Commonwealth Edison Company
LaSalle Generating Station
2601 North 21st Road
Marseilles, IL 61341-9757
Tel 815-357-6761

ComEd

February 20, 1998

United States Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Supplemental Information regarding Containment Leak Chase Channels
LaSalle County Station, Units 1 and 2
Facility Operating License NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Reference: See Attachment F

In Reference (9), Commonwealth Edison Company (ComEd), LaSalle County Nuclear Power Station, Units 1 and 2 (LaSalle), provided the United States Nuclear Regulatory Commission (NRC) with justification to demonstrate that the performance of containment integrated leak rate tests (CILRTs) with the leak chase channel plugs installed satisfies the requirements of Title 10, Code of Federal Regulations, Part 50 (10 CFR 50), Appendix J. This justification shows that (a) the leak chase channel welds are qualitatively equivalent to or better than those for the primary containment liner welds and (b) the leak chase channels will maintain their integrity when subjected to the loading conditions of a postulated design basis accident (DBA) as well as during normal operation.

Subsequently, LaSalle has identified two additional leak chase channel configurations used in the pressure suppression pool (PSP) that were not bounded by the justification previously provided. Justification for these leak chase channel configurations is provided in Attachments A through E of this letter. There are, however, eighteen (18) specific leak chase channels in this population for each unit that cannot be demonstrated to maintain their integrity during a postulated DBA due to their location with respect to the dynamic effects of the PSP water inventory during the postulated event. Disposition of these leak chase channels will be provided to the NRC in a supplement to Licensee Event Report (LER) 50-373/97-030-00 [Reference (8)].

A017

9802270050 980220
PDR ADOCK 05000373
P PDR

If there are any questions or comments concerning this letter, please refer them to Perry Barnes, Regulatory Assurance Manager, at (815) 357-6761, extension 2383.

Respectfully,

Fred Dacimo
Site Vice President
LaSalle County Station

Attachments

cc: A. B. Beach, NRC Region III Administrator
M. P. Huber, NRC Senior Resident Inspector - LaSalle
D. M. Skay, Project Manager - NRR - LaSalle
F. Niziolek, Office of Nuclear Facility Safety - IDNS

Attachment A

Justification

The containment liners at LaSalle County Nuclear Power Station, Units 1 and 2 (LaSalle), were installed in accordance with Chicago Bridge and Iron (CBI) Contracts 73-6336 and 73-6337, for Units 1 and 2 respectively. The leak test channels installed under these original CBI contracts were evaluated and determined to be "equal to or better than" the liner welds. Justification for the performance of containment integrated leak rate tests (CILRTs) with plugs installed on these leak test channels was provided to the United States Nuclear Regulatory Commission (NRC) on November 26, 1997 [Reference (9)].

Subsequently, it was noted that additional leak test channels were installed in support of the containment downcomer bracing and safety relief valve (SRV) KWU quencher modifications that were installed prior to the initial startup of each unit. These modifications were installed in accordance with CBI Contracts 83670 for Units 1 and 2, 83671 for Unit 1, 83672 for Unit 2 and 83674 for Units 1 and 2. These modifications required additional embedment plates to be installed through the pressure suppression pool (PSP) liner into the PSP concrete wall. Closure and testing of the PSP liner welds around these embedment plates was accomplished in the same manner as the original liner welds.

LaSalle has evaluated these additional leak test channels and determined that, except for the leak test channels around the 18 embedment plates numbered 34 through 51 between elevations 704' and 710' in both Unit 1 and Unit 2 PSPs, performance of CILRTs with the leak test channel plugs installed is acceptable because the containment pressure boundary can be redefined as the combined liner butt weld along with the pre-tested channel fillet welds and the leak test connections. The leak test channels around the 18 embedment plates numbered 34 through 51 between elevations 704' and 710' in both Unit 1 and Unit 2 PSPs are not able to withstand the upward hydro-dynamic loads associated with the initial pool swell during a design basis loss-of-coolant accident (DBLOCA) without plastic deformation.

The justification for the performance of CILRTs with plugs installed on these additional leak test channels is as follows:

a. **<u>The channel welds are qualitatively equivalent to or better than those for the primary containment liner welds</u>.**

1. <u>Fabrication /Installation</u>

The leak test channel system was installed as a permanent attachment to the liner by CBI in accordance with Sargent and Lundy (S&L) Specification J-2990, Downcomer Bracing Work, LaSalle County Station (LSCS) - Units 1 & 2. The leak test channel assembly is a Category I structure as specified on S&L drawings S-794 and S-795. The design, fabrication and erection of the containment downcomer bracing and SRV KWU quencher modifications was made to the requirements of Subsection NE of American Society of Mechanical Engineers (ASME) Section III, 1971 Code, Winter 1972 Addenda for Class MC.

S&L Specification J-2990, Downcomer Bracing Work, LSCS - Units 1 & 2 did not require detailed records for the permanent attachment welds, therefore, there are no weld control records that document the actual weld procedure, weld material or welder used. However;

a. CBI Welding Procedure Application Table Downcomer Bracing & Quencher Support & Liner Work, WPAT 83670, specifies the welding procedures to be followed (See Attachment C). The CBI Welding Procedure Application Table required the same welding procedures to be used for the leak test channel fillet welds as the liner plate butt welds. The CBI Welding Procedure Application Table also specified the same weld rod material to be used for both the leak test channel fillet welds and the liner plate butt welds. No exceptions were identified for the leak test channels. Therefore, it is reasonable to conclude that the same weld procedure and weld materials used for the liner butt weld joints were used for the fabrication of the leak test channel system.

b. All CBI welders who worked on the containment downcomer bracing and SRV KWU quencher modifications were qualified in accordance with ASME Section IX for overhead, horizontal and vertical position butt welds (See Attachment D). As indicated on the qualification records, qualification on butt welds also qualified the welder for fillet welds, such as those used to weld the channel to the liner. The leak test channels were installed by the same CBI welders that installed the containment downcomer bracing and SRV KWU quencher modification liner plate butt welds. The same

weld procedures were used for installation of the leak test channels as were used for the containment downcomer bracing and SRV KWU quencher modifications liner plate butt weld. It is therefore reasonable to conclude that essentially the same quality of weld obtained on the liner butt weld joints was also obtained for the fabrication of the leak test channel system.

Based on the above, it is reasonable to conclude that the material quality of the leak test channel welds would be essentially the same as the containment downcomer bracing and SRV KWU quencher modifications liner plate butt welds.

2. Testing

The containment downcomer bracing and SRV KWU quencher modifications liner seam welds were tested by partial radiography and 100% liquid penetrant. Furthermore, the leak tightness of the leak test channels and the liner welds were established during construction by pressure testing to containment design pressure.

Venting the leak test channels during the CILRT will not provide information on the leak tightness of the liner weld, since the liner is backed by concrete and is an integral part of the containment wall which will act as a leak tight membrane. The most effective procedure for performing the test on the liner weld is to test when it is not backed by concrete.

Documentation

Neither the S&L design specification, nor the CBI Master Checklist, required detailed records for the installation of the leak test channels. Therefore, complete documentation as required by ASME subsections NE-2000 and NE-4000 is not available. However, design and other documentation exists which provides reasonable assurance of the quality and type of materials used in the fabrication of the containment downcomer bracing and SRV KWU quencher modifications and leak test channel system.

Based on the above discussion, LSCS concludes that the PSP leak test channels installed for the containment downcomer bracing and SRV KWU quencher modifications have sufficient strength and were installed with the same material and with the same quality as the containment liner. Therefore, it is

reasonable to conclude that the channels are qualified to be used as part of the containment liner.

b. **<u>The channels will maintain their integrity when subjected to the loading conditions of a postulated design basis accident as well as during normal operation</u>.**

1. <u>Design Assessment of the Containment Downcomer bracing and SRV KWU quencher modifications Leak Test Channels</u>

   The welded steel plate liner, attached to the entire inside surface of the containment, serves as a leak tight membrane but not as a structural load carrying element. The liner seam welds are always in compression due to the pre-stress condition in the containment concrete wall even though the CILRT pressure will relieve this compression force to some extent. Therefore, the liner seam welds are considered non-structural.

   The liner to embendment plate seams in the suppression pool area are enclosed by stainless steel leak test channels (3/8" bent plate ASTM A-240, Type 304) which are attached to the liner and embedment plate by 3/16 inch continuous fillet welds. The bolt cover assemblies on the embedment plates are inclosed in leak test channels (6" diameter seamless schedule 40 pipe, SA 312, type TP 304). The channels (except for the 18 channels on each unit noted above), the bolt cover channels and the associated liner welds are designed to withstand accident pressure and temperature stresses. The loads and load combinations for which the channels and its welds are qualified, the applicable codes and acceptance criteria are listed below:

2. <u>Loads and Load Combinations</u>

   The applicable loss-of-coolant accident (LOCA), jet impingement, and pool hydrodynamic loads as defined in Section 3 and Table 3.4-1 of the LSCS-Mark II Design Assessment Report (DAR) Revision 7, January 1980 (See Reference 9, Attachment I), are:

   a. SRV Actuation Loads

      In addition to the boundary loads, the SRV discharge loads include air bubble drag loads due to:

      1. All Valve and
      2. Single Valve Second Actuation.

b. LOCA Accident Loads

The LOCA loads considered for this assessment are:

1. LOCA Water Jet Loads,
2. LOCA Charging Air Bubble Loads,
3. Pool Swell and Fall Back Loads,
4. Condensation Oscillation Loads,
5. Chugging Loads,
6. Accident Temperature and
7. Jet Impingement Loads.

In addition to the pool hydrodynamic loads listed above, the leak test channel is assessed for the effect of hydrostatic pressure.

These loads were combined using the appropriate load combinations from Table 4.3-2 of LSCS-Mark II DAR, Revision 7, January 1980.

3. Calculations (Attachment E)

Calculation L-001337, Revision 2, provides an expanded assessment of the containment downcomer bracing and SRV KWU quencher modifications leak test channels for the governing loading combinations. This calculation is the referenced calculation for the design margins discussed in Paragraph 5 below.

4. Applicable Code and Acceptance Criteria

The acceptance criteria used for this assessment is the same as outlined in Subsection 4.3.2 of LSCS-Mark II DAR, Revision 7, January 1980. Thus, stresses per 1969 AISC specification are used for load combinations 1 through 3 defined in Table 4.3-2 of LSCS-Mark II DAR. For load combinations involving abnormal or extreme environmental loads (combinations 4 through 7a), the stresses are limited to 0.95fy. The allowable stress used for the weld for all load combinations is 21000 psi.

5. Margin Factors

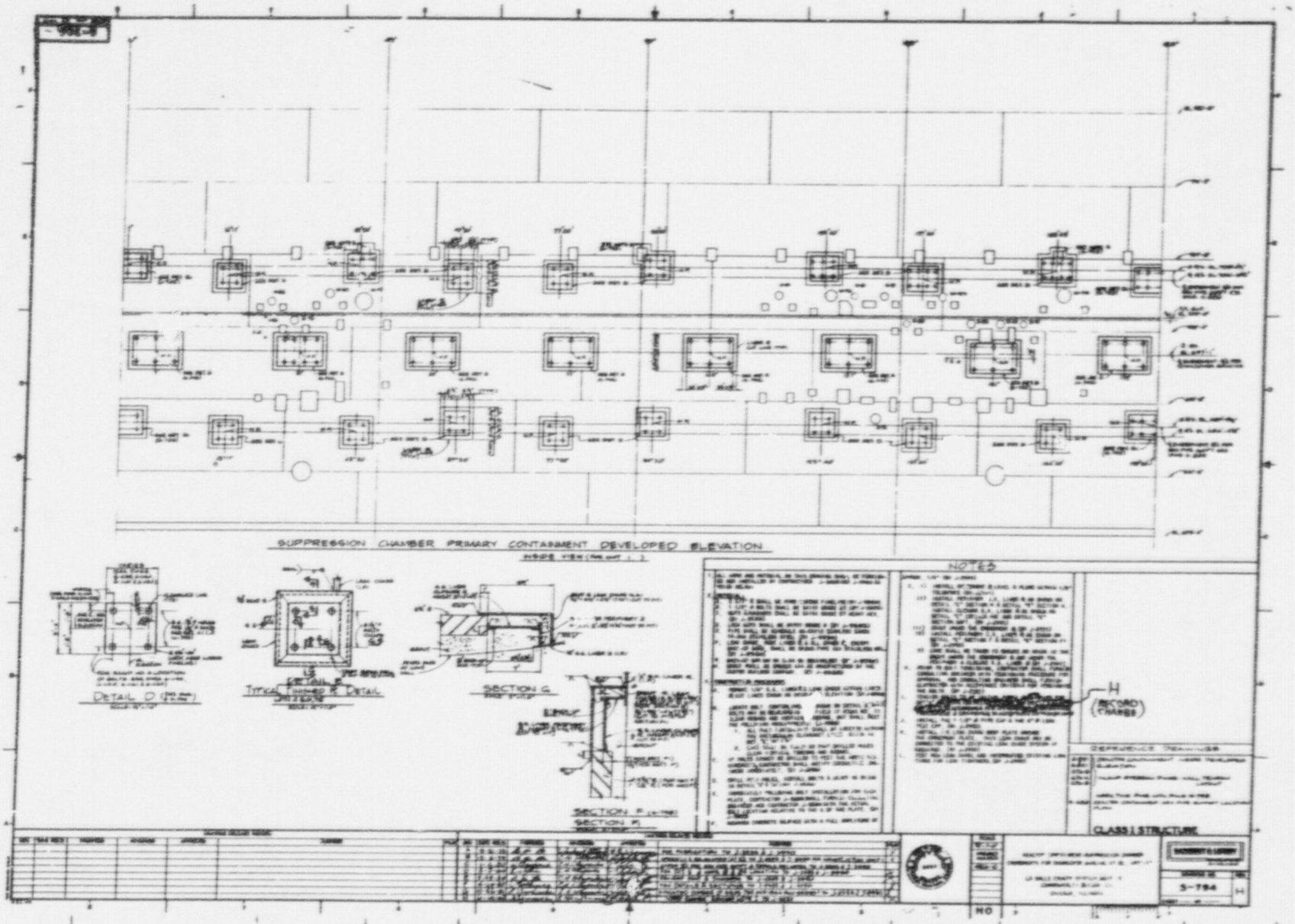
Margin factors, defined as the ratio between the allowable stress and the actual stress, were computed for the containment downcomer bracing and SRV KWU quencher modifications channel configurations in the suppression pool for the governing load combinations of Table 4.3-2 of LSCS-Mark II DAR. This assessment has been performed using a 10% increase in the minimum specified material yield strength, as allowed in AISC Manual of Steel Construction, Seventh Edition, for SA240 Type 304 in accordance with S&L Specification J-2990.

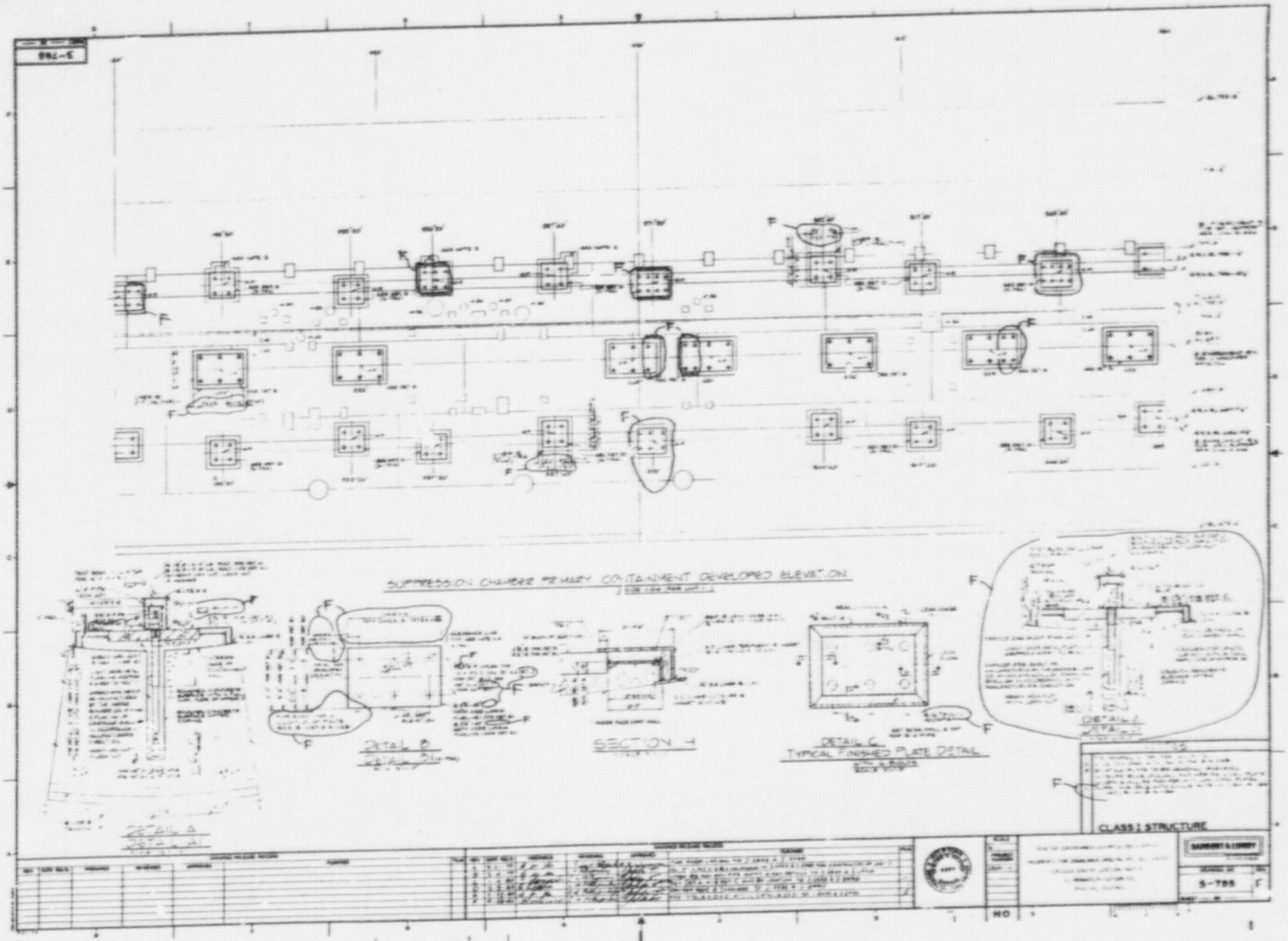
All margin factors are greater than 1.0 thus demonstrating that all leak test channels have been found to meet the acceptance criteria and are thus able to serve as part of the containment pressure boundary.

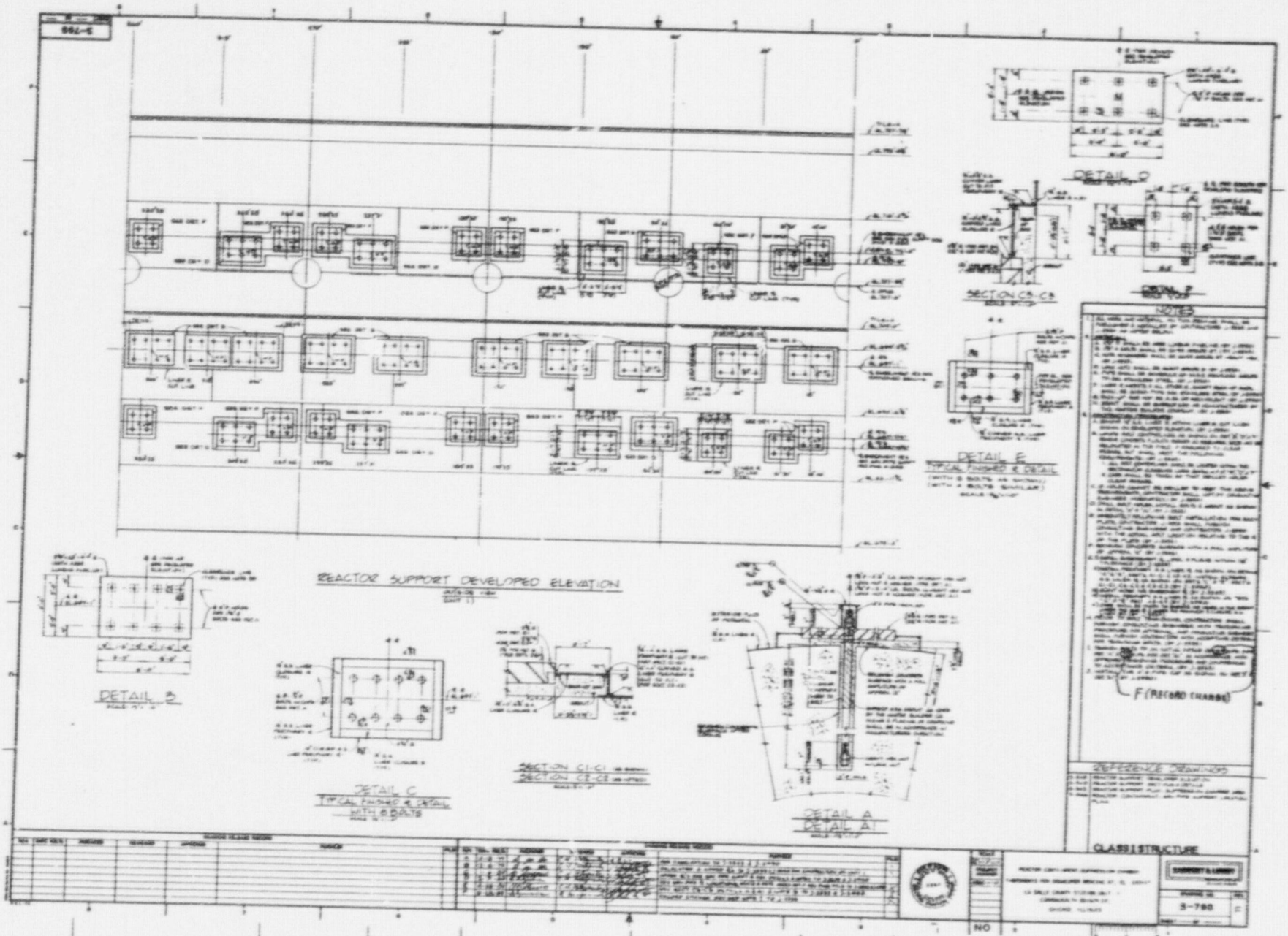
Attachment B

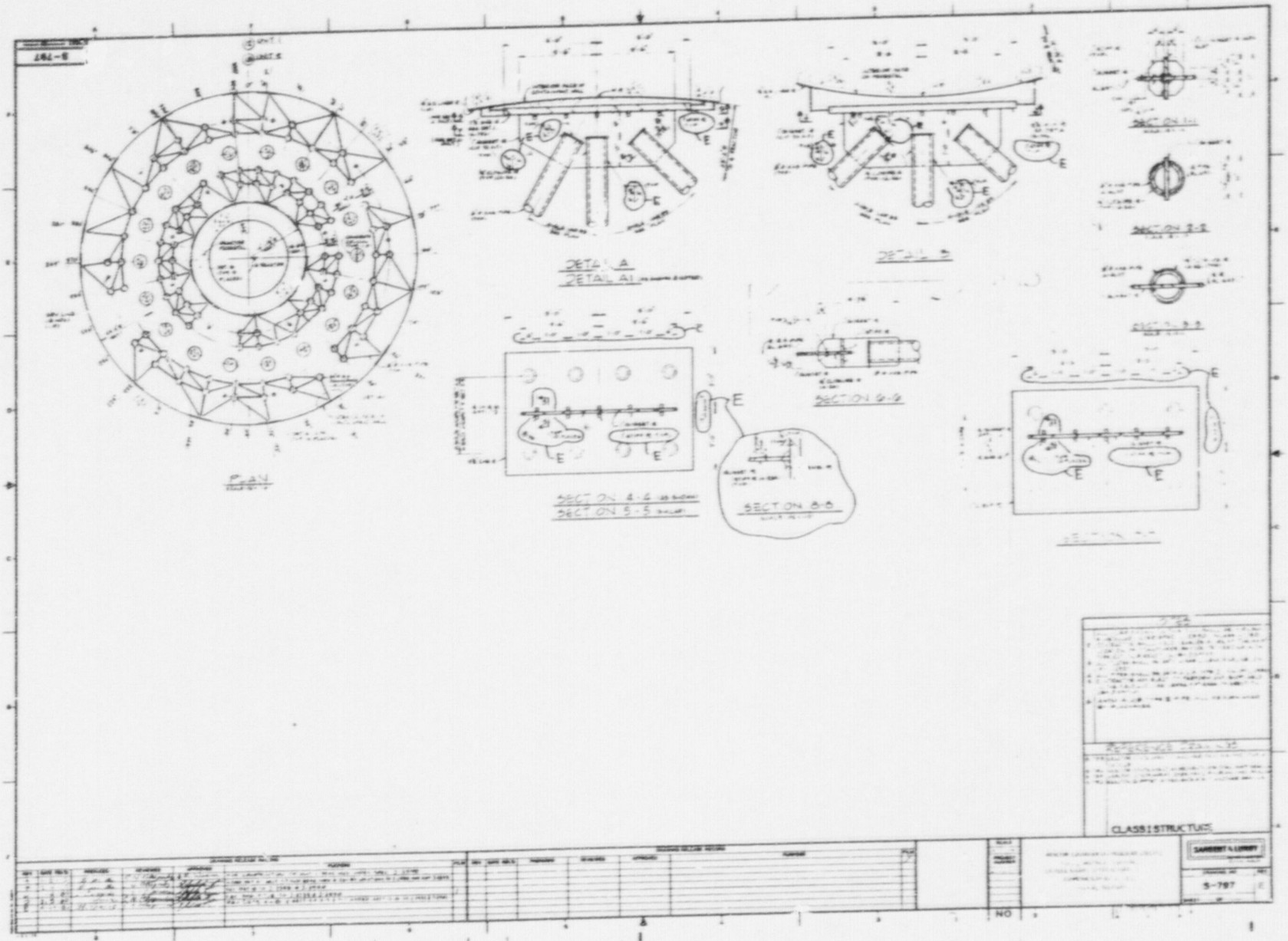
Leak Test Channels

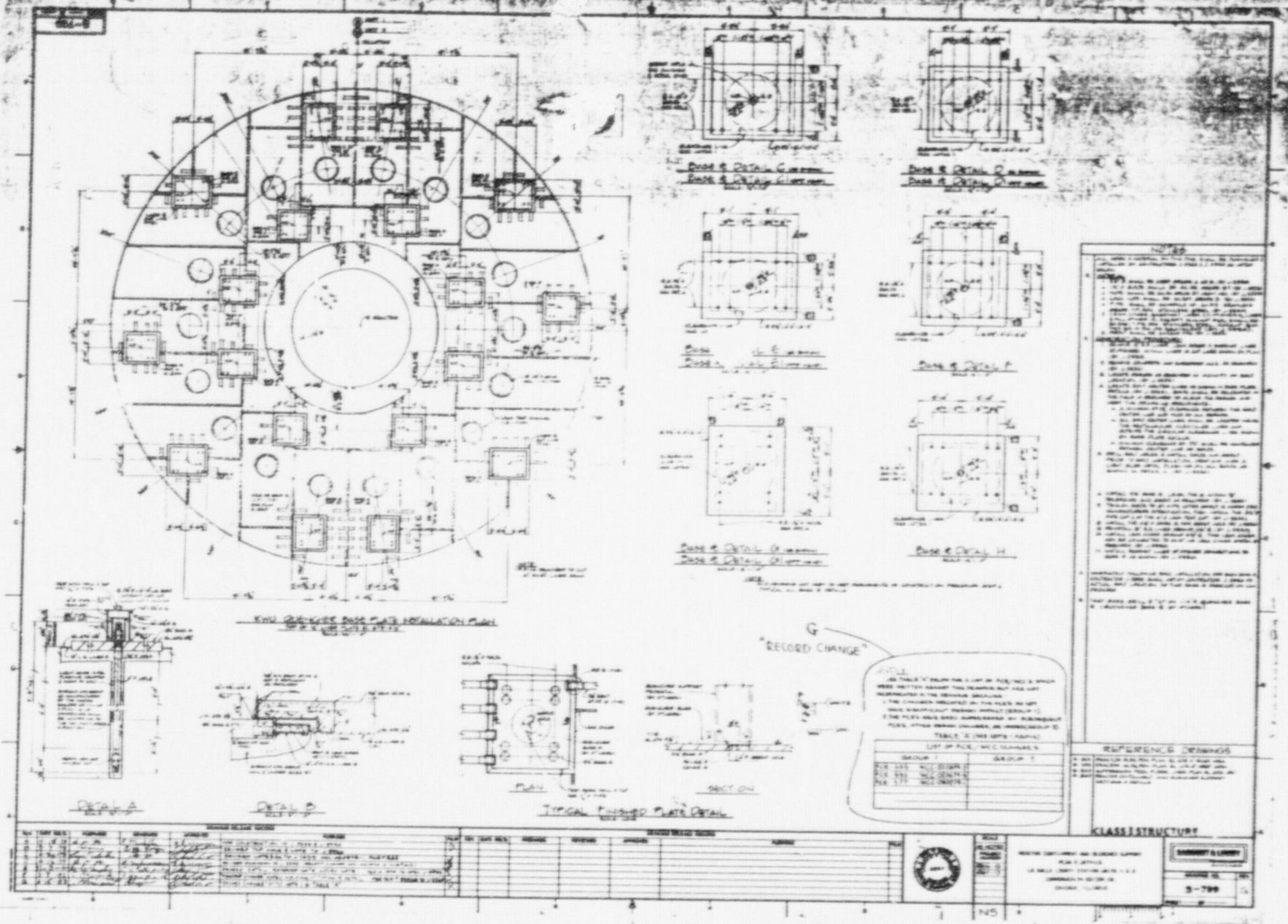
Locations and Details

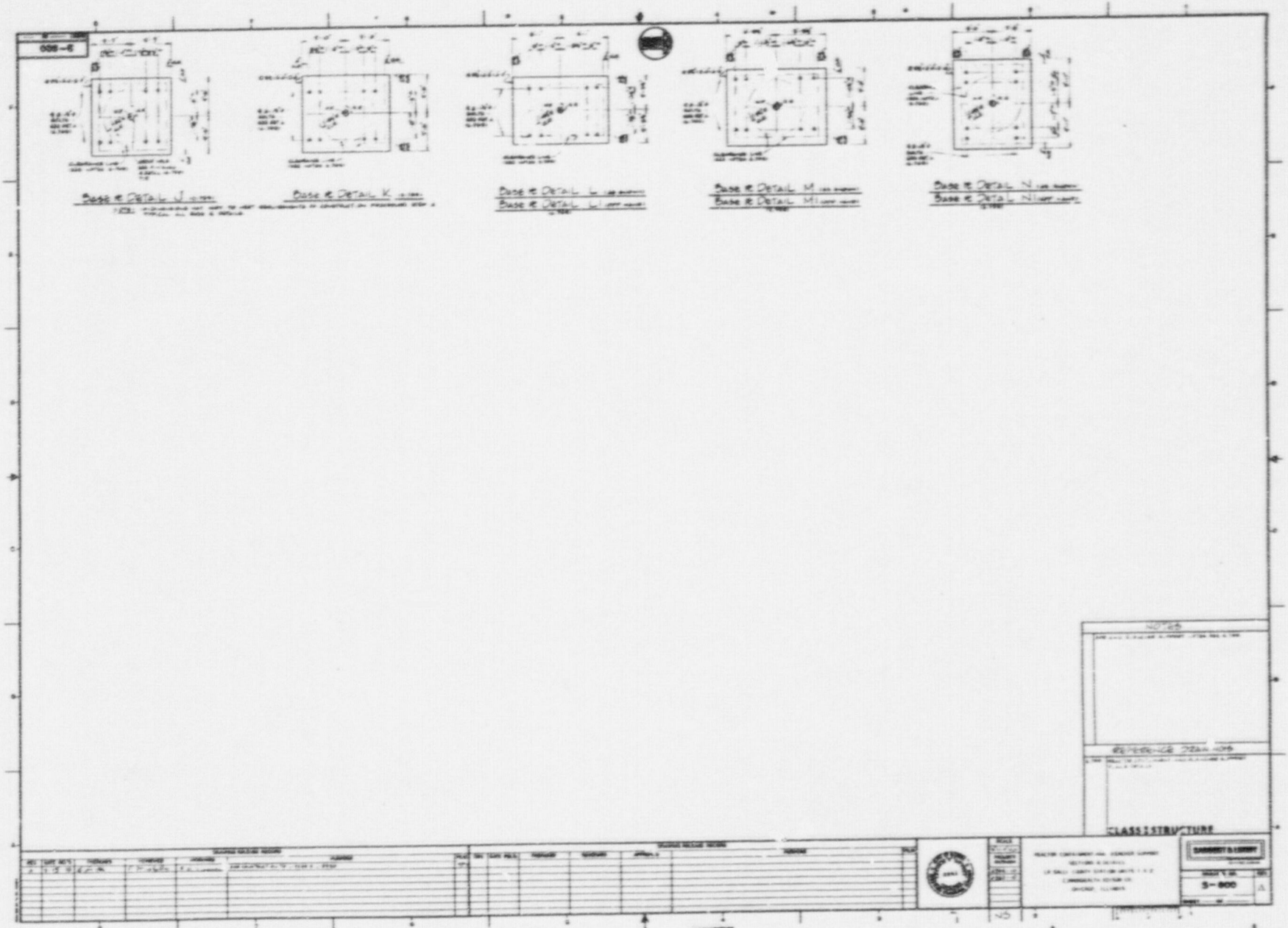

SUPPRESSION CHAMBER PRIMARY CONTAINMENT DEVELOPED ELEVATION
DETAIL D
TYPICAL DOWNCOMER DETAIL
SECTION G
SECTION E
SECTION K
NOTES
H
(RECORD CHANGE)
CLASS I STRUCTURE
S-784
H


