



*Celebrating Thirty-six Years of Experience & Integrity*

Scotts Valley Water District

Sequoia Exterior Coating Analysis



Mr. Nate Gillespie

Operations Manager

2 Civic Center Drive

Scotts Valley, CA 95066

Prepared By

---

Mr. Ed Darrimon

National Association of Corrosion Engineers Inspector Number #106

July 6, 2023

Northern CA, Corporate: 1- 888-384-6839    Southern CA. 1-661-873-3601    Nevada 775-379-2283

P.O. Box 867    Denair CA. 95316

Member: API-AWWA-NACE-SSPC-ASTM

### Introduction

At the request of the Scotts Valley Water District, Bay Area Coating Consultants, Inc. (BACC) conducted condition assessment inspection the exterior of Sequoia reservoir. The reservoir is an AWWA D-100 welded carbon steel tank. BACC was requested to perform an exterior coating assessment. The exterior shell was overcoated within the past five years.

This report is prepared on the basis of noted field investigations and the review of existing information furnished by Scotts Valley Water District. The conclusions and recommendations contained within this report are those determined by the coating inspection consultant and are consistent with the best practices identified by AWWA, NACE, ASTM and SSPC.

Background Information	
Location:	Scotts Valley, CA.
Project Engineer:	Mr. Nate Gillespie
Identification:	No Identification
Year Built:	1983
Diameter:	85'
Height:	32'
Builder:	Trsco Tank
Capacity:	1.25 MG.
Type of Lining:	Epoxy
Exterior coating.:	Unknown
Cathodic Protection:	Yes

**Inspected By:** Mr. Ed Darrimon  
N.A.C.E. Certified Inspector #106



The exterior shell plate coating is in good condition.



Detachment of over coat at floor plate extension



Vegetation growth at base of tank



No caulking at interface between foundation and tank floor plate extension



Center Vent



Failed fractured roof plate coating.



The coating failed, and uniform corrosion is coming through the existing roof plate coating.

### Findings

The exterior of the shell has been overcoated within the past five years. The exterior roof plates were not coated. The existing coating has totally failed. The coating has become brittle and has fractured down to the steel substrate. No isolated or exfoliation corrosion was noted. The roof plates are exhibiting large areas where the base metal is rusting. This type of corrosion is called uniform corrosion in which the steel corrodes evenly. Spot, or exfoliation concentrates in an area that leads to a more severe type of corrosion and metal isolated metal loss in a concentrated area. The exterior roof plate coating is completely failed and will require abrasive blasting and application of a new coating system.



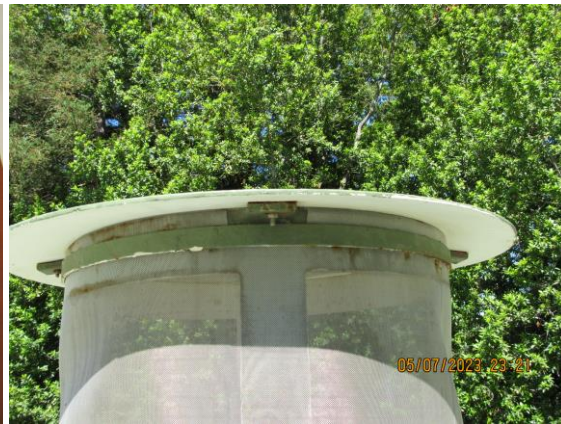
The coating on the shell plates looks to be in good condition. We are witnessing minor peeling along the tub ring floor plate extension. Any vegetation growth should always be maintained at the base of the tank.

### Recommendations

The roof plate should be abrasive blasted to SSPC/SpNo.10 near white metal. I would recommend wet abrasive blasting using a water ring. All the vents will require protective covers installed each day and removed at the end of the day to prevent the tank from implosion during a rapid drawdown of the tank. The material would be HEPA filter material. A prime coat with a stripe coat of the welds with something like PPG/Ameron Amerlock 2 surface tolerant epoxy. Then a coat of PPG/PSX 700 poly siloxane finish coat. There are better anode covers and the existing covers should be replaced with a rubber handhold grommet which will help with edge corrosion and any water intrusion into the tank. The gap at the interface between the concrete slab and the floor plate extension should be caulked something like Sika 2-C Non sag to prevent water intrusion from entering the bottom of the tank floor plates. The minor areas at the bottom of the tub ring floor plate extension should be touched up with the same system applied to the roof. If you are going to rehabilitate the roof coating system, the outer vents could use new fiber glass covers to protect from water intrusion through the vent screens. The center vent is in good condition.



C/P Handhold Gasket



Exposed vent screens

Please call if you have any questions or if you want to further discuss the information contained in this report.

Respectfully submitted,

Please call if you have any questions or if you want to further discuss the information contained in this proposal.

Respectfully Submitted,



Ed Darrimon

President

Bay Area Coating Consultants, Inc.

[edarrimon@bayareacoating.com](mailto:edarrimon@bayareacoating.com)

[www.bayareacoating.com](http://www.bayareacoating.com)



**SSPC Certified Inspection  
Company**

**BACC Safety and Drug Testing Compliance Partners**



Collect. Verify. Connect.

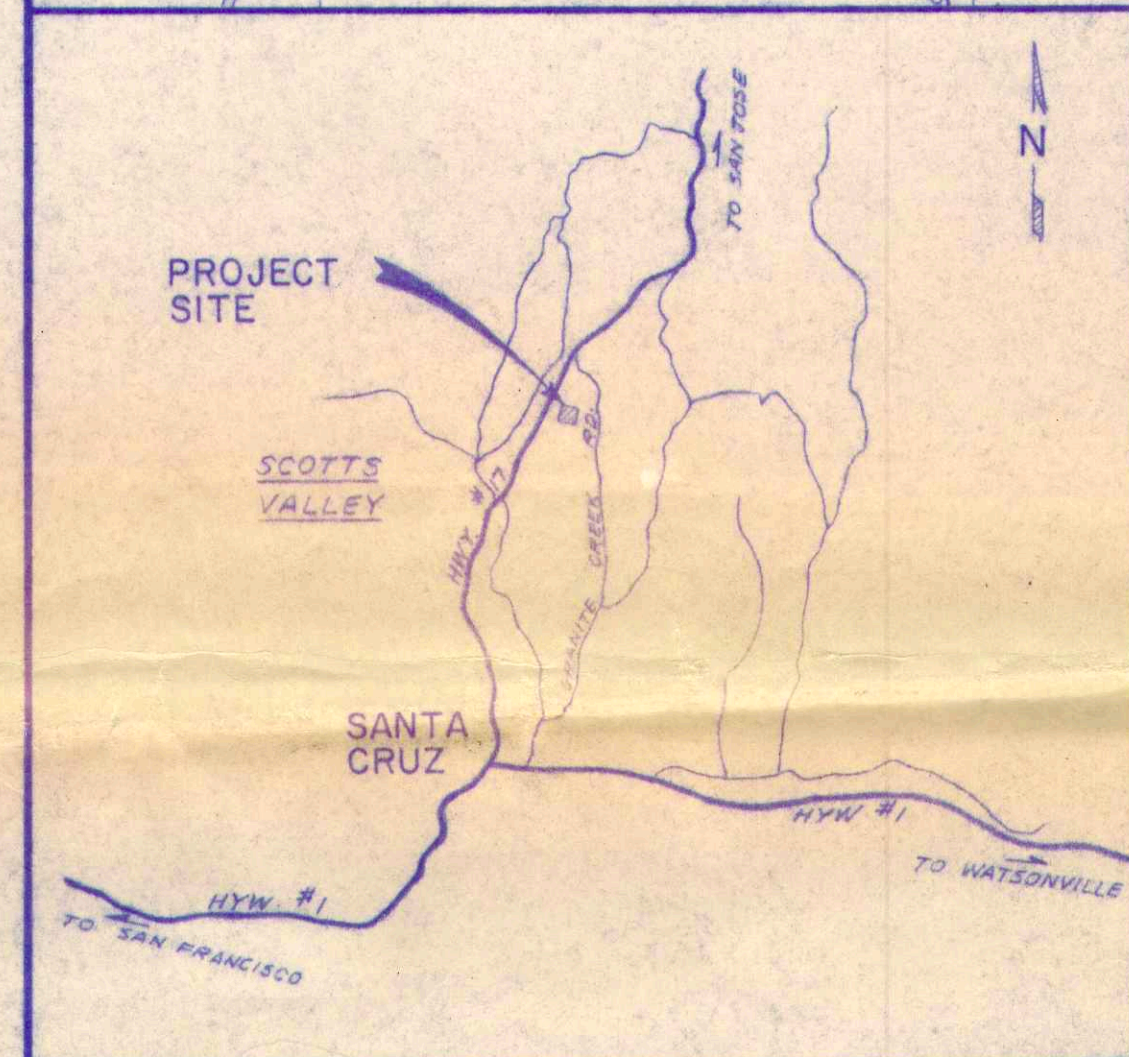
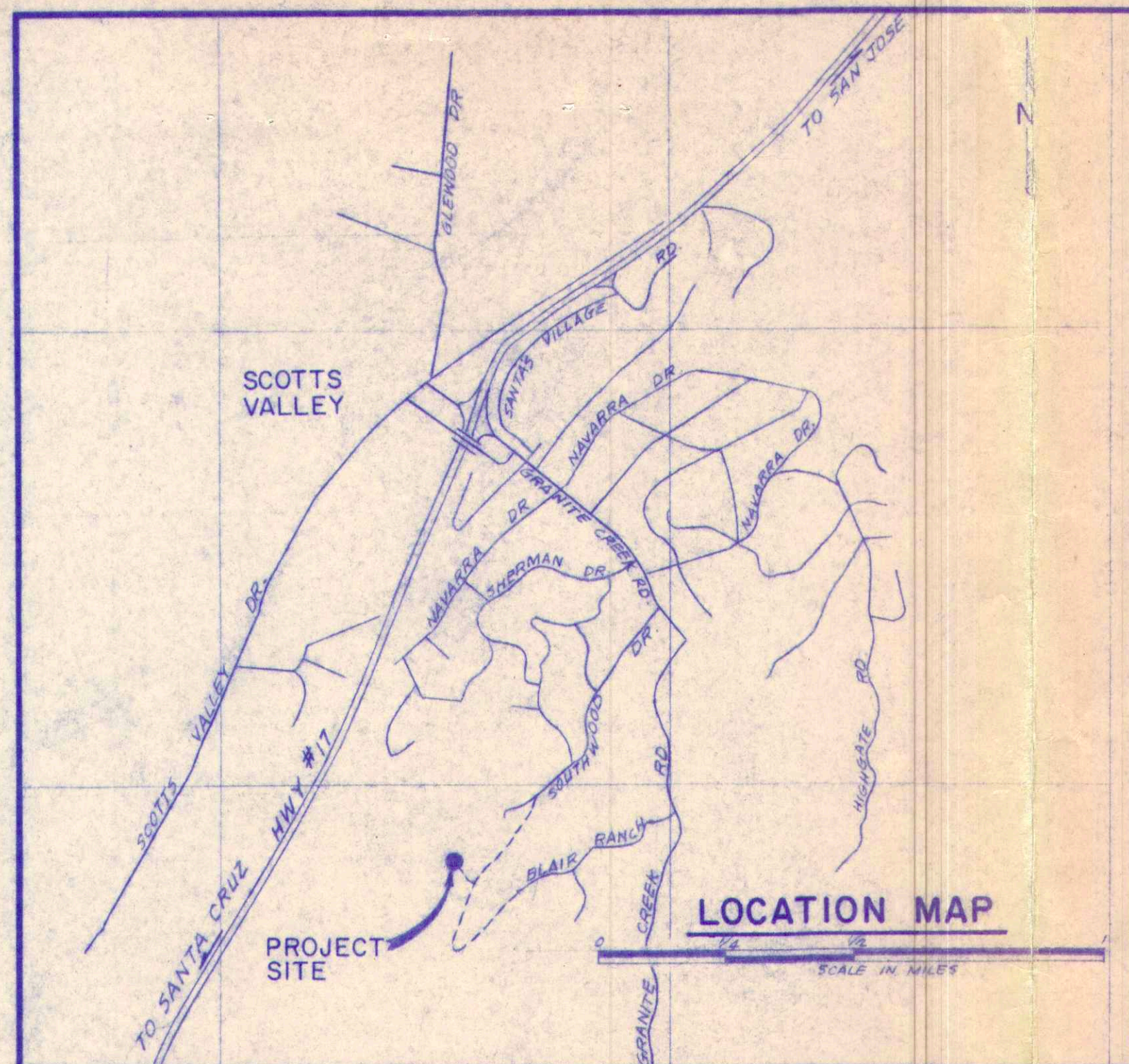


**Northern CA, Corporate: 1- 888-384-6839    Southern CA. 1-661-873-3601    Nevada 775-379-2283**

**P.O. Box 867    Denair CA. 95316**

**Member: API-AWWA-NACE-SSPC-ASTM**



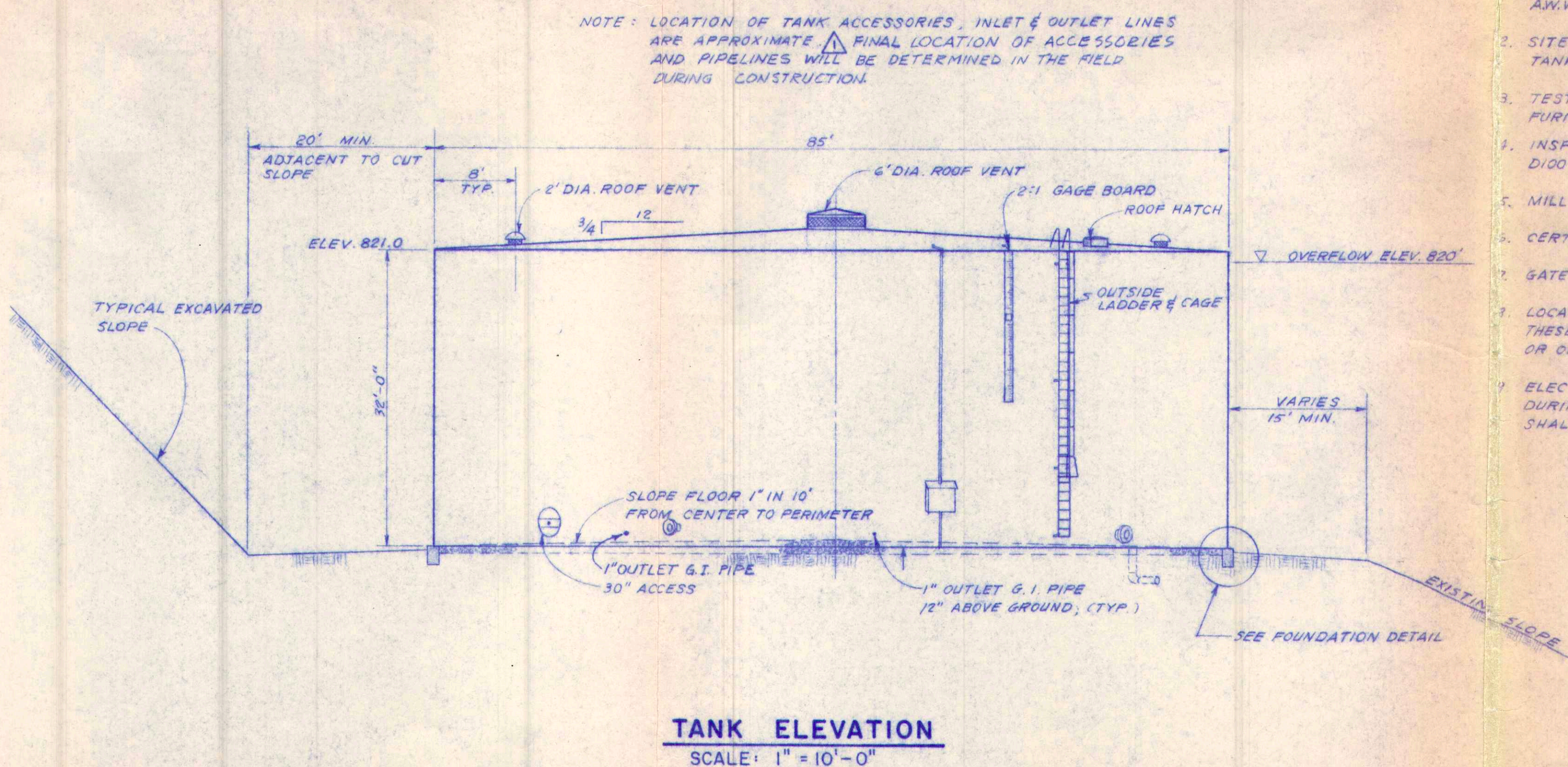
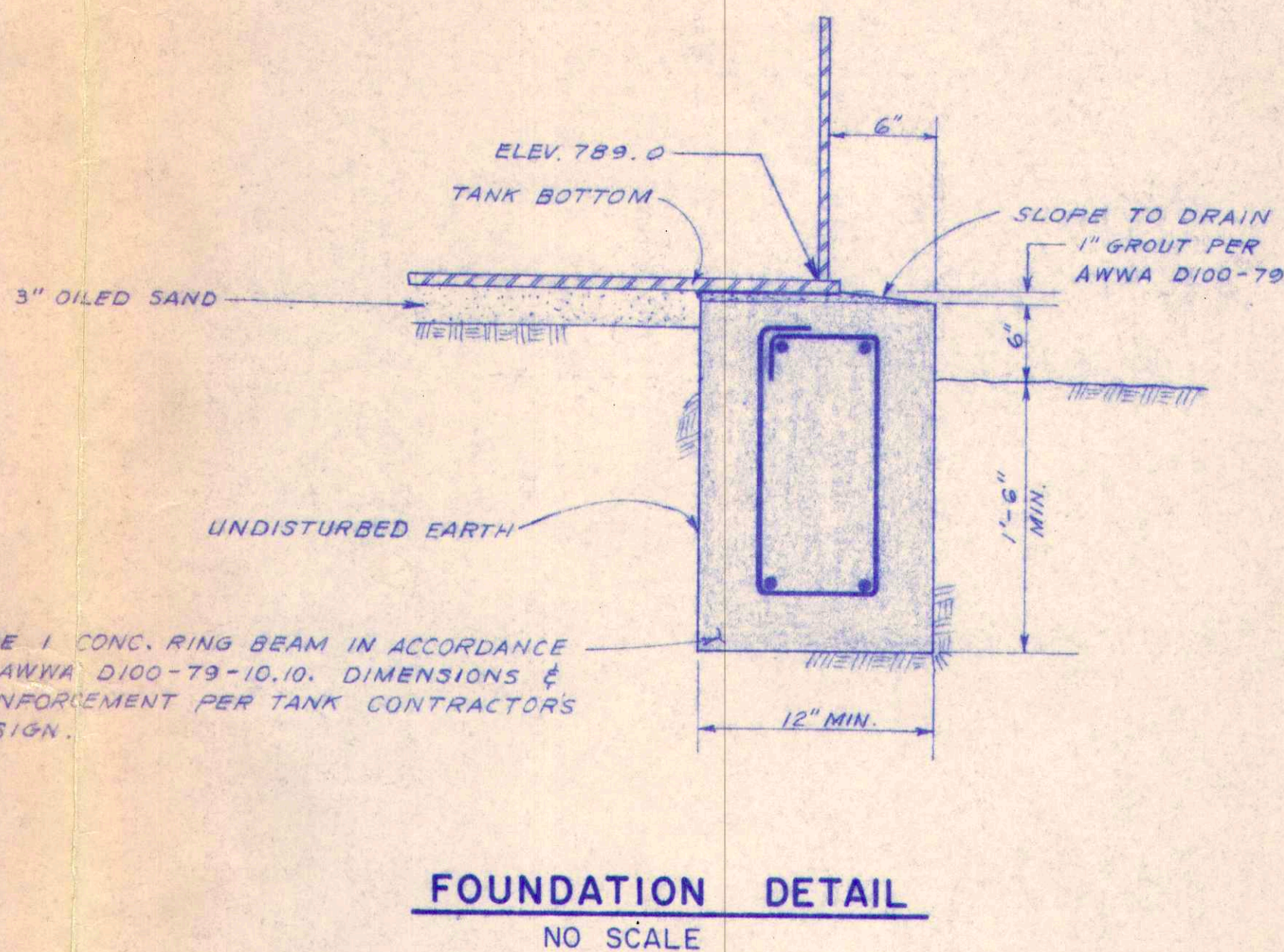
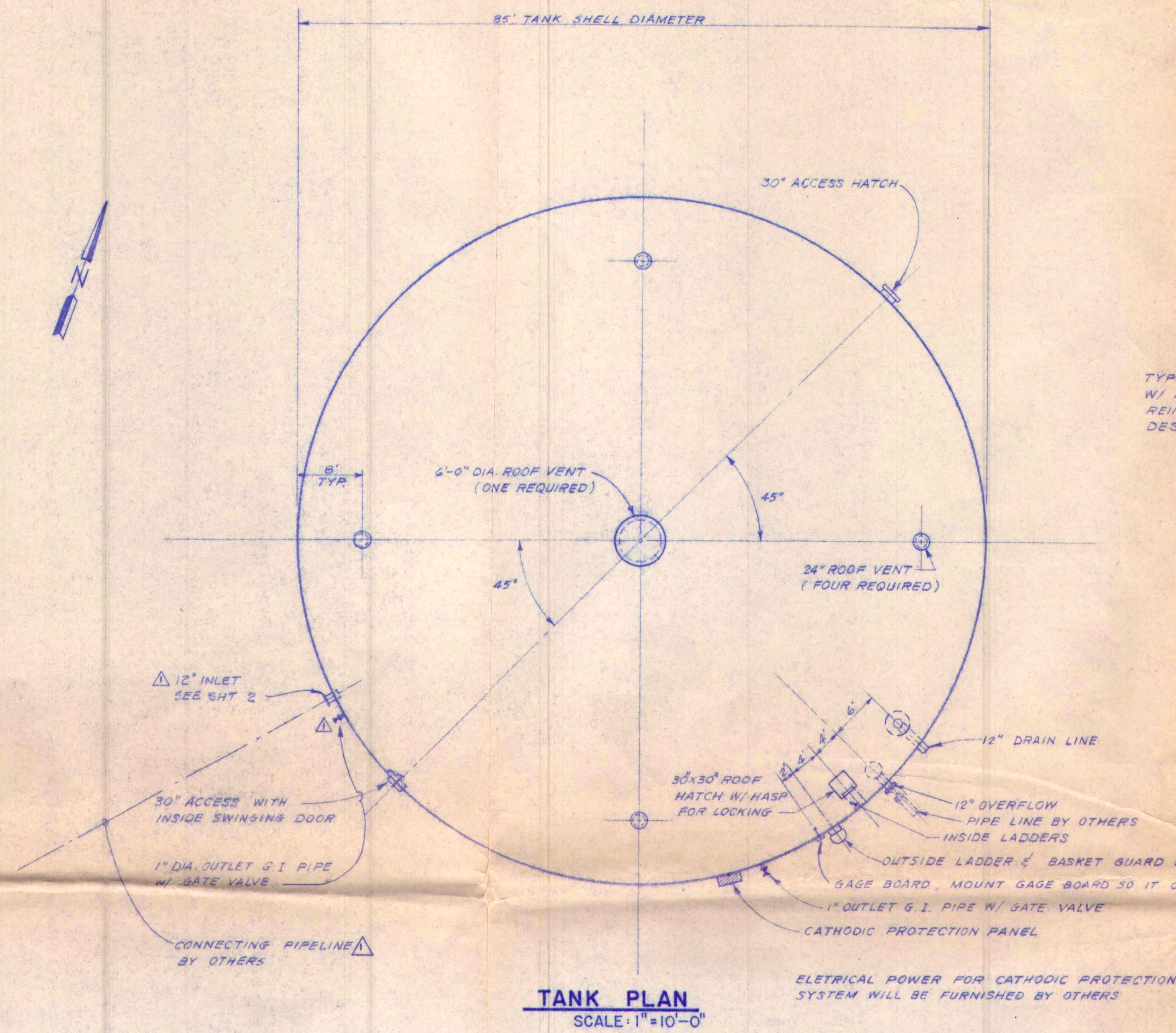


