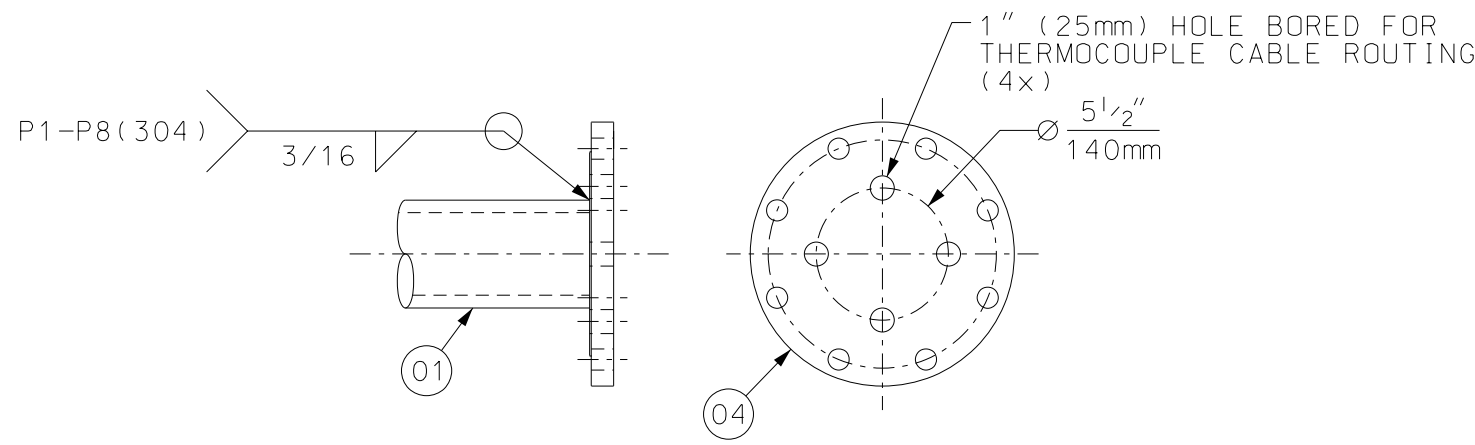
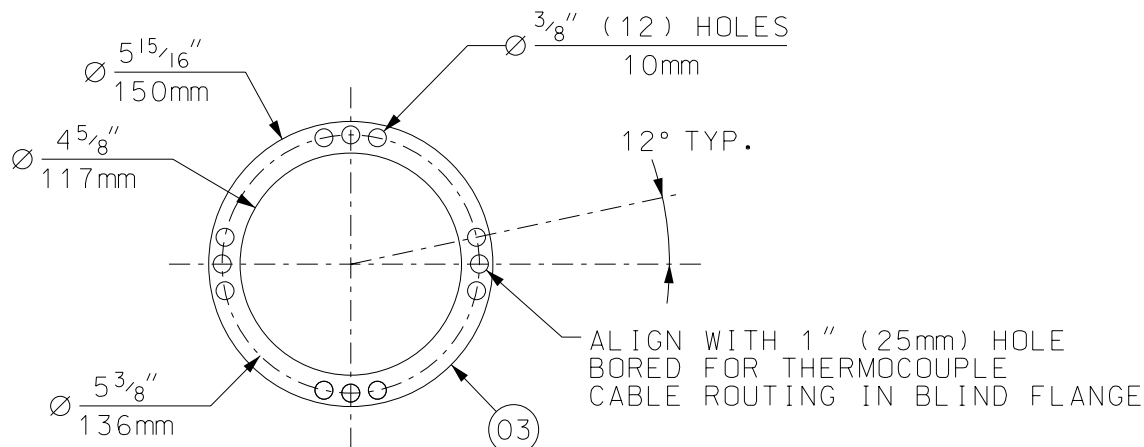


