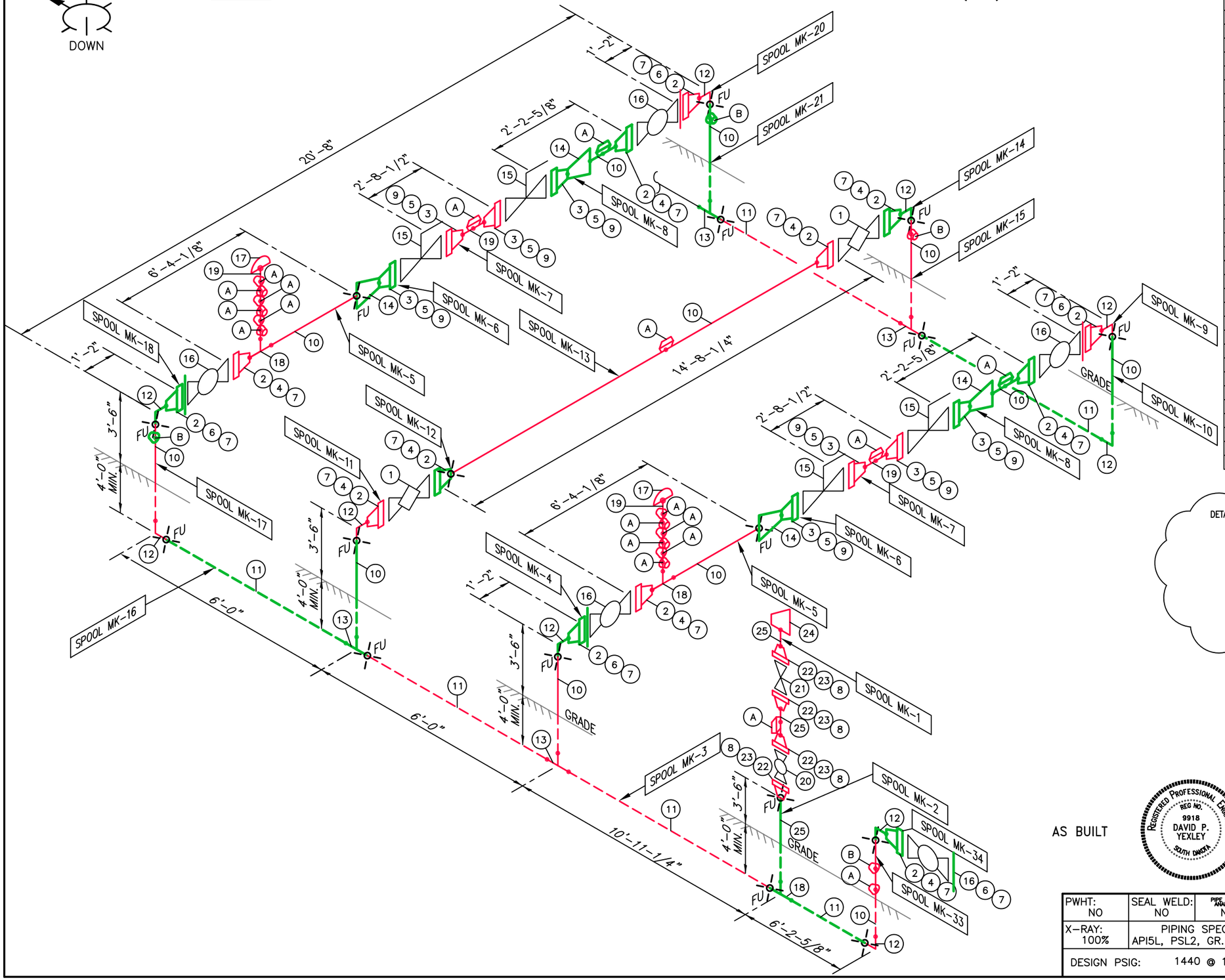
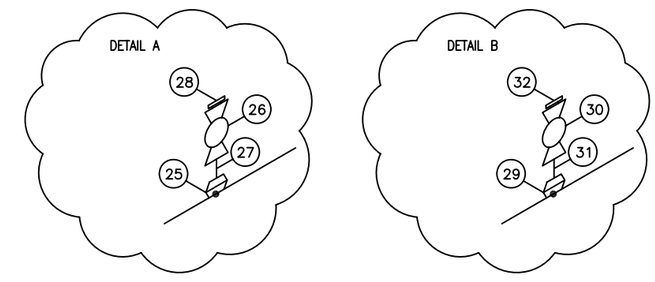
NORTH UP DOWN

NOTE: PROVIDE 18" MIN OF ADDITIONAL PIPE TO ALL FIELD FIT-UP (FU) WELDS.