REV.	BY	DATE	DESCRIPTION
DES.	G.M.	APP.	G.E.C.
DWN.	E.L.	DATE	JULY 1982
CHK.	G.M.		

$$Vol = AH = \pi r^2 H$$

$$= 3.14 \left( \frac{85}{2} \right)^2 32 = 181,492 \text{ ft}^3$$

$$1.36 \text{ mgal}$$



- GENERAL NOTES
- TANK SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE W/ AWWA SPECIFICATION D-100-79, APPENDIX C.
  - SITE GRADING WILL BY OTHERS. CONTRACTOR SHALL DESIGN & CONSTRUCT TANK FOUNDATION.
  - TESTING: TANK BOTTOM SHALL BE TESTED W/ VACUUM SEAM TESTER FURNISHED & OPERATED BY CONTRACTOR.
  - INSPECTION OF WELDS TO BE BY RADIOGRAPHY IN ACCORDANCE W/ A.W.W.A. D100-79, APPENDIX C.
  - MILL TEST REPORTS SHALL BE FURNISHED.
  - CERTIFICATE OF COMPLIANCE SHALL BE FURNISHED BY CONTRACTOR.
  - GATE VALVES SHALL BE CRANE NO. 437.
  - LOCATION OF TANK ACCESSORIES, INLET & OUTLET LINES ARE APPROXIMATE. THESE ITEMS WILL BE LOCATED EITHER IN THE FIELD TO SUIT FIELD CONDITIONS OR ON THE SHOP DRAWINGS.
  - ELECTRIC POWER WILL BE EXTENDED TO THE BASE OF THE TANK BY OTHERS DURING CONSTRUCTION. CONNECTION TO THE ELECTRIC POWER CONDUCTORS SHALL BE MADE AT THE GROUND ELEVATION.

APPROVED BY *[Signature]* 5-18-82  
SCOTTS VALLEY COUNTY WATER DISTRICT DATE

AUG 12 1982

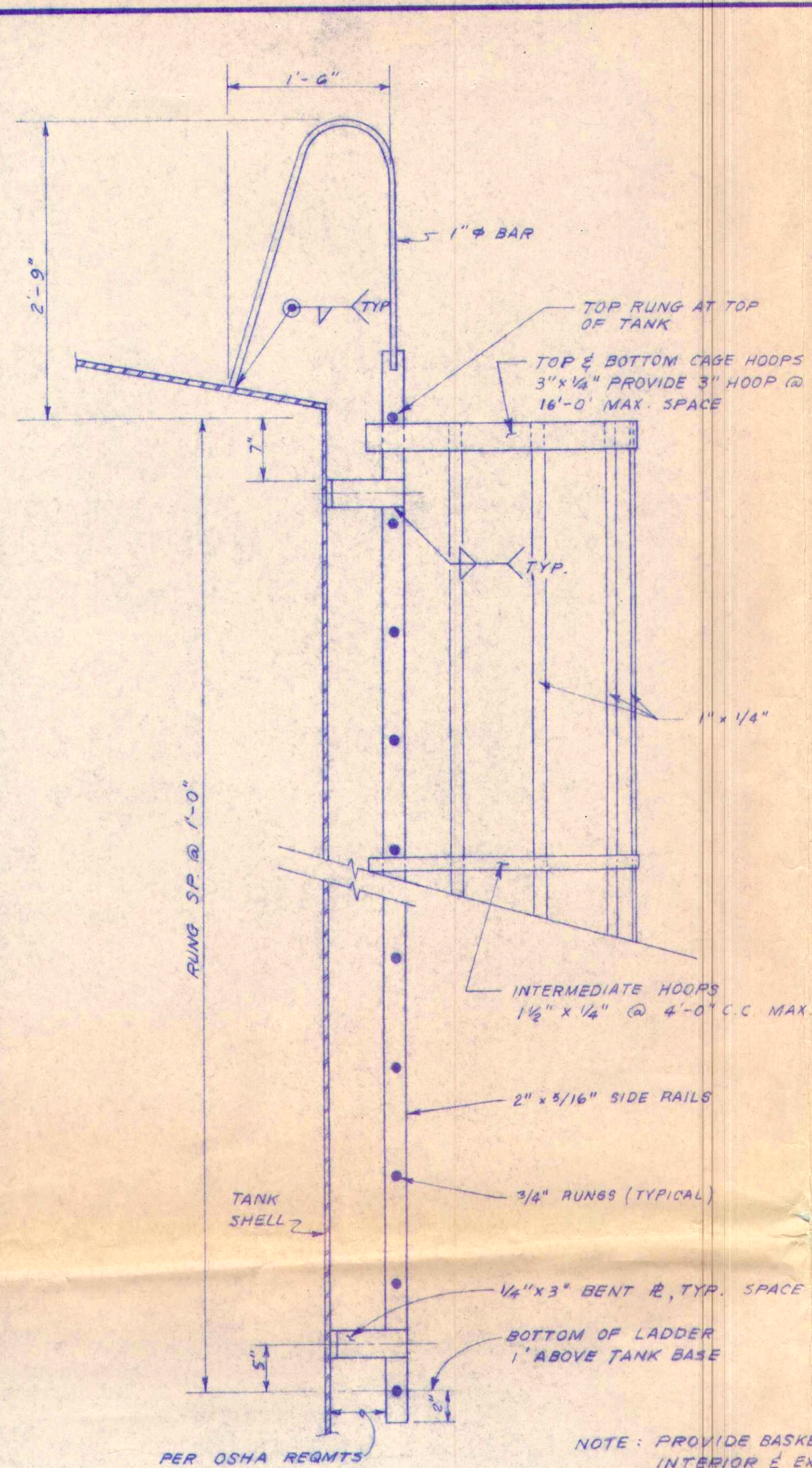
STEKOLL DEVELOPMENT CORPORATION  
1.25 MILLION GALLON WATER TANK

BOONE, COOK & ASSOCIATES  
CONSULTING ENGINEERS  
1020 CORPORATION WAY PALO ALTO, CALIFORNIA 94303

TANK PLAN AND ELEVATION

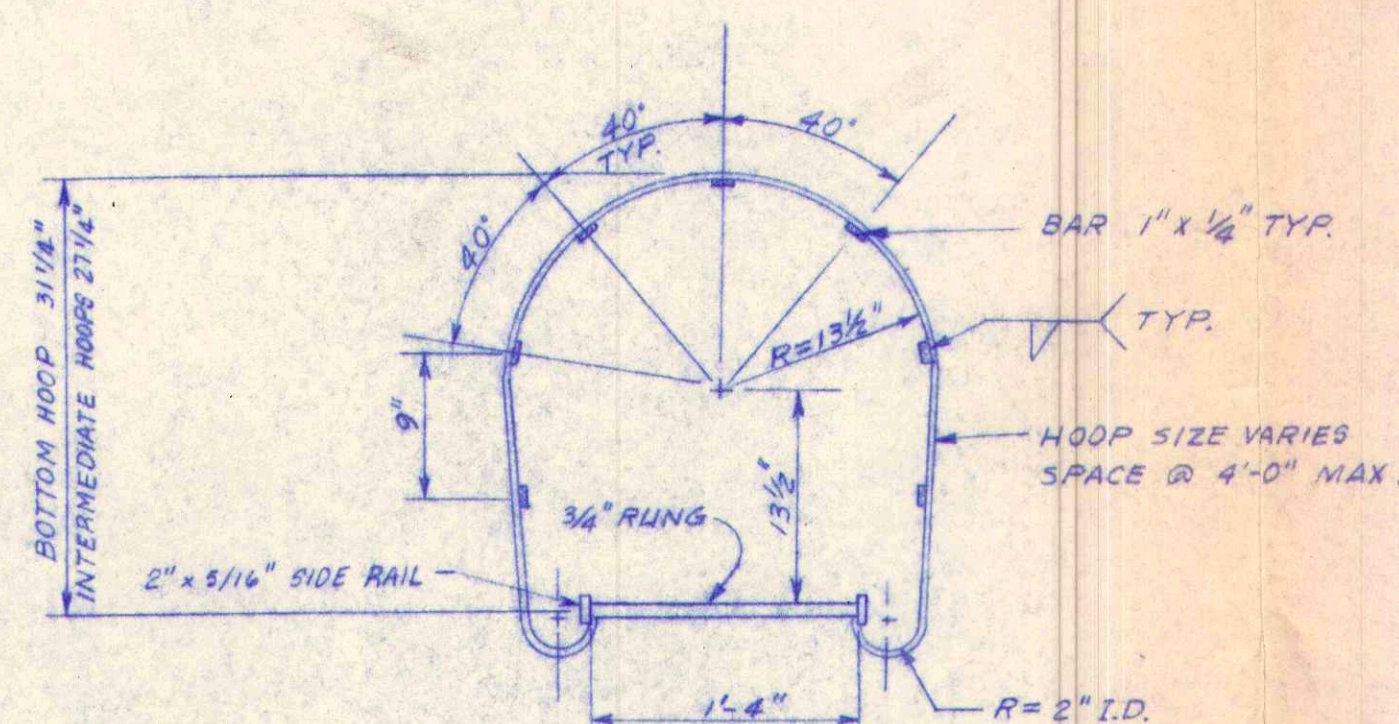
DWG. NO. M 226 G  
1 OF 3  
JOB. NO. 1-3-13





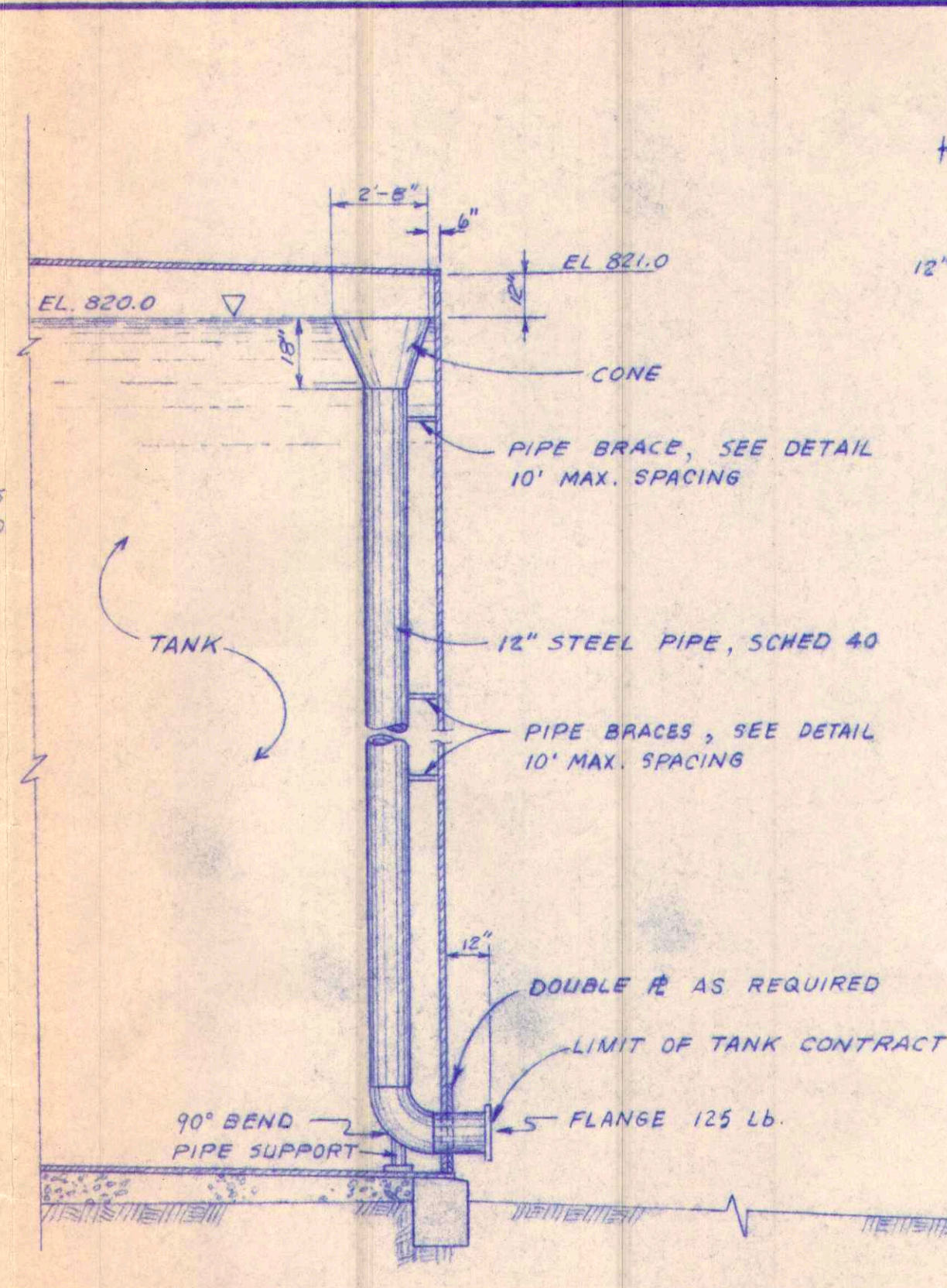
**LADDER DETAIL**  
SCALE: 1" = 1'-0"

△ PROVIDE LOCKABLE PLATE COVER BELOW ENTRANCE TO BASKET GUARD CAGE. SHOW DETAILS ON SHOP DRAWINGS OF CAGE AND LADDER.

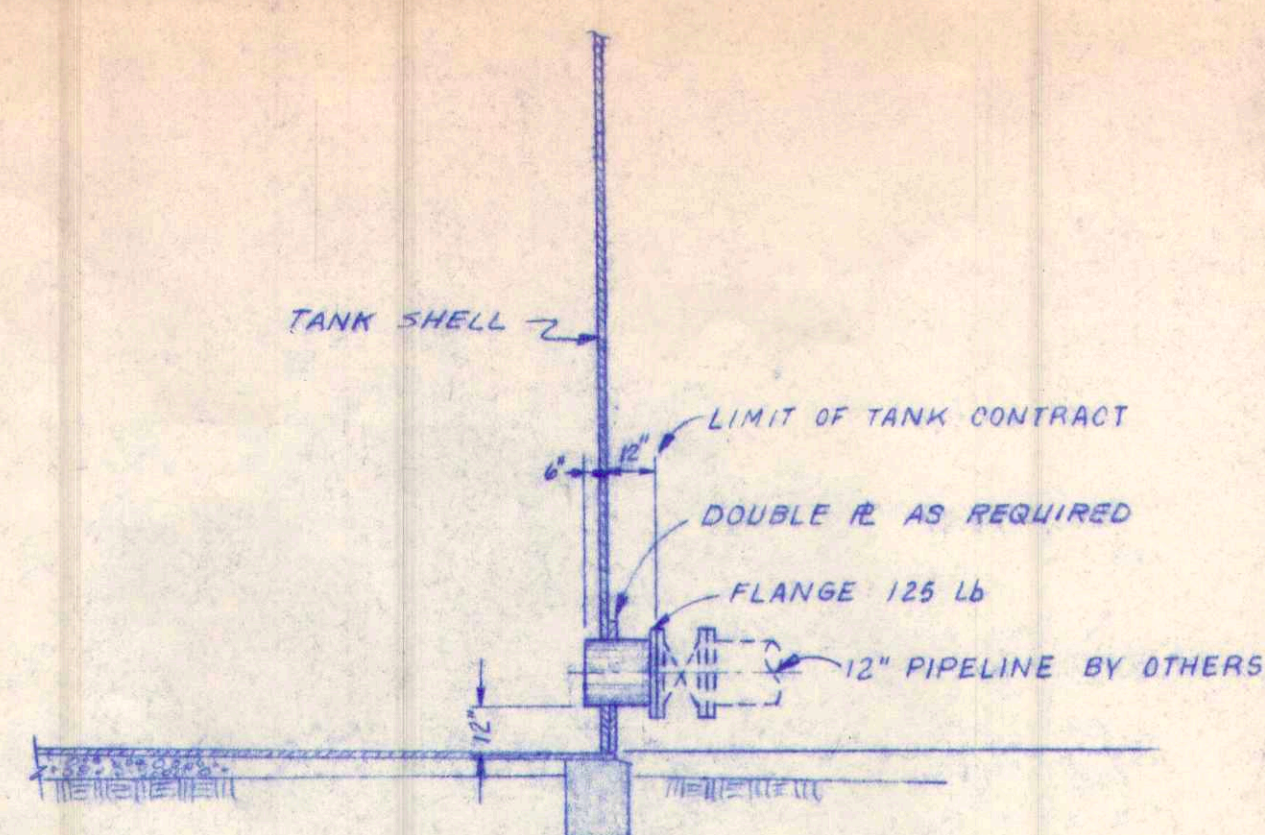


**BASKET GUARD HOOP**  
SCALE: 1" = 1'-0"

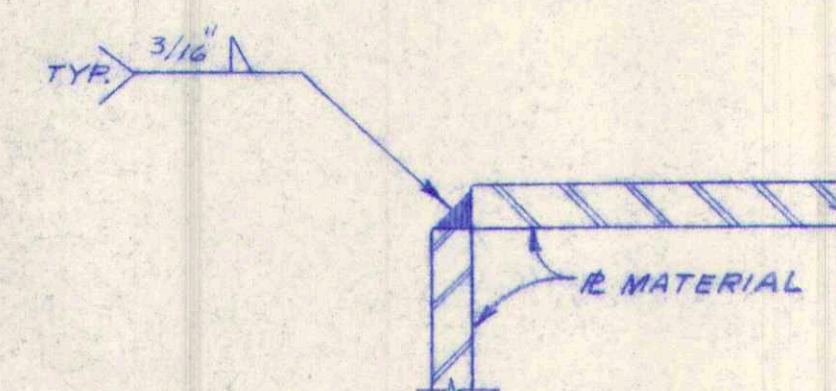
NOTE: BASKET GUARD HOOP AS REQUIRED BY CAL/OSHA REGS. BOTTOM HOOP TO BE LARGER.



