

687419

REVISIONS

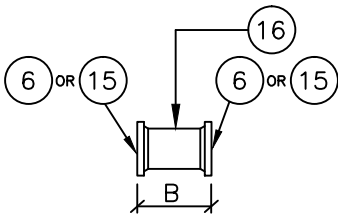
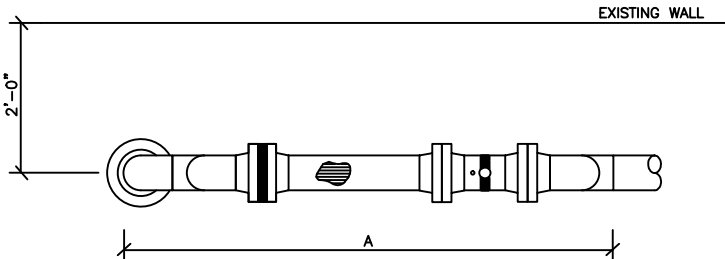
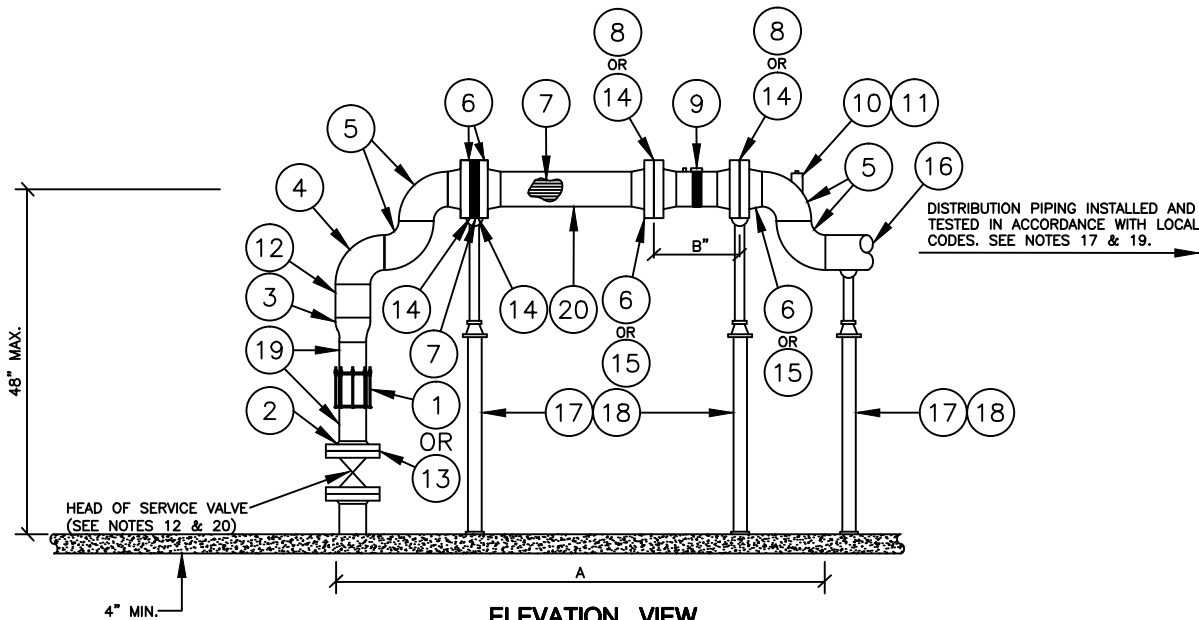
G. LUDWIG03/17/170

NEW DRAWING

D.T.03/17/17

METERING SPECIFICATIONS AND PROCEDURES VOLUME #3

YELLOW BOOK



**TURBINE METER SPOOL PIECE
FOR PRESSURE TEST**
(SEE NOTE 22 FOR 12" METER)

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

TABLE 2 - DIMENSION "A", "B", "C", "D", "M"				
METER	AAT-18 175# 4GTS 175#	AAT-35 175# AAT-57 175# 4GTS 175#	AAT-60 175# AAT-90 175# 4GTS 175#	AAT-140 175#
M	4"	6"	8"	12"
A	62"	85"	112"	162"
B	14"	16"	21"	30"
C	24"	24"	24"	24"
D	24"	24"	24"	24"

