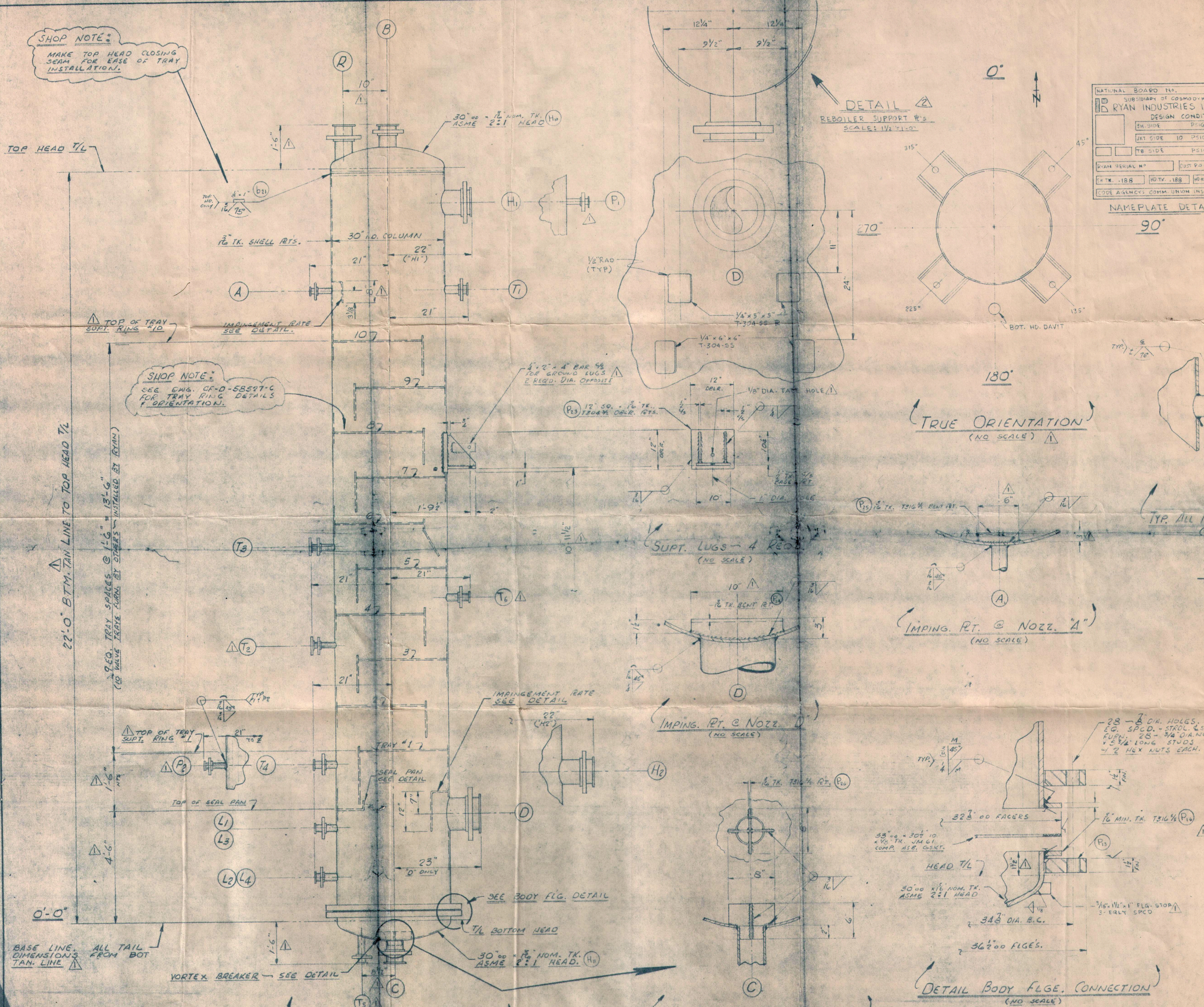


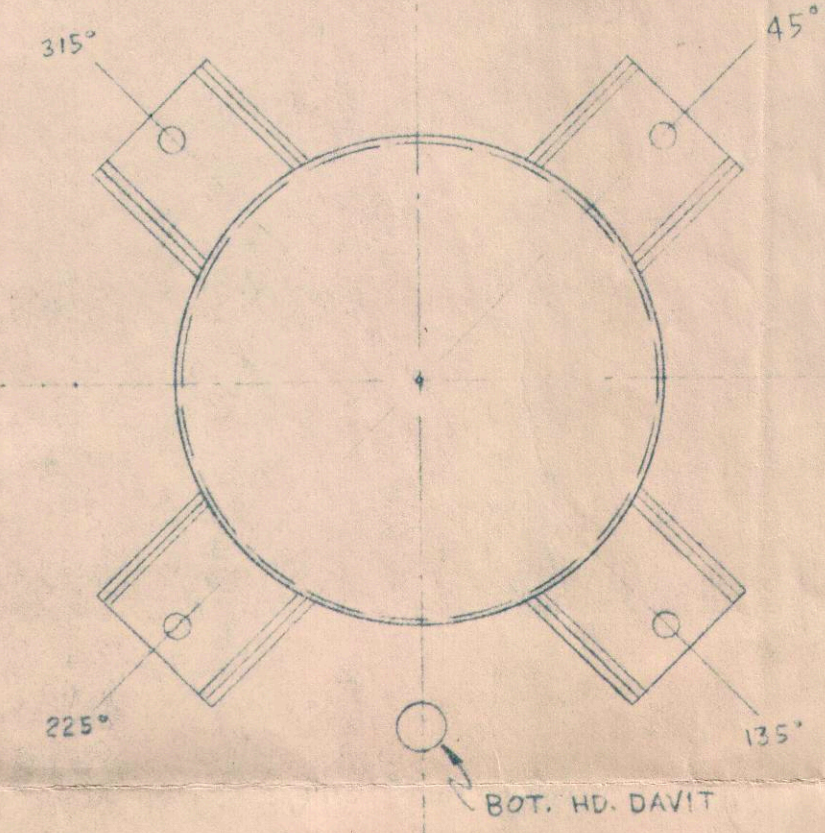
SHOP NOTE:
MAKE TOP HEAD CLOSING SEAM FOR EASE OF TRAY INSTALLATION.



