

EAST GUTTER LINE ALIGNMENT CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
PT 0+451.713	8839.124	10784.100
PC 0+455.218	8841.977	10786.135
PT 0+553.959	8934.236	10817.064

WEST GUTTER LINE ALIGNMENT CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
PT 0+414.366	8845.459	10775.218
PC 0+417.871	8848.312	10777.253
PT 0+510.152	8934.535	10806.158

CYCLE TRACK RIGHT EDGE ALIGNMENT CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
PT 0+467.270	8835.536	10789.132
PC 0+470.775	8838.389	10791.167
POC 0+516.494	8878.669	10812.513
PCC 0+525.825	8887.501	10815.519
PCC 0+553.929	8914.897	10821.646
PT 0+565.058	8925.981	10822.569
PI 0+584.901	8945.818	10823.112
PI 0+623.599	8984.514	10823.399
PI 0+691.850	9052.740	10825.269

CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C44	20.000	10.252	29°22'16"	5.241
C45	51.722	18.424	20°24'36"	9.311
C46	5.000	6.350	72°46'02"	3.684
C47	23.500	3.208	7°49'14"	1.606
C48	23.500	8.367	20°24'00"	4.228
C49	48.250	17.179	20°24'00"	8.682
C50	8.500	10.795	72°46'02"	6.263

EAST GUTTER LINE ALIGNMENT				
CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C53	185.713	75.051	23°09'17"	38.045
C55	166.760	98.741	33°55'32"	50.865

WEST GUTTER LINE ALIGNMENT				
CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C51	174.803	70.642	23°09'17"	35.810
C52	155.850	92.281	33°55'32"	47.537

CYCLE TRACK RIGHT EDGE ALIGNMENT				
CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C57	191.893	77.549	23°09'17"	39.311
C58	172.940	83.154	27°32'58"	42.397
C59	100.000	11.129	6°22'34"	5.570

CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C51	174.803	70.642	23°09'17"	35.810
C52	155.850	92.281	33°55'32"	47.537

CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C54	185.893	29.751	9°10'11"	14.907
C56	166.940	98.847	33°55'32"	50.920

CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C63	205.150	23.908	6°40'38"	11.967
C64	205.150	57.501	16°03'34"	28.940
C66	40.000	10.185	14°35'22"	5.120
C67	30.000	3.000	5°43'46"	1.501
C68	30.000	21.776	41°35'20"	11.393
C69	20.180	7.140	20°16'20"	3.608
C70	20.330	2.233	6°17'35"	1.118
C71	37.830	6.328	9°35'05"	3.172
C72	37.650	10.756	16°22'06"	5.415
C73	14.000	3.387	13°5'146"	1.702
C74	15.000	10.270	39°13'37"	5.345
C75	50.000	21.074	24°08'57"	10.696
C76	199.850	49.666	14°14'20"	24.962
C77	6.000	3.514	33°33'26"	1.809
C78	6.000	3.514	33°33'26"	1.809

WEST EDGE HYDRO PATH ALIGNMENT CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
PC 0+100.000	8760.646	10822.588
PCC 0+102.362	8762.937	10823.156
PRC 0+112.614	8773.052	10822.424
PT 0+131.040	8791.172	10819.673
PC 0+214.712	8874.812	10821.966
PT 0+221.062	8879.682	10818.580
POT 0+226.423	8881.410	10813.505

WEST EDGE HYDRO PATH ALIGNMENT				
CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C44	20.000	10.252	29°22'16"	5.241
C45	51.722	18.424	20°24'36"	9.311
C46	5.000	6.350	72°46'02"	3.684

CYCLE TRACK RIGHT EDGE ALIGNMENT CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
PI 0+730.548	9091.394	10827.103
PC 0+783.771	9144.598	10828.561
PT 0+865.900	9224.999	10814.677

