2017 Sewer Renewals by CIPP Lining, Contract 4, Bid Opportunity 224-2018

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	Intrud Conn Tender	Description	Root Tender	Description	Tender 1st 3m	Tender >3m (m)	Tender at Joints	Description	Service Grouting	Description	Distance	Description
1	11748	S-MA60000352	ROBINDALE RD	1ST MH S OF BETSWORTH AV TO 2ND MH S OF BETSWORTH AV	S-MH60000198	3.78	S-MH60000199	4.06	74.7	200		CIRCULAR	SANITARY	CONCRETE	8	1	0.0-1.0 H @ 3-8 DS								12.3 EL(CN) @ 2-3 DS; 12.7 EL) @ 8-4 DS; 13.6 EMJ @ 1-4 DS; 16.7 ELJ @ 8-9 DS; 18.2 ELJ @ 2-4 DS; 19.8, ELJ @ 1-4 DS; 22.8 EMJ @ 8-4 DS; 24.4 ELJ @ 7-5 DS; 25.9 ELJ @ 8-4 DS; 27.5 ELJ @ 1-4 DS; 29.0 ELJ @ 8-4 DS; 32.0 EMJ @ 7-9 DS; 33.0 EMJ @ 7-10; 2-5 DS; 33.9 EJ(CN) @ 5 DS; 35.1 ELJ @ 8-10 DS; 35.6 ELJ @ 7-10 DS; 36.5 ELJ @ 7 DS; 38.1 ELJ @ 8-11 DS; 39.6 ELJ @8-5 DS; 40.7 EL @ 1-4 DS; 41.1 ELJ @ 8-5 DS; 41.3 ELJ @ 2-5 DS; 42.9 EL @ 1-4 DS; 44.2 ELJ @ 8-5 DS; 45.4 EM @ 7-5 DS; 45.8 ELJ @ 2-5 DS; 46.8 EM @ 7-5 DS; 48.9 ELJ @ 8-4 DS; 50.4 ELJ @ 8-10 DS; 52.1 EL(CN) @ 1-5 DS; 52.7 EM(CN) @ 8-5 DS; 54.9 ELJ @ 7-12 DS; 56.1 EL @ 8-12 DS; 56.5 ELJ @ 8-5 DS; 62.7 ELJ @ 1-4 DS; 62.8 EL(CN) @ 9-4 DS; 69.3 EL @ 2-10 DS; 73.9 EL @ 1-5, 7-9 DS	1	9.0	25				
2	11749	S-MA60002011	BEIKO AV	MN @ DONNINGTON RD TO MH @ ELMHURST RD (E.PL)	S-MH60001461	6.04	S-MH60001460	6.62	75.0	250		CIRCULAR	SANITARY	CONCRETE	2								1.0	11.4 RM(CN) @ 12-2 DS; 58.8 RFJ @ 1-4 DS; 60.0 RFJ @ 8-10 DS; 63.7 RFJ @ 9-11, 3 DS; 64.9 RFJ @ 2-4 DS; 66.1 RMJ @ 8-10, 2-4 DS; 70.5 RMJ @ 1-4, 9 DS; 72.9 RFJ @ 2-4, 8-10 DS; 74.1 RFJ @ 9-2 DS;	1	1.0		0.0 EL @ 12-3 DS; 7.9 EL @ 2-4, 7-10 DS; 9.2 EL @ 5, 8 DS; 11.1 EL (CN) @ 8-2 DS;				
3	11750	S-MA60002519	HANEY ST	MH @ HEWITT CR - MH @ OSWALD BY	S-MH60001866	4.00	S-MH60001875	4.51	122.4	200		CIRCULAR	SANITARY	CONCRETE	12								1.0	2.7-10.0 DEG @ 10-3 DS; 18.2 RFJ @ 9-10 DS; 20.2 RM(CN) @ 8-11 DS; 38.3 RF(CN) @ 10-12 DS; 97.0 DEG @ 11-1 DS; 98.9-101.3 DEG @ 11-1 DS;	1	5.4	1	0.0-14.8 EL @ 9-3 DS; 23.0 EL @ 10 DS; 66.4 OB(GASKET) @ 3-8 DS; 87.8 OB(GASKET) @ 9-3 DS; 96.1 EL @ 10-2 DS; 104.7 OB(GASKET) @ 8-10 DS; 108.5-115.2 EL @ 4, 8 DS;				
4	11751	S-MA60002792	LAXIDAL RD	1ST MH S OF GRANT AV TO MH @ GRANT AV	S-MH60002049	5.75	S-MH60002053	6.81	122.1	200		CIRCULAR	SANITARY	CONCRETE	9								1.0	23.8-26.2 DEG @11-2 DS; 34.9-36.7 DEG @10-2 DS; 64.3 RMJ @ 10-3 DS; 90.9 RTJ @ 12-2 DS;	1	27.5	3						
5	11752	S-MA60002813	LAXDIAL RD	1ST MH S OF PARKIN AV - 2ND MH S OF PARKIN AV	S-MH60002065	3.43	S-MH60002064	4.00	122.0	200		CIRCULAR	SANITARY	CONCRETE	12							2	40.4 CNI @ 9 DS; 118.6 CNI @ 11 DS;			1	7.0	4	3.1 EL(CN) @ 8-11 DS; 15.6 EL(CN) @ 8-9 DS; 21.9 EL(CN) @ 2-7 DS; 25.3 EL @ 3-4 DS; 37.8 EL(CN) @ 3-4 DS; 62.5 EL(CN) @ 8-11 DS; 63.7 ELJ @ 9-3 DS; 73.5 EL(CN) @ 2-5 DS; 80.4 EL(CN) @ 8-12 DS; 81.0 ELJ @ 8-12 DS; 93.3 ELJ @ 12-6 DS; 98.5 EL(CN) @ 8-10 DS; 112.0 EL(CN) @ 1-3 DS; 117.5 EL @ 12-3 DS;				
6	11753	S-MA60002935	CATHCART ST	2ND MH S OF PARKIN AV TO MH @ BOYER AV	S-MH60002143	6.86	S-MH60002144	6.76	84.9	400		CIRCULAR	SANITARY	AC-ASBESTOS CEMENT	9							1	8.4 CNI @ 12 DS;	1.0	0.0 RFJ @ 12 DS; 8.3 RFJ(CN) @ 11 DS; 26.7 RF(CN) @ 11-4 DS; 75.4 RM(CN) @ 11-1 DS;	1	7.0	2	8.3 EL(CN) @ 12-3 DS; 14.1 ELJ @ 7 DS; 14.7 EL(CN) @ 9-1 DS; 20.9 EL @ 4 DS; 27.0 EL @ 8-12 DS; 31.3 EL(CN) @ 11-1 DS; 34.3 EL(CN) @ 9-3 DS; 48.1 EL(CN) @ 12 DS; 52.3 ELJ @ 8-4 DS; 64.6 EL(CN) @ 9-3 DS; 75.4 EM(CN) @ 9-3 DS; 83.9 EL @ 9-11, 2-3 DS;				
7	11754	S-MA60003595	CATHCART ST	MH @ ROBLIN BV TO 1ST MH S OF ROBLIN BV	S-MH60002603	3.37	S-MH60002608	3.28	53.7	250		CIRCULAR	SANITARY	CONCRETE	3								1.0	17.3 RFJ @ 8-10 DS; 40.0-42.3 DEG @ 10-2 DS;	1	0.7	1	42.3-44.0 EL @ 9-11, 1-3 DS; 43.5 EM(CN) @ 8-9 DS; 51.4 OB(GASKET) @ 10-1 DS;				
8	11755	S-MA60003650	BATCHELOR AV	1ST MH W OF OAKDALE DR TO MH AT OAKDALE DR	S-MH60002649	4.96	S-MH60002650	5.45	90.7	200		CIRCULAR	SANITARY	CONCRETE	7							1	22.1 CNI @ 1 DS;			1	3.0	6	13.6 EL(CN) @ 9-10 DS; 28.7 ELJ @ 9 DS; 32.4 ELJ @ 4, 8 DS; 34.9 ELJ @ 2-4, 8-9 DS; 38.7 EL @ 3-5, 8 DS; 39.4 ELJ @ 2-4 DS; 48.8 EL(CN) 9-4 DS; 51.6 ELJ @ 8-12, 3-4 DS; 65.5 ELJ @ 2-3 DS; 67.7 EL @ 4, 8 DS; 72.5 EL @ 3-5, 8-10 DS; 78.0 EM(CN) @ 9-3 DS;				