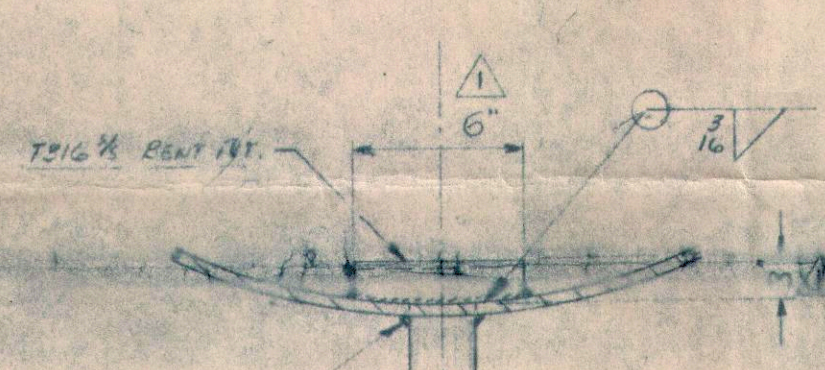
BASE LINE DIMENSIONS TAN. LINE

SCHEMATIC ELEVATION (NO SCALE)

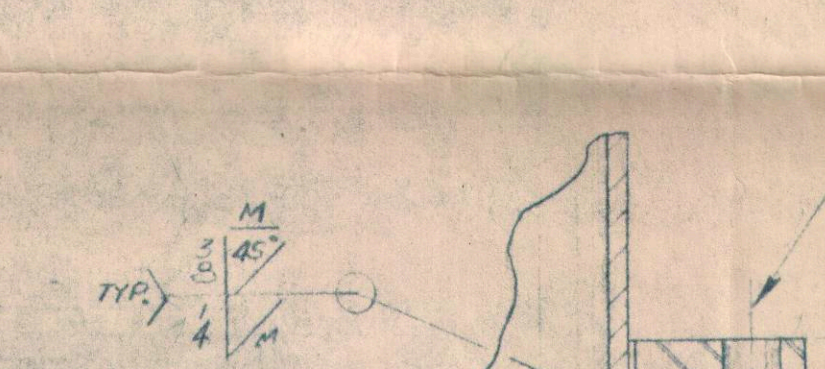
DETAIL REBOILER SUPPORT R'S SCALE: 1/2"=1'-0"