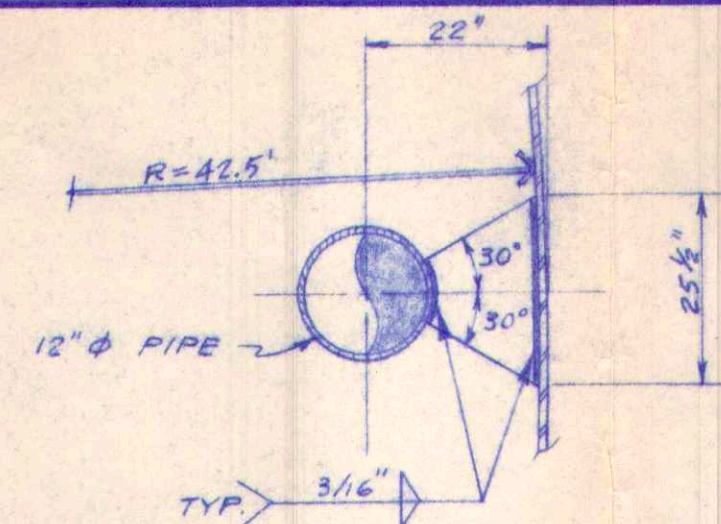
**OVERFLOW LINE DETAIL**  
SCALE: 1/4" = 1'-0"



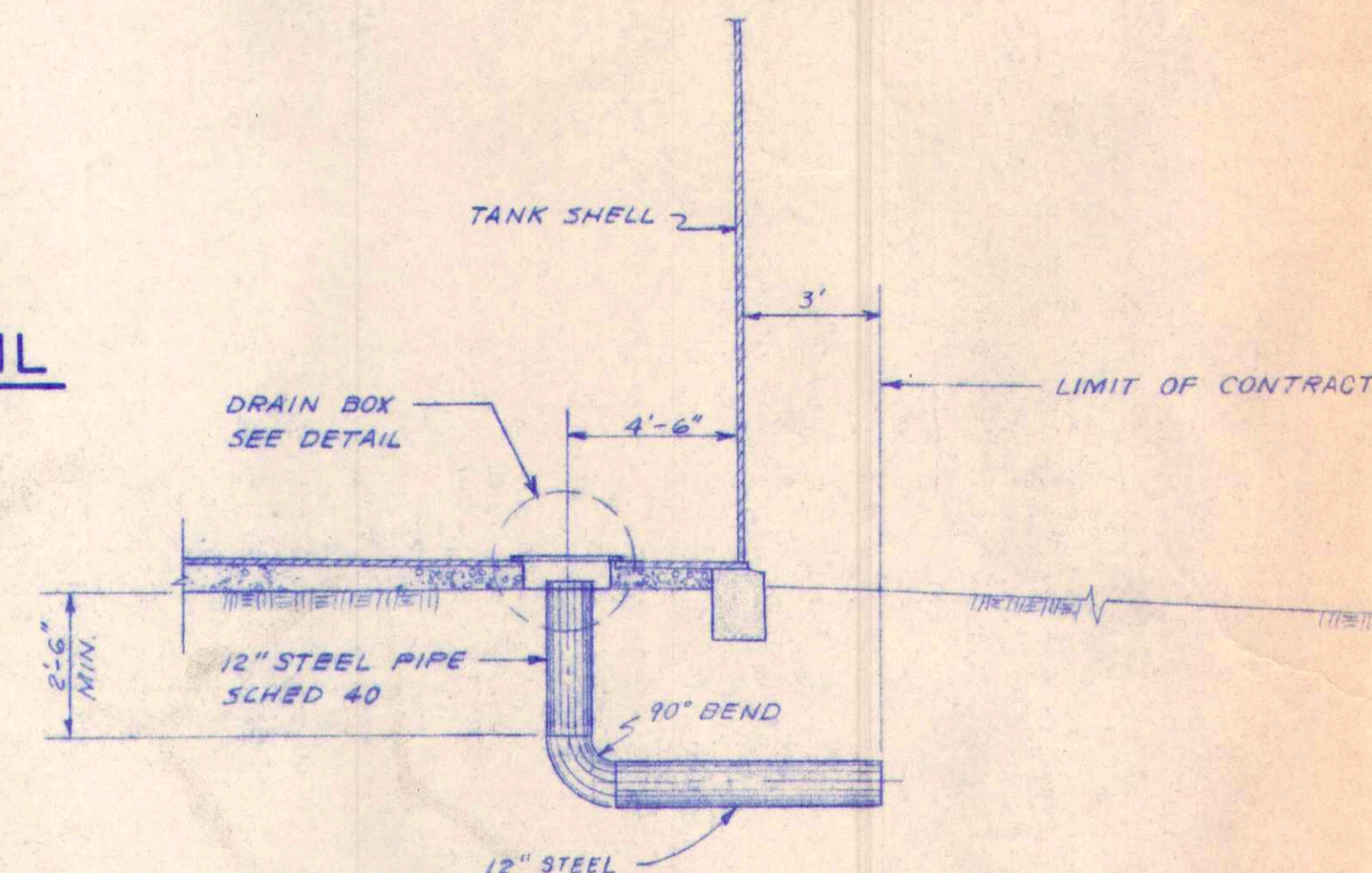
**INLET LINE DETAIL**  
SCALE: 1/4" = 1'-0"



**ACCESS HATCH TYPICAL JOINT DETAIL**  
NO SCALE

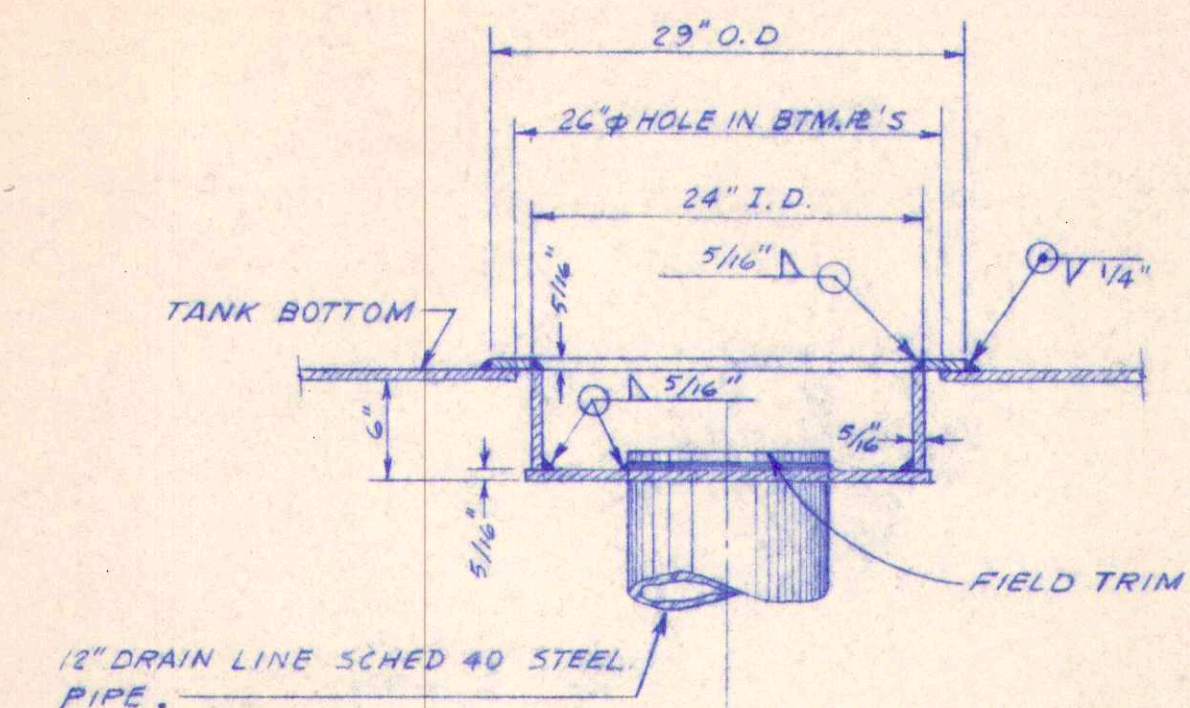


**PIPE BRACE DETAIL**  
NO SCALE

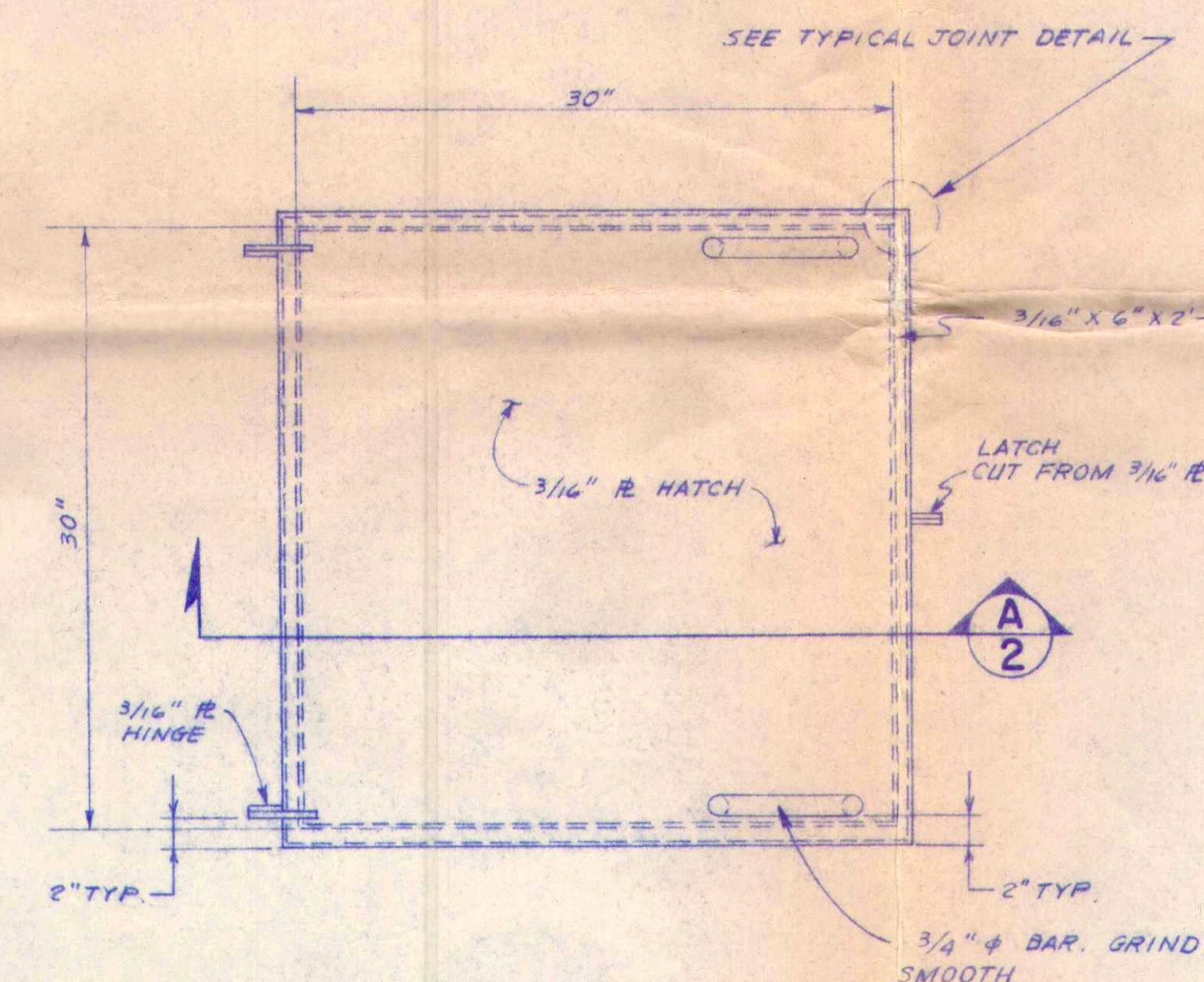


**DRAIN LINE DETAIL**  
SCALE: 1/4" = 1'-0"

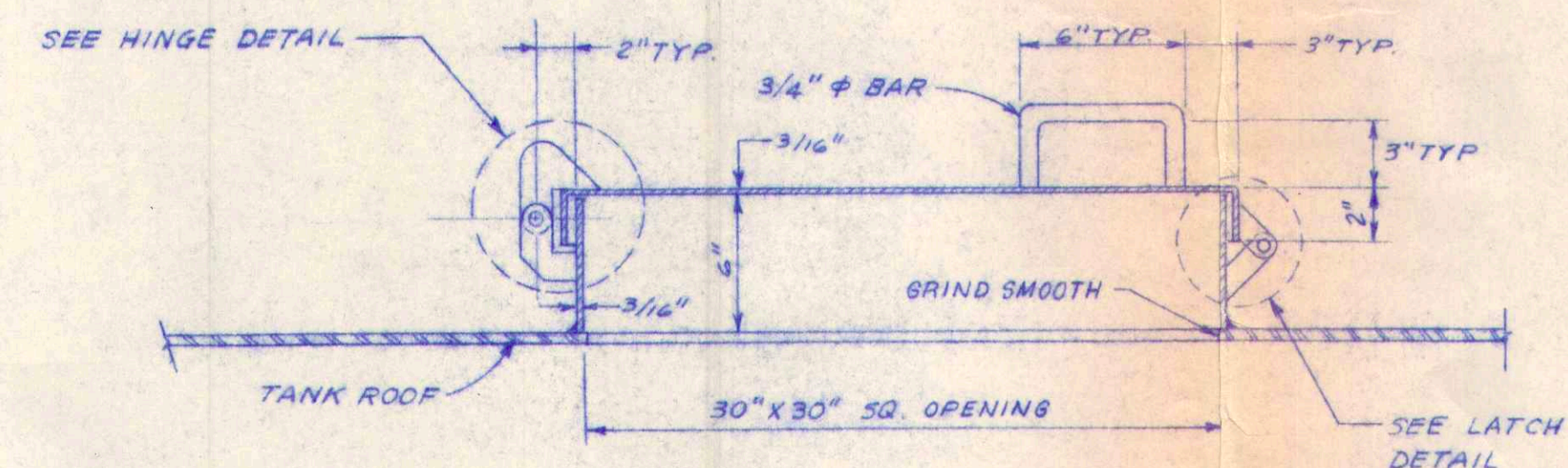
NOTE: WRAP BURIED STEEL PIPE WITH TWO LAYERS OF "PROTECTO-WRAP 202".



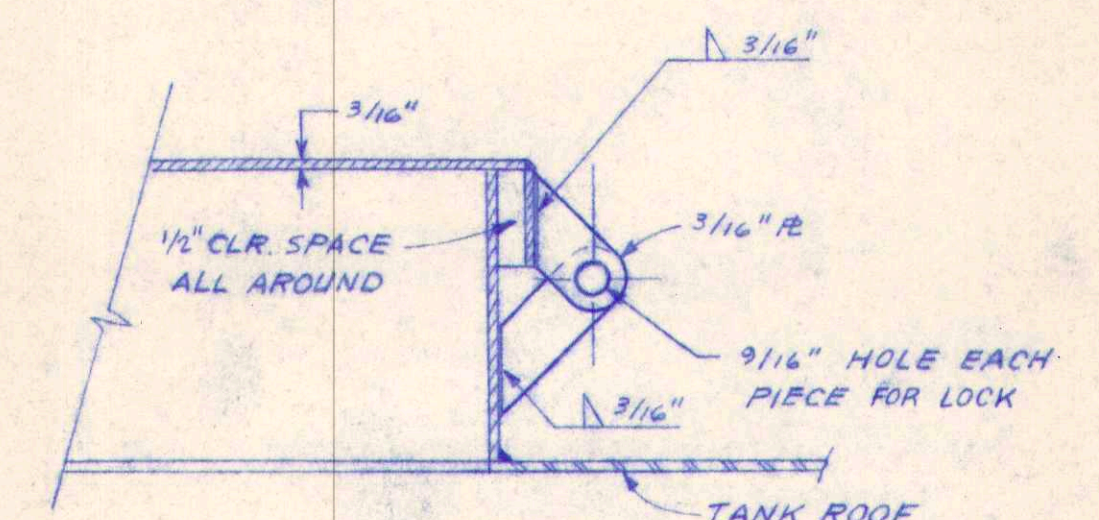
**DRAIN BOX DETAIL**  
SCALE: 1" = 1'-0"



**ACCESS HATCH (TOP VIEW)**  
NO SCALE



**SECTION A-A**  
NO SCALE



**LATCH DETAIL**  
SCALE: 3" = 1'-0"

REV.	BY	DATE	DESCRIPTION
DES.	G. M.	APP.	G. E. C.
DWN.	E. L.	DATE	JULY 1982
CHK.	G. M.		

**STEKOLL DEVELOPMENT CORPORATION**  
1.25 MILLION GALLON WATER TANK  
SCOTT'S VALLEY, CALIFORNIA

APPROVED BY *[Signature]* 8-18-82  
SCOTT'S VALLEY COUNTY WATER DISTRICT DATE

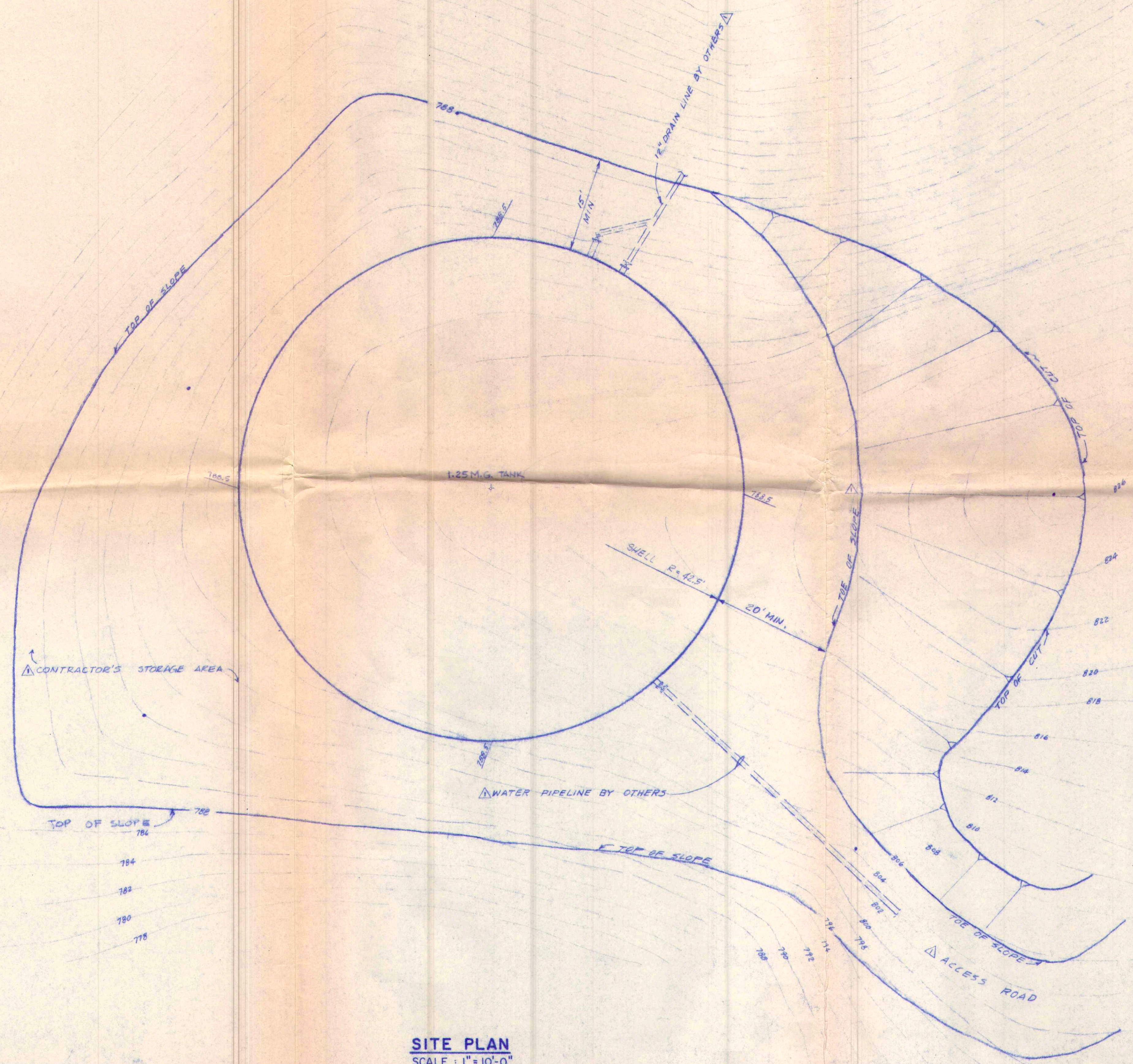
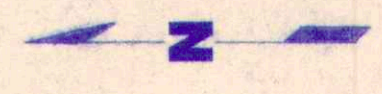
**BOONE, COOK & ASSOCIATES**  
CONSULTING ENGINEERS  
1020 CORPORATION WAY PALO ALTO, CALIFORNIA 94303

PIPING DETAILS

AUG 12 1982

DWG. NO. M 227 G  
2 OF 3  
JOB. NO. 1-3-13





NOTE:  
1. SITE GRADING & ACCESS ROAD BY OTHERS.  
2. "CONTRACTOR'S STORAGE AREA" AS SHOWN IS FOR INFORMATION ONLY. FINAL CONFIGURATION OF GRADED SITE AND WORK AREA WILL BE DETERMINED DURING GRADING CONSTRUCTION.

