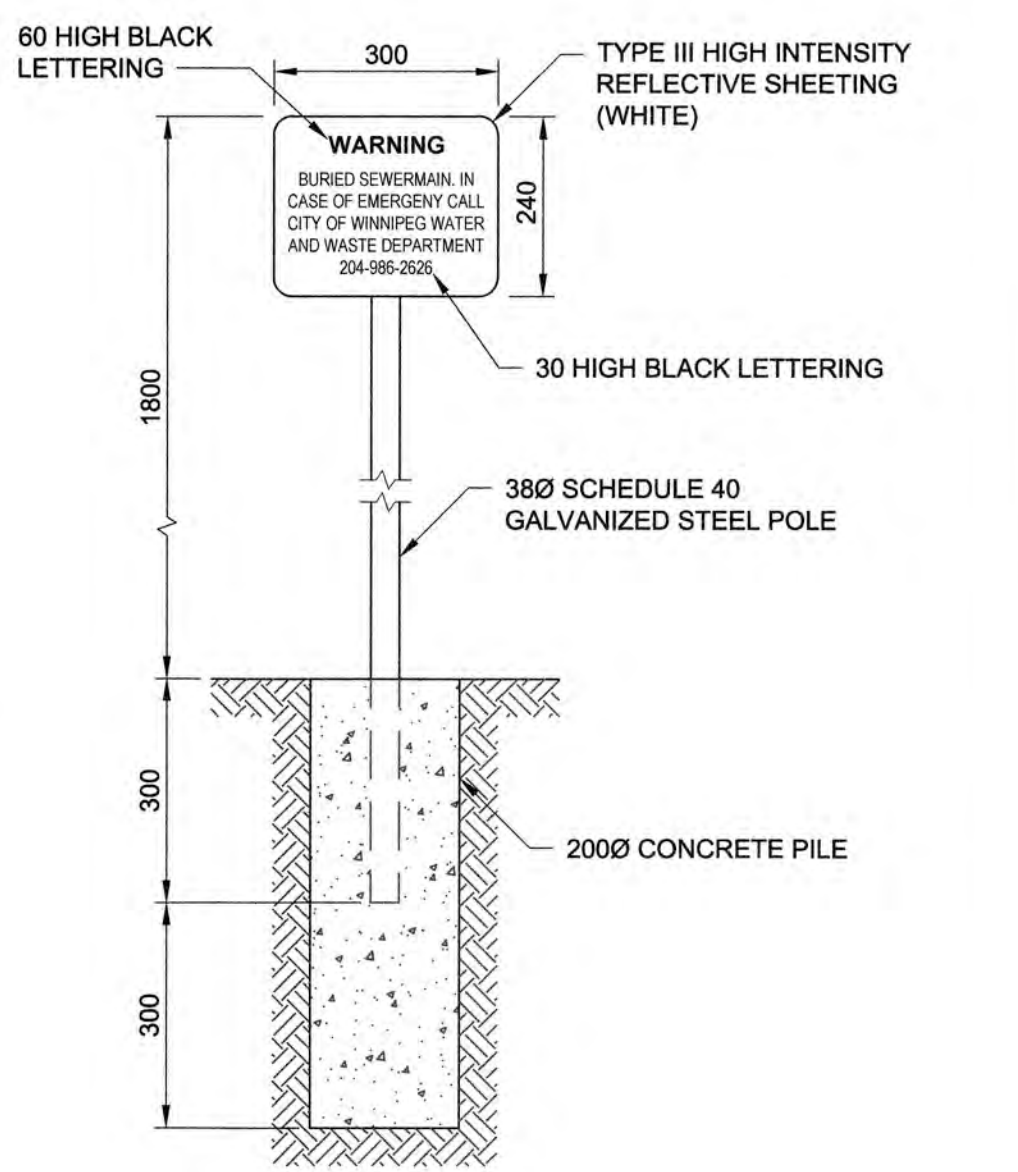
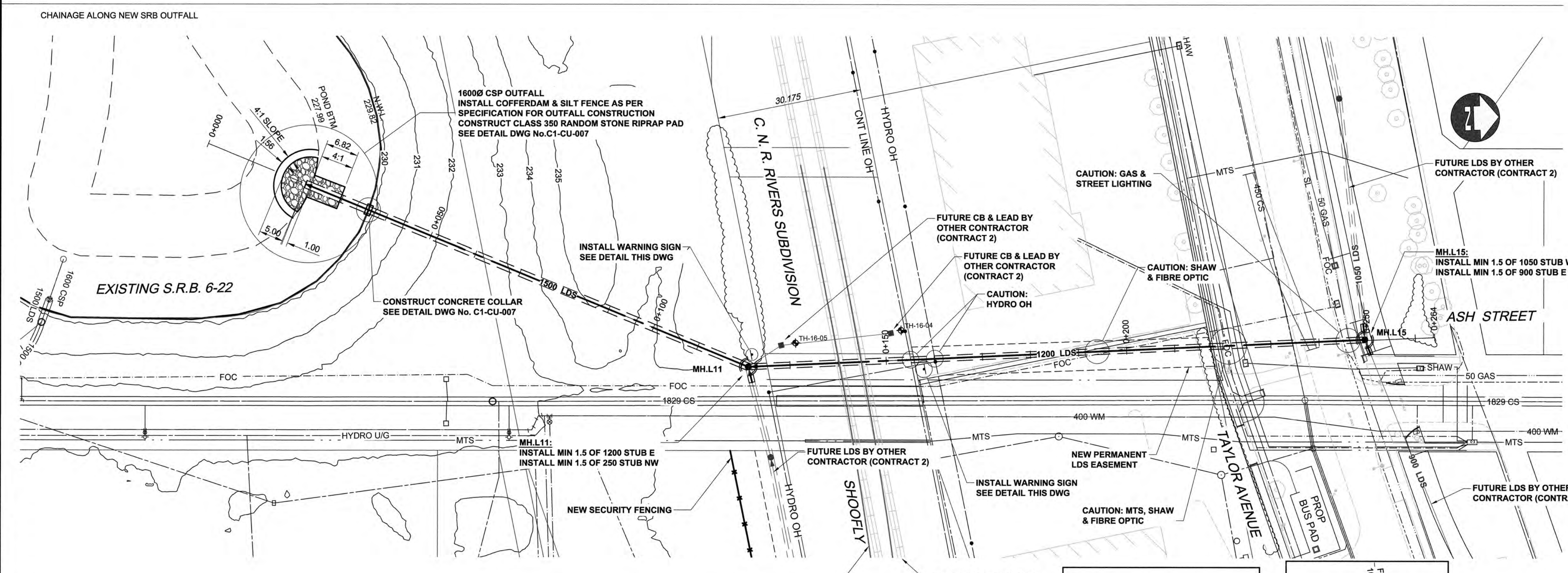


