

**MANHOLE, CATCH BASIN, CATCH PIT & DITCH INLET  
STRUCTURE AND LOCATION TABLE**

STRUCTURE NAME	DESCRIPTION	FRAME & COVER	NORTHING	EASTING	EX RIM ELEV	PROP RIM ELEV	INV NORTH	INV SOUTH	INV EAST	INV WEST	BOTTOM ELEV	CB LEAD	SPECIAL FEATURES
CB.1	SD-024 CB		5523597.4652	630963.2323		232.239		230.989			230.39	23.8m OF 300 SSP @ 2.26%	
CB.2	SD-024 CB		5523574.1666	630985.5213		232.240				230.840	230.56	18.4m OF 300 SSP @ 1.50%	
CB.3	SD-024 CB		5523553.6109	630968.6877		233.212		SW 231.494			230.97	22.6m OF 250 SSP @ 1.51%	
CB.4	SD-024 CB		5523429.4920	630951.1149		232.882				231.242	230.64	2.6m OF 300 SSP @ 8.00%	
CB.8	SD-024 CB		5523401.8760	630865.5799		232.808		231.168			230.57	13.2m OF 300 SSP @ 8.00%	
CB.28	SD-024 CB		5523576.2920	630899.1534		227.421		225.980 SE 225.781	226.100		225.37	2.5m OF 300 SSP @ 1.98%	
CB.29	SD-024 CB		5523505.8114	630896.5778		227.165	NE 225.525	226.332		226.113	225.11	2.5m OF 250 SSP @ 2.00%	
CB.30	SD-024 CB		5523393.6038	630888.6338		231.268	230.484		230.410		229.21	2.5m OF 250 SSP @ 1.99%	
CB.31	SD-024 CB		5523344.5872	630886.1057		232.420	NE 230.860 NW 231.305	231.755			230.37	2.5m OF 250 SSP @ 2.02%	
CB.32	SD-024 CB		5523359.3366	630876.6875		232.525		SE 231.568			230.93	17.5m OF 250 SSP @ 2.00%	
CB.33	SD-025 CB w/ BEEHIVE INLET		5523522.5354	630928.3593		226.690		225.594			225.20	9.3m OF 250 SSP @ 2.00%	
CB.34	SD-024 CB		5523346.5614	630919.8364		232.418		225.819			230.78	2.5m OF 250 SSP @ 1.99%	
CB.35	SD-025 CB w/ BEEHIVE INLET		5523363.1936	630929.3861		232.010	NW 231.070	SW 231.277		230.518	229.71	25.4m OF 300 SSP @ 2.00%	
CB.36	SD-024 CB		5523383.8514	630921.1899		231.563		228.250		228.110	229.51	16.7m OF 300 SSP @ 2.00%	
CB.37	SD-024 CB		5523427.2949	630922.7773		230.002			231.374	230.709	227.95	2.5m OF 250 SSP @ 2.00%	
CB.38	SD-024 CB		5523480.1548	630924.7092		227.886		227.084	226.834	226.246	225.83	2.4m OF 250 SSP @ 2.04%	
CB.39	SD-024 CB		5523513.5954	630925.9307		226.828		225.976	225.409	225.188	224.78	2.5m OF 250 SSP @ 2.03%	
CB.40	SD-024 CB		5523565.6863	630927.8344		227.003		224.990	225.500	224.890	224.51	2.5m OF 300 SSP @ 1.96%	
CB.41	SD-024 CB		5523601.0059	630929.1256		228.283	227.484	SE 226.643			226.23	2.5m OF 250 SSP @ 1.98%	
CB.48	SD-024 CB		5523535.4227	630896.5556		226.748	225.848	225.131	225.112		224.51	2.5m OF 250 SSP @ 1.96%	
CB.51	SD-024 CB		5523535.6000	630927.8341		226.600	225.711	225.711	225.734	224.960	224.37	5.8m OF 250 SSP @ 2.00%	
CB.52	SD-025 CB w/ BEEHIVE INLET		5523529.5950	630895.4308		226.890	225.190				224.59	5.9m OF 250 SSP @ 1.00%	
