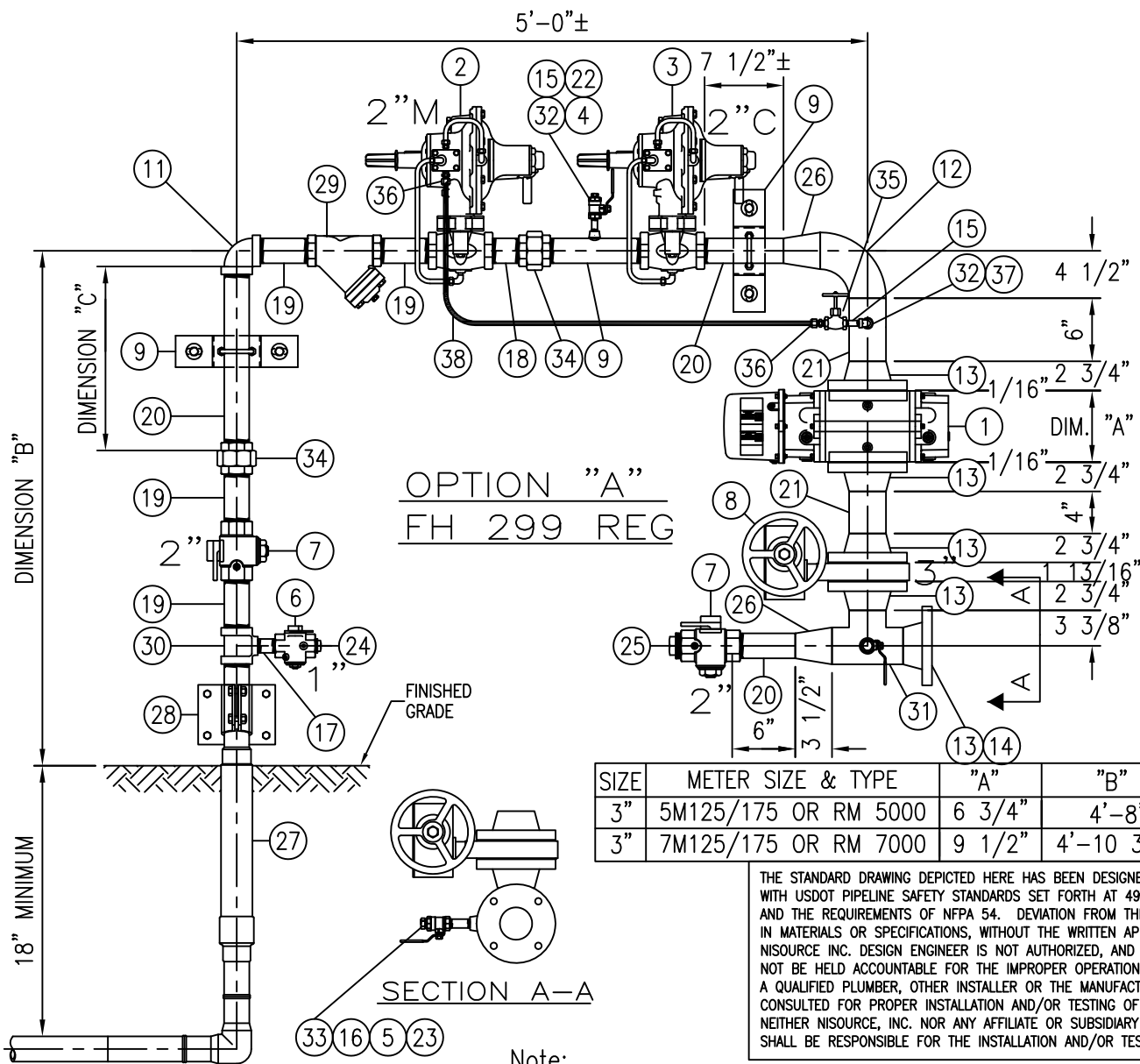


OPTION "B" FH 133L REG



OPTION "A"
FH 299 REG

SIZE	METER SIZE & TYPE	"A"	"B"	"C"
3"	5M125/175 OR RM 5000	6 3/4"	4'-8"	17 1/2"
3"	7M125/175 OR RM 7000	9 1/2"	4'-10 3/4"	20 1/4"