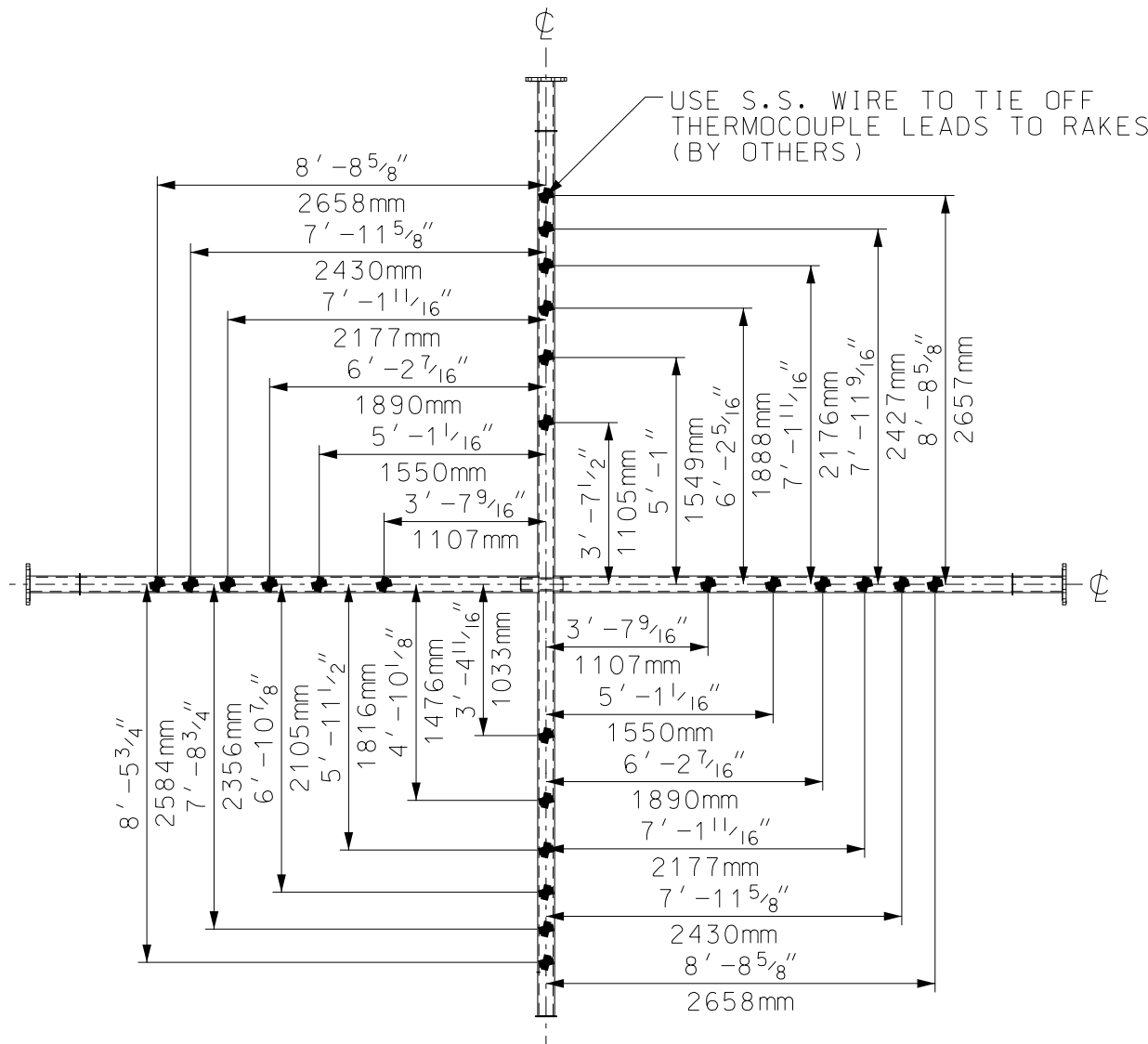
TESTING SUPPORT EQUIPMENT -DO NOT INSTALL UNLESS DIRECTED TO DO SO BY VPI



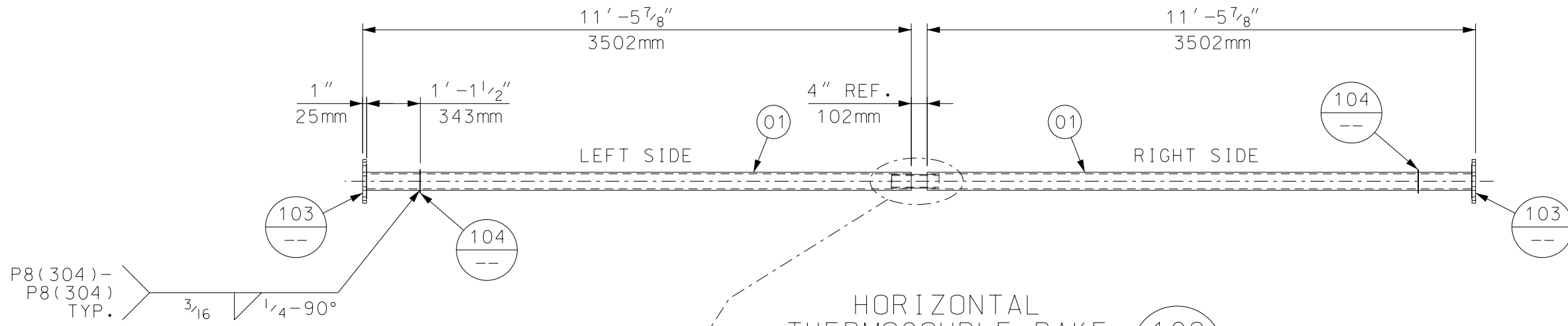
BLIND FLANGE DETAIL (3) REQ'D
SCALE: 1 1/2" = 1'-0"