CB.53	SD-025 CB w/ BEEHIVE INLET		5523535.9071	630933.6295		227.550				225.850	225.44	5.8m OF 250 SSP @ 2.00%	
CB.71	SD-025 CB w/ BEEHIVE INLET		5523581.7469	630894.5996		228.480		SE 226.170			225.50	7.1m OF 300 SSP @ 0.99%	
CB.73	SD-025 CB w/ BEEHIVE INLET		5523594.7642	630931.0398		228.029	226.512			226.329	225.98	14.2m OF 300 SSP @ 2.00%	
CB.141	SD-024 CB		5523453.4599	630893.3263		229.066		228.253	227.426	228.014	226.97	2.4m OF 250 SSP @ 2.11%	
CB.156	SD-025 CB		5523374.2200	630966.9200		232.924				231.284	230.68	3.2m OF 250 SSP @ 1.58%	
CB.185	SD-025 CB w/ BEEHIVE INLET		5523505.8248	630894.6101		227.263			226.163		225.66	2.0m OF 250 SSP @ 2.54%	
CB.186	SD-025 CB w/ BEEHIVE INLET		5523453.5839	630891.6640		229.164			228.064		227.48	1.7m OF 250 SSP @ 3.00%	
CB.187	SD-025 CB w/ BEEHIVE INLET		5523480.0930	630926.5540		227.984				226.884	226.34	1.8m OF 250 SSP @ 2.71%	
CB.190	SD-024 CB		5523544.4200	630895.8075		226.900		SE 225.800			225.20	15.6m OF 250 SSP @ 1.00%	
CP.1	SD-023 CP		5523569.3814	630984.8371		233.330				224.898	230.78	22.6m OF 250 SSP @ 1.51%	
CP.25	SD-023 CP		5523573.7677	630899.0611		227.340			226.287		224.22	2.5m OF 300 SSP @ 1.98%	
CP.26	SD-023 CP		5523503.3162	630896.4873		227.232		225.109			224.58	2.5m OF 250 SSP @ 2.00%	
CP.27	SD-023 CP		5523396.1140	630888.7456		231.187	225.000			225.185	228.52	2.5m OF 250 SSP @ 1.99%	
CP.28	SD-023 CP		5523342.1111	630886.1030		232.459		227.064	227.329		229.79	2.5m OF 250 SSP @ 2.02%	
CP.29	SD-023 CP		5523344.0475	630919.7359		232.459		232.781			229.61	2.5m OF 250 SSP @ 1.99%	
CP.31	SD-023 CP		5523424.7940	630922.6861		230.102	226.172				227.44	2.5m OF 250 SSP @ 2.00%	
CP.32	SD-023 CP		5523477.7097	630924.6204		227.984	226.610				225.32	2.4m OF 250 SSP @ 2.04%	
CP.33	SD-023 CP		5523511.1339	630925.8410		226.876		226.026			224.22	2.5m OF 250 SSP @ 2.03%	
CP.34	SD-023 CP		5523568.2316	630927.9276		227.070	231.792				223.87	2.5m OF 300 SSP @ 1.96%	
CP.35	SD-023 CP		5523603.5331	630929.2177		228.384	231.795				225.72	2.5m OF 250 SSP @ 1.98%	
CP.39	SD-023 CP		5523364.9009	630927.4925		231.920	228.394				229.07	2.5m OF 250 SSP @ 1.96%	
CP.86	SD-023 CP		5523387.5602	630942.7042		232.330	226.300				229.24	21.8m OF 250 SSP @ 2.00%	
CP.100	SD-023 CP		5523537.9709	630896.6494		226.748	225.139				225.30	2.5m OF 250 SSP @ 1.96%	
CP.102	SD-023 CP		5523538.0983	630927.9254		226.616		235.874			225.16	2.5m OF 250 SSP @ 2.00%	
CP.103	SD-023 CP		5523533.1017	630927.7433		226.616		225.468			225.16	2.5m OF 250 SSP @ 2.00%	
CP.110	SD-023 CP		5523451.1082	630893.0452		229.153		231.070			226.40	2.4m OF 250 SSP @ 2.11%	

