 EA(CN) @ 12-6 US; 61.5 ELj @ 1-6 US; 68.3-72.9 EL @ 5-8.7 US; 12.1 EL(CN) @ 2-6 DS; 19.4 EL(CN) @ 2-6 DS;				
11434	S-MA60011525	TAYLOR AV	2ND MH W OF WILTON ST TO MH AT LOWE ST	S-MH60009754	3.56	S-MH60009774	4.58	73.5	300		CIRC	COMBINED	CO-CONCRETE	6										1		22	1.7 ELj @ 1-10 DS; 2.7 ELj @ 6-5 DS; 3.4 EL(CN) @ 6-9 DS; 9.2 EL @ 5-9 DS; 10.1 EL @ 3-9 DS; 12.3 ELj @ 6-9 DS; 12.9 ELj @ 2-9 DS; 17.1-17.5 EL @ 7-5 DS; 19.3 ELj @ 6-9 DS; 21.6 EL @ 6-9 DS; 28.5 ELj @ 7:00 DS; 30.1 ELj @ 7:00 DS; 34.0 ELj @ 7:00 DS; 37.3 DE @ 6:00 DS; 38.6 ELj @ 2-9 DS; 42.4 ELj @ 5:00 DS; 44.2 EL(CN) @ 3-6 DS; 45.4 EL @ 5:00 DS; 48.6 EL @ 7:00 DS; 49.5 EL(CN) @ 6-9 DS; 50.2 ELj @ 5-7 DS; 53.4 EM(CN) @ 2-6 DS; 67.9 EM(CN) @ 2-6 DS;				
11435	S-MA60011781	HECTOR AV	MH AT STAFFORD ST TO 1ST MH W OF STAFFORD ST	S-MH60010001	3.15	S-MH60010008	4.38	86.7	300		CIRC	COMBINED	VC-VITRIFIED CLAY	17						1	18.8 CNI @ 2:00 DS;					9	8.3 DE @ 6:00 DS; 22.5 ELj @ 3:00 DS; 24.1 ELj @ 5:00 DS; 36.7 ELj @ 7-5 DS; 37.5 ELj @ 4-8 DS; 38.9 ELj @ 2-6 DS; 40.0 ELj(CN) @ 6-10 DS; 44.0 EL(CN) @ 2-6 DS; 57.7 ELj @ 6-9 DS;				
11436	S-MA60011873	STAFFORD ST	2ND MH N OF PEMBINA HW TO 3RD MH N OF PEMBINA HW	S-MH60010093	3.58	S-MH60010104	3.46	45.2	300		CIRC	COMBINED	CO-CONCRETE	2										1		4	2.2 ELj @ 3-9 DS; 14.0 ELj @ 8-9 DS; 16.8 ELj @ 9:00 DS; 24.1 ELj @ 4-9 DS; 25.0-26.0 EL @ 4-8 DS; 42.9-43.9 EL @ 3-9 DS;				
11437	S-MA60011879	PEMBINA HW (CL)	1ST NODE S OF STAFFORD ST TO MH AT STAFFORD ST	NEW MH REQD	New MH	S-MH60010098	3.46	31.0	300		CIRC	COMBINED	VC-VITRIFIED CLAY	5						2	2.6 CNI @ 9:00 US; 15.0 CNI @ 2:00 US;			1	7.2	5	4.2 EM @3:00 US; 6.1-11.4 EL @ 4-8 US; 13.8-18.5 EL @ 3-9 US; 20.8 ELj @ 4-8 US; 21.5 ELj @ 6-9 US; 22.4 ELj @ 4:00 US; 23.2 ELj @ 3-9 US;				
11438	S-MA60012338	NASSAU ST S	1ST MH S OF MCNAUGHTON AV TO MH AT MCNAUGHTON AV	S-MH60010534	1.95	S-MH60010544	2.74	48.2	300		CIRC	COMBINED	VC-VITRIFIED CLAY	2			1		0.0 @ MH AROUND PIPE INLET												