9	11756	S-MA60003871	ROW E RIDGEDALE	1ST MH W BISHOPS LN - MH @ RIDGEDALE CR	S-MH60002667	6.14	S-MH60002772	6.57	66.4	200		CIRCULAR	SANITARY	AC-ASBESTOS CEMENT	1							1	28.0 CNI @ 12 DS;	1.0	11.2 DEG @ 12 DS; 24.0-25.8 DEG @ 12 DS; 28.5-31.1 DEG @ 10-2 DS; 31.3 DEG @ 12 DS;	1	0.5		28.5-30.9 EL @9-3 DS; 31.0-32.1 EL @ 11-2 DS;				
10	11757	S-MA60006279	ALDERSHOT BV	MH AT HOLDSWORTH AV-1ST MH N OF HOLDSWORTH AV	S-MH60004913	5.34	S-MH60004918	5.70	99.6	250		CIRCULAR	SANITARY	CONCRETE	5											1		33	0.1 EL @ 8-11 DS; 8.2 OB(GASKET) @ 10, 3 DS; 15.6 ELJ @ 1-3 DS; 16.8 OB(GASKET) @ 9,3 DS; 17.5 EL @ 8 DS; 19.3 ELJ @ 7-10 DS; 21.8 ELJ @ 1-4 DS; 23.0 ELJ @ 7-5 DS; 28.3 EL(CN) @ 2-4 DS; 30.4 ELJ @ 8-4 DS; 31.6 ELJ @ 7-5 DS; 32.8 EM @ 8-12 DS; 34.0 ELJ @ 1-4 DS; 35.3 ELJ @ 2-4 DS; 39.1 ELJ @ 8-9 DS; 41.4 ELJ @ 7-11, 3 DS; 42.7 ELJ @ 2-4, 9 DS; 45.2 ELJ @ 8-11, 3 DS; 48.9 ELJ @ 8-3 DS; 51.2 ELJ @ 3-4 DS; 56.2 EMJ @ 7-4 DS; 57.5 ELJ @ 8-1 DS; 60.0 ELJ @ 8-12, 2-4 DS; 64.9 ELJ @ 1-3 DS; 66.1 EMJ @ 9-3 DS; 68.6 ELJ @ 9-3 DS; 73.5 ELJ @ 9-11 DS; 77.2 ELJ @ 9-3 DS; 78.4 ELJ @ 3 DS; 83.3 ELJ @ 3-4 DS; 84.6 ELJ @ 7-10 DS; 85.8 ELJ @ 7-10 DS; 89.5 ELJ @ 12-4 DS; 90.8 ELJ @ 8-4 DS; 94.4 ELJ @ 2-5 DS; 97.3 ELJ @ 7 DS;				
11	11758	S-MA60007351	LANE (S.OF CORYDON AV)	1ST MH W OF SOUTHPORT BV TO MH @ SOUTHPORT BV	S-MH60005914	2.84	S-MH60005968	3.18	47.6	200		CIRCULAR	SANITARY	CONCRETE	0								1.0	0.0-4.6 DEG @ 9-3 DS; 4.8-8.4 DEG @ 10-2 DS; 8.8 DEG @ 10, 2 DS; 11.0-16.7 DEG @ 9-3 DS; 17.2 DEG @ 10, 2 DS; 19.2-26.1 DEG @ 10-2 DS; 27.5 DEG @ 9-3 DS; 28.7 DEG @ 9-1 DS; 39.5-44.1 DEG @ 9, 3 DS;	1		2	0.5 ELJ @ 7-9 DS; 41.2 ELJ @ 1-4 DS;				EPR from 45.8-48.1 m DS
12	11759	S-MA70124492	TUXEDO AV	1ST MH E OF EDGELAND BVTO1ST MH W OF EDGELANDBV	S-MH70060835	3.22	S-MH70060836	3.16	146.4	300		CIRCULAR	COMBINED	CONCRETE	6								1.0	22.6 RFJ @ 3, 9 DS; 25.7 RFJ @ 8 DS;			1		21	25.7 ELJ @ 9-4 DS; 26.5 ELJ @ 3-4 DS; 31.4 EM(CN) @ 7-10 DS; 35.1 ELJ @ 3-4 DS; 35.9 ELJ @ 3 DS; 48.2 ELJ @ 4 DS; 48.9 ELJ @ 7-11 DS; 53.8 ELJ @ 9 DS; 54.7 ELJ @ 5, 4 DS; 55.4 ELJ @ 9-4 DS; 60.1 ELJ @ 9-4 DS; 60.9 ELJ @ 9, 4 DS; 61.6 ELJ @ 3, 8 DS; 68.3 ELJ @ 8-9 DS; 77.5 EL(CN) @ 4 DS; 79.6 ELJ @ 7-9 DS; 87.8 ELJ @ 4 DS; 88.5 ELJ @ 8 DS; 94.7 ELJ @ 2-3 DS; 95.6 ELJ @ 4, 8 DS; 112.8 ELJ @ 9-4 DS; 125.3 ELJ @ 9-11 DS; 126.9 ELJ @ 2-3 DS; 131.7 EL(CN) @ 8 DS;				EPR 137.2-146.5 m DS
13	11760	S-MA60015560	TOWNSEND AV	1ST MH E TO MH AT AURORA ST	S-MH60013293	3.18	S-MH60013283	5.49	99.7	200		CIRCULAR	SANITARY	CONCRETE	14							1	27.5 CNI @ 2 DS;	1.0	0.5 RFJ @ 3-4 DS; 55.1 RF(CN) @ 11-4 DS;	1	6.0	13	4.4 ELJ @ 9-4 DS; 7.5 ELJ @ 8-4 DS; 10.1 EL(CN) @ 2-4 DS; 15.1 ELJ @ 8-11 DS; 22.7 ELJ @ 7-5 DS; 24.3 ELJ @ 7-5 DS; 27.6 EL(CN) @ 1 DS; 31.1 EL(CN) @8-3 DS; 38.1 ELJ @ 3-9 DS; 43.6 EL(CN) @ 4 DS; 46.1 EL(CN) @ 8 DS; 53.5 ELJ @ 7-10 DS; 55.1 EL(CN) @ 4 DS; 63.2 EL(CN) @ 8 DS; 68.8 EMJ @ 7-11 DS; 70.4 ELJ @ 8-4 DS; 76.5 ELJ @ 9-4 DS; 77.7 EL(CN) @ 2-5 DS; 78.0 ELJ @ 9-4 DS; 79.5 ELJ @ 3-8 DS; 88.5 EL(CN) @ 2-5 DS; 98.2 ELJ @ 2 DS;				
14	11761	S-MA60015571	SILVERSTONE AV SPL	1ST MH E TOWNSEND AV - MH @ AURORA ST	S-MH60013291	1.52	S-MH60013279	2.00	86.0	375		CIRCULAR	STORM	CONCRETE	1								1.0	62.1 RFJ @ 12 DS;											
15	11762	S-MA60015601	SILVERSTONE AV SPL	MH @ LEACH ST - 1ST H E LEACH ST	S-MH60013317	2.57	S-MH60013322	0.00	46.3	525		CIRCULAR	STORM	CONCRETE	0								1.0	18.7 RFJ @ 8 DS; 20.5 RJF @ 5 DS; 38.9 RFJ @ 7 DS; 44.5 RFJ @ 7 DS;	1		1	16.9 EL @ 5 DS; 34.1 EL @ 5 DS;				
16	11763	S-MA60015619	APRIL ST	1ST MH N OF PASADENA AV TO MH AT PASADENA AV	S-MH60013337	2.42	S-MH60013338	3.54	91.4	200		CIRCULAR	SANITARY	CONCRETE	8							1	59.6 CNI @ 2 DS;	1.0	23.1 RM(CN) 12-4 DS; 54.5 RF(CN) @ 8-10 DS;	1	6.0	19	6.5 ELJ @ 9-3 DS; 9.5 EM @ 7-11 DS; 12.6 EMJ @ 8-5 DS; 22.0 EL(CN) @ 9 DS; 23.1 EL(CN) @ 3-4 DS; 23.8 EM(CN) 6-9 DS; 28.0 ELJ @ 2-4 DS; 32.5 ELJ @ 9-10 DS; 34.0 ELJ @ 8 DS; 35.6 ELJ @ 10 DS; 37.1 EMJ @ 12-5 DS; 38.0 ELJ @ 1-4 DS; 39.6 ELJ @ 1-3 DS; 40.3 ELJ @ 1-3 DS; 41.5 EL @ 8-9 DS; 43.3 ELJ @ 8-4 DS; 44.9 ELJ @ 2-4 DS; 55.6 EM) @ 7-5 DS; 56.3 EL @ 9-10 DS; 59.6 EM(CN) @ 3-5 DS; 74.0 EMJ @ 8-4 DS; 75.6 ELJ @ 8-12 DS; 81.6 ELJ @ 2-5 DS; 84.7-85.7 EMJ @ 7-5 DS; 86.3 ELJ @ 8-11 DS; 87.1 EL @ 8-10, 2-4 DS; 87.5 EL @ 4, 7 DS; 88.6 EL @ 7 DS;				EPR 40.3-43.3 m DS
