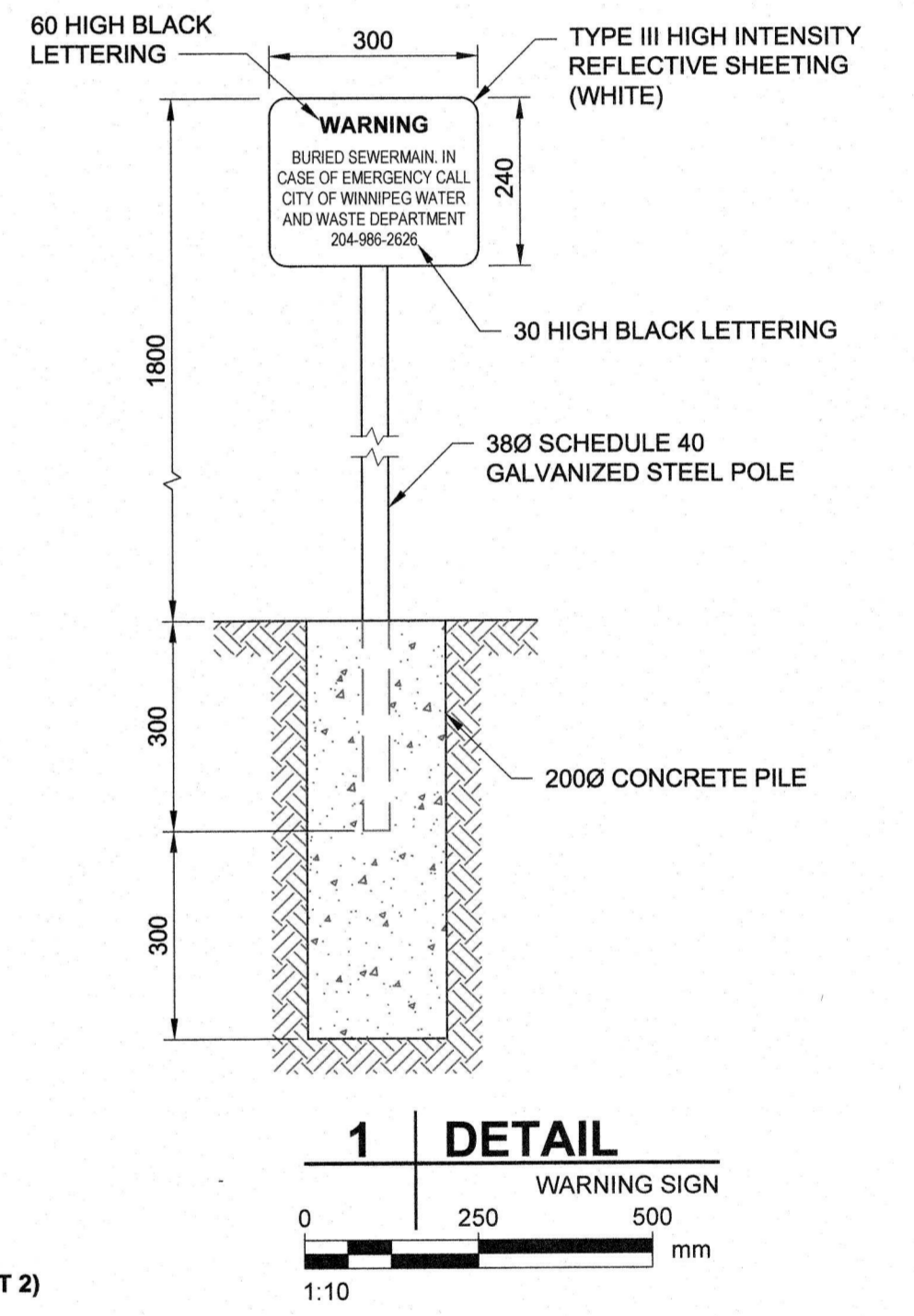
