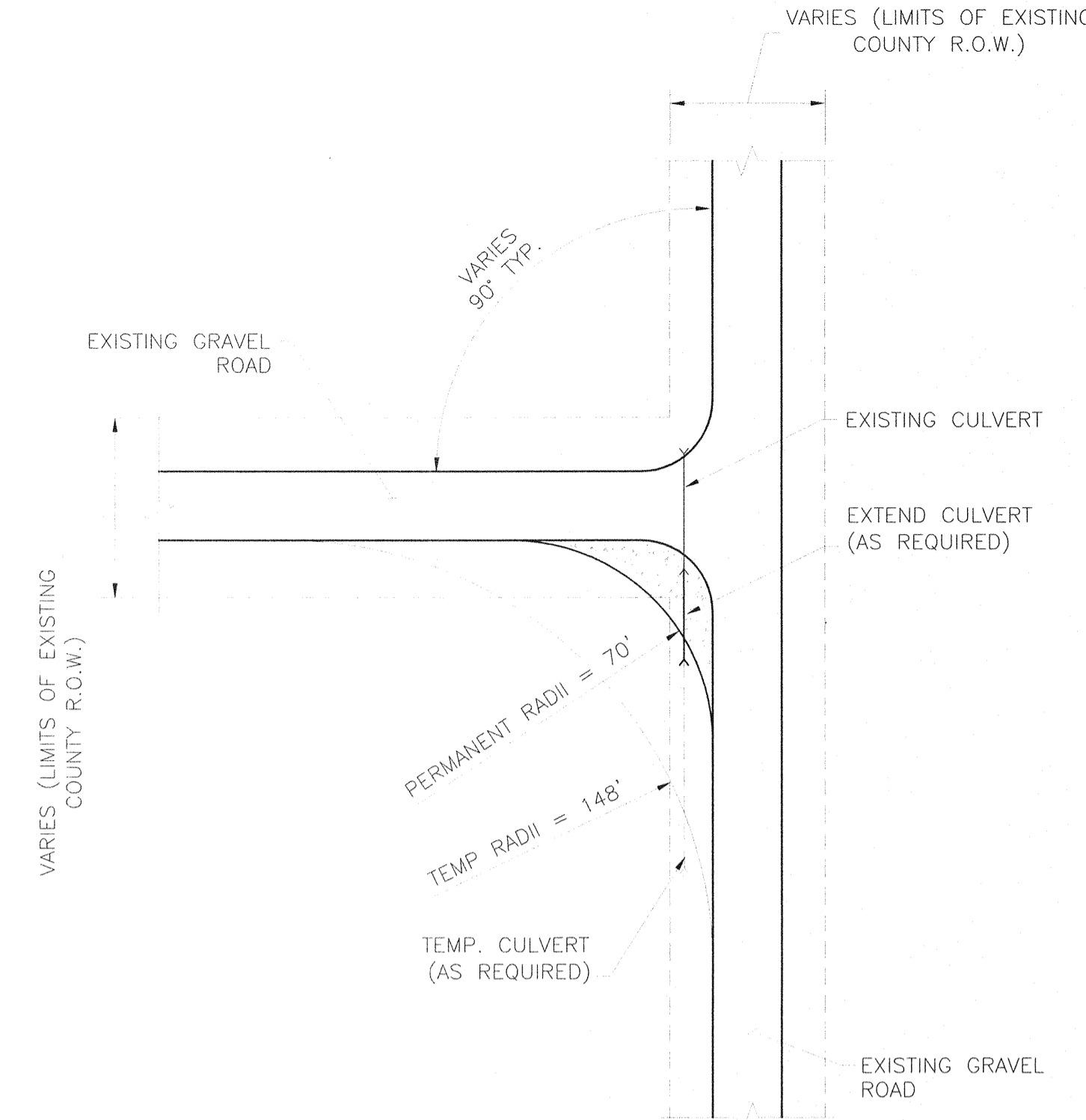


TURBINE TABLE

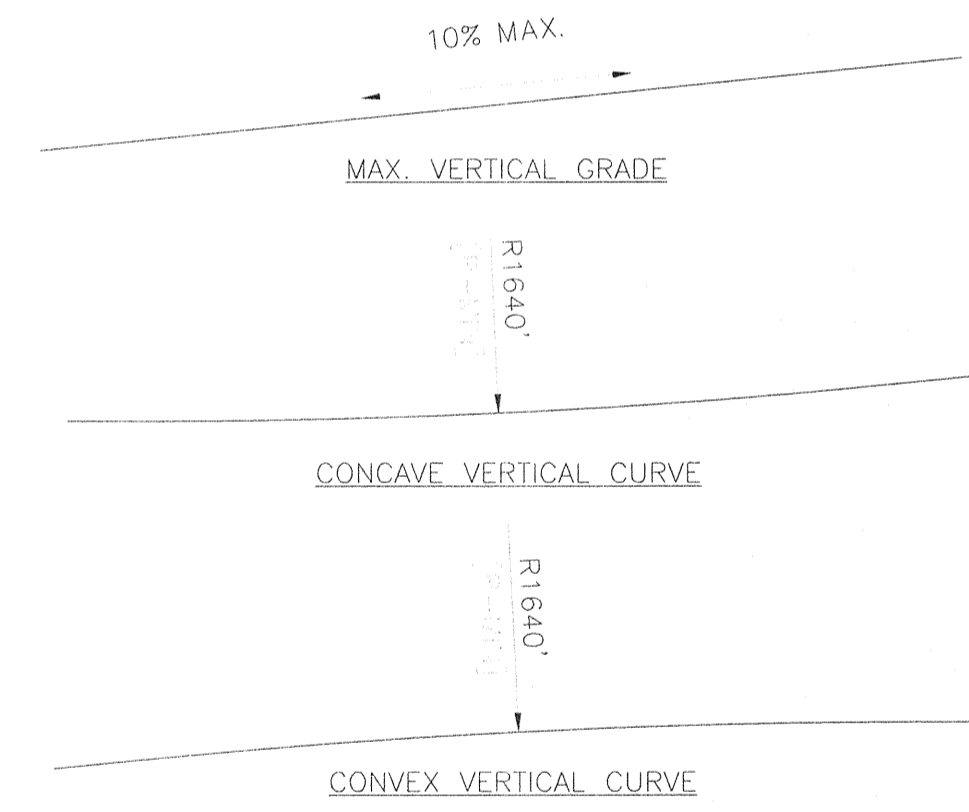
TURBINE	NORTHING	EASTING	COORD_SYS	ELEVATION (TOC)	SRC_LAT	SRC_LONG	SRC_COORD_SYS
201	490172.540	1717386.746	SPCS ND South NAD83 (US Feet)	2217.26	309463.79	5208917.88	UTM WGS 84 zone 14 meter
202	490849.251	1718099.193	SPCS ND South NAD83 (US Feet)	2219.45	309684.89	5209119.96	UTM WGS 84 zone 14 meter
203	487594.235	1722106.148	SPCS ND South NAD83 (US Feet)	2183.14	310887.07	5208104.46	UTM WGS 84 zone 14 meter
204	489142.011	1722108.424	SPCS ND South NAD83 (US Feet)	2215.17	310896.81	5208576.17	UTM WGS 84 zone 14 meter
205	489691.246	1723745.916	SPCS ND South NAD83 (US Feet)	2264.13	311399.09	5208733.99	UTM WGS 84 zone 14 meter
206	484431.814	1724155.091	SPCS ND South NAD83 (US Feet)	2171.56	311493.04	5207128.66	UTM WGS 84 zone 14 meter
207	483713.167	1726682.004	SPCS ND South NAD83 (US Feet)	2235.38	312258.97	5206894.86	UTM WGS 84 zone 14 meter
208	467851.485	1712335.008	SPCS ND South NAD83 (US Feet)	2187.39	307793.64	5202144.43	UTM WGS 84 zone 14 meter
209	466597.729	1711796.607	SPCS ND South NAD83 (US Feet)	2210.96	307622.22	5201765.46	UTM WGS 84 zone 14 meter
210	465186.123	1710725.260	SPCS ND South NAD83 (US Feet)	2222.74	307287.45	5201341.49	UTM WGS 84 zone 14 meter
211	467238.371	1707130.044	SPCS ND South NAD83 (US Feet)	2264.40	306203.68	5201987.97	UTM WGS 84 zone 14 meter