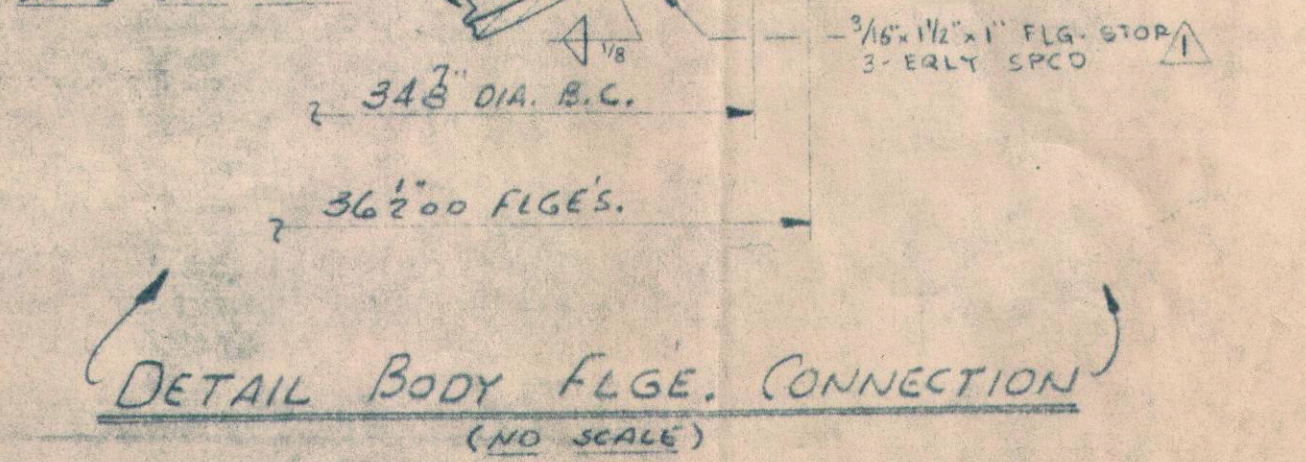
TRUE ORIENTATION (NO SCALE)



IMPING. PL. @ NOZZ. "A" (NO SCALE)



IMPING. PL. @ NOZZ. "D" (NO SCALE)



DETAIL BODY FLGE. CONNECTION (NO SCALE)

DET. VORTEX BRKR. IN NOZZ. "C" (NO SCALE)

NATIONAL BOARD INC. SUBSIDIARY OF COSMOPOLITE RYAN INDUSTRIES INC. DESIGN CONDITIONS

SH. SIDE	PSIG @	° F
INT. SIDE	10 PSIG @	260 ° F
TB. SIDE	PSIG @	° F

RYAN SERIAL NO. [] JUST. P.O. NO. 33020-0501-18
EX. TR. -188 INT. TR. -188 HEAD 2-1 1/2 1/2 1/2
CODE AGENCY COMM. UNION INC.

NAMEPLATE DETAIL (NO SCALE)