SUPPRESSION CHAMBER PRIMARY CONTAINMENT DEVELOPED ELEVATION
DETAIL A
DETAIL B
SECTION 4
DETAIL C
TYPICAL FINISHED PLATE DETAIL
DETAIL 7
CLASS 1 STRUCTURE
S-785
NO


REACTOR SUPPORT DEVELOPED ELEVATION
DETAIL B
DETAIL C
TYPICAL FINISHED W. DETAIL
WITH 8 BOLTS
SECTION C1-C1
SECTION C2-C2
DETAIL A
DETAIL A1
DETAIL D
SECTION C3-C3
DETAIL E
TYPICAL FINISHED W. DETAIL
NOTES
F (RECORD CHANGE)
REFERENCE DRAWINGS
CLASS I STRUCTURE
3-780
NO

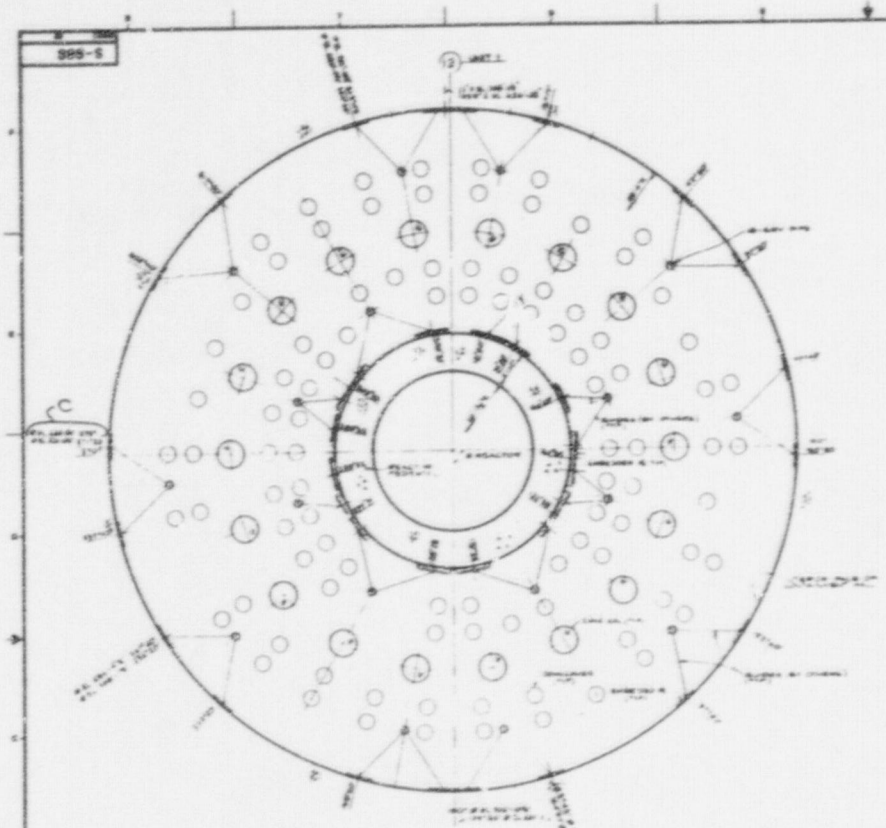

S-797
PLAN
DETAIL A
DETAIL A1
DETAIL B
SECT ON 1-1
SECT ON 2-2
SECT ON 3-3
SECT ON 4-4
SECT ON 5-5
SECT ON 6-6
SECT ON 8-8
CLASS I STRUCTURE
SARGENT & LUNDY
S-797
NO


KW2 REACTOR BASE PLATE INSTALLATION PLAN
BASE & DETAIL G
BASE & DETAIL D
BASE & DETAIL F
BASE & DETAIL H
DETAIL A
DETAIL B
PLAN
SECTION
TYPICAL FINISHED PLATE DETAIL
"RECORD CHANGE"
NOTES
REFERENCE DRAWINGS
CLASS I STRUCTURE
S-799


BASE & DETAIL J
BASE & DETAIL K
BASE & DETAIL L
BASE & DETAIL M
BASE & DETAIL N
NOTES
REFERENCE DRAWINGS
CLASS I STRUCTURE
S-800

REY

30X



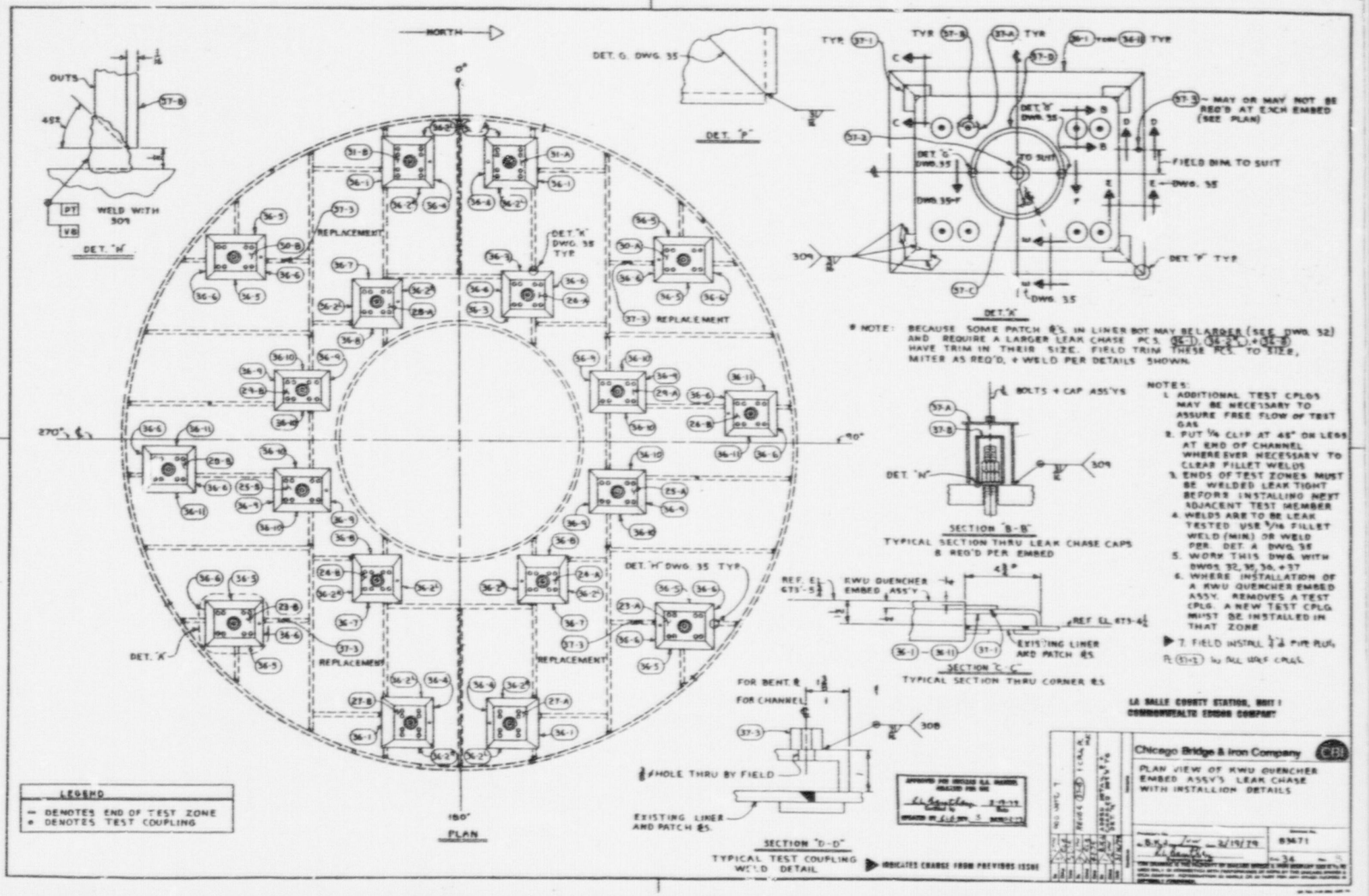
SRV PIPE SUPPORT LOCATION PLAN

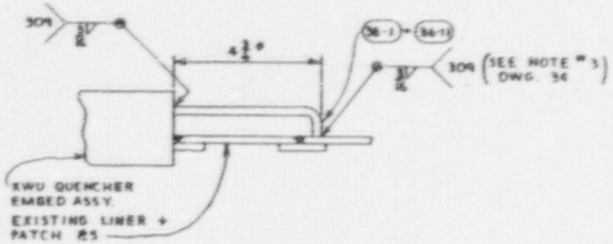
NOTES

CLASS I STRUCTURE

S-888

C

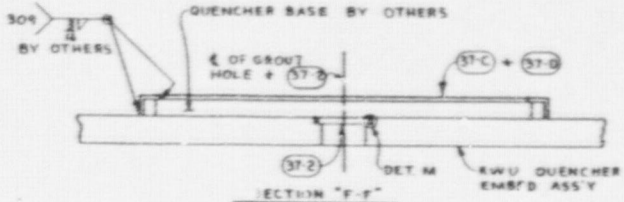

NORTH
0°
90°
180°
270°
PLAN
DET. "W"
WELD WITH 309
PT
VB
DET. G. DWG. 35
DET. "P"
DET. "K"
DET. "K" DWG. 35 TYP
DET. "H" DWG. 35 TYP
REPLACEMENT
DET. "K"
TYP
TO SUIT
FIELD DIM. TO SUIT
DWG. 35
DET. "F" TYP
DET. "N"
SECTION "B-B"
TYPICAL SECTION THRU LEAK CHASE CAPS & REQ'D PER EMBED
BOLTS + CAP ASS'YS
RWU QUENCHER EMBED ASS'Y
EXISTING LINER AND PATCH RS
SECTION "C-C"
TYPICAL SECTION THRU CORNER RS
FOR BENT R
FOR CHANNEL
HOLE THRU BY FIELD
EXISTING LINER AND PATCH RS.
SECTION "D-D"
TYPICAL TEST COUPLING WELD DETAIL
INDICATES CHANGE FROM PREVIOUS ISSUE
LEGEND
— DENOTES END OF TEST ZONE
• DENOTES TEST COUPLING
* NOTE: BECAUSE SOME PATCH RS. IN LINER BOT. MAY BE LARGER (SEE DWG. 32) AND REQUIRE A LARGER LEAK CHASE PCS. (35-1), (35-2), + (35-3) HAVE TRIM IN THEIR SIZE. FIELD TRIM THESE PCS. TO SIZE, MITER AS REQ'D, + WELD PER DETAILS SHOWN.
NOTES:
1. ADDITIONAL TEST CPLGS MAY BE NECESSARY TO ASSURE FREE FLOW OF TEST GAS
2. PUT 1/16 CLIP AT 45° ON LEGS AT END OF CHANNEL WHEREVER NECESSARY TO CLEAR FILLET WELDS
3. ENDS OF TEST ZONES MUST BE WELDED LEAK TIGHT BEFORE INSTALLING NEXT ADJACENT TEST MEMBER
4. WELDS ARE TO BE LEAK TESTED USE 5/16 FILLET WELD (MIN.) OR WELD PER DET. A DWG. 35
5. WORK THIS DWG. WITH DWGS. 32, 35, 36, + 37
6. WHERE INSTALLATION OF A RWU QUENCHER EMBED ASSY. REMOVES A TEST CPLG. A NEW TEST CPLG MUST BE INSTALLED IN THAT ZONE
7. FIELD INSTALL 1/2" PIPE PLUG
PL (35-2) IN ALL WELD CPLGS.
LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY
Chicago Bridge & Iron Company
PLAN VIEW OF RWU QUENCHER EMBED ASSY'S LEAK CHASE WITH INSTALLION DETAILS
834-71
34



MAY BE UP TO 6 1/2 DUE TO FIELD TRIM

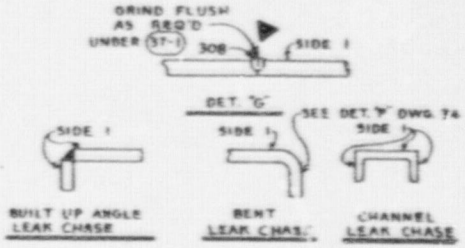
SECTION "E-E"

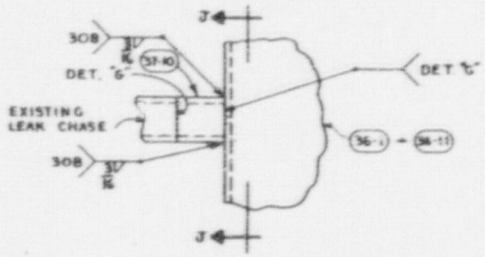
TYPICAL SECTION THRU BENT LEAK CHASE @



SECTION "F-F"

TYPICAL SECTION THRU AT ℄ OF GROUT HOLE

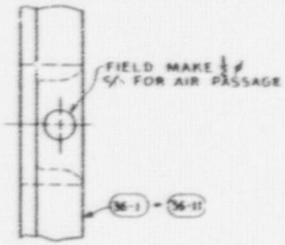




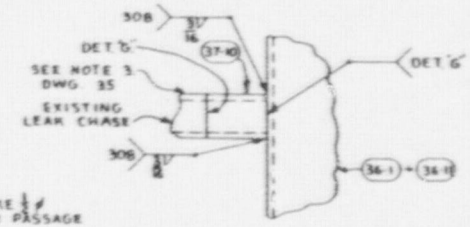
DET. "H"

TYPICAL AIR PASSAGE DETAIL

SEE NOTE 2



SECTION "J-J"

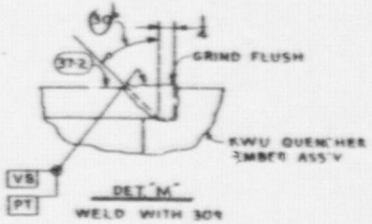


DET. "K"

TYPICAL WELD DET. FOR END OF TEST ZONE

NO AIR PASSAGE

SEE NOTE 2



DET. "M"

WELD WITH 309

NOTES:

1. WORK THIS DWG. WITH DWGS. 34, 36, + 37
2. IN ORDER TO INSTALL LEAK CHASE SYSTEM AROUND KWU EMBEDS, IT MAY BE NECESSARY TO CUT BACK EXISTING LEAK CHASE. PC. 37-10 IS FURNISHED TO REPLACE LEAK CHASE THAT IS REMOVED. FIELD CUT PC. 37-10 TO LENGTH REQ'D AND INSTALL PER. DET. "H" OR "K".

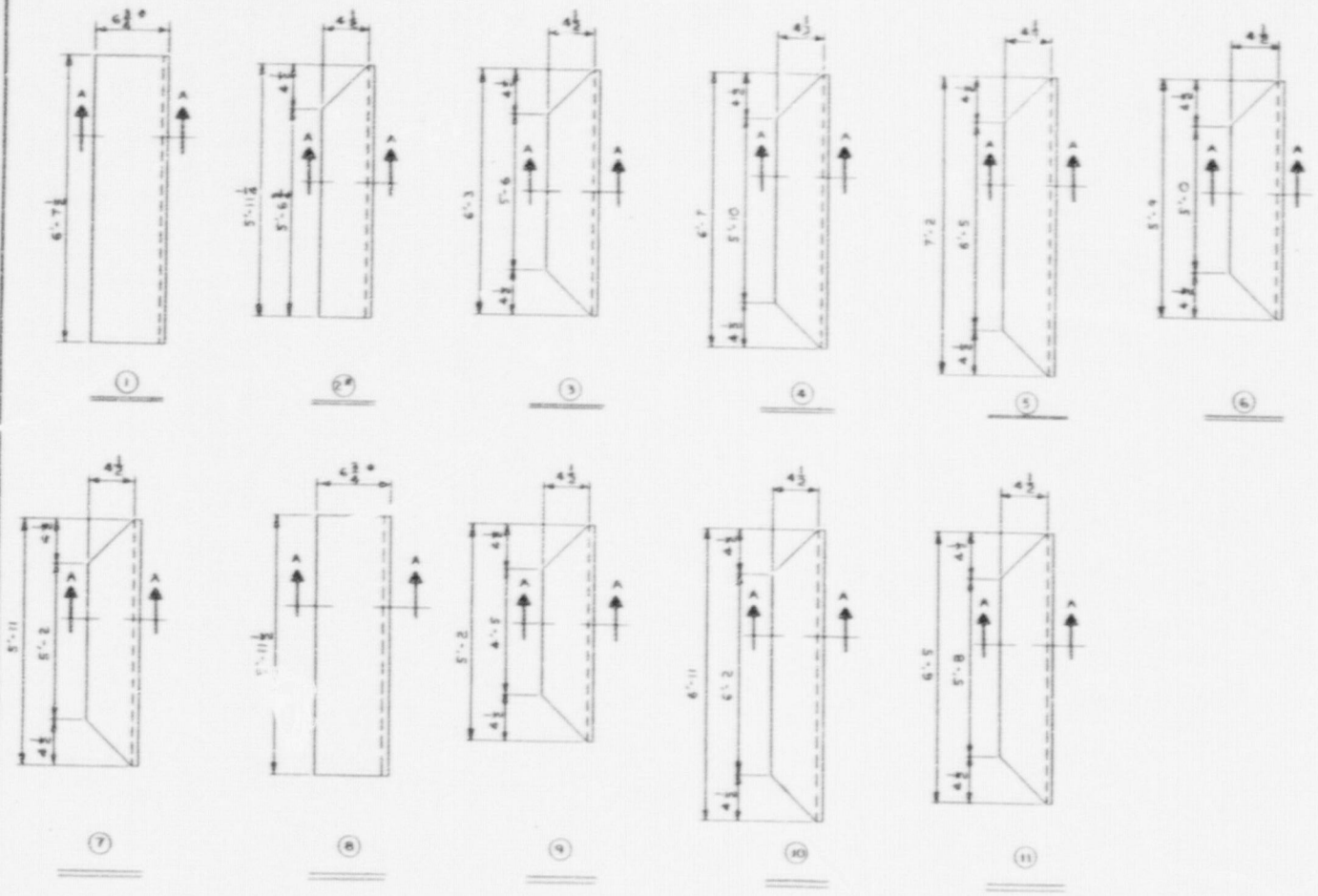
APPROVED FOR ISSUED U.S. ASME CODE INCLUDED FOR USE

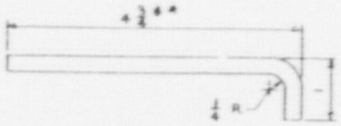
Chicago Bridge & Iron Company

LEAK CHASE INSTALLATION DETAILS

LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

▶ INDICATES CHANGE FROM PREVIOUS ISSUE





SECTION "A-A"

TYP SECTION THRU BENT LEAK CHASE #5

* EXTRA MATERIAL ADDED FOR FIELD TRIM
** MAY BE 4 3/4 DUE TO FIELD TRIM ALLOWANCE

4	36-1	✓	℄ 7 3/8 × 1/4 × SK C/W (℄ 111 × 1/2 × 30'-0) ON C-9	6	7 1/2		C
14	36-2	✓	℄ 5 3/8 × 1/4 × SK C/W (36-1) ON C-9	5	11 1/2		C
2	36-3	✓	℄ 5 3/8 × 1/4 × SK C/W (℄ 111 × 1/2 × 30'-0) ON C-9	6	3		C
4	36-4	✓	℄ 5 3/8 × 1/4 × SK C/W (36-3) ON C-9	6	7		C
8	36-5	✓	℄ 5 3/8 × 1/4 × SK C/W (36-3) ON C-9	7	2		C
14	36-6	✓	℄ 5 3/8 × 1/4 × SK C/W (36-3) ON C-9	6	9		C
3	36-7	✓	℄ 5 3/8 × 1/4 × SK C/W (36-1) ON C-9	5	11		C
3	36-8	✓	℄ 7 3/8 × 1/4 × SK C/W (36-1) ON C-9	5	11 1/2		C
8	36-9	✓	℄ 5 3/8 × 1/4 × SK C/W (36-3) ON C-9	5	2		C
8	36-10	✓	℄ 5 3/8 × 1/4 × SK C/W (36-3) ON C-9	6	11		C
4	36-11	✓	℄ 5 3/8 × 1/4 × SK C/W (36-3) ON C-9	6	5		C

NOTES:
1. FOR LOCATIONS SEE DWG. 34.

APPROVED FOR NRC/ASME U.S. CODE
RELEASE FOR USE
R. L. Bentley 2-13-81
CHIEF ENGINEER DATE
APPROVED BY: ____ REV. ____ DATE ____

LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

Chicago Bridge & Iron Company

DETAILS OF BENT LEAK CHASE #5
FOR KWU EMBEDS

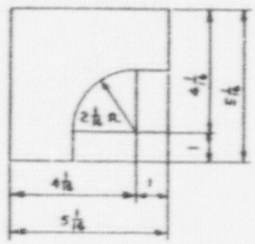
CHANGED ALL REV

DRAWN BY: [illegible] 2/20/79
R. L. Bentley

83671

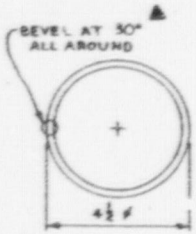
36

▶ INDICATES CHANGE FROM PREVIOUS ISSUE



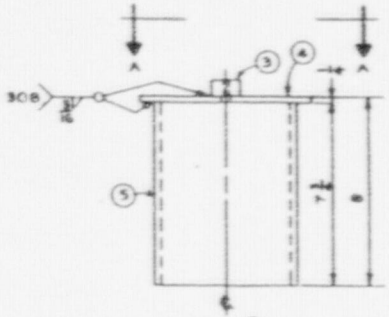
1

4 REQ'D PER EMBED



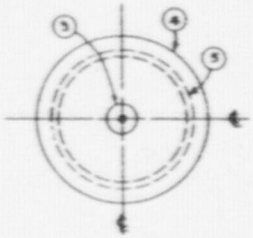
2

1 REQ'D PER EMBED

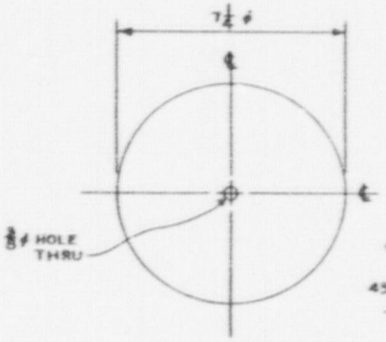


ASS'Y A

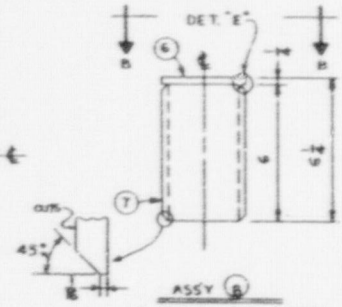
8 REQ'D PER EMBED



VIEW "A-A"

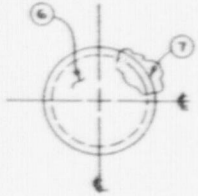


4

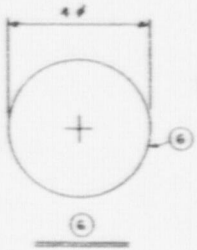


ASS'Y B

8 REQ'D PER EMBED



VIEW "B-B"



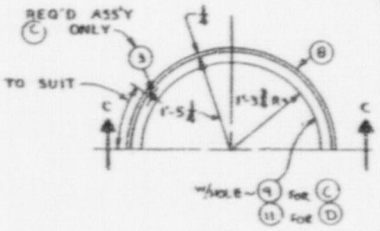
6

▶ INSTALLED BY OTHERS

NOTES:
1. WORK THIS DWG WITH DWGS. 34, 35, & 36
2. FOR LOCATIONS SEE DWGS. 34 & 35

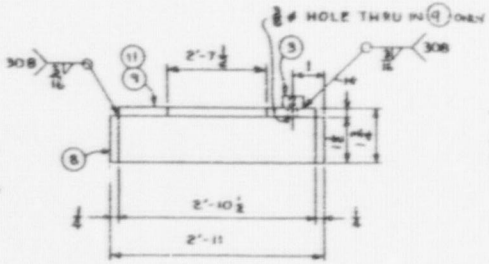
72	37-1	✓	PL 5 1/2 × 1/2 × 5K	O	8 1/2	SA 240 TP 304L	C
			C/W (33-3) ON C-8				
18	37-2	✓	PL 4 1/2 ø × 1/2			SA 240 TP 304L	A
144	37-A		LEAK CHASE ASS'Y				
	37-3	✓ 144	1/2 ø 3000# SCREWED HALF	CPLG		A182 F304	C
	37-4	✓ 144	PL 7 1/4 × 1/2 W/HOLE			SA 240 TP 304L	C
			C/W (33-3) ON C-8				
	37-5	✓ 144	6 ø SCH. 40 PIPE	O	7 1/2	SA 312 TP 304L	C
144	37-B		STUD COVER ASS'Y				
	37-6	✓ 144	PL 4 ø × 1/2			SA 240 TP 304L	A
			C/W (33-3) ON C-8				
	37-7	✓ 144	3 1/2 ø SCH. 40 PIPE	O	6	SA 312 TP 304	A
18	37-C		LEAK CHASE ASS'Y				
	37-8	✓ 18	PL 1 1/2 × 1/2 × 5K ROLL	4	6 1/2	SA 240 TP 304L	C
			C/W (33-1) ON C-8				
	37-9	✓ 18	PL 5K × 1/2 (ROLL 34 7/8 O.D. × 5 1/2 I.D.)	1/2		SA 240 TP 304L	C
			C/W (36-1) ON C-9				
	37-3	✓ 18	1/2 ø 3000# SCREWED HALF	CPLG		A182 F304	C
18	37-D		LEAK CHASE ASS'Y				
	37-8	✓ 18	PL 1 1/2 × 1/2 × 5K ROLL	4	6 1/2	SA 240 TP 304L	C
			C/W (33-1) ON C-8				
	37-11	✓ 18	PL 5K × 1/2 (ROLL 34 7/8 O.D. × 5 1/2 I.D.)	1/2		SA 240 TP 304L	C
			C/W (36-1) ON C-9				
23	37-3	✓	1/2 ø 3000# SCREWED HALF CPLG			A182 F304	C
▶ 105	37-12	✓	1/4 ø 3000# SCRWD. SOLID PIPE PLUG			A182 F304	C
▶ 16	37-10	✓	[2 × 1 × 1/2	4	6	SA 240 TP 304L	C
			1/2 W/P PL (3 1/4 × 1/2 × 4'-6)				
			C/W (36-3) ON C-9				