212	467243.442	1705778.074	SPCS ND South NAD83 (US Feet)	2255.24	305791.66	5201997.41	UTM WGS 84 zone 14 meter
213	467046.761	1704308.564	SPCS ND South NAD83 (US Feet)	2250.76	305342.63	5201946.05	UTM WGS 84 zone 14 meter
214	466185.665	1703484.507	SPCS ND South NAD83 (US Feet)	2240.75	305086.44	5201688.42	UTM WGS 84 zone 14 meter
215	472639.783	1702816.379	SPCS ND South NAD83 (US Feet)	2291.52	304920.51	5203659.43	UTM WGS 84 zone 14 meter
216	468734.840	1700367.908	SPCS ND South NAD83 (US Feet)	2222.58	304151.30	5202483.38	UTM WGS 84 zone 14 meter
217	466740.330	1699122.173	SPCS ND South NAD83 (US Feet)	2201.59	303760.10	5201882.95	UTM WGS 84 zone 14 meter
218	459918.220	1701524.686	SPCS ND South NAD83 (US Feet)	2243.87	304452.51	5199789.64	UTM WGS 84 zone 14 meter
219	459177.621	1698920.157	SPCS ND South NAD83 (US Feet)	2231.41	303654.37	5199579.12	UTM WGS 84 zone 14 meter
220	457629.107	1698684.851	SPCS ND South NAD83 (US Feet)	2184.77	303573.61	5199108.53	UTM WGS 84 zone 14 meter
221	456115.619	1697173.397	SPCS ND South NAD83 (US Feet)	2168.59	303104.10	5198656.06	UTM WGS 84 zone 14 meter
222	460236.662	1685978.717	SPCS ND South NAD83 (US Feet)	2158.17	299716.14	5199977.46	UTM WGS 84 zone 14 meter
223	462320.011	1686640.317	SPCS ND South NAD83 (US Feet)	2179.75	299929.95	5200608.59	UTM WGS 84 zone 14 meter