APPROVED BY *Mac J* 8-18-82  
SCOTTS VALLEY COUNTY WATER DISTRICT DATE

**SITE PLAN**  
SCALE: 1" = 10'-0"

Δ	GM	8-12-82	REVISED PIPELINE LOCATIONS
REV. BY	DATE	DESCRIPTION	
DES.	G.M.	APP.	G.E.C.
DWN.	E.L.	DATE	JULY 1982
CHK.	G.M.		

**STEKOLL DEVELOPMENT CORPORATION**  
**1.25 MILLION GALLON WATER TANK**  
SCOTTS VALLEY CALIFORNIA

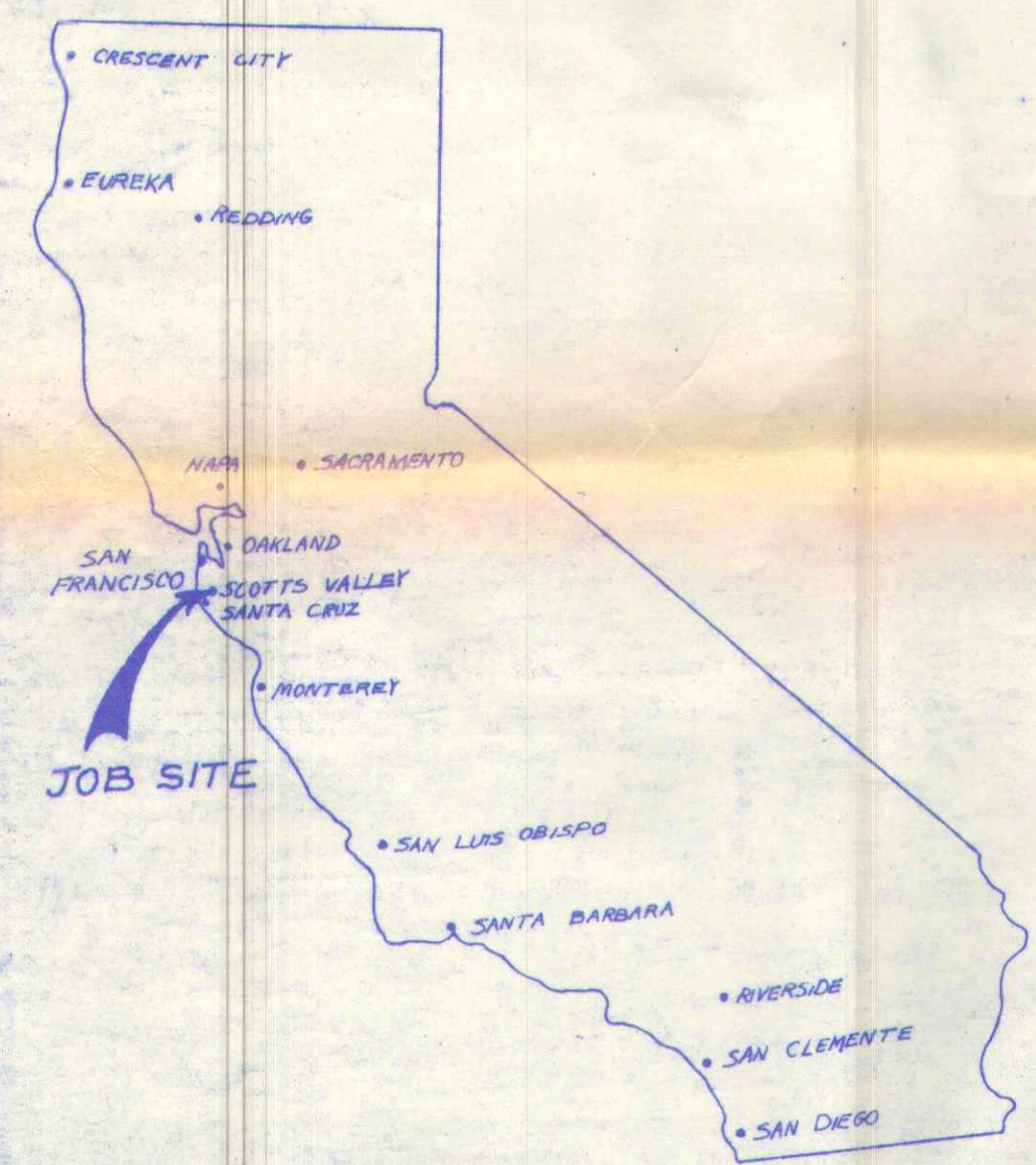
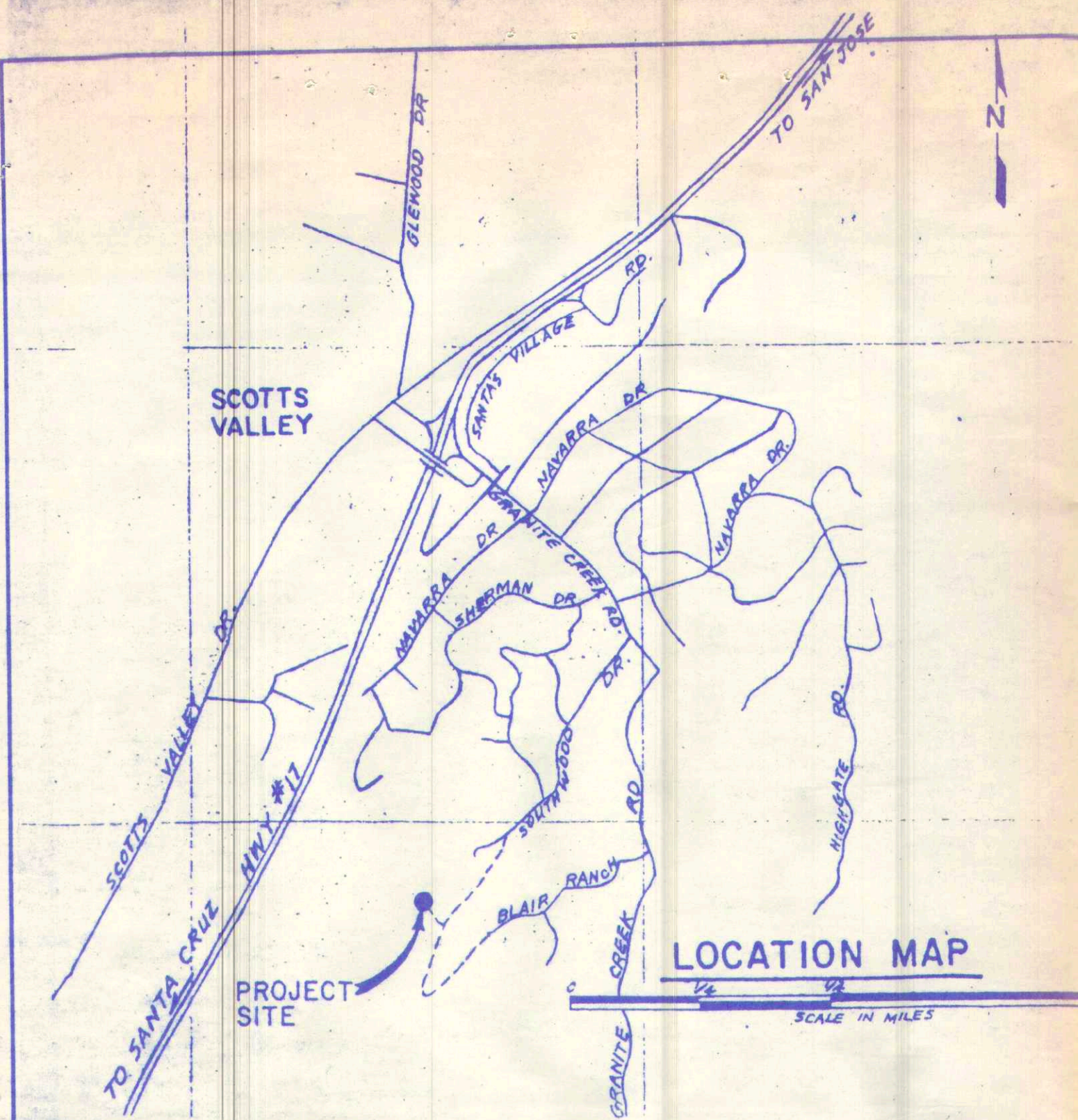
**BOONE, COOK & ASSOCIATES**  
CONSULTING ENGINEERS  
1020 CORPORATION WAY PALO ALTO, CALIFORNIA 94303

**SITE PLAN**

DWG. NO. M 228 G  
**3 OF 3**  
JOB. NO. 1-3-13

AUG 12 1982





CONSTRUCTION PLANS FOR A 1.25 MILLION GALLON WATER TANK FOR STEKOLL DEVELOPMENT CORPORATION AT SCOTTS VALLEY.

TRUSCO TANK INC. C499  
JOB INFORMATION SHEET SCOTTS VALLEY  
1.25 MG

**JOB SITE LOCATION:** Job site is in SCOTTS VALLEY. Exit South East on GRANITE CREEK ROAD from HIGHWAY 17. To SOUTH WOOD DRIVE. Turn right on Southwood Dr., to an easement off of which the tank is located. Access to the tank is along an easement over a private road and then through an undeveloped park area.

**OWNER:** STEKOLL DEVELOPMENT CORPORATION.....(408)438-5500  
340-C El Pueblo Rd., Scotts Valley, CA 95066  
Representative: Dennis L. McFarlane

**ENGINEER:** BOONE, COOK & ASSOCIATES.....(415)326-5511  
1020 Corporation Way, Palo Alto, CA 94303  
Representative: Graham W. Malone

**CONTRACTOR:** IDEVCO.....(408)438-5500  
340-C El Pueblo Rd., Scotts Valley, CA 95066

**INSPECTOR:** Dick Crosser  
Test Control.....(408)724-2234

**SUBCONTRACTOR:** TRUSCO TANK, INC.....(805)544-9155  
3490 Broad Street, San Luis Obispo, CA 93401  
Project Coordinator: Lorin Todd

**TRUSCO TANK SUB-CONTRACTORS:**  
Cathodic Protection: WALLACE & TIERNAN.....(415)676-2733  
2520 Stanwell Dr., Suite 260, Concord, CA 94520

**Painting:**

**Site Preparation:**

**JOB PHONE:**.....(408)438-5887

**HIGHWAY PATROL :**.....911

**FIRE - EMERGENCY:**.....911

**POLICE - EMERGENCY:**.....911

**SHERIFF - EMERGENCY:**.....911

**HOSPITAL - EMERGENCY:** Dominican Hospital.....(408)476-0220  
1555 Soquel Drive, Santa Cruz, CA

**AMBULANCE - EMERGENCY:**.....911

**UNDERGROUND SERVICE ALERT:**.....1-800-642-2444

**RECORD  
DRAWING**

**RECORD  
DRAWING**

COVER SHEET

SCALE:	APPROVED BY:	DRAWN BY AMD
DATE: 5-18-83		REVISED
SCOTTS VALLEY		
TRUSCO TANK, INC.		DRAWING NUMBER



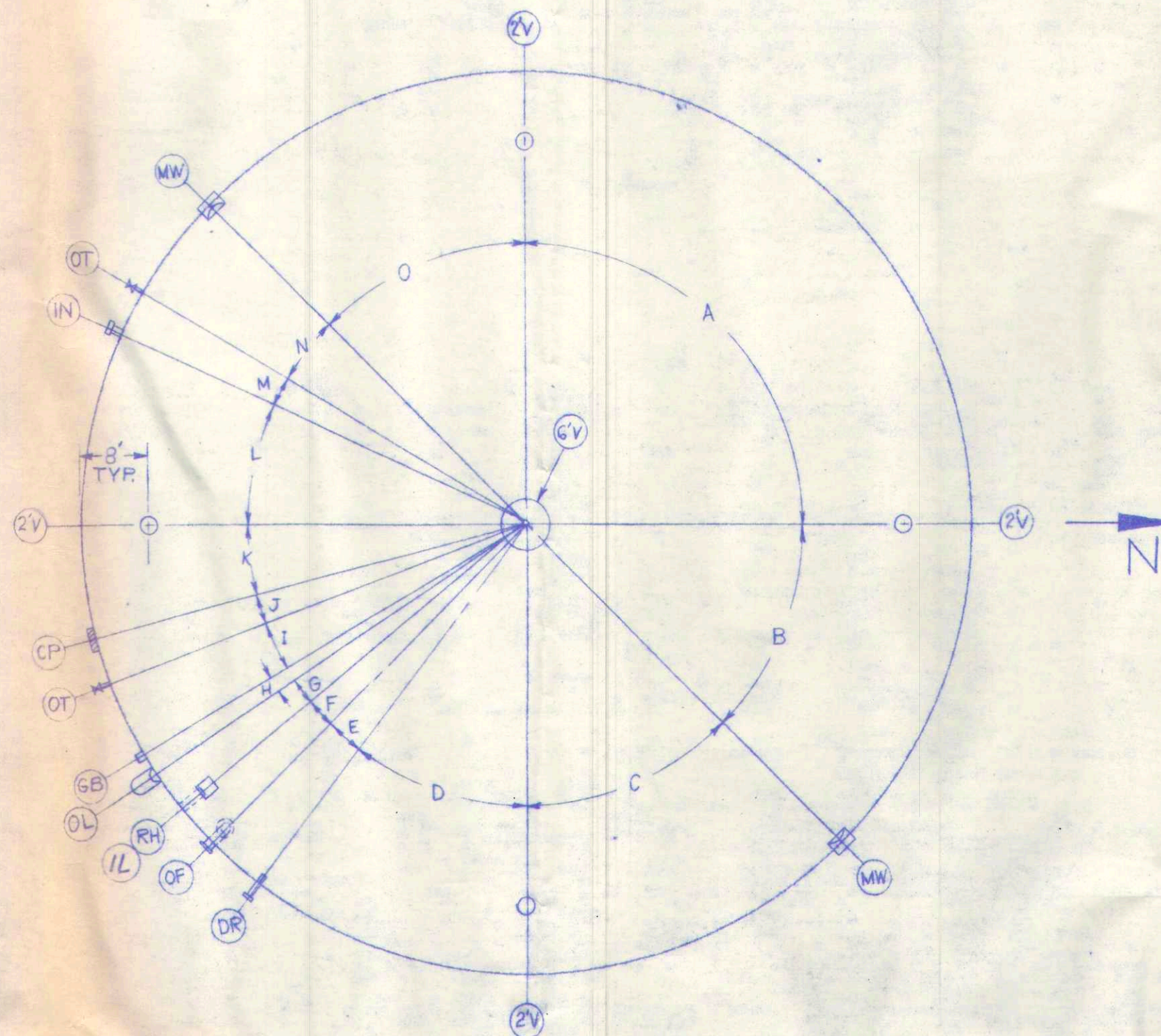
Hand-drawn diagram of a shell and tube heat exchanger. The diagram shows a cross-section of the shell with a central tube bundle. Key dimensions and labels include:

- Top Dimensions:**
  - Overall width:  $2'-10''$
  - Tube bundle width:  $2'-3''$
  - Tube pitch:  $3''$
- Bottom Dimensions:**
  - Overall width:  $2'-10''$
  - Tube bundle width:  $2'-3''$
  - Tube pitch:  $3''$
- Tube Bundle Dimensions:**
  - Tube diameter:  $1'-1''$
  - Tube length:  $6''$
  - Tube pitch:  $1'-1''$
- Labels and Annotations:**
  - TRIM ITEM ⑤ TO FIT AROUND PIPE**: A note pointing to the tube bundle.
  - ⑤**: A circled number pointing to the tube bundle.
  - ②**: A circled number pointing to the tube bundle.
  - 20°**: An angle dimension for the tube bundle.
  - FW**: A label for the feed water inlet.
  - 3''**: A dimension for the feed water inlet.
  - 16**: A dimension for the feed water inlet.

Hand-drawn technical drawing of a vertical structure, possibly a chimney or tower, with various dimensions and numbered callouts (1 through 7). The drawing includes the following details:

- Top Section:** A horizontal line at the top with dimensions  $2'-8''$  and  $1'-6''$  indicated. A vertical dimension of  $12''$  is shown on the right side.
- Callouts 1 and 2:** Located near the top left, pointing to a vertical section and a horizontal section respectively, with a dimension of  $1'-6''$  indicated.
- Callout 3:** Located near the bottom left, pointing to a curved section.
- Callout 4:** Located near the bottom right, pointing to a horizontal section.
- Callout 5:** Located in the upper middle section, pointing to a horizontal section.
- Callout 6:** Located at the bottom right, pointing to a horizontal section.
- Callout 7:** Located at the bottom right, pointing to a horizontal section.
- Dimensions:**
  - Vertical dimensions on the right:  $27'-0''$  (total height),  $18'-0''$  (middle section height), and  $9'-0''$  (bottom section height).
  - Horizontal dimensions at the bottom:  $2'-0''$  and  $12''$ .
- Other Labels:** "FW" and "SW" are labeled near the bottom left, and "SW" is labeled near the top right.

OF OVERFLOW  
SCALE: 1/4" = 1'-0"



Hand-drawn technical drawing of a rectangular sheet, likely a piece of paper or fabric, with dimensions and annotations.

**Dimensions:**

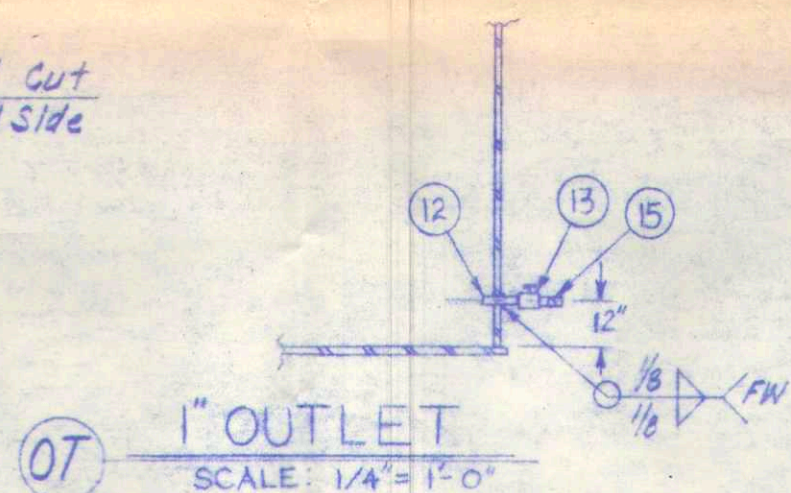
- Top edge: 4'-0"
- Right edge: 10'-0" (labeled "10'-0" Std Sheet")
- Left edge: 10" (repeated 6 times, indicating a total of 60")

**Annotations:**

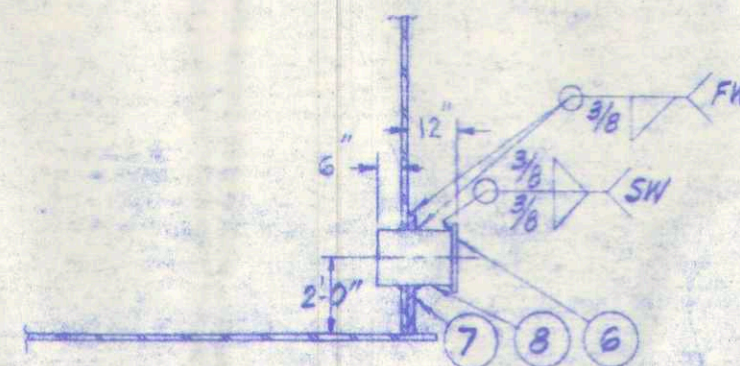
- Top right corner: "15/16" Cut Typ. 1 Side"
- Bottom left corner: "16" (circled) with an arrow pointing to the bottom edge.
- Bottom left corner: "FW" (Facing Width) and "SW" (Side Width) with arrows pointing to the bottom edge.
- Bottom left corner: "3/8" (circled) with an arrow pointing to the bottom edge.
- Bottom left corner: "3/8" (circled) with an arrow pointing to the bottom edge.