MS 1000 POA: SA 312 TYPE 304
TO QAS 3000 AOS
MS 2404 COB: SA 240 TYPE 304
TO QAS 3000 AOS

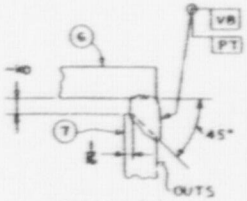


PLAN VIEW ASS'Y C & D

1 REQ'D PER EMBED

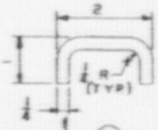


SECTION "C-C"



DETAIL "E"

WELD WITH 30B



10

APPROVED FOR WELDING U.S. MARINE
RECEIVED FOR USE
R. L. Kaufman 2-12-73
Date
APPROVED BY U.S. INSP. 3 DATE 2-12-73

LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

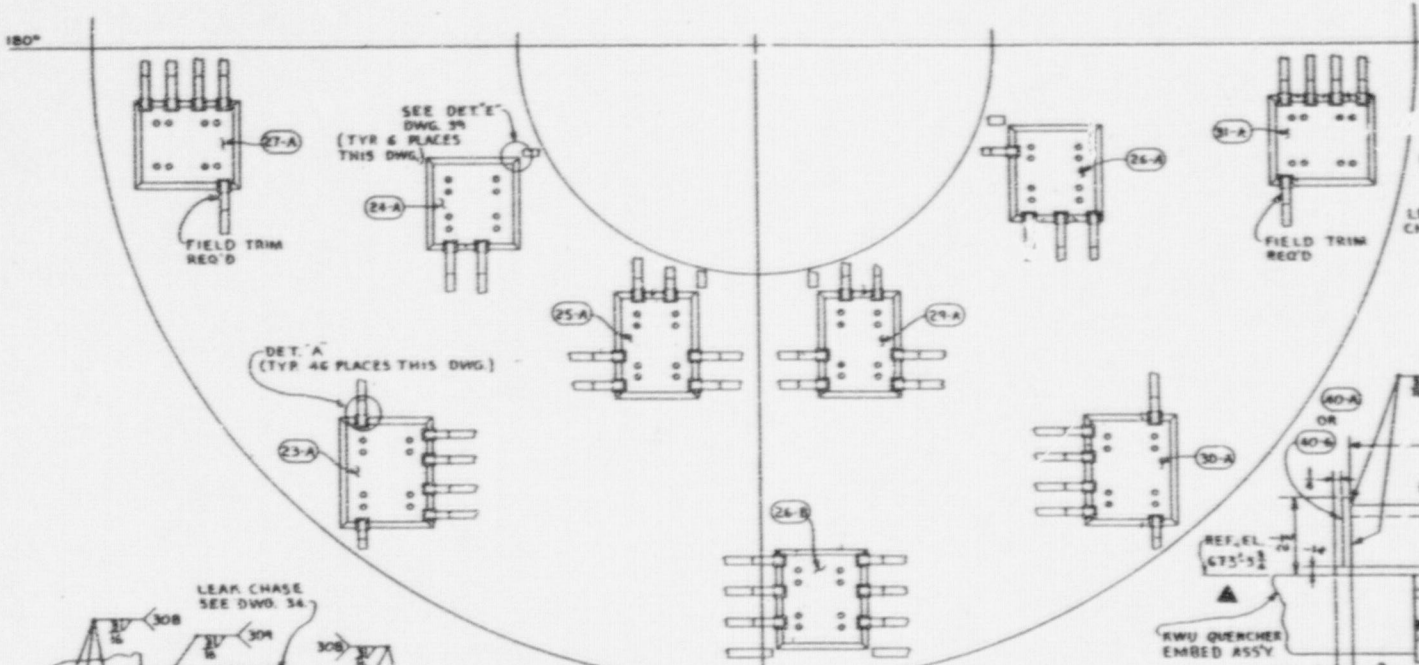
Chicago Bridge & Iron Company

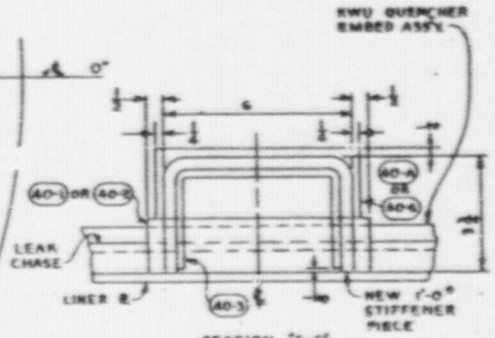
LEAK CHASE DETAILS

B.K.J. 2/22/73
R. L. Kaufman
Approved by

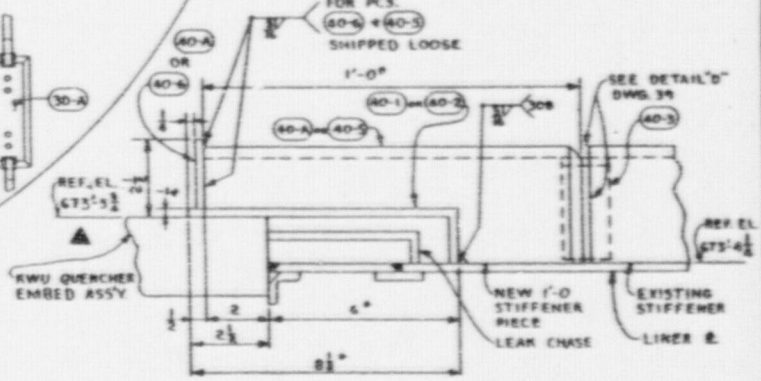
83671
37

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

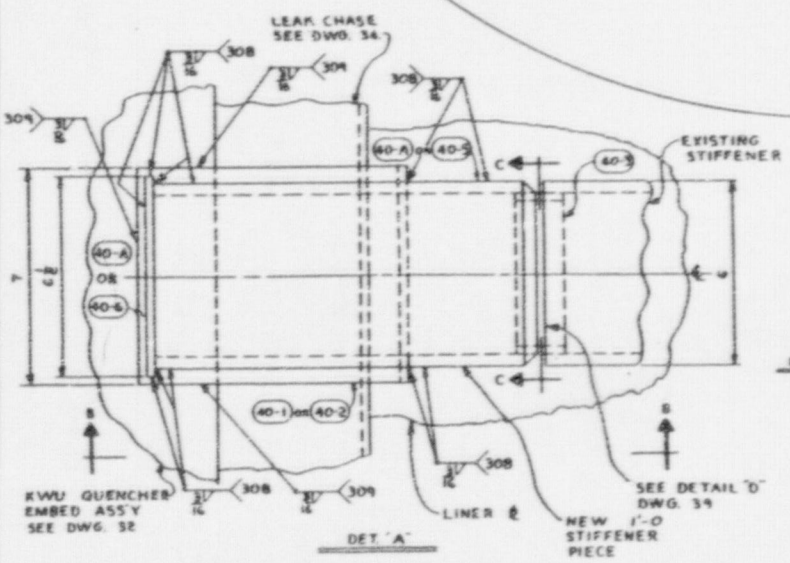




SECTION "C-C"



VIEW "B-B"



DET. "A"

NOTES:

1. WORK THIS DWG. WITH DWGS. 23 THRU 40
2. AT DET. "A" TYPE INTERSECTIONS WHERE FIELD TRIM IS REQ'D (THESE LOCATIONS ARE SO NOTED IN THE HALF PLAN) USE PC'S. (40-5) AND (40-2), WITH PC (40-6) BEING FIELD WELDED TO PC (40-5). AT ALL OTHER DET. "A" TYPE INTERSECTIONS USE ASS'Y (40-A) AND PC (40-1)
3. PT ALL WELDS OF (40-A), (40-5), (40-3), + (40-2) TO LINER BOT. ℄ + KWU EMBEDS.

* THESE DIMS. MAY VARY AT LOCATIONS WHERE FIELD TRIM IS REQ'D

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

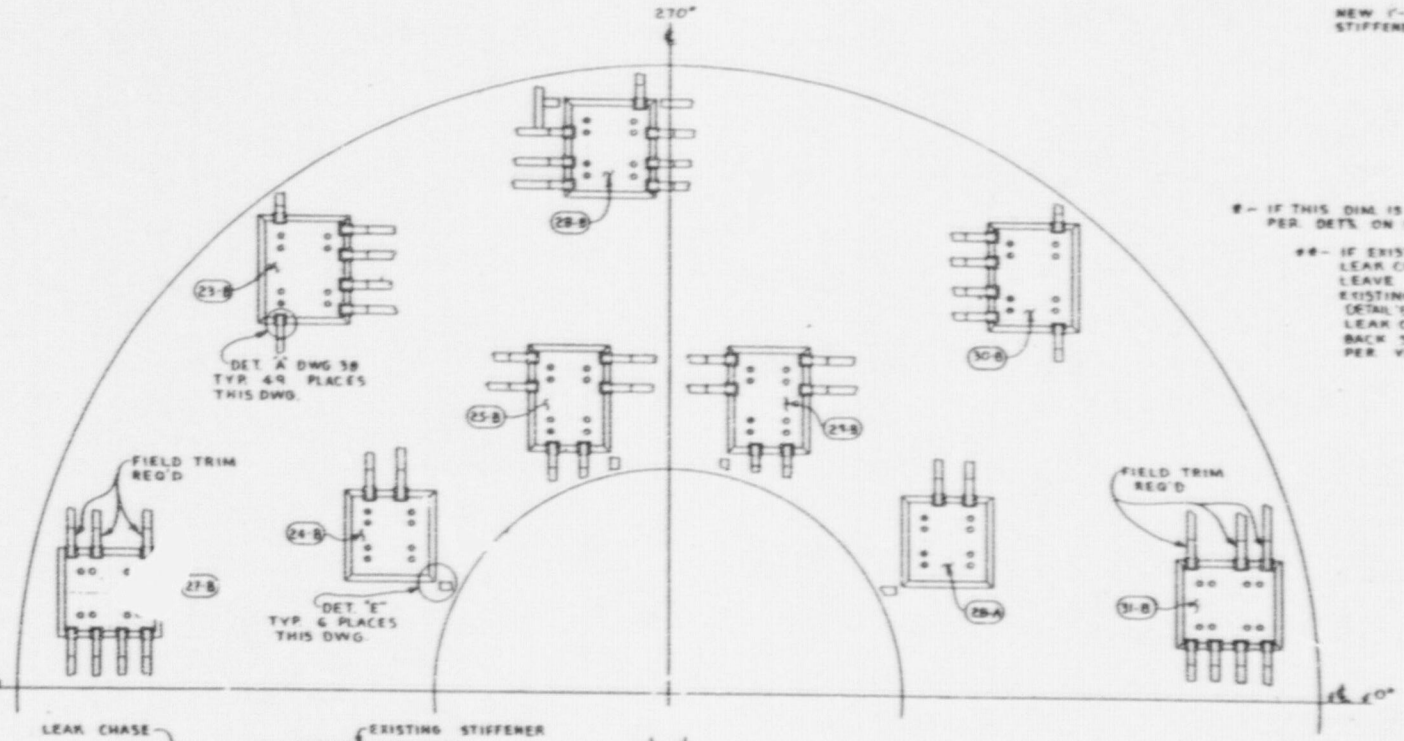
Chicago Bridge & Iron Company

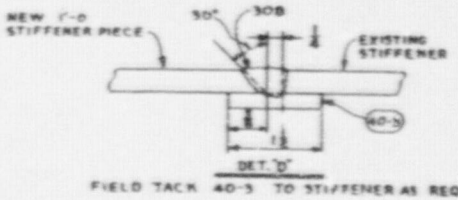
PLAN VIEW OF STIFFENER AND KWU QUENCHER EMBED ASS'Y INTERSECTIONS, WITH DETAILS

B.K.J. 2/26/79

85671

Dwg. 38 Rev. 2



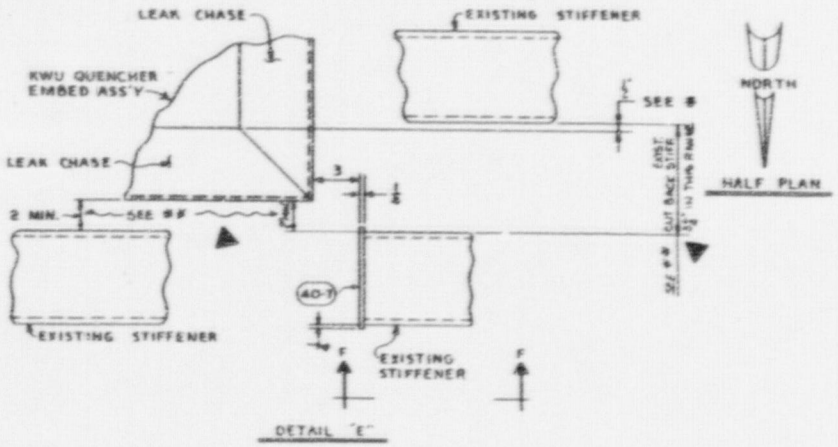


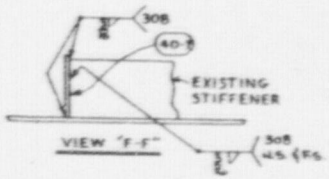
FIELD TACK 40-3 TO STIFFENER AS REQ'D

#- IF THIS DIM. IS 1/8 OR GREATER INSTALL NEW STIFFENERS PER DETS. ON DWG. 38.

##- IF EXISTING STIFFENER LEG CLOSEST TO LEAK CHASE IS ≥ 2 FROM LEAK CHASE LEAVE EXISTING STIFFENER AS IS. IF EXISTING STIFF. FALLS IN RANGE PER DETAIL 'E' SUCH THAT INSTALLATION OF LEAK CHASE WOULD BE DIFFICULT, CUT-BACK STIFFENER 3 1/2" + ADD CAP PLATE 40-7 PER VIEW "F-F"

NOTES:
1. WORK THIS DWG. WITH DWGS. 23 THRU 40
2. SEE NOTES 2 + 3 DWG. 38





▶ INDICATES CHANGE FROM PREVIOUS ISSUE

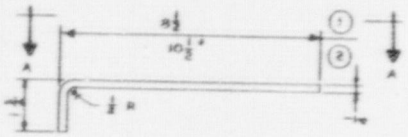
LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

Chicago Bridge & Iron Company CBI

PLAN VIEW OF STIFFENER AND KWU QUENCHER EMBED ASS'Y INTERSECTIONS, WITH DETAILS

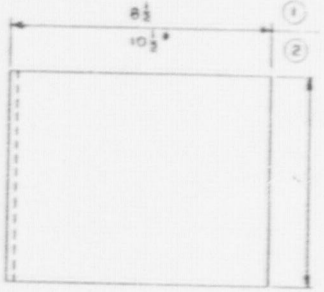
2/27/79

83671

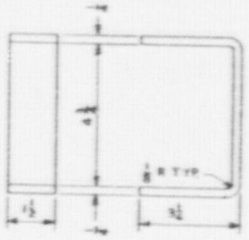


1 + 2

* EXTRA MATERIAL ADDED FOR FIELD TRIM

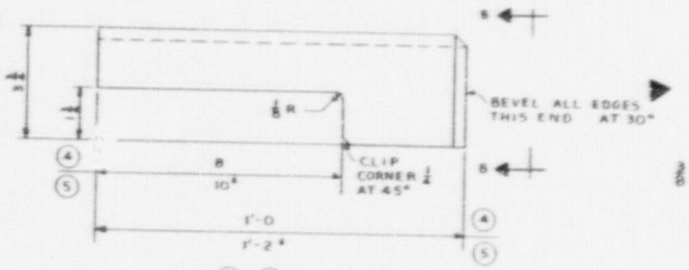


VIEW "A-A"

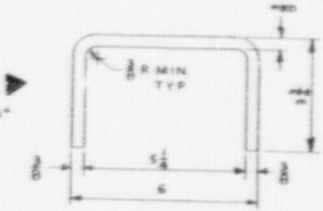


3

(3 EXT.)	90	40-1	✓	R 7×½×5K	0	4	[illegible]	C
				F/W (33-1) ON C-B				
(2 EXT.)	10	40-2	✓	R 7×½×5K	0	11	[illegible]	C
				F/W (33-1) ON C-B				
(5 EXT.)	100	40-3	✓	R 12×½×5K	0	11	[illegible]	C
				F/W (33-1) + (33-3) ON C-B				
(3 EXT.)	90	40-A		STIFFENER ASS'Y				
		40-4	90	C6×3½×½×5K W/ ½ R	1	0	[illegible]	C
				(R 12×1-0) W/ 2 R3 7½×11-6 F/W		ON	C-10	
		40-6 ✓	90	R 2½×½	0	6½	[illegible]	C
				F/W (33-1) ON C-B				
(2 EXT.)	10	40-5 ✓		C6×3½×½×5K W/ ½ R	1	2	[illegible]	C
				(R 12×1-2) W/ F/W (40-4) ON	C-10			
(2 EXT.)	10	40-6	✓	R 2½×½	0	6½	[illegible]	C
				F/W (33-1) ON C-B				
(5 EXT.)	17	40-7	✓	R 4×½	0	6½	[illegible]	C
				F/W (33-1) ON C-B				

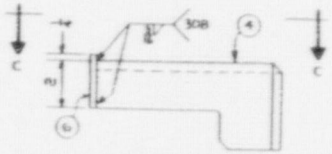


4 + 5

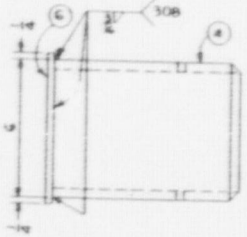


VIEW "B-B"

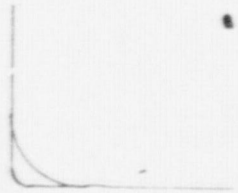
NOTES:
1. WORK THIS DWG. WITH DWGS. 23 THRU 39



ASS'Y (A)



VIEW "C-C"



APPROVED FOR ISSUE U.S. NUCLEAR REGULATORY COMMISSION
[illegible] 2-2-79
APPROVED BY: DATE: DATE:

LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

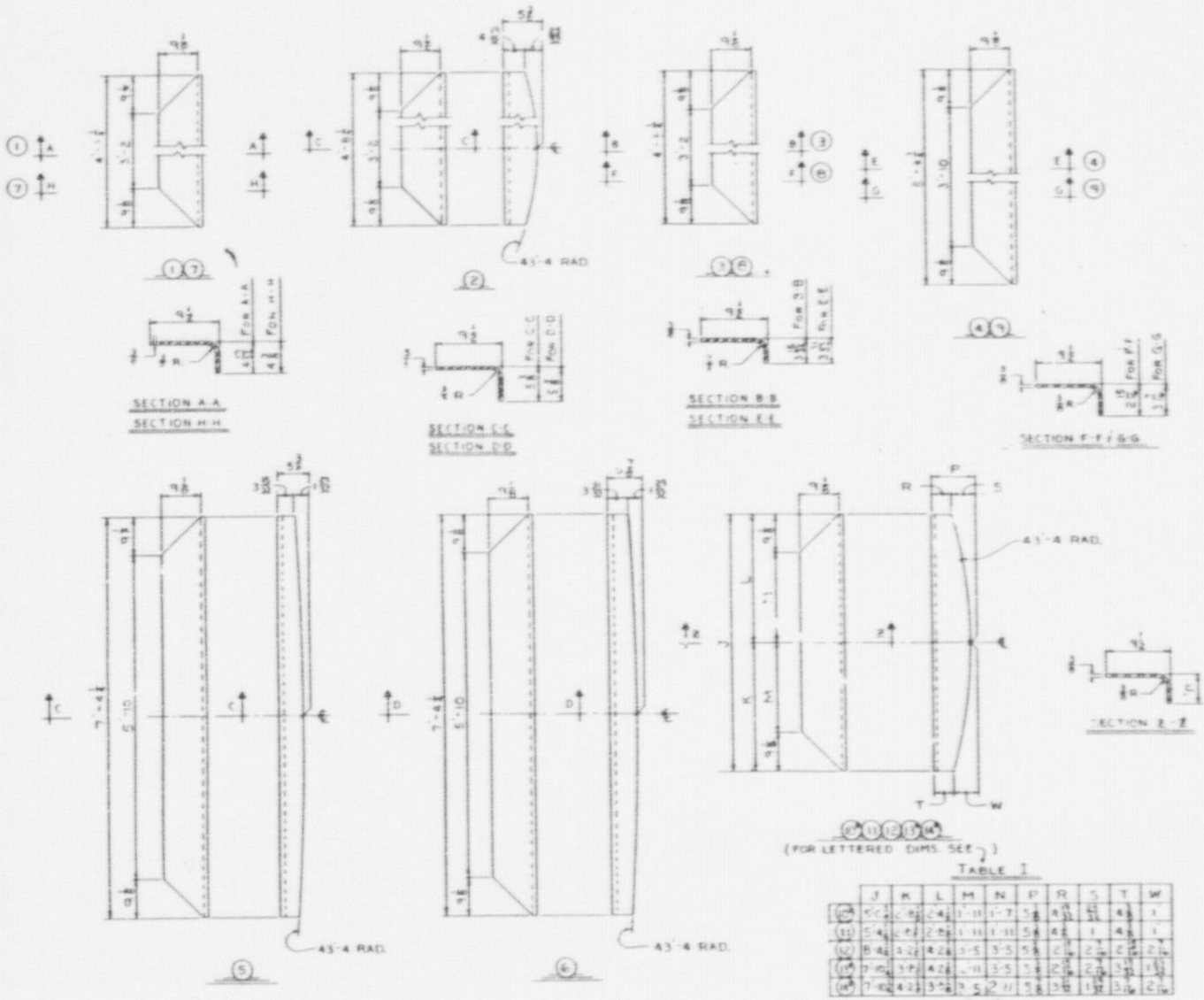
Chicago Bridge & Iron Company

PIECE DETAILS FOR RHU QUENCHER EMBED ASSY INTERSECTIONS WITH STIFFENERS

BR.J. 2/27/79
[illegible]

836-71
40

INDICATES CHANGE FROM PREVIOUS ISSUE



MARK NO.	DIAGRAM	SHEET		LENGTH FT.	IN.	WEIGHT	M	T
*1	11-1	✓	R-13 5/32 × 3/8 (SK)	4	8 1/2	(7)	C	
			(SP L.C. MAT'L)					
*A	11-2	✓	R-14 1/8 × 3/8 (SK)	4	8 1/2	(7)	C	
			(SP L.C. MAT'L)					
5	11-3	✓	R-12 5/32 × 3/8 (SK)	4	8 1/2	(7)	C	
			(SP L.O. MAT'L)					
*B	11-4	✓	R-12 5/32 × 3/8 (SK)	5	8 1/2	(7)	C	
			(SP L.O. MAT'L)					
6	11-5	✓	R-14 1/8 × 3/8 (SK)	7	4 1/2	(7)	C	
			(SP L.O. MAT'L)					
*3	11-6	✓	R-14 1/8 × 3/8 (SK)	7	4 1/2	(7)	C	
			(SP L.O. MAT'L)					
12	11-7	✓	R-13 1/8 × 3/8 (SK)	4	8 1/2	(7)	C	
			(SP L.C. MAT'L)					
3	11-8	✓	R-11 5/8 × 3/8 (SK)	4	8 1/2	(7)	C	
			(SP L.O. MAT'L)					
2	11-9	✓	R-12 5/8 × 3/8 (SK)	5	4 1/2	(7)	C	
			(SP L.C. MAT'L)					
*C	11-10	✓	R-14 1/8 × 3/8 (SK)	5	0 1/2	(7)	C	
			(SP L.O. MAT'L)					
8	11-11	✓	R-14 1/8 × 3/8 (SK)	5	4 1/2	(7)	C	
			(SP L.O. MAT'L)					
2	11-12	✓	R-14 1/8 × 3/8 (SK)	8	4 1/2	(7)	C	
			(SP L.O. MAT'L)					
2	11-13	✓	R-14 1/4 × 3/8 (SK)	7	10 1/2	(7)	C	
			(SP L.O. MAT'L)					
4	11-14	✓	R-14 1/8 × 3/8 (SK)	7	10 1/2	(7)	C	
			(SP L.O. MAT'L)					

NOTES:

1. FOR MAT'L SPEC. SEE DWG. 1.
2. WORK THIS DWG. WITH DWG. 23, 24, & 29.

TABLE I

	J	K	L	M	N	P	R	S	T	W
(10)	7'-0	6'-8	6'-4	1'-11	1'-7	5	4	1	4	1
(11)	5'-4	6'-8	2'-8	1'-11	1'-11	5	4	1	4	1
(12)	8'-4	3'-4	4'-4	3'-5	3'-5	5	2	2	2	2
(13)	7'-10	3'-8	4'-4	3'-11	3'-5	5	2	2	3	1
(14)	7'-10	4'-2	3'-8	3'-5	2'-11	5	3	1	3	2

INDICATES CHANGE FROM PREVIOUS ISSUE

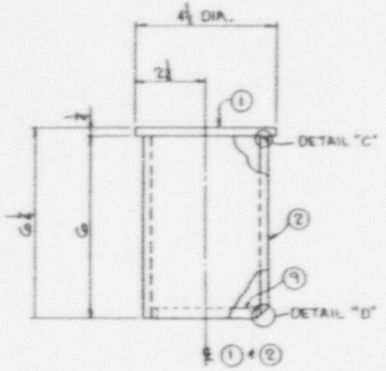
LaSalle County Station, Unit 1
Commonwealth Edison Company

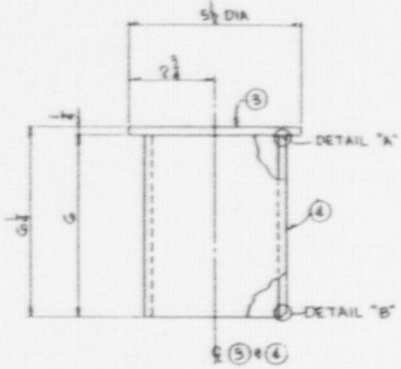
Chicago Bridge & Iron Company CBI

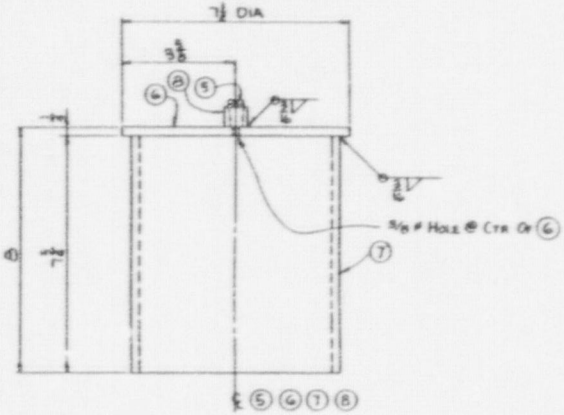
LEAK CHASE DETAILS

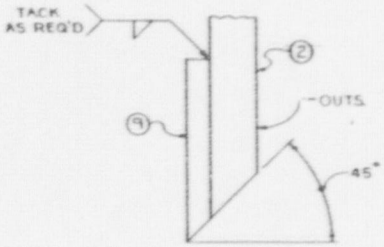
MD. JMM 3-6-80
L. L. TUDSON
Engineering Coordinator

B3674

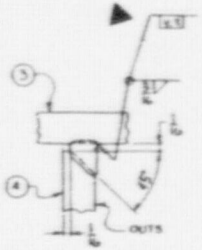




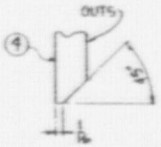




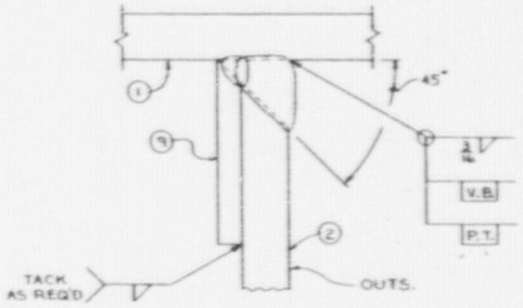
DETAIL "D"



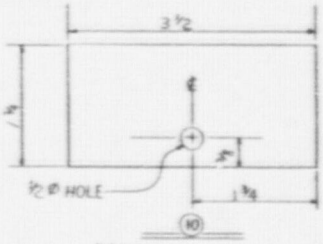
DETAIL "A"



DETAIL "B"



DETAIL "C"



278	14-A		BOLT COVER ASSY.					1278
✓	14-1	278	PL 4¾ DIA - ⅛ (4¼-1¼ ⅛ LD. HOLE)			⑨	A	312
✓	14-2	278	3½ø SMLS. SCH. 40 PIPE 5/16	0	6½	④	A	1266
✓	14-9	556	3½ O.D. × .0120 WALL DOM. RD. MECH. TUBING	0	1	⑩	C	200
192	14-B		BOLT COVER ASSY					1159
✓	14-3	192	PL 8½ DIA - ⅛ (4¼-1¼ ⅛ LD. HOLE)			⑦	C	923
✓	14-4	192	8ø SMLS. SCH. 40 PIPE 5/16	0	6	⑨	A	1086
278	14-C		BOLT COVER LEAK CHASE					6049
✓	14-5	278	¼ø 3000# SCRD. SQ. HD. PIPE PLUG			⑥	C	8
✓	14-6	278	PL 7⅞ DIA - ⅛ HOLE			⑦	C	812
✓	14-7	278	6ø SMLS. SCH. 40 PIPE 5/16	0	7⅞	④	C	3407
✓	14-8	278	¼ø 3000# SCRD. HALF COUPLING			⑥	C	18
✓ 42†	14-5		¼ø 3000# SCRD. SQ. HD. PIPE PLUG			⑥	C	2
✓ 42†	14-8		¼ø 3000# SCRD. HALF COUPLG			⑥	C	4
✓ 92	14-10		PL ⅜ SQ. (3¼ HOLE) (1¼ HOLE) (3½ HOLE) (3½ HOLE)	0	3½	⑦	C	36
1	14-11		ROW [2¼ ⅛ LD. FROM CONT. 5/16 & 3½ ø EXTRA]	25	0	DRAW. PLATE	C	68

† - SHIPPING PCS. FOR ⑤ & ⑧ INCLUDE 11 EXTRA.