1200 LDS CROSSING

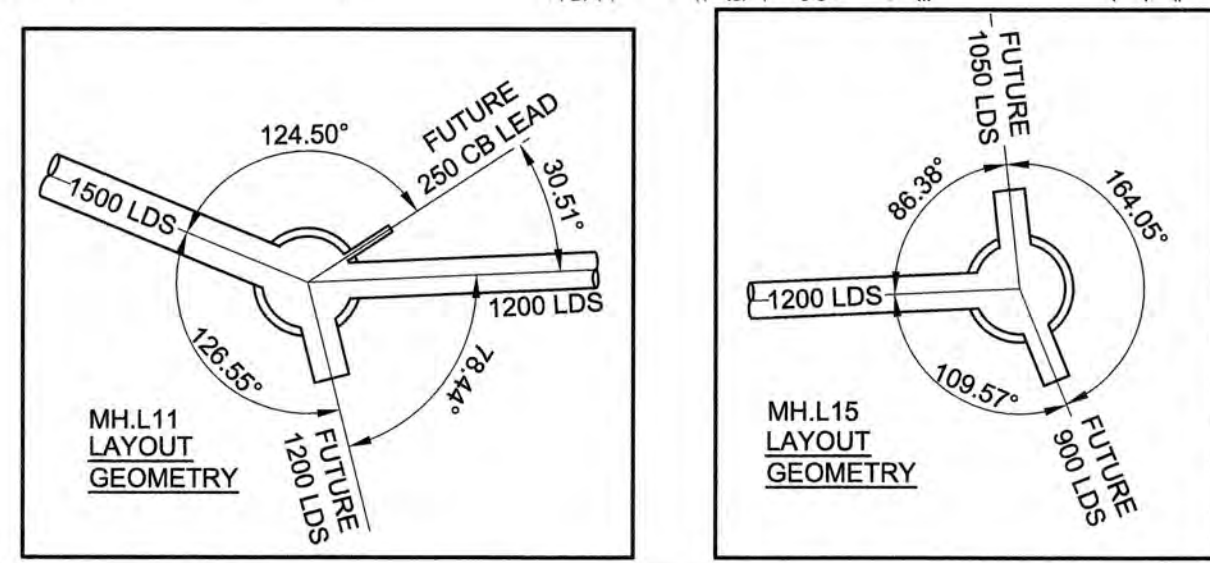
RAIL CROSSING NOTES	
RAILWAY MILEAGE AND SUBDIVISION	MAIN LINE - RIVERS SUBDIVISION - MILE 4.15
NAME OF PIPELINE OWNER	CITY OF WINNIPEG, WATER AND WASTE DEPARTMENT
CONTENTS TO BE HANDLED	LAND DRAINAGE SEWER
MAXIMUM OPERATING PRESSURE	25 kPa - SURCHARGED GRAVITY FLOW
MAXIMUM SURGE AND TEST PRESSURE	N/A
MAXIMUM OPERATING TEMPERATURE	ATMOSPHERIC
MINIMUM OPERATING TEMPERATURE	N/A
PIPING MATERIALS	CARRIER
NOMINAL DIAMETER	1200 mm
OUTSIDE DIAMETER	1473 mm
MATERIAL SPECIFICATION AND GRADE	REINFORCED CONCRETE ASTM C76 CLASS 5
WALL THICKNESS	127 mm
TYPE OF JOINT	RUBBER GASKET BELL AND SPIGOT
COATING	N/A
METHOD OF INSTALLATION	TRENCHLESS - CONCRETE PIPE TO BE JACKED WITH NO SOIL REMOVAL AHEAD OF PIPE
VENTS	N/A NUMBER N/A
SEALS	N/A HEIGHT ABOVE GROUND N/A
BURY	N/A BOTH ENDS N/A
	N/A TYPE N/A
	N/A BASE OF RAIL TO TOP OF CARRIER 4.9 m
	N/A NOT BENEATH TRACKS 3.0 m
	N/A ROADWAY DITCHES 3.4 m
	N/A BASE OF RAIL TO BOTTOM OF JACKING/RECEIVING PITS 7.3 m
EXTENT OF CASING MEASURED PERPENDICULAR TO CENTRELINE OF TRACK	N/A
ANGLE OF PIPE / TRACK CROSSING	81°
DIRECTION OF FLOW	NORTH TO SOUTH
CENTRELINE OF TRACK TO FACE OF JACKING/RECEIVING PITS	16.0 m
TYPE, SIZE AND SPACING OF INSULATORS OR SUPPORTS	N/A
CATHODIC PROTECTION	N/A
GEOTECHNICAL BOREHOLES	N/A
SOIL TYPE	SEE PROFILE
BASE OF RAIL TO GROUND WATER	CLAY 3.4m to 3.8m
NOTE: INSTALLATION AND MAINTENANCE TO BE IN ACCORDANCE WITH TC E10	