11439	S-MA60013175	RIVERWOOD AV	1ST MH E OF LYON ST TO MH AT LYON ST	S-MH60011365	1.95	S-MH60011316	3.57	106.4	300		CIRC	STORM	CO-CONCRETE	0								1.0	2.2; 3.5; 4.4; 5.9; 6.7; 7.9; 9.2 @ 9-9 DS; 9.1 RF(T) @ 3:00 DS; 9.8 RF(T) @ 3:00 DS; 11.3 RF(T) @ 9:00 US; 12.1 RIT @ 4:00 DS; 13.6; 14.3; 15.1; 15.9; 17.4 RF; @ 3 & 9 DS; 21.3 RTJ @ 8:00 DS; 22.8; 23.6 RF; @ 3:00 DS; 25.1 RF; @ 9:00 DS; 25.9 RF; @ 3 & 9 DS; 26.6 RF; @ 9:00 DS; 32.8 RF; @ 8:00 DS; 33.5 RF; @ 5:00 DS; 41.2 RF; @ 3-9 DS; 42.0 RT; @ 5:00 DS; 45.1 RT; @ 6:00 DS; 48.9 RT; @ 3& DS; 50.5 RT; @ 9:00 DS; 51.9 RF; @ 3:00 DS; 52.8 RF; @ 3-9 DS; 53.5 RF; @ 9:00 DS; 55.0; 55.8 RT; @ 3:00 DS; 60.4 RF; @ 10:00 DS; 61.1 RF; @ 10-1 DS; 62.5 RF; @ 9-11 DS; 63.3 RF; @ 9:00 DS; 64.1 RF; @ 9-12 DS; 64.8 RF; @ 10:00 DS; 65.6 RF; @ 9 & 3 DS; 66.3 RF; @ 3:00 DS; 67.1 RF; @ 3:00 DS; 67.9 RF; @ 9:00 DS; 69.4 RF; @ 10 DS; 70.2 RF; @ 2 DS; 71.0 RF; @ 10-2 DS; 73.3, 75.5 RF; @ 9 & 3 DS; 77.1 RF; @ 3 DS; 77.8 RF; @ 9 & 3 DS; 78.9-80.3 RF @ 12:00 DS; 80.9 RF; @ 2 DS; 81.7 RTJ @ 9 & 3 DS; 86.3 RF; @ 4 DS; 86.4 RF; @ 9 & 3 DS; 93.5 RF; @ 9 DS;																		
11440	S-MA60014188	SHORECREST DR W LEG	MH AT PARK ROYAL BY N LEG TO MH AT PARK ROYAL BY	S-MH60012088	4.49	S-MH60012066	4.30	98.4	250		CIRC	SANITARY	CO-CONCRETE	7										1	25.9	4	4.6-19.2 EL @ 3-9 DS; 26.4 ELj @ 6 DS; 23.0-25.3 ISM @ 3-9 DS; 30.3-31.4 ISM @ 6-9 DS; 31.7 ELj(CN) @ 6-9 DS; 35.1-43.5 EL @ 4-8 DS; 45.7 ELj(CN) @ 7-11 DS; 66.9 ELj(CN) @ 3-6 DS; 68.7-71.2 EL @ 4-6 DS;				
11441	S-MA60016365	MARKHAM RD	1ST MH SW OF PEMBINA HW TO MH AT PEMBINA HW	S-MH60013702	4.33	S-MH60014085	4.72	91.4	250		CIRC	SANITARY	CO-CONCRETE	0												1	6.5 ELj @ 9:00 DS;				
11442	S-MA60016625	CHANCELLOR DR	MH@SWAN LAKE(BY)(ELG)TO1STMH E OF SWAN LAKE(BY)(ELG)	S-MH60014313	6.82	S-MH60014298	7.68	61.3	300		CIRC	SANITARY	AC-ASBESTOS CEMENT	0										1	4.0		9.9-15.4 EL @ 11-1 DS; 20.9 ELj @ 9-3 DS; 24.6 ELj @ 9-3 DS; 28.3 ELj @ 9-3 & OB (GASKET) @ 9 DS; 30.1 ELj @ 8-12 DS; 32.0 ELj @ 12-4 DS; 37.5 ELj @ 1-5 DS; 48.6 OB (GASKET) @ 3 DS;				
