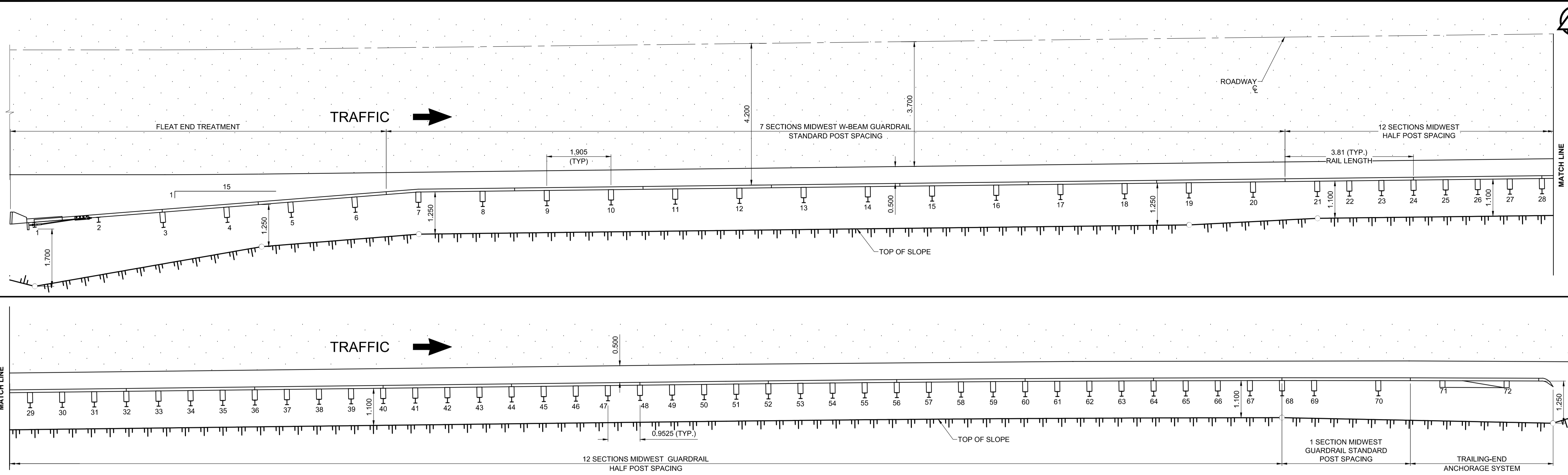


ISO A1 - 594mm x 841mm
 M:\Proj\160966\09_Drawing\05_Sheets\Detailed\Design\160966-GRDL-13 TO 15.dwg
 Last Saved: 9/13/2017 10:35 AM by mshabbir
 Plotted: 9/13/2017 2:18 PM by Dave Lane



SOUTH GUARDRAIL LAYOUT PLAN
 1:100

SOUTH GUARDRAIL CENTRE OF POST LAYOUT TABLE		
POST #	STATION	OFFSET
1	0+243.396	5.175 R
2	0+245.282	5.027 R
3	0+247.192	5.189 R
4	0+249.079	5.051 R
5	0+250.967	4.917 R
6	0+252.857	4.789 R
7	0+254.732	4.663 R
8	0+256.637	4.663 R
9	0+258.542	4.663 R
10	0+260.447	4.663 R
11	0+262.352	4.663 R
12	0+264.257	4.663 R
13	0+266.162	4.663 R
14	0+268.067	4.663 R
15	0+269.972	4.663 R
16	0+271.877	4.663 R
17	0+273.782	4.663 R
18	0+275.687	4.663 R
19	0+277.592	4.663 R
20	0+279.497	4.663 R
21	0+281.402	4.663 R
22	0+282.355	4.663 R
23	0+283.307	4.663 R
24	0+284.260	4.663 R

SOUTH GUARDRAIL CENTRE OF POST LAYOUT TABLE		
POST #	STATION	OFFSET
25	0+285.212	4.663 R
26	0+286.165	4.663 R
27	0+287.117	4.663 R
28	0+288.070	4.663 R
29	0+289.022	4.663 R
30	0+289.975	4.663 R
31	0+290.927	4.663 R
32	0+291.880	4.663 R
33	0+292.832	4.663 R
34	0+293.785	4.663 R
35	0+294.737	4.663 R
36	0+295.690	4.663 R
37	0+296.642	4.663 R
38	0+297.595	4.663 R
39	0+298.547	4.663 R
40	0+299.500	4.663 R
41	0+300.452	4.663 R
42	0+301.405	4.663 R
43	0+302.357	4.663 R
44	0+303.310	4.663 R
45	0+304.262	4.663 R
46	0+305.215	4.663 R
47	0+306.167	4.663 R
48	0+307.120	4.663 R