17	11764	S-MA60017296	CLARENCE AV	1ST MH E OF HUDSON ST - 2ND MH E OF HUDSON ST	S-MH60014922	4.58	S-MH60014930	4.61	93.6	250		CIRCULAR	SANITARY	CONCRETE	19							4	20.0 CNI @ 12 DS; 25.3 CNI @ 2 DS; 40.1 CNI @ 11 DS; 63.7 CNI @ 2 DS;	1.0	0.5 RF @ 4 DS; 18.4 DEG @ 10-2 DS; 25.4 RT(CN) @ 2 DS; 71.9 RFJ @ 12 DS;	1	18.0	16	2.1 EL @ 8 DS; 11.3 ELJ @ 2-4 DS; 12.8 EL @ 10, 2 DS; 14.0 EL(CN) @ 9-2 DS; 14.4-17.4 EL @ 10, 2 DS; 17.6 EL @ 10 DS; 19.0 ELJ @ 9-2 DS; 20.0 EL(CN) @ 12-2 DS; 20.6 ELJ @ 9-3 DS; 23.6 ELJ @ 8-11, 2 DS; 25.3 EL(CN) @ 9-1 DS; 27.6 EL @ 5 DS; 28.9 EMJ @ 8-11 DS; 40.0 EL @ 8-10 DS; 40.8 EL(CN) @ 2-4 DS; 45.7 ELJ @ 3 DS; 52.8 EM(CN) @ 1-4 DS; 55.0 EMJ @ 8-12 DS; 61.9 ELJ @ 9-5 DS; 62.7 ELJ @ 2-4 DS; 64.2 ELJ @ 9-11 DS; 68.0 ELJ @ 3-4 DS; 68.3 EL(CN) @ 2 DS; 69.3 EL(CN) @ 3 DS; 70.3 ELJ @ 10-4 DS; 72.9 EM(CN) @ 1-3 DS; 74.2 ELJ @ 8-11 DS; 75.7 EL @ 2 DS; 76.1 EL(CN) @ 2-4 DS; 78.9 ELJ @ 9 DS; 80.9 EL(CN) 9-2 DS; 84.4 ELJ @ 8-4 DS; 89.9 ELJ @ 9-4 DS; 88.3 EM(CN) @ 12-4 DS; 92.7 EL @ 8-11, 2-4 DS;				
18	11765	S-MA60017317	HUDSON ST	1ST MH OF KELSEY AV TO 1ST MH N OF KELSEY AV	S-MH60014946	2.48	S-MH60014945	2.64	65.2	250		CIRCULAR	SANITARY	CONCRETE	4											1	3.0	7	3.7 ELJ @ 1-5 DS; 5.4 EL (CN) @ 7 DS; 13.4 EMJ @ 8-6 DS; 16.6 EL(CN) @ 3, 8 DS; 23.3 ELJ @ 8-9 DS; 32.7 EL(CN) @ 3-4 DS; 33.6 EL @ 7 DS; 41.6 EMJ @ 7-5 DS; 44.0 EMJ @ 7-11 DS; 47.6 EMJ @ 6-10 DS; 55.8 EL(CN) @ 4 DS; 56.3 ELJ @ 7-10 DS; 59.2 EL @ 7-11 DS;				
19	11766	S-MA60017283	HOWARD AVE	1ST MH E OF HUDSON ST TO 2ND MH E OF HUDSON ST	S-MH60014912	3.96	S-MH60014983	4.19	106.7	200		CIRCULAR	SANITARY	CONCRETE	14							2	14.2 CNI @ 2 DS; 60.6 CNI @ 2 DS;	1.0	2.5 RT(CN) @ 9 DS; 39.1 DEG @ 11-2 DS;	1	5.0	24	5.9 EL @ 12-9 DS; 7.5 ELJ @ 3-5 DS; 8.3 ELJ @ 2-4 DS; 10.6 ELJ @ 9-4 DS; 13.4 EL @ 12-2 DS; 17.6 ELJ @ 3-4 DS; 18.3 ELJ @ 2-4 DS; 22.2 ELJ @ 1-5 DS; 23.8 ELJ @ 2-4, 9-11 DS; 25.3 ELJ @ 4 DS; 28.8 EM @ 8-4 DS; 31.5 ELJ @ 2-4 DS; 32.3 ELJ @ 2-3 DS; 33.1 ELJ @ 1-4 DS; 37.7 ELJ @ 4 DS; 38.5 ELJ @ 2-4, 9 DS; 39.3 ELJ @ 10-2 DS; 40.1 ELJ @ 9-3 DS; 40.8 ELJ @ 9-3 DS; 60.5 EL(CN) @ 10-4 DS; 64.1 ELJ @ 9-4 DS; 67.2 ELJ @ 1-4, 9 DS; 69.0 EL(CN) @ 8 DS; 69.5 ELJ @ 4 DS; 74.9 ELJ @ 2-5, 8 DS; 80.6 EM(CN) @ 3-4 DS; 90.5 EMJ @ 8-10 DS; 91.4 EL @ 4 DS; 94.8 EL(CN) @ 11-4 DS; 101.3 EMJ @ 8-11 DS; 102.8 ELJ @ 8-11 DS; 105.6 EL @ 7-5 DS;				
20	11767	S-MA60017357	HOWARD AVE	1ST MH W OF PEMBINA HWY TO MH AT PEMBINA HWY	S-MH60014983	4.19	S-MH60014984	5.77	29.3	250		CIRCULAR	SANITARY	CONCRETE	1							1	2.0 CNI @ 10 DS;	1.0	10.1 DEG @ 11-2 DS; 18.1 RTJ @ 6 DS; 20.2 DEG @ 12-1 DS;	1	5.9	2	2.0 EL @ 2-4 DS; 2.3 EL @ 4 DS; 2.4 EL @ 7 DS; 5.7-8.6 EL(CN) @ 8-5 DS; 8.8 EL @ 4-6 DS; 15.5 EL @ 8-4 DS; 16.6 ELJ @ 1-4 DS; 24.4 EL @ 8 DS; 25.2 EL @ 4, 8 DS;				
21	11768	S-MA60017364	PEMBINA HWY	MH AT KELSEY AV TO MH AT HOWARD AV	S-MH60015032	5.00	S-MH60014984	5.77	93.9	250		CIRCULAR	SANITARY	VITRIFIED CLAY	4							1	40.5 CNI @ 11 DS;	1.0	12.1 RFJ @ 10 DS; 29.5 RM @ 10-12 DS; 31.7 RFJ @ 2 DS; 36.5 RFJ @ 10 DS; 37.4 RM(CN) @ 12-3 DS; 40.5 RF(CN) @ 11 DS; 42.8 RFJ @ 9-2 DS; 44.3 RMJ @ 9-11 DS; 47.5 RFJ @ 10, 2 DS; 48.2 RFJ @ 11 DS; 49.0 RFJ @ 9-4 DS; 49.9 RMJ @ 8-2 DS; 50.6 RMJ @ 9-2 DS; 51.4 RMJ @ 9-11 DS; 51.6 RF @ 1 DS; 52.1 RFJ @ 10-2 DS; 53.0 RMJ @ 9-3 DS; 53.7 RFJ @ 1-3 DS; 56.1 RFJ @ 10, 2 DS; 56.9 RFJ @ 9, 2-3 DS; 57.1 RF(CN) @ 2 DS; 57.7 RMJ @ 8-11 DS; 60.9 RFJ @ 10, 2 DS; 64.0 RFJ @ 10-11, 3 DS; 64.8 RFJ @ 10, 3 DS; 65.6 RFJ @ 10, 2 DS; 66.3 RFJ @ 10, 2 DS; 67.3 RFJ @ 9-11, 1-3 DS; 67.9 RFJ @ 10, 3 DS; 68.7 RFJ @ 12, 2 DS; 80.5 RFJ @ 8-10 DS; 81.2 RFJ @ 8-10, 2 DS; 82.9 RFJ @ 9 DS; 91.5 RFJ @ 10 DS;	1	50.0						