11443	S-MA60017376	RADISSON AVE	1ST MH E OF PEMBINA HWY TO MH AT PEMBINA HWY	S-MH60014999	2.33	S-MH60015041	2.54	97.9	200		CIRC	SANITARY	CO-CONCRETE	11						1	36.1 CNI @ 3:00 DS;			1		8	6.7-7.3 EL @ 12-6 DS; 19.0 ELj @ 7-12 DS; 22.1 ELj @ 8-4 DS; 23.7 ELj @ 7-9 DS; 28.5 EL(CN) @ 6-7 DS; 32.1 ELj @ 7-5 DS; 57.8-58.3 EL @ 9-3 DS; 62.2-63.1 EL @ 5-7 DS; 65.3 ELj @ 2-6 DS; 73.5 EL(CN) @ 3-6 DS; 88.4 EL; @ 5-8 DS;			0.8	EPR 16.7-17.5 DS
11444	S-MA60018276	BOSTON AVE	1ST MH W OF PEMBINA HWY TO MH AT PEMBINA HWY	S-MH60015840	4.04	S-MH60015839	4.24	29.0	200		CIRC	SANITARY	CO-CONCRETE	0										1		5	5-2.1 EM @ 7-5 DS; 6.5 ELj @ 12-3 DS; 22.3 ELj @ 12-3 DS; 24.7 ELj @ 6-12 DS; 25.5 ELj @ 8-4 DS; 26.2 ELj @ 12-6 DS;				
11445	S-MA60019752	DALHOUSIE DR	MH@ KILLARNEY AV (NPL)TO MH @ KILLARNEY AV (SPL)	S-MH60017148	4.63	S-MH60017151	6.24	20.2	250		CIRC	SANITARY	CO-CONCRETE	0												3	7.2 ELj @ 9-5 DS; 10.9 ELj @ 7-3 DS; 14.6 ELj @ 9-5 DS;				
11446	S-MA60019836	MACALESTER BAY (S LEG)	MH@ MACALESTER BY (ELG)TO MH@ MACALESTER BY(WLG)	S-MH60017267	2.61	S-MH60017235	2.55	85.5	200		CIRC	SANITARY	CO-CONCRETE	8						4	11.5 CNI @ 9:00 DS; 60.2 CNI @ 10:00 DS; 78.6 CNI @ 9:00 DS; 80.1 CNI @ 9:00 DS;			1		22	6.0 ELj @ 9-3 DE; 12.1 EMj @ 12-4 DE; 15.2 ELj @ 12-3 DS; 22.8 EMj @ 9-3 DS; 24.4 ELj @ 9-3 DS; 30.4-32.2 EM @ 6-8 DS; 33.5 ELj @ 7-5 DS; 35.1 ELj @ 6-12 DS; 36.6 ELj @ 2-10 DS; 38.1 ELj @ 3-10 DS; 39.6 ELj @ 12-4 DS; 41.1 ELj @ 12-6 DS; 44.2 EMj @ 12-6 DS; 51.8 ELj @ 3-6 DS; 54.9 ELj @ 6-12 DS; 59.4 ELj @ 3-6 DS; 60.9 ELj @ 3-9 DS; 65.5 ELj @ 4-6 DS; 67.0 ELj @ 4-5 DS; 73.2 ELj @ 12-9 DS; 76.2 EMj @ 7-5 DS; 77.8 EMj @ 7-5 DS; 82.3 EMj @ 12-4 DS;				
11447	S-MA60019853	FORDHAM BAY (N LEG)	1ST MH E OF CORNELL DR TO MH AT CORNELL DR	S-MH60017307	2.88	S-MH60017272	2.84	70.1	200		CIRC	SANITARY	CO-CONCRETE	6						6	5.0 CNI @ 2:00 DS; 5.5 CNI @ 9:00 DS; 23.3 CNI @ 3:00 DS; 23.9 CNI @ 9 DS; 42.6 CNI @ 9:00 DS; 42.9 CNI @ 1:00 DS;			1		7	0.0-1.5 EM @ 7-5 DS; 4.8-5.7 EL @ 7-5 DS; 8.3 ELj @ 6 DS; 12.8 ELj @ 3-9 DS; 14.4 ELj @ 9-11 DS; 19.0 EMj @ 8-4 DS; 20.5 ELj @ 6-9 DS; 41.8 EM; @ 9-4 DS; 66.2 ELj @ 12-9 DS;				