The drawing shows a rectangular sheet with a grid of lines. The top edge is labeled "4'-0" and the right edge is labeled "10'-0" Std Sheet". The left edge is divided into six equal segments, each labeled "10". The bottom edge is labeled "FW" and "SW" with arrows pointing to the bottom edge. The bottom left corner has two "3/8" labels with arrows pointing to the bottom edge. The top right corner has a note "15/16" Cut Typ. 1 Side".

EXPANSION JOINT MATERIAL  
6 Shts x 12 Segments = 72 Pcs. (Ship 68 pcs min.)



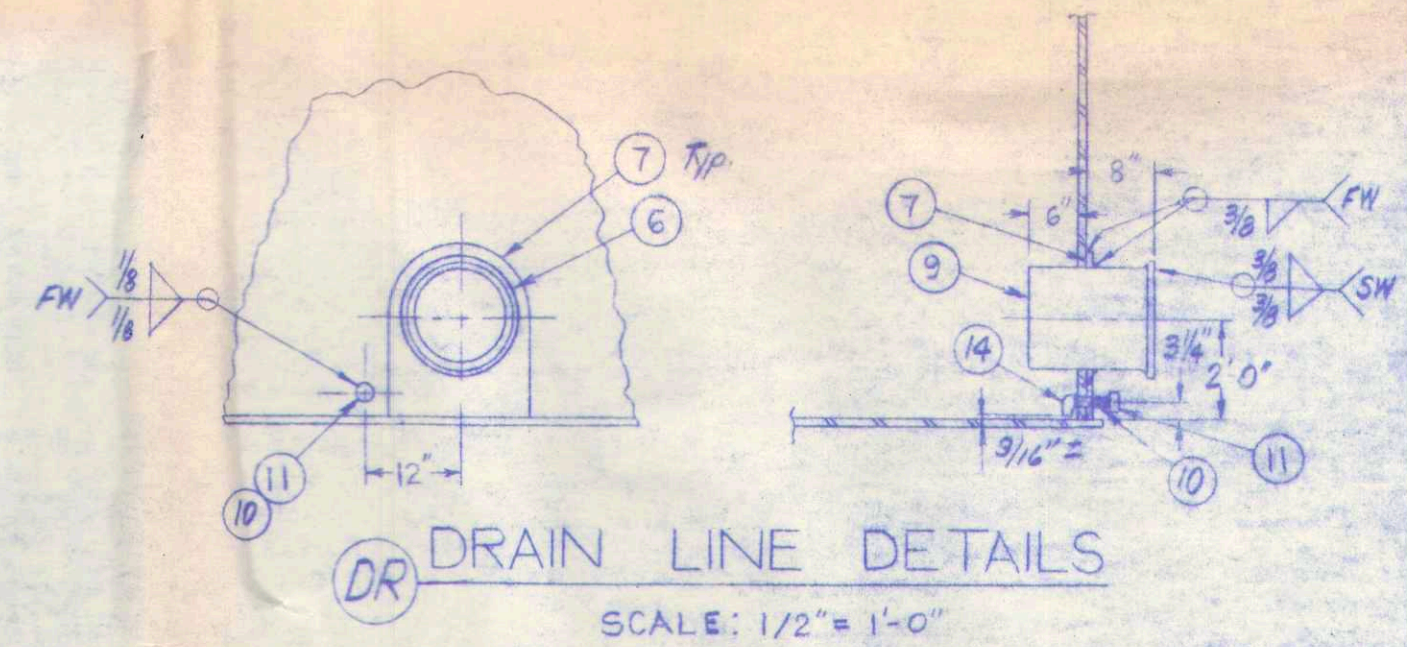
1" OUTLET  
SCALE: 1/4" = 1'-0"



IN INLET  
SCALE: 1/4" = 1'-0"

ITEM NO.	DESCRIPTION	MATERIAL	NO. REQ'D
1	CONE 1/4" P x 31 1/2" I.D. x 12 1/4" I.D. x 18" HIGH	A3G	1
2	12" SCH 40 PIPE x 26'-0" LG.	A53-B	1
3	12" SCH 40 L.R. 90° ELL	A234	1
4	12" SCH 40 PIPE x 2'-4" LG.	A53-B	1
5	1/4" P x 26" x 2'-5" LG.	A3G	3
6	WELD NECK FF FLANGE 150 LB x 12"	A181	3
7	3/8" P x 17" O.D. x 12 3/4" I.D. x 32 1/2" LG.	A3G	3
8	12" SCH 40 PIPE x 1'-6" LG.	A53-B	1
9	12" SCH 40 PIPE x 1'-2" LG.	A53-B	1
10	1 1/2" SCH 40 x 6" LG G.I. TANK NIPPLE	A120	1
11	1 1/2" THREADED PIPE CAP GALV. IRON	A-120	1
12	1" SCH 40 x 6" LG. GALV. IRON PIPE T.O.E.	A120	2
13	1" FEMALE THREADED GATE VALVE CRANE No.437	BRONZE	2
14	1 1/2" 90° STREET ELBOW - GALV. IRON	A120	1
15	1" STREET TEE WITH PLUG, GALV. IRON	A120	2
16	1/2" ASPHALT IMPREG EXPANSION JOINT MATERIAL - 4' x 10' STANDARD SHEET - Cut 68 Pcs. Min. @ 10" x 48" w 1/4" Trim.	ASTM D1751-78	6

	ANGLE	STRAP DIST.
A	90° 0' 0"	66'-9 <sup>13</sup> / <sub>32</sub> "
B	45° 0' 0"	33'-4 <sup>11</sup> / <sub>16</sub> "
C	45° 0' 0"	33'-4 <sup>11</sup> / <sub>16</sub> "
D	37° 0' 0"	27'-5 <sup>5</sup> / <sub>32</sub> "
E	8° 5' 9"	6'-0"
F	5° 23' 26"	4'-0"
G	5° 23' 26"	4'-0"
H	2° 41' 43"	2'-0"
I	10° 6' 26"	7'-6"
J	6° 3' 52"	4'-6"
K	15° 15' 58"	11'-3 <sup>15</sup> / <sub>16</sub> "
L	25° 0' 0"	18'-6 <sup>5</sup> / <sub>8</sub> "
M	6° 0' 0"	4'-5 <sup>7</sup> / <sub>16</sub> "
N	14° 0' 0"	10'-4 <sup>21</sup> / <sub>32</sub> "
O	45° 0' 0"	33'-4 <sup>11</sup> / <sub>16</sub> "



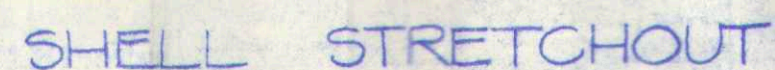
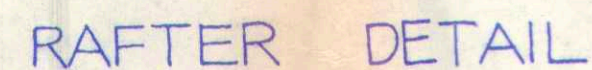
DR DRAIN LINE DETAILS  
SCALE: 1/2" = 1'-0"

# RECORD DRAWING

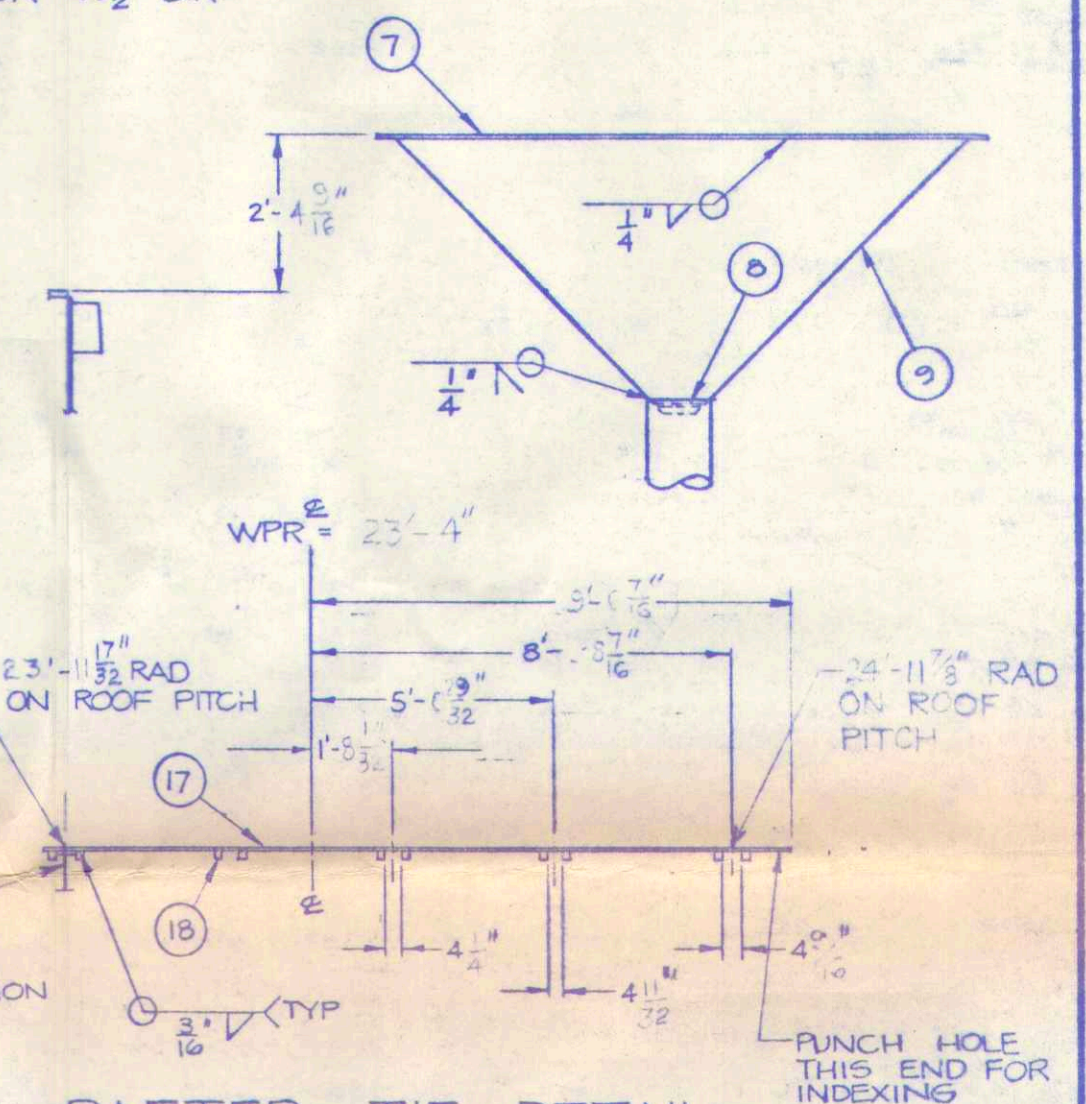
RECORD  
RECORD

SCALE: <i>As Shown</i>	APPROVED BY:	DRAWN BY <i>AMD</i>
DATE: <i>5-12-83</i>		REVISED <i>7-21-83</i>
SCOTTS VALLEY		
TRUSCO TANK, INC.		DRAWING NUMBER 1 OF 9





IN ITEM ⑦ PUNCH 44 SETS OF  
 $\frac{11}{16}$ " DIA HOLES  $\times$   $2\frac{1}{4}$ " ON CENTER  
 EQUALLY SPACED ON  $49\frac{1}{2}$ " B.R.



### RAFTER TIE DETAIL

# RECORD DRAWING

## RECORD FRANCHISES

## TANK SECTION

SCALE: NONE

APPROVED BY:

DRAWN BY *Y. Sh*

DATE: 4.25.83

REVISÉ 7-21-83

SCOTTS VALLEY

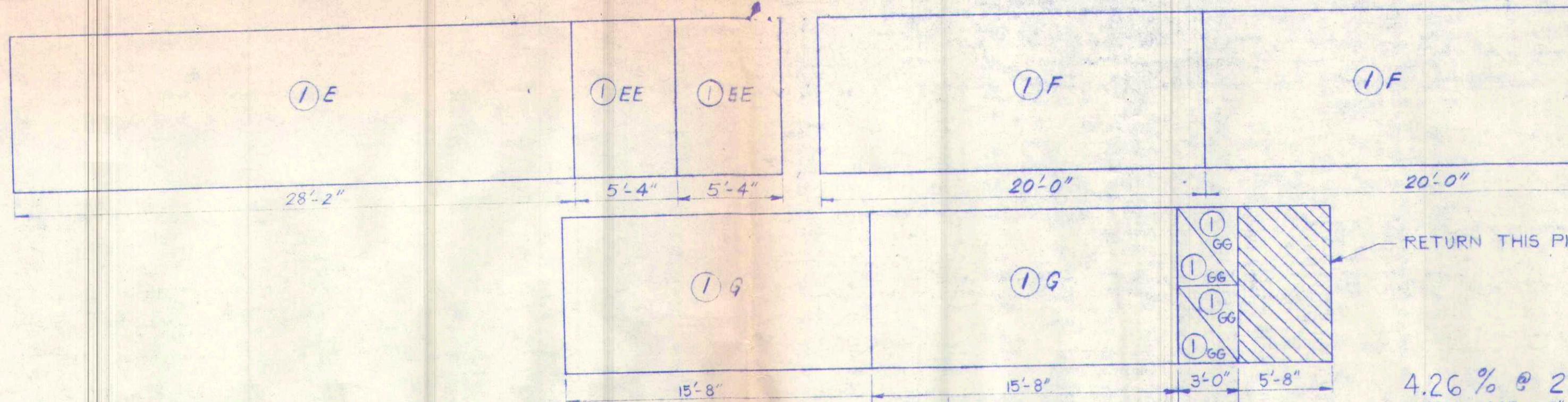
TRUSCO TANK, INC.

DRAWING NUMBER:  
2 OF 9

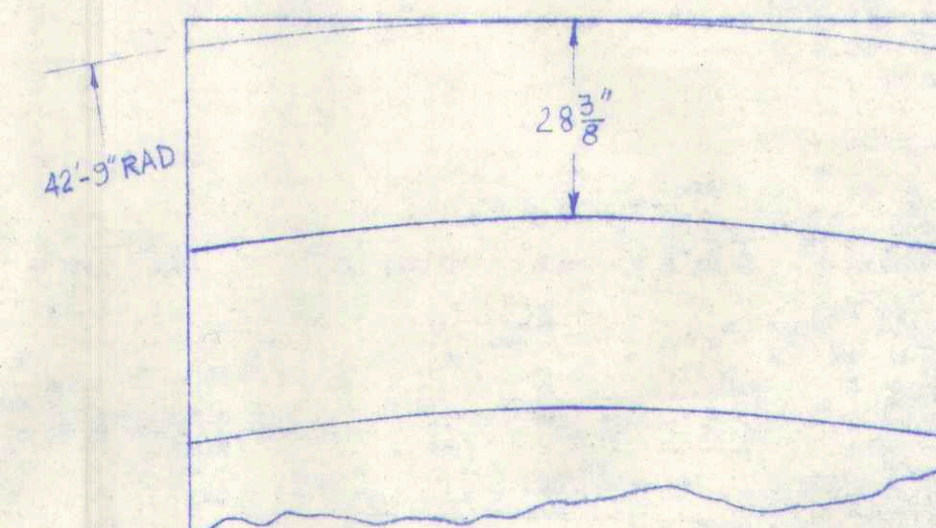


# MATERIAL LIST

ITEM NO.	DESCRIPTION	MATERIAL	NO. REQ'D
1	1/4" R x 96" x 480" (40'-0")	A283-C	17
2	.285 R x 96" x 430" (35'-10")	A36	2
* 3	7 mm R x 96" x 120" (10'-0")	A36	1



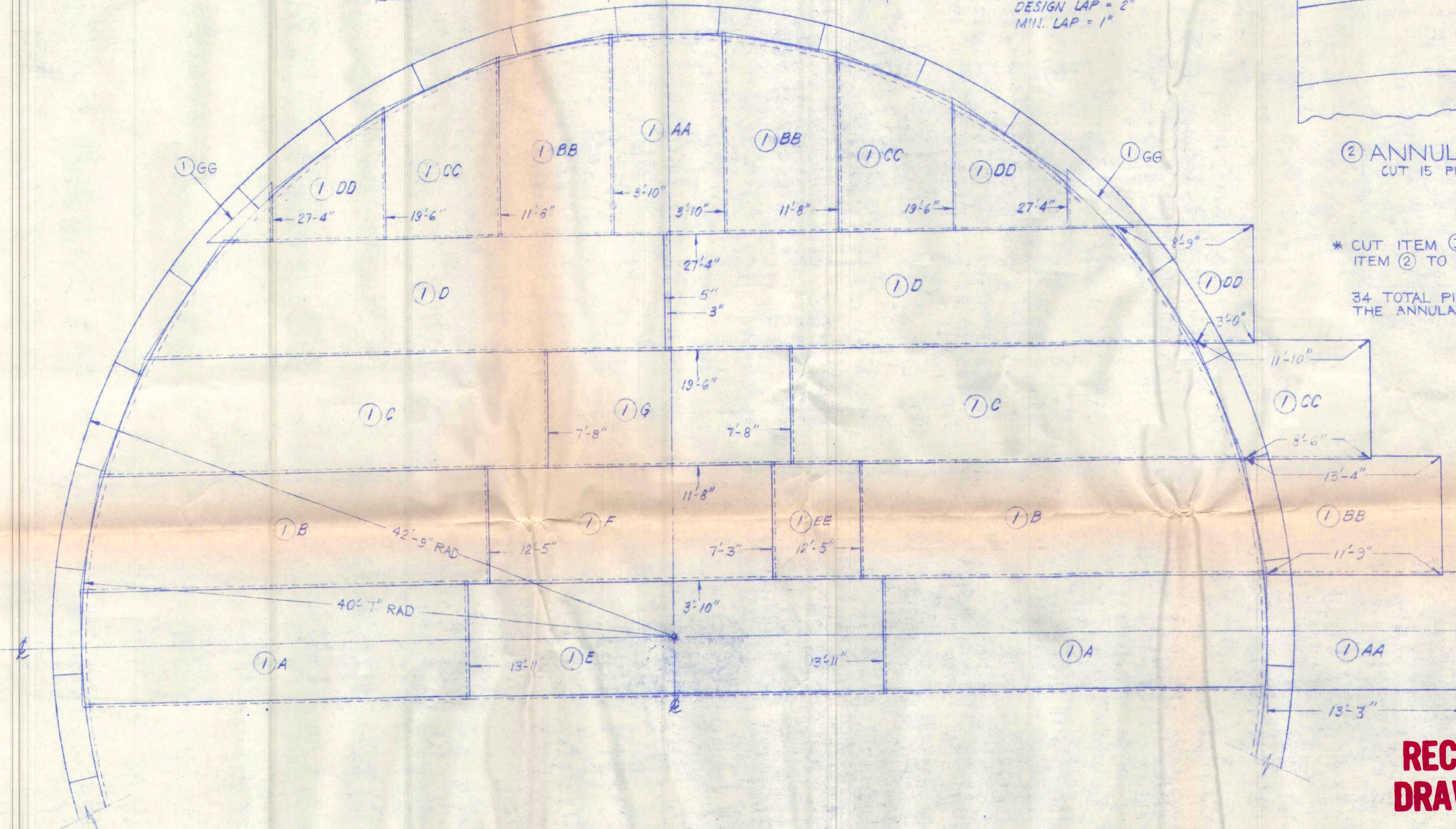
4.26% @ 2" L.E.F.  
DESIGN LAP = 2"  
MIN. LAP = 1"



② ANNULAR RING DETAIL  
CUT 15 PIECES

\* CUT ITEM ③ THE SAME AS  
ITEM ② TO OBTAIN 4 PCS.