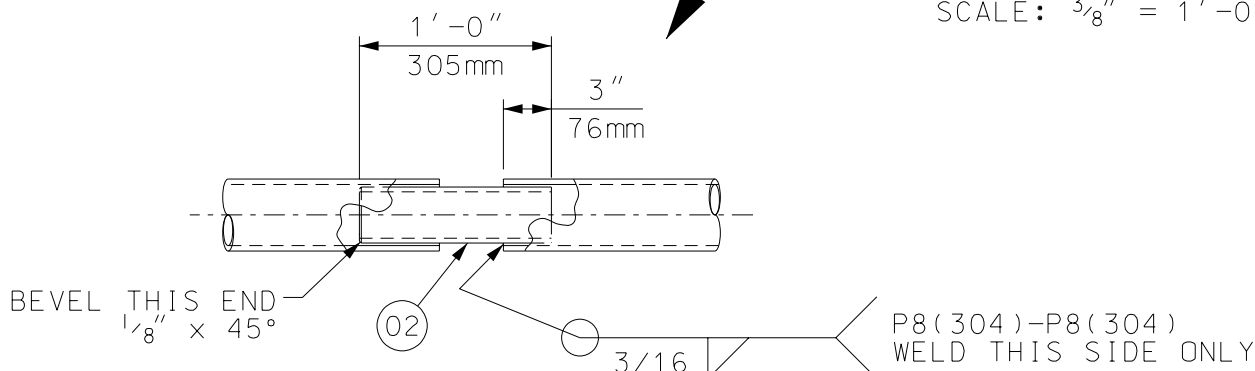
WASHER DETAIL (3) REQ'D
SCALE: 3" = 1'-0"