**WARNING**

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

1. NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2. TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS SEE PROVINCIAL REGULATION 210/72 FOR DETAILS.
3. OBTAIN EXCAVATION PERMITS PRIOR TO CONSTRUCTION.

**AECOM**  
Certificate of Authorization  
AECOM Canada Ltd.  
No. 4671 Date: \_\_\_\_\_

**METRIC**  
WHOLE NUMBERS INDICATE MILLIMETRES  
DECIMALIZED NUMBERS INDICATE METRES

<table border="1"> <tr><td>150 WM</td><td>WATER MAIN</td><td>150 WM</td><td>PIPE ABANDONMENTS</td><td>150 WM</td><td>WATER MAIN</td><td>150 WM</td></tr> <tr><td>⊕</td><td>HYDRANT</td><td>⊕</td><td>SURVEY BAR</td><td>⊕</td><td>HYDRANT</td><td>⊕</td></tr> <tr><td>⊙</td><td>VALVE</td><td>⊙</td><td>CURB STOP</td><td>⊙</td><td>VALVE</td><td>⊙</td></tr> <tr><td>300 LDS</td><td>LAND DRAINAGE SEWER</td><td>300 LDS</td><td>REDUCER</td><td>300 LDS</td><td>LAND DRAINAGE SEWER</td><td>300 LDS</td></tr> <tr><td>250 WWS</td><td>WASTE WATER SEWER</td><td>250 WWS</td><td>COUPLING</td><td>250 WWS</td><td>WASTE WATER SEWER</td><td>250 WWS</td></tr> <tr><td>---</td><td>SEWER SERVICE PIPE</td><td>---</td><td>ANODE</td><td>---</td><td>PAVEMENT CROWN</td><td>---</td></tr> <tr><td>---</td><td>DRAINAGE CONNECTION PIPE</td><td>---</td><td>HYDRO</td><td>---</td><td>N/W PROPERTY LINE</td><td>---</td></tr> <tr><td>○</td><td>MANHOLE</td><td>○</td><td>MTS</td><td>○</td><td>S/E PROPERTY LINE</td><td>○</td></tr> <tr><td>□</td><td>CATCH BASIN</td><td>□</td><td>GAS</td><td>□</td><td>N/W GUTTER</td><td>□</td></tr> <tr><td>△</td><td>CURB INLET</td><td>△</td><td>TESTHOLE</td><td>△</td><td>S/E GUTTER</td><td>△</td></tr> <tr><td>▬</td><td>CULVERT</td><td>▬</td><td>LAMP STANDARD</td><td>▬</td><td></td><td>▬</td></tr> <tr><td>EXISTING</td><td>LEGEND - PLAN</td><td>NEW</td><td>EXISTING</td><td>LEGEND - PLAN</td><td>NEW</td><td>EXISTING</td><td>LEGEND - PROFILE</td><td>NEW</td></tr> </table>	150 WM	WATER MAIN	150 WM	PIPE ABANDONMENTS	150 WM	WATER MAIN	150 WM	⊕	HYDRANT	⊕	SURVEY BAR	⊕	HYDRANT	⊕	⊙	VALVE	⊙	CURB STOP	⊙	VALVE	⊙	300 LDS	LAND DRAINAGE SEWER	300 LDS	REDUCER	300 LDS	LAND DRAINAGE SEWER	300 LDS	250 WWS	WASTE WATER SEWER	250 WWS	COUPLING	250 WWS	WASTE WATER SEWER	250 WWS	---	SEWER SERVICE PIPE	---	ANODE	---	PAVEMENT CROWN	---	---	DRAINAGE CONNECTION PIPE	---	HYDRO	---	N/W PROPERTY LINE	---	○	MANHOLE	○	MTS	○	S/E PROPERTY LINE	○	□	CATCH BASIN	□	GAS	□	N/W GUTTER	□	△	CURB INLET	△	TESTHOLE	△	S/E GUTTER	△	▬	CULVERT	▬	LAMP STANDARD	▬		▬	EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PROFILE	NEW	<p><b>UNDERGROUND STRUCTURES</b></p> <p>SUPV. U/G STRUCTURES DATE</p> <p>LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.</p>	<p>B.M. ELEV.</p>	<p align="center"><b>AECOM</b></p>	<p>ENGINEER'S SEAL PROVINCE OF MANITOBA <b>M.P.A. GAUDREAU</b> Member <b>32167</b> REGISTERED PROFESSIONAL ENGINEER</p>	<p align="center"><b>THE CITY OF WINNIPEG</b> PUBLIC WORKS DEPARTMENT</p>	<p>WAVERLEY STREET UNDERPASS AT CN MILE 3.89 RIVERS SUB CONTRACT 2: UNDERPASS STRUCTURE, RAILWORKS, ROADWORKS, LAND DRAINAGE SEWER, PUMPING STATION AND LANDSCAPING WORKS</p>	<p>CITY DRAWING NUMBER U239-2016-C2-CU-039 SHEET 39 OF 41</p>	<p>CONSULTANT DRAWING NUMBER <b>C2-CU-039</b></p>
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<p>DESIGNED BY: MPG</p> <p>DRAWN BY: KLC</p> <p>HOR. SCALE: 1:500</p> <p>VERTICAL: 1:100</p> <p>0 ISSUED FOR TENDER 17/01/09 Wjd</p> <p>NO. REVISIONS DATE BY</p>	<p>CHECKED BY:</p> <p>APPROVED BY:</p> <p>RELEASED FOR CONSTRUCTION</p> <p>CONSULTANT PROJECT NUMBER 60321148</p>	<p>LAND DRAINAGE SYSTEM STRUCTURE &amp; LOCATION SCHEDULE 5</p>																																																																																												

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