22	11769	S-MA60017380	PEMBINA HWY	1ST MH N OF WALLERAV TO MH AT WALLER AV	S-MH60015006	3.97	S-MH60015003	4.04	101.9	250		CIRCULAR	SANITARY	CONCRETE	4							3	53.3 CNI @ 1 DS; 69.1 CNI @ 2 DS; 93.8 CNI @ 10 DS;	1.0	0.0 DEG @ 8 DS; 0.1-2.5 @ 10-2 DS; 4.7 DEG @ 11, 1 DS; 42.9 RTJ @ 10 DS; 48.3 RFJ @ 9-2 DS; 49.1 RFJ @ 8-10 DS; 58.8 DEG @ 12 DS; 64.3 DEG @ 3 DS; 64.7 RFJ @ 10-12 DS; 93.9 RF(CN) @ 10 DS; 94.3 RFJ @ 10-2 DS; 98.9 RFJ @ 2 DS;	1		39	0.2 ELJ @ 3 DS; 4.4 EL @ 9, 4 DS; 6.5 ELJ @ 3-10 DS; 6.8 EL(CN) @ 3 DS; 8.6 ELJ @ 12-3 DS; 12.6 ELJ @ 2 DS; 14.8 ELJ @ 9-3 DS; 15.2 EL @ 9-10 DS; 15.7 ELJ @ 9-3 DS; 16.4 ELJ @ 9-4 DS; 17.3 ELJ @ 9-3 DS; 18.1 ELJ @ 3 DS; 18.8 ELJ @ 8-11 DS; 19.5 ELJ @ 8-4 DS; 21.1 ELJ @ 9-4 DS; 21.9 ELJ @ 9-3 DS; 22.7 ELJ @ 3-8 DS; 23.4 ELJ @ 9-3 DS; 24.2 ELJ @ 9-4 DS; 24.4 EL(CN) @ 2 DS; 25.0 ELJ @ 9-3 DS; 27.3 ELJ @ 1-3 DS; 28.1 ELJ @ 10-3 DS; 31.0 ELJ @ 1 DS; 32.0 EMJ@ 7-11 DS; 32.8 EMJ @ 8-12, 2-4 DS; 33.5 EMJ @ 8-4 DS; 35.1 EMJ @ 9-3 DS; 35.9 ELJ @ 8-4 DS; 37.5 EMJ @ 7-11, 4 DS; 38.3 ELJ @ 7-4 DS; 39.0 ELJ @ 8-5 DS; 39.8 ELJ @ 8-4 DS; 47.5 ELJ @ 4 DS; 53.3 EL(CN) @ 10-1 DS; 56.1 ELJ @ 9-4 DS; 71.3 EL @ 11 DS; 74.9 ELJ @ 10 DS; 77.9 EL @ 10-4 DS;				EPR from 97.4 to 101.9 m DS
23	11770	S-MA60017555	SANDRA BAY (W. LEG)	1ST MH N OF CRANE AV TO MH AT CRANE AV	S-MH60015195	3.67	S-MH60015178	6.18	61.2	200		CIRCULAR	SANITARY	CONCRETE	6				1		0.5 H @ 5-7 DS;	2	20.5 CNI @ 2 DS; 42.0 CNI @ 10 DS;			1		10	1.8 ELJ @ 9-11 DS; 7.0 ELJ @ 8-10 DS; 8.6 ELJ @ 1-5 DS; 9.3 ELJ @ 7-9 DS; 12.3 ELJ @ 8 DS; 20.6 EL(CN) @ 2 DS; 28.0 ELJ @ 10 DS; 39.6 ELJ @ 8-11 DS; 51.5 EL @ 2-4 DS; 54.3 ELJ @ 8-10 DS; 55.9 ELJ @ 10 DS; 57.4 ELJ @ 1 DS;				
24	11771	S-MA60017686	BUXTON RD	2ND MH S DOWKER AV -3RD MH S DOWKER AV	S-MH60015298	4.02	S-MH60015311	4.06	111.9	200		CIRCULAR	SANITARY	VITRIFIED CLAY	13							1	85.4 CNI @ 10 DS;	1.0	22.8 DEG @ 3 DS; 25.2 RT(CN) @ 3 DS; 25.9 DEG @ 4, 9 DS; 26.5 DEG @ 4, 9 DS; 26.5 DEG @ 4 DS; 27.3 DEG @ 9 DS; 28.0 DEG @ 2, 10 DS; 28.3 DEG @ 11-2 DS; 52.2 RFJ @ 8 DS; 53.0 RFJ @ 4 DS; 54.5 RFJ @ 10 DS; 55.3 RFJ @ 10, 2 DS; 55.5 RMJ(CN) @ 1-3 DS; 66.2 RFJ @ 1 DS; 67.0 RFJ @ 10 DS; 67.8 RFJ @ 8-10 DS; 68.6 RFJ @ 10 DS; 69.4 RFJ @ 9, 2-4 DS; 70.2 RMJ(CN) @ 9-11 DS; 71.2 RF(CN) @ 3 DS; 71.7 RFJ @ 3 DS; 72.5 RFJ @ 8-10 DS; 73.3 RFJ @ 9-10, 2 DS; 74.9 RFJ @ 9, 3 DS; 75.6 RFJ @ 9, 2 DS; 76.4 RFJ @ 10 DS; 77.2 RFJ @ 3-9 DS;	1			10.2-10.8 EL @ 4, 9 DS; 62.6 EL @ 8 DS;				EPR 24.1-25.6 m DS
25	11772	S-MA60017675	BUXTON RD	3RD MH S DOWKER AV - MH @ CRANE AV NPL	S-MH60015311	4.06	S-MH70065595	0.00	92.7	200		CIRCULAR	SANITARY	VITRIFIED CLAY	14							5	33.1 CNI @ 2 DS; 43.1 CNI @ 12 DS; 53.8 CNI @ 2 DS; 84.2 CNI @ 2 DS; 89.3 CNI @ 1 DS;	1.0	0.9 RFJ @ 2 DS; 7.6 RM(CN) @ 9-3 DS; X.X RFJ @ 10 DS; X.7 RM(CN) @ 2 DS; 9.2 RFJ @ 10-2 DS; 9.9 RFJ @ 2 DS; 10.7 RFJ @ 9-11, 2 DS; 11.5 RFJ @ 9-11, 3 DS; 12.3 RFJ @ 3-8 DS; 13.8 RFJ @ 9 DS; 19.3 RFJ @ 10 DS; 20.9 RFJ @ 10 DS; 22.5 RFJ @ 10, 2 DS; 23.2 RFJ @ 2 DS; 24.0 RFJ @ 10 DS; 25.6 RFJ @ 1 DS; 29.9-30.8 DEG @ 9 DS; 33.1 RMJ(CN) @ 3 DS; 34.3-35.8 DEG @ 1, 9 DS; 36.5 DEG @ 11 DS; 37.7 DEG @ 10, 2 DS; 38.5 DEG @ 11 DS; 39.0 RF(CN) @ 2 DS; 40.4 RFJ @ 10 DS; 41.2 RFJ @ 9-3 DS; 42.4 RF @ 11 DS; 43.1 RM(CN) 1 DS; 43.5 RFJ @ 10-2 DS; 44.3 RFJ @ 2 DS; 46.7 RFJ @ 2 DS; 52.2 DEG @ 12 DS; 53.8 RM(CN) @ 10-3 DS;	1	7.0	2	6.1 EL @ 1 DS; 15.4 ELJ @ 11 DS; 28.2 EL @ 1 DS; 40.7 EL @ 3 DS; 42.2 EL @ 4 DS; 42.6 EL @ 11 DS; 42.9 EL @ 9, 3 DS; 57.6 ELJ @ 12-3 DS; 61.1 EL(CN) @ 12 DS; 77.6 EL @ 2 DS; 84.3 DE @ 3 DS; 89.9 EL(CN) @ 12-4 DS;				EPR AT 83.4 - 84.9 m DS and 88.8 - 90.4 m DS
26	11773	S-MA70131572	BUXTON RD	MH AT CRANE AV (N PL) TO MH AT CRANE AV (S CURB)	S-MH70065595	0.00	S-MH60015302	6.55	16.1	200		CIRCULAR	SANITARY	CONCRETE	0								1.0	0.8 RFJ @ 10-2 DS; 2.6 RFJ @ 11-1 DS; 3.4 RFJ @ 11 DS; 4.1 RFJ @ 10-12 DS; 4.9 RFJ @ 10-1 DS; 7.3 RFJ @ 10-2 DS; 8.0 RFJ @ 10-2 DS; 8.8 RFJ @ 1 DS; 9.6 RFJ @ 11-1 DS; 10.5 RFJ @ 11-1 DS; 10.9 RF @ 12 DS; 11.1 RFJ @ 10-1 DS; 11.9 RFJ @ 9-2 DS; 12.8 RFJ @ 10-1 DS; 14.3 RFJ @ 9-3 DS;									EPR 13.2 - 15.1 DS
27	11774	S-MA60018046	MARSHALL BAY	MH AT BRISBANE AV TO MH AT CLARENCE AV	S-MH60015621	3.66	S-MH60015631	4.18	86.0	200		CIRCULAR	SANITARY	CONCRETE	5							1	11.2 CNI @ 3 DS;	1.0	4.8 RFJ @ 2 DS; 5.6 RFJ @ 4, 8 DS; 6.3 RFJ @ 3 DS; 10.9 RFJ @ 8-4 DS; 11.4 RF(CN) @ 3 DS; 11.7 RFJ @ 4, 9 DS; 12.5 RFJ @ 4 DS; 17.9 RFJ @ 10-11 DS; 18.9 RM(CN) @ 8-12 DS; 19.7 RFJ @ 3, 8-9 DS; 20.5 RFJ @ 9 DS; 27.9 RFJ @ 3, 10 DS; 28.8 RFJ @ 1, 8 DS; 32.5 RFJ @ 10 DS; 33.1 RF @ 10 DS; 33.7 RFJ @ 11 DS; 34.4 RFJ @ 8, 12 DS; 35.3 RFJ @ 8 DS; 36.2 RFJ @ 4, 8 DS; 70.0 DEG @ 11 DS; 70.6 DEG @ 8-4 DS; 74.7 DEG @ 10

2017 Sewer Renewals by CIPP Lining, Contract 4, Bid Opportunity 224-2018