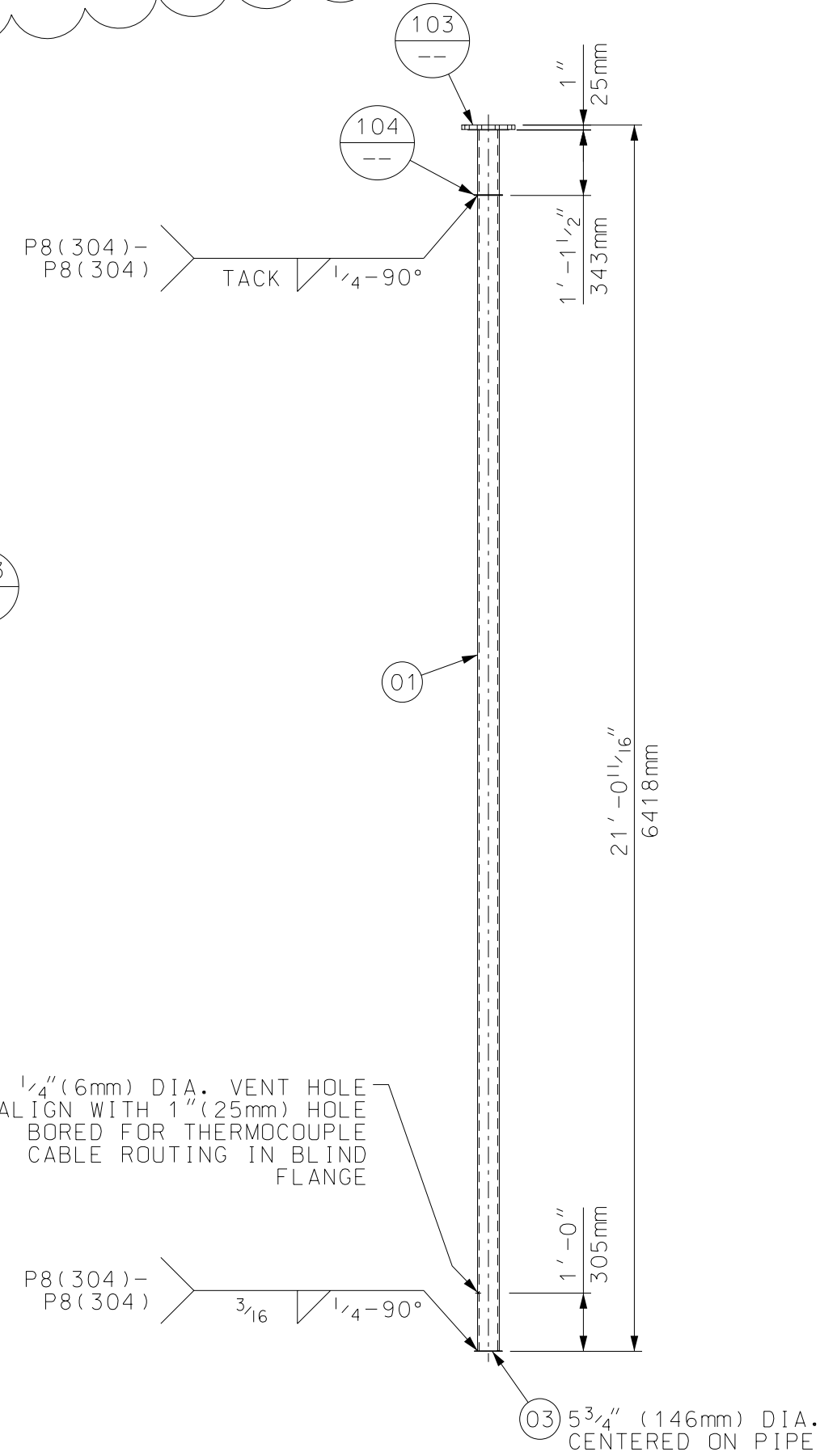
THERMOCOUPLE TIE OFF LOCATIONS (105)



HORIZONTAL THERMOCOUPLE RAKE (1) REQ'D
SCALE: 3/8" = 1'-0"

