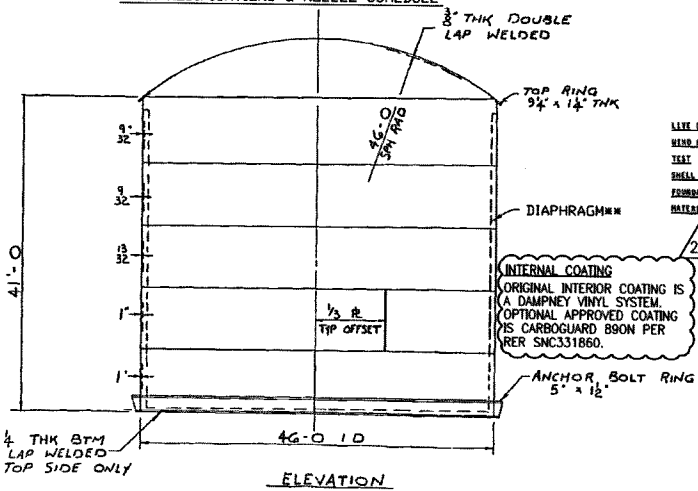


* SEE DRAWING U-187218 FOR TANK MODIFICATIONS & NOZZLE SCHEDULE.



ELEVATION

GENERAL NOTES

SELECT CONDENSATE STORAGE TANK

SPECIFICATIONS

- ALABAMA POWER CO PURCHASE ORDER NO FOP-303 SOUTHERN SERVICES, INC NO 33-1111-4 ENCLOSURE ADDENDUM NO 1
- ASME CODE SECTION III, CLASS 3, ARTICLE NB-3000 - 1971 EDITION INCLUDING THE WINTER 1971 ADDENDUM

DESIGN CONDITIONS

- HORIZONTAL CAPACITY - 600 GPM GALLONS
- PRESSURE - ATMOSPHERIC - STATIC HEAD
- TEMPERATURE - 60° (200° F MA.)
- CONSTRUCTION ALLOWANCE - NONE
- SEISMIC CLASS - NONE

ONE GROUND ACCEL - 0.5 HORIZONTAL
0.33 VERTICAL

ONE GROUND ACCEL - 10 HORIZONTAL
0.9 VERTICAL

RESPONSE SPECTRA FURNISHED BY SOUTHERN SERVICES, INC ANALYSIS IN ACCORDANCE WITH AEC BULLETIN TID-7002

EXTERNAL LOADS ON NOZZLES NONE SPECIFIED

WATER TIGHTNESS ISSUED THAT THE MATERIALS SPECIFIED ARE ADEQUATE FOR THE CONDITIONS

BASE SHEAR ASSUMED THAT PROTECTION BETWEEN THE BOTTOM OF THE TANK AND THE FOUNDATION RESISTS HORIZONTAL SEISMIC SHEAR

TORNADO DESIGN CONDITIONS

- AMBIENT PRESSURE DROP OF 3 PSI TO 3 SEC. CONTINUING FOR 2 SEC AND RETURNING TO NORMAL ATMOSPHERE IN 3 SEC
- WIND OF 300 MPH VELOCITY USING ASCE PAPER 2809 "WIND FORCES ON STRUCTURES"

Where $q = 230 \text{ mph}^2, V_p = 1.0$ (Cm) Applied per Table 1-1 and $C_{pe} = 2.0$ Windward and $C_{pe} = 0.8$ Leeward $C_{pe} = -1.7$ perpendicular

+ sign = pressure toward tank center and conversely - sign = away from tank center

NOTE: C_{pe} values are based on a 10 ft high wall.