1 DETAIL
WARNING SIGN
0 250 500 mm
1:10

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.

STRUCTURE LOCATION TABLE						
STRUCTURE NAME	NORTHING	EASTING	BASE DIAM.	BASE HT.	TRANSITION SLAB	STUB DIAM. C/W PLUG
MHL 11	5523487.015	630508.647	3050	3600	3050 x 1200	1200/250
MHL 15	5523615.225	630506.807	3050	2400	3050 x 1200	1050/900
OUTFALL	5523396.28	630468.009			AS DETAILED	



METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES



150 WM		150 WWS		PIPE ABANDONMENTS		150 WM		150 WWS		UNDERGROUND STRUCTURES	
HYDRANT	+	VALVE	+	SURVEY BAR	+	HYDRANT	+	VALVE	+	U/G STRUCTURES	DATE
LAND DRAINAGE SEWER	300 LDS	WASTE WATER SEWER	250 WWS	CURB STOP	X	LAND DRAINAGE SEWER	300 LDS	WASTE WATER SEWER	250 WWS		
SEWER SERVICE PIPE	SSP	SEWER SERVICE PIPE	SSP	REDUCER	+	PAVEMENT CROWN	+	PAVEMENT CROWN	+		
DRAINAGE CONNECTION PIPE	+	DRAINAGE CONNECTION PIPE	+	COUPLING	X	N/W PROPERTY LINE	+	N/W PROPERTY LINE	+		
MANHOLE	○	MANHOLE	○	ANODE	+	S/E PROPERTY LINE	+	S/E PROPERTY LINE	+		
CATCH BASIN	□	CATCH BASIN	□	HYDRO	+	N/W GUTTER	+	N/W GUTTER	+		
CURB INLET	△	CURB INLET	△	MTS	+	S/E GUTTER	+	S/E GUTTER	+		
CULVERT	▭	CULVERT	▭	GAS	+						
EXISTING	LEGEND - PLAN	NEW	LEGEND - PLAN	NEW	LEGEND - PROFILE	EXISTING	LEGEND - PROFILE	NEW	LEGEND - PROFILE		

AECOM		ENGINEER'S SEAL PROVINCE OF MANITOBA M.P.A. GAUDREAU Member 32107 REGISTERED PROFESSIONAL ENGINEER	
DESIGNED BY	MRP	CHECKED BY	[Signature]
DRAWN BY	KLC	APPROVED BY	[Signature]
HOR. SCALE	1:500	RELEASED FOR CONSTRUCTION	[Signature]
VERTICAL	1:100	CONSULTANT PROJECT NUMBER	60321148
NO. REVISIONS		ISSUED FOR TENDER	16/10/17 WJD
		DATE	BY

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT		CITY DRAWING NUMBER	U239-2016-C1-CU-004
WAVERLEY STREET UNDERPASS AT CN MILE 3.89 RIVERS SUB CONTRACT 1: PRELIMINARY UNDERGROUND WORKS AND SECURITY FENCING		SHEET	6 OF 9
SRB OUTFALL - PLAN/PROFILE EXISTING SRB TO TAYLOR AVENUE		CONSULTANT DRAWING NUMBER	C1-CU-004

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