SOUTH GUARDRAIL CENTRE OF POST LAYOUT TABLE		
POST #	STATION	OFFSET
49	0+308.072	4.664 R
50	0+309.025	4.665 R
51	0+309.978	4.663 R
52	0+310.934	4.663 R
53	0+311.889	4.663 R
54	0+312.845	4.663 R
55	0+313.800	4.663 R
56	0+314.756	4.663 R
57	0+315.711	4.663 R
58	0+316.667	4.663 R
59	0+317.622	4.663 R
60	0+318.578	4.663 R
61	0+319.533	4.663 R
62	0+320.489	4.663 R
63	0+321.444	4.663 R
64	0+322.400	4.663 R
65	0+323.356	4.663 R
66	0+324.311	4.663 R
67	0+325.267	4.663 R
68	0+326.222	4.663 R
69	0+327.178	4.663 R
70	0+329.089	4.663 R
71	0+330.994	4.383 R
72	0+332.905	4.383 R

BILL OF MATERIALS - GUARDRAIL - SOUTH SIDE		
DESIGNATOR	QUANTITY	DESCRIPTION
MIDWEST W-BEAM GUARDRAIL SYSTEM		
FBB01	160	GUARDRAIL SPLICE BOLTS (38mm) AND NUTS
FBB06	64	GUARDRAIL POST BOLTS (356mm) AND NUTS
FWC16a	64	ROUND WASHER
-	64	NEOPRENE BLOCKOUT (305 x 356 x 152mm)
PWE06	64	WIDE-FLANGE GUARDRAIL POST (W 150 x 14 x 1830mm)
RWM04a	20	W-BEAM RAIL (4-SPACE)
-	64	16D NAIL, GALVANIZED
TRAILING-END ANCHORAGE SYSTEM		
FBB01	8	GUARDRAIL SPLICE BOLTS (38mm) AND NUTS
FBB03	2	GUARDRAIL POST BOLTS (255mm) AND NUTS
FBX16a	2	HEX HEAD BOLT (254mm) AND NUT
FBX16a	8	HEX HEAD BOLT (38mm) AND NUT
FBX22a	2	HEX HEAD BOLT (191mm) AND NUT
FCA01	1	BCT ANCHOR CABLE ASSEMBLY
FMM02	1	BCT POST SLEEVE
FPA01	1	ANCHOR BRACKET ASSEMBLY
FPB01	1	BCT BEARING PLATE
FWC16a	22	ROUND WASHER
FWC22a	4	ROUND WASHER
PDF01	2	BCT TIMBER POST (140 x 190 x 1080 mm)
PTE06	2	FOUNDATION TUBE
RWE01a	1	W-BEAM FLARED END SECTION
RWM14a	1	BCT TERMINAL RAIL SECTION
PFP02	1	STRUT AND YOKE ASSEMBLY
END TREATMENT		
-	1	FLEAT TERMINAL MIDWEST GUARDRAIL SYSTEM; STEEL POSTS (FLEAT-SP-MGS)

- NOTES:
- SPLICES TO BE LAPPED IN THE DIRECTION OF TRAFFIC
 - REFER TO AASHTO-AGC-ARTBA JOINT COMMITTEE TASK FORCE 13 'A' GUIDE TO STANDARDIZED HIGHWAY BARRIER FOR DESIGNATOR SPECIFICATIONS.
 - REFER TO MANUFACTURERS INSTALLATION MANUAL FOR FLEAT TERMINAL DETAILS.



METRIC
 WHOLE NUMBERS INDICATE MILLIMETRES
 DECIMALIZED NUMBERS INDICATE METRES

LOCATION APPROVED
 UNDERGROUND STRUCTURES

SUPR. U/G STRUCTURES COMMITTEE 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.

NO.	ISSUED FOR TENDER	DATE	BY
0	ISSUED FOR TENDER	17/09/15	JGK
	REVISIONS	YYMMDD	BY

MORRISON HERSHFIELD

DESIGNED BY: JGK
 CHECKED BY: DAN
 DRAWN BY: MS
 APPROVED BY: SAL

HOR SCALE: AS SHOWN
 VERT SCALE: AS SHOWN

RELEASED FOR CONSTRUCTION

DATE: _____



THE CITY OF WINNIPEG
 PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

**RUE DES TRAPPISTES AT WESTENDORF
 COULEE CULVERT REPLACEMENT AND
 ROAD RECONSTRUCTION
 SOUTH GUARDRAIL LAYOUT PLAN
 AND BILL OF MATERIALS**

CITY DRAWING NUMBER: C372-17-14
 SHEET 14 OF 22
 DRAWING No. 14 REV 0

BID OPPORTUNITY No. 698-2017