$-1.0(230)^2 = -1.6 \text{ psi}$

Allowable Stresses

- Normal Oper Section $\leq 0.9 F_y$

3) MISSILE IMPINGEMENT

THE LOWER 150 AND ONE MUST WITHSTAND FORCES RESULTING FROM MISSILE IMPACT THE FOLLOWING MISSILE CONDITIONS MUST BE CONSIDERED

- 8.0 x 1.0" LONG TINDER STRIKING ON END @ 300 MPH
- 3" x 1.0" x 1.0" LONG PIPE STRIKING ON END @ 300 MPH
- 4000 LB "C" CONTACT AREA 20 FT x 2.0 x 10 MPH NOT MORE THAN 25 FT ABOVE GRADE

WIND LOAD 25 PSF ON PROJECTED ROOF AREA

WIND LOAD 30 PSF ON PROJECTED TANK AREA, OR TORNADO TEST HYDROSTATIC-PNEUMATIC

WIND TEST HYDROSTATIC-PNEUMATIC

SHELL JOINT EFFICIENCY HT OR PT SHELL JOINTS - 70%

FOUNDATION BY OTHERS

MATERIALS

PLATE	- SA508-C	(MS-684)
FUNCTIONS	- SA508-C	(MS-684)
PIPE	- SA508-C	(MS-684)
WELDS	- SA508-C	(MS-684)
GASKETS	- SA508-C	(MS-684)
STRUCTURAL	- SA508-C	(MS-684)

TABLE OF ARCS

L	23	1	9/16	23	0	3/8	23	0	3/8
10"	6	5	3/8						
23"	11	8	1/2						
30"	12	1	1/2						
35"	14	1	3/4	14	1	3/4			
45"	18	1	3/4			18	1	3/4	
39"10								15	9
39"	15	8	3/16						
40"	16	1	3/8						
43"34	17	6	3/16						

APPROVED FOR NUCLEAR Q. A MANUAL RELEASED FOR USE

B.W. Morgan

Checked by: *shuts*

DATE: _____

FITTING FURNISHED & DETAIL BY CSI

CURT MARK	NO REQD	CR MARK	ELEVATION H	PROJECTION J	DESCRIPTION
1	1	7A	2	0	24" SH 24" SH 24" SH
2	1	6A	1	0	24" SH 24" SH 24" SH
3	1	14A	1	0	24" SH 24" SH 24" SH
4	1	9	0	0	150" OVERHEAD NOZZLE
5	1	9	0	5	6" STUB NOZZLE DRAIN CONN
6	1	9	0	5	1" 150" NOZ - LEVEL CONTROL CONN
7	2	9	0	5	1" 6000" SCRD CHG - LEVEL PRESS SWITCH
8	1	9	0	5	1" 6000" SCRD CHG - LEVEL TRANSMITTER
9	2	13A	1	7.5	8" STUB NOZ - ALL FEEDPUMP SUCTION
10	1	12	1	2.5	8" STUB NOZ - NO FEEDPUMP REGENERATION
11	1	12	1	2.5	8" STUB NOZ - COND MFR UP & RETURN
12	1	12	1	2.5	8" STUB NOZ - COND FILL FROM DEMON
13	1	12	1	11.5	1" STUB NOZ - LEVEL ALARM
14	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
15	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
16	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
17	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
18	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
19	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
20	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
21	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
22	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
23	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
24	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
25	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
26	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
27	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
28	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
29	1	8A	1	0	1" STUB NOZ - LEVEL ALARM
30	1	8A	1	0	1" STUB NOZ - LEVEL ALARM

NOTES:

SEE DRAWING U-187218 FOR NOZZLE SCHEDULE

MAX. FLOW IN & OUT OF TANK: 12000 GPM

WIND DIAPHRAGM

SEE DRAWING U-419662 FOR DIAPHRAGM ASSEMBLY AND DRAWING U-161927 FOR DIAPHRAGM EQUATOR/SUPPORT

NON-DESTRUCTIVE EXAMINATION SYMBOLS IDENTIFYING TYPE OF EXAMINATIONS ARE AS FOLLOWS

- HT - MAGNETIC PARTICLE EXAMINATION
- PT - LIQUID PENETRANT EXAMINATION
- RT - RADIOGRAPHIC EXAMINATION
- VT - VISUAL EXAMINATION
- WT - WELD METAL TESTING

