

514486

REVISIONS

G. LUDWIG

11/29/16

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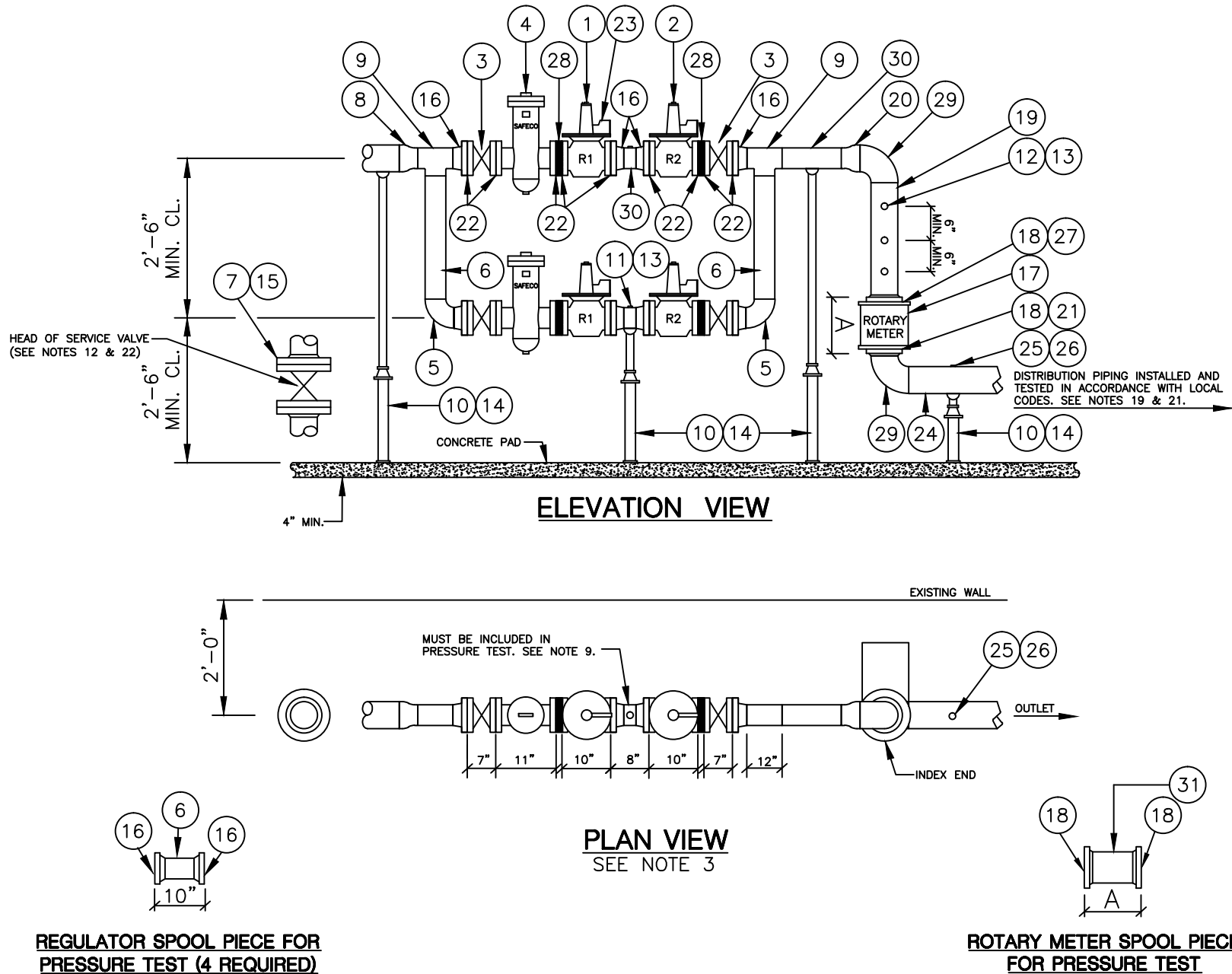
NEW DRAWING (PREVIOUSLY INCLUDED ON DWG. 361100)

D.T.