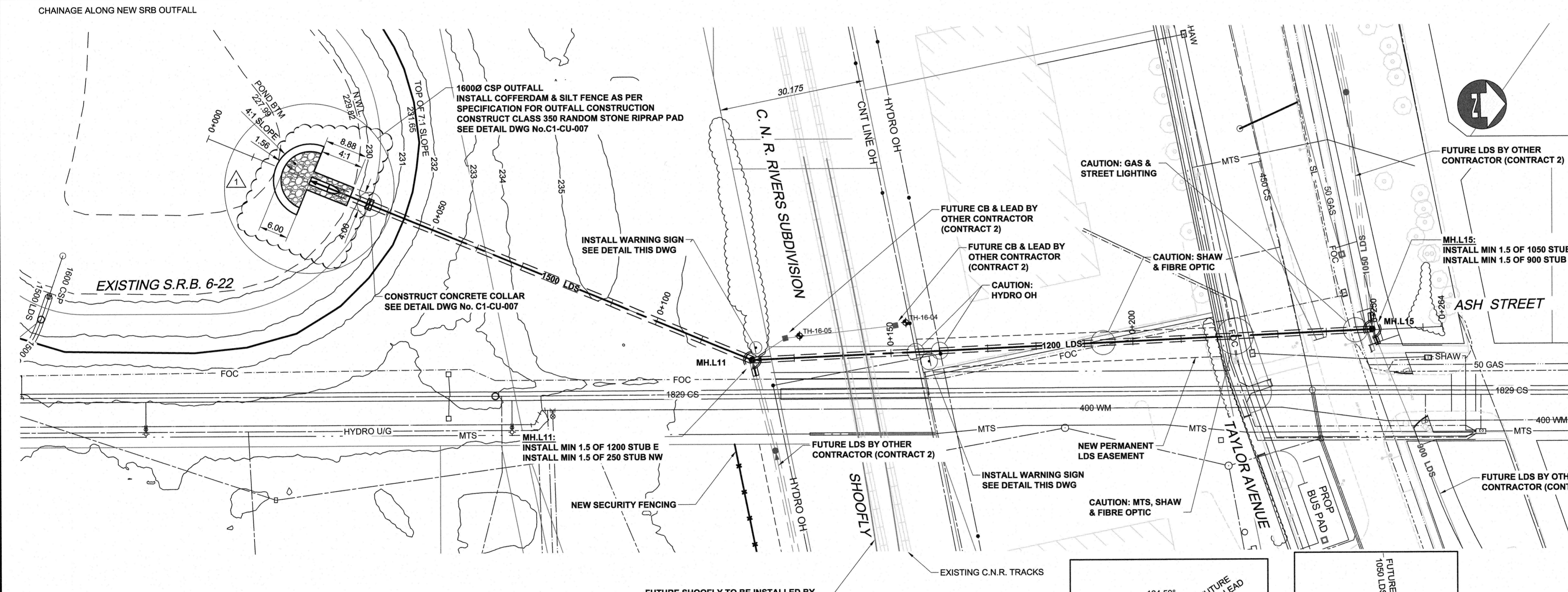