224	459566.006	1692170.713	SPCS ND South NAD83 (US Feet)	2219.79	301599.49	5199736.90	UTM WGS 84 zone 14 meter
225	460641.880	1692401.020	SPCS ND South NAD83 (US Feet)	2226.71	301675.96	5200063.47	UTM WGS 84 zone 14 meter
226	462879.921	1690285.521	SPCS ND South NAD83 (US Feet)	2236.15	301044.25	5200757.96	UTM WGS 84 zone 14 meter
227	465533.554	1691200.840	SPCS ND South NAD83 (US Feet)	2242.77	301338.73	5201561.41	UTM WGS 84 zone 14 meter
228	460201.927	1688174.517	SPCS ND South NAD83 (US Feet)	2147.44	300385.20	5199954.06	UTM WGS 84 zone 14 meter
229	466604.681	1693210.495	SPCS ND South NAD83 (US Feet)	2256.84	301957.51	5201876.14	UTM WGS 84 zone 14 meter
230	467070.446	1694232.283	SPCS ND South NAD83 (US Feet)	2275.80	302271.66	5202012.13	UTM WGS 84 zone 14 meter
231	468566.491	1694951.083	SPCS ND South NAD83 (US Feet)	2246.74	302499.48	5202463.91	UTM WGS 84 zone 14 meter
232	471848.869	1692402.954	SPCS ND South NAD83 (US Feet)	2268.76	301742.02	5203479.23	UTM WGS 84 zone 14 meter
233	472842.968	1693273.273	SPCS ND South NAD83 (US Feet)	2285.63	302013.09	5203777.13	UTM WGS 84 zone 14 meter
234	473912.962	1693514.345	SPCS ND South NAD83 (US Feet)	2290.17	302092.82	5204101.85	UTM WGS 84 zone 14 meter
235	474262.786	1695952.699	SPCS ND South NAD83 (US Feet)	2235.87	302838.04	5204194.22	UTM WGS 84 zone 14 meter