NOTES:
1. FOR GENERAL NOTES AND MATERIAL SPECS SEE DWG. 1.
2. FOR FIELD LOCATIONS SEE DWGS. 22, 23 & 24.
3. THE LOCATION OF 51 PCS. ⑤ & ⑧ ARE SHOWN ON DWG. 29.

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

APPROVED PER NUCLEAR L.A. MANUAL REVISED 1971 ALT
L. L. Hudson 3-19-80
DATE SIGNATURE

LASALLE COUNTY STATION UNIT 1
COMMONWEALTH EDISON COMPANY

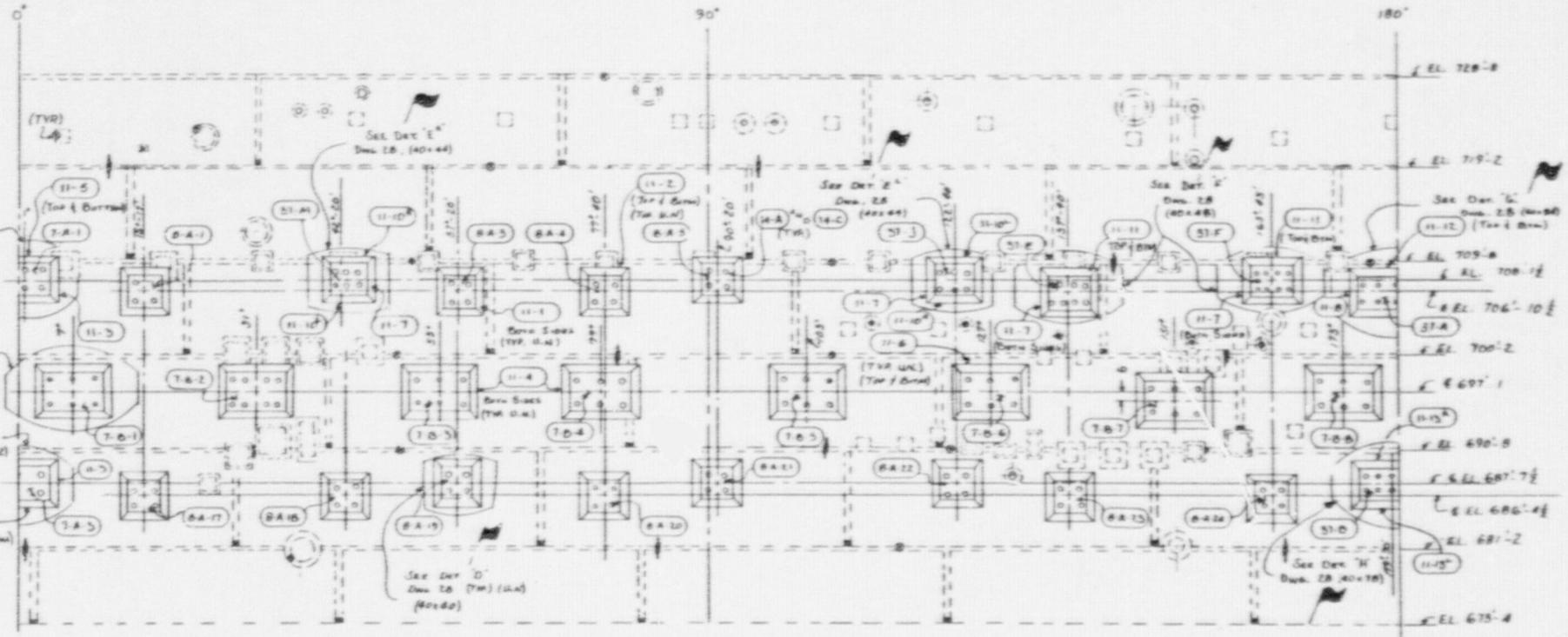
Chicago Bridge & Iron Company CBI

BOLT COVER ASSEMBLIES AND LEAK CHASE

RLS — JWM — 2-14-80
L. L. HUDSON
Drawing Coordinator

Drawing No. 83674
Sheet 14 — 5

THIS DRAWING IS THE PROPERTY OF BIRGER JENSEN & PARTNERS AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK OF THE APPROVED OFFERER OR PRIOR CONTRACT REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY PROHIBITED.



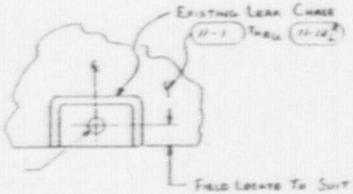
▶ SHELL STRETCH-OUT - INSIDE VIEW

NOTES:

1. WORK THIS DWG. WITH DWG. 28, 29, & 30.
2. FOR LEAK CHASE INSTALLATION, SEE DET. "A" DWG. 29.
3. SOME EXISTING EMBEDS AND PLATES, WHICH DO NOT INTERFERE @ THE WORK, HAVE BEEN OMITTED FOR CLARITY.
4. ▶ WHERE NEW LEAK CHASE INTERFERES @ EXISTING LEAK CHASE FIELD OPEN (PER DET. A.-A.) OR LEAK CONNECTIONS CLOSED TO FORM NEW LEAK CHASE ZONES. SUCH THAT THE TOTAL LENGTH OF THE ZONES DO NOT EXCEED 100 FEET FIELD ADD COUPLING (PER SEC. "E-E", DWG. 29) AS REQ'D.

LEGEND

SYMBOL	DETAIL
- - - -	EXISTING LEAK CHASE
▶	END OF TEST ZONE
	END OF TEST ZONE BLOCK 'B'
	TEST COUPLING



▶ DETAIL A.-A.

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

APPROVED FOR INCLUSION IN U.S. MANUAL
RELEASED FOR USE
Contract No.
UPDATED W/ Vol/Rev. 3 Date 7-2-80

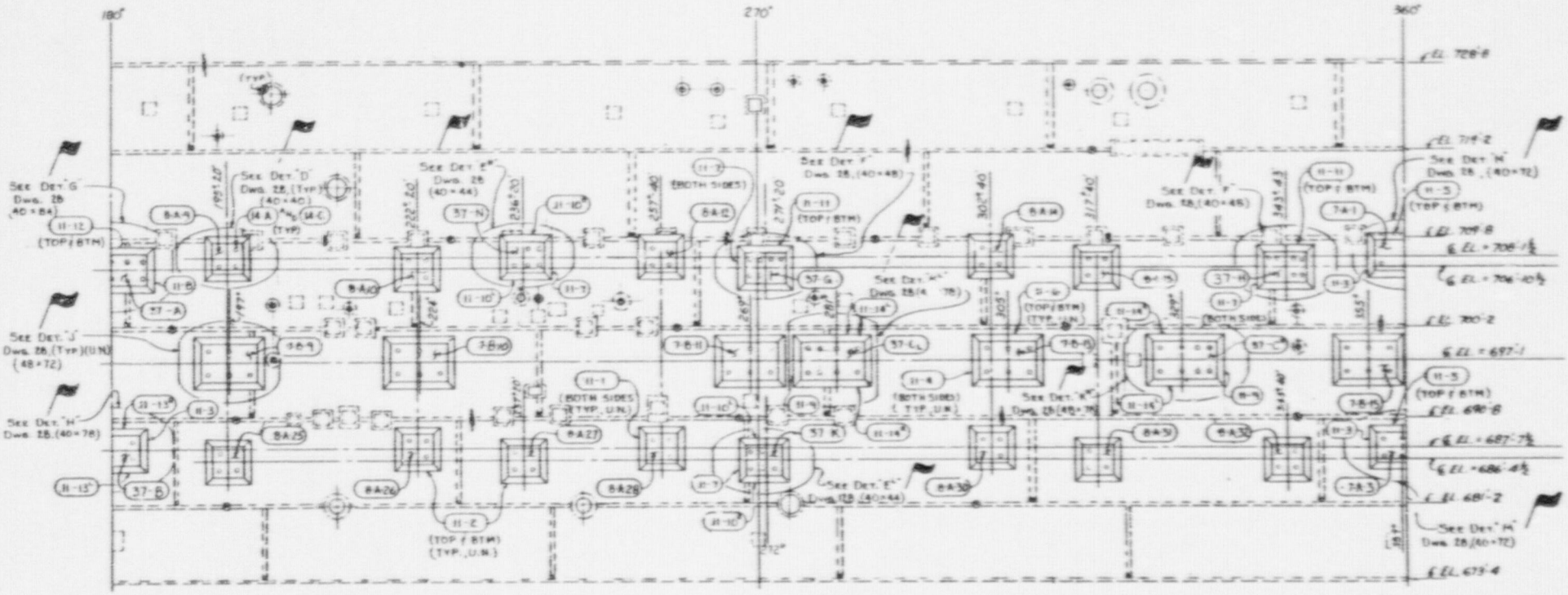
LA SALLE COUNTY STATION, UNITS
COMMONWEALTH EDISON COMPANY

Chicago Bridge & Iron Company CBI

SUPPRESSION CHAMBER
EMBEDMENT PLATE ASS'S
0°-180°

Drawn by: J.M. Date: 2-14-80
L.L. HUDSON
Engineering Checked

Contract No. 85678
Dwg. 23 Rev. 5



▶ SHELL STRETCH-OUT - INSIDE VIEW

NOTES:

1. WORK THIS DWG WITH #3, 28, 29 & 30
2. FOR LEAK CHASE INSTAL IN, SEE DET. A, DWG. 29
3. ▶ SOME EXISTING EMBEDS & PENETRATIONS, WHICH DO NOT INTERFERE @ THE NEW MODS, HAVE BEEN OMITTED FOR CLARITY.
4. ▶ WHERE NEW LEAK CHASE INTERFERES @ EXISTING LEAK CHASE FIELD OPEN (PER DET. A-A, DWG. 23) OR LEAK CONNECTIONS CLOSED TO FORM NEW LEAK CHASE ZONES SUCH THAT THE TOTAL LENGTH OF THE ZONES DO NOT EXCEED 100 FEET. FIELD ROD COUPLINGS (PER SEC. "E-E" ON DWG. 29) AS REQ'D.

▶ LEGEND

SYMBOL	DETAIL
	EXISTING LEAK CHASE
	END OF TEST ZONE
	END OF TEST ZONE BLOCK B
	TEST COUPLING

APPROVED FOR NUCLEAR Q.A. MANUAL
RELEASED FOR USE
APPROVED BY: Rev. 5 DATE: 9-23-80

LA SALLE COUNTY STATION, UNIT I
COMMONWEALTH EDISON COMPANY

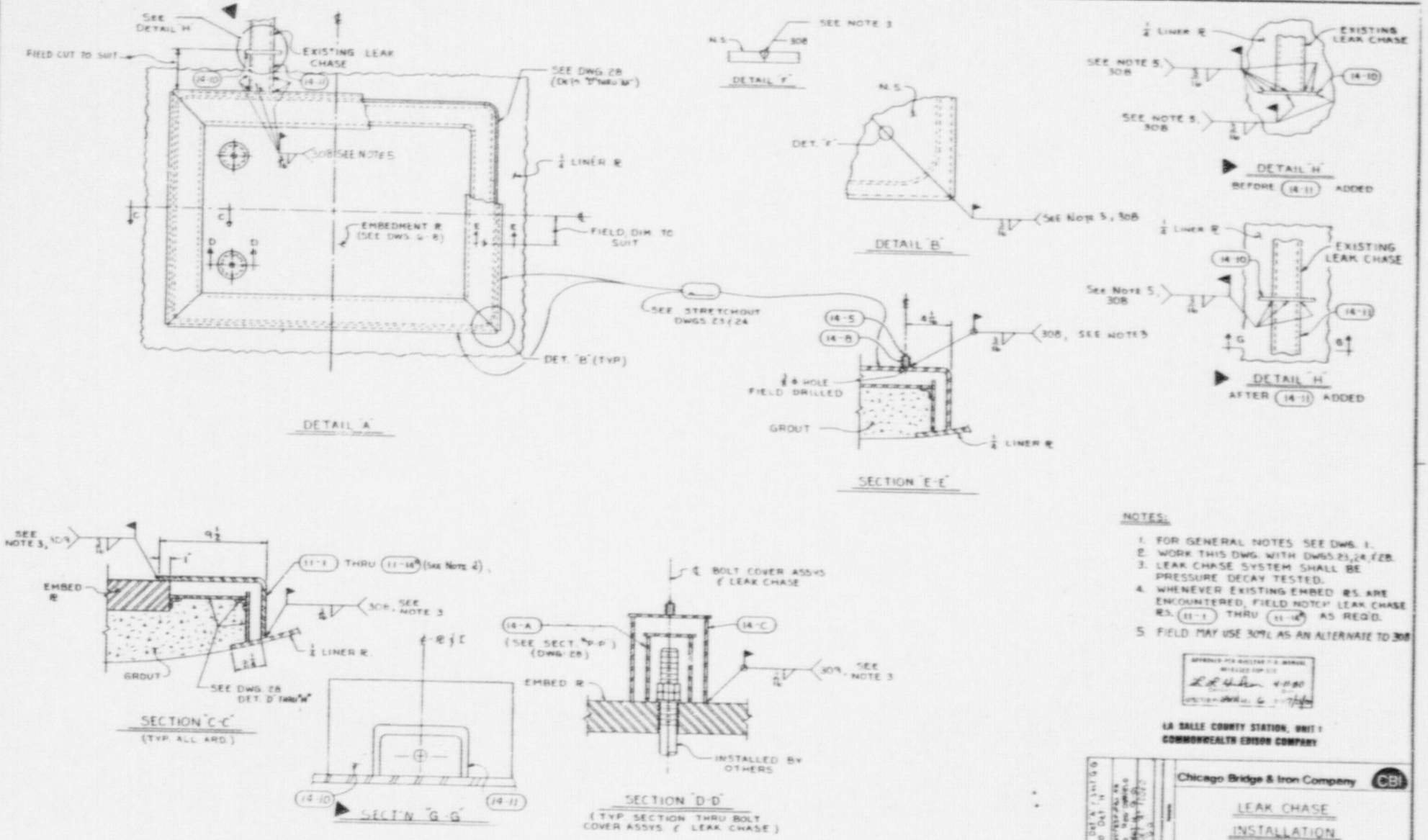
Chicago Bridge & Iron Company CBI

SUPPRESSION CHAMBER EMBEDMENT PLATE ASSEMBLIES 180° THRU 360°

Drawn by: TLA Date: 5/19/80
Engineering Approval: K.L. Robinson

Drawing No. 83674
Rev. 24 of 5

▶ INDICATES CHANGE FROM PREVIOUS ISSUE



NOTES:

1. FOR GENERAL NOTES SEE DWG. 1.
2. WORK THIS DWG. WITH DWGS. 23, 24, & 28.
3. LEAK CHASE SYSTEM SHALL BE PRESSURE DECAY TESTED.
4. WHENEVER EXISTING EMBED RS. ARE ENCOUNTERED, FIELD NOTCH LEAK CHASE RS. (11-1) THRU (11-14) AS REQ'D.
5. FIELD MAY USE 309L AS AN ALTERNATE TO 308

APPROVED FOR NUCLEAR P.E. MANUAL
RELEASED FOR USE
L. R. Hudson 4-11-80
SYSTEM NO. 6 7/1/80

LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

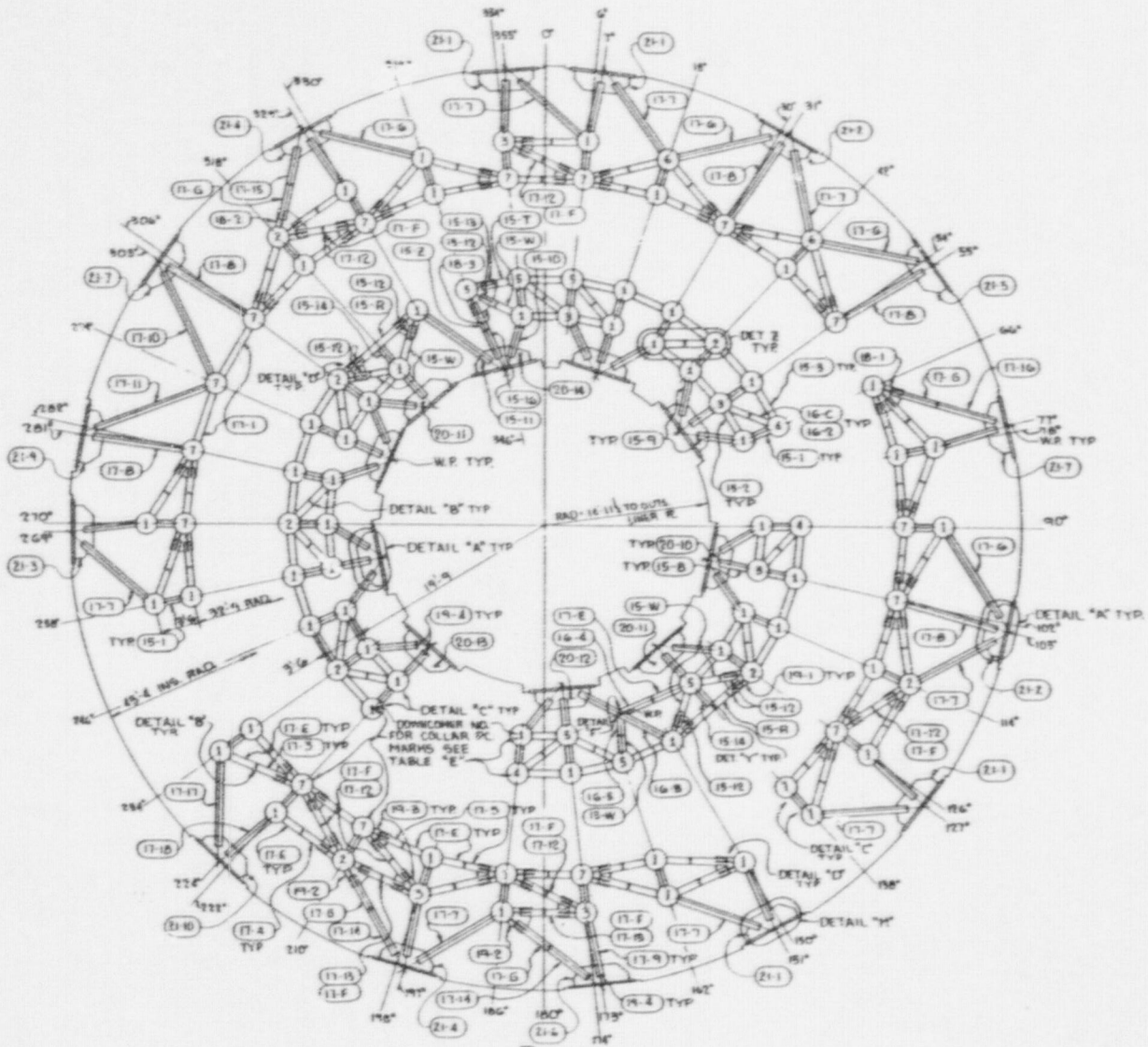
Chicago Bridge & Iron Company CBI

LEAK CHASE INSTALLATION

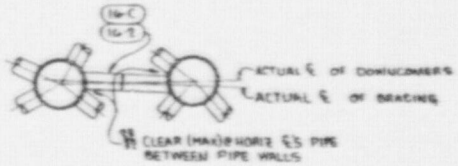
M.D. 3-13-80
L. L. HUDSON

B36674

INDICATES CHANGE FROM PREV. ISSUE



PLAN



DETAIL Z

(TYP INSTALLATION OF PCS. (16-Z) & (16-C))

NOTES:

1. FOR GENERAL NOTES SEE DWG. 1.
2. FOR DETAILS "A", "B", "C", "D", "H", "V", "F" & TABLE E SEE DWG. 36.
3. WORK THIS DWG WITH DWGS 15, 16, 17, 18, 19, 20 & 21.
4. ALL LOCATIONS SHOWN ARE THEORETICAL. FIELD ADJUST AS REQ'D. TO MEET ACTUAL LOCATIONS OF EMBEDMENTS & DOWNCOMER PIPES.
5. IN ADDITION TO MATERIAL TOLERANCES OF ASME CODE OR STANDARD PRACTICE THE FOLLOWING TOLERANCES APPLY:
   a. BASED ON ACTUAL ℄ OF EMBEDS., FIELD IS TO SUPPLY BRACING. SHOP SHALL THE MAXIMUM HORIZONTAL ECCENTRICITY DOES NOT EXCEED ½" FROM THE W.P. ON THE CONTAINMENT WALL THERE.
   b. FOR MEMBERS BETWEEN TWO DOWNCOMER PIPES THE MAXIMUM ALLOWABLE HORIZONTAL ECCENTRICITY FROM THE ACTUAL LOCATION OF THE W.P. IS 1½".
6. PC. MKS. SHOWN FOR PIPE BRACING ARE DETAILED WITH EXTRA LENGTH TO PERMIT FIELD ADJUSTMENT, BASED ON AS-BUILT OF DOWNCOMERS & EMBEDMENTS. WHENEVER DETAILED PCS. DO NOT PROVIDE SUFFICIENT LENGTH TO FIT ACTUAL DOWNCOMERS & EMBEDMENTS, FIELD SHOULD USE (15-18) TO FABRICATE A NEW PIECE. THE NEW PIECE IS TO BE IDENTICAL TO THE ORIGINAL PIECE EXCEPT FOR THE LENGTH.

LASALLE COUNTY STATION UNIT 1
COMMONWEALTH EDISON COMPANY

APPROVED PER NUCLEAR G.A. MANUAL
BY: 3-17-80
DATE
SPECIFICATION NO. 3 REV. 5 DATE

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

REV.	DATE	REVISION NOTE & REVISED NOTE #	BY	CHK	APP
1	2-8-80	GENERAL REV. TO PLAN DETAILS FOR ITS ISSUED FOR CONST.			

Chicago Bridge & Iron Company (CBI)

PLAN VIEW ELEVATION 697'-1
DOWNCOMER BRACING

Prepared by: PLS Date: 2-8-80
Checked by: HUDSON
Engineering Supervisor

Drawing No. 83674
Sheet 35 Rev. 3

THIS DRAWING IS THE PROPERTY OF BRIDGE BRIDGE & IRON COMPANY AND IS LOANED ONLY IN CONNECTION WITH PERFORMANCE OF WORK OF THE BRIDGE BRIDGE COMPANY. REPRODUCTION OR SHOWING OF ANY PART AND ANY OTHER PURPOSE IS PROHIBITED, UNLESS AUTHORIZED.

Attachment C

Unit 1 CBI Master Checklists

Material Requirement Table

Welding Procedures

General Repair Procedures

Leak Chase Channel Solution Film and Pressure Decay Procedure

CBI NUCLEAR RECORD INDEX

Document Number	Number of Pages	DESCRIPTION FIELD CHECK LIST MASTER AND DETAIL CHECK LIST
1	1	M1
2	1	M2
3	1	M3
4	1	M4
5	1	M5
6	1	D1
7	1	D1 A
8	1	D1 B
9	1	D2
10	1	D2 A
11	1	D2 B
12	1	D3
13	1	D3 A
14	1	D3 B
15	1	D4
16	1	D4 A
17	1	D4 B
18	1	D5
19	1	D6
20	1	D7
21	1	D8
22	1	D9
23	1	D9 A
24	1	D10
25	1	D10 A
26	1	Record Drawing - Additional Bottom Leak Chase

COPIES of documents covered by this index are certified to be true copies

Date 9-17-84

Signature [illegible]

CCC
Office Code

8.5
Classification

Page 1 of 1

83674
Contract Number Unit 1

Folder 1 of 4

GO 1152 JAN 75

CBI MASTER CHECK LIST
For Control and Certification

NO.	DESCRIPTION: OPERATIONS, INSPECTIONS, EXAMINATIONS & REQUIREMENTS TO BE COMPLETED	APPLICABLE DETAIL RECORDS	CBI: LISTED OPRTS, INSPTS & EXAMINS COMPLTD & ACCPTD. LISTED REQRMTS CARRIED OUT — PROJ. FOREMAN & PROJ. WELD & QA SUPR: INITIALS	CBI: DATE	CUSTOMER AUTH. INSPECTOR: LISTED DATA REVIEWED & FOUND TO BE IN ACCORDANCE WITH THE CODE — CUSTOMER AUTH. INSPECTOR: INITIALS	CUSTOMER AUTH. INSPECTOR: DATE		
1A	CONSULT WITH CUSTOMER'S AUTHORIZED REPRESENTATIVE AND REVIEW ALL MASTER CHECK LISTS, DETAIL CHECK LISTS AND RECORD DRAWINGS AS THEY BECOME AVAILABLE TO DETERMINE CUSTOMER'S DESIRED WITNESS POINTS.	x John F. Hoechst 8.5	ULT ELH	4/1/80 4/1/80	x J.F.H.	04-01-80		
1B	REVIEW ALL MASTER CHECK LISTS, DETAIL CHECK LISTS AND RECORD DRAWING AS THEY BECOME AVAILABLE WITH PROJECT FOREMAN SO THAT HE IS AWARE OF ALL REQUIREMENTS.	8.5	ULT ELH	12/9/80 12-9-80	J.F.H.	12-10-80		
2	MAKE CONTENTS OF QUALITY ASSURANCE HANDBOOK AVAILABLE TO CUSTOMER'S AUTHORIZED REPRESENTATIVE.	x John F. Hoechst	ULT ELH	4/1/80 4/1/80	J.F.H.	04-01-80		
3	INSPECT ALL MATERIAL, SUB-ASSEMBLIES, AND PARTS RECEIVED FROM CBI SHOPS FOR SHIPPING DAMAGE AND PROPER IDENTIFICATION. RESOLVE ANY DEFICIENCIES, INCLUDING THOSE NOTED ON THE SHOP RELEASE FOR SHIPMENT CHECK LIST.	8.16.1	ULT ELH	12/9/80 12/9/80	J.F.H.	12-10-80		
4	INSPECT ALL MATERIAL, SUB-ASSEMBLIES, COMPONENTS, APPURTENANCES, AND PARTS RECEIVED DIRECT FROM VENDOR FOR SHIPPING DAMAGE AND PROPER IDENTIFICATION. OBTAIN RELEASE FROM MANUFACTURING - ASSIGNED Q.A.	N/A	ULT ELH	12/9/80 12-9-80	J.F.H.	12-10-80		

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
L L Hudson 3/28/80
Certified by Date
UPDATED BY _____ REV. _____ DATE _____

MADE BY	CHKD BY	REVISIONS	MADE				CONTRACT NO.	SHEET
TLA	JMM		CHKD				83674	M1
DATE 3-27-80	DATE 3/28/80		DATE					

Folder No. _____ Line No. _____

GE 681 REV APR 76

CBI MASTER CHECK LIST
For Control and Certification

NO.	DESCRIPTION: OPERATIONS, INSPECTIONS, EXAMINATIONS & REQUIREMENTS TO BE COMPLETED	APPLICABLE DETAIL RECORDS	CBI: LISTED OPRTS, INSPTS & EXAMINS COMPLTD & ACCPTD. LISTED REQRMTS CARRIED OUT — PROJ. FOREMAN & PROJ. WELD & QA SUPR: INITIALS	DATE	CUSTOMER AUTH. INSPECTOR: LISTED DATA REVIEWED & FOUND TO BE IN ACCORDANCE WITH THE CODE — CUSTOMER AUTH. INSPECTOR: INITIALS	DATE
5	INSPECT ALL WELDING MATERIAL RECEIVED FOR SHIPPING DAMAGE, AND PROPER IDENTIFICATION. OBTAIN AUTHORIZATION (G0824) WITH TEST REPORTS FROM CONSTRUCTION WELDING AND Q.A. MANAGER.	8.19	ULT ELH	12/9/80 12-9-80	[illegible]	12-10-80
6	RECORD NAME, I.D. PROCESS, IN WHICH QUALIFIED AND ELECTRODE "F" NUMBER FOR EACH WELDER AND SUPERVISORY WELDING PERSONNEL ASSIGNED TO THIS CONTRACT AND VERIFY THAT WELDERS ARE QUALIFIED ON THE DATES THAT THE PROCESS WERE USED. (G01152)	8.10	ULT ELH	12/9/80 12-9-80	[illegible]	12-10-80
7	MAINTAIN COPIES OF WL101, WL30, AND WL63 FOR EACH NDE OPERATOR AND SUPERVISORY PERSONNEL ASSIGNED TO THIS CONTRACT AND VERIFY THAT NDE PERSONNEL ARE QUALIFIED ON THE DATES THAT THE PROCESSES WERE USED.	8.12	ULT ELH	12/9/80 12-9-80	[illegible]	12-10-80
8	RECORD INFORMATION AS REQUIRED ON RECORD DRAWINGS FOR WELDING JOINTS OF TYPE "A" MATERIAL TOGETHER AND RECORD THE FINAL LOCATION BY SERIALIZATION OR CODING OF ALL TYPE "A" MATERIAL.	RECORD DRAWINGS	ULT ELH	12/9/80 12-9-80	[illegible]	12-10-80