Appendix A - Repair Requirements

Sewer Details																	Pre-Lining Inspection																			
	DWG	Sewer Asset	Street Name	Location	Manholes				Length	Size		Shape	Flow Type	Material	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	
					Upstream	Depth	Downstream	Depth		Height	Width					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
37	11784	S-MA60019519	FORDHAM BAY (S LEG)	MH @ FORDHAM BY (ELG) TO 1ST MH E OF CORNELL DR	S-MH60016920	2.90	S-MH60017306	3.51	79.1	200		CIRCULAR	SANITARY	CONCRETE	8						5	35.0 CNI @ 10 DS; 35.4 CNI @ 1 DS; 55.3 CNI @ 10 DS; 55.6 CNI @ 1 DS; 74.2 CNI @ 2 DS;	1.0	24.4 RFJ @ 9, 4 DS; 35.1 RM(CN) @ 10 DS; 35.4 RM(CN) @ 2 DS; 39.8 RTJ @ 7 DS; 53.8-55.1 DEG @ 9, 3 DS; 55.6 RF(CN) @ 12-4 DS; 78.7 DEG @ 10-2 DS;	1	15.4	29	1.1-2.5 EL @ 12-4 DS; 2.5 EL @ 8-12 DS; 2.9 ELJ @ 1-5 DS; 2.9 EL @ 12 DS; 3.4 EL @ 8-12 DS; 4.6 EL(CN) @ 8-3 DS; 5.8 EM @ 7-5 DS; 6.1 EL @ 8-12 DS; 6.7 EL @ 7-4 DS; 9.0 ELJ @ 2-5 DS; 9.8 EL @ 2-5 DS; 12.0 ELJ @ 8-10 DS; 16.6 EM) @ 7-5 DS; 18.1 ELJ @ 1 DS; 19.7 EMJ @ 7-4 DS; 20.4 EL(CN) @ 8 DS; 21.2 ELJ @ 8 DS; 24.4 EMJ @ 7-9 DS; 27.5 EMJ @ 7-5 DS; 29.0 ELJ @ 1-4 DS; 29.7 EL @ 7 DS; 30.6 ELJ @ 7-4 DS; 31.7 ELJ @ 1-5 DS; 34.9 ELJ(CN) @ 3, 9 DS; 35.5 EM(CN) @ 7-11 DS; 36.7 ELJ @ 1-4 DS; 38.2 ELJ @ 7-5 DS; 42.9 ELJ @ 1-4 DS; 43.8 EL @ 7-5 DS; 44.6 ELJ @ 2, 7 SD; 46.0 ELJ @ 8-4 DS; 47.4 ELJ @ 7-1 DS; 48.9 ELJ @ 9-3 DS; 50.5 ELJ 2.8-4 DS; 53.6 EMJ @ 8-4 DS; 55.2 EL(CN) 8-2 DS; 59.8 ELJ @ 7-5 DS; 60.8 EL @ 9-1 DS; 61.3 ELJ @ 9-3 DS; 66.0 EHJ @ 8-4 DS; 67.5 EMJ @ 7-5 DS; 69.1 ELJ @ 8-10 DS; 72.1 EMJ @ 7-4 DS; 73.9 EL(CN) @ 8-9 DS; 74.2 EL(CN) @ 2-4 DS; 78.3 ELJ @ 7-3 DS; 80.8 ELJ @ 9-3 DS;				
38	11785	S-MA60019538	KILKENNY DR	2NDMH N OF RADCLIFFE RDTO1STMH N OF RADCLIFFE RD	S-MH60016944	3.68	S-MH60016945	4.21	58.7	200		CIRCULAR	SANITARY	CONCRETE	4						2	16.5 CNI @ 10 US; 36.5 CNI @ 9 US;	1.0	55.2 RMJ @ 7-10 US; 55.6 RM(CN) @ 7-9 US; 56.1 RFJ @ 8-4 US; 56.9 RFJ @ 8-9 US;	1		2	2.9 EL(CN) @ 9-2 US; 3.9 EL @ 12 US; 34.5 EL @ 8, 4 US; 57.4 ELJ @ 4 US; 58.4 ELJ @ 9 US;				
39	11786	S-MA60019535	KILKENNY DR	1ST MH N OF RADCLIFFE RD TO MH AT RADCLIFFE RD	S-MH60016945	4.21	S-MH60016938	4.02	58.8	200		CIRCULAR	SANITARY	CONCRETE	2								1.0	21.6 RF(CN) @ 12-3 DS;								EPR 20.9-22.4 m DS	
40	11787	S-MA60019640	BRIAR CLIFF BAY (S LEG)	MH@BRIAR CLIFF BY(WLG)TO MH@ BRIAR CLIFF BY(ELG)	S-MH60017045	2.97	S-MH60017139	3.03	102.9	200		CIRCULAR	SANITARY	CONCRETE	7								1.0	6.5 DEG @ 8, 4 DS; 7.5-10.4 DEG @ 8-4 DS; 10.6 DEG @ 3-4 DS; 12.0-14.0 DEG @ 3 DS; 14.0-15.0 DEG @ 3-5, 7-9 DS; 18.2 DEG @ 1 DS; 18.8 DEG @ 11, 2-4 DS; 19.8 DEG @ 1, 10 DS; 20.3-21.7 DEG @ 9-3 DS; 21.8-23.5 DEG @ 11-1 DS; 24.6-25.9 DEG @ 10-2 DS; 28.9 DEG @ 10, 2 DS; 29.9 DEG @ 3, 9 DS; 31.3 DEG @ 3 DS; 32.5 DEG @ 3, 9 DS; 35.9 DEG @ 9 DS; 36.8 DEG @ 10, 2 DS; 98.9 RF @ 8 DS;	1	15.0	44	0.3 ELJ @ 6-6 DS; 1.5 ELJ @ 4-8 DS; 2.1 DE @ 8 DS; 4.4 EH(CN) @ 12-5 DS; 4.7 ELJ @ 7-11 DS; 7.3 ELJ @ 12-4 DS; 8.9 ELJ @ 8-4 DS; 10.4 EMJ@ 1-4 DS; 11.9 ELJ @ 8-4 DS; 13.5 ELJ @ 9-3 DS; 15.0 ELJ @ 10-4 DS; 16.6 EMJ @8-4 DS; 18.5 EM(CN) @ 4-6 DS; 27.4 EHJ @ 9-3 DS; 32.0 EHJ @ 9-3 DS; 35.1 ELJ @ 12 DS; 35.4 EM(CN) @ 12-3 DS; 42.8 ELJ @ 1-2 DS; 44.3 EMJ @ 9-2 DS; 45.9 EHJ @ 9-3 DS; 47.1 EL @ 2 DS; 47.4 ELJ @ 9-3 DS; 48.9 ELJ @ 10-4 DS; 50.5 ELJ @ 3 DS; 51.5 EL @ 8-11, 3 DS; 53.1 EL(CN) 1-3 DS; 55.1 ELJ @ 8-3 DS; 56.4 EL @ 5 DS; 56.6 ELJ @ 9-5 DS; 58.2 ELJ @ 2-4 DS; 59.7 ELJ @ 10-4 DS; 60.7 EL @ 4-5 DS; 61.3 ELJ @ 11-5 DS; 62.7 ELJ @ 9-5 DS; 63.3 EL @ 4 DS; 64.3 ELJ @ 8-4 DS; 64.7 EL @ 2-4 DS; 65.8 ELJ @ 2-4 DS; 66.6 ELJ @ 4, 8 DS; 66.8 EL @ 1-3 DS; 67.2 EL @ 1-4 DS; 67.4 ELJ @ 8-4 DS; 68.7 ELJ @ 4 DS; 68.9 ELJ @ 2-5 DS; 70.4 ELJ @ 2-5, 7-3 DS; 72.0 ELJ @ 7-11 DS; 72.6 EL(CN) @ 12-4 DS; 73.1 EL @ 8-11 DS; 75.0 ELJ @ 8-11 DS; 76.6 ELJ @ 7-10 DS; 78.1 ELJ @ 1-4 DS; 79.6 ELJ @ 8-4 DS; 84.2 ELJ @ 8-10, 4 DS; 85.7 ELJ @ 7-10 DS; 86.4 EL @ 3-4 DS; 87.0 ELJ @ 4, 8 DS; 88.8 ELJ @ 7-9 DS; 93.4 EMJ @ 7-11 DS; 98.0 ELJ @ 8-4 DS; 98.4 EM(CN) @ 2-4 DS; 99.5 EMJ @ 8-4 DS; 100.8 ELJ @ 9-4 DS;				