34 TOTAL PIECES REQ'D FOR  
THE ANNULAR RING.



**RECORD  
DRAWING**

## BOTTOM LAYOUT

SCALE: 3/16" = 1'-0"  
DATE: 5-16-83

APPROVED BY:

DRAWN BY AMD  
REVISED 7-19-83

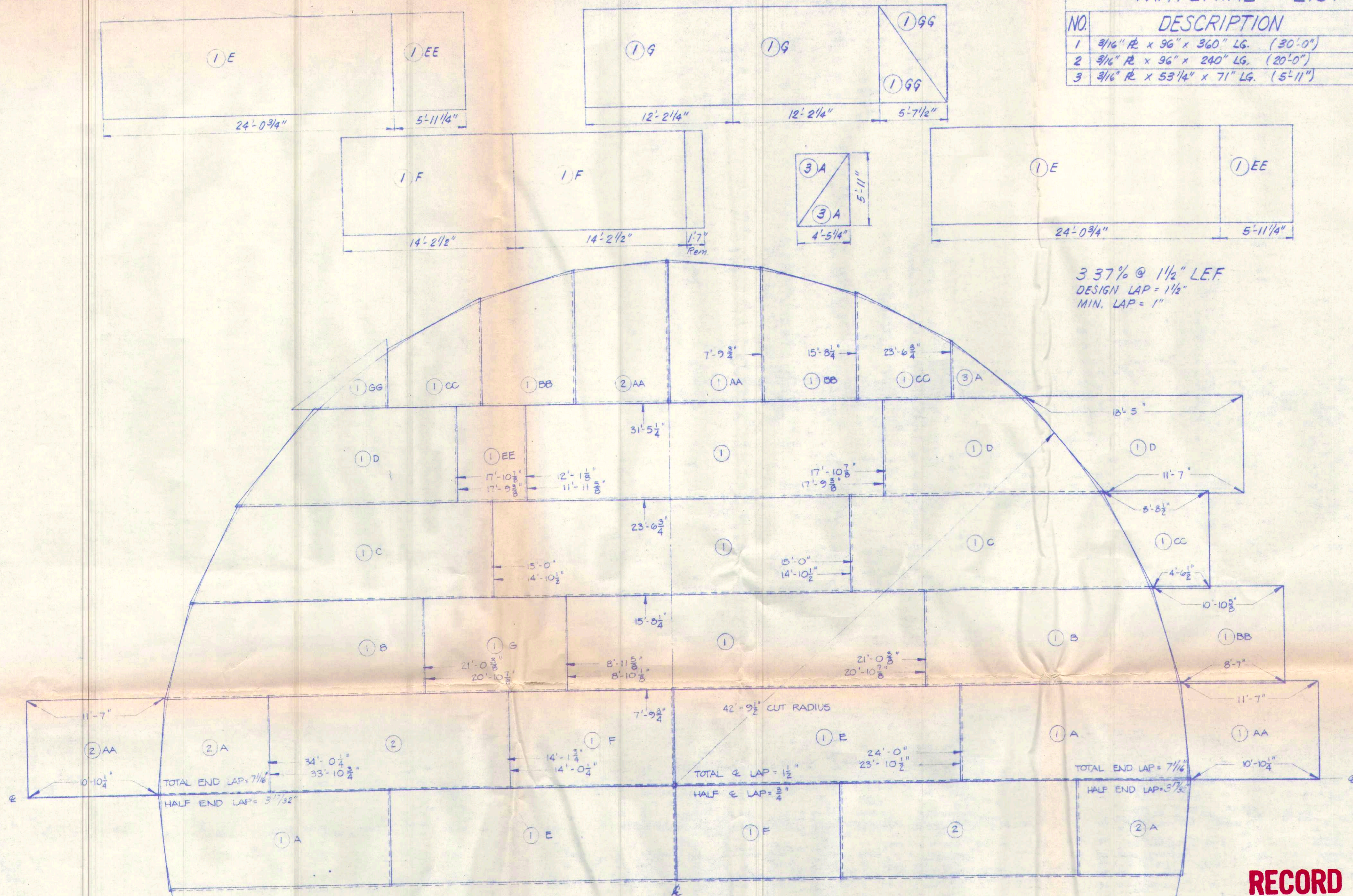
SCOTTS VALLEY  
TRUSCO TANK, INC.

DRAWING NUMBER  
3 OF 9



# MATERIAL LIST

NO.	DESCRIPTION	MATERIAL	NO. REQ'D
1	3/16" R x 96" x 360" LG. (30'-0")	A283C	22
2	3/16" R x 96" x 240" LG. (20'-0")	A283C	4
3	3/16" R x 53 1/4" x 71" LG. (5'-11")	A283C	1



**RECORD  
DRAWING**

**RECORD  
DRAWING**

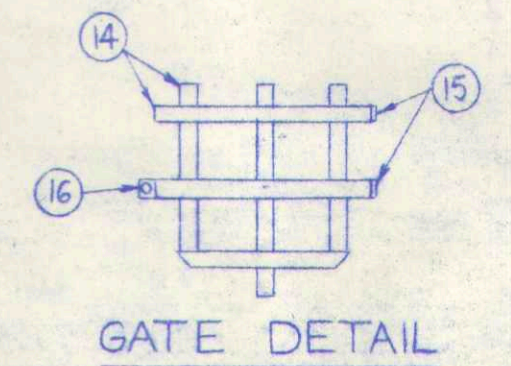
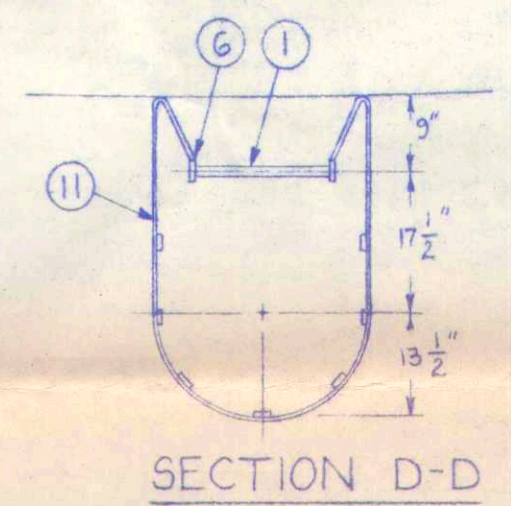
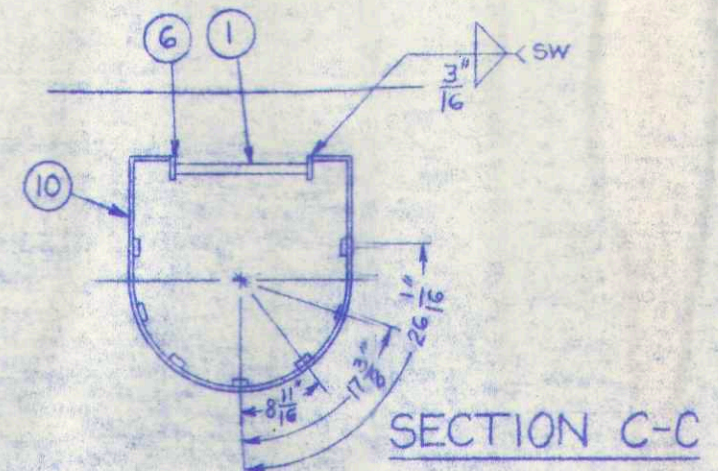
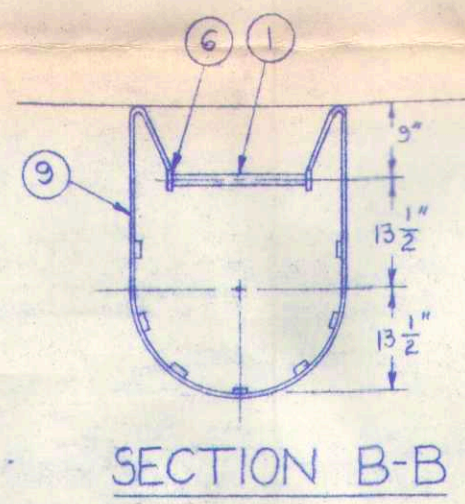
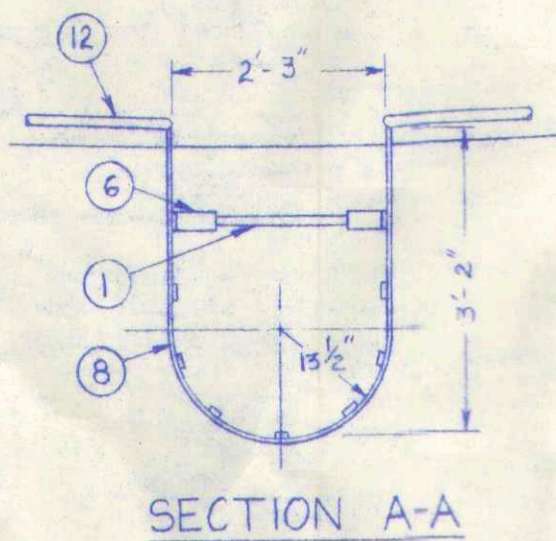
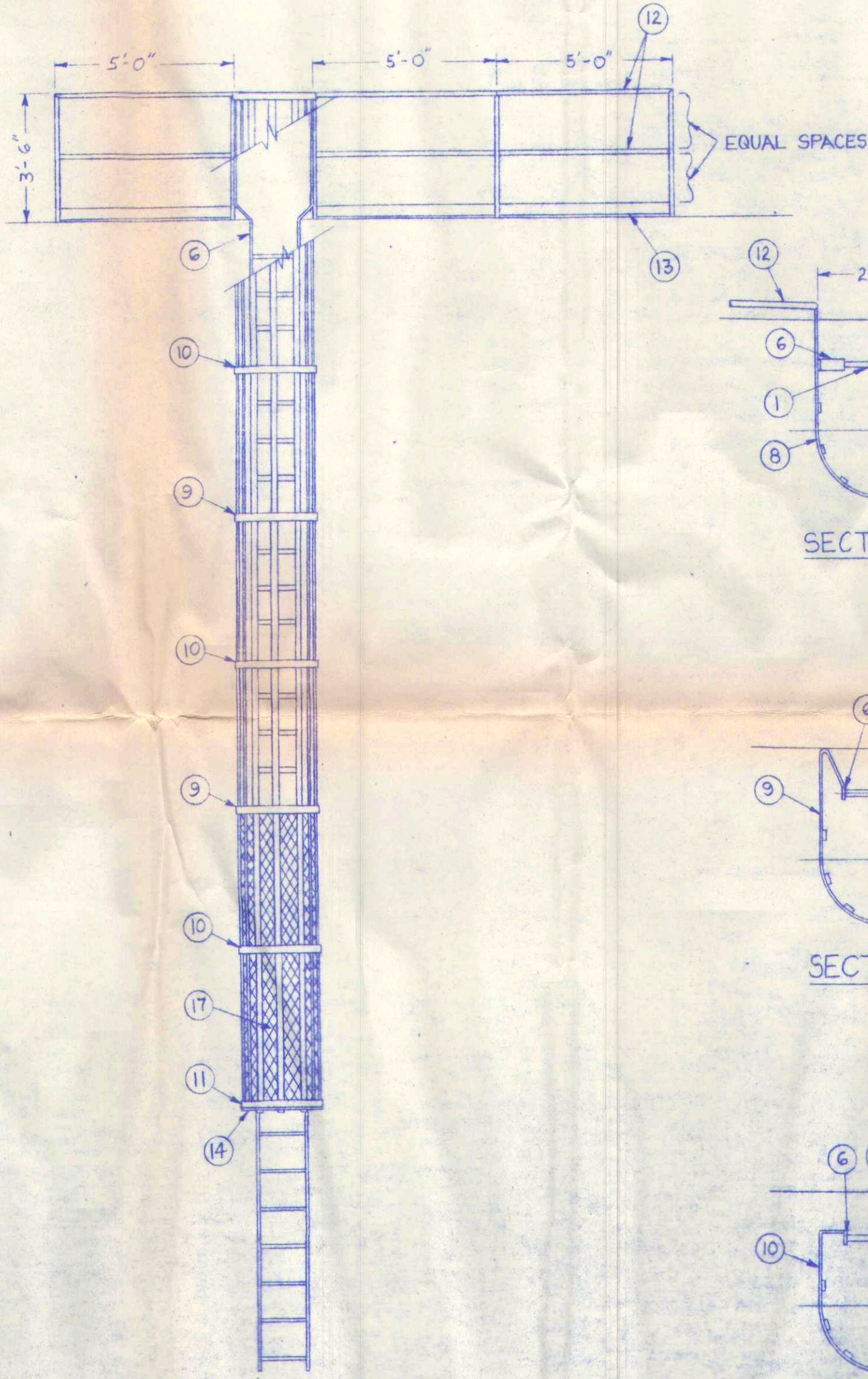
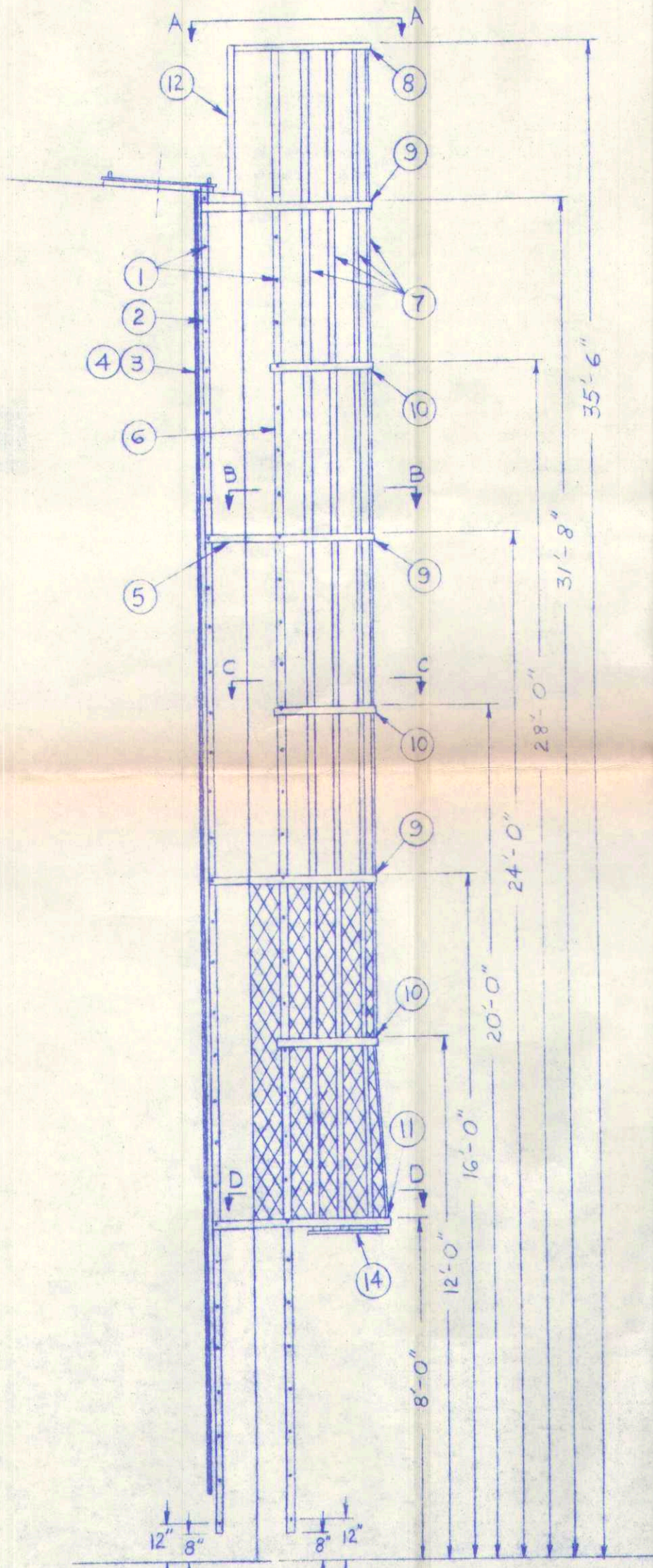
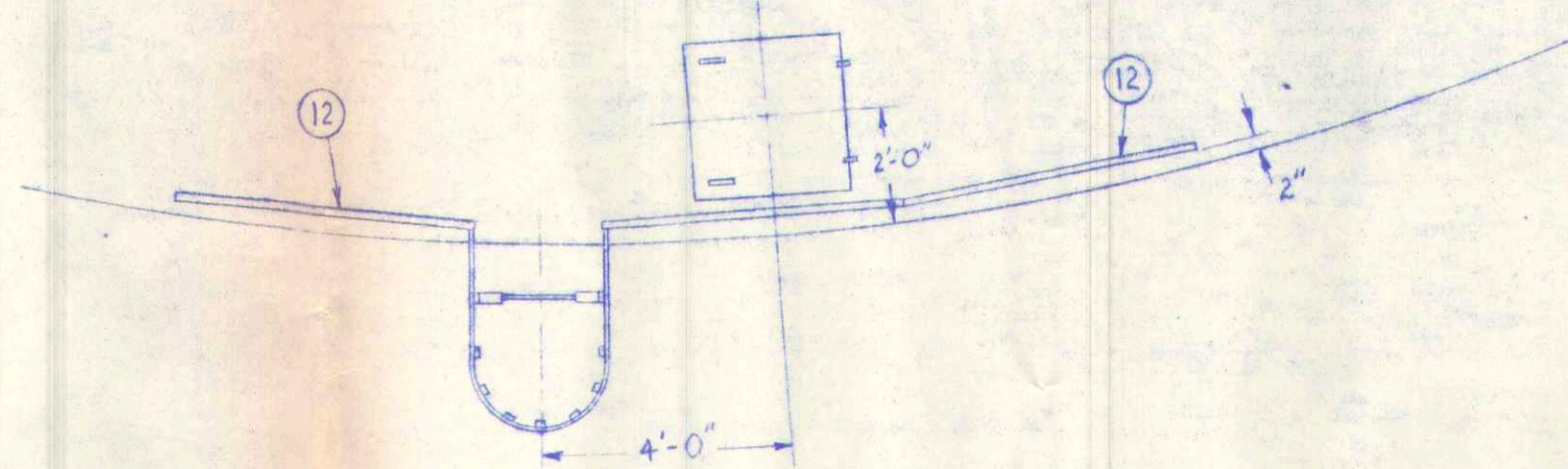
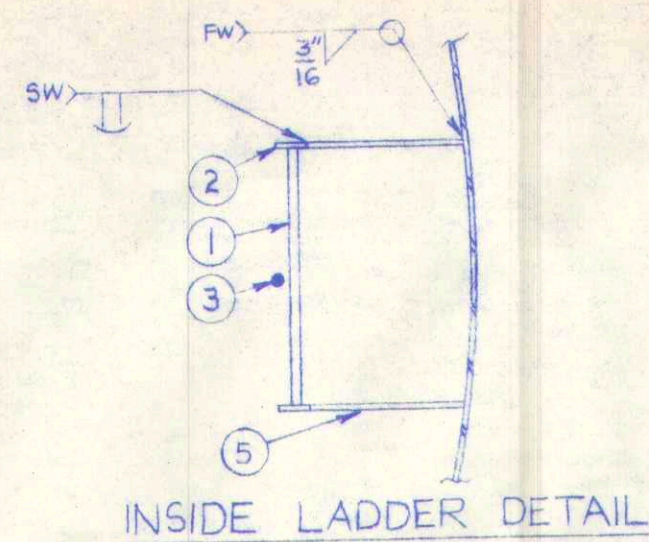
## ROOF LAYOUT

SCALE: 3/16" = 1'-0"	APPROVED BY:	DRAWN BY: DLV/YAA
DATE: 5-31-83	REVISED:	

SCOTTS VALLEY  
TRUSCO TANK, INC.