* IN AREAS THAT ARE UNACCESSIBLE TO HT EQUIPMENT, PT MAY BE SUBSTITUTED FOR HT

BOTTOM PLATES TOGETHER LAP WELDS TO BE VT AFTER WELDING

SEAM TO SIDEWALL DOUBLE-FILLET WELDS WITH FULL PENETRATION VIB AFTER WELDING VT DURING TEST

SIDEWALL JOINTS BUTT WELDS HT OR PT AFTER WELDING VT DURING TEST

TOP STIFFENER TO SIDEWALL HT OR PT AFTER WELDING

TOP STIFFENER TOGETHER HT OR PT AFTER WELDING

ROOF TO TOP STIFFENER FILLET WELD VT AFTER WELDING

ROOF PLATES TOGETHER LAP WELDS VT & VT AFTER WELDING

NOZZLES TO SHELL HT OR PT AFTER WELDING VT DURING TEST.

SHELL NOZZLE WITH PAD

FILLET WELDS 1 SOLUTION FILM BEFORE TEST WITH PRESSURE UNDER PAD
2 HT OR PT AFTER WELDING

SHELL TO NECK 1 CARVE WELDS SOLUTION FILM BEFORE TEST WITH PRESSURE UNDER PAD
2 HT OR PT AFTER WELDING

BASE SHIMS BY CSI, GROUT BY OTHERS BEFORE WATER IS PUT IN TANK

SURFACE DEFECTS AT TEMPORARY ATTACHMENTS - HT OR PT AFTER REMOVAL

PERMANENT ATTACHMENTS TO SHELL - HT OR PT AFTER WELDING DURING HYDROSTATIC-PNEUMATIC TEST AT ALL JOINTS IN THE WALLS OF THE TANK AND ALL WELDING AROUND NOZZLES AND HANDWAYS

TPLNS NO QIP17001

Chicago Bridge & Iron Company **CBI**

GENERAL PLAN

46 0 - 11 41 0 - 11 0000 0000 TANK

CONDENSATE STORAGE TANK

FARLEY NUCLEAR PLANT UNIT #1

Particulars: FNP - 303

72-4859

DATE: 7-12-73

BY: JJB

DATE: 7-12-73

SCALE: 1" = 10'-0"

INDICATES CHANGE FROM PREVIOUS ISSUE

CAD U161693

OY2000 JJB

THIS DWG. REFERENCED IN VENDOR MANUAL N/A

TAB/SECT. N/A

PAGE N/A

FIGURE N/A

VERSION 2.0 DATE 11-14-11

REVISOR BY SNC PER ABN-F02433, VERSION 1.0

SEE MICROFILM FOR PREVIOUS VER. SIGNATURES.