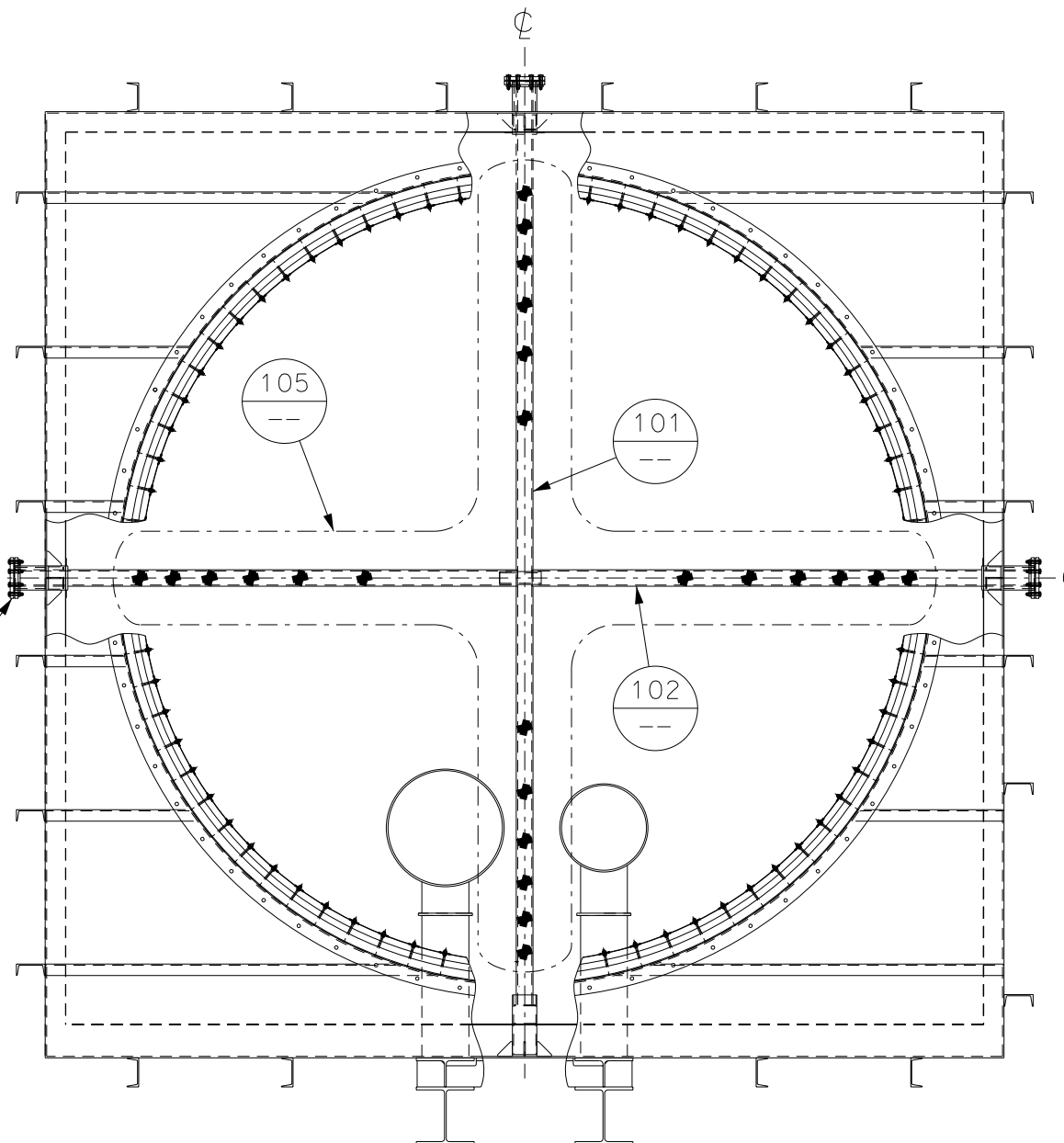


SCALE: 1" = 1'-0"



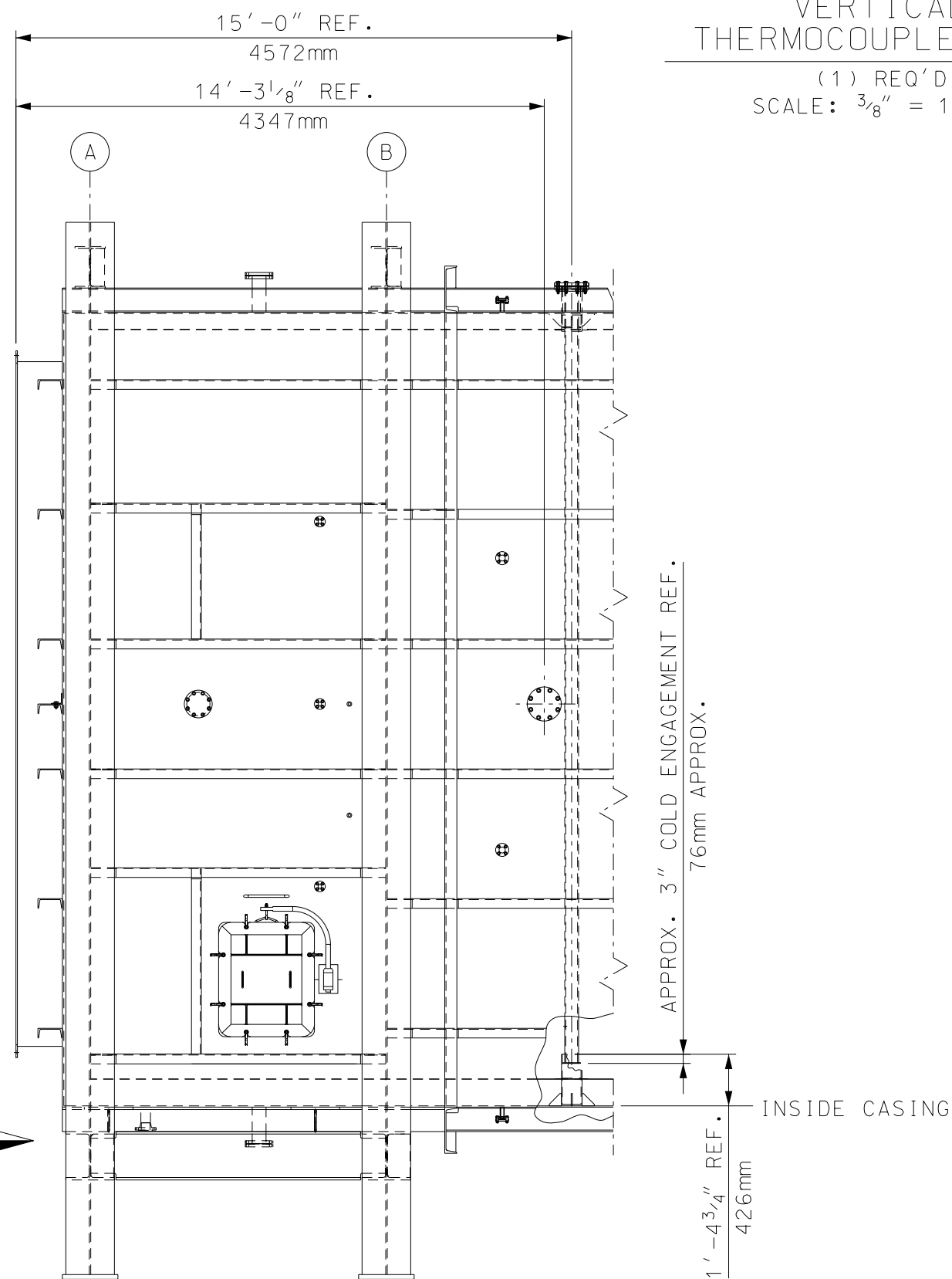
VERTICAL THERMOCOUPLE RAKE (1) REQ'D
SCALE: 3/8" = 1'-0"