41	11788	S-MA60019775	PURDUE BAY (N LEG)	MH @ PURDUE BY (ELG) TO 1ST MH E OF DALHOUSIE DR	S-MH60017177	3.38	S-MH60017170	3.82	94.8	200		CIRCULAR	SANITARY	CONCRETE	11						1	75.0 CNI @ 11 DS;	1.0	53.7 RFJ @ 9-3 DS; 55.3 RFJ @ 1-3 DS; 56.6 DEG @ 3 DS; 57.4 DEG @ 2 DS; 57.5 RFJ @ 9-3 DS; 58.1 RF @ 1 DS; 58.2 DEG @ 1 DS; 59.6 DEG @ 9 DS; 60.5 DEG @ 3, 9 DS; 60.8 RMJ @ 9-11, 1-3 DS; 63.0 RFJ @ 9-3 DS; 63.2 DEG @ 9 DS; 66.9 RMJ @ 8-4 DS; 67.6 RMJ @ 3-11 DS; 69.2 RMJ @ 8-4 DS; 70.7 RFJ @ 8-10 DS; 72.2 RFJ @ 7-3 DS; 75.0 RM(CN) @ 7-10 DS; 84.2 RF(CN) @8, 2-4 DS; 90.7 RFJ @ 10-3 DS; 90.9 RF(CN) @ 10 DS;	1		25	4.4 EMJ @ 2-4 DS; 7.4 ELJ @ 9-4 DS; 12.0 ELJ @ 12-5 DS; 15.1 EMJ @ 8-4 DS; 17.7 EM(CN) @ 8-4 DS; 24.0 EM(CN) @ 8-4 DS; 25.9 ELJ @ 9-3 DS; 29.0 EMJ @ 7-12 DS; 33.6 ELJ @ 1-5 DS; 35.7-36.0 EL @ 7-5 DS; 38.2 ELJ @ 7-5 DS; 39.8 ELJ @ 8-2 DS; 41.4 EM(CN) @ 7-4 DS; 44.5 ELJ @ 4 DS; 46.0 ELJ @ 7-5 DS; 47.5 ELJ @ 7-4 DS; 49.1 ELJ @ 5, 7 DS; 49.6 EM(CN) @ 7-11 DS; 55.3 ELJ @ 8-4 DS; 58.4 DE(GASKET) @ 8-12 DS; 66.8 ELJ @ 2-4 DS; 70.7 ELJ @ 8 DS; 72.2 ELJ @ 7-11 DS; 73.7 ELJ @ 8-11 DS; 74.9 ELJ(CN) @ 9-2 DS; 81.5 ELJ @ 2-5 DS; 95.0 EL @ 1-4, 8-9 DS;				EPR FROM 56.9M TO 59.9M DS
42	11789	S-MA60019813	RUTGERS BAY (E LEG)	MH@ RUTGERS BY(SLG) (NPL)TO MH@ RUTGERS BY (NLG)	S-MH60017214	3.34	S-MH60017215	3.04	81.0	200		CIRCULAR	SANITARY	CONCRETE	5						1	1.6 RFJ @ 10-3 DS; 3.1 RFJ @ 10-2 DS; 4.7 RFJ @ 9-4 DS; 6.2 RMJ @ 9-4 DS; 6.2 DEG @ 9 DS; 7.7 RFJ @ 9-3 DS; 9.2 RFJ @ 8-4 DS; 11.1 RM(CN) @ 8-12 DS; 12.4 RFJ @ 7-12 DS; 13.9 RFJ @ 12-5 DS; 17.0 RFJ @ 8-5 DS; 20.0 RFJ @ 8-10, 4 DS;21.2 RFJ @ 8-10 DS; 24.8 RFJ @ 2-4 DS; 32.4 RFJ @ 8-10 DS; 33.9 RFJ @ 11-1 DS; 37.1 RFJ @ 9-1 DS; 41.1 RFJ @ 8 DS; 41.8 RFJ @ 2 DS; 74.8 RF(CN) @ 9-11 DS;	1	4.0	43	0.5 ELJ @ 8-4 DS; 3.9 ELJ @ 7-12 DS; 35.5 EMJ @ 8-4 DS; 37.1 ELJ @ 8-12 DS; 38.6 ELJ @ 8-10 DS; 40.1 ELJ @ 9-4 DS; 43.1 ELJ @ 12-4 DS; 44.0 ELJ @ 8-4 DS; 44.8 ELJ @ 2-3 DS; 45.5 ELJ @ 8-4 DS; 49.4 ELJ @ 7-10 DS; 50.9 EMJ @ 7-5 DS; 52.5 ELJ @ 1-5 DS; 54.0 ELJ @ 8-5 DS; 55.5 ELJ @ 8-4 DS; 58.7 ELJ @ 8-4 DS; 60.3 ELJ @ 12-4 DS; 63.3 ELJ @ 9-3 DS; 64.9 ELJ @ 9-3 DS; 66.1 EM @ 2 DS; 66.4 ELJ @ 1-3 DS; 67.9 ELJ @ 1-3 DS; 71.0 ELJ @ 8-4 DS; 72.5 ELJ @ 8-4 DS; 73.2 EL @ 7-5 DS; 74.8 EL(CN) @ 9 DS; 75.1 EL @ 2-4 DS; 75.5 ELJ @ 1-5 DS; 77.1 ELJ @ 7-5 DS; 80.1 ELJ @ 7-5 DS;				
43	11790	S-MA60019865	BALDRY BAY (N LEG)	1ST MH W OF CORNELL DR TO MH AT BALDRY BY (WLG)	S-MH60017264	2.92	S-MH60017271	2.93	84.4	200		CIRCULAR	SANITARY	CONCRETE	11						10	15.0 CNI @ 10 DS; 18.4 CNI @ 10 DS; 25.3 CNI @ 2 DS; 31.3 CNI @ 10 DS; 45.1 CNI @ 10 DS; 45.8 CNI @ 11 DS; 61.4 CNI @ 11 DS; 63.9 CNI @ 2 DS; 1.7 CNI @ 11 US; 2.0 CNI @ 1 US;	1.0	14.7 DEG @ 12 DS; 15.0 RF(CN) @ 9 DS; 18.4 RM(CN) @ 7-11 DS; 31.2 RM(CN) @ 9-12 DS; 45.8 RF(CN) @ 4 DS; 1.6 RF(CN) @ 10-11 US;	1		32	1.7-3.9 EL @ 12-5 DS; 8.1 ELJ @ 8-5 DS; 11.2 ELJ @ 8-5 DS; 15.0 EL(CN) @ 8 DS; 18.6 EM(CN) @ 7-4 DS; 25.2 EM(CN) @ 12-5 DS; 31.2 EM(CN) @ 8-4 DS; 35.5 ELJ @ 7 DS; 37.1 EMJ @ 7-11 DS; 38.7 EMJ @ 12-4 DS; 41.2 EMJ @ 7-2 DS; 44.8-46.0 EM @ 8-4 DS; 46.4 ELJ @ 8-9, 3 DS; 47.8 EMJ @ 1-5 DS; 49.4 ELJ @ 12-3 DS; 51.5 EM @ 7-4 DS; 52.4 ELJ @ 8-11 DS; 54.0 ELJ @ 2-4 DS; 55.5 EMJ @ 12-5 DS; 57.1 ELJ @ 11-4 DS; 58.5 EHJ @ 7-5 DS; 60.2 ELJ @ 7-5 DS; 61.5 EMJ @ 7-5 DS; 63.0 EL(CN) @ 1-4, 8-9 DS; 63.8 EL(CN) @ 3-4 DS; 64.7 EMJ @ 8-4 DS; 67.8 EHJ @ 6-3 DS; 68.5 EHJ @ 9-4 DS; 0.9 EL @ 4, 8 DS; 1.7 ELJ(CN) 8-4 US; 2.2 EL(CN) @ 8-4 US; 3.1-3.7 EM 8-4, 8-10 US; 7.5 DE @ 6 US; 9.0 ELJ @ 8-10 US; 10.7-11.3 EL @ 8-4 US; 12.1 EMJ @ 8-4 US; 15.2 ELJ @ 9-4 US;				EPR 0.0-2.0 m DS
44	11790	S-MA60019872	BALDRY BAY (N LEG)	1ST MH W OF CORNELL DR TO MH AT CORNELL DR	S-MH60017271	2.93	S-MH60017272	2.98	83.9	200		CIRCULAR	SANITARY	CONCRETE	8						6	8.5 CNI @ 11 US; 9.5 CNI @ 2 US; 27.9 CNI @ 11 US; 46.8 CNI @ 2 US; 66.1 CNI @ 10 US; 66.6 CNI @ 2 US;	1.0	1.0 RF @ 9-3 DS; 3.0 RTJ @ 3-7 DS; 22.6 RFJ @ 9-10 US; 27.9 RF(CN) @ 1 US; 71.6 RFJ @ 10 US;	1	7.0	37	0.5 EL @ 3-5, 9 DS; 1.0 EL @ 4, 8 DS; 6.1 ELJ @ 9-12 DS; 4.1 EMJ @ 8-4 US; 5.7 EMJ @ 7-4 US; 8.4 EL(CN) @ 9-2 DS; 9.5 EM(CN) @ 2-4, 8 US; 11.9 ELJ @ 8-10 US; 13.4 ELJ @ 8-11 US; 16.4 ELJ @ 2-4 US; 18.0 ELJ @ 9 US; 22.6 ELJ @ 4 US; 24.1 ELJ @ 8-4 US; 25.7 ELJ @ 8-4 US; 27.1 ELJ @ 3, 8 US; 28.8 EL(CN) @8-2 US; 30.2 ELJ @ 4, 9 US; 31.8 ELJ @ 3, 9 US; 33.3 ELJ @ 7-4 US; 34.9 ELJ @ 7-4 US; 36.3 EMJ @ 3-5, 7-9 US; 37.9 ELJ @ 7-4 US; 38.5 EL @ 3, 8 US; 39.4 ELJ @ 4, 7-9 US; 40.9 EMJ @ 7-4 US; 42.5 ELJ @ 4, 8-1 US; 44.0 ELJ @ 8-4 US; 45.5 ELJ @ 8-11 US; 46.8 EL(CN) @ 3 US; 47.3 EL(CN) @ 8-11 US; 48.6 EMJ @ 12-4 US; 50.1 ELJ @ 8-4 US; 51.7 EMJ @ 11-4 US; 53.2 ELJ @ 8-4 US; 54.7 ELJ @ 8-11 US; 56.3 ELJ @ 8-2 US; 57.8 ELJ @ 9-3 US; 59.3 ELJ @ 9-2 US; 60.9 EMJ @ 9-2 US; 64.0 EMJ @ 10-2 US; 65.5 ELJ @ 9-3 US; 66.2 EL(CN) @ 12-2 US; 66.5 EL(CN) @ 10-2 US; 68.5 ELJ @ 9-3 US; 70.0 ELJ @ 9-12 US; 71.6 ELJ @ 9-4 US; 73.1 ELJ @ 8-3 US;				EPR 4.6-9.2 m DS