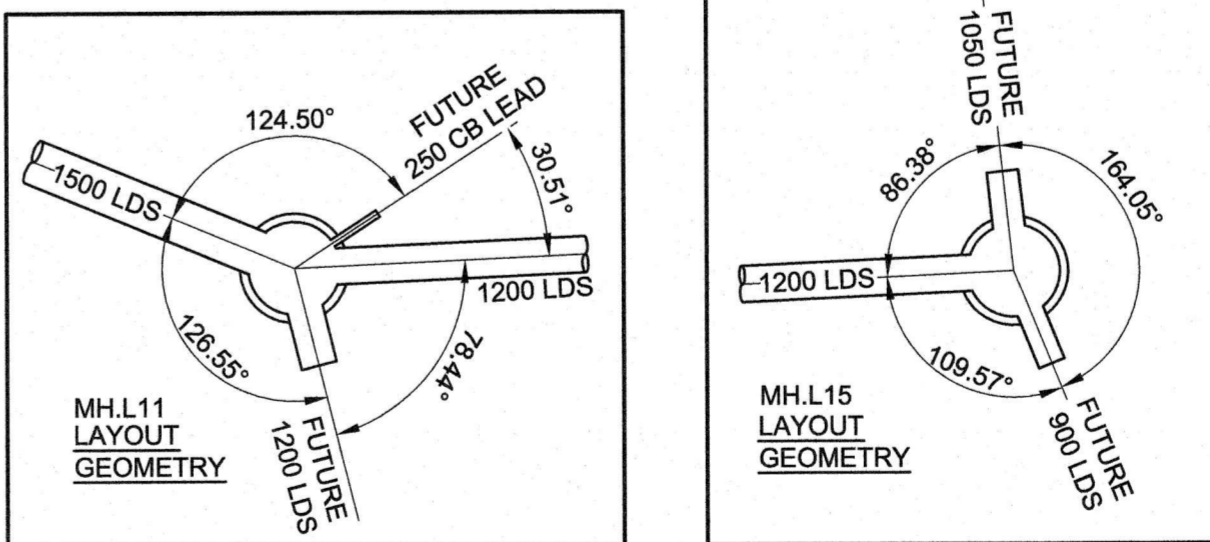
1200 LDS CROSSING

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		
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		
NOMINAL DIAMETER	1200 mm	
OUTSIDE DIAMETER	1473 mm	
MATERIAL	REINFORCED CONCRETE	
SPECIFICATION AND GRADE	ASTM C76 CLASS 5	
WALL THICKNESS		
RUBBER GASKET	127 mm	
BELL AND SPIGOT	N/A	
COATING		
TRENCHLESS - CONCRETE PIPE TO BE JACKED WITH NO SOIL REMOVAL AHEAD OF PIPE		
VENTS		
N/A	NUMBER	N/A
SEALS		
BOTH ENDS	N/A	
TYPE	N/A	
BURY		
BASE OF RAIL TO TOP OF CARRIER	4.9 m	
NOT BENEATH TRACKS	3.0 m	
ROADWAY DITCHES	3.4 m	
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		
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		



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 NAME	NORTHING	EASTING	BASE DIAM.	BASE HT.	TRANSITION SLAB	STUB DIAM. C/W PLUG
MH.L. 11	5523487.015	630508.647	3050	3600	3050 x 1200	1200/250
MH.L. 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	WATER MAIN	150 WM	PIPE ABANDONMENTS	150 WM	WATER MAIN	150 WM
HYDRANT	HYDRANT	SURVEY BAR	SURVEY BAR	HYDRANT	HYDRANT	HYDRANT
VALVE	VALVE	CURB STOP	CURB STOP	VALVE	VALVE	VALVE
300 LDS	LAND DRAINAGE SEWER	REDUCER	REDUCER	300 LDS	LAND DRAINAGE SEWER	300 LDS
250 WWS	WASTE WATER SEWER	COUPLING	COUPLING	250 WWS	WASTE WATER SEWER	250 WWS
SEWER SERVICE PIPE	SEWER SERVICE PIPE	ANODE	ANODE	PAVEMENT CROWN	PAVEMENT CROWN	PAVEMENT CROWN
DRAINAGE CONNECTION PIPE	DRAINAGE CONNECTION PIPE	HYDRO	HYDRO	N/W PROPERTY LINE	N/W PROPERTY LINE	N/W PROPERTY LINE
MANHOLE	MANHOLE	MTS	MTS	S/E PROPERTY LINE	S/E PROPERTY LINE	S/E PROPERTY LINE
CATCH BASIN	CATCH BASIN	GAS	GAS	N/W GUTTER	N/W GUTTER	N/W GUTTER
CURB INLET	CURB INLET	TESTHOLE	TESTHOLE	S/E GUTTER	S/E GUTTER	S/E GUTTER
CULVERT	CULVERT	LAMP STANDARD	LAMP STANDARD			
EXISTING	LEGEND - PLAN	NEW	EXISTING	LEGEND - PLAN	NEW	EXISTING

UNDERGROUND STRUCTURES	B.M. ELEV.
SUPV. U/G STRUCTURES	DATE

NO.	REVISIONS	DATE	BY
1	ISSUED FOR ADDENDUM 2	20/10/26	MRP
0	ISSUED FOR TENDER	18/10/17	WJd

AECOM

DESIGNED BY: MRP
CHECKED BY: [Signature]
DRAWN BY: KLC
APPROVED BY: [Signature]

HOR. SCALE: 1:500
VERTICAL: 1:100

RELEASED FOR CONSTRUCTION

DATE: [Blank]

CONSULTANT PROJECT NUMBER: 60321148

THE CITY OF WINNIPEG PUBLIC WORKS DEPARTMENT

WAVERLEY STREET UNDERPASS AT CN MILE 3.89 RIVERS SUB
CONTRACT 1: PRELIMINARY UNDERGROUND WORKS AND SECURITY FENCING

CITY DRAWING NUMBER: U239-2016-C1-CU-004
SHEET: 6 OF 9
CONSULTANT DRAWING NUMBER: C1-CU-004

SRB OUTFALL - PLAN/PROFILE
LDS
EXISTING SRB TO TAYLOR AVENUE

P:\60321148\60321148-Work\9100-DD_040\200-SHEETS\Municipal\163535-C1-CO-CU-SRB-Ash-001.dwg