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
L L Hudson 3/28/80
Certified by Date
UPDATED BY _____ REV. ____ DATE _____

MADE BY	CHKD BY	REVISIONS	MADE	CHKD	DATE
TLA	JMM				
DATE 3-27-80	DATE 3/28/80				

1 OF 1

CONTRACT NO. 83674

SHEET M2

QE 681 REV APR 76

CBI

M. ER CHECK LIST
For Control and Certification

NO.	DESCRIPTION: OPERATIONS, INSPECTIONS, EXAMINATIONS & REQUIREMENTS TO BL COMPLETED	APPLICABLE DETAIL RECORDS	CBI: LISTED OPRTS, INSPTS & EXAMINS COMPLTD & ACCPTD. LISTED REQRMTS CARRIED OUT — PROJ. FOREMAN & PROJ. WELD & QA SUPR: INITIALS	CBI: DATE	CUSTOMER AUTH. INSPECTOR: LISTED DATA REVIEWED & FOUND TO BE IN ACCORDANCE WITH THE CODE — CUSTOMER AUTH. INSPECTOR: INITIALS	CUSTOMER AUTH. INSPECTOR: DATE		
9	VT ALL WELDS OF COMPONENT SUPPORTS TOGETHER AND REPAIR DEFECTS FOUND.	D1 & D101	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80		
10	VT ALL WELDS ATTACHING COLLARS TO DOWNCOMERS AND REPAIR DEFECTS FOUND.	D2 & D102	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80		
11	VT ALL BUTT WELDS IN DOWNCOMER COLLARS AND REPAIR DEFECTS FOUND.	D3 & D103	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80		
12	ON CONTAINMENT VESSEL WALL: MT OR PT ALL WELDS OF ATTACHMENTS TO EMBEDMENTS OR LINER PLATE (EXCLUDING LEAK CHASE), MT AND VT WELDS ATTACHING COMPONENT SUPPORTS TO EMBEDMENTS, AND REPAIR DEFECTS FOUND.	D4 & D104	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80		
13	ON CONTAINMENT VESSEL WALL: A) PT AND VB ALL CORNER JOINTS IN LINER PATCH PLATES AND REPAIR DEFECTS FOUND.	RECORD DRAWINGS	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80		
	B) PT AND VB ALL BACKED UP JOINTS IN LINER PATCH PLATES AND REPAIR DEFECTS FOUND.	RECORD DRAWINGS	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80		
	C) RT AND VB DOUBLE BUTT WELDED JOINTS IN LINER PATCH PLATES AND REPAIR DEFECTS FOUND.	RECORD DRAWINGS	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80	1 OF 1	
14	ON EPV WALL: VT ALL WELDS OF ATTACHMENTS TO EMBEDS OF LINER PLATE, MT & VT WELDS ATTACHING COMPONENT SUPPORTS TO EMBEDS AND REPAIR DEFECTS FOUND.	D7 & D107	UCT ELH	12/9/80 12-9-80	J.T.H.	12-10-80	Line No. 3 Item No. 1	

APPROVED FOR NUCLEAR Q.A. MANUAL RELEASED FOR USE

Certified by L.L. Hudson Date 3/28/80

UPDATED BY LLH REV. 2 DATE 6/17/80

MADE BY	CHKD BY	REVISIONS	MADE	1	2			CONTRACT NO.	SHEET
TLA	JMM			JMM	WLP			83674	M3
DATE 3-27-80	DATE 3/28/80		CHKD	LLH	JMM				
			DATE	5/20/80	6/16/80				

GE 681 REV APR 76

CBI M. ER CHECK LIST
For Control and Certification

NO.	OPERATIONS, INSPECTIONS, EXAMINATIONS & REQUIREMENTS TO BE COMPLETED	APPLICABLE DETAIL RECORDS	CBI: LISTED OPRTS, INSPTS & EXAMINS COMPLTD & ACCPTD. LISTED REQRMTS CARRIED OUT — PROJ. FOREMAN & PROJ. WELD & QA SUPR: INITIALS	DATE	CUSTOMER AUTH. INSPECTOR: LISTED DATA REVIEWED & FOUND TO BE IN ACCORDANCE WITH THE CODE — CUSTOMER AUTH. INSPECTOR: INITIALS	DATE
15	ON RPV WALL:	D10 & D110	CLT	12/9/80	YTH	12-10-80
	T ALL JOINTS IN LINER PL AND REPAIR DEFECTS FOUND		ELH	12-9-80		
16	REMOVE ALL TEMPORARY ATTACHMENT MATERIAL AND CLEAN UP SURFACES AND ADJOINING WELD AREAS.	D5 & D105	CLT	12/9/80	YTH	12-10-80
			ELH	12-9-80		
17	PERFORM CBI INHOUSE NDE REQUIREMENTS DURING ERECTION PER INTERNAL REQUIREMENTS SHEET.	D5 & D105	CLT	12/9/80	YTH	12-10-80
			ELH	12-9-80		
18	TEST LEAK CHASE SYSTEMS AND REPAIR DEFECTS FOUND.	Folder 7.9	WRW	9-17-81		
			KEN	9-17-81		
19	FOR PERMANENT ATTACHMENTS TO TYPE "A" MATERIAL AND FOR WELDS OF COMPONENTS SUBMITTED TOGETHER USE AUTHORIZED WELDING PROCEDURE, CHECK FIT-UP, WELDING, AND FINISHED WELD AND RECORD ON CHECK LISTS.	D6 & D106	CLT	12/9/80	YTH	12-10-80
			ELH	12-9-80		
20	PERFORM DIMENSIONAL CHECKS AND RECORD DIMENSIONAL AS-BUILT DATA AS REQUIRED BY APPROPRIATE PROCEDURE.	D7 & D107	WRW	9-17-81		
			KEN	9-17-81		
21	REVIEW FINAL CONTRACT DRAWINGS, REPAIR PROCEDURES, AND DEVIATION REPORTS TO ASSURE RECORDS REFLECT APPROVED AS-BUILT CONDITION.		WRW	9-17-81		
			KEN	9-17-81		

1 of 1

Line # 4
Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
L L Hudson, 3/28/80
Certified by Date
UPDATED BY LLH REV. 2 DATE 6/17/80

MADE BY	CHKD BY	REVISIONS	MADE	1	2
TLA	JMM			JMM	WLP
DATE	DATE		CHKD	LLH	JMM
3-27-80	3/28/80		DATE	5/20/80	6/16/80

CONTRACT NO. 83674

SHEET M4

GE 681 REV APR 76

CBI MASTER CHECK LIST
For Control and Certification

NO.	DESCRIPTION: OPERATIONS, INSPECTIONS, EXAMINATIONS & REQUIREMENTS TO BE COMPLETED	APPLICABLE DETAIL RECORDS	CBI: LISTED OPRTS, INSPTS & EXAMINS COMPLTD & ACCPTD. LISTED REQRMTS CARRIED OUT — PROJ. FOREMAN & PROJ. WELD & QA SUPR: INITIALS	DATE	CUSTOMER AUTH. INSPECTOR: LISTED DATA REVIEWED & FOUND TO BE IN ACCORDANCE WITH THE CODE — CUSTOMER AUTH. INSPECTOR: INITIALS	DATE
22	REVIEW ALL FIELD CHECK LIST SYSTEM DOCUMENTS FOR COMPLETENESS AND APPROPRIATE SIGN-OFFS BY CBI AND AS APPLICABLE BY THE CUSTOMER.		ULT KEN	12/19/80 9-17-81	[illegible]	12-20-80
23	MAKE JOBSITE CNQA PROGRAM AUDIT REPORTS AVAILABLE TO THE CUSTOMER.		ULT KEN	12/19/80 9-17-81	[illegible]	12-20-80
24	OBTAIN FINAL RELEASE FROM CNQA AT COMPLETION OF WORK.		[illegible] KEN	9-12-81 9-17-81		

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
L L Hudson 3/28/80
Certified by Date
UPDATED BY _____ REV. _____ DATE _____

MADE BY	CHKD BY	REVISIONS	MADE	CHKD	DATE
TLA	JMM				
DATE 3-27-80	DATE 3/28/80				

CONTRACT NO. 83674

SHEET M5

Line No. 5

Folder No. 1

1 of 1

GE 681 REV APR 76

INSTRUCTIONS:
VT ALL WELDS OF COMPONENT SUPPORTS TOGETHER AND REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-3241
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		VT THE FOLLOWING JOINTS										
		AND REPAIR DEFECTS FOUND AS										
		APPLICABLE AT THE LISTED										
		AZIMUTHS:										
		COLLARS TOGETHER										
		GUSSETS TO COLLARS,										
		GUSSETS TO GUSSETS,										
		PIPES TO GUSSETS										
		PIPE CLOSURE PLATES TO PIPES										
		PIPE CLOSURE PLATES TO GUSSETS	Folder 7.10 #2									
		PIPES TOGETHER										
		GUSSETS TO EMBEDMENTS										
		PIPES TO COLLARS										
		AT THE FOLLOWING AZIMUTHS										
		ON THE REACTOR SUPPORT										
		SIDE:										
		6°-18°	UT 5	0	N/A		UCT	7/1/80				
		18°-30°	UT 5	0	N/A		UCT	7/1/80				
		30°-42°	UT 5	0	N/A		UCT	7/1/80				
		42°-54°	UT 5	0	N/A		UCT	7/1/80				
		54°-66°	UT 5	0	N/A		UCT	7/1/80				
		90°-102°	UT 5	0	N/A		UCT	7/1/80				
		102°-114°	UT 5	0	N/A		UCT	7/1/80				
		114°-126°	UT 5	0	N/A		UCT	7/1/80				
		126°-138°	UT 5	0	N/A		UCT	7/1/80				
		138°-150°	UT 5	0	N/A		UCT	7/1/80				
		150°-162°	UT 5	0	N/A		UCT	7/1/80				
		162°-174°	UT 5	0	N/A		UCT	7/1/80				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
L L Hudson 3/28/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY: TLA — DATE: 3-27-80
CHKD BY: JMM — DATE: 3/28/80

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83674

SHEET 01

Line No. 6
Folder No. 1

GE 682 REV APR 76

INSTRUCTIONS:
VT ALL WELDS OF COMPONENT SUPPORTS TOGETHER AND REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA3211
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		174°-186°	UT 5	0	N/A		VLT	7/1/80				
		222°-234°	UT 5	0	N/A		VLT	7/1/80				
		234°-246°	UT 5	0	N/A		VLT	7/1/80				
		246°-258°	UT 5	0	N/A		VLT	7/1/80				
		258°-270°	UT 5	0	N/A		VLT	7/1/80				
		270°-282°	UT 5	0	N/A		VLT	7/1/80				
		282°-294°	UT 5	0	N/A		VLT	7/1/80				
		294°-306°	UT 5	0	N/A		VLT	7/1/80				
		306°-318°	UT 5	0	N/A		VLT	7/1/80				
		318°-330°	UT 5	0	N/A		VLT	7/1/80				
		330°-342°	UT 5	0	N/A		VLT	7/1/80				
		342°-354°	UT 5	0	N/A		VLT	7/1/80				
		354°-6°	UT 5	0	N/A		VLT	7/1/80				
		AT THE FOLLOWING AZIMUTHS ON THE SUPPRESSION CHAMBER WALL SIDE.	Folder 7.10 #2									
		6°-18°	UT 5	0	N/A		VLT	7-21-80				
		18°-30°	UT 5	0	N/A		VLT	7-21-80				
		30°-42°	UT 5	0	N/A		VLT	7-21-80				
		42°-54°	UT 5	0	N/A		VLT	7-21-80				
		66°-78°	UT 5	0	N/A		VLT	7-21-80				
		78°-90°	UT 5	0	N/A		VLT	7/1/80				
		90°-102°	UT 5	0	N/A		VLT	7/1/80				
		102°-114°	UT 5	0	N/A		VLT	7/1/80				
		114°-126°	UT 5	0	N/A		VLT	7/1/80				

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
L L Hudson 3/28/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY TLA — DATE 3-27-80
CHKD BY JMM — DATE 3/28/80
REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83674
SHEET DIA

GE 682 REV APR 76

INSTRUCTIONS:
VT ALL WELDS OF COMPONENT SUPPORTS TOGETHER AND REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-3244
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		126°-138°	UT 5	0	N/A		ULT	7/11/80				
		150°-162°	UT 5	0	N/A		ULT	7/11/80				
		162°-174°	UT 5	0	N/A		ULT	7/11/80				
		174°-186°	UT 5	0	N/A		ULT	7/11/80				
		186°-198°	UT 5	0	N/A		ULT	7/11/80				
		198°-210°	UT 5	0	N/A		ULT	7/11/80				
		210°-222°	UT 5	0	N/A		ULT	7/11/80				
		222°-234°	UT 5	0	N/A		ULT	7/11/80				
		258°-270°	UT 5	0	N/A		ULT	7/21/80				
		270°-282°	UT 5	0	N/A		ULT	7/21/80				
		282°-294°	UT 5	0	N/A		ULT	7/21/80				
		294°-306°	UT 5	0	N/A		ULT	7/21/80				
		306°-318°	UT 5	0	N/A		ULT	7/21/80				
		318°-330°	UT 5	0	N/A		ULT	7/21/80				
		330°-342°	UT 5	0	N/A		ULT	7/21/80				
		342°-354°	UT 5	0	N/A		ULT	7/21/80				
		354°-6°	UT 5	0	N/A		ULT	7/21/80				
		THIS DETAIL CHECKLIST HAS BEEN REVIEWED WITH PROJECT FOREMAN	N/A		N/A		UAT	4/1/80				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
Certified by L L Hudson Date 3/28/80
UPDATED BY _____ REV. _____ DATE _____

MADE BY TLA DATE 3-27-80
CHKD BY JMM DATE 3/28/80
REVISIONS: MADE _____ CHKD _____ DATE _____

CONTRACT NO. 883674
SHEET DIB

1 OF 1

GE 682 REV APR 76

INSTRU S:

VT A CHMENTS WELDS OF COLLARS TO DOWNCOMER PIPES AND REPAIRS DEFECTS FOUND

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSP BEFORE USE PER NA-2744

INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.	PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE
		VT WELDS OF COLLARS TO DOWNCOMERS AND REPAIR DEFECTS FOUND AT THE FOLLOWING RADII FOR THE AZIMUTH LISTED	Folder 710 #2 Report #12						
		RADIUS = 19'-9 AND RADIUS = 23'-3:							
		6°	VT 5	0	N/A	VLT	7/4/80		
		18°	VT 5	0	N/A	VLT	7/4/80		
		30°	VT 5	0	N/A	VLT	7/4/80		
		42°	VT 5	0	N/A	VLT	7/4/80		
		54°	VT 5	0	N/A	VLT	7/4/80		
		66°	VT 5	0	N/A	VLT	7/4/80		
		78°	VT 5	0	N/A	VLT	7/4/80		
		102°	VT 5	0	N/A	VLT	7/4/80		
		114°	VT 5	0	N/A	VLT	7/4/80		
		126°	VT 5	0	N/A	VLT	7/4/80		
		138° (R=19'9 ONLY)	VT 5	0	N/A	VLT	7/4/80		
		150° (R=23'-3 ONLY)	VT 5	0	N/A	VLT	7/4/80		
		162° (R=23'-3 ONLY)	VT 5	0	N/A	VLT	7/4/80		
		174°	VT 5	0	N/A	VLT	7/4/80		
		186°	VT 5	0	N/A	VLT	7/4/80		
		222°	VT 5	0	N/A	VLT	7/4/80		
		234°	VT 5	0	N/A	VLT	7/4/80		
		246°	VT 5	0	N/A	VLT	7/4/80		
		258°	VT 5	0	N/A	VLT	7/4/80		
		270°	VT 5	0	N/A	VLT	7/4/80		

1 OF 1

9 / 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

Certified by L L Hudson Date 3/28/80

UPDATED BY LLH REV. 1 DATE 5/22/80

MADE BY TLA DATE 3-27-80

CHKD BY JMM DATE 3/28/80

REVISIONS: MADE JMM; CHKD LLH; DATE 5/20/80

CONTRACT NO. 83674

SHEET D2

GE 682 REV APR 76

INSTRUCTIONS:

▶ SAME AS D2

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSP BEFORE USE PER NA-5211

INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		282°	UT 5	0	N/A		VLT	7/1/80				
		294°	UT 5	0	N/A		VLT	7/1/80				
		306°	UT 5	0	N/A		VLT	7/1/80				
		318° (R=19'-9 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		330° (R=23'-3 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		342° (R=23'-3 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		354°	UT 5	0	N/A		VLT	7/1/80				
		AT RADIUS = 32'-9 AND RADIUS = 36'-3:										
		6°	UT 5	0	N/A		VLT	7/21/80				
		18°	UT 5	0	N/A		VLT	7/21/80				
		30° (R=32'-9 ONLY)	UT 5	0	N/A		VLT	7/21/80				
		42°	UT 5	0	N/A		VLT	7/21/80				
		54° (R=32'-9 ONLY)	UT 5	0	N/A		VLT	7/21/80				
		66° (R=32'-9 ONLY)	UT 5	0	N/A		VLT	7/21/80				
		78°	UT 5	0	N/A		VLT	7/1/80				
		90°	UT 5	0	N/A		VLT	7/1/80				
		102° (R=32'-9 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		114°	UT 5	0	N/A		VLT	7/1/80				
		126°	UT 5	0	N/A		VLT	7/1/80				
		138°	UT 5	0	N/A		VLT	7/1/80				
		150° (R=36'-3 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		162°	UT 5	0	N/A		VLT	7/1/80				
		174°	UT 5	0	N/A		VLT	7/1/80				
		186°	UT 5	0	N/A		VLT	7/1/80				
		198°	UT 5	0	N/A		VLT	7/1/80				

1 of 1

No. 10

Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

L L Hudson 3/28/80

Certified by Date

UPDATED BY LLH REV. 1 DATE 5/29/80

MADE BY	CHKD BY	REVISION 1	MADE	JMM	CONTRACT NO.	SHEET
TLA	JMM		CHKD	LH	83674	D2A
DATE 3-27-80	DATE 3/28/80		DATE	5/29/80		

GE 682 REV APR 76

INSTRU S:

▶ SAME AS D2

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSP BEFORE USE PER NAS204
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		210°	VT 5	0	N/A		VLT	7/11/80				
		222°	VT 5	0	N/A		VLT	7/11/80				
		234°	VT 5	0	N/A		VLT	7/11/80				
		258°	VT5	0	N/A		VLT	7/21/80				
		270°	VT5	0	N/A		VLT	7/21/80				
		282° (R = 32'-9 ONLY)	VT 5	0	N/A		VLT	7/21/80				
		294° (R = 32'-9 ONLY)	VT5	0	N/A		VLT	7/21/80				
		306° (R = 32'-9 ONLY)	VT5	0	N/A		VLT	7/21/80				
		318°	VT5	0	N/A		VLT	7/21/80				
		330°	VT5	0	N/A		VLT	7/21/80				
		342°	VT5	0	N/A		VLT	7/21/80				
		354°	VT5	0	N/A		VLT	7/21/80				
		THIS DETAIL CHECK LIST HAS BEEN REVIEWED WITH PROJECT FOREMAN	N/A		N/A		VLT	5/23/80				

1 OF 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE — L L Hudson — 3/28/80
Certified by — Date
UPDATED BY LLH REV. 1 DATE 5/22/80

MADE BY TLA — DATE 3-27-80
CHKD BY JMM — DATE 3/28/80

REVISIONS: 1 — MADE JMM — CHKD — DATE 5/20/80

CONTRACT NO. 83674

SHEET D2B

GE 682 REV APR 76

INSTRUCTIONS:
VT BUTT WELDS IN COLLARS AND REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-3201
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		VT BUTT WELDS IN COLLARS AND REPAIR DEFECTS FOUND AT THE FOLLOWING RADII FOR THE AZIMUTHS LISTED	Folder 7.10 #2									
		AT RADIUS = 19'-9 AND RADIUS = 23'-3.										
		6°	VT 5	0	N/A		VLT	7/1/80				
		18	VT 5	0	N/A		VLT	7/1/80				
		30°	VT 5	0	N/A		VLT	7/1/80				
		42°	VT 5	0	N/A		VLT	7/1/80				
		54°	VT 5	0	N/A		VLT	7/1/80				
		66°	VT 5	0	N/A		VLT	7/1/80				
		90°	VT 5	0	N/A		VLT	7/1/80				
		102°	VT 5	0	N/A		VLT	7/1/80				
		114°	VT 5	0	N/A		VLT	7/1/80				
		126°	VT 5	0	N/A		VLT	7/1/80				
		138° (R=19'-9 ONLY)	VT 5	0	N/A		VLT	7/1/80				
		150° (R=23'-3 ONLY)	VT 5	0	N/A		VLT	7/1/80				
		162° (R=23'-3 ONLY)	VT 5	0	N/A		VLT	7/1/80				
		174°	VT 5	0	N/A		VLT	7/1/80				
		186°	VT 5	0	N/A		VLT	7/1/80				
		222°	VT 5	0	N/A		VLT	7/1/80				1 OF 1
		234°	VT 5	0	N/A		VLT	7/1/80				
		246°	VT 5	0	N/A		VLT	7/1/80				12
		258°	VT 5	0	N/A		VLT	7/1/80				
		270°	VT 5	0	N/A		VLT	7/1/80				
		282°	VT 5	0	N/A		VLT	7/1/80				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
L L Hudson 5/22/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY	CHKD BY	REVISIONS					CONTRACT NO.	SHEET
TLA	JMM	MADE	1	JMM			83674	D3
DATE 3-27-80	DATE 3/28/80	CHKD		LLH				
		DATE		5/22/80				

GE 682 REV APR 76

INSTRUCTIONS:

SAME AS D3

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA5711

INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		294°	UT 5	0	N/A		VLT	7/1/80				
		306°	UT 5	0	N/A		VLT	7/1/80				
		318° (R=19'-9 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		330° (R=23'-3 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		342° (R=23'-3 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		354°	UT 5	0	N/A		VLT	7/1/80				
		AT RADIUS = 32'-9 AND RADIUS = 36'-3:	Folder 710 #2									
		6°	UT 5	0	N/A		VLT	7/21/80				
		18°	UT 5	0	N/A		VLT	7/21/80				
		[illegible] (R=32'-9 ONLY)	UT 5	0	N/A		VLT	7/21/80				
		42°	UT 5	0	N/A		VLT	7/21/80				
		54° (R=[illegible] ONLY)	UT 5	0	N/A		VLT	7/21/80				
		66° (R=[illegible] ONLY)	UT 5	0	N/A		VLT	7/1/80				
		78°	UT 5	0	N/A		VLT	7/1/80				
		[illegible]	UT 5	0	N/A		VLT	7/1/80				
		102° (R=32'-9 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		114°	UT 5	0	N/A		VLT	7/1/80				
		126°	UT 5	0	N/A		VLT	7/1/80				
		138°	UT 5	0	N/A		VLT	7/1/80				
		150° (R=36'-3 ONLY)	UT 5	0	N/A		VLT	7/1/80				
		162°	UT 5	0	N/A		VLT	7/1/80				
		174°	UT 5	0	N/A		VLT	7/1/80				
		186°	UT 5	0	N/A		VLT	7/1/80				
		198°	UT 5	0	N/A		VLT	7/1/80				
		210°	UT 5	0	N/A		VLT	7/1/80				

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
L L Hudson 5/22/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY TLA — DATE 3-28-80

CHKD BY JMM — DATE 3/28/80

REVISIONS: 1 — MADE JMM; CHKD LLH; DATE 5/22/80

CONTRACT NO. 83674

SHEET D3A

1 OF 1

GE 682 REV APR 76

INSTRUCTIONS:

SAME AS D3

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR
BEFORE USE PER NA-3144
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		222°	UT 5	0	N/A		ULT	7/14/80				
		234°	UT 5	0	N/A		ULT	7/21/80				
		258°	UT 5	0	N/A		ULT	7/21/80				
		270°	UT 5	0	N/A		ULT	7/21/80				
		282° (R=32'-9 ONLY)	UT 5	0	N/A		ULT	7/21/80				
		294° (R=32'-9 ONLY)	UT 5	0	N/A		ULT	7/21/80				
		306° (R=32'-9 ONLY)	UT 5	0	N/A		ULT	7/21/80				
		318°	UT 5	0	N/A		ULT	7/21/80				
		330°	UT 5	0	N/A		ULT	7/21/80				
		342°	UT 5	0	N/A		ULT	7/21/80				
		354°	UT 5	0	N/A		ULT	7/21/80				
		THIS DETAIL CHECK LIST HAS BEEN REVIEWED WITH PROJECT FOREMAN	N/A		N/A		ULT	5/29/80				

1 OF 1

Line No. 14
Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
L L Hudson 5/22/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY	CHKD BY	REVISIONS						CONTRACT NO.	SHEET
TLA	JMM		MADE	1	JMM			83674	D3B
DATE 3-28-80	DATE 3/28/80		CHKD		LLH				
			DATE		5/22/80				

GE 682 REV APR 76

INSTRUCTIONS: ON CONTAINMENT VESSEL WALL MT OR PT ATTACHMENT TO EMBEDMENTS OR LINER PLATES (EXCLUDING LEAK CHASE), MT AND VT WELDS OF COMPONENT SUPPORTS TO EMBEDMENTS, AND REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-3241

INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		MT OR PT ATTACHMENTS TO EMBEDMENTS OR LINER PLATES (EXCLUDING LEAK CHASE), MT AND VT WELDS OF COMPONENT SUPPORTS TO EMBEDMENTS, AND REPAIR DEFECTS FOUND AT THE FOLLOWING EMBEDMENTS:										
		AT ELEV. 708'-1 1/2 OR ELEV. 706'-10 1/2 APPROX. AZIMUTH										
		1°	PT 10	4	N/A		VLT	7-24-80				
		15°	PT 10	4	N/A		VLT	7-24-80				
		42°	PT 10	4	N/A		VLT	7-24-80				
		57°	PT 10	4	N/A		VLT	6-24-80				
		77°	PT 10	4	N/A		VLT	6-24-80				
		90°	PT 10	4	N/A		VLT	6-24-80				
		122°	PT 10	4	N/A		VLT	6-25-80				
		137°	PT 10	4	N/A		VLT	7-24-80				
		163°	PT 10	4	N/A		VLT	7-24-80				
		180°	PT 10	4	N/A		VLT	7-24-80				
		195°	PT 10	4	N/A		VLT	7-24-80				
		222°	PT 10	4	N/A		VLT	7/24-80				
		236°	PT 10	4	N/A		VLT	7-24-80				
		257°	PT 10	4	N/A		VLT	7-24-80				
		271°	PT 10	4	N/A		VLT	7-24-80				
		302°	PT 10	4	N/A		VLT	7-24-80				
		317°	PT 10	4	N/A		VLT	7-24-80				
		343°	PT 10	4	N/A		VLT	7-24-80				

1 OF 1

Line No. 15

Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

L L Hudson 3/28/80

Certified by Date

UPDATED BY LLH REV. 1 DATE 5/20/80

MADE BY	CHKD BY	REVISIONS							CONTRACT NO.	SHEET
TLA	JMM	MADE	1	JMM					83674	D4
DATE 3/28/80	DATE 3/28/80	CHKD		LLH						
		DATE		5/20/80						

GE 682 REV APR 76

INSTRUCTIONS:

SAME AS D4

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-3244

INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		AT ELEV 697'-1										
		APPROX AZIMUTH										
		7°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		31°	PT10 Rev4, UT5	0	N/A		ULT	6-24-80				
		55°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		77°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		103°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		127°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		151°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		173°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		197°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		224°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		269°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		281°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		305°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		329°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		355°	PT10 Rev4, UT5	0	N/A		ULT	6-18-80				
		AT ELEV. 687'-7 1/2 OR 686'-4 1/2										
		APPROX. AZIMUTH										
		15°	PT10	4	N/A		ULT	7-24-80				
		42°	PT10	4	N/A		ULT	7-24-80				
		57°	PT10	4	N/A		ULT	7-24-80				
		77°	PT10	4	N/A		ULT	7-24-80				
		90°	PT10	4	N/A		ULT	7-24-80				
		122°	PT10	4	N/A		ULT	7-24-80				
		137°	PT10	4	N/A		ULT	7-24-80				
		164°	PT10	4	N/A		ULT	7-24-80				
		179°	PT10	4	N/A		ULT	7/24/80				

1 OF 1

Line No. 16

Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE	MADE BY	CHKD BY	REVISIONS	MADE	1 JMM			CONTRACT NO.	SHEET
L L Hudson 3/28/80 Certified by Date	TLA	JMM		CHKD	LLH			83674	D4A
UPDATED BY LLH REV. 1 DATE 5/24/80	DATE 3/28/80	DATE 3/28/80		DATE	5/20/80				

GE 682 REV APR 76

INSTRUCTIONS:

SAME AS D4

CBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-5244~~

~~INITIALS _____ DATE _____~~

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		195°	PT 10	4	N/A		ULT	7-24-80				
		222°	PT 10	4	N/A		ULT	7-24-80				
		237°	PT 10	4	N/A		ULT	7-24-80				
		257°	PT 10	4	N/A		ULT	7-24-80				
		271°	PT 10	4	N/A		ULT	7-24-80				
		302°	PT 10	4	N/A		ULT	7-24-80				
		317°	PT 10	4	N/A		ULT	7-24-80				
		344°	PT 10	4	N/A		ULT	7-24-80				
		359°	PT 10	4	N/A		ULT	7-24-80				
		THIS DETAIL CHECK LIST HAS BEEN REVIEWED WITH PROJECT FOREMAN	N/A		N/A		ULT	5-28-80				1 of 1