45	11792	S-MA70076036	CORNELL DR (EPL TO CL)	2NDMHS OFSILVERSTONEAVTO3RDMH S OF SILVERSTONEAV	S-MH60017268	3.31	S-MH60017254	6.59	14.2	200		CIRCULAR	SANITARY	CONCRETE	0										1		6	3.2 ELJ @ 1-5, 8 DS; 4.4 EL @ 1-3 DS; 4.7 ELJ @ 11-5 DS; 6.3 ELJ @ 8-10 DS; 7.7 ELJ @7-5 DS; 9.3 ELJ @ 7-3 DS; 12.4 ELJ @ 4-5 DS; 12.8 EL @ 7-5 DS;				
46	11793	S-CL60023129	PEMBINA HWY E OF CL	2ND CB S OF LEMAY AV TO MH AT DE LIGLISE AV N OF	S-CB60019391	1.84	S-CB60019384	1.99	19.8	200		CIRCULAR	STORM	CSP	0																	EPR 0.0 - 5.6 m DS	
47	11794	S-CL60023119	PEMBINA HWY E OF CL	2ND CB S OF LEMAY AV TO MH AT DE LIGLISE AV N OF	S-CB60019384	1.99	S-MH60019383	2.13	27.3	250		CIRCULAR	STORM	CSP	0	1	26.5-27.0 H @ 12 DS								1	0.8		16.3-19.1 EL @ 9 DS; 19.2 EL @ 4, 9 DS;				
48	11795	S-MA60023118	PEMBINA HWY E OF CL	MH AT DE LIGLISE AV S OF CL TO MH AT DE LIGLISE	S-MH60019383	2.13	S-MH60019000	2.77	14.0	300		CIRCULAR	STORM	CMP	0																	EPR @ O - 2.6 m DS	
49	11796	S-MA60023124	PEMBINA HWY E OF CL	1ST MH S OF DE LEGLISE AV TO MH AT DE LEGLISE AV	S-MH60019000	2.77	S-MH60019386	3.96	35.5	300		CIRCULAR	STORM	CMP	0										1		2	4.8 EL @ 7-9 US; 6.9 EL @ 7 US; 20.9 ELJ @ 4 DS; 25.6 ELJ @ 12-2 DS;				
50	11797	S-MA60021988	ST THERESE AVE	3RD MH W OF ST PIERRE ST TO MH @ LA BARRIERE ST	S-MH60018649	4.16	S-MH60018650	5.08	87.1	250		CIRCULAR	SANITARY	CONCRETE	3								1.0	13.8-16.0 DEG @ 10, 2 DS; 36.5 RFJ @ 4, 8 DS;	1	1.0	20	2.8 ELJ @ 2 DS; 8.4 EL(CN) @ 10-3 DS; 9.8 ELJ @ 2 DS; 11.4 ELJ @ 2 DS; 18.4 ELJ @ 10, 2 DS; 19.2 ELJ @ 2-4 DS; 20.7 ELJ @ 1, 9 DS; 21.7 EL @ 8-12, 4 DS; 23.1 ELJ @ 12-3 DS; 23.9 ELJ @ 8-5 DS; 24.9 EM(CN) @ 10-4 DS; 26.2 ELJ @ 9 DS; 27.0 ELJ @ 9 DS; 28.6 ELJ @ 8-4 DS; 30.2 ELJ @ 4 DS; 30.9 ELJ @ 8-10, 2 DS; 31.8 ELJ @ 4 DS; 37.3 ELJ @ 8-12 DS; 38.1 ELJ @ 9 DS; 38.8 ELJ @ 8-11 DS; 39.6 ELJ @ 12-4 DS; 41.2 ELJ @ 9, 3 DS; 42.2 ELJ @ 11 DS; 73.5 EL @ 8 DS;				
51	11798	S-MA60020033	LEMAY AV	1STMH E OF LA BARRIERE STTO MH AT LA BARRIEREST	S-MH60018690	5.84	S-MH60018688	5.87	103.4	250		CIRCULAR	SANITARY	CONCRETE	7										1	10.0	3	1.2 EL @ 10-2 DS; 8.0 EL @ 2 DS; 9.5 EL @ 2 DS; 15.7 EL @ 10 DS; 18.8 ELJ @ 9 DS; 19.5 ELJ @ 9-3 DS; 21.1 ELJ @ 10 DS; 23.6 EL @ 10 DS; 27.5 EL @ 2 DS; 30.9 EL @ 9 DS; 54.5 EL(CN) @ 8-4 DS; 68.0 EL @ 8 DS; 69.0 EL @ 10-2 DS; 80.5 EL @ 11-2 DS; 81.5 EL @ 2-4 DS; 83.8 EL @ 12 DS;				
52	11799	S-MA60020032	LEMAY AV	1STMH W OF ST PIERRE STTO2ND MH W OF ST PIERREST	S-MH60018689	3.67	S-MH60018690	5.84	101.8	250		CIRCULAR	SANITARY	CONCRETE	10								1.0	91.4 RF(CN) @ 1 DS;	1	42.6	3	0.0-12.4 EL @ 8-4 DS; 12.4-16.3 EM @ 9-3 DS; 16.3-19.7 EH @ 8-4 DS; 19.7-21.7 EL @ 10-3 DS; 38.0-38.6 EL @ 9-3 DS; 40.7-41.1 EL @ 8 DS; 41.5-48.5 EM @ 8-9, 3 DS; 49.0-54.7 EM @ 10-2 DS; 54.7-56.4 EL @ 11, 1 DS; 56.9-57.6 EM @ 9 DS; 58.0 EL @ 9 DS; 58.5-60.9 EL @ 9-3 DS; 61.7-62.5 EL @ 10 & 2 DS; 63.6-64.1 EL @ 11, 1 DS; 66.9-67.3 EM @ 4 DS; 67.7-70.3 EM @ 9-3 DS; 81.9 ELJ @ 2 DS; 83.6-84.3 EL @ 8, 12 DS; 100.2 EM(CN) @ 8-4 DS;				EPR at 83.5-87.9
53	11800	S-MA60022274	CLOUTIER DR	1ST MHE OF STORMONT TO 2ND MHE OF STORMONT	S-MH60018720	5.18	S-MH60018721	4.16	98.1	250		CIRCULAR	SANITARY	CONCRETE	2								1.0	65.0 RF(CN) @ 2 DS; 78.5 RFJ @ 4, 8 DS; 81.5 RFJ @ 10 DS;	1	4.0	11	0.2 EL @ 7-4, 8-11 DS; 11.7 ELJ @ 4, 8 DS; 14.1 ELJ @ 8 DS; 15.2 EL @ 8 DS; 26.3 ELJ @ 4 DS; 29.4 ELJ @ 4 DS; 31.0 ELJ @ 3 DS; 32.0 EL @ 8 DS; 32.8 EL(CN) @ 2-5 DS; 35.6 ELJ @ 9 DS; 46.2 ELJ @ 4 DS; 51.0 ELJ @ 9 DS; 65.0 EL(CN) @ 8 DS; 75.8 EL @ 5, 8 DS; 77.1 ELJ @ 4 DS; 90.2 EL @ 8-5 DS; 91.4 ELJ @ 8-5, 8-10 DS; 97.7 ELJ @ 8-5 DS;				
