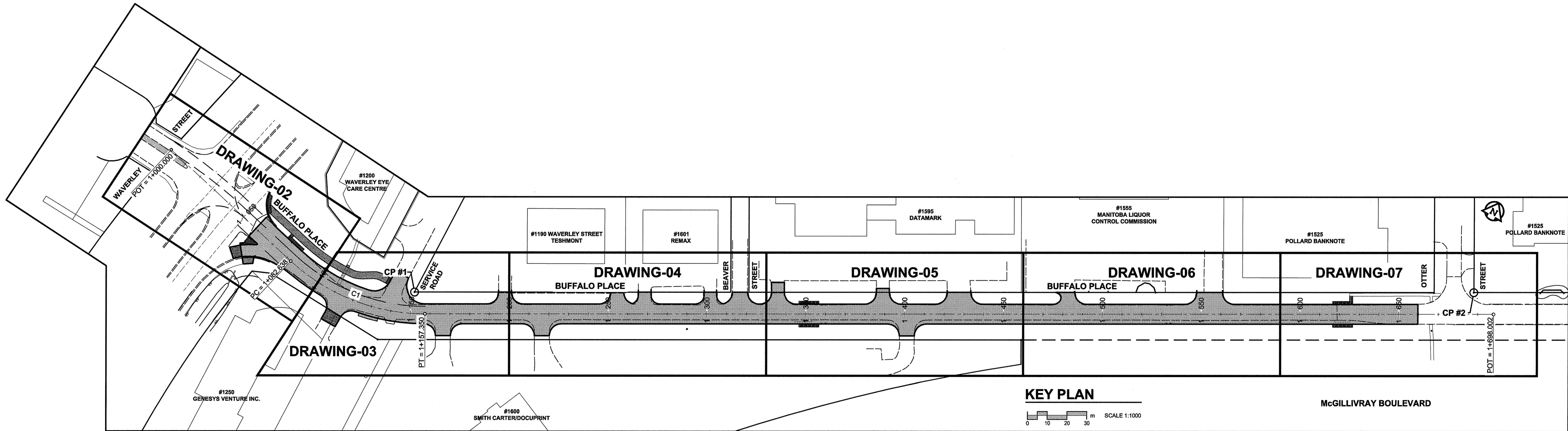


ABBREVIATIONS - GENERAL		CRESCENT		CRESC		FENCE		FNCE		ON CENTER		RIGHT		RGHT	
ABANDON (ED)	ABAN	CROSS SECTION	XSEC	FORCEMAIN	FRM	ORIGINAL GROUND	O/C	RIGHT-OF-WAY	ROW	SEWER SERVICE PIPE	SSP	SHOULDER	SHLDR	SEWER SERVICE PIPE	SSP
APPROXIMATE	APROX	CURB & GUTTER INLET	C & GI	FRAME & COVER	FRME & CVR	OUTSIDE DIAMETER	OD	SHOULDER	SHLDR	SHOULDER	SHLDR	SIDEWALK	PCC	SIDEWALK	PCC
ASPHALT	ASPH	CURB INLET	CI	GEODETIC BENCH MARK	GBM	PAVEMENT	PAVT	SOUTH	S	POINT OF COMPOUND CURVE	PCC	STANDARD	PI	SOUTH	S
AVENUE	AVE	CURB	CRB	GATE VALVE	GV	POINT OF CURVE	PC	STANDARD	PI	POINT OF INTERSECTION	PI	STATION	STA	STANDARD	STD
BEGINNING OF CURVE	BC	DEGREE	DEG	GRASS	GRSS	POINT OF VERTICAL CURVE	PVC	STATION	STA	PI OF VERTICAL CURVE	PVC	STORM RELIEF SEWER	SRS	STATION	STA
BEGINNING OF VERTICAL CURVE	BVC	DETOUR	DET	GRAVEL	GRVL	POINT OF REVERSE CURVE	PRC	STREET	ST	POINT OF TANGENT	PT	STORM RELIEF SEWER	SRS	STREET	ST
BACK OF CURB	BOC	DIAMETER	DIA	HIGHWAY	HWY	POINT OF VERTICAL INTERSECTION	PVI	SWALE	SWL	POINT OF TANGENT	PT	STREET	ST	SWALE	SWL
BOTTOM	BOT	DRAINAGE CONNECTION PIPE	DCP	HORIZONTAL	HORZ	POINT OF CURVE	POC	SYMMETRICAL	SYM	POINT OF VERTICAL INTERSECTION	PVI	STREET	ST	SYMMETRICAL	SYM
BOULEVARD	BLVD	DRAWING	DWG	HYDRANT	HYD	POINT ON TANGENT	POT	TANGENT	TAN	POINT ON VERTICAL CURVE	PVC	TAPER	TPR	TANGENT	TAN
BUILDING	BLDG	EAST	E	HYDRO	H	POINT ON VERTICAL CURVE	PVC	TAPER	TPR	PROPERTY LINE	PL	TRAFFIC SIGNAL	TS	TAPER	TPR
CATCH BASIN	CB	EDGE OF PAVEMENT	EOPAVT	INVERT ELEVATION	INV EL	PROPOSED	PROP	TRAFFIC SIGNAL	TS	RADIUS	R	VERTICAL CURVE	VC	TRAFFIC SIGNAL	TS
CATCH PIT	CP	ELEVATION	EL	IRON BAR	IB	RED LIGHT CAMERA	RLC	VERTICAL CURVE	VC	PROPOSED	PROP	WASTE WATER SEWER	WWS	TRAFFIC SIGNAL	TS
CENTER LINE	CL	END OF CURVE	EC	JUNCTION	JCT	REINFORCED CONCRETE	RC	WASTE WATER SEWER	WWS	RADIUS	R	WATERMAIN	WM	WASTE WATER SEWER	WWS
CENTER RADIUS	CTR	END OF TAPER	ET	LAND DRAINAGE SEWER	LDS	REINFORCE (-D)	REINF	WATERMAIN	WM	REINFORCED CONCRETE	RC	WEST	W	WATERMAIN	WM
CHECKED	CHKD	END OF VERTICAL CURVE	EVC	LENGTH OF VERTICAL CURVE	LVC	REVISED/REVISION	REV	WEST	W	REINFORCE (-D)	REINF			WEST	W
COMBINED SEWER	CS	ENTRANCE	ENT	LEFT	LFT					RADIUS	R				
CONCRETE	CONC	EQUALLY SPACED	ES	MANHOLE	MH					REINFORCED CONCRETE	RC				
COORDINATE	COORD	EXCAVATION	EXC	MAXIMUM	MAX					REINFORCE (-D)	REINF				
CORRUGATED STEEL/METAL PIPE	CSP/CMP	EXISTING	EXST	MONUMENT	MON					REVISED/REVISION	REV				
		FEEDERMAIN	FM	NORTH	N										