11/22/16

METERING SPECIFICATIONS AND PROCEDURES VOLUME #3

YELLOW BOOK



REGULATOR SPOOL PIECE FOR PRESSURE TEST (4 REQUIRED)

ROTARY METER SPOOL PIECE FOR PRESSURE TEST

TABLE 1 - DIMENSION "V", "M", "A" (SEE NOTES 6 & 7)		
SIZE OF HEAD OF SERVICE VALVE	V	
SIZE OF METER FLANGE/PIPING	M	
SIZE OF METER FLANGE TO FLANGE	A	

TABLE 2 - DIMENSIONS "A" & "M"				
METER	5M175TC 5M175TCID RM5000TC RM5000TCID	7M175TC 7M175TCID RM7000TC RM7000TCID	11M175TC 11M175TCID RM11000TC RM11000TCID 16M175TC 16M175TCID RM16000TC RM16000TCID RM23000TC RM23000TCID	RM38000DCID RM56000DCID
A	6.75"	9.5"	9.5"	16.0"
M		3"	4"	6"

TABLE 3 - REGULATOR CONFIGURATIONS			
SPECIFIED REGULATORS	APPLICABLE PRESSURE SYSTEM	R1	R2
2"-133HP	MEDIUM/HIGH	2"-133HP	2"-133HP
2"-99 / 2"-133HP	MEDIUM/HIGH	2"-133HP	2"-99
2"-133L	MEDIUM	2"-133L	2"-133L
2" MOONEY FLOWGRID	HIGH	2" FLOWGRID	2" FLOWGRID

BILL OF MATERIALS			
ITEM	DESCRIPTION	SPEC. OR STD.	QUANTITY
1	2" REGULATOR (R1), 150LB., R.F. SUPPLIED BY CON ED (TABLE 3)	_____	2
2	2" REGULATOR (R2), 150LB., R.F. SUPPLIED BY CON ED (TABLE 3)	_____	2
3	2" 150 LB. BALL VALVE, R.F. (SEE TABLE 2, YELLOW BOOK)	_____	4
4	2" GAS FILTER, R.F. SUPPLIED BY CON ED	_____	2
5	2" SHORT RADIUS 90° ELBOW, SCH. 40, BUTT WELD	ASME B16.28	2
6	2" STEEL PIPE, SCH. 40	ASTM - A106 GRADE "B"	AS REQ'D.
7	V" STEEL FLANGE, 150 LB., FLAT OR RAISED FACE (TO MATCH VALVE FLANGE) (SEE NOTE 6), BUTT WELD	ASME B16.5	1
8	V" x 2" CONCENTRIC STD. STEEL REDUCER, IF REQUIRED, B.W.	ASME B16.9	1
9	2" x 2" x 2" STEEL TEE, SCH. 40, BUTT WELD	ASME B16.9	2
10	BAKELITE, NEOPRENE, OR EQUIV. INSULATING MAT'L (SEE NOTE 8)	_____	AS REQ'D.
11	2" x 1/2" THREADOLET (SEE NOTE 5)	_____	1
12	M" x 1/2" THREADOLET (SEE NOTE 5)	_____	3
13	1/2" STEEL SQUARE HEAD PLUG	ASME B16.4	5
14	PIPE SUPPORT (SEE NOTE 11)	_____	4
15	FLANGE INSULATING KIT V" (SEE NOTE 6)	_____	1
16	2" STEEL FLANGE, RAISED FACE, 150 LB., BUTT WELD	_____	10
17	M" ROTARY METER, 3", 4" OR 6" SUPPLIED BY CON ED (TABLE 2)	_____	1
18	M" STEEL FLANGE, FLAT FACE 150 LB., BUTT WELD	ASME B16.5	4
19	M" STEEL PIPE, SCH. 40, 18" LG	ASTM - A106 GRADE "B"	1
20	M" x 2" STEEL REDUCER, BUTT WELD	ASME B16.9	1
21	M" x 1/16" 150 LB. FULL FACE GASKET (SEE NOTE 4)	_____	1
22	2" x 1/16" 150 LB. RING GASKET (SEE NOTE 4)	_____	18
23	2" VENT CAP 90 ELBOW WITH SCREEN - UPSCO (SEE NOTE 16)	_____	4
24	M" STEEL PIPE, SCH. 40	ASTM - A106 GRADE "B"	AS REQ'D
25	M" x 1" THREADOLET (SEE NOTE 5)	_____	1
26	1" STEEL SQUARE HEAD PLUG	ASME B16.4	1
27	M" x 1/16" 150 LB. FULL FACE GASKET STRAINER (SEE NOTE 4)	G-8220	1
28	2" BLEED RING, 150 LB., RAISED FACE	-	4
29	M" SHORT RADIUS, 90° ELBOW, SCH. 40, BUTT WELD	ASME 816.28	2
30	2" STEEL PIPE, SCH. 40, 6" LG	ASTM - A106 GRADE "B"	1

NOTES:

- ALL MATERIAL SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER EXCEPT FOR THE FILTERS AND REGULATORS WHICH ARE FURNISHED BY THE COMPANY AND INSTALLED BY THE CUSTOMER, AND THE METER WHICH IS FURNISHED AND INSTALLED BY THE COMPANY.
- DO NOT INCLUDE REGULATORS OR METER IN PRESSURE TEST. USE SPOOL PIECES SHOWN ON DRAWING.
- IF THE INSTALLATION CANNOT BE MADE AS SHOWN, CONTACT GAS MEASUREMENT.
- GASKET MATERIAL SHALL BE GARLOCK 3000 (1/16" THICK). GASKET STRAINER CONTAINS A 60 MESH STAINLESS STEEL SCREEN.
- ALL THREADOLETS MUST BE FULL BORE, FILLET WELDED AND PLUGGED. DO NOT WELD WITH METERS INSTALLED.
- THE LETTER V REPRESENTS THE SERVICE HEAD VALVE FLANGE SIZE, THE LETTER M REPRESENTS THE METER FLANGE SIZE, AND THE LETTER A REPRESENTS THE METER FLANGE TO FLANGE DIMENSION. SEE TABLE 1 FOR EXACT SIZES. IF TABLE 1 IS NOT COMPLETED, CONTACT THE ASSIGNED ENERGY SERVICE REPRESENTATIVE.
- TABLE 1 MUST BE COMPLETED BY ASSIGNED ENERGY SERVICE REPRESENTATIVE BEFORE PROVIDING TO CONTRACTOR.
- INSULATING MATERIAL MUST BE INSTALLED BETWEEN THE PIPE SUPPORTS AND THE PIPE, SO THAT THE PIPE NEVER MAKES CONTACT WITH THE PIPE SUPPORT.
- A PRESSURE TEST MUST BE CONDUCTED AT 200 PSIG.
- EXCEPT FOR WHERE FLANGED COMPONENTS ARE CALLED FOR, ALL METER PIPING (PIPING FROM THE HEAD OF SERVICE VALVE TO METER OUTLET) SHALL BE BUTT WELDED. ALL BUTT WELDS FROM THE HEAD OF SERVICE VALVE TO THE REGULATOR CLOSEST TO THE METER SHALL BE RADIOGRAPHED. FOR CUSTOMER DELIVERY PRESSURES EXCEEDING 5 PSIG, ALL BUTT WELDS ON METER PIPING SHALL BE RADIOGRAPHED.
- PIPE SUPPORT OR ANY BRACING SHALL NOT BE WELDED TO METER/DISTRIBUTION PIPING AND SHALL BE INSTALLED PER G-695.
- IF A DOMESTIC REGULATOR METER SET IS REQUIRED, IT SHALL BE INSTALLED IMMEDIATELY AFTER THE SERVICE HEAD VALVE WITH AN ISOLATION VALVE.
- REFER TO YELLOW BOOK FOR FURTHER INFORMATION.
- (BLANK)
- ALL OUTDOOR PIPING SHALL BE PAINTED WITH SUITABLE NON-LEAD OUTDOOR PAINT FOR USE ON METAL SURFACES.
- REFER TO EO-17118 - "REGULATOR VENT INSTALLATION" FOR VENT PIPE INSTALLATION, CAPS AND TERMINUS LOCATION REQUIREMENTS. SINCE THESE REGULATORS DO NOT UTILIZE FULL CAPACITY RELIEF, VENT PIPING SHALL BE 2" IN DIAMETER.
- EACH REGULATOR SHALL BE SEPARATELY VENTED.
- (BLANK)
- FOR ANY DOWNSTREAM PIPING BELOW GRADE REFER TO SPEC G-8205.
- OUTDOOR METER SETS SHALL BE LOCATED, INSTALLED, SECURED AND PROTECTED FROM DAMAGE IN ACCORDANCE WITH G-704. THIS INDUSTRIAL METER SET INSTALLATION REQUIRES LOCKED 6 FOOT HIGH MINIMUM CYCLONE FENCING, 4 INCH THICK (MIN.) CONCRETE PAD AND METER PROTECTION MEETING REQUIREMENTS IN REFERENCED SPECIFICATION.
- DISTRIBUTION PIPING EXCLUDING METER PIPING MUST MEET ALL WELDING, SPECIAL INSPECTION, AND RADIOGRAPHY REQUIREMENTS OF THE NYC FUEL GAS CODE OR OTHER AUTHORITY HAVING JURISDICTION.
- FOR INSTALLATIONS HAVING BRANCH LINES THAT ARE SEPARATELY METERED AND/OR SEPARATELY REGULATED, REFER TO SPEC. G-703 FOR PIPE SIZING REQUIREMENTS.
- ALL STUDS, BOLTS AND NUTS USED ON THIS METER/REGULATOR INSTALLATION SHALL BE CORROSION RESISTANT.

INSTALLATION OF PARALLEL 2" REGULATORS WITH ROTARY METER OUTDOORS 10,000 CFH TO 50,000 CFH

CONSOLIDATED EDISON COMPANY OF N.Y., INC. GAS ENGINEERING DEPT.

DATE 11/29/16

DWG. NO. 514486

REV. 0

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