54	11801	S-MA60023213	LESTANG ST	MH @ HOUDE DR - MH @ GENDREAU AV	S-MH60019467	3.17	S-MH60019462	4.26	91.2	200		CIRCULAR	SANITARY	CONCRETE	0								1.0	0.5 RMJ @ 9-3 DS; 3.4 RFJ @ 10-2 DS; 4.0 RT @ 2 DS;	1	11.0	31	4.0 ELJ @ 9 DS; 6.0 EL @ 2-4 DS; 8.0 ELJ @ 8-10 DS; 9.6 ELJ @ 3 DS; 12.7 ELJ @ 1-4 DS; 16.5 ELJ @ 1-3 DS; 18.4 ELJ @ 7-2 DS; 20.4 ELJ @ 10-3 DS; 21.3 EL @ 11 DS; 22.7 EL @ 2-4 DS; 23.8 EL @ 2 DS; 4.3 EMJ @ 7-12 US; 5.8 EMJ @ 7-5 US; 7.5 EMJ @ 8-4 US; 9.0 EMJ @ 7-12 US; 10.6 ELJ @ 12 -3 US; 11.1 EL @ 2-5, 8 US; 12.2 ELJ @ 3-11 US; 12.4 ELJ @ 3-5, 8 US; 13.6 EMJ @ 7-12 US; 16.6 EMJ @ 7-12 US; 19.8 EMJ @ 7-12 US; 21.2 EMJ @ 8-4 US; 22.9 EL @ 3 US; 23.3 EL @ 8-9 US; 24.8 EMJ @ 8-4 US; 25.5 EL @ 9 US; 25.7 EMJ @ 8-4 US; 28.0 EMJ @ 8-3 US; 29.4 EL @ 2-4 US; 30.9 EL @ 12-4 US; 32.6 EM @ 9-12, 2-3 US; 33.8 EL @ 1-4, 9 US; 36.7 EMJ @ 9-3 US; 40.8 EMJ @ 10-4 US; 42.4 ELJ @ 8-4 US; 43.9 EMJ @ 8-5 US; 53.0 EHJ @ 7-5 US; 55.1 ELJ @ 7-5 US; 55.3 EL @ 4, 8 US; 56.2 EMJ @ 7-5 US; 59.3 EMJ @ 9-4 US; 62.3 ELJ @ 7-4 US; 65.4 EMJ @ 7-5 US; 65.8 EL @ 4 US;				
55	11802	S-MA60023225	DES TRAPPISTES ST	1ST MH W OF VILLENEUVE TO 2ND MH W OF VILLENEUVE	S-MH60019477	4.90	S-MH60019476	5.32	68.0	250		CIRCULAR	SANITARY	CONCRETE	8						3	19.6 CNI @ 10 DS; 30.3 CNI @ 2 DS; 66.5 CNI @ 10 DS;	1.0	48.6 DEG @ 11-1 DS; 49.7 DEG @ 12 DS;	1	7.0	15	0.5 EL @ 2-4 DS; 2.9 EL(CN) @ 2-4 DS; 7.2 EL(CN) @ 8-10 DS; 9.5 EMJ @ 8-5 DS; 11.1 ELJ @ 8-10 DS; 14.1 ELJ @ 3 DS; 19.6 EM(CN) @ 7-10 DS;22.1 EL(CN) @ 7-10 DS; 24.9 ELJ @ 8-10 DS; 31.0 EMJ @ 8-5 DS; 32.6 ELJ @ 1-4 DS; 34.2 ELJ @ 8-4 DS; 37.1 ELJ @ 1-3 DS; 38.7 ELJ @ 9-3 DS; 40.3 EMJ @ 9-4 DS; 41.8 EMJ @ 1-4 DS; 43.0 EM @ 8-10 DS; 43.5 EMJ @ 8-4 DS; 44.9 ELJ @ 8-10 DS; 47.9 EMJ @ 9-5 DS; 48.2 EL(CN) @9-2 DS; 50.6 EL(CN) @ 12-5 DS; 52.5 EMJ @ 8-4 DS; 66.5 EM(CN) @ 7-2 DS; 67.1 EL @ 7-4 DS;				
56	11803	S-MA60023223	VILLENEUVE BLVD	MH AT RUE DES TRAPPISTES TO 1ST MH S OF GENDREAU	S-MH60019474	4.96	S-MH60019475	5.24	97.8	250		CIRCULAR	SANITARY	CONCRETE	10								1.0	9.7 DEG @ 12 DS; 28.4 DEG @ 11-2 DS; 31.9 DEG @ 11-1 DS; 41.8-43.6 DEG @ 10, 2 DS; 44.1 DEG @ 11-1 DS; 45.9 DEG @ 2 DS; 46.6-50.9 DEG @ 10-2 DS; 52.3 DEG @ 11-1 DS; 74.4 DEG @ 10, 2 DS; 75.8-79.4 DEG @ 10-3 DS; 80.0 DEG @ 11-1 DS; 81.3 DEG @ 1 DS; 86.7 DEG @ 10 DS; 89.8 DEG @ 9-3 DS; 92.9 DEG @ 11-3 DS;	1	23.8	16	0.1 EL @ 9-3 DS; 0.5-5.5 EM @ 10-2 DS; 5.9 EL @ 8-4 DS; 6.6 ELJ @ 10-4 DS; 11.9 EL(CN) @ 10 DS; 13.4-14.8 EL @ 11-1 DS; 14.9 EM @ 10-2 DS; 15.9 EM(CN) @ 8-4 DS; 16.6 ELJ @ 1-4 DS; 17.0-20.6 EL @ 10-2 DS; 20.7 EL(CN) @ 9-3 DS; 21.0-22.8 EL @ 11-1 DS; 23.9 ELJ @ 8-10 DS; 24.4 EL @ 1 DS; 26.3 ELJ @ 8-4 DS; 31.8 EL(CN) @ 9-3 DS; 39.9 ELJ @ 9-11 DS; 42.0 EL @ 8-9, 4 DS; 51.5 ELJ @ 9 DS; 55.2 EL(CN) @ 9-4 DS; 55.9 ELJ @ 3 DS; 58.3 ELJ @ 8 DS; 60.8 ELJ @ 8-10 DS; 68.2 ELJ @ 3 DS; 70.6 ELJ @ 3 DS; 75.1 ELJ @ 2-4 DS; 79.7 EL(CN) @ 1-4 DS; 83.2 EL(CN) @ 1-3 DS; 84.1 ELJ @ 10 DS; 84.8 EL @ 11, 2 DS; 87.9 ELJ @ 8-10 DS; 88.3 EM @ 11,1 DS; 91.7 EL @ 2 DS; 93.6 EL @ 12 DS; 97.2 ELJ @ 8-11 DS;				
57	11804	S-MA60023238	DES TRAPPISTES ST	MH AT VILLENEUVE BV TO 1ST MH E OF VILLENEUVE BV	S-MH60019475	5.24	S-MH60019488	5.79	46.0	250		CIRCULAR	SANITARY	CONCRETE	0										1	34.3	4	0.0-22.0 EL @ 9-3 DS; 25.3 EL @ 10, 2 DS; 26.6 ELJ @ 1-4 DS; 27.1 ELJ @ 9-2 DS; 27.9 ELJ @ 12-4 DS; 28.5 EL @ 9-2 DS; 31.8 EL @ 11, 1 DS; 32.1 EL @ 9-2 DS; 33.5 EL @ 9, 2 DS; 34.0 ELJ @ 9, 3 DS; 34.6 EL @ 10 DS; 35.0-40.3 EL @ 9-2 DS; 41.7 EL @ 2 DS; 42.1 EL @ 12 DS; 43.1 EL @ 2 DS; 43.9 EL @ 2 DS;				
58	11805	S-MA60023239	DES TRAPPISTES ST	1ST MH E OF VILLENEUVE BV TO 1ST MH W OF PEMBINA	S-MH60019488	5.79	S-MH60019489	5.74	76.5	250		CIRCULAR	SANITARY	CONCRETE	3								1.0	22.2-26.5 DEG @ 12 DS;	1	4.0	29	0.5 EH @ 9-3 DS; 1.9 EL @ 1 DS; 2.7 EL @ 1 DS; 3.6 EM @ 2 DS; 26.8 EM(CN) @ 9-3 DS; 34.3 ELJ @ 12-3 DS; 35.6 ELJ @ 9-3 DS; 36.8 ELJ @ 9-12 DS; 38.1 ELJ @ 9-4 DS; 39.3 ELJ @ 1-4 DS; 40.6 EMJ @ 12-4 DS; 41.9 EMJ @ 8-12 DS; 43.1 EMJ @ 8-4 DS; 44.3 ELJ @ 9-3 DS; 45.6 ELJ @ 8-4 DS; 46.9 ELJ @ 8-4 DS; 50.6 ELJ @ 9-3 DS; 51.7 ELJ @ 8-11 DS; 53.1 EMJ @ 8-3 DS; 54.3 ELJ @ 8-11 DS; 55.5 ELJ @ 8-12 DS; 56.9 ELJ @ 2 DS; 58.2 EL(CN) @ 10 DS; 59.2 ELJ @ 8-11 DS; 60.6 ELJ @ 1-4 DS; 61.7 ELJ @ 9-11 DS; 62.9 EMJ @ 8-4 DS; 63.0 EM @ 12-4 DS; 63.8 ELJ @ 9-10, 3 DS; 65.2 ELJ @ 8-4 DS; 66.5 ELJ @ 8-4 DS; 67.8 ELJ @ 8-4 DS; 69.1 ELJ @ 2-4