RAKE INSTALLATION:
USE EXISTING BOLTS
& GASKET FROM DUCT



INLET DUCT
FRONT VIEW
LOOKING WITH GAS FLOW

GAS FLOW



RIGHT SIDE ELEVATION

BILL OF MATERIALS			
MATERIAL LIST (BY FABRICATOR)			
PART NO.	QTY.	DESCRIPTION	MAT'L. SPEC.
01	44	LIN. FT. PIPE 4" SCH.80 (0.337" WALL)	A312-TP304
02	1	LIN. FT. PIPE 3" SCH.80 (0.300" WALL)	A312-TP304
03	1	SO. FT. PLATE 1/4"(6mm.) THK.	A240-TP304
04	3	BLIND FLANGE, R.F. 6"-150#	A105

MATERIAL LIST (BY VPI)			
PART NO.	QTY.	DESCRIPTION	MAT'L. SPEC.

PART NUMBERS AND ASSEMBLIES ARE TO HAVE THE PREFIX OF "ER45" FOR EXAMPLE, "01" WOULD BE PART "ER4501", "101" ASSEMBLY WOULD BE "ER45101"

- NOTES:
- SEE DRAWING V17494-ERND-0001 FOR GENERAL NOTES.
 - ALL WELDING TO BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY STANDARD D1.1 OR D1.6 AS APPLICABLE.
 - NO PAINTING OR COATING REQUIRED FOR ITEMS SHOWN ON THIS DRAWING.
 - TOTAL APPROX. WEIGHT: 762 LBS. (345 Kg)
 - QUANTITIES SHOWN ARE FOR (1) ONE UNIT:
 - (1) ONE UNIT REQUIRED FOR MIDDLETOWN PROJECT
 - (1) ONE UNIT REQUIRED FOR KINGS MOUNTAIN PROJECT

THERMAL EXPANSION DESIGN TEMP: 1150°F

REFERENCE DRAWINGS:
V17494-ERND-0001 - FIELD CONNECTIONS LOCATION MAP
V17494-DWND-0001 - HRSG INLET DUCT ASSEMBLY

Rev.	Description	Date	Drawn	Chkd.	Appr.
01	ADDED NOTE	01-SEP-16	DR	REEVES	FRY
00	FIRST ISSUE	19-MAY-16	KS	SEG	FRY

Revisions

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MIDDLETOWN ENERGY CENTER
and
KINGS MOUNTAIN ENERGY CENTER
for
NTE ENERGY and GEMMA POWER SYSTEMS
VOGT POWER PROJECTS V17494 & V17495
Title
FIELD CONNECTIONS
INLET DUCT THERMOCOUPLE RAKE ASSEMBLY
AND INSTALLATION - ER45

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Internal Drawing Status	Size	Drawing No.	Rev.
FOR RECORD	D	V17494-ERND-0025	01