DRAWING NUMBER  
4 OF 9





# MATERIAL LIST

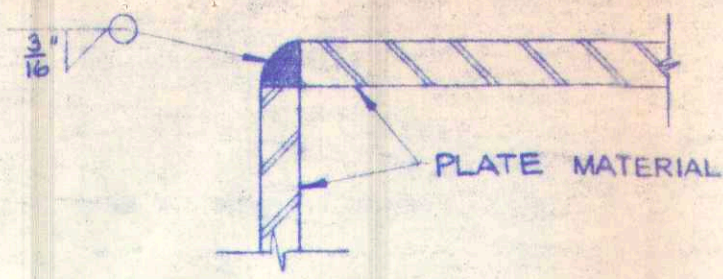
ITEM NO.	DESCRIPTION	MATERIAL	NO. REQ'D
1	3/4" DIA. BAR x 16" LG	A36	63
2	3/8" x 2" FB x 31'-6" LG	A36	2
3	SAFE-T-CLIMB DEVICE x 31' LG	—	1
4	SAFE-T BELT & SLEEVE	—	1
5	3/8" x 2" FB x 11" LG	A36	8
6	3/8" x 2" FB x 36'-0" LG	A36	2
7	1/4" x 2" FB x 29'-0" LG	A36	7
8	1/4" x 2" FB x 8'-0" LG	A36	1
9	1/4" x 2" FB x 9'-0" LG	A36	3
10	1/4" x 2" FB x 7'-0" LG	A36	3
11	1/4" x 2" FB x 10'-6" LG	A36	1
12	1 1/4" STD PIPE x 21' STD LEN	A120	3
13	3/16" x 4" x 15'-0" LG	A36	1
14	1/4" x 2" FB AS NEEDED	A36	—
15	TYP TRUSCO HINGE	—	2
16	LOCKABLE HASP	—	1
17	3/4", 13 GA. FLAT. EXPANDED METAL 4' x 8'	A36	2

**RECORD  
DRAWING**

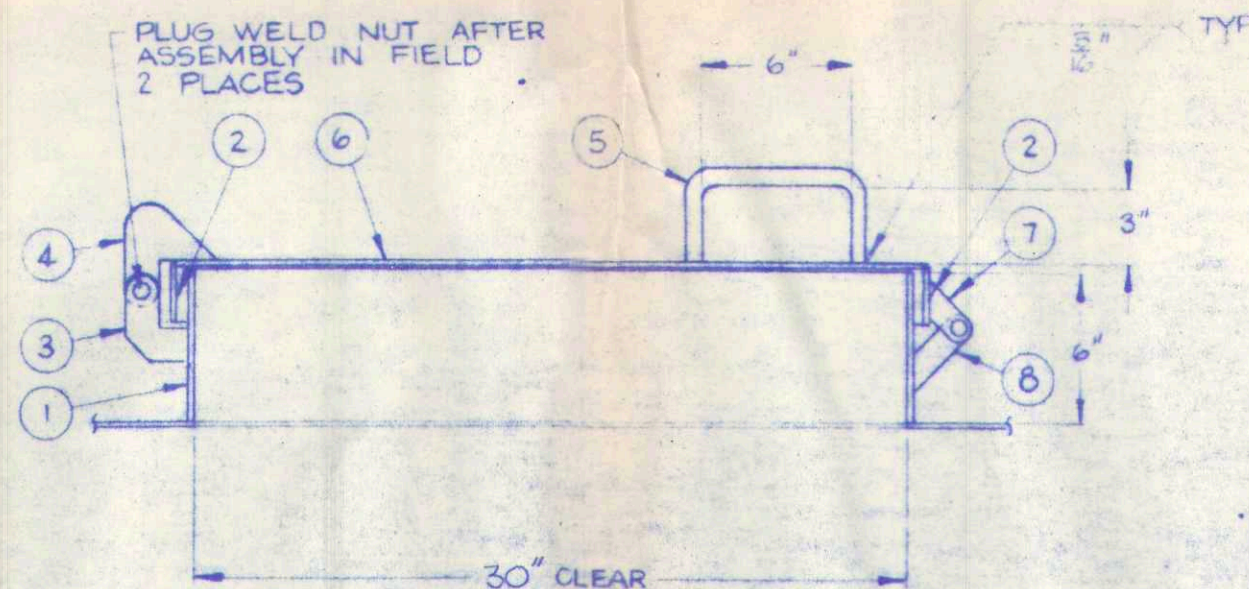
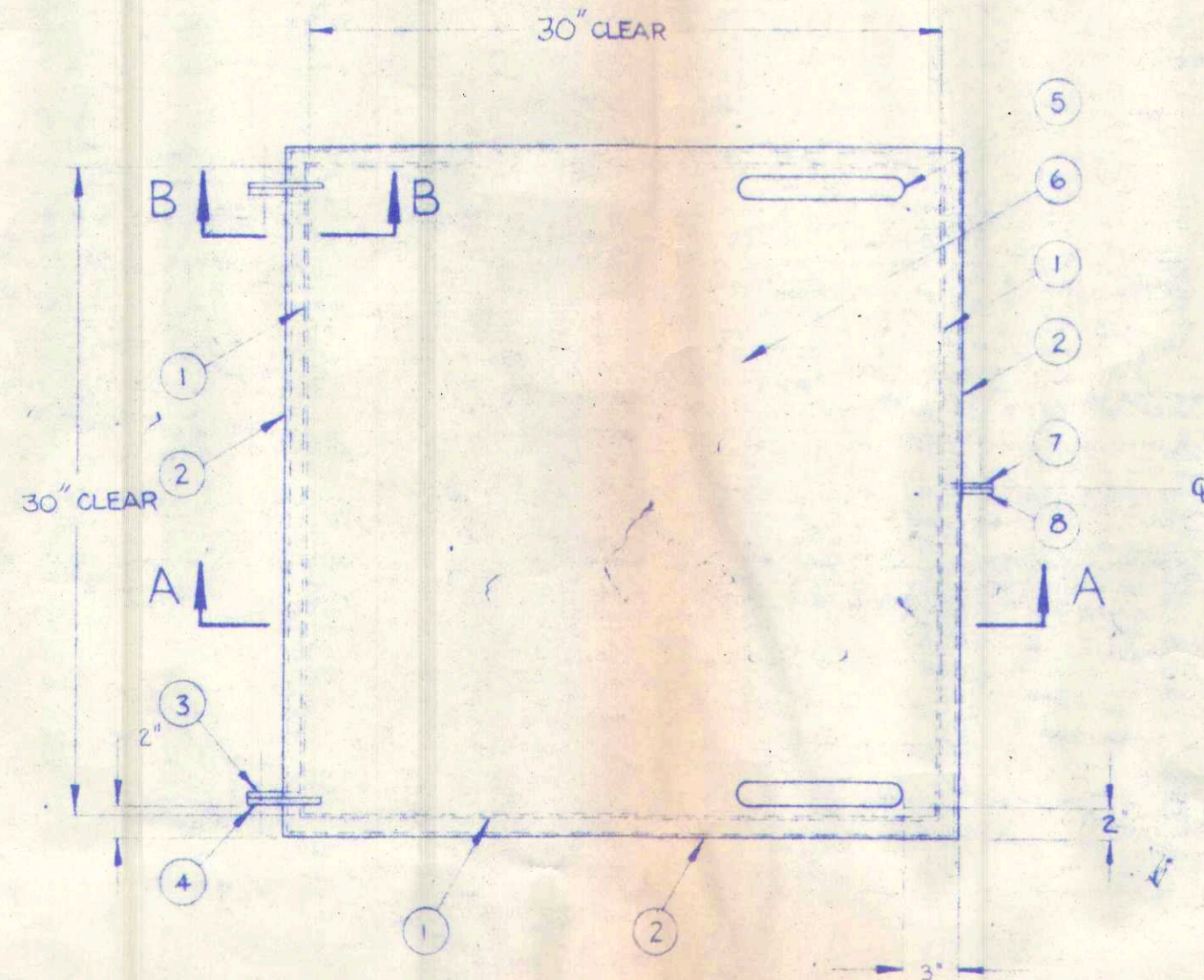
## LADDER DETAILS

SCALE:	APPROVED BY:	DRAWN BY AMD
DATE: 5-9-83		REVISED 5-16-83
SCOTTS VALLEY		DRAWING NUMBER
TRUSCO TANK, INC.		5 OF 9

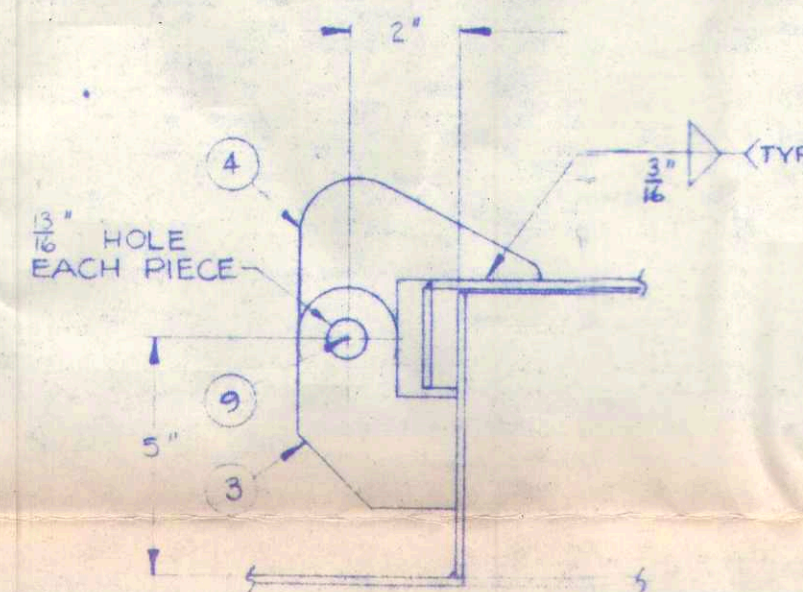




TYPICAL JOINT DETAIL



SECTION A-A

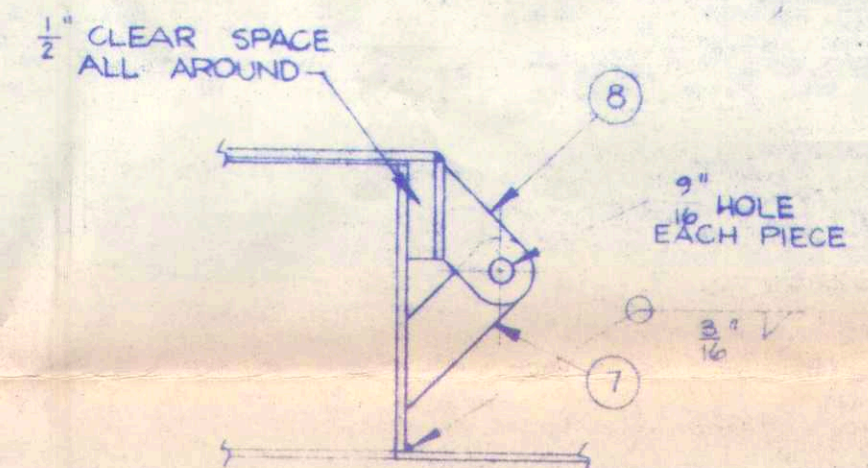


SECTION B-B

# MATERIAL LIST

NO.	DESCRIPTION	MATERIAL	NO REQ'D
1	3/16" x 6" FB x 30" LG	A36	4
2	3/16" x 2" FB x 31 3/8" LG	A36	4
3	3/16" R PER TEMPLATE	A36	2
4	3/16" R PER TEMPLATE	A36	2
5	1/2" Ø BAR x 12" LG	A36	2
6	3/16" R x 31 3/8" x 31 3/8"	A36	1
7	3/16" R PER TEMPLATE	A36	1
8	3/16" R PER TEMPLATE	A36	1
9	3/4" x 1 1/2" NC BOLT & NUT	A325	2

NUMBER REQUIRED IS PER HATCH  
NUMBER OF HATCHES REQUIRED : 1



NOTE: ITEMS 7 & 8 SHALL BE PLACED SO THAT THE HOLES COINCIDE

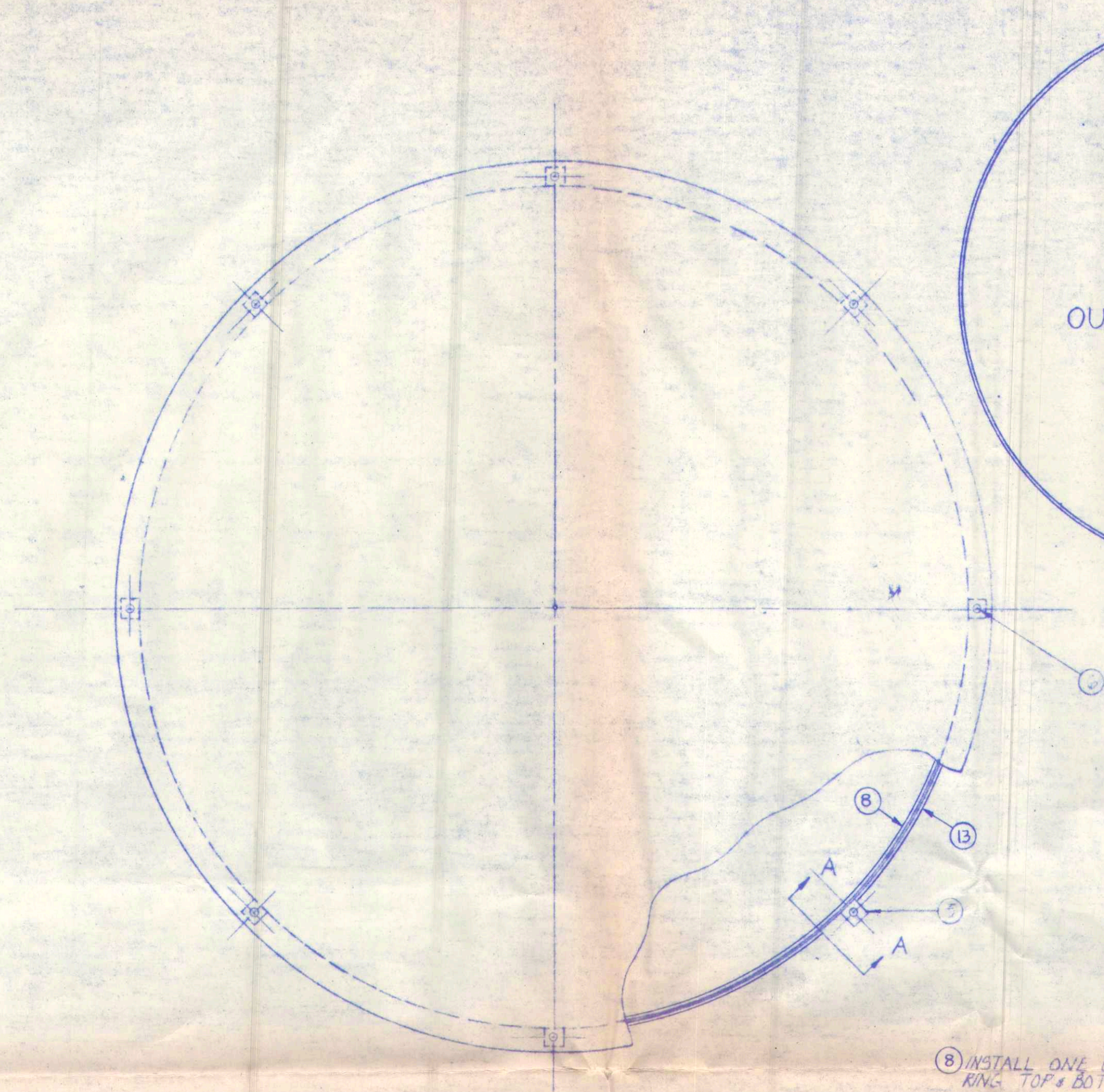
LATCH DETAIL

**RECORD  
DRAWING**

## SQUARE ROOF HATCH

SCALE: NONE	APPROVED BY: <i>[Signature]</i>	DRAWN BY: <i>[Signature]</i>
DATE: 4-25-83		REVISED: 5-10-83
SCOTTS VALLEY		
TRUSCO TANK INC		DRAWING NUMBER: 6 OF 9





OUTER CLAMPING RING

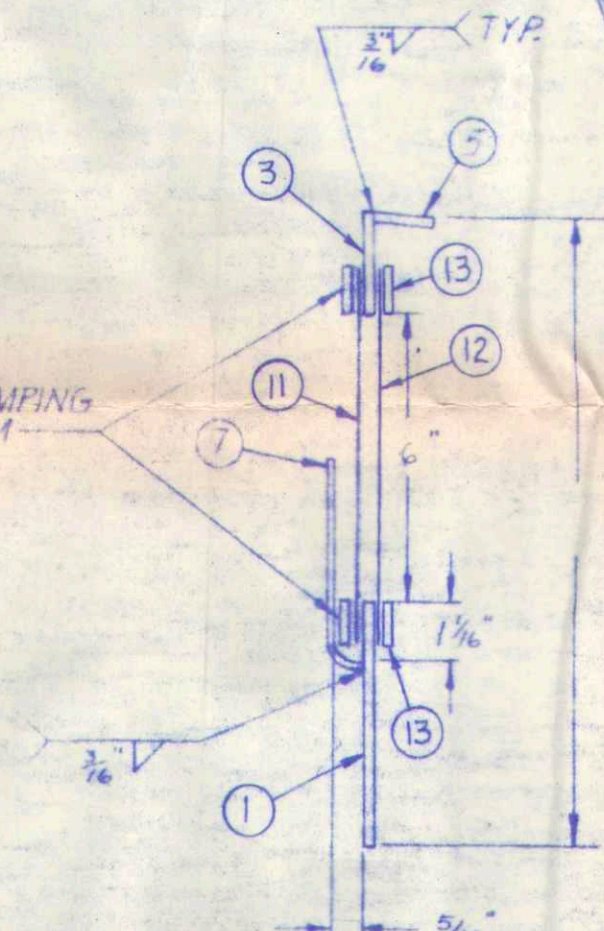
INNER CLAMPING RING

NO. REQ'D IS PER VENT  
1 VENT REQ'D

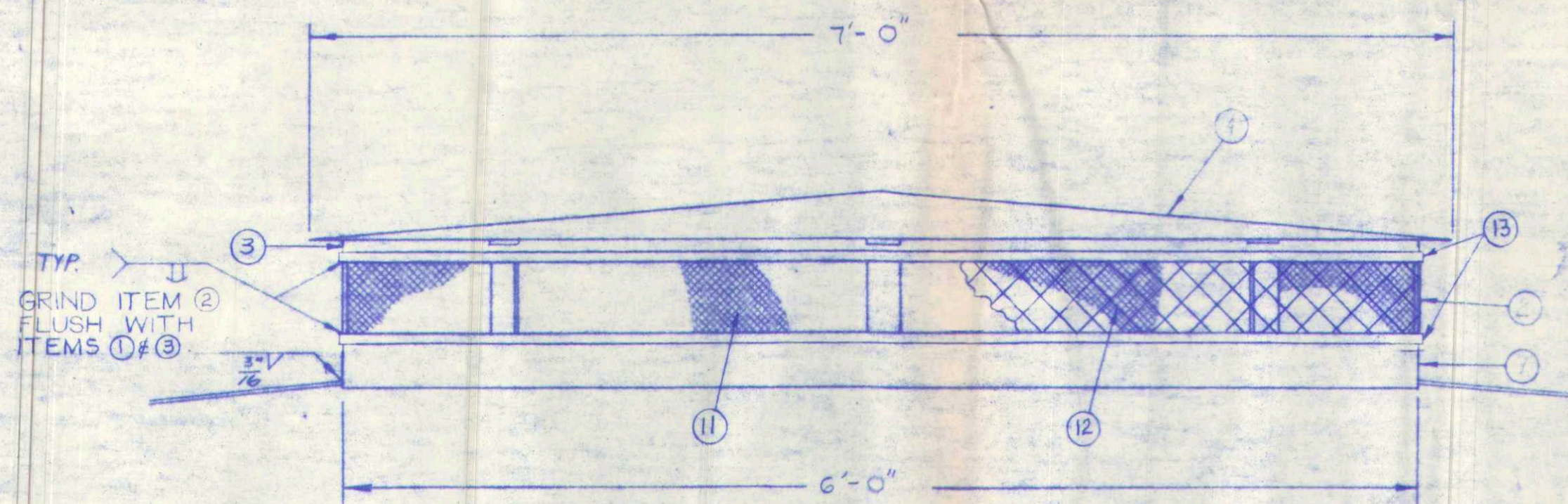
MATERIAL LIST			
NO.	DESCRIPTION	MATERIAL	NO. REQ'D.
1	1/4" x 3" FB x 18' 9" LG.	A36	1
2	1/4" x 3" FB x 6" LG.	A36	8
3	1/4" x 3" FB x 18' 9" LG.	A36	1
4	3/16" x 7'-0" DIA.	A36	1
5	3/8" x 2" FB x 2" LG.	A36	8
6	5/16" x 1" NC BOLT & NUT	SAE GR. 5	8
7	1/8" x 1" FB x 4" LG.	A36	1
8	3/16" x 1" FB x 18'-7" LG.	A36	2
9	5/16" NC STOCK x 5" LG. WITH 4 NUTS	A325	4
10	3/16" x 1" FB x 1" LG.	A36	8
11	8x8 MESH x 8" x 13'-0" LG.	BRONZE	1
12	2" MESH CHAIN LINK WIRE FABRIC 8"x13'-2"	GALV	1
13	3/16" x 1" FB x 18'-10" LG.	A36	2

8 INSTALL ONE CLAMPING RING TOP & BOTTOM

NOTE: INSTALL CLAMPING RINGS AFTER SCREEN IS IN PLACE. ADJUST NUTS TO CLAMP SCREEN SECURELY.



SECTION A-A  
NOTE: ITEM 2 OMITTED FOR CLARITY.