CULVERT TABLE

CULVERT NUMBER	ALIGNMENT	STATION	SIZE (INCHES)	ELEVATION	
				IN	OUT
1	A1	0+25	18	2193.94	2148.10
2	A1	12+30	24	2208.23	2207.65
2a	A5	10+40	18	2206.16	2205.98
5	A1	54+25	18	2251.58	2240.10
9	A1	98+50	18	2240.06	2239.91
10	A1	113+70	18	2244.97	2244.88
11	A1	123+00	18	2260.80	2259.33
12	A1	132+40	18	2267.75	2265.87
13	A1	154+25	24	2254.72	2253.44
14	A1	170+25	30	2225.15	2224.59
15	A6	12+30	24	2164.94	2165.08
16	A6	40+75	24	2139.18	2138.97
17	A7	10+50	30	2134.34	2134.42
18	A7	16+70	18	2132.21	2131.66
19	B1	3+20	30	2183.00	2182.00
20	B1	13+80	24	2185.00	2184.48
21	B1	41+10	24	2188.91	2184.16
22	C	5+50	18	2154.33	2153.12
23	C	19+25	24	2157.47	2157.03
24	F	9+10	18	2188.15	2187.77
25	G	0+25	18	2188.84	2188.57
26	I1	8+15	18	2230.34	2229.95
27	I1	17+25	24	2235.47	2235.30
28	I2	8+00	24	2219.06	2218.84
29	I2	20+25	24	2236.11	2235.73
30	I2	37+20	24	2237.44	2237.22
31	J1	0+25	18	2158.23	2154.62
32	J1	26+00	36	2166.38	2266.39
33	J2	7+65	36	2170.01	2169.30
34	K	0+20	30	2190.07	2188.00
35	K	14+80	36	2205.18	2204.38
36	L1	7+80	24	2169.25	2169.33
37	L2	3+15	42	2197.57	2193.94
38	M	6+85	36	2150.12	2156.08
39	M	10+15	18	2158.16	2157.60
40	M	24+70	2-42	2146.30	2145.53
41	MET TOWER		18	2230.00	2229.50