THE STANDARD DRAWING DEPICTED HERE HAS BEEN DESIGNED IN ACCORDANCE WITH USDOT PIPELINE SAFETY STANDARDS SET FORTH AT 49 CFR PART 192, AND THE REQUIREMENTS OF NFPA 54. DEVIATION FROM THIS DRAWING, EITHER IN MATERIALS OR SPECIFICATIONS, WITHOUT THE WRITTEN APPROVAL OF THE NISOURCE INC. DESIGN ENGINEER IS NOT AUTHORIZED, AND NISOURCE, INC. WILL NOT BE HELD ACCOUNTABLE FOR THE IMPROPER OPERATION OF THE FACILITY. A QUALIFIED PLUMBER, OTHER INSTALLER OR THE MANUFACTURER SHOULD BE CONSULTED FOR PROPER INSTALLATION AND/OR TESTING OF THIS FACILITY, AND NEITHER NISOURCE, INC. NOR ANY AFFILIATE OR SUBSIDIARY OF NISOURCE, INC. SHALL BE RESPONSIBLE FOR THE INSTALLATION AND/OR TESTING OF THE FACILITY.

Note:

IN KENTUCKY, THE COMPANY WILL INSTALL THE RISER

NiSource™

**NiSource Energy
Distribution**

DRAWING TITLE
2" X 3" SETTING WITH
2" REGULATORS AND 3" METER

DRAWN
L.HARTLEY-CLARK
CHECKED

DATE
10-18-04
DATE


DRAWING NO.
PLMB-0011
SHEET NO.
1 of 2

ISSUE NO.
6

ITEM	FH299 QTY.	FH133L QTY.	SIZE	BILL OF MATERIAL
1	1	1	3"	METER, ROTARY, TO BE PROVIDED BY COLUMBIA GAS
2	1	1	2"	REGULATOR, MONITOR, TO BE PROVIDED BY COLUMBIA GAS
3	1	1	2"	REGULATOR, CONTROL, TO BE PROVIDED BY COLUMBIA GAS
4	1	1	1/4"	VALVE, BALL, SCREW, CARBON STEEL, ONE PIECE BODY, 2000# W.P.
5	1	1	1/2"	VALVE, BALL, SCREW, CARBON STEEL, ONE PIECE BODY, 2000# W.P.
6	1	1	1"	VALVE, METER STOP, SCREWED BODY, LOCKWING, USE ONLY APPROVED MANUFACTURERS
7	2	2	2"	VALVE, METER STOP, SCREWED BODY, LOCKWING, USE ONLY APPROVED MANUFACTURERS
8	1	1	3"	VALVE, BUTTERFLY, USE ONLY APPROVED MANUFACTURERS
9	1	1	2"	BRACKET, SETTING SUPPORT, FABRICATED OR PURCHASED
10	1	1	2" X 10"	NIPPLE, PIPE, STEEL, GRADE B, THREAD BOTH ENDS
11	1	1	2"	ELBOW, 90 DEG., THREADED, MALLEABLE IRON, STANDARD, CLASS 150
12	1	1	3"	ELL, WELDING, 90 DEG., L.R., GRADE B, 0.216" WALL
13	5	5	3"	FLANGE, WELD NECK, ANSI 150, FLAT FACED, 0.216" WALL, 3.068" BORE
--	8	8	5/8" X 1 3/4"	-- CAP SCREW, ASTM A-307, GRADE B, HEX. HEAD (INSTALL ON METER)
--	8	8	5/8" X 3"	-- BOLT, MACHINE, ASTM A-307, GRADE B, WITH (1) HVY. HEX. NUT (FOR REGULATOR)
--	4	4	5/8" X 5 1/2"	-- BOLT, STUD, ASTM A-193, GRADE B7, WITH TWO HEAVY HEX HEAD NUTS
--	4	4	3"	-- GASKET, RING TYPE, 1/16" THICK, I.D.=3 1/2" X O.D.=5 3/8", ANSI 150
14	1	1	3"	INSULATING KIT, ANSI 150, NEOPRENE FACED, MYLAR SLEEVES, TYPE "FNSW"
15	2	2	1/4" X 2"	NIPPLE, PIPE, STEEL, GRADE B, EX. HEAVY, THREAD BOTH ENDS