BY: JJB CHK'D: RAW APPR.1: AAN APPR.2: X

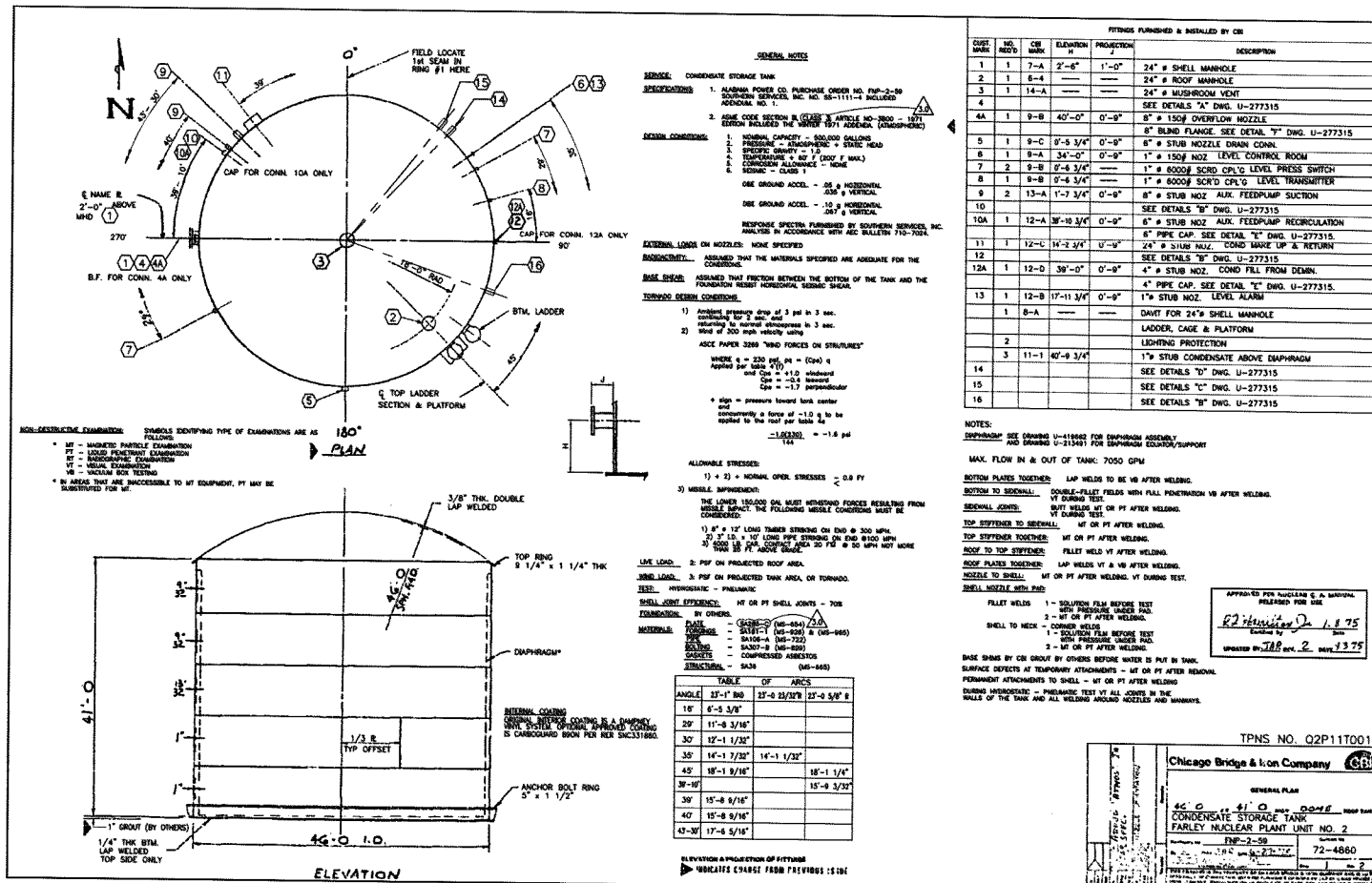
VENDOR: CBI

P.O.#: FNP-00000303

DRAWING NO. U-161693

Southern Nuclear Operating Company, Inc. FOR J.M. FARLEY NUCLEAR PLANT UNIT 1

TITLE: CONDENSATE STORAGE TANK GENERAL PLAN



FITTINGS FURNISHED & INSTALLED BY CBI

CURT. MARK	NO. REQ'D	CR. MARK	ELEVATION	PROJECTION	DESCRIPTION
1	1	7-A	2'-6"	1'-0"	24" # SHELL MANHOLE
2	1	8-A	---	---	24" # ROOF MANHOLE
3	1	14-A	---	---	24" # MUSHROOM VENT
4	---	---	---	---	SEE DETAILS "A" DWG. U-277315
4A	1	9-B	40'-0"	0'-0"	8" # 150F OVERFLOW NOZZLE
5	1	9-C	0'-5 3/4"	0'-0"	8" # BLIND FLANGE. SEE DETAIL "T" DWG. U-277315
6	1	9-A	34'-0"	0'-0"	8" # STUB NOZZLE DRAIN CONN.
7	2	9-B	0'-4 3/4"	---	1" # 150F NOZ. LEVEL CONTROL ROOM
8	1	9-B	0'-6 3/4"	---	1" # 150F NOZ. LEVEL PRESS SWITCH
9	2	13-A	1'-3 3/4"	0'-0"	1" # 150F NOZ. COND. FALL FROM DENN.
10	---	---	---	---	SEE DETAILS "B" DWG. U-277315
10A	1	12-A	38'-12 3/4"	0'-0"	8" # STUB NOZ. ALK. FEEDPUMP RECIRCULATION
11	1	12-C	14'-2 5/4"	U'-0"	6" # PIPE CAP. SEE DETAIL "T" DWG. U-277315.
12	---	---	---	---	24" # STUB NOZ. COND. MAKE UP & RETURN
12A	1	12-D	39'-0"	0'-0"	4" # STUB NOZ. COND. FALL FROM DENN.
13	1	12-B	17'-11 3/4"	0'-0"	4" # STUB NOZ. ALK. FEEDPUMP SUCTION
14	---	---	---	---	SEE DETAILS "B" DWG. U-277315
15	---	---	---	---	1" # STUB NOZ. LEVEL ALARM
16	---	---	---	---	DAWT FOR 24" SHELL MANHOLE
					LADDER, CAGE & PLATFORM
					LIGHTING PROTECTION
					1" # STUB CONDENSATE ABOVE DIAPHRAGM
					SEE DETAILS "D" DWG. U-277315