11448	S-MA60020048	PEMBINA HWY (W PL)	2ND MH S OF BISON DR - 3RD MH S OF BISON DR	S-MH60017404	3.12	S-MH60017416	3.49	90.9	300		CIRC	SANITARY	CO-CONCRETE	5												16	5.4 EL(CN) @ 3:00 US; 12.2 OB (GASKET) @ 10-2 DS; 20.7 OB (GASKET) @ 9-1 DS; 24.4 OB (GASKET) @ 10-2 DS; 26.2 OB (GASKET) @4-9 DS; 31.7 OB (GASKET) @ 9-1 DS; 35.4 OB(GASKET) @ 12-2 DS; 39.1 OB (GASKET) @ 1-4 DS; 41.0 OB (GASKET) @ 6-8 DS; 42.9 OB (GASKET) @9-3 DS; 44.8 OB (GASKET) @7-3 DS; 55.8 OB (GASKET) @9-12 DS; 66.9 OB (GASKET) @ 8-1 DS; 68.8 OB (GASKET) @ 9-1 DS; 70.6 OB (GASKET) @ 9-3 DS; 72.5 OB (GASKET) @ 10-2 DS; 79.8 EL; @ 3-8 DS;				
11449	S-MA60020935	PRESCOT RD	MH AT RYERSON AV - 1ST MH W OF RYERSON AV	S-MH60017984	2.62	S-MH60017985	2.97	41.3	200		CIRC	SANITARY	CO-CONCRETE	3						1	27.7 CNI @ 1:00 DS;		1.0	29.2 RM(CN) @ 9:00 DS;	1		8	15.3 ELj @ 3-9 DS; 20.6 EMj/OG/JDL; 28.2 ELj @ 6-9 DS; 29.8 ELj @ 7-5 DS; 32.9 ELj @ 12-6 DS; 34.4 ELj @ 12-9 DS; 35.9 ELj @ 7-6 DS; 40.3 JDM(O) EL @ 7-5 DS;				
11450	S-MA60022273	CLOUTIER DR	MH AT STORMONT TO 1ST MHE OF STORMONT	S-MH60018711	4.91	S-MH60018720	5.18	50.7	250		CIRC	SANITARY	CO-CONCRETE	1						1	38.5 CNI @ 1:00 DS;					4	7.0 ELj @ 9-12 DS; 23.9 OB (GASKET) @ 3-10 DS; 37.4 ELj @ 3-9 DS; 43.3 ELj @ 4-8 DS;				
11451	S-MA60022955	EASEMENT E OF HOUDE DR E LEG	MH AT HOURDE DR N LEG TO NODE E OFHOUDE DR E LEG	S-MH60019261	2.15	S-MH60019262	New MH	43.7	450		CIRC	STORM	CO-CONCRETE	1										1		2	40.5-43.5 EL @ 3-12 DS; 43.5 EL(CN) @ 3-6 DS; 59.1 EM:ODE @ 3-7 DS;				
11452	S-MA60023190	LE MAIRE ST	2NDMH S OF DUCHARME AV TO 1STMH S OF DUCHARMEAV	S-MH60019448	2.45	S-MH60019128	2.73	109.1	200		CIRC	SANITARY	CO-CONCRETE	19						12	13.7 CNI @ 3:00 US; 4.8 CNI @ 9:00 DS; 14.0 CNI @ 9:00 DS; 24.6 CNI @ 9:00 DS; 33.1 CNI @ 9:00 DS; 35.7 CNI @ 3:00 DS; 38.1 CNI @ 9:00 DS; 52.2 CNI @ 9:00 DS; 65.3 CNI @ 9:00 DS; 74.9 CNI @ 9:00 DS; 86.7 CNI @ 9:00 DS; 95.3 CNI @ 9:00 DS;	1.0	24.6 RM(CN) @ 9:00 DS; 28.7 RFJ @ 9:00 DS; 33.1 RM(CN) @ 9:00 