16	1	1	1/2" X 3"	NIPPLE, PIPE, STEEL, GRADE B, EX. HEAVY, THREAD BOTH ENDS
17	1	1	1" X 3"	NIPPLE, PIPE, STEEL, GRADE B, EX. HEAVY, THREAD BOTH ENDS
18	1	1	2" X 4"	NIPPLE, PIPE, STEEL, GRADE B, THREAD BOTH ENDS
19	3	3	2" X 6"	NIPPLE, PIPE, STEEL, GRADE B, THREAD BOTH ENDS
20	3'	3'	2"	PIPE, P.E., STEEL, ERW, GRADE B, 0.154" WALL, CUT AND THREAD TO SUIT
21	1'	1'	3"	PIPE, P.E., STEEL, ERW, GRADE B, 0.216" WALL
22	1	1	1/4"	PLUG, STEEL, HEX HEAD, 3000#
23	1	1	1/2"	PLUG, STEEL, HEX HEAD, 3000#
24	1	1	1"	PLUG, SQUARE HEAD, MALLEABLE IRON, CLASS 150, DRILL FOR WIRE SEAL
25	1	1	2"	PLUG, SQUARE HEAD, MALLEABLE IRON, CLASS 150, DRILL FOR WIRE SEAL
26	2	2	3" X 2"	REDUCER, CONCENTRIC, WELDING, 0.216" X 0.154" WALL
27	1	1	2"	RISER, APPROVED ANODELESS, STUB OR ENCASED OR FLEX CASING PRE-BENT STEEL
28	1	1	2"	RISER BRACKET
29	1	1	2"	STRAINER, Y-TYPE, 250# W.P., MFG. MUELLER, TO BE PROVIDED BY COLUMBIA GAS
30	1	1	2" X 1"	TEE, REDUCING, THREADED, MALLEABLE IRON, CLASS 150
31	1	1	3"	TEE, STRAIGHT, WELDING, GRADE B, 0.216" WALL
32	2	3	1/4"	THREDOLET, STEEL, 3000#
33	1	1	1/2"	THREDOLET, STEEL, 3000#
34	2	2	2"	UNION, INSULATED, MALLEABLE IRON, STANDARD, CLASS 150
35	1	2	1/4"	VALVE, NEEDLE, SCREW, CARBON STEEL
36	2	1	3/8" X 1/4"	CONNECTOR, MALE, 3/8" TUBE X 1/4" NPT, SWAGelok SS-600-1-4
37	1		1/4"	ELBOW, STREET, 90 DEG., THREADED, MALLEABLE IRON, STANDARD, CLASS 150
39	5'±	7'±	3/8"	TUBING, SMLS OR ERW, TYPE 304 STAINLESS, ANNEALED 0.35" WALL
40		2	3/8" X 3/4"	CONNECTOR, MALE, 3/8" TUBE X 3/4" NPT, SWAGelok SS-600-1-12
41		1	3/8" X 3/4"	CONNECTOR, MALE ELBOW, 3/8" TUBE X 3/4" NPT, SWAGelok SS-600-2-12

NOTES

- REFER TO COLUMBIA GAS STANDARDS FOR CUSTOMER SERVICE LINES, METERS, AND SERVICE REGULATORS (PLUMBER'S GUIDE) FOR PROPER METER SET INSTALLATION INSTRUCTIONS.
- APPROVED METER SUPPORT MUST BE USED.
- IF THE SERVICE LINE IS STEEL, CONTACT COLUMBIA GAS PERSONNEL FOR SPECIFIC INSTALLATION INSTRUCTIONS.
- PREFABRICATED RISERS AND BRACKETS MUST BE INSTALLED AND SECURED ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- THERE MUST BE A MINIMUM DISTANCE OF 12" BETWEEN THE SETTING AND BUILDING AND A MINIMUM OF 18" BETWEEN THE METER AND ANY OTHER OBSTRUCTIONS.
- THE METER MUST BE INSTALLED IN A LEVEL POSITION.
- NO SCREW FITTINGS ARE TO BE USED BELOW GROUND.

DRAWN L.HARTLEY-CLARK	DATE 10-18-04	DRAWING NO. PLMB-0011	ISSUE NO. 
CHECKED	DATE	SHEET NO. 2 OF 2	