					SEE DETAILS "C" DWG. U-277315
					SEE DETAILS "B" DWG. U-277315

NOTES:

DIAPHRAGM: SEE DRAWING U-118682 FOR DIAPHRAGM ASSEMBLY AND DRAWING U-213481 FOR DIAPHRAGM CONTROL/SUPPORT

MAX. FLOW IN & OUT OF TANK: 7050 GPM

BOTTOM PLATES TOGETHER: LAP WELDS TO BE W/ AFTER WELDING.

BOTTOM TO SIDEWALL: DOUBLE-FILLET WELDS WITH FULL PENETRATION W/ AFTER WELDING.

SEAMLESS JOINTS: BUTT WELDS WT OR PT AFTER WELDING. WT DURING TEST.

TOP STIFFENER TO SIDEWALL: WT OR PT AFTER WELDING.

TOP STIFFENER TO BOTTOM: WT OR PT AFTER WELDING.

ROOF TO TOP STIFFENER: FILLET WELD W/ AFTER WELDING.

ROOF PLATES TOGETHER: LAP WELDS W/ & W/ AFTER WELDING.

NOZZLE TO SHELL: WT OR PT AFTER WELDING. WT DURING TEST.

SHELL NOZZLE WELD PAD:

FILLET WELDS: 1 - SOLUTION FLM BEFORE TEST W/ PREPRESSURE UNDER PAD.
2 - WT OR PT AFTER WELDING.

SHELL TO NECK - CORNER WELD: 1 - SOLUTION FLM BEFORE TEST W/ PREPRESSURE UNDER PAD.
2 - WT OR PT AFTER WELDING.

BASE DRAG BY CR GROUP BY OTHERS BEFORE WATER IS PUT IN TANK.

SURFACE DEFECTS AT TOWARD ATTACHMENTS - WT OR PT AFTER REPAIR.

PERMANENT ATTACHMENTS TO SHELL - WT OR PT AFTER WELDING.

DURING HYDROSTATIC - PNEUMATIC TEST W/ ALL JOINTS IN THE WALLS OF THE TANK AND ALL WELDING INCLUDING NOZZLES AND MANHOLES.

APPROVED FOR NUCLEAR G. A. MATERIAL RELEASED FOR USE
EJ Hester 1.8.75
Checked by
Updated by JAB Rev. 2 Date 1.3.75

TPNS NO. Q2P11T001

Chicago Bridge & Iron Company

GENERAL PLAN
46'-0" x 41'-0" DIA. DOME ROOF
CONDENSATE STORAGE TANK
FARLEY NUCLEAR PLANT UNIT NO. 2
REV. 2-58
72-4860
JAN 2 1975