DS; 39.1 RM(CN) @ 9:00 DS;	1	0.7	12	1.2-4.7 EL @ 4-8 US; 5.0 EM(CN) @ 6-12 US; 9.2 ELj @ 8-3 US; 4.6-5.3 EL @ 3-6 DS; 9.1 EM(CN) @ 2-6 DS; 12.1 ELj @ 12-6 DS; 12.7 ELj @ 6-12 DS; 18.8 ELj @ 9-3 DS; 22.1 EM(CN) @ 2-4 DS; 24.9 EMj @ 7-1 DS; 37.0-38.5 EL @ 3&9 DS; 38.5 OB(GASKET) @ 10 DS; 45.8 EMj @ 8-4 DS; 76.8 EL(CN) @ 2-6 DS; 91.5 EL(CN) @ 3-6 DS;				
11453	S-MA60023243	DE LA DIGUE AV	MH @ PEMBINA HWY - 1ST MH E PEMBINA HWY	S-MH60019492	6.86	S-MH60018700	6.55	73.4	250		CIRC	SANITARY	CO-CONCRETE	1										1	12.6		2.2-3.5 EL @ 10-2 DS; 4.7-7.1 EM @ 9-3 DS; 10.3-10.9 EM @ 10-2 DS; 12.5-15.7 EM @ 9-3 DS; 20.3-22.6 EL @ 10-2 DS; 22.8-24.2 EM @ 9-3 DS; 47.0-51.4 EM @ 10-2 DS;				
11454	S-MA60023777	HOLLY AV	1ST MH E SOUTH DR - MH @ SOUTH DR	S-MH60015295	3.60	S-MH60015280	6.14	64.1	200		CIRC	SANITARY	VC-VITRIFIED CLAY	0												14	0.0-2.0 DE @ 6:00 DS; 3.5 ELj @ 3-6 DS; 13.6 ELj @ 6-12 DS; 14.4 ELj @ 6-9 DS; 17.5 ELj @ 8-4 DS; 18.2 ELj @ 6-9 DS; 20.5 ELj @ 3-6 DS; 21.3 EHJ @ 3-9 DS; 22.9 EMj @ 7-5 DS; 23.6 ELj @ 7-12 DS; 27.5 EMj @ 12-9 DS; 29.0 ELj @ 7-5 DS; 33.6 ELj @ 8-4 DS; 37.5 ELj @ 12-9 DS; 40.6 ELj @ 6-12 DS;				
11455	S-MA70004357	RIVER AV [N OF CL]	MH AT CLARKE ST TO MH AT DONALD ST	S-MH70005718	2.68	S-MH70051699	3.09	182.6	600		CIRC	SANITARY	CO-CONCRETE	1								1.0	RF THROUGHOUT.	1	11.9	49	3.3-4.1 EL @ 9-3 DS; 4.6 EL @ 9-12 DS; 5.2 ELj @ 9-3 DS; 6.7 ELj @ 9-3 DS; 8.3 ELj @ 9-3 DS; 9.8 ELj @ 9-3 DS; 13.6 ELj @ 9-3 DS; 16.6 ELj @ 9-3 DS; 19.8 ELj @ 9-3 DS; 22.3 ELj @ 9-3 DS; 23.8 ELj @ 9-3 DS; 24.5 ELj @ 9-3 DS; 28.2-31.0 EL @ 8-4 DS; 32.9 EL @ 10:00 DS; 33.4 EL @ 2:00 DS; 34.4 ELj @ 9-3 DS; 35.3 DM @ 2:00 DS; 36.0 EL @ 2:00 DS; 36.8 ELj @ 9-3 DS; 37.6 EL @ 1-4 DS; 42.1 ELj @ 9-3 DS; 45.0-46.5 EL @ 8-4 DS; 49.8-53.6 EL @ 2-4 DS; 54.2 ELj @ 9-12 DS; 55.8 EL @ 1-4 DS; 56.6 ELj @ 9-3 DS; 57.5 EL @ 3:00 DS; 72.5 ELj @ 9-3 DS; 74.6 ELj @ 9-3 DS; 78.0 RTj @ 12:00 DS; 81.6 EL @ 9-3 DS; 84.75 ELj @ 9-3 DS; 85.3-87.8 EL @ 2-4 DS; 88.4 EL @ 9-12 DS; 89.0 EL @ 3:00 DS; 107.6 EL @ 10 DS; 116.2-118.6 