BILL OF MATERIALS			
ITEM	DESCRIPTION	SPEC. OR STD.	QUANTITY
1	"V" FLANGE INSULATING KIT (SEE NOTE 6 AND 12)		1
2	V" STEEL FLANGE, 150 LB., FLAT OR RAISED FACE (TO MATCH VALVE FLANGE) (SEE NOTE 6), BUTT WELD	ASME B16.5	1
3	V" X M" CONCENTRIC STD. STEEL REDUCER, B.W. IF REQUIRED	ASME B16.9	1
4	M" LONG RADIUS 90° ELBOW, SCH. 40, BUTT WELD	ASME B16.28	1
5	M" SHORT RADIUS 90° ELBOW, SCH. 40, BUTT WELD	ASME B16.28	4
6	M" STEEL FLANGE, FLAT FACE, 150 LB., BUTT WELD (SEE NOTE 6 & 22)	ASME B16.5	
7	M" STRAIGHTENING VANE, SUPPLIED BY CON ED (SEE NOTE 1)		1
8	12" X 1/16", 150 LB., RING GASKET (SEE NOTE 4)	----	4
9	M" TURBINE METER, 4",6",8" OR 12" SUPPLIED BY (SEE TABLE 2 & NOTE 22)	----	1
10	M" x 1" THREADOLET (SEE NOTE 5)	----	1
11	1" STEEL SQUARE HEAD PLUG	ASME B16.4	1
12	M" STEEL PIPE, SCH. 40, M" x 4" LG. (MIN.)	ASTM-A106 GRADE "B"	AS REQ'D
13	V" COUPLING, COMPRESSION, INSULATED (SEE NOTE 6 & 12)	YELLOW BOOK (TABLE 11)	1
14	M" x 1/16" 150 LB. FULL FACE GASKET (SEE NOTE 4)	----	4
15	12" STEEL FLANGE, RAISED FACE, 150LB., BUTT WELD (SEE NOTE 6 & 22)	ASME B16.5	—
16	M" STEEL PIPE, SCH. 40	ASME B16.5	AS REQ'D
17	BAKELITE, NEOPRENE, OR EQUIV. INSULATING MAT'L (SEE NOTE 8)	—	AS REQ'D
18	PIPE SUPPORT (SEE NOTE 11)	G-695	3
19	V" STEEL PIPE, SCH. 40	ASTM-A106 GRADE "B"	AS REQ'D
20	M" STEEL PIPE, SCH. 40, 4" x M" LG.	ASTM-A106 GRADE "B"	1

- NOTES:**
- ALL MATERIAL SHALL BE FURNISHED AND INSTALLED BY THE CUSTOMER EXCEPT FOR THE METER WHICH IS FURNISHED AND INSTALLED BY THE COMPANY AND THE STRAIGHTENING VANES WHICH WILL BE PROVIDED BY CON EDISON AND INSTALLED BY THE CUSTOMER. STRAIGHTENING VANE INSTALLATION INSTRUCTIONS TO BE PROVIDED BY CON EDISON.
 - DO NOT INCLUDE THE METER IN PRESSURE TEST. USE SPOOL PIECE SHOWN ON DRAWING.
 - IF THE INSTALLATION CANNOT BE MADE AS SHOWN, CONTACT GAS MEASUREMENT.
 - GASKET MATERIAL SHALL BE GARLOCK 3000 (1/16" THICK).
 - 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 B 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 AS PER THE YELLOW BOOK.
 - 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.
 - INSTALL PIPE SUPPORTS AS DEPICTED AND AS NEEDED. PIPE SUPPORT OR ANY BRACING SHALL NOT BE WELDED TO METER/DISTRIBUTION PIPING AND SHALL BE INSTALLED PER G-695.
 - FOR CON EDISON LOW PRESSURE SYSTEMS, AN INSULATING COMPRESSION COUPLING (ITEM 13) OR FLANGE INSULATING KIT (ITEM 1) AS APPROPRIATE SHALL BE INSTALLED IMMEDIATELY DOWNSTREAM OF THE HEAD OF SERVICE VALVE.
 - REFER TO "YELLOW BOOK" FOR FURTHER INFORMATION.
 - ALL PIPING SHALL BE INSTALLED PLUMB AND LEVEL.
 - ALL OUTDOOR PIPING SHALL BE PAINTED WITH SUITABLE NON-LEAD OUTDOOR PAINT FOR USE ON METAL SURFACES.
 - ALL INSTALLATIONS MUST HAVE 24" MINIMUM CLEARANCE ABOVE THE METER.
 - 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, REFER TO SPEC. G-703 FOR PIPE SIZING REQUIREMENTS.
 - ALL STUDS, BOLTS AND NUTS SHALL BE CORROSION RESISTANT.
 - 4", 6" & 8" TURBINE METERS HAVE FLAT FACE FLANGES. 12" TURBINE METERS HAVE RAISED FACED FLANGES. WHEN INSTALLING A 12" TURBINE METER, USE 12" 150 LB. RAISED FACE STEEL FLANGES (ITEM 15) AND 12" x ¼" 150 LB. RING GASKETS (ITEM 8).

INSTALLATION OF OUTDOOR LOW PRESSURE
GAS TURBINE METER

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

DATE 3/17/2017 DWG. NO. 514789 REV. 0
LAST REV. 3/17/2017