CAD U213481
OVY2000 PVK

Southern Nuclear Operating Company, Inc.
FOR
J.M. FARLEY NUCLEAR PLANT
UNIT 2

THIS DWG. REFERENCED IN VENDOR MANUAL N/A
TAB/SECT. N/A
PAGE N/A
FIGURE N/A

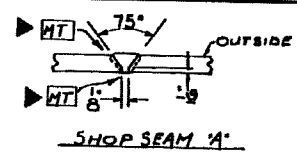
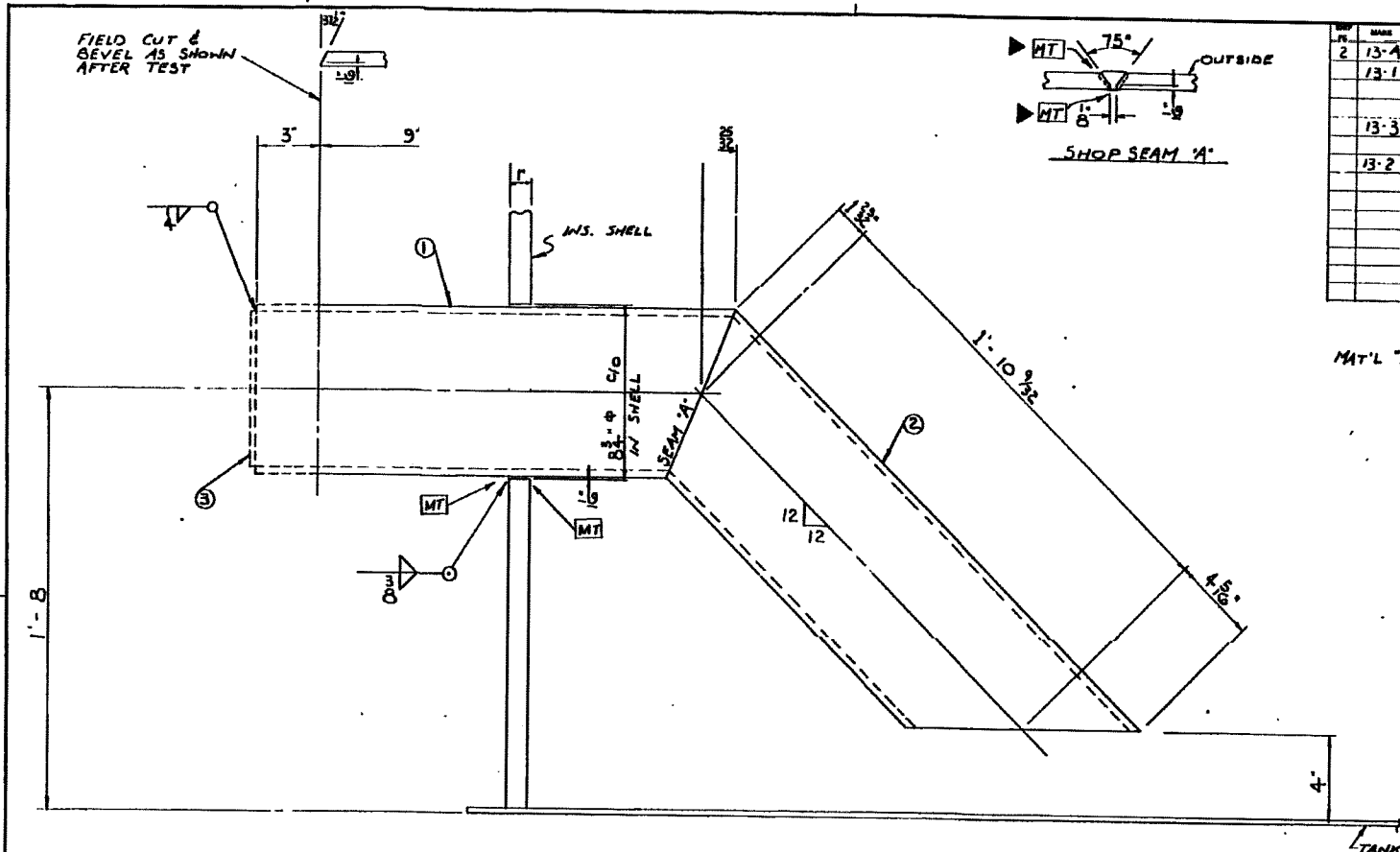
VERSION 3.0 DATE 4/09/12
REVISED BY SNC PER ABN-F02570, VERSION 1.0