Line No. 17

Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

L L Hudson 3/28/80

Certified by Date

UPDATED BY LLH REV. 1 DATE 5/22/80

MADE BY	CHKD BY
TLA	JMM
DATE 3/28/80	DATE 3/28/80

REVISIONS

MADE	1 JMM		
CHKD	LLH		
DATE	5-20-80		

CONTRACT NO. 83674

SHEET D4B

GE 682 REV APR 76

INSTRUCTIONS:

PERFORM FOLLOWING MISCELLANEOUS IN-HOUSE REQUIREMENTS PER INTERNAL REQUIREMENTS SHEET

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-2110

INITIALS _____ DATE _____

CHECKING NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
	1	MT OR PT EXAMINE ALL FIELD SPLICES IN BACK-UP BARS.	PT 10	4	N/A		VLT	5/14/80				
	2	FOR TEMPORARY ATTACHMENTS	VT5	0	N/A		VLT	5/14/80				
		A) VT AFTER RICK-UP.	VT 5	0	N/A		VLT	5/14/80	A			
		B). PT OR MT IF QUESTIONABLE INDICATIONS ARE SEEN.	PT 10	4	N/A		VLT	5/14/80				

1 OF 1

LIST NO. 18

FOLDER NO. 1

APPROVED PER NUCLEAR Q.A. MANUAL

C. D. Hudson 3/28/80

Certified by Date

UPDATED BY _____ REV. ____ DATE ____

MADE BY TLA DATE 3-28-80

CHKD BY JMM DATE 3/28/80

REVISIONS

MADE

CHKD

DATE

CONTRACT NO. 83674

SHEET 05

LIST NO. 18

FOLDER NO. 1

GC 682 REV APR 76

INSTRUCTIONS:
PERFORM FOLLOWING MISCELLANEOUS IN-HOUSE REQUIREMENTS PER INTERNAL REQUIREMENTS SHEET

CBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-5211~~
~~INITIALS _____ DATE _____~~

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
	1	MT OR PT EXAMINE ALL FIELD SPLICES IN BACK-UP BARS.	PT 10	4	N/A		VLT	8/11/80				
	2	FOR TEMPORARY ATTACHMENTS	VT5	0	N/A		VLT	8/13/80				
		A) VT AFTER PICK-UP.	VT 5	0	N/A		VLT	8/14/80				
		B). PT OR MT IF QUESTIONABLE INDICATIONS ARE SEEN.	PT 10	4	N/A		VLT	8/14/80				

1 OF 1

Line No. 18
Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
L L Hudson 3/28/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY TLA DATE 3-28-80
CHKD BY JMM DATE 3/28/80
REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83674
SHEET 05

Line No. 18
Folder No. 1
1 OF 1

GE 682 REV APR 76

INSTRUCTIONS: FOR PERMANENT ATTACHMENTS TO TYPE "A" MATERIAL AND FOR WELDS OF COMPONENT SUPPORTS TOGETHER, USE AUTHORIZED WELDING PROCEDURE, CHECK FIT-UP, WELDING AND FINISHED WELD.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-5241

INITIALS NA DATE NA

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		USE AUTHORIZED WELDING PROCEDURE, CHECK FIT-UP, WELDING AND FINISHED WELD FOR THE FOLLOWING:										
	1	PERMANENT ATTACHMENTS TO TYPE "A" MATERIAL.	WPS E309/E3670	2	N/A		VLT	8/13/80				
			WPS E309/E3670	4/5/6	N/A		VLT	8/13/80				
			WPS E2016/E3670	6	N/A		VLT	8/12/80				
	2	WELDS OF COMPONENT SUPPORTS TOGETHER	WPS E309/E3670	4	N/A		VLT	7-30-80				
			WPS E2016/E3670	6	N/A		VLT	7-30-80				
		THIS DETAIL CHECK LIST HAS BEEN REVIEWED WITH THE PROJECT FOREMAN.	N/A		N/A		VLT	4/17/80				

1 OF 1

Line No. 19

Fabr. No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

L L Hudson 4-15-80

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY	CHKD BY	REVISIONS	MADE	CHKD	DATE
LLH	JMM				
DATE 3-27-80	DATE 3-27-80				

CONTRACT NO. 83674

SHEET D6

GE 682 REV APR 76

INSTRUCTIONS:

PERFORM DIMENSIONAL CHECKS AND RECORD DIMENSIONAL DATA AS REQUIRED BY APPROPRIATE DIMENSIONAL CONTROL PROCEDURE

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED NUCLEAR INSPECTOR BEFORE USE.

INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	PROCEDURE: REV NO.		PROJECT WELD & QA SUPERINTENDENT: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED: INITIALS	PROJECT WELD & QA SUPERINTENDENT: DATE	ANI: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS: INITIALS	ANI: DATE			SEE NON-CONFORMANCE CONTROL LIST NO.
		PERFORM DIMENSIONAL CHECKS										
		AND RECORD DIMENSIONAL DATA										
		AS REQUIRED BY APPROPRIATE										
		DIMENSIONAL CONTROL PROCED-										
		URE FOR THE FOLLOWING:										
		ALL EMBEDMENTS AND BRACING	DC IN	1		WHW	9-17-81					
		AS LISTED IN THE DIMENSIONAL										
		CONTROL PROCEDURE										

1 OF 1

Line No. 20

Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

L L Hudson 9/19/80

Certified by Date

UPDATED BY _____ REV. ____ DATE ____

MADE BY	CHKD BY	REVISIONS				CONTRACT NO.	SHEET
LLH	JMM	MADE				83674	D7
DATE 9-5-80	DATE 9-5-80	CHKD					
		DATE					

GE 682 REV OCT 77

Printed In USA

INSTRUCTIONS: FOR WELDS OF PERMANENT ATTACHMENTS TO TYPE "A" MATERIAL, WELDS OF COMPONENT SUPPORTS TOGETHER, AND WELDS OF ALL TEMPORARY ATTACHMENTS, RECORD WELDER IDENTIFICATION.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-5241

INITIALS NA DATE NA

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED		AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS			
							INITIALS	DATE	INITIALS	DATE		
		WELDERS WHO PERFORMED WELDING IN THE FOLLOWING AREAS ARE LISTED ON THE LIST OF WELDERS: Folder 8.10										
	1	PERMANENT ATTACHMENTS TO TYPE "A" MATERIAL	WPS E308/83670	2	N/A		VLT	8/11/80				
			WPS E309/83670	4	N/A		VLT	8/11/80				
			WPS E7018/83670	6	N/A		VLT	8/11/80				
	2	WELDS OF COMPONENT SUPPORTS TOGETHER	WPS E308/83670	2	N/A		VLT	7-30-80				
			WPS E309/83670	4	N/A		VLT	7-30-80				
			WPS E7018/83670	6	N/A		VLT	7-30-80				
	3	ALL TEMPORARY ATTACHMENT WELDS	WPS E308, 83670	2	N/A		VLT	8-17-80				
			WPS E309/83670	4	N/A		VLT	7-30-80				
			WPS E7018/83670	6	N/A		VLT	7-30-80				
		THIS DETAIL CHECK LIST HAS BEEN REVIEWED WITH THE PROJECT FOREMAN.	N/A		N/A		VLT	4/17/80				

1 OF 1

26

1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

L L Hudson 4-15-80

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY	CHKD BY	REVISIONS					CONTRACT NO.	SHEET
LLH	JMM	MADE					83674	D8
DATE 3-27-80	DATE 3-27-80	CHKD						
		DATE						

GE 682 REV APR 76

INSTRUCTIC 4 RPV WALL
VT ATTACHMENTS TO EMBEDMENTS OR LINER PLATES, MT AND VT WELDS OF COMPONENT SUPPORTS TC EMBEDMENTS, AND REPAIR DEFECTS FOUND.

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTC BEFORE USE PER NA3211
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		ON RPV WALL										
		VT ATTACHMENTS TO EMBED-										
		MENTS OR LINER PLATES. MT										
		AND VT WELDS OF COMPONENT										
		SUPPORTS TC EMBEDMENTS, AND	Folder 7.4 #6									
		REPAIR DEFECTS FOUND.	Folder 7.10									
		AT THE FOLLOWING EMBEDMENTS:										
		AT ELEV. 712'-0 OR 710'-9										
		APPROX. AZIMUTH										
		16°	VT 5	0	N/A		VCT	7/9/80				
		31°	VT 5	0	N/A		VCT	7/9/80				
		64°	VT 5	0	N/A		VCT	7/9/80				
		94°	VT 5	0	N/A		VCT	7/9/80				
		122°	VT 5	0	N/A		VCT	7/9/80				
		170°	VT 5	0	N/A		VCT	7/9/80				
		189°	VT 5	0	N/A		VCT	7/9/80				
		237°	VT 5	0	N/A		VCT	7/9/80				
		259°	VT 5	0	N/A		VCT	7/9/80				
		280°	VT 5	0	N/A		VCT	7/9/80				
		302°	VT 5	0	N/A		VCT	7/9/80				
		350°	VT 5	0	N/A		VCT	7/9/80				
												1 OF 1
		AT ELEV. 697'-1										
		APPROX. AZIMUTH										Line No. 22
												Folder No. 1
		18°	MT 13 Rev. 3, VT 5	0	N/A		VCT	7/9/80				
		54°	MT 13 Rev. 3 VT 5	0	N/A		VCT	7/9/80				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE	MADE BY	CHKD BY	REVISIONS	MADE		CONTRACT NO.	
L L Hudson 6/2/80	JMM	LLH		CHKD		83674	SHEET D9
Certified by / Date	DATE 5/20/80	DATE 5/22/80		DATE			
UPDATED BY _____ REV. ____ DATE _____							

GE 682 REV APR 76

INSTRUCTI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTI
BEFORE USE PER NA-5741
INITIALS _____ DATE _____

SAME AS D9

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		102°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		138°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		174°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		222°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		258°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		294°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		318°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		346°	MT13 Rev.3, UT5	0	N/A		UCT	7/9/80				
		AT ELEV. 687'-7 1/2 OR										
		ELEV. 686'-4 1/2										
		APPROX. AZIMUTH										
		16°	UT5	0	N/A		UCT	8/13/80				
		31°	UT5	0	N/A		UCT	8/13/80				
		64°	UT5	0	N/A		UCT	8/13/80				
		94°	UT5	0	N/A		UCT	8/13/80				
		122°	UT5	0	N/A		UCT	8/13/80				
		170°	UT5	0	N/A		UCT	8/13/80				
		189°	UT5	0	N/A		UCT	8/13/80				
		237°	UT5	0	N/A		UCT	8/13/80				
		259°	UT5	0	N/A		UCT	8/13/80				
		280°	UT5	0	N/A		UCT	8/13/80				
		302°	UT5	0	N/A		UCT	8/13/80				
		350°	UT5	0	N/A		UCT	8/13/80				

1 OF 1

Line No. 23
Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
L L Hudson 6/2/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY JMM — DATE 5/20/80
CHKD BY LLH — DATE 5/22/80

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83674

SHEET D94

GE 682 REV APR 75

INSTRUCTIC

ON RPV WALL VT ALL JOINTS IN LINER PLATE AND REPAIR DEFECTS FOUND.

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTC BEFORE USE PER NA-3241~~

~~INITIALS _____ DATE _____~~

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.	PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		VT ALL JOINTS IN LINER PLATE									
		AND REPAIR DEFECTS FOUND.									
			Folder 710 #2								
		AT THE FOLLOWING AZIMUTH AND									
		ELEVATIONS ON THE REACTOR									
		SUPPORT SIDE ONLY:									
		350° 25' ELEV. 712'-0	VT 5	0	N/A	VLT	7/9/80				
		280° 38' ELEV. 712'-0	VT 5	0	N/A	VLT	7/9/80				
		259° 22' ELEV. 712'-0	VT 5	0	N/A	VLT	7/9/80				
		189° 35' ELEV. 712'-0	VT 5	0	N/A	VLT	7/9/80				
		170° 25' ELEV. 712'-0	VT 5	0	N/A	VLT	7/9/80				
		94° 34' ELEV. 712'-0	VT 5	0	N/A	VLT	7/9/80				
		16° 40' ELEV. 712'-0	VT 5	0	N/A	VLT	7/9/80				
		302° 28' ELEV. 710'-9	VT 5	0	N/A	VLT	7/9/80				
		237° 31' ELEV. 710'-9	VT 5	0	N/A	VLT	7/9/80				
		122° 28' ELEV. 710'-9	VT 5	0	N/A	VLT	7/9/80				
		64° 40' ELEV. 710'-9	VT 5	0	N/A	VLT	7/9/80				
		31° 20' ELEV. 710'-9	VT 5	0	N/A	VLT	7/9/80				
		346° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		318° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		294° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		258° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		222° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		174° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		138° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		102° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				
		54° ELEV. 697'-1	VT 5	0	N/A	VLT	7/8/80				

1 OF 1

Line No. 64

Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

L L Hudson 6/2/80

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY JMM DATE 5/20/80

CHKD BY LLH DATE 5/22/80

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83674

SHEET D10

GE 682 REV APR 76

INSTRUCTIC

SAME AS D10

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTO
BEFORE USE PER NA-5211
INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.	PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE
		18° ELEV. 697'-1	UT 5	0	N/A	ULT	7/8/80		
		350° 25' ELEV. 687'-7 1/2	UT 5	0	N/A	ULT	8/12/80		
		280° 38' ELEV. 687'-7 1/2	UT 5	0	N/A	ULT	8/13/80		
		259° 22' ELEV. 687'-7 1/2	UT 5	0	N/A	ULT	8/13/80		
		189° 35' ELEV. 687'-7 1/2	UT 5	0	N/A	ULT	8/13/80		
		170° 25' ELEV. 687'-7 1/2	UT 5	0	N/A	ULT	8/13/80		
		94° 34' ELEV. 687'-7 1/2	UT 5	0	N/A	ULT	8/13/80		
		16° 40' ELEV. 687'-7 1/2	UT 5	0	N/A	ULT	8/13/80		
		302° 28' ELEV. 686'-4 1/2	UT 5	0	N/A	ULT	8/13/80		
		237° 31' ELEV. 686'-4 1/2	UT 5	0	N/A	ULT	8/13/80		
		122° 28' ELEV. 686'-4 1/2	UT 5	0	N/A	ULT	8/13/80		
		64° 40' ELEV. 686'-4 1/2	UT 5	0	N/A	ULT	8/13/80		
		31° 20' ELEV. 686'-4 1/2	UT 5	0	N/A	ULT	8/13/80		
		THIS DETAILED CHECK LIST HAS BEEN REVIEWED WITH THE PROJECT FOREMAN.	N/A		N/A	ULT	6/4/80		

1 OF 1

Line No. 25
Folder No. 1

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
L L Hudson 6/2/80
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

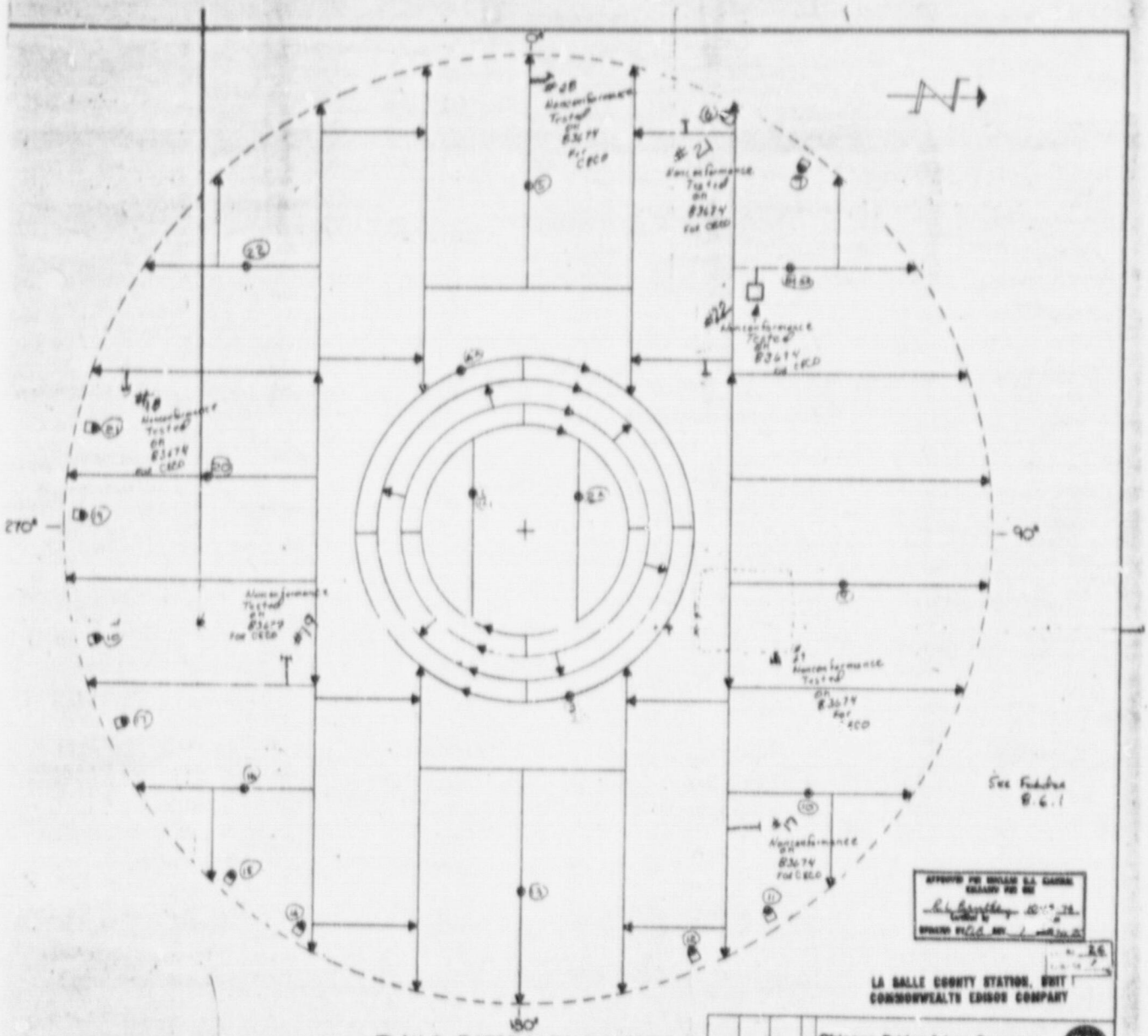
MADE BY JMM — DATE 5/20/80
CHKD BY LLH — DATE 5/22/80

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83674

SHEET D10A

GE 682 REV APR 76



PLAN OF BOTTOM LEAK CHASE

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

LA SALLE COUNTY STATION, UNIT 1
COMMONWEALTH EDISON COMPANY

Chicago Bridge & Iron Company CBI

RECORD DRAWING FOR LEAK CHASE TESTING OF THE BTM SUPPRESSION CHAMBER

Contract No. 160496

NUCLEAR RECORD INDEX

Document Number	Number of Pages	DESCRIPTION	
		Record Drawing No.	
1	1	R-0, Rev.1.	"Record drawing for field notes and keys."
2	1	R-1, Rev.1.	"Instructions for completing record drawings and record drawing tables."
3	1	R-2, Rev.1.	"Record drawing for RPV support wall embedments."
4	2		"Record drawing table index sheets, 1 & 2. covering record drawings R-28, thru R-48.
5	4	R-28, Rev.2.	
6	4	R-29, Rev.2.	
7	5	R-30, Rev.1.	
8	4	R-31, Rev.2.	
9	4	R-32, Rev.1.	
10	4	R-33, Rev.1.	
11	4	R-34, Rev.1.	"Includes record drawing tables
12	4	R-35, Rev.1.	(for exact embedment closure
13	4	R-36, Rev.1.	azmuths and elevations
14	4	R-37, Rev.1.	see record drawing table index)"
15	4	R-38, Rev.2.	
16	4	R-39, Rev.1.	
17	4	R-40, Rev.1.	
18	4	R-41, Rev.1.	
19	4	R-42, Rev.1.	
20	4	R-43, Rev.1.	

12-2-80

Darlene Trulb

CCC
Office Code

8.5
Classification

Page 1 of 2

83674
Project No.

Folder 2 of 9

Vol 1

Welding Procedure Key

E381	WPS E308/83670 Rev.1	
E394	WPS E309/83670 Rev.4	
GR10	GR 10 Rev. 23	
E395	WPS E309/83670 Rev. 5	6-20-80
E382	WPS E308/83670 Rev. 2	6-3-80

INSTRUCTIONS:

1. JOBSITE Q.A. SHALL COMPLETE THIS DWG. AS NECESSARY TO RECORD MISCELLANEOUS CROSS REFERENCES FOR KEYS, CODES, LEGENDS, ETC. USED BY JOBSITE QA IN COMPLETING RECORD DRAWINGS AND RECORD DWG. TABLES.
   I.E. CODE FOR WELDING PROCEDURE NUMBER USED IN COMPLETING RECORD DWG. TABLE WHEN USED IN LIEU OF FILLING IN ACTUAL PROCEDURE NUMBER IN TABLE.

LA SALLE COUNTY STATION, UNIT 1 & 2
COMMONWEALTH EDISON COMPANY

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
L.L. Hudson 4-21-80
Certified by Date
UPDATED BY ____ REV ____ DATE ____

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Rev	Chkd	Date	Rev	Chkd	Date	Rev	Chkd	Date	Revisions
						1	WP JMM	6-16-80	ADDED UNIT #2 TO NOTE

Chicago Bridge & Iron Company CBI

RECORD DWG. FOR FIELD NOTES AND KEYS

Sheet 1 of 1
Folder 2

Purchaser's No.
By RLS Chkd. JMM Date 4-8-80
L.L. HUDSON
Engineering Coordinator

Contract No. 83674
Dwg. R-0 Rev. 1

THIS DRAWING IS THE PROPERTY OF CHICAGO BRIDGE & IRON COMPANY AND IS TO BE USED ONLY IN CONNECTION WITH PERFORMANCE OF WORK BY THE CHICAGO BRIDGE & IRON COMPANY. REPRODUCTION IN WHOLE OR IN PART FOR ANY OTHER PURPOSE IS EXPRESSLY FORBIDDEN.

1.0 NOTES:

1.1 JOBSITE QA SHALL COMPLETE RECORD OF SIGNS AND RECORD DRAWING TABLES AS EXPLAINED IN THE FOLLOWING NOTES. ADDITIONAL NOTES MAY BE FOUND ON INDIVIDUAL RECORD DRAWINGS.

1.2 JOBSITE Q.A. SHALL USE ONLY LETTERING SIZE OF 1/8 INCH IN HEIGHT WHEN FILLING IN RECORD DRAWING AND RECORD DRAWING TABLE.

1.3 COLUMN HEADING NUMBERS FROM THE RECORD DRAWING TABLE ARE GIVEN IN PARENTHESIS UNDER INSTRUCTIONS FOR COMPLETING RECORD DRAWING TABLES.

1.4 THE PERSON PERFORMING THE CHECK OF THE COMPLETED JOINT SHALL ENTER KEY INITIALS IN COLUMN 3 OF THE RECORD DRAWING TABLE. INITIALS OF THE PERSON PERFORMING THE FIT UP, WELDING, AND FINISHED JOINT CHECK SHALL BE ENTERED IN COLUMNS 2, 4 AND 5 OF THE RECORD DRAWING TABLE, BUT THE INITIALS MAY BE ENTERED BY SOMEONE OTHER THAN THE PERSON ACTUALLY MAKING THE CHECK PROVIDED THE INITIALS OF THE SECOND PARTY MAY ALSO ENTERED.

2.0 INSTRUCTIONS FOR COMPLETING RECORD DRAWINGS:

2.1 RECORD FOR JOINTS SHOWN AS SOLID LINES TO BE KEPT ON THE ORIGINAL DRAWING SOLID LINES. JOINTS REPRESENTED BY DOTTED LINES WILL BE RECORDED ON OTHER DRAWINGS (EXCEPT WHERE THE FIELD IS INSTRUCTED TO MAKE DOTTED LINES SOLID PER 2.1.1.)

2.1.1 ON FINAL VESSEL SECTION RECORD DRAWINGS CONTAINING DRAWING ASSEMBLIES, RECORD THE FINAL LOCATIONS OF DRAWING ASSEMBLIES BY MAKING THE APPROPRIATE DOTTED LINES SOLID TO LOCATE THE DIFFICULT TEAMS AND SHOW THE APPLICABLE ASSEMBLY SERIAL NUMBERS.

2.2 IDENTIFY EACH JOINT ON THE SKETCH AND INDICATE ON THE RECORD DRAWING, APPLICABLE RECORD DRAWING TABLE SHEET NUMBER WHERE THE JOINT IS DOCUMENTED. APPLICABLE SHEET NUMBER TO BE INDICATED BY PARENTHESIS BEHIND THE JOINT I.D. i.e. 6016(WHILE INDICATE JOINT AS DOCUMENTED ON RECORD DRAWING TABLE SHEET NUMBER 4.

2.3 RECORD ON THE SKETCH THE FIXED HR ASSEMBLY NAME AND SERIAL NUMBER (IF ANY) OF EACH ITEM OR ASSEMBLY SHOWN.

2.4 RECORD ON THE SKETCH THE WELDER'S ID ON EACH JOINT.

2.5 FOR TANK KC, RECORD THE FIRST AND LAST BT INTERNAL NUMBER ON EACH JOINT. ON EDITH JOINTS THE DIRECTION OF DIMENSIONS MUST BE SHOWN WITH AN ARROW.

2.6 RECORD DRAWING NO SHALL BE COMPLETED AS NECESSARY TO RECORD MISCELLANEOUS CROSS REFERENCES FOR KEYS, CODES, LEGEND, ETC. USED BY JOBSITE QA IN COMPLETING RECORD DRAWING.

3.0 INSTRUCTIONS FOR COMPLETING RECORD DRAWING TABLES: (FROM LAST SHEET 2)

(1) 3.1 ENTER JOINT I.D. IN THE FIRST COLUMN OF THE TABLE CORRESPONDING TO JOINT I.D. ENTERED ON RECORD DRAWING SKETCH PER 2.2.

(2) 3.2 CHECK OFF IN COLUMN 2 AFTER MATERIAL ID HAS BEEN RECORDED ON RECORD DRAWING SKETCH PER 2.3.

(3) 3.3 CHECK OFF IN COLUMN 2 AFTER JOINT ID IS RECORDED ON RECORD DRAWING SKETCH PER 2.2.

(3) 3.4 CHECK OFF IN COLUMN 2 AFTER WELDER ID IS RECORDED ON RECORD DRAWING SKETCH PER 2.4.

(3) 3.5 CHECK OFF IN COLUMN 2 AFTER BT INTERNALS HAVE BEEN RECORDED ON RECORD DRAWING SKETCH PER 2.5.

(3) 3.6 DATE AND INITIAL IN COLUMN 3 PER 1.4 AFTER FIT UP CHECKED AND BEEN COMPLETED.

(4) 3.7 RECORD THE WELDING PROCEDURE THAT WAS USED IN COLUMN 4

3.7.1 A TABLE OF WELDING PROCEDURES WITH A COMPLETED CODE FOR EACH PROCEDURE MAY BE ADDED TO RECORD DRAWING NO PER 2.6. ...ed LIST IN THE COLUMN PROVIDED.

(5) 3.8 DATE AND INITIAL IN COLUMN 5 PER 1.4 AFTER WELDING CHECKED AND FINISHED JOINT CHECKED AND BEEN COMPLETED.

(6) 3.9 PROCEED IN / / HRS HEADING COLUMNS 6a, 6b, 6c, 6d, 6e, 6f. (CONTINUED HRS PROCEDURES INCLUDING REPAIRS TO BE USED.

3.9.1 A TABLE OF HRS PROCEDURES, WITH A COMPLETED CODE FOR EACH PROCEDURE MAY BE ADDED TO RECORD DRAWING NO PER 2.6 AND USED IN THE COLUMN PROVIDED.

3.9.2 WHEN ONE OF THE JOINT TO COMPLETE, RECORD THE DATE AND INITIAL UNDER "JOINT HRS RESULTS EVALUATED AND ACCEPTED".

(7) 3.10 LIST THE NDE REPORT ID UNDER COLUMNS 7a, 7b, AND 7c "NDE REPORT ID".

3.10.1 THE NDE REPORT SHOWS TRACEABLE ID, OPERATOR IDENTIFICATION, RESULTS OF COMPLETION, REPAIRS, AND ACCEPTANCE OF CORRECTION. THE REPORT OF RADIOGRAPHY CONTRACTOR ALSO INFORMATE REPAIRS DUE TO BT CONNECTION.

(8) 3.11 UNDER COLUMN 8, LIST APPLICABLE NONCONFORMANCE CONTROL LIST
(9) ITEM NUMBERS. WHEN THE REPAIRS ARE COMPLETE, ENTER THE DATE AND INITIAL UNDER COLUMN 9 PER 1.4.

3.11.1 MAKE A RECORD ENTRY IN THE TABLE FOR JOINTS WHICH REQUIRE REPAIR AS A RESULT OF UNACCEPTABLE DEFECTS FOUND BY NT. MAKE A NEW ENTRY FOR EACH REPAIR AFTER THE FIRST REPAIR (NP, R1, ETC.). DOCUMENT THE
(8) REPAIR NPT, CHECKING OF REPAIR WELDING, REPAIR
(9) (7) PROCEDURE REFERENCE, AND TIMEPT FOR CONFIRMATION
(9) OF THE REPAIR (WITH CONFIRMATION IS RE-QUIRED) IN THE NEW COLUMN DATE AND ENTER THE "COMPLETE" COLUMN PER 1.4 TO INDICATE THE REPAIRS WERE COMPLETED IN ACCORDANCE WITH THE REPAIR PROCEDURE.