EM @ 9-3 DS; 121.2 ELj @ 9-3 DS; 124.7-125.6 EL @ 9:00 DS; 140.9 ELj @ 9-3 DS; 141.7 ELj @ 9-3 DS; 144.8 EL @ 3:00 DS; 149.5 EL @ 3:00 DS; 156.2 EL @ 3:00 DS; 158.7 DE @ 12:00 DS; 162.3 EMj @ 9-3 DS; 166.7 EMj @ 9-3 DS; 168.8 EMj @ 9-3 DS; 172.7 EL @ 3:00 DS; 173.6 EMj @ 9-3 DS; 174.5 EL @ 3:00 DS; 175.1 ELj @ 9-3 DS; 175.9 ELj @ 9-3 DS; 177.2 ELj @ 9-3 DS; 178.1 EL @ 2:00 DS;				
11456	S-MA70008293	OAKWOOD AV (CL)	3RD MH E OF OSBORNE ST - MH AT HAY ST (WPL)	S-MH60007223	4.04	S-MH70003342	4.81	61.9	300		CIRC	COMBINED	VC-VITRIFIED CLAY	10						1	56.6 CNI @ 2:00 DS;	1.0	5.9 RM @ 9:00 DS; 38.3 RM(CN) @ 9:00 DS; 51.6 RM(CN) @ 2:00 DS;	1	20.0	1	0.0- 2.6 EM @ 8-4 DS; 5.2 ELj @ 3:00 DS; 30.8-31.9 EL @ 4-8 DS; 35.5-38.4 EL @ 8-4 DS; 39.1-42.4 EL @ 9&3 DS; 43.0-45.1 EM @ 9&3 DS; 46.1 EL @ 8:00 DS; 48.7 EM @ 9-10 DS; 50.6-55.8 EM @ 9-3 DS; 56.6-58.2 EL @ 9-2 DS; 58.7-60.9 EM @ 10-2 DS;				
11457	S-MA70014493	BOREBANK ST	4TH MH N OF KINGSWAY (CL) TO MH AT ACADEMY RD	S-MH60005474	4.77	S-MH60005476	8.00	96.8	450		CIRC	COMBINED	CO-CONCRETE	17						1	54.6 CNI @ 1:00 DS;					3	63.6 ELj @ 12:00 DS; 72.9 ELj @ 12-6 DS; 77.8 ELj @ 6-12 DS; 85.7-86.1 EL @ 7-5 DS;				
11458	S-MA70015216	ACADEMY RD	MH AT ELM ST (CL) TO MH AT ELM ST (W OF CL)	S-MH60005775	6.56	S-MH70006204	6.42	7.0	750		CIRC	COMBINED	CO-CONCRETE	2										0						
11459	S-MA70016431	ARCHIBALD ST	1ST MH S OF ELIZABETH RD TO MH AT ELIZABETH RD	S-MH70006532	3.16	S-MH50008678	3.47	88.0	450		CIRC	COMBINED	CO-CONCRETE	6						1	77.2 CNI @ 10:00 DS;			1	6.2	13	4.5-13.7 EL @ 8 & 4 DS; 17.3 ELj @ 12-4 DS; 27.3 ELj @ 9-2 DS; 47.3 ELj @ 6-12 DS; 51.9 ELj @ 9-12 DS; 53.5 ELj @ 9& 3 DS; 54.2 ELj @ 9-12 DS; 57.3 ELj @ 9-12 DS; 58.1 ELj @ 12-3 DS; 63.4 ELj @ 12-4 DS; 65.0 ELj @ 9-6 DS; 68.1 ELj @ 10-12 DS; 73.6 EL(CN) @ 6-9 DS; 75.9 EL(CN) @ 3-6 DS;				