TITLE: CONDENSATE STORAGE TANK GENERAL PLAN

SEE MICROFILM FOR PREVIOUS VER. SIGNATURES

BY	CHK'D	APPR.1	APPR.2
PVK	CJK	AAN	X

VENDOR: CBI P.O.#: FNP2-000059
DRAWING NO. U-213481



ITEM NO.	QTY	DESCRIPTION	UNIT	LENGTH	SPEC. I.D.
13-1	2	8" STUB NOZZLE (3)			
13-2	2	R 8" SCH 40 SML PIPE	CT	9	5" A
13-3	2	R 8" x 1/4" THK			MB3C D
13-4	2	R 8" x 1/4" THK			
13-5	2	R 8" SCH 40 SML PIPE	CT	10 1/2	5" C

MAT'L "5" - SA106-B (MS 722)

APPROVED FOR NUCLEAR & MARINE RELEASED FOR USE
B.W. White
 Checked by
 DATE

U161703B

TANS NO QIPITOOI

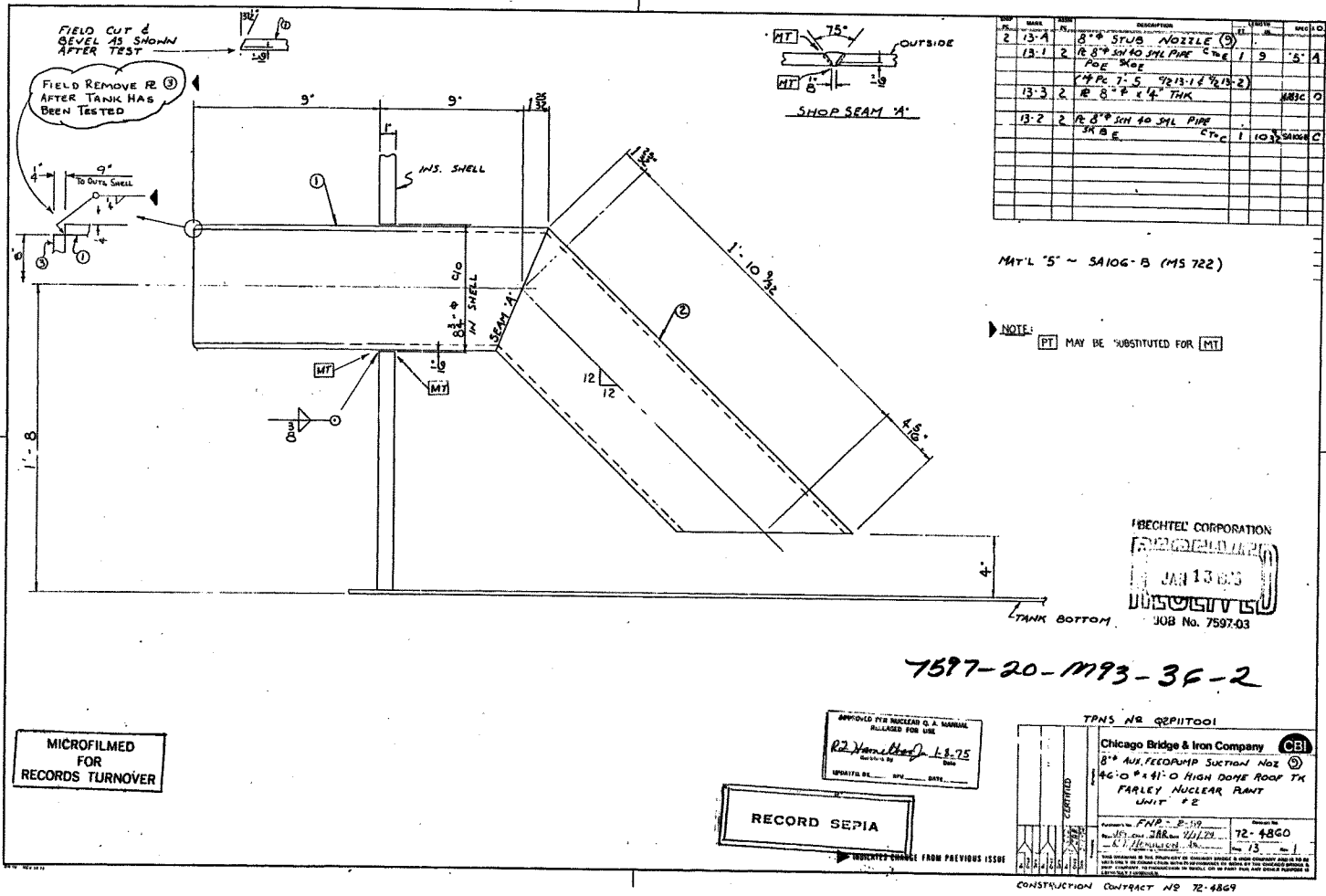
Chicago Bridge & Iron Company **CBI**

8" AUX. FEEDPUMP SUCTION NOZ (3)
 46'-0" x 41'-0" HIGH DOME ROOF TX
 FARLEY NUCLEAR PLANT
 UNIT # 1

Particulars to: **ENP-303** Contract No. **72-4859**

7-10-73 13 2

INDICATES CHANGE FROM PREVIOUS ISSUE



REV	DATE	DESCRIPTION	BY	CHKD	APP'D
2	13-4	8" * 5' SUB NOZZLE (3)			
13-1	2	RE 8" SH 40 SPL PIPE CTR 1 9' 5' A			
		POE SHG			
13-3	2	4" PC 7-5 9213-1 6 2 15-2			
		RE 8" * 4" THK			
13-2	2	RE 8" SH 40 SPL PIPE CTR 1 10 3' SH 40 C			
		SH B E			

MAT'L '5' ~ SA106-B (MS 722)

NOTE: PT MAY BE SUBSTITUTED FOR MT

BECHTEL CORPORATION
 BECHTEL BUILDING