(10) 3.12 DATE AND INITIAL COLUMN 2 PER 1.4 AFTER ALL INSPECTIONS HAVE BEEN COMPLETED AND ACCEPTED.

(10) 3.13 COLUMN 10 (BLANK) IS PROVIDED FOR LATER REVISIONS OR ADDITIONS.

3.14 JOBSITE QA SHALL NUMBER EACH SHEET OF THE RECORD DRAWING TABLES, AND INDEX EACH SHEET ON RECORD DRAWING INDEX SHEET (S. (FORM RD01 INDEX). THE JOINTS SHOWN ON THE RECORD DRAWING SKETCHES ARE TO BE CLEARLY REFERENCED TO THE RECORD DRAWING TABLE PER 2.2.

3.15 DATE AND INITIALS ENTERED PER 1.4 AND 10.0 UPON COMPLETION OF AN INSPECTION, AND DATE 15 TO BE THE DATE CLOSED OFF. TEMPORARY RECORDS (ETC. SUPPLIES DETAIL TEMPORARY, AND IT IS PERMITTED ALL TO PERFORM AND REPORT COMPLETING FINISHED JOINT CHECKED PER 3.0, IF NECESSARY.

Special Notes
1. Welds R-05 & 1 To Be Used For Both Units 1 & 2
2. Welds R-98 Thru R-99 Are For Unit 1
3. Welds R-108 Thru R-109 Are For Unit 2

Welding Procedure Key
[illegible] WPS E308/E7018 Rev 1
[illegible] WPS E309/E7018 Rev 4
GE 10 GE 10 Rev 23
E312 WPS E309/E7018 Rev 5

LA SALLE COUNTY STATION, UNIT 1 & 2
COMMONWEALTH EDISON COMPANY

APPROVED PER NUCLEAR Q.A. MANUAL
RELEASED FOR USE
[illegible] 4-21-80
Date

OPERATED BY ___ BY ___ DATE ___

Chicago Bridge & Iron Company

INSTRUCTIONS FOR COMPLETING RECORD DRAWINGS AND RECORD DRAWING TABLES

JOB NO. [illegible] DATE 4-9-80 Scale NONE
Drawing No. RRG78
Rev. 1

▶ INDICATES CHANGE FROM PREVIOUS ISSUE

Indicates revision from previous issue

FORM 20 C-03

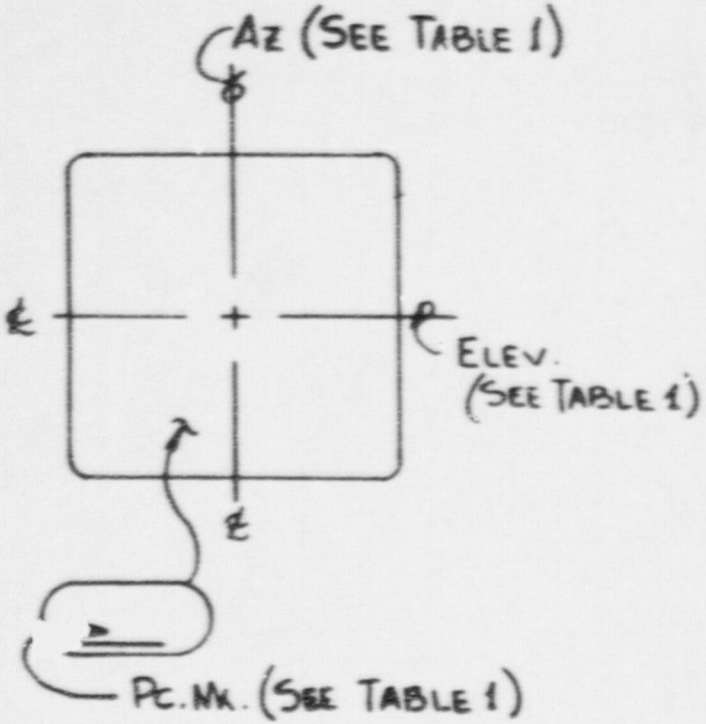


TABLE 1

PC. MK.	AZ.	ELEV.	PC. MK.	AZ	ELEV
8B-8-	16° 40'	712'-0	8B-13-	170° 25'	687'-7½
8B-7-	31° 20'	710'-9	8B-12-	189° 35'	687'-7½
8B-6-	64° 40'	710'-9	6C^{R}-6	237° 31'	686'-4½
6A-4-	94° 34'	712'-0	8B-11-	259° 22	687'-7½
6A-9-	122° 28'	710'-9	8B-10-	280° 38'	687'-7½
8B-5-	170° 25'	712'-0	6C-5-^{L}	302° 28'	686'-
8B-4-	189° 35'	712'-0	8B-9-	350° 25'	687'-7½
6C-2^{B}	237° 31'	710'-9	6B-10-	18°	697'-1
8B-3-	259° 22'	712'-0	6B-9	54°	
8B-2-	280° 38'	712'-0	6B-8	102°	
6C-1^{L}	302° 28'	710'-9	6B-7-	138°	
8B-1-	350° 25'	712'-0	6B-6-	174°	
8B-16-	16° 40'	687'-7½	6B-5-	222°	
8B-15-	31° 20'	686'-4½	6B-4-	258°	
8B-14-	64° 40'	686'-4½	6B-3-	294°	
6A-8-	94° 34'	687'-7½	6B-2-	318°	
6A-7-	122° 28'	686'-4½	6B-1-	346°	697

APPROVED FOR BIDDING E.L.A. DIVISION
APPROVED FOR USE
Engineer Hudson 6/26/80

Dr.		
Chkd.		
Date		
Dr.	JMM	REDRAWN
Chkd.	MD	
Date	4-28-80	
Revisions		Remarks

Chicago Bridge & Iron Company

RECORD DWG. FOR RPV SUPPORT WALL EMBEDMENTS

By RLS Chkd. JMM Date 4·7·80

L.L. HUDSON

Construction Supervisor

Contract No. B36-14

Dwg. R-2 Rev. 1

Line No. 3
Folder No. 2
1 of 1

Line No.
Folder No.

CBI

RECORD DRAWING TABLE INDEX

RECORD DWG TABLE SHT NO	APPLICABLE RECORD DWG	REV	REMARKS
1,2,3,	R-28	2	AZ 281°. Elev. 697-1. H's 140,191,113,70,160, 277,155,128. A.B.C.D.E.F.J.K.L.M.N.
1,2,3,	R-29	2	AZ 329°. Elev. 697-1. H's 82,67,135,274,88, 119,137,172. A.B.C.D.E.F.J.K.L.M.N.
1,2,3,4	R-30	1	AZ 180°. Elev. 706-10½ H's 143,63,121,139,236, 35,112,134,206,111, A.B.C.D.E.F.J.K.L.M.N.
1.2,3,	R-31	2	AZ 179°, Elev. 687-7½. H's 270,163,226,73,220, 180,215,229. A.B.C.D.E.F.J.K.L.M.N.
1,2,3,	R-32	1	AZ 15°-17' Elev.706-10½ H's 83,49,89,12, A.B.C.D.E.F.J.K.L.M.N.
1,2,3,	R-33	1	AZ 57°-20' Elev.706-10½ H's 77,42,96,50. A.B.C.D.E.F.J.K.L.M.N.
1.2,3.	R-34	1	AZ 77°-40' Elev.706-10½ H's 19,31,84,86. A.B.C.D.E.F.J.K.L.M.N.
1,2,3,	R-35	1	AZ 90°-20' Elev. 708-1½ H's 32,44,93,8. A.B.C.D.E.F.J.K.L.M.N.

RECORD DWG TABLE SHT NO	APPLICABLE RECORD DWG	REV	REMARKS
1.2.3.	R-36	1	AZ 15°-17' Elev.686-4½ H's 175,78,76,146. A.B.C.D.E.F.J.K.L.M.N.
1,2,3,	R-37	1	AZ 7°. Elev. 697-1. H's 141,158,72,148,150, 227. A.B.C.D.E.F.J.K.L.M.
1.2.3.	R-38	2	AZ 31°. Elev. 697-1. H's 85,36,90,30,11,52, 39,79. A.B.C.D.E.F.J.K.L.M.N.
1.2.3.	R-39	1	AZ 55°. Elev. 697-1. H's 216,142,165,154, 147,276. A.B.C.D.E.F.J.K.L.M.N.
1.2.3.	R-40	1	AZ 77°. Elev. 697-1. H's 239,138,105,127,130 190, A.B.C.D.E.F.J.K.L.M.N.
1.2.3.	R-41	1	AZ 103°. Elev. 697-1. H's 136,201,253,189 97 269. A.B.C.D.E.F.J.K.L.M.N.
1.2.3.	R-42	1	AZ 127°. Elev. 697-1. H's 254,194,234,114,65, 176. A.B.C.D.E.F.J.K.L.M.N.
1.2.3.	R-43	1	AZ 151°. Elev. 697-1. H's 262,195,272,186,123 200. A.B.C.D.E.F.J.K.L.M.N.

Embedment Closures for Contract # 83674 Unit 1.

SHEET One

Line No. 4
Folder No. 2

1 of 9

CBI

RECORD DRAWING TABLE INDEX

RECORD DWG TABLE SHT NO	APPLICABLE RECORD DWG	REV	REMARKS	RECORD DWG TABLE SHT NO	APPLICABLE RECORD DWG	REV	REMARKS
1.2.3.	R-44	1	AZ 42°-20' El. 686-4½ H's 167,117,126,116.				
			A.B.C.D.E.F.J.K.L.M.N.				
1.2.3.	R-45	1	AZ 57°-20' El. 687-7½ H's 151,164,115,207.				
			A.B.C.D.E.F.J.K.L.M.N.				
1.2.3.	R-46	1	AZ 77°-40' El. 686-4½ H's 264,218,192,3.				
			A.B.C.D.E.F.J.K.L.M.N.				
1.2.3.	R-47	1	AZ 90°-20' El. 687-7½ H's 80,110,2.71.				
			A.B.C.D.E.F.J.K.L.M.N.				
1.2.3.	R-48	1	AZ 122°-40' El. 687-7½ H's 193,258,271,240.				
			A.B.C.D.E.F.J.K.L.M.N.				

Embedment Closures for Contract # 83674 Unit 1.

SHEET Two

FORM # RDT REV.

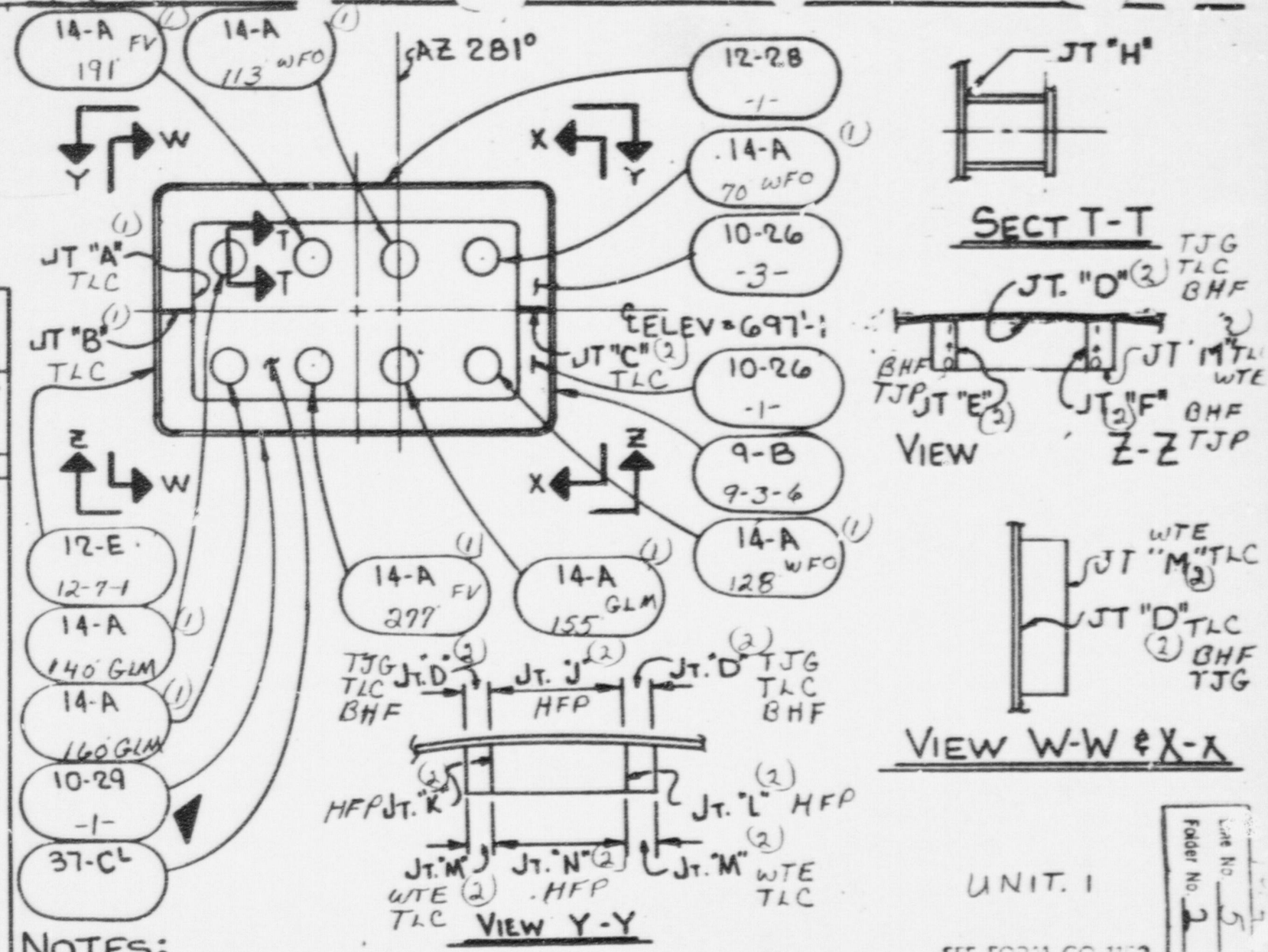
Line No. 4

Folder No. 2

e UFB

Indicates revision from previous issue

FORM ED 2W-2



NOTES:

1. WORK THIS DWG. WITH CONTRACT DWG. 24
2. SEE DWG. R-1 FOR INSTRUCTIONS.

UNIT. 1

SEE FORM GO-1102 OF FOLDER 0.10 FOR ATTACHMENT WELDERS

Line No. 5
Folder No. 2

Revisions	By	Chkd	Date	Remarks
2	JMM	LLH	6-6-80	CHG'D. PL. NK 10-21 TO 10-29
1	WLP	JMM	5-15-80	REV AS NOTED

APPROVED FOR CONSTRUCTION U.S. NUCLEAR REGULATORY COMMISSION
RELEASED FOR USE 4/21/80
Engineering Supervisor 6/6/80

Chicago Bridge & Iron Company (CBI)

RECORD DWG. FOR EMBEDMENT CLOSURE DETAILS

By RLS Chkd JMM Date 4-7-80
L. L. HUDSON
Engineering Supervisor

Contract No. B3674
Dwg. R-28 Rev. 2

CBI

RECORD DRAWING TABLE

1	2				3	4	5	6A	7A	6B	7B	6C	7C	8	9	10
JOINT IDENTIFICATION * = SERIAL NO. OF 14A ASSY	RECORD ON DWG: JOINT ID	WELDER ID	MATERIAL ID	RT INTERVALS	WELDING: FIT-UP CHECKED / DATE AND INITIAL	RECORD WELDING PROCEDURE SPEC USED AND REPAIR PROCEDURE USED	WELDING CHECKED FINISHED JOINT CHECKED / DATE AND INITIAL	PT: NDE PROCEDURE PT 1C, REV 4, RESULTS EVALUATED AND ACCEPTED / DATE AND INITIAL	NDE REPORT ID	VB: NDE PROCEDURE VB 3X, REV 1, RESULTS EVALUATED AND ACCEPTED / DATE AND INITIAL	NDE REPORT ID	RT: NDE PROCEDURE RT 2X, REV 1, RESULTS EVALUATED AND ACCEPTED / DATE AND INITIAL	NDE REPORT ID	NONCONFORMANCE CONTROL LIST ITEM NUMBER	COMPLETE: NONCONFORMANCES CORRECTED, CHECKS AND EXAMINATIONS OF JOINT COMPLETED AND ACCEPTED / DATE AND INITIAL	
* H-140	✓✓✓				6-2-80 CWW JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
* H-191	✓✓✓				6-11-80 CWW JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
* H-113	✓✓✓				6-2-80 CWW JSM	E 394	6-11-[illegible] CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
* H-70	✓✓✓				6-2-80 CWW JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
* H-160	✓✓✓				6-2-80 CWW JSM	E 394	[illegible]-80 CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
* H 277	✓✓✓				6-11-80 CWW JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
* H-155	✓✓✓				6-2-80 CWW JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
* H-128	✓✓✓				6-2-80 CWW JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
A	✓✓✓				5-19-80 VLT JSM	E 394	5-19-80 VLT JSM	5-19-80 VLT JSM	1/36	5-20-80 VLT JSM	1/20	N/A		N/A	5-27-80 VLT	Line No. 5 Folder No. 2
B	✓✓✓				5-16-80 VLT JSM	E 394	5-19-80 VLT JSM	5-19-80 VLT JSM	1/36	5-20-80 VLT JSM	1/20	N/A		N/A	5-27-80 VLT	

EMBEDMENT CLOSURE AT AZ 281° AND ELEVATION 697'-1

Unit 1. REV. 2

REFER TO RECORD DRAWING NO. R 28

CONTRACT NO. 83674

SHEET 1

CBI

RECORD DRAWING TABLE

1	2				3	4	5	6A	7A	6B	7B	6C	7C	8	9	10
JOINT IDENTIFICATION	RECORD ON DWG: JOINT ID	WELDER ID	MATERIAL ID	RT INTERVALS	WELDING: FIT-UP CHECKED — DATE AND INITIAL	RECORD WELDING PROCEDURE SPEC USED AND REPAIR PROCEDURE USED	WELDING CHECKED FINISHED JOINT CHECKED — DATE AND INITIAL	PT: NDE PROCEDURE MT-5, REV 4, RESULTS EVALUATED AND ACCEPTED — DATE AND INITIAL	NDE REPORT ID	VB: NDE PROCEDURE VB-28, REV 1, RESULTS EVALUATED AND ACCEPTED — DATE AND INITIAL	NDE REPORT ID	RT: NDE PROCEDURE RT-8X, REV 1, RESULTS EVALUATED AND ACCEPTED — DATE AND INITIAL	NDE REPORT ID	NONCONFORMANCE CONTROL LIST ITEM NUMBER	COMPLETE: NONCONFORMANCES CORRECTED, CHECKS AND EXAMINATIONS OF JOINT COMPLETED AND ACCEPTED — DATE AND INITIAL	
C	✓	✓	✓		5-16-80 VLT JSM	E 394	5-19-80 VLT JSM	5-19-80 VLT JSM	1/36	5-20-80 VLT JSM	1/20	N/A		N/A	5-27-80 VLT	
D	✓	✓	✓		5-12-80 WFH JSM	E 381	5-15-80 DLP JSM	5-15-80 VLT JSM	1/20	5-20-80 VLT JSM	1/20	N/A		N/A	5-27-80 VLT	
E	✓	✓	✓	✓	5-8-80 VLT JSM	E 381	5-8-80 VLT JSM	5-9-80 VLT JSM	1/12	5-9-80 VLT JSM	1/10	5-16-80 VLT JSM	1/1	N/A	5-27-80 VLT	
F	✓	✓	✓	✓	5-8-80 VLT JSM	E 381	5-8-80 VLT JSM	5-11-80 VLT JSM	1/13	5-9-80 VLT JSM	1/10	5-16-80 VLT JSM	1/1	N/A	5-27-80 VLT	
J	✓	✓	✓		6-4-80 DLP JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/8	6-11-80 VLT JSM	1/59	N/A		N/A	6-16-80 VLT	
K	✓	✓	✓		6-4-80 DLP JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/8	6-11-80 VLT JSM	1/59	N/A		N/A	6-16-80 VLT	
L	✓	✓	✓		6-4-80 DLP JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/8	6-11-80 VLT JSM	1/59	N/A		N/A	6-16-80 VLT	
M	✓	✓	✓		5-16-80 VLT JSM	E 394	5-19-80 VLT JSM	5-19-80 VLT JSM	1/36	5-20-80 VLT JSM	1/20			N/A	5-27-80 VLT	
N	✓	✓	✓		6-4-80 DLP JSM	E 394	6-11-80 CWW JSM	6-11-80 VLT JSM	2/8	6-11-80 VLT JSM	1/59			N/A	6-16-80 VLT	

EMBEDMENT CLOSURE AT AZ 281° AND ELEVATION 691'-1

Unit 1.

REFER TO RECORD DRAWING NO. K28 REV 2

CONTRACT NO. 83674

SHEET 2

Line No. 5 Folder No. 2

3 of 4

FORM 1-AS REV 0

CBI

RECORD DRAWING TABLE

1	2				3	4	5	6A	7A	6B	7B	6C	7C	8	9	10
JOINT IDENTIFICATION	RECORD ON DWG: JOINT ID	WELDER ID	MATERIAL ID	RT INTERVALS	WELDING: FIT-UP CHECKED; DATE AND INITIAL	RECORD WELDING PROCEDURE SPEC USED AND REPAIR PROCEDURE USED	WELDING CHECKED FINISHED JOINT CHECKED; DATE AND INITIAL	PT; NDE PROCEDURE PT 10; REV 4; RESULTS EVALUATED AND ACCEPTED; DATE AND INITIAL	NDE REPORT ID	VB; NDE PROCEDURE VB 3X; REV 1; RESULTS EVALUATED AND ACCEPTED; DATE AND INITIAL	NDE REPORT ID	APT; NDE PROCEDURE LC 5X; REV 2; RESULTS EVALUATED AND ACCEPTED; DATE AND INITIAL	NDE REPORT ID	NONCONFORMANCE CONTROL LIST ITEM NUMBER	COMPLETE: NONCONFORMANCES CORRECTED, CHECKS AND EXAMINATIONS OF JOINT COMPLETED AND ACCEPTED; DATE AND INITIAL	
LEAK CHASE TO EMBED	N/A				N/A	N/A	N/A	N/A		N/A		6-13-80 VLT JSM	2/4	N/A	6-18-80 VLT	
BOLT CAPS Leak Chase TO EMBED	N/A				N/A	N/A	N/A	N/A		N/A		6-17-80 VLT JSM	2/4	N/A	6-18-80 VLT	

EMBEDMENT CLOSURE AZ-281°
ELEVATION 699-1

REFER TO RECORD DRAWING NO. R-28 REV. 2

CONTRACT NO. 83674

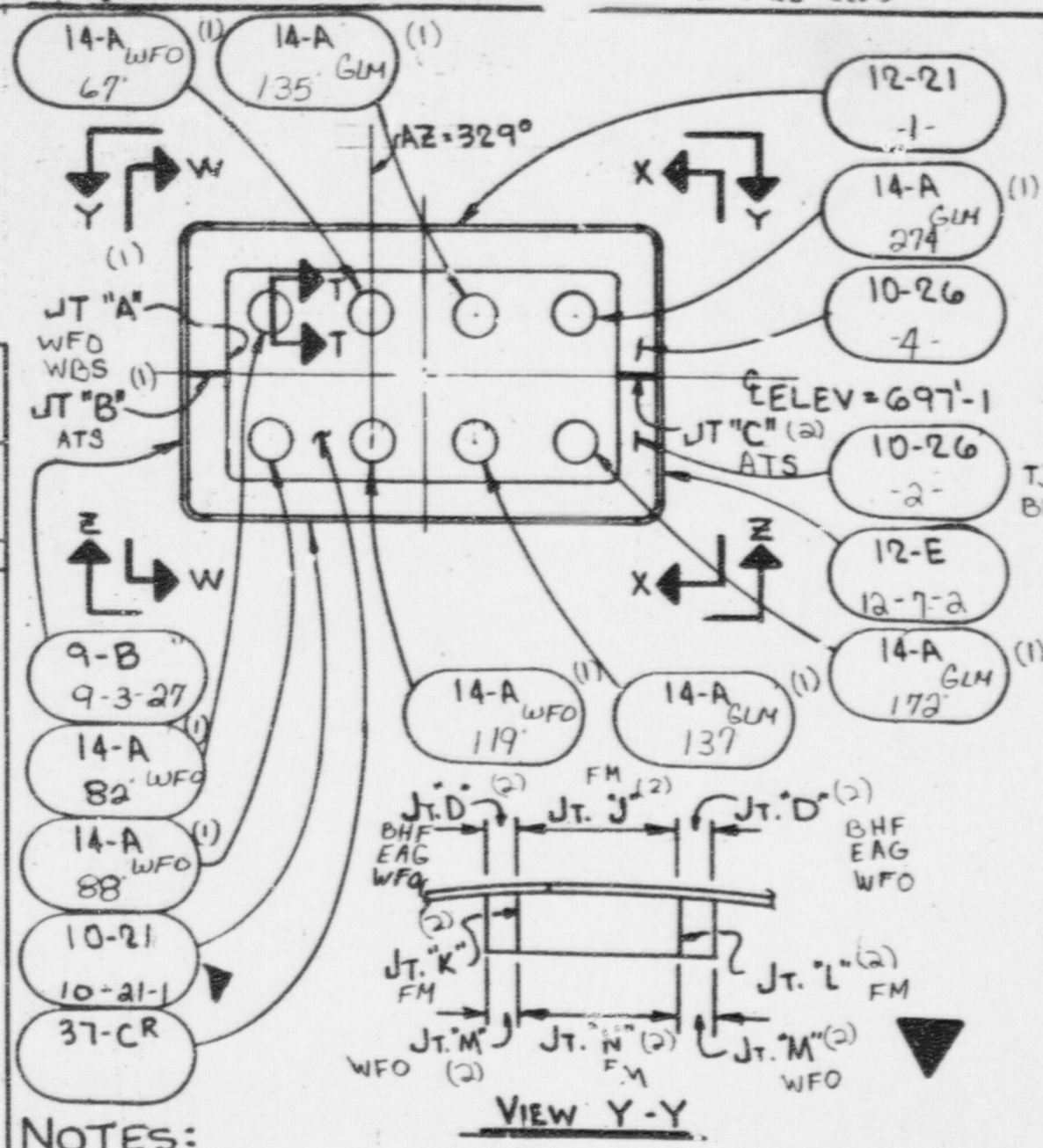
SHEET 3

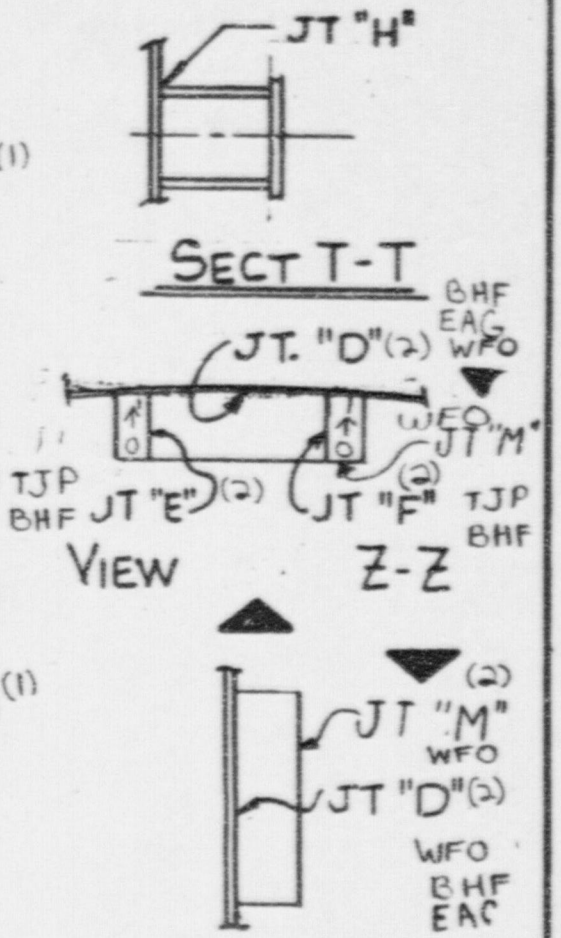
Line No. 5
Folder No. 2

4 of 4

Indicates revision from previous issue

FORM RD 2109





NOTES:

1. WORK THIS DWG. WITH CONTRACT DWG. 2 4
2. SEE DWG. R-1 FOR INSTRUCTIONS.

UNIT - 1

1 OF 4

Line No. 6 Folder No. 2

SEE FORM GO-1152 OF FOLDER 8.10 FOR ATTACHMENT WELDERS

APPROVED FOR MERCHANT U.S. MARINE
RELEASED FOR USE
Released By 4/21/80
Approved By 6/6/80

Revisions		Remarks
By	JMM	CHG'D PE. MK. 10-29 TO 10-21
Chkd	LLH	
Date	6-6-80	
By	WLP	REV. AS NOTED
Chkd	JMM	
Date	5-15-80	