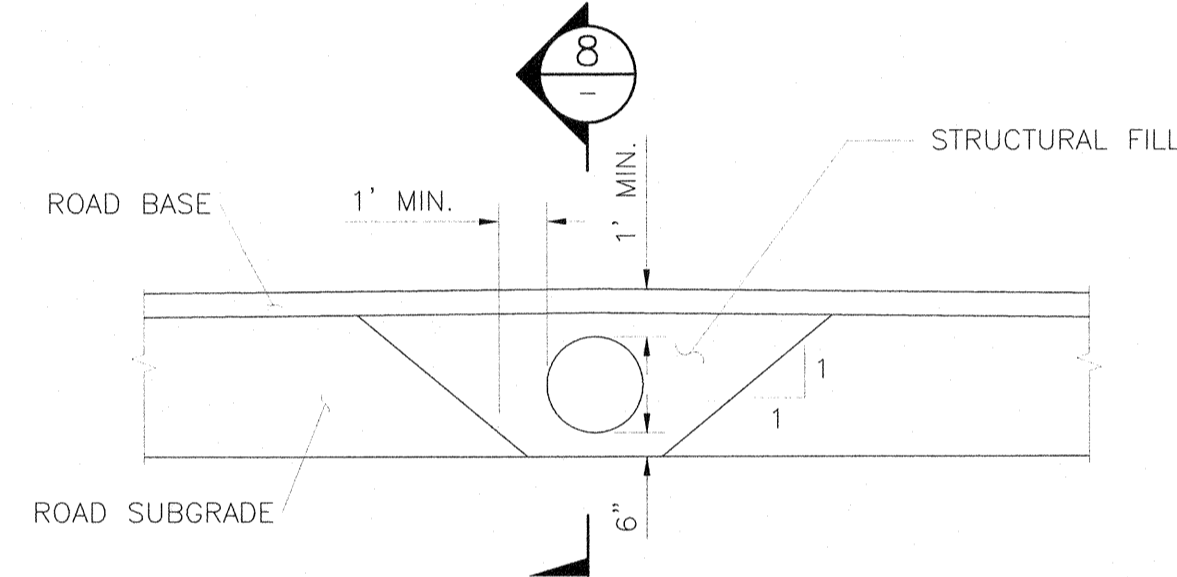


1 DETAIL: STATE OR COUNTY ROAD INTERSECTION
NO SCALE

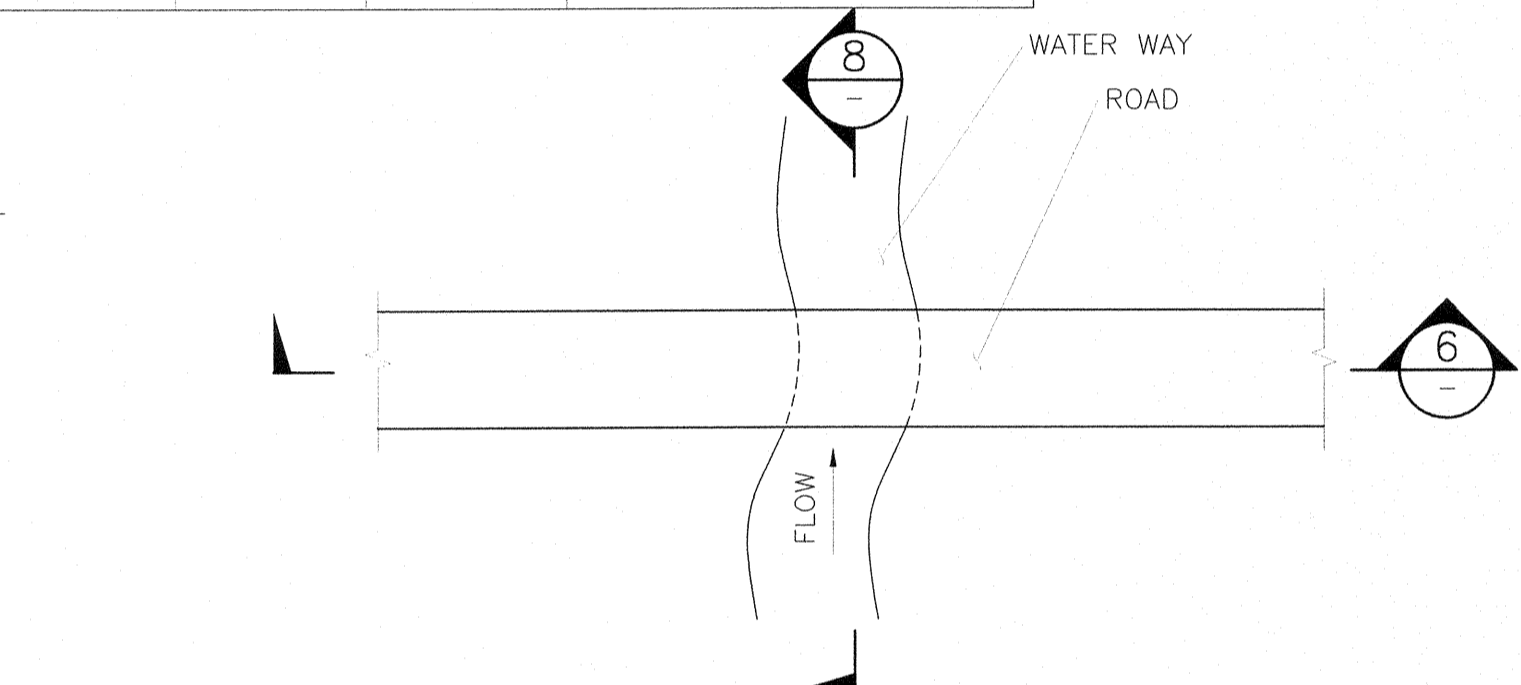


2 DETAIL: VERTICAL ROAD GRADES AND CURVES
NO SCALE

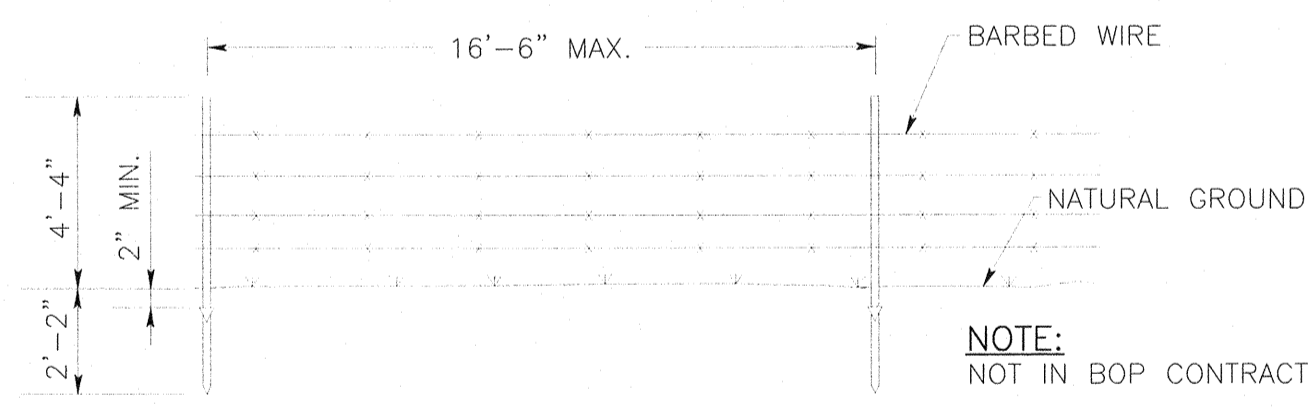
NOTE: HEIGHT CLEARANCE MIN. 26'. CONTRACTOR IS RESPONSIBLE FOR MOVING ITEMS WITHIN CLEARANCE ZONE AND RESTORING.



6 SECTION: CULVERT CROSSING
SCALE

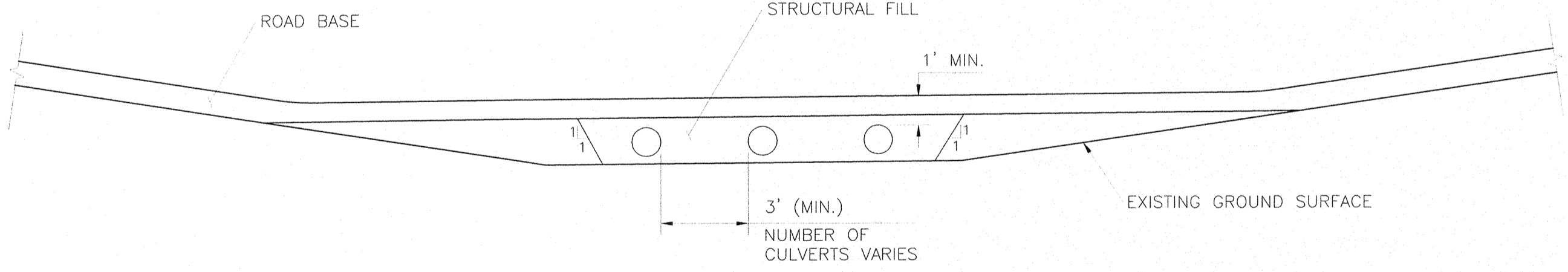


5 PLAN: CULVERT CROSSING
NO SCALE

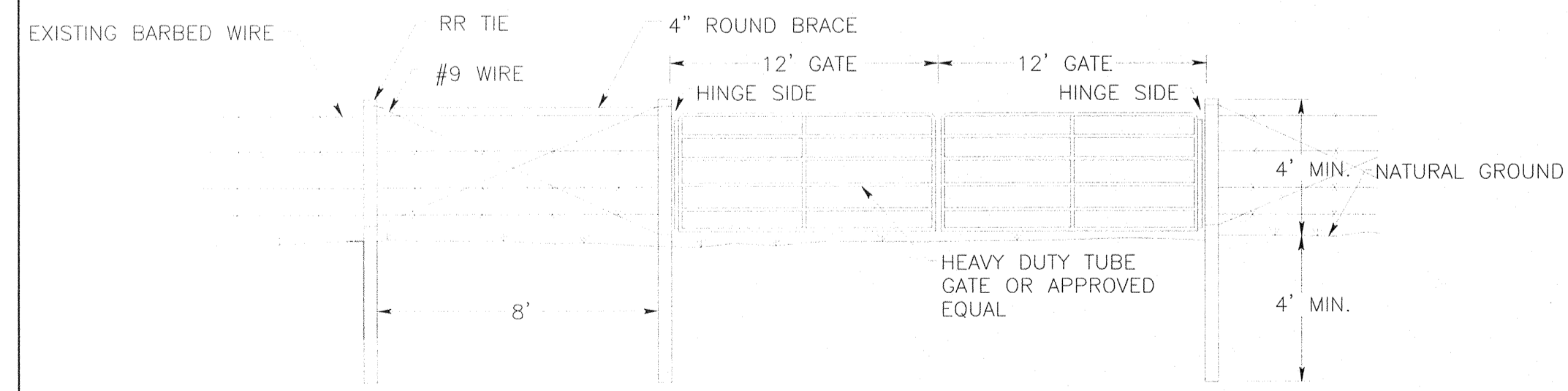


3 DETAIL: FENCE
NO SCALE

NOTE: NOT IN BOP CONTRACT

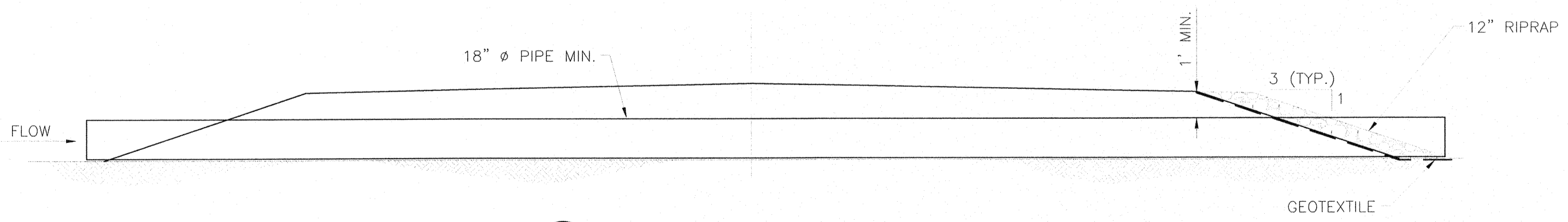


7 SECTION: SWALE CROSSING MULTIPLE CULVERTS
NO SCALE



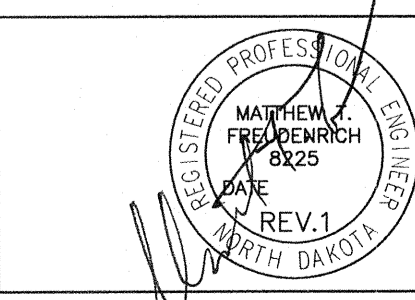
4 DETAIL: TYPICAL GATE DETAIL
NO SCALE

NOTE: NOT IN BOP CONTRACT



8 SECTION: CULVERT CROSSING
SCALE IN FEET

NO.	BY	CHK.	APP.	DATE	REVISION DESCRIPTION
A	DMD	CAD	JXB	05/27/11	60 PERCENT SUBMITTAL
B	CAD	CAD	JXB	07/01/11	90 PERCENT SUBMITTAL
0	DMD	CAD	JXB	08/12/11	ISSUED FOR CONSTRUCTION
1	NJG			1/30/13	CONSTRUCTION REVISIONS

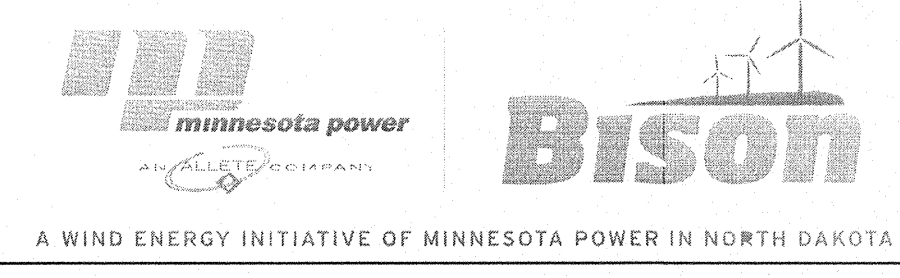


CLIENT	05/27/10/01/11						
BID							
CONSTRUCTION				08/12/11			
PERMITTING							
RELEASED TO/FOR	A	B	C	0	1	2	3

Project Office:
BARR ENGINEERING CO.
 4700 WEST 77TH STREET
 MINNEAPOLIS, MN.
 55435-4803
 Ph: 1-800-632-2277
 Fax: (952) 832-2601
 www.barr.com

Corporate Headquarters:
 Minneapolis, Minnesota
 Ph: 1-800-632-2277

Scale	AS SHOWN
Date	05/20/11
Drawn	DMD
Checked	JXB
Designed	CAD
Approved	JXB



BISON 2 WIND PROJECT
 MORTON & OLIVER COUNTIES, NORTH DAKOTA

MISCELLANEOUS
 SECTIONS AND DETAILS

BARR PROJECT No. 34/33-1007	CLIENT PROJECT No.
DWG. No. C-04	REV. No. 1