 JAN 13 1975
 BECHTEL
 JOB No. 7597-03

7597-20	U-213493A
TITLE: 8 in. Aux. FW PP Suct. Nozzles	
JOB: JOSEPH M. FARLEY NUCLEAR PLANT UNIT 2 ALABAMA POWER COMPANY	
MFR. Chicago Bridge & Iron	P.O. BOX 2-59 REQ. 46037-SS CLASS



VENDOR'S DRAWING REVIEW

- Approved - Mfg. may proceed
- Approved - Submit final desg. - Mfg. may proceed
- Approved except as noted - Make changes and submit final desg. - Mfg. may proceed as approved.
- Not approved - Correct and resubmit.
- Review not required - Mfg. may proceed.

Approval of this drawing does not relieve supplier from full compliance with contract or purchase order requirements.

BY *S. Dulon* DATE 2-25-75
 BECHTEL

JOB NO. 7597-20	BECHTEL POWER CORPORATION P. O. BOX 607 GAITHERSBURG, MD.
--------------------	--

7597-20-1193-3F-2

MICROFILMED FOR RECORDS TURNOVER

APPROVED FOR NUCLEAR O. & MANUAL ALLOWED FOR USE
R2 H. H. H. H. H. 1-8-75
 DATE: _____ BY: _____

RECORD SEPIA

TPNS NR QEPHTOOI

Chicago Bridge & Iron Company **CBI**

8" AUX. FW PP SUCT. NOZ (3)
 46" O * 41" O HIGH DOME ROOF TX
 FARLEY NUCLEAR PLANT
 UNIT # 2

Approved by: *R. H. H. H. H.* 72-4860
 Date: 13-1-75

CONSTRUCTION CONTRACT NO 72-4869