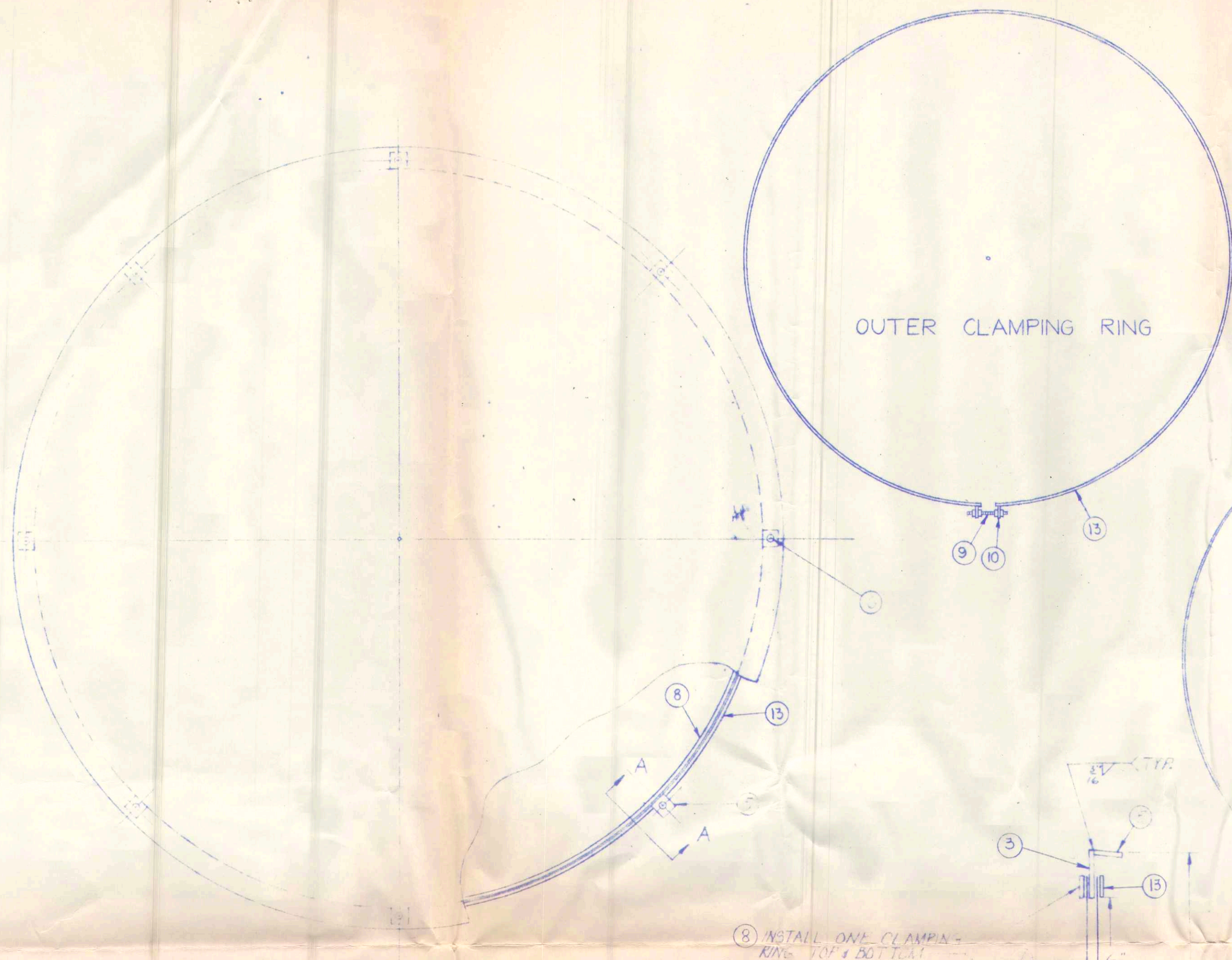


TYP.  
GRIND ITEM 2 FLUSH WITH ITEMS 1 & 3.

**RECORD  
DRAWING**

STANDARD ROOF VENT			
SCALE: NONE	APPROVED BY: <i>[Signature]</i>	DRAWN BY: <i>[Signature]</i>	
DATE: 4-25-83		REVISED 7-7-83	
SCOTT'S VALLEY			
TRUSCO TANK, INC.			DRAWING NUMBER 7 OF 9





OUTER CLAMPING RING

MATERIAL LIST			
NO.	DESCRIPTION	MATERIAL	NO. REQ'D.
1	1/4" x 3" FB x 6'-2 1/4" LG. (74 1/4")	A36	1
2	1/4" x 3" FB x 6" LG.	A36	1
3	1/4" x 3" FB x 6'-2 1/4" LG. (74 1/4")	A36	1
4	3/16" P x 2'-8" DIA. (32")	A36	1
5	3/8" x 2" FB x 2" LG.	A36	8
6	5/16" x 1" NC BOLT & NUT	SAT. GALV.	3
7	1/8" x 1" FB x 4" LG.	A36	1
8	3/16" x 1" FB x 12" LG. (6'-0")	A36	2
9	5/16" NC STOCK x 5" LG. WITH 4 NUTS	A325	4
10	3/16" x 1" FB x 1" LG.	A36	8
11	8x8 MESH x 8" x 77" LG. (6'-5")	BRONZE	1
12	2" MESH CHAIN LINK WIRE FABRIC 8'x6'-6" LG.	GALV.	1
13	3/16" x 1" FB x 73 1/2" LG. (6'-1 1/2")	A36	2

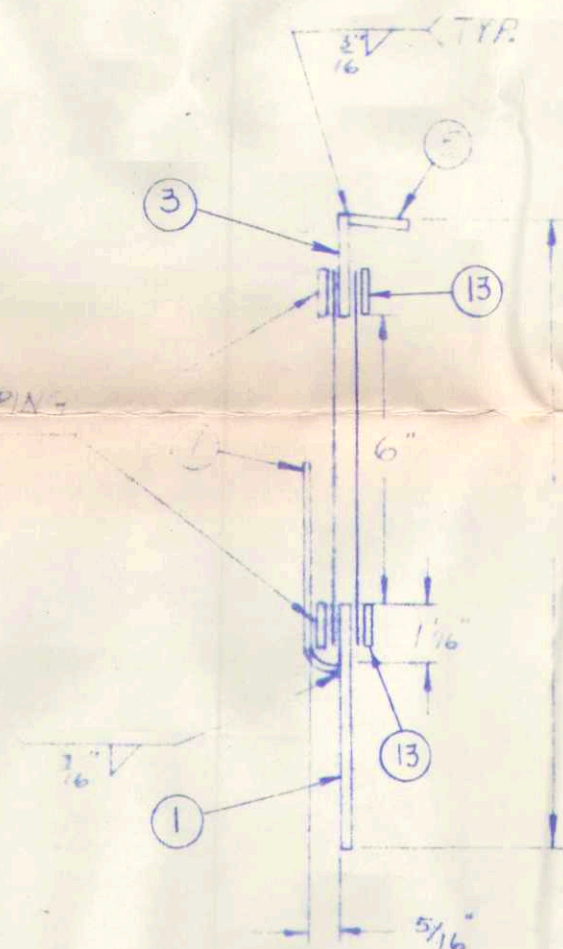
NO. REQ'D. OVER VENT  
4 VENTS REQ'D



INNER CLAMPING RING

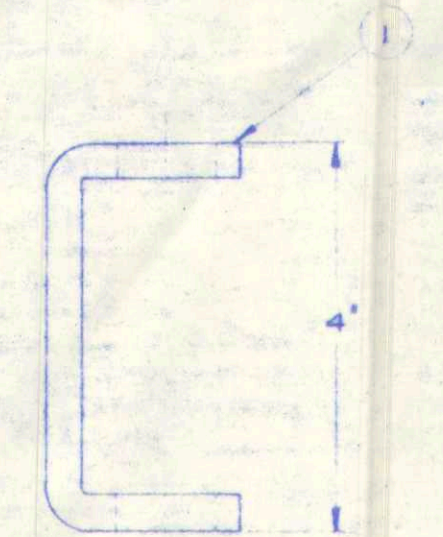
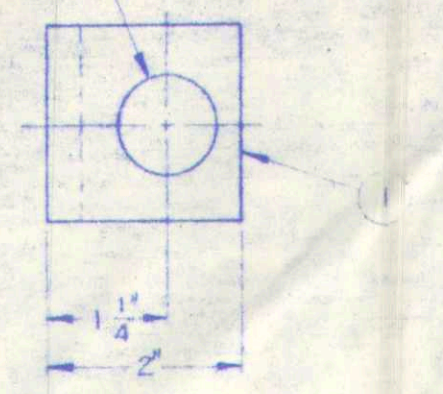
NOTE: INSTALL CLAMPING RINGS AFTER SCREEN IS IN PLACE. ADJUST NUTS TO CLAMP SCREEN SECURELY.

8) INSTALL ONE CLAMPING RING TOP & BOTTOM



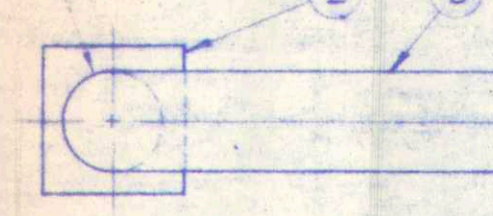


PUNCH 1" DIA HOLE  
2 PLACES

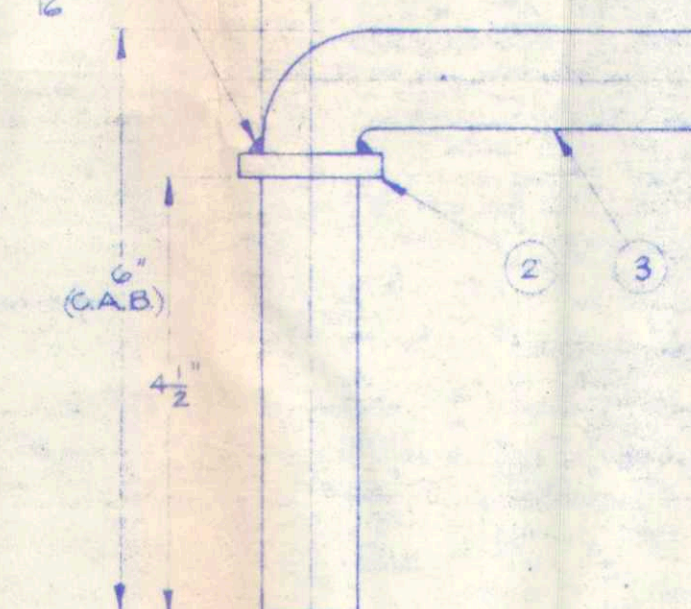
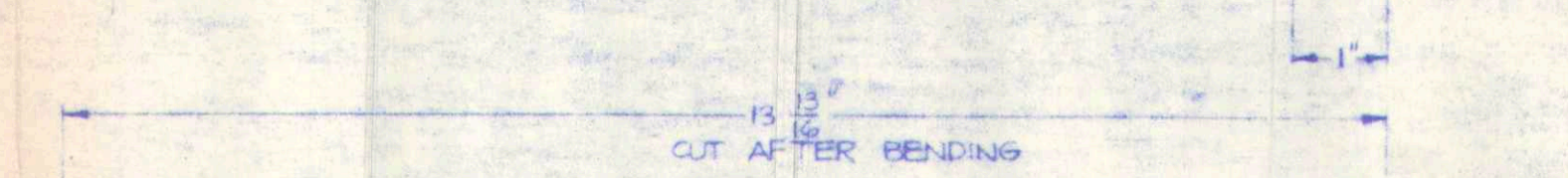


① DAVIT SUPPORT  
DETAIL

PUNCH 1" DIA HOLE IN  
ITEM ②



5/16" DIA HOLE  
DRILL AFTER BENDING

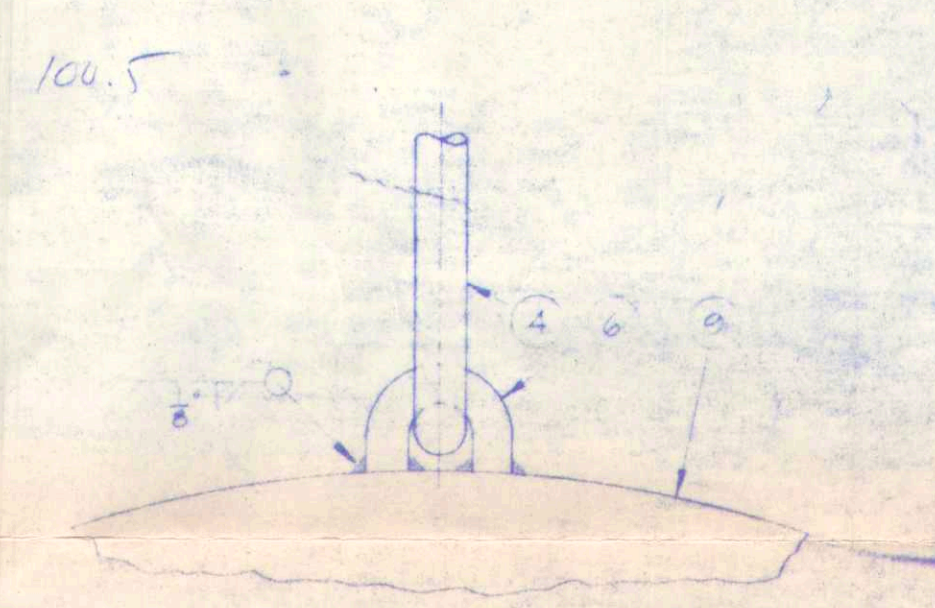
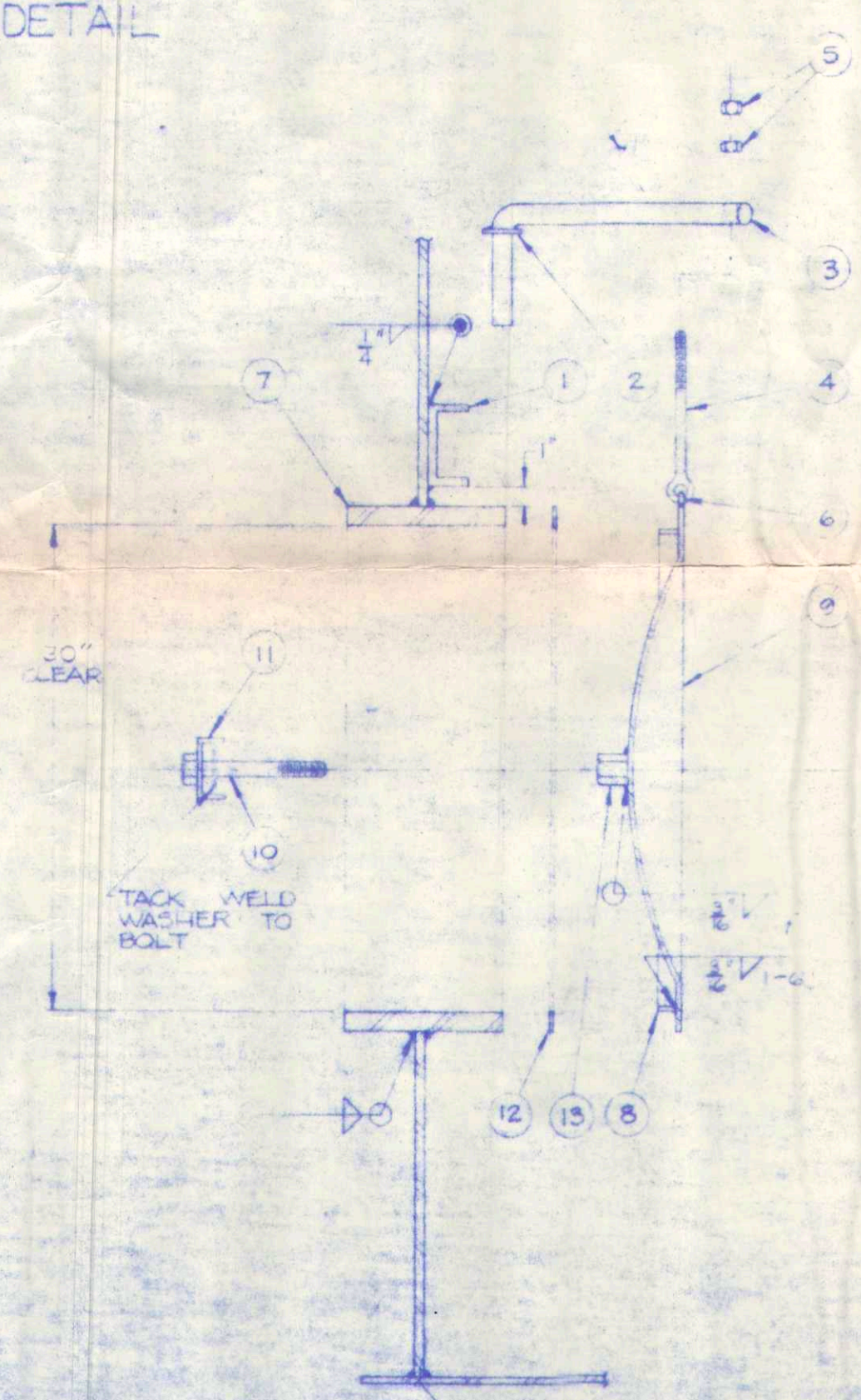
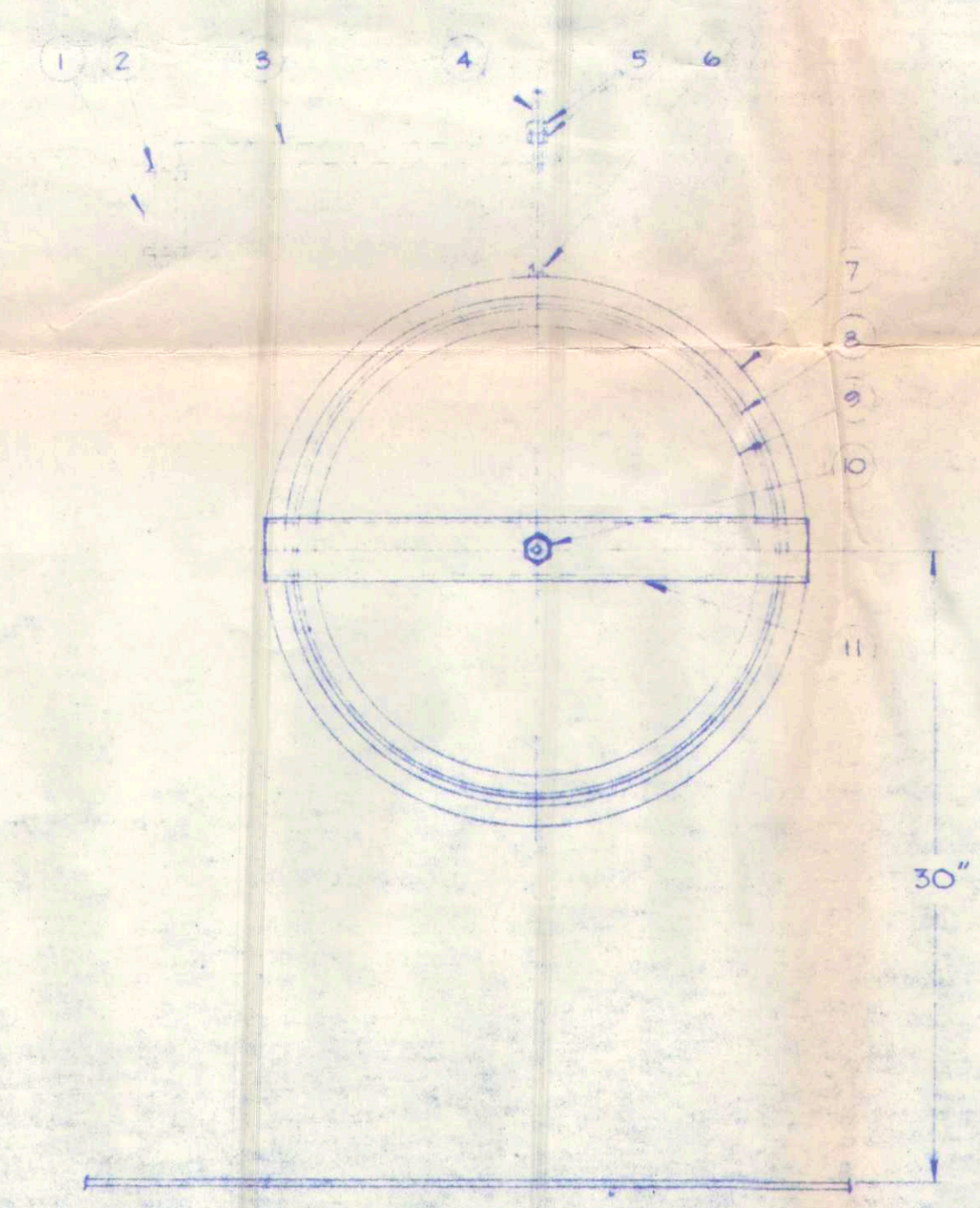


② ③ DAVIT ARM  
DETAIL

# MATERIAL LIST

NO	DESCRIPTION	MATERIAL	NO REQ'D
1	3/8" x 2" FB x 8" LG	A36	1
2	1/4" x 1 1/2" FB x 1 1/2" LG	A36	1
3	1" Ø BAR x 19" LG	A36	1
4	1/2" x 8" EYE BOLT	SS 18-8	1
5	1/2" NC NUT	SS 18-8	2
6	HALF LINK		1
7	1" x 8" FB x 9 1/4" LG (ROLLED TO 30" I.D.)	A36	1
8	1/4" x 1" FB x 31 1/4" LG (ROLLED TO 28 3/4" I.D.)	A36	1
9	1/4" x 28" I.D. x 32" O.D. x 28" R. HAT HEAD	A285	1
10	3/2" x 6 1/2" NC BOLT AND 3/16" WASHER	SS 18-8	1
11	3" L 4 1/4" x 27" LG	A36	1
12	1/4" x 23" I.D. x 26" O.D. GASKET	NEOPRENE	1
13	3/4" NC BARREL NUT x 2 1/4" LG	SS 18-8	1

NUMBER REQUIRED IS PER MANWAY  
NUMBER MANWAYS REQUIRED: 2



④ ⑥ HALF LINK  
DETAIL

**RECORD  
DRAWING**

30" ONE-BOLT MANWAY

SCALE: NONE	APPROVED BY: <i>Boyd</i>	DRAWN BY: <i>V.L.H.</i>
DATE: 4-25-83		REVISED: 7-7-83
SCOTTS VALLEY		
TRUSCO TANK, INC		
DRAWING NUMBER 9 OF 9		