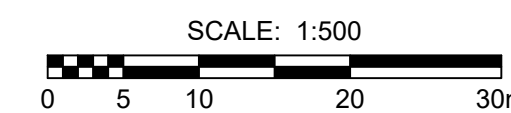
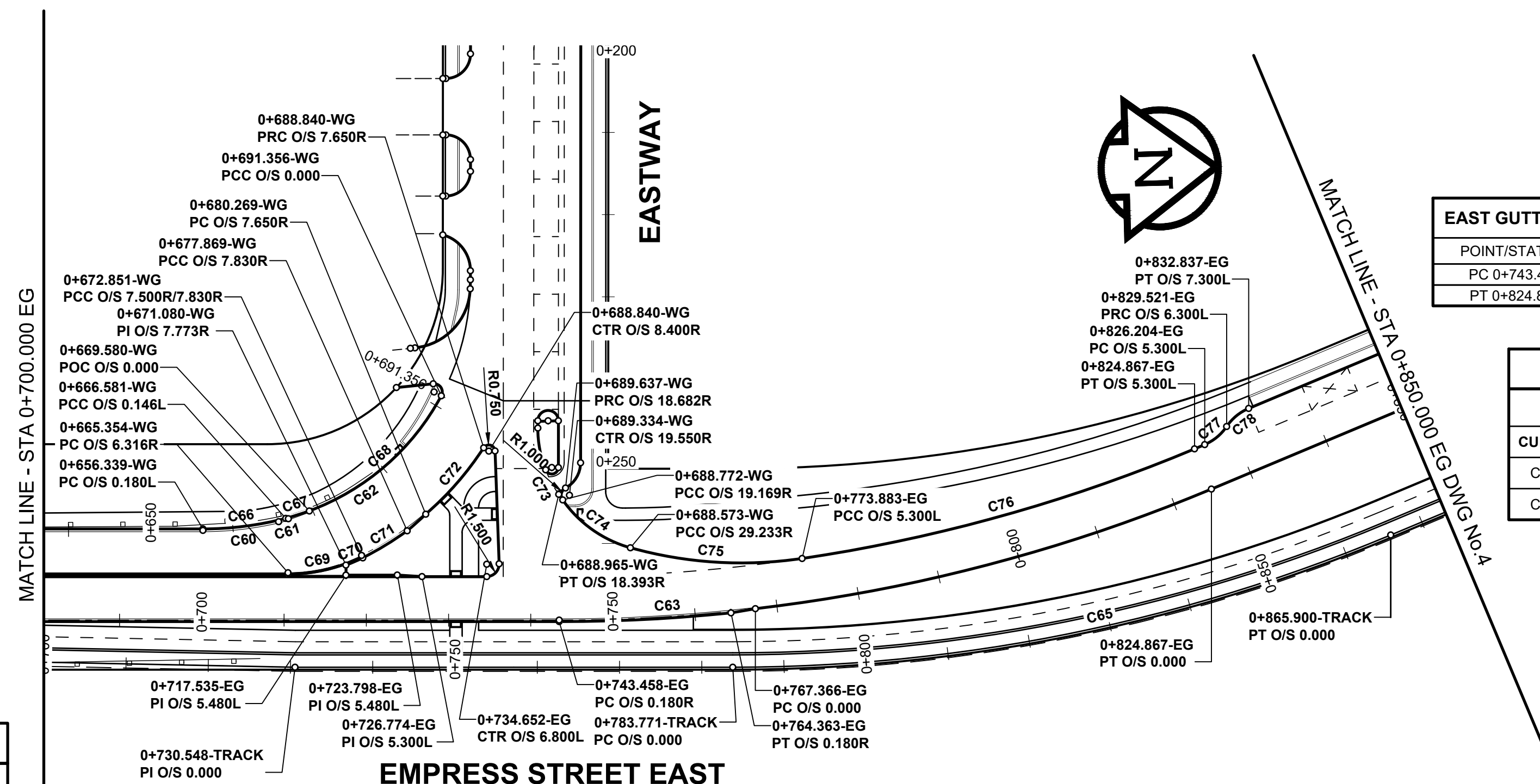
CYCLE TRACK RIGHT EDGE ALIGNMENT				
CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C65	206.964	82.129	22°44'11"	41.612

EAST GUTTER LINE ALIGNMENT CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
PC 0+743.458	9123.664	10822.257
PT 0+824.867	9203.360	10808.494

EAST GUTTER LINE ALIGNMENT				
CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C63	205.150	23.908	6°40'38"	11.967
C64	205.150	57.501	16°03'34"	28.940

WEST GUTTER LINE ALIGNMENT				
CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C60	40.180	9.286	13°14'29"	4.664
C61	10.045	1.237	7°03'14"	0.619
C62	30.000	21.776	41°35'20"	11.393

WEST GUTTER LINE ALIGNMENT CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
PC 0+656.339	9080.667	10810.164
PCC 0+665.625	9089.896	10809.348
PT 0+666.860	9091.087	10806.158
PC 0+669.580m	9093.663	10808.150
PCC 0+691.356m	9110.089	10794.589



BID OPPORTUNITY No. 602-2018

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMAL NUMBERS INDICATE METRES

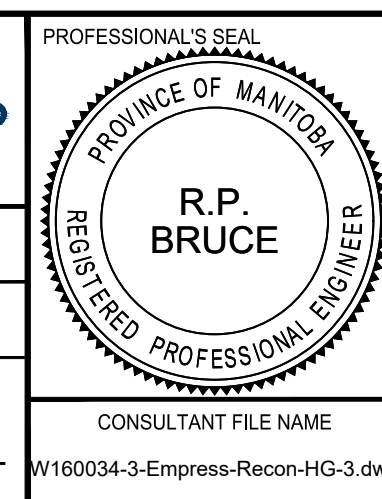
	GAS		MANHOLE		CONCRETE PAVEMENT
	MTS / PEDESTAL		CATCH BASIN / CATCH PIT		CONC SIDEWALK / MEDIAN
	HYDRO / CABINET		CURB INLET WITH BOX		ASPHALT PAVEMENT
	CATV / FIBRE OPTIC		TREE		PAVING STONE
	TRAFFIC SIGNALS / PIT		TEST HOLE		GRAVEL
	LAND DRAINAGE SEWER		PROPERTY LINE		RAMP CURB
	SANITARY/COMBINED SEWER		SURVEY BAR		PLANING / REMOVAL
	CB LEAD / SSP / DCP		FENCE		
	WATER MAIN		BOC / EDGE OF PAVEMENT		
	SUBDRAIN		ELEVATION (33.333)		
	DITCH		TRAFFIC SIGN		
	EXISTING		LEGEND - PLAN		EXISTING
	NEW		LEGEND - PLAN		NEW

LOCATION APPROVED
UNDERGROUND STRUCTURES

DATE: _____

NOTE: 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.

DESIGNED BY	WRJ	CHECKED BY	RPB
DRAWN BY	DID	APPROVED BY	BWB
RELEASED FOR CONSTRUCTION	N/A		
HOR SCALE	1:500	DATE	18/09/04
VERT SCALE	N/A	DATE	18/09/04
REVISIONS	BY DATE		



THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

EMPRESS STREET PROJECT
PAVEMENT RECONSTRUCTION
HORIZONTAL GEOMETRY
EMPRESS STREET EAST
STA 0+390.000 EG TO STA 0+850.000 EG

CITY DRAWING NUMBER: P-3494-3
SHEET 3 OF 168
DRAWING No. REV: 3 B