BILL OF MATERIALS

ITEM	QTY	SIZE	DESCRIPTION
1	2	6"	6x4 TEXSTREAM 600#, RF, PLUG VALVE
2	13	6"	FLANGE, WN, 600, STD, RF, FS, A860 MSS-SP-75 WPHY 52
3	8	4"	FLANGE, WN, 600, STD, RF, FS, A860 MSS-SP-75 WPHY 52
4	9	6"	GASKET, KAMMPRO, LP3 600 5/32 316L-APX2 316-L OR NS
5	8	4"	GASKET, KAMMPRO, LP3 600 5/32 316L-APX2 316-L OR NS
6	5	6"	GASKET, 600, INS, PIKOTEK PGE W/ G10 SLEEVE W/ HCS WASHERS
7	168	1"x7 3/4"	BOLTS, STUD, /A 193 GR.B7, W/ 2-HVY HEX NUTS, /A 194 2H
8	32	5/8"x5 1/4"	BOLTS, STUD, /A 193 GR.B7, W/ 2-HVY HEX NUTS, /A 194 2H
9	64	7/8"x6 3/4"	BOLTS, STUD, /A 193 GR.B7, W/ 2-HVY HEX NUTS, /A 194 2H
10	80'	6"	PIPE, API5L, PSL2 GR. B, .280" W.T. X52
11	60'	6"	PIPE, 0.280 WT, ERW, API5L, PSL2, X52, 16-18 MIL FBE
12	10	6"	ELBOW, 90, STD, A860 MSS-SP-75 WPHY 52
13	4	6"	TEE, STD, A860 MSS-SP-75 WPHY 52
14	4	6"x4"	REDUCER, CONC, STD, A860 MSS-SP-75 WPHY 52
15	4	4"	FISHER, MODEL FL-SR PILOT OP. REG, SET @ 435-475 PSIG
16	5	6"	BALON, 6F-T63-RF, 600#, RF, FP TRUNNION BALL VALVE
17	2	4"	CAP, STD, A860 MSS-SP-75 WPHY 52
18	3	6"x4"	TEE, REDUCER, STD, A860 MSS-SP-75 WPHY 52
19	8'	4"	PIPE, API5L, PSL2, GR. B, .237" W.T. X52
20	1	2"	BALON 2F-F63, RF, 600#, RF, FP, FLOATING BALL VALVE
21	1	2"	FISHER, MODEL EZR TOKEN RELIEF W/ 6358 EBH PILOT, SET @ 500 PSIG
22	4	2"	FLANGE, WN, 600, STD, RF, FS, A860 MSS-SP-75 WPHY 52
23	4	2"	GASKET, KAMMPRO, LP3 600 5/32 316L-APX2 316-L OR NS
24	1	2"	WEATHERCAP, SCIENTIFIC LININGS & COATINGS, WCL-2
DETAIL A: 1/2" THREADOLET DETAIL			
25	18	1/2"	THREADOLET, 3000#, CARBON STEEL
26	18	1/2"	BALL VALVE, BALON SERIES LS, 3000#
27	18	1/2"	INDUSTRIAL PIPE NIPPLE, SHORT HEX, 316 SS, 3000#
28	18	1/2"	PLUG, SQUARE HEAD, 316 SS, 3000#
DETAIL B: 3/4" THREADOLET DETAIL			
29	4	3/4"	THREADOLET, 3000#, CARBON STEEL
30	4	3/4"	BALL VALVE, BALON SERIES LS, 3000#
31	4	3/4"	INDUSTRIAL PIPE NIPPLE, SHORT HEX, 316 SS, 3000#
32	4	3/4"	PLUG, SQUARE HEAD, 316 SS, 3000#



AS BUILT

REGISTERED PROFESSIONAL ENGINEER
REG NO. 9918
DAVID P. YEXLEY
SOUTH DAKOTA

PWHT: NO	SEAL WELD: NO	PIPE STRESS ANALYZED: NO
X-RAY: 100%	PIPING SPEC API5L, PSL2, GR.B X52	
DESIGN PSIG:	1440 @ 100 °F	

NO.	DATE	BY	REVISION
-	-	-	-

BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

MONTANA-DAKOTA UTILITIES CO.
A Division of MDU Resources Group, Inc.

GAS PIPELINE PLANT SITE ISOMETRIC
SHEET 1 OF 3
DEER CREEK STATION

SCALE	DATE	DRAWN BY	APPROVED BY
NONE	6/2/10	CASSIE PETER	DAVE YEXLEY

DCS-MP-ONG-0007