11460	S-MA70032297	BLENHEIM AV	1ST MH E OF OVERTON ST - 1ST MH E OF ST ANNES	S-MH50012513	3.80	S-MH50012514	4.18	112.7	300		CIRC	SANITARY	VC-VITRIFIED CLAY	23			1		1113-112.0 DS - PATCHING AND STABILIZATION REQ'D @ SERVICE CONNECTION	2	21.4 CNI @ 2:00 DS; 62.1 CNI @ 11:00 DS;	1.0	2.0; 2.7; 3.5 RF; @ 3 & 9 DS; 4.3 RF; @ 9-3 DS; 6.0 RMJ @ 3 & 9 DS; 7.5; 8.3; 9.9; 10.8 RMJ @ 3& 9 DS; 11.4 RMJ @ 9:00 DS; 13.1 RF; @ 9:00 DS; 14.6 RF; @ 9 DS; 15.4 RF; @ 9-12 DS; 17.0 RF; @ 9 DS; 38.1; 39.0; 39.8; 40.5 RF; @ 3&9 DS; 45.8 RF(CN) @ 9:00 DS; 42.1; 44.5; RF; @ 3&9 DS; 44.8 RF(CN) @ 2:00 DS; 45.2; 45.9; 46.7; 47.5; 48.4 RF; @ 3&9 DS; 51.5 RF; @ 9-3 DS; 52.5 RMJ(CN) @ 9:00 DS; 54.7; 55.3; 56.3 RF; @ 9-3 DS; 58.0 RM(CN) @ 2:00 DS; 58.6; 59.4; 60.2 RF; @ 9-3 DS; 61.0 RMJ @ 3&9 DS; 61.7 RMJ @ 2:00 DS; 63.8 RM(CN) @ 10:00 DS; 65.7 RMJ @ 9:00 DS; 67.3; 67.9; 68.8; 69.6 RF; @ 3&9 DS; 70.4 DM:UB-5.3 DS; 71.8 JB:UB-9.3 DS;	1		16	11.5 EL(CN) @ 3-6 DS; 12.3 ELj @ 6-9 DS; 19.2 ELj/OB/OE @ 6:00 DS; 49.9 ELj/DE/OB @ 6:00 DS; 56.4-58.6 EL @ 4-8 DS; 73.6 ELj @ 9-3 DS; 75.0 ELj @ 9-3 DS; 75.9 ELj @ 9-3 DS; 76.7 ELj @ 10-5 DS; 77.5 ELj @ 11-3 DS; 78.3 ELj @ 3:00 DS; 80.5 ELj @ 9-3 DS; 94.0 ELj @ 3-6 DS; 94.7 ELj @ 9-3 DS; 95.6 ELj @ 9-3 DS; 108.1 EM @ 9-3 DS; 108.9 ELj @ 9-3 DS;			2.6	EPR 31.8-34.4 DS
11461	S-MA70055226	HASTINGS BV	1ST MH E OF DUNKIRK DR-MH AT DUNKIRK DR(EPL)	S-MH70024646	2.72	S-MH60009988	3.00	85.0	300		CIRC	SANITARY	CO-CONCRETE	11						1	25.3 CNI @ 2 DS;	1.0	8.9m RM @ 10 (CN); 21.5m RM @2 (CN); 23.0m RM @ 10 (CN); 78.3m DEG @ 2 (CN);			3	35.9m EL/DEG @ 2 (CN); 36.3m DE @ 7; 48.8m DE @ 6;			1.6	EPR 18.8-20.4 DS
11462	S-MA70069673	CUNNINGTON AV	3RD MH W OF STMARY'S RD TO 2ND MHW OF ST MARY'SRD	S-MH70046037	5.77	S-MH70032852	5.65	81.1	600		CIRC	COMBINED	VC-VITRIFIED CLAY	12						4	8.7 CNI @ 10:00 DS; 53.2 CNI @ 2:00 DS; 74.4 CNI @ 2:00 DS; 74.9 CNI @ 10:00 DS;			1	33.0	1	18.1-21.4 EL @ 9-3 DS; 22.7-49.3 EL @ 9-3 DS; 54.3-59.4 EL @ 9-3 DS; 59.4 OB/DE @ 1:00 DS; 61.0 END EM @ 9-5 DS;				
11463	S-MA70019746	BARKER BV	1ST MH S LIFT - NODE @ LIFT STATION	S-MH70011894	8.43	PS00000302		13.3	300		CIRC	SANITARY	CO-CONCRETE	0										1	7.4		0-3.3m EL @ 9-3; 3.3-5.0 EL @ 9 & 3; 6.2-11.0 EL @ 9 & 3 DS; 11.9-12.5 EM @ 7-5				