NOZZLE SCHEDULE

MARK	SIZE	FLANGE	PIPE SCH.	ELEVATION	SERVICE	ORIENT.
A	1"	150° LU	SCH. 40	20'-0"	INLET	90°
B	4"	"	"	SEE DWG	OVERHEAD VAPOR	E
C	4"	"	"	SEE DWG	REBOILER FEED	E
D	5"	"	SCH. 10	3'-0"	REBOILER RETURN	270°
L1	1"	"	SCH. 40	3'-9 1/8"	LEVEL GAGE	45°
L2	1"	"	"	2'-2"	LEVEL GAGE	45°
L3	1 1/2"	"	"	3'-6"	LEVEL CONTROL	315°
L4	1 1/2"	"	"	2'-4"	LEVEL CONTROL	315°
H1	8"	"	SCH. 10	20'-6"	HANDHOLE	0°
H2	8"	"	SCH. 10	4'-0"	HANDHOLE	0°
P1	1"	"	SCH. 40	20'-6"	PRESSURE CONN.	180°
P2	1"	"	"	5'-0"	PRESSURE CONN.	180°
R	4"	"	SCH. 40	SEE DWG	RELIEF	180°
T1	1 1/2"	"	"	20'-0"	TEMP. CONN.	30°
T2	1 1/2"	"	"	9'-8"	TEMP. CONN. W/B.F.	0°
T3	1 1/2"	"	"	12'-9"	TEMP. CONN. W/B.F.	0°
T4	1 1/2"	"	"	5'-0"	TEMP. CONN.	0°
T5	1 1/2"	"	"	SEE DWG	TEMP. CONN.	0°
S1	3/4"	6000 #	FULL CPLG.	21'-6"	SAMPLE	270°
S2	3/4"	6000 #	FULL CPLG.	12'-6"	SAMPLE	5°
T6	1 1/2"	150° LU	SCH. 40	11'-4"		0°

"APPROVED" FOR LAYOUT ONLY
CATALYTIC CONSTRUCTION CO.
Date: 6-5-70
Signed: [Signature]
Engineering Department
All details and dimensions are the responsibility of the vendor. Proceed with fabrication. This approval does not relieve vendor of the obligation to meet specifications and all other terms and conditions of the subcontract or purchase order.

- GENERAL NOTES:
- 1) MAT'L: SHELL, HEADS, TRAY RINGS, TRAY DOWNCOMERS, NOZZLE FLANGES, ALL INTERNALS - A 240 T-316 3/4, NOZZLE NECK EXTENSIONS - A 312 T-316 3/4, STUB-ENDS - A 182 F-316 3/4, SUPPORT LUG DOUBLERS - T-304 S.S., SUPPORT LUGS - A 782 S.S. C, NOZZ. FLGS. - A 181 S.S. I, BODY FLANGES - A 785 S.S. C, STUDS - A 143 S.S., NUTS - A 794 S.S. 2H, GASKETS - 1/4" TR. JMGL, TRAYS & DOWNCOMERS - T-316 3/4 S.S. (BY OTHERS), DAVIT & BOTTOM HEAD - ALL CARBON STEEL T-304 S.S. DOUBLERS.
 - 2) DESIGN: COLUMN TO BE ASME CODE CONSTRUCTED BUT NOT STAMPED. FOR A DESIGN PRESSURE OF 10 PSIG @ 260° F. HYDRO TEST @ 20 PSIG. SPOT X-RAY REQUIRED. SPECIFIED CORROSION ALLOWANCE - .063
 - 3) CLEANING: REMOVE ALL DIRT, GREASE, WELD SPATTER, ETC. FROM ALL INTERNAL & EXTERNAL SURFACES. REMOVE EXTERIOR S.S. SURFACES FOR APPEARANCE. PROTECT ALL OPENINGS PRIOR TO SHIPMENT WITH MASONITE COVERS & WATERPROOF TAPE.
 - 4) INSPECTION BY CATALYTIC CONSTRUCTION CO. AND RYAN.
 - 5) CATALYTIC CONST. CO. PO # 33020-0501-18, TAG ITEM # T-71
 - 6) APPROX. WT. EMPTY: 2950#, WT. FULL H2O: 9700#
 - 7) SEE DWG. CF-D-58527-C FOR TRAY RINGS & RELATED DETAILS.
 - 8) ITEM N° 2, 0-180° E, SHIPPING WGT & NORTH ARROW SHALL BE PAINTED ON VESSEL

1 REQ'D. RYAN W.O.# 58527
V.P. 33020-0501-18-2R3

PRINT ISSUED

RYAN INDUSTRIES INCORPORATED

NO.	REVISION	DATE	BY

30" ID - 22'-0" TBIG 1/2 TRAY COLUMN FOR CATALYTIC CONSTRUCTION CO. PHILADELPHIA, PENNSYLVANIA

SCALE AS NOTED DATE FEB. 7, 1970

DRAWN BY: [Signature] CHECKED BY: [Signature] APPROVED BY: [Signature]

DRAWING NO. CF-D-58527-B

CUST. P.O. 33020-0501-18

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