SURVEY BAR-HORIZONTAL CONTROL POINTS-PROJECT COORDINATES				NAD83 DATUM			
CONTROL POINT	LOCATION	NORTHING	EASTING	ELEVATION	NORTHING	EASTING	ELEVATION
#1	IB @ Pt of PL's @ NE CRN OF BUFFALO PLACE AND SERVICE ROAD	10000.010	10000.004	232.445	5521727.270	630938.952	-
#2	IB @ Pt of PL's @ NE CRN OF BUFFALO PLACE AND OTTER STREET	10260.053	10468.642	232.784	5521987.246	631407.420	-

NOTE: THE PROJECT DRAWINGS HAVE A SCALE FACTOR OF 1.000338 APPLIED TO LBIS INFORMATION TO MATCH LOCAL SURVEYED PROJECT COORDINATES

GEODETIC BENCHMARK-VERTICAL CONTROL POINTS		
GBM	LOCATION	ELEVATION
65-006	TBLT IN S WALL OF UMA ENGINEERING LTD #1479 BUFFALO PLACE 4.1m W of SE COR OF BLDG & 0.6m BELOW BLACK BRICKWORK	233.588m
65-008	TBLT IN 7.6 CONC PILE, 4.9m S OF CL OF PAVT OF BUFFALO PL AND 0.6m W OF CL OF E WAVERLEY ST SERVICE RD	232.295m

BUFFALO PLACE CENTERLINE-GEOMETRIC CONTROL POINT COORDINATES		
POINT/STATION	NORTHING	EASTING
POT 1+000.000	10002.956	9857.352
PC 1+082.638	9983.270	9937.611
PT 1+157.350	9992.951	10009.953
POT 1+698.002	10255.274	10482.701

CIRCULAR CURVE DATA				
CURVE	LENGTH	RADIUS	DELTA	TANGENT
C1	74.712	100.000	42°48'25"	39.197

DRAWING LIST

No.	CITY DWG No.	REV.	DESCRIPTION
00	N/A	0	COVER SHEET AND LOCATION PLAN
01	N/A	0	ABBREVIATIONS, KEY PLAN, DRAWING LIST, HORIZONTAL AND VERTICAL CONTROL, GEOMETRIC LAYOUT
02	N/A	0	HORIZONTAL AND VERTICAL ALIGNMENT-WAVERLEY STREET TO STA 1+100
03	N/A	0	HORIZONTAL AND VERTICAL ALIGNMENT-STA 1+100 TO STA 1+200
04	N/A	0	HORIZONTAL AND VERTICAL ALIGNMENT-STA 1+200 TO STA 1+330
05	N/A	0	HORIZONTAL AND VERTICAL ALIGNMENT-STA 1+330 TO STA 1+460
06	N/A	0	HORIZONTAL AND VERTICAL ALIGNMENT-STA 1+460 TO STA 1+590
07	NA	0	HORIZONTAL AND VERTICAL ALIGNMENT-STA 1+590 TO OTTER STREET
08	NA	0	TRAFFIC STAGING, STAGES I & II

LOCATION APPROVED
 UNDERGROUND STRUCTURES
 SUPR. UG STRUCTURES COMMITTEE
 DATE: April 29/08

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.

NO.	ISSUED FOR CONSTRUCTION	DATE	BY
0	ISSUED FOR CONSTRUCTION	08/04/25	DID
	REVISIONS	YYMMDD	BY

DESIGNED BY		CHECKED BY	
RPB	JGK		
DRAWN BY		APPROVED BY	
DID	BWB		
HOR. SCALE		VERT. SCALE	
AS SHOWN	AS SHOWN		
DATE		DATE	
08/04/25	APR. 29/08		

PROFESSIONAL'S SEAL
 R. P. BRUCE
 REGISTERED PROFESSIONAL ENGINEER
 CONSULTANT DRAWING NO.
 0265-403-00_01-CT1001_RX.dwg

UMA | AECOM

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THE CITY OF WINNIPEG
 PUBLIC WORKS DEPARTMENT
 TRANSPORTATION ENGINEERING DIVISION

BUFFALO PLACE
 WAVERLEY STREET TO OTTER STREET
 STREET RECONSTRUCTION
 ABBREVIATIONS, KEY PLAN, DRAWING LIST,
 HORIZONTAL AND VERTICAL CONTROL,
 GEOMETRIC LAYOUT

CITY DRAWING NUMBER: N/A
 SHEET 1 OF 8
 DRAWING No. 01
 REV 0

BID OPPORTUNITY NO. 159-2008

APECM
 Certificate of Authorization
 UMA Engineering Ltd. (MB)
 No. 256 Date: April 25/08

METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES