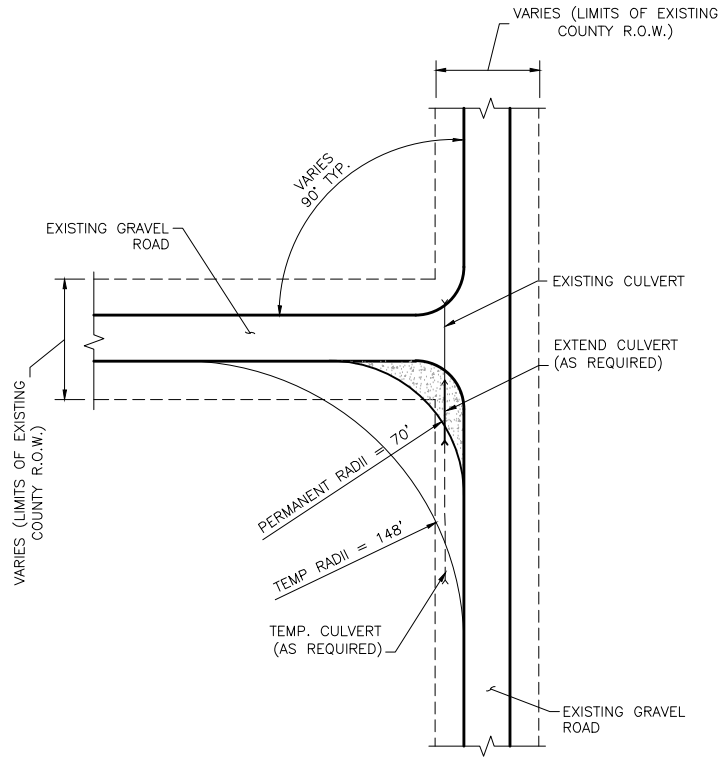
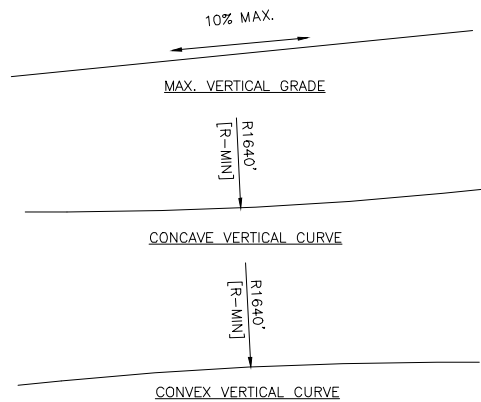


Images in Drawing: M:\Design\3433\007\04 Drawings\Client Logo.jpg K:\Design\3433\006\01\Job_signatures.dwg K:\Design\3433\006\01\Job_BISON_3_IFC.dwg
cad K:\Design\3433\006\01\3433\006_C-04.dwg Plot at 1 09/29/2011 10:48:43

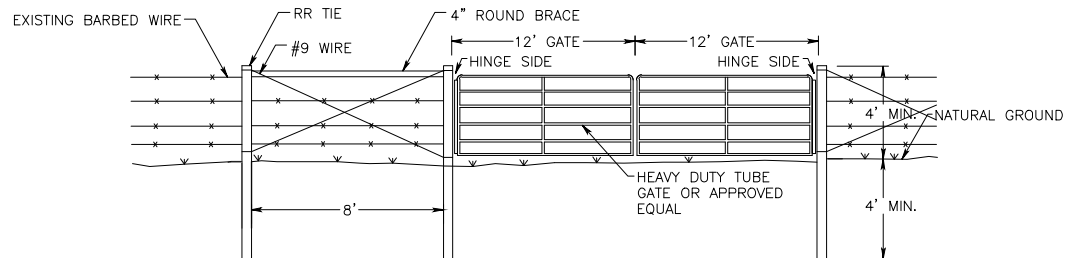


1 **DETAIL: STATE OR COUNTY ROAD INTERSECTION**
NO SCALE



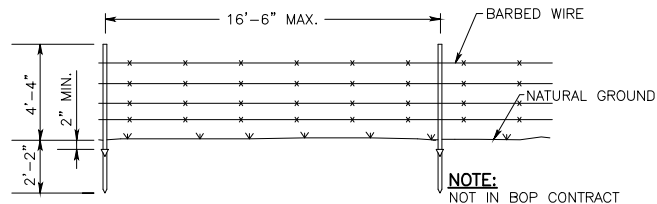
2 **DETAIL: VERTICAL ROAD GRADES AND CURVES**
NO SCALE

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



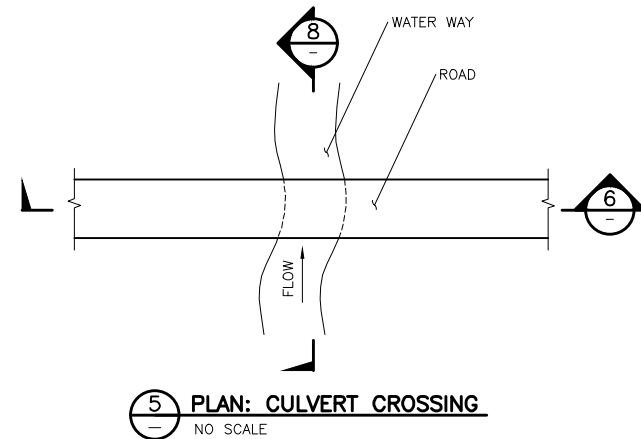
4 **DETAIL: TYPICAL GATE DETAIL**
NO SCALE

TURBINE TABLE						
TURBINE	NORTHING	EASTING	COORD_SYS	ELEVATION (TOC)	SRC_LAT	SRC_LONG
301	474809.470854	1728541.470953	SPCS ND South NAD83 (US Feet)	2115.1	312773.64	5204170.38
302	474796.805539	1730210.007816	SPCS ND South NAD83 (US Feet)	2114.2	313282.09	5204156.77
303	476233.968047	1732825.875306	SPCS ND South NAD83 (US Feet)	2149.7	314087.73	5204579.49
304	476451.906988	1734821.365360	SPCS ND South NAD83 (US Feet)	2169.8	314697.17	5204634.25
305	479236.153172	1734894.002631	SPCS ND South NAD83 (US Feet)	2159.8	314735.58	5205482.38
306	478443.799956	1733960.614395	SPCS ND South NAD83 (US Feet)	2196.5	314446.48	5205246.35
307	478897.350000	1731322.144800	SPCS ND South NAD83 (US Feet)	2173.3	313645.00	5205400.00
308	465077.122832	1681830.439032	SPCS ND South NAD83 (US Feet)	2182.7	298480.04	5201477.03
309	465773.063694	1683432.489625	SPCS ND South NAD83 (US Feet)	2201.7	298972.40	5201679.79
310	465009.748744	1685719.154827	SPCS ND South NAD83 (US Feet)	2201.5	299664.90	5201433.78
311	465907.018134	1687039.133682	SPCS ND South NAD83 (US Feet)	2222.9	300072.46	5201699.55
312	466874.516218	1687995.191855	SPCS ND South NAD83 (US Feet)	2227.7	300369.51	5201988.85
313	467944.199381	1689177.907607	SPCS ND South NAD83 (US Feet)	2297.1	300736.24	5202307.97
314	468731.425555	1691950.476367	SPCS ND South NAD83 (US Feet)	2245.1	301585.89	5202531.71
315	470918.958818	1689133.085109	SPCS ND South NAD83 (US Feet)	2251.2	300739.96	5203214.91
316	471300.374713	1686616.248410	SPCS ND South NAD83 (US Feet)	2266.3	299975.08	5203345.87
317	470130.373385	1685997.357202	SPCS ND South NAD83 (US Feet)	2320.5	299779.61	5202992.88
318	469272.616325	1683444.380675	SPCS ND South NAD83 (US Feet)	2222.5	298996.47	5202746.36
319	472405.227254	1678663.043800	SPCS ND South NAD83 (US Feet)	2244.8	297558.11	5203763.31
320	472660.805696	1677038.124829	SPCS ND South NAD83 (US Feet)	2292.3	297063.68	5203816.50
321	472195.095733	1678612.995954	SPCS ND South NAD83 (US Feet)	2259.5	296611.63	5203683.17
322	475741.371265	1674235.307871	SPCS ND South NAD83 (US Feet)	2261.2	296227.40	5204771.83
323	476919.264114	1674518.883646	SPCS ND South NAD83 (US Feet)	2261.4	296320.72	5205129.19
324	477477.280000	1677130.524775	SPCS ND South NAD83 (US Feet)	2272.7	297120.00	5205284.00
325	480714.170898	1673326.342651	SPCS ND South NAD83 (US Feet)	2271.9	295979.43	5206292.84
326	480303.140081	1675658.304670	SPCS ND South NAD83 (US Feet)	2292.8	296687.80	5206153.92
327	481022.010571	1676695.902589	SPCS ND South NAD83 (US Feet)	2265.5	297008.26	5206366.96
328	482578.977114	1679680.116862	SPCS ND South NAD83 (US Feet)	2289.7	297926.94	5206824.06
329	486325.362363	1678664.192714	SPCS ND South NAD83 (US Feet)	2295.5	297639.21	5207971.88
330	485850.941109	1681157.635800	SPCS ND South NAD83 (US Feet)	2286.3	298396.42	5207812.69
331	483016.641745	1682443.988518	SPCS ND South NAD83 (US Feet)	2295.7	298771.91	5206941.29
332	482499.843021	1684094.367413	SPCS ND South NAD83 (US Feet)	2290.3	299271.91	5206774.12
333	479789.622055	1683703.809467	SPCS ND South NAD83 (US Feet)	2302.3	299137.02	5205950.35
334	479317.800232	1682103.604630	SPCS ND South NAD83 (US Feet)	2271.7	298646.53	5205815.90
335	477533.052436	1682091.813725	SPCS ND South NAD83 (US Feet)	2242.3	298632.50	5205271.99

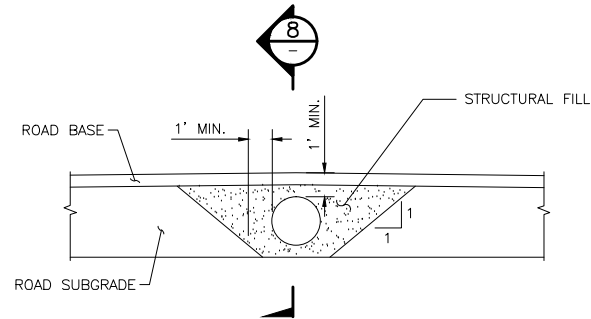


3 **DETAIL: FENCE**
NO SCALE

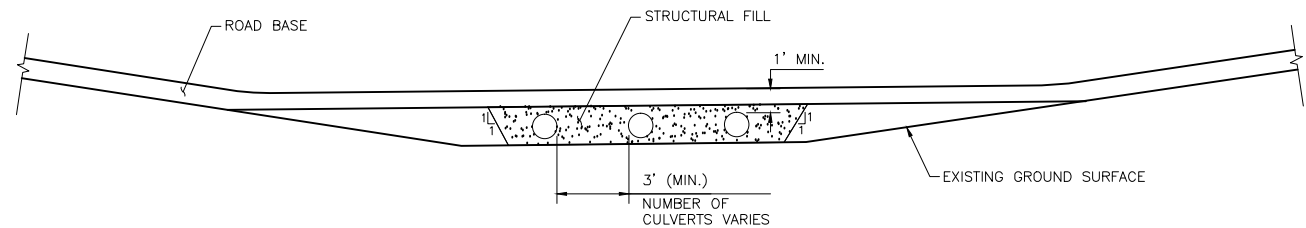
NOTE: NOT IN BOP CONTRACT



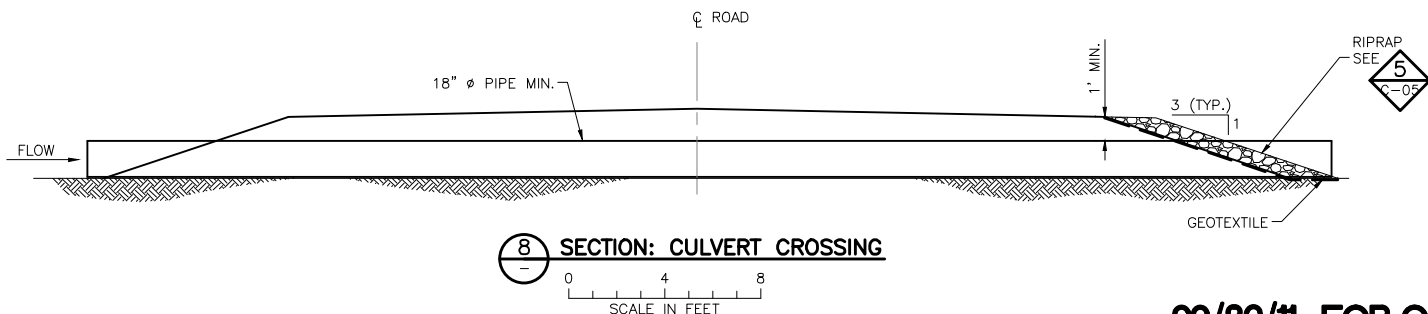
5 **PLAN: CULVERT CROSSING**
NO SCALE



6 **SECTION: CULVERT CROSSING**
0 1 4
SCALE



7 **SECTION: SWALE CROSSING MULTIPLE CULVERTS**
NO SCALE



8 **SECTION: CULVERT CROSSING**
0 4 8
SCALE IN FEET

CULVERT TABLE				
CULVERT NUMBER	ALIGNMENT	STATION	SIZE (INCHES)	LENGHT (FEET)
1	3-B1	1+75	18	50
2	3-B1	18+75	18	60
3	3-B1	32+25	3-24	90
4	3-B1	50+15	24	60
5	3-B2	14+10	30	65
6	3-B2	21+50	24	55
7	3-C1	11+85	18	65
8	3-C1	29+35	36	80
9	3-C1	41+70	24	95
10	3-C1	43+00	24	80
11	3-C1	51+85	18	65
12	3-C1	61+00	18	55
13	3-C1	70+45	24	60
14	3-C1	82+00	18	55
15	3-C2	16+50	24	110
16	3-C2	31+00	18	110
17	3-D1	0+15	30	90
18	3-D1	16+25	24	85
19	3-D1	30+85	36	75
20	3-D1	50+60	36	75
21	3-D1	59+30	24	60
22	3-D1	69+50	18	70
23	3-D1	41+00	18	150
24	3-D3	1+25	18	150
25	3-E1	4+00	30	60
26	3-E1	20+00	30	60
27	3-E1	26+50	18	120
28	3-E1	43+00	18	55
29	3-E2	4+00	18	100
30	3-F1	17+60	30	60
31	3-F1	20+00	24	75
32	3-F1	35+60	18	125
33	3-H	0+20	18	200
34	3-I	0+20	18	200
35	3-J2	0+20	18	200
36	3-J1	0+20	18	125
37	3-J1	33+30	24	100
38	3-J1	37+60	30	65
39	3-L1	2+25	24	55
40	3-L1	10+75	18	55
41	3-L1	13+15	30	70
42	3-L1	27+15	30	55
43	3-L1	53+00	24	60
44	3-L1	41+00	18	125
45	3-L3	9+45	24	55
46	3-L4	1+45	18	125
47	3-M1	10+75	18	50
48	3-M1	26+90	18	55
49	3-M1	27+40	18	55
50	3-M1	32+20	3-36	60
51	3-M1	34+80	30	70
43a	3-L1	62+25	24	60
43b	3-L5	19+00	18	120

09/30/11 FOR CONSTRUCTION

A	KKB	CAD	JXB	07/15/11	60 PERCENT SUBMITTAL
B	CAD	CAD	JXB	09/02/11	90 PERCENT SUBMITTAL
C	CAD	CAD	JXB	09/30/11	ISSUED FOR CONSTRUCTION
NO.	BY	CHK	APP.	DATE	REVISION DESCRIPTION

CLIENT	07/15/11	09/02/11
BID		
CONSTRUCTION		09/30/11
PERMITTING		
RELEASED TO/FOR	A B C O 1 2 3	DATE RELEASED

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

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

Scale	AS SHOWN
Date	07/05/11
Drawn	KKB
Checked	JXB
Designed	CAD
Approved	JXB



A WIND ENERGY INITIATIVE OF MINNESOTA POWER IN NORTH DAKOTA

BISON 3 WIND PROJECT MORTON & OLIVER COUNTIES, NORTH DAKOTA		BARR PROJECT No. 34/30-1006	
MISCELLANEOUS SECTIONS AND DETAILS		CLIENT PROJECT No.	
DWG. No. C-04		REV. No. 0	

