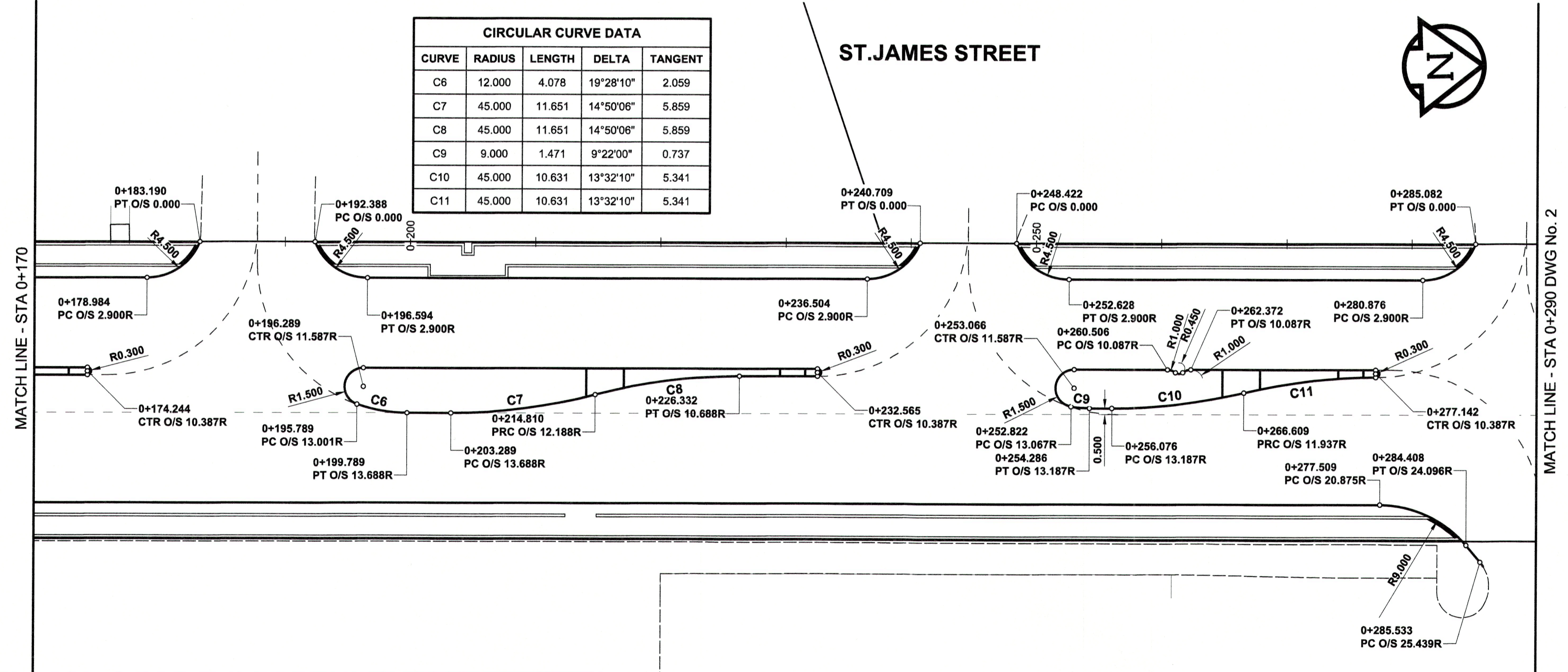


WEST PROPERTY LINE CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
POT 0+057.555	8834.840	10284.828
POT 0+981.275	9758.174	10311.523

HORIZONTAL CONTROL POINTS-PROJECT COORDINATES					NAD83 DATUM		
CONTROL POINT	LOCATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION
#1	PI OF NORTH PL PORTAGE AVE AND WEST PL OF ST JAMES ST	8877.267	10286.054	233.829	5526878.952	629182.217	-
#2	PI OF NORTH PL ST MATTHEWS AVE AND EAST PL OF ST JAMES ST	10074.860	10340.804	233.796	5528076.325	629236.934	-

NOTE: THE PROJECT DRAWINGS HAVE A SCALE FACTOR OF 1.000183543 APPLIED TO LBIS INFORMATION TO MATCH LOCAL SURVEYED PROJECT COORDINATES

CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C1	17.500	2.790	9°08'07"	1.398
C2	115.000	12.726	6°20'25"	6.369
C3	115.000	12.726	6°20'25"	6.369
C4	39.000	20.077	29°29'45"	10.266
C5	33.000	45.613	79°11'39"	27.297



CIRCULAR CURVE DATA				
CURVE	RADIUS	LENGTH	DELTA	TANGENT
C6	12.000	4.078	19°28'10"	2.059
C7	45.000	11.651	14°50'06"	5.859
C8	45.000	11.651	14°50'06"	5.859
C9	9.000	1.471	9°22'00"	0.737
C10	45.000	10.631	13°32'10"	5.341
C11	45.000	10.631	13°32'10"	5.341

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	
	GAS		MANHOLE		CONCRETE PAVEMENT		LOCATION APPROVED		BM 38-032 ELEV 234.325 m
	MTS / PEDESTAL		CATCH BASIN / CATCH PIT		CONC SIDEWALK / MEDIAN		SUPR. LIG STRUCTURES		DESIGNED BY WRJ
	HYDRO / CABINET		CURB INLET WITH BOX		ASPHALT PAVEMENT		DATE		DRAWN BY DID
	CATV / FIBRE OPTIC		TREE		PAVING STONE		NOTE:		CHECKED BY RPB
	TRAFFIC SIGNALS / PIT		TEST HOLE		GRAVEL		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.		APPROVED BY BWB
	LAND DRAINAGE SEWER		PROPERTY LINE		RAMP CURB		RELEASED FOR CONSTRUCTION		HOR SCALE 1:250
	SANITARY/COMBINED SEWER		SURVEY BAR		PLANING / REMOVAL		VERT SCALE 1:10		DATE 16/11/02
	CB LEAD / SSP / DCP		FENCE				REVISIONS		PROFESSIONAL'S SEAL
	WATER MAIN		BOC / EDGE OF PAVEMENT						R.P. BRUCE PROFESSIONAL ENGINEER
	SUBDRAIN		ELEVATION (33.333)						MORRISON HERSHFIELD
	DITCH		TRAFFIC SIGN						

PROFESSIONAL'S SEAL
PROVINCE OF MANITOBA
R.P. BRUCE
REGISTERED PROFESSIONAL ENGINEER

THE CITY OF WINNIPEG
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

2016 REGIONAL STREET RENEWAL PROGRAM
ST. JAMES STREET RECONSTRUCTION
PORTAGE AVENUE TO MAROONS ROAD
HORIZONTAL GEOMETRY
STA 0+040 TO STA 0+290

CITY DRAWING NUMBER P-3475-1
SHEET 1 OF 13
DRAWING No. 1 REV 0

APEGM
Certificate of Authorization
MORRISON HERSHFIELD
No. 1736
BID OPPORTUNITY No. 19-2016