Chicago Bridge & Iron Company

RECORD DWG. FOR EMBEDMENT CLOSURE DETAILS

By RLS Chkd JMM Date 4-7-80

L. L. HUDSON

Contract No. 83674

Dwg. R-29 Rev. 2

Rev. 2 6-10-80 UCT

CBI

RECORD DRAWING TABLE

1	2				3	4	5	6A	7A	6B	7B	6C	7C	8	9	10
JOINT IDENTIFICATION * = SERIAL NO. OF 14A ASSY	RECORD ON DWG: JOINT ID	WELDER ID	MATERIAL ID	RT INTERVALS	WELDING: FIT-UP CHECKED DATE AND INITIAL	RECORD WELDING PROCEDURE SPEC USED AND REPAIR PROCEDURE USED	WELDING CHECKED FINISHED JOINT CHECKED DATE AND INITIAL	PT NDE PROCEDURE PT 1C REV 4 RESULTS EVALUATED AND ACCEPTED DATE AND INITIAL	NDE REPORT ID	VB NDE PROCEDURE VB 3X REV 1 RESULTS EVALUATED AND ACCEPTED DATE AND INITIAL	NDE REPORT ID	RT NDE PROCEDURE RT 2X REV 1 RESULTS EVALUATED AND ACCEPTED DATE AND INITIAL	NDE REPORT ID	NONCONFORMANCE CONTROL LIST ITEM NUMBER	COMPLETE: NONCONFORMANCES CORRECTED, CHECKS AND EXAMINATIONS OF JOINT COMPLETED AND ACCEPTED DATE AND INITIAL	
H *82	✓	✓	✓	✓	6-2-80 CWW JSM	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
H-*67	✓	✓	✓	✓	6-2-80 CWW JSM	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
H *135	✓	✓	✓	✓	6-2-80 CWW JSM	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
H *274	✓	✓	✓	✓	6-2-80 JSM CWW	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
H *88	✓	✓	✓	✓	6-2-80 JSM CWW	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
H *119	✓	✓	✓	✓	6-2-80 JSM CWW	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
H *137	✓	✓	✓	✓	6-2-80 JSM CWW	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
H *172	✓	✓	✓	✓	6-2-80 JSM CWW	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	9/9	6-11-80 VLT JSM	1/58	N/A		N/A	6-16-80 VLT	
N	✓	✓	✓	✓	6-4-80 DLP JSM	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	8/8	6-11-80 VLT JSM	1/57	N/A		N/A	6-16-80 VLT	

EMBEDMENT CLOSURE AT AZ 329° AND ELEVATION 697'-1

Unit 1 REV 2

REFER TO RECORD DRAWING NO. R 29

CONTRACT NO. 83674

SHEET 1

Line No. 6 Folder No. 2 2 OF 4

CBI

RECORD DRAWING TABLE

1	2	3	4	5	6A	7A	6B	7B	6C	7C	8	9	10
JOINT IDENTIFICATION	RECORD ON DWG: JOINT ID, WELDER ID, MATERIAL ID, RT INTERVALS	WELDING: FIT-UP CHECKED — DATE AND INITIAL	RECORD WELDING PROCEDURE SPEC USED AND REPAIR PROCEDURE USED	WELDING CHECKED FINISHED JOINT CHECKED — DATE AND INITIAL	PT — NDE PROCEDURE PT 10 REV 4 RESULTS EVALUATED AND ACCEPTED — DATE AND INITIAL	NDE REPORT ID	VB — NDE PROCEDURE VB 3X REV 1 RESULTS EVALUATED AND ACCEPTED — DATE AND INITIAL	NDE REPORT ID	RT — NDE PROCEDURE RT 2X REV 1 RESULTS EVALUATED AND ACCEPTED — DATE AND INITIAL	NDE REPORT ID	NONCONFORMANCE CONTROL LIST ITEM NUMBER	COMPLETE: NONCONFORMANCES CORRECTED, CHECKS AND EXAMINATIONS OF JOINT COMPLETED AND ACCEPTED — DATE AND INITIAL	
A	✓✓✓	5-17-80 VLT JSM	E 314	5-20-80 VLT JSM	5-20-80 VLT JSM	1/34	5-21-80 JSM VLT	1/23	N/A		N/A	5-27-80 VLT	
B	✓✓✓	5-17-80 VLT JSM	E 314	5-17-80 VLT JSM	5-20-80 VLT JSM	1/34	5-21-80 JSM VLT	1/23	N/A		N/A	5-27-80 VLT	
C	✓✓✓	5-17-80 VLT JSM	E 394	5-17-80 VLT JSM	5-20-80 VLT JSM	1/34	5-21-80 VLT JSM	1/23	N/A		N/A	5-27-80 VLT	
D	✓✓✓	5-13-80 VLT JSM	E 381	5-15-80 DLP JSM	5-15-80 VLT JSM	1/21	5-21-80 JSM VLT	1/23	N/A		N/A	5-27-80 VLT	
E	✓✓✓✓	5-8-80 VLT JSM	E 381	5-8-80 VLT JSM	5-11-80 VLT JSM	1/14	5-11-80 VLT JSM	1/11	5-16-80 VLT JSM	1/1	N/A	5-19-80 VLT	
F	✓✓✓✓	5-8-80 VLT JSM	E 381	5-8-80 VLT JSM	5-11-80 VLT JSM	1/14	5-9-80 VLT JSM	1/11	5-16-80 VLT JSM	1/1	N/A	5-19-80 VLT	
J	✓✓✓	6-4-80 DLP JSM	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	2/8	6-11-80 VLT JSM	1/57	N/A		N/A	6-16-80 VLT	
K	✓✓✓	6-4-80 DLP JSM	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	2/8	6-11-80 VLT JSM	1/57	N/A		N/A	6-16-80 VLT	
L	✓✓✓	6-4-80 DLP JSM	E 394	6-11-80 WFH JSM	6-11-80 VLT JSM	2/8	6-11-80 VLT JSM	1/57	N/A		N/A	6-16-80 VLT	
M	✓✓✓	5-17-80 VLT JSM	E 314	5-20-80 DLP JSM	5-20-80 VLT JSM	1/34	5-21-80 VLT JSM	1/23	N/A		N/A	5-27-80 VLT	

EMBEDMENT CLOSURE HT AZ 329°
ELEVATION 697-1.

Unit 1.
REFER TO RECORD DRAWING NO. R21 REV. 2

CONTRACT NO. 83674

Line No. 6
Folder No. 2

SHEET 2 OF 4

FORM 145 REV 0

CBI

RECORD DRAWING TABLE

1	2	3	4	5	6A	7A	6B	7B	6C	7C	8	9	10
JOINT IDENTIFICATION	RECORD ON DWG: JOINT ID, WELDER ID, MATERIAL ID, RT INTERVALS	WELDING: FIT-UP CHECKED; DATE AND INITIAL	RECORD WELDING PROCEDURE SPEC USED AND REPAIR PROCEDURE USED	WELDING CHECKED FINISHED JOINT CHECKED; DATE AND INITIAL	PT; NDE PROCEDURE VT 10; REV 4; RESULTS EVALUATED AND ACCEPTED; DATE AND INITIAL	NDE REPORT ID	VR; NDE PROCEDURE VB 3A; REV 1; RESULTS EVALUATED AND ACCEPTED; DATE AND INITIAL	NDE REPORT ID	AFT; NDE PROCEDURE LC 5A; REV 2; RESULTS EVALUATED AND ACCEPTED; DATE AND INITIAL	NDE REPORT ID	NONCONFORMANCE CONTROL LIST ITEM NUMBER	COMPLETE: NONCONFORMANCES CORRECTED, CHECKS AND EXAMINATIONS OF JOINT COMPLETED AND ACCEPTED; DATE AND INITIAL	
LEAK CHASE TO EMBED	N/A	N/A	N/A	N/A	N/A		N/A		6-13-80 VLT JSM	2/4	N/A	6-18-80 VCT	
BOLT CAPS Leak Chase TO EMBED	N/A	N/A	N/A	N/A	N/A		N/A		6-13-80 VLT JSM	2/5	N/A	6-18-80 VCT	

Line No. 6
Folder No. 2
4 OF 4

EMBEDMENT CLOSURE AZ - 329°
ELEVATION 697-1

REFER TO RECORD DRAWING NO. R-29 REV. 2

CONTRACT NO. 83674

SHEET 3

MASTER CHECK LIST
For Control and Certification

NO.	DESCRIPTION: OPERATIONS, INSPECTIONS, EXAMINATIONS & REQUIREMENTS TO BE COMPLETED	APPLICABLE DETAIL RECORDS	CBI: LISTED OPRTS, INSPTS & EXAMINS COMPLTD & ACCPTD. LISTED REQRMTS CARRIED OUT — PROJ. FOREMAN & PROJ. WELD & QA SUPR: INITIALS	CBI: DATE	Customer Auth. Inspector: LISTED DATA REVIEWED & FOUND TO BE IN ACCORDANCE WITH Cont. Requirements — Customer Auth. Inspector: INITIALS	Customer Auth. Inspector: DATE		
13	APPLICABLE INFORMATION AS REQUIRED ON THE RECORD DRAWINGS							
	IS COMPLETED FOR THE KWU QUENCHER EMBEDS, LINER PATCH	7.3						
	PLATES, GROUT HOLE COVERS AND BOLT COVERS.	7.9	FAL	5-17-79				
			ELH	6-12-80				
13A	REMOVE TEMPORARY ATTACHMENTS FROM KWU TYPE A MATERIAL							
	AND EXISTING LINER BOTTOM, CLEAN UP PLATE SURFACES AND		FAL	5-17-79				
	ADJOINING WELD AREA AND VISUALLY INSPECT AREA.		ELH	6-12-80				
13B	LIQUID PENETRANT EXAMINE ATTACHMENT WELDS OF STIFFENERS							
	TO KWU EMBEDS AND LINER BOTTOM.	7.3	FAL	5-17-79				
			ELH	6-17-80				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

R L Bentley 4-5-79
Certified by Date

UPDATED BY _____ REV. ____ DATE _____

MADE BY	CHKD BY	REVISIONS	MADE	CONTRACT NO.	SHEET
LVW	RLB			83671	M3A
DATE 3-20-79	DATE 3-20-79		CHKD		
			DATE		

Line No. 4
Folder No. 1

GE 681 REV APR 76

CBI MASTER CHECK LIST
For Control and Certification

Line No. 5
Folder No. 1

NO.	DESCRIPTION: OPERATIONS, INSPECTIONS, EXAMINATIONS & REQUIREMENTS TO BE COMPLETED	APPLICABLE DETAIL RECORDS	CBI: LISTED OPRTS, INSPTS & EXAMINS COMPLTD & ACCPTD. LISTED REQRMTS CARRIED OUT — PROJ. FOREMAN & PROJ. WELD & QA SUPR — INITIALS	CBI — DATE	Customer Auth. Inspector: LISTED DATA REVIEWED & FOUND TO BE IN ACCORDANCE WITH Cont. Requirements — Customer Auth. Inspector — INITIALS	Customer Auth. Inspector — DATE
14	Review final contract drawings, repair procedures, and deviation reports to assure records reflect applicable as-built condition.		DJ ELH	3-5-79 3-5-79	DJH	3-7-79
15	Review all Field Check List System Documents for completeness and appropriate sign-offs by CBI and as applicable by the customer.		[illegible] ELH	3-9-79 3-9-79		
16	Make Jobsite CNQA Program Audit reports available to the customer.		ELH DJ	12-19-79 12-19-79		
17	Obtain final release from CNQA at completion of work.		[illegible] ELH by RCL	8-28-80 8-28-80		

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE	MADE BY	CHKD BY	REVISIONS		CONTRACT NO.	
RL Bentley 6-23-78 (Certified by / Date)	RLB	D	MADE		83671	SHEET M4
UPDATED BY ____ REV. ____ DATE ____	DATE 5-4-78	DATE 5/30/78	CHKD			
			DATE			

INSTRUCTIONS:
VISUALLY EXAMINE ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TOGETHER AND ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TO PREVIOUSLY INSTALLED MATERIAL & SURFACES WHERE TEMPORARY ATTACHMENTS REMOVED. REPAIR DEFECTS FOUND

CBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA 5741~~
~~INITIALS _____ DATE _____~~

Line No. 6
Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	PROCEDURE: REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED: INITIALS	PROJECT WELD & QA SUPERVISOR: DATE	AUTHORIZED INSPECTOR: SPOT WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS: INITIALS	AUTHORIZED INSPECTOR: DATE		
		STIFF ON 96'-3 RAD PER CHECK										
		LIST SKETCH S-1 VISUALLY										
		EXAMINE THE FOLLOWING										
		JOINT ITEMS & REPAIR DEFECTS										
		FOUND AT AZIMUTHS LISTED										
	1	COLLAR FLGS TOGETHER										
	2	SPLICE PLS TO COLLAR										
	3	BEAM WEB TO COLLAR ASS'Y										
	4	BEAM FLG TO COLLAR FLG										
	5	BEAM WEB TO COLLAR ASS'Y										
	6	BEAM FLG TO COLLAR FLG										
	7	BEAM WEB TO COLLAR ASS'Y										
	8	BEAM FLG TO COLLAR FLG										
	9	BEAM FLGS TOGETHER										
	10	(15-7) TO COLLAR ASS'Y										
	11	COLLAR FLGS TOGETHER										
	12	COLLAR ASS'Y TO DOWNCOMER										
		@ AZ = 18° ✓	Folder 4.10 Seq 12	VT5	D			3-1-79				
		42° ✓	do-	VT5	D			3-1-79				
		78° ✓	Seq 16	VT5	D			3-5-79				
		90°	do-	VT5	D			3-5-79				
		114°	do-	VT5	D			3-5-79				
		126°	do-	VT5	D			3-5-79				
		138° ✓	do-	VT5	D			3-5-79				
		150°	Seq 18	VT5	D			3-6-79				
		162°	-do-	VT5	D			3-6-79				
		174°	-do-	VT5	D			3-6-79				
		186°	-do-	VT5	D			3-6-79				
		198°	-do-	VT5	D			3-6-79				
		CONT'D ON SHEET DC-2										

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
R L Bentley 9-14-78
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY CMK JR
DATE 9-7-78

CHKD BY L
DATE 9-8-78

REVISIONS
MADE
CHKD
DATE

CONTRACT NO. 83671

SHEET DC-1

GE 682 REV APR 76

INSTRUCTIONS:

SEE SHEET DC-1

CBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA3741~~

~~INITIALS _____ DATE _____~~

Line No. 7

Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		CONT'D FROM SHEET DC-1										
		210° FOLDER 7.10 Seg 18	YT5	0			[illegible]	3-6-79				
		222° FOLDER 7.10	YT5	0			[illegible]	2-26-79				
		234° Seg	4 YT5	0			[illegible]	2-26-79				
		258° "	4 YT5	0			[illegible]	2-26-79				
		270° "	4 YT5	0			[illegible]	2-26-79				
		318° "	4 YT5	0			[illegible]	2-26-79				
		330° ✓ Seg	8 YT5	0			[illegible]	2-28-79				
		342° ✓ "	8 YT5	0			[illegible]	2-28-79				
		354° ✓ "	8 YT5	0			[illegible]	2-28-79				
		6° ✓ "	8 YT5	0			[illegible]	2-28-79				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

R L Bentley 7-14-78

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY: CMK JR — DATE: 9-7-78

CHKD BY: [illegible] — DATE: 9-8-78

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83671

SHEET DC-2

GE 582 REV APR 76

INSTRUCTIONS: VISUALLY EXAMINE ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TOGETHER AND ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TO PREVIOUSLY INSTALLED MATERIAL & SURFACES WHERE TEMPORARY ATTACHMENTS REMOVED. REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA3241

INITIALS _____ DATE _____

Line No. 8

Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED: INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS: INITIALS	DATE		
		STIFF ON 32'-9 RAD PER CHECK										
		LIST SKETCH S-2 VISUALLY										
		EXAMINE THE FOLLOWING JOINT										
		ITEMS & REPAIR DEFECTS										
		FOUND AT AZIMUTHS LISTED										
	1	COLLAR FLGS TOGETHER										
	2	SPICE RS TO COLLAR										
	3	BEAM WEB TO COLLAR ASS'Y										
	4	BEAM FLG TO COLLAR FLG										
	5	BEAM WEB TO COLLAR ASS'Y										
	6	BEAM FLG TO COLLAR FLG										
	7	BEAM WEB TO COLLAR ASS'Y										
	8	BEAM FLG TO COLLAR FLG										
	9	BEAM FLGS TOGETHER										
	10	(15-7) TO COLLAR ASS'Y										
	11	BEAM WEB TO COLLAR ASS'Y										
	12	BEAM FLG TO COLLAR FLG										
	13	BEAM FLGS TOGETHER										
	14	COLLAR ASS'Y TO DOWNCOMER										
		@ AZ = 18° ✓	FOLDER 7 & Seq 11	VTS	0			3-1-79				
		30° ✓	do	VTS	0			3-1-79				
		42° ✓	do	VTS	0			3-1-79				
		54° ✓	do	VTS	0			3-1-79				
		66°	Seq 15	VTS	0			3-5-79				
		78°	do	VTS	0			3-5-79				
		90°	do	VTS	0			3-5-79				
		102° ✓	do	VTS	0			3-5-79				
		114° ✓	do	VTS	0			3-5-79				
		126°	do	VTS	0			3-5-79				
		CONT'D ON SHEET DC-4										

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

R L Bentley 9-14-78

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY CMK 1R

DATE 9-7-78

CHKD BY

ATE

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83671

SHEET DC-3

GE 682 REV APR 76

INSTRUCTIONS:

SEE SHEET DC-3

GBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA3741~~

~~INITIALS _____ DATE _____~~

Line No. 9

Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		CONT'D FROM SHEET DC-3										
		198° ✓	Folder 9D Seq 15 YT5	0			[illegible]	3-5-79				
		162°	Seq 17 YT5	0			[illegible]	3-6-79				
		174°	do- YT5	0			[illegible]	3-6-79				
		186°	do- YT5	0			[illegible]	3-6-79				
		198°	do- YT5	0			[illegible]	3-6-79				
		210°	do- YT5	0			[illegible]	3-6-79				
		222°	FOLDER 9D YT5	0			[illegible]	2-26-79				
		234° ✓	Seq #3 YT5	0			[illegible]	2-26-79				
		258° ✓	do- YT5	0			[illegible]	2-26-79				
		270° ✓	do YT5	0			[illegible]	2-26-79				
		282° ✓	do- YT5	0			[illegible]	2-26-79				
		294° ✓	do- YT5	0			[illegible]	2-26-79				
		306° ✓	do YT5	0			[illegible]	2-26-79				
		318° ✓	do- YT5	0			[illegible]	2-26-79				
		330° ✓	Seq #4 YT5	0			[illegible]	2-28-79				
		342° ✓	do- YT5	0			[illegible]	2-28-79				
		354° ✓	do- YT5	0			[illegible]	2-28-79				
		6° ✓	do- YT5	0			[illegible]	2-28-79				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

R.L. Bentley 9-14-78

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY CMK JR — DATE 9-7-78

CHKD BY [illegible] — DATE 9-8-78

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83671

SHEET DC-4

GE 682 REV APR 76

INSTRUCTIONS:
VISUALLY EXAMINE ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TOGETHER AND ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TO PREVIOUSLY INSTALLED MATERIAL & SURFACES WHERE TEMPORARY ATTACHMENTS REMOVED. REPAIR DEFECTS FOUND

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA3701
INITIALS _____ DATE _____

Line No. 10
Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		STIFF ON 23'-3 RAD PER CHECK										
		LIST SKETCH S-3 VISUALLY										
		EXAMINE THE FOLLOWING JOINT										
		ITEM & REPAIR DEFECTS FOUND										
		AT AZIMUTHS LISTED										
	1	COLLAR FLGS TOGETHER										
	2	SPLICE R. TO COLLAR										
	3	BEAM WEB TO COLLAR ASS'Y										
	4	BEAM FLG TO COLLAR FLG										
	5	BEAM WEB TO COLLAR ASS'Y										
	6	BEAM FLG TO COLLAR FLG										
	7	BEAM WEB TO COLLAR ASS'Y										
	8	BEAM FLG TO COLLAR FLG										
	9	BEAM FLGS TOGETHER										
	10	15-7 TO COLLAR ASS'Y										
	11	COLLAR FLGS TOGETHER										
	12	BEAM WEB TO COLLAR ASS'Y										
	13	BEAM FLG TO COLLAR FLG										
	14	BEAM FLGS TOGETHER										
	15	COLLAR ASS'Y TO DOWNCOMER										
		@ AZ = 18° ✓	FLTR 910 Seq 10	VTS	0			3-1-79				
		30° ✓	-do-	VTS	0			3-1-79				
		42° ✓	-do-	VTS	0			3-1-79				
		54° ✓	-do-	VTS	0			3-1-79				
		66° ✓	-do-	VTS	0			3-1-79				
		90° ✓	Seq 14	VTS	0			3-5-79				
		102° ✓	-do-	VTS	0			3-5-79				
		114° ✓	-do-	VTS	0			3-5-79				
		126° ✓	-do-	VTS	0			3-5-79				
		CONT'D ON SHEET DC-6										

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
RL Bentley 9-14-78
Certified by Date
UPDATED BY _____ REV. _____ DATE _____

MADE BY CMK JR — DATE 9-7-78
CHKD BY [illegible] — DATE 9-8-78
REVISIONS — MADE — CHKD — DATE

CONTRACT NO. 83671

SHEET DC-5

GE 682 REV APR 76

INSTRUCTIONS:
SEE SHEET DC-5

CBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-5201~~
~~INITIALS _____ DATE _____~~

Line No. 11
Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED, RESULTS EVALUATED & ACCEPTED: INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS: INITIALS	DATE		
		CONT'D FROM SHEET DC-5										
		150° ✓	FOLDER 2 & 10 SEQ 14 VT5	0			[illegible]	3-5-79				
		162° ✓	-do- VT5	0			[illegible]	3-5-79				
		174° ✓	-do- VT5	0			[illegible]	3-5-79				
		186° ✓	-do- VT5	0			[illegible]	3-5-79				
		222° ✓	FOLDER 7,10 SEQ 2 VT5	0			[illegible]	2-26-79				
		234° ✓	-do- VT5	0			[illegible]	2-26-79				
		246° ✓	-do- VT5	0			[illegible]	2-26-79				
		258° ✓	-do- VT5	0			[illegible]	2-26-79				
		270° ✓	-do- VT5	0			[illegible]	2-26-79				
		282° ✓	-do- VT5	0			[illegible]	2-26-79				
		294° ✓	-do- VT5	0			[illegible]	2-26-79				
		306° ✓	Seq #16 VT5	0			[illegible]	2-28-79				
		330° ✓	-do- VT5	0			[illegible]	2-28-79				
		342° ✓	-do- VT5	0			[illegible]	2-28-79				
		354° ✓	-do- VT5	0			[illegible]	2-28-79				
		6° ✓	-do- VT5	0			[illegible]	2-28-79				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
R.L. Bentley 9-14-78
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY: CMK JR
DATE: 9-7-78

CHKD BY: LRW
DATE: 9-8-78

REVISIONS
MADE
CHKD
DATE

CONTRACT NO. 83671

SHEET DC-6

GE 682 REV APR 76

INSTRUCTIONS:
VISUALLY EXAMINE ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TOGETHER AND ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TO PREVIOUSLY INSTALLED MATERIAL & SURFACES WHERE TEMPORARY ATTACHMENTS REMOVED. REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA5201~~
INITIALS _____ DATE _____

Line No. 12
Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		STIFF ON 19'-9 RAD PER CHECK										
		LIST SKETCH S-4 VISUALLY										
		EXAMINE THE FOLLOWING JOINT										
		ITEM & REPAIR DEFECTS										
		FOUND AT AZIMUTHS LISTED										
	1	COLLAR FLGS TOGETHER										
	2	SPLICE RS TO COLLAR										
	3	15-7 TO COLLAR ASS'Y										
	4	COLLAR FLGS TOGETHER										
	5	15-7 TO COLLAR ASS'Y										
	6	COLLAR FLGS TOGETHER										
	7	BEAM WEB TO COLLAR ASS'Y										
	8	BEAM FLG TO COLLAR FLG										
	9	15-7 TO COLLAR ASS'Y										
	10	BEAM WEB TO COLLAR ASS'Y										
	11	BEAM FLG TO COLLAR FLG										
	12	COLLAR ASS'Y TO DOWNCOMER										
		@ AZ = 18° ✓	FOLDER 7.10 Seq #9	YTS	0		[illegible]	3-1-79				
		30° ✓	-do-	YTS	0		[illegible]	3-1-79				
		42° ✓	-do-	YTS	0		[illegible]	3-1-79				
		54° ✓	-do-	YTS	0		[illegible]	3-1-79				
		66° ✓	-do-	YTS	0		[illegible]	3-1-79				
		90° ✓	SEQ 13	YTS	0		[illegible]	3-5-79				
		102°	-do-	YTS	0		[illegible]	3-5-79				
		114°	-do-	YTS	0		[illegible]	3-5-79				
		126°	-do-	YTS	0		[illegible]	3-5-79				
		138°	-do-	YTS	0		[illegible]	3-5-79				
		174°	-do-	YTS	0		[illegible]	3-5-79				
		186°	-do-	YTS	0		[illegible]	3-5-79				
		CONT'D ON SHEET DC-8										

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
R L Bentley 9-14-78
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY: CMK JR — DATE: 9-7-78
CHKD BY: LVW — DATE: 9-8-78

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83671

SHEET DC-7

GE 682 REV APR 76

INSTRUCTIONS: SEE SHEET DC-7

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-3141

INITIALS _____ DATE _____

Line No. 13

Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		CONT'D FROM SHEET DC-7	FOLDER 7.10 SEQ #1									
		222° ✓	-do-	YTS	0			2-26-79				
		234° ✓	-do-	YTS	0			2-26-79				
		246° ✓	-do-	YTS	0			2-26-79				
		258° ✓	-do-	YTS	0			2-26-79				
		270° ✓	-do-	YTS	0			2-26-79				
		282° ✓	-do-	YTS	0			2-26-79				
		294° ✓	-do-	YTS	0			2-26-79				
		306° ✓	SEQ #5	YTS	0			2-28-79				
		318° ✓	-do-	YTS	0			2-28-79				
		354° ✓	-do-	YTS	0			2-28-79				
		6° ✓	-do-	YTS	0			2-28-79				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

R.L. Bentley 9-14-78

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY CMK JR — DATE 9-7-78

CHKD BY LMW — DATE 9-8-78

REVISIONS: MADE _____ CHKD _____ DATE _____

CONTRACT NO. 83671

SHEET DC-8

GE 682 REV APR 76

INSTRUCTIONS:
VISUALLY EXAMINE ALL WELDS JOINING COMPONENT SUPPORT MATERAL TOGETHER AND ALL WELDS JOINING COMPONENT SUPPORT MATERIAL TO PREVIOUSLY INSTALLED MATERIAL & SURFACES WHERE TEMPORARY ATTACHMENTS REMOVED. REPAIR DEFECTS FOUND.

CBI

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-3744
INITIALS _____ DATE _____

Line No. 14
Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	PROCEDURE: REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED: INITIALS	PROJECT WELD & QA SUPERVISOR: DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS: INITIALS	AUTHORIZED INSPECTOR: DATE		
		15-A To 15-B	F 7.10 Sy #16 VT5	0			[illegible]	3-5-79				
		15-A To 15-B	F 7.10 Sy 12 VT5	0			[illegible]	2-28-79				
		15-3 To 15-A	F 7.10 Sy 6 VT5	0			[illegible]	2-28-79				
		15-3 To 15-A	F 7.10 Sy 4 VT5	0			[illegible]	3-5-79				
		14-6 To 14-F	F 7.10 Sy 13 VT5	0			[illegible]	3-5-79				
		14-6 To 14-F	-do- VT5	0			[illegible]	3-5-79				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE	MADE BY	CHKD BY	REVISIONS					CONTRACT NO.	
R L Bentley 9-14-78 Certified by / Date	CMK JR	LVW		MADE				83671	SHEET DC-9
	DATE 9-7-78	DATE 9-8-78		CHKD					
UPDATED BY _____ REV. _____ DATE _____				DATE					

QE 682 REV APR 76

INSTRUCTIONS:
VISUALLY EXAMINE AREAS WHERE EXISTING ITEMS WERE REMOVED AS FOLLOWS.

CBI

DETAIL CHECK LIST

~~REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NA-5241~~
INITIALS _____ DATE _____

Line No. 15
Folder No. 1

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD & QA SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED — INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS — INITIALS	DATE		
		REMOVE HORIZ. LEG (74-1) FROM LINER	YT 5	0			[illegible]	2-20-79				
		REMOVE (74-2) FROM LINER	YT 5	0			[illegible]	2-20-79				
		REMOVE HORIZ. LEG (209-1) FROM LINER	YT 5	0			[illegible]	2-20-79				
		REMOVE (209-3) FROM LINER	YT 5	0			[illegible]	2-20-79				
		REMOVE (200-4) FROM 18 COLUMNS	YT 5	0			[illegible]	2-23-79				
		REMOVE (200-3) FROM 18 COLUMNS	YT 5	0			[illegible]	2-23-79				
		REMOVE (204-8) FROM 98 DOWNCOMERS	YT 5	0			[illegible]	2-23-79				
		REMOVE (204-7) FROM 98 DOWNCOMERS	YT 5	0			[illegible]	2-23-79				
		REMOVE (204-A) FROM 98 DOWNCOMERS	YT 5	0			[illegible]	2-23-79				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE
RL Bentley 9-14-78
Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY: CMK JR — DATE: 9-7-78
CHKD BY: LRW — DATE: 9-8-78

REVISIONS: MADE / CHKD / DATE

CONTRACT NO. 83671

SHEET DC-10

GE 682 REV APR 76

INSTRUCTIONS: 1. LIQUID PENETRANT EXAMINE (✓) THE FOLLOWING WELDS. 2. JOBSITE Q.A. TO ENTER I.D. & REVISION OF PROCEDURE USED.

DETAIL CHECK LIST

REVIEWED WITH AUTHORIZED INSPECTOR BEFORE USE PER NASA-[illegible]

INITIALS _____ DATE _____

SEE DWG NO.	REF MRK	DESCRIPTION OF ITEMS, JOINTS OR ASSEMBLIES AND OF OPERATION, INSPECTION OR EXAMINATION TO BE COMPLETED	PROCEDURE: PROCEDURE IDENTIFICATION OF OPERATION PROCESS, INSPECTION OR EXAMINATION	REV NO.	REPAIR: SEE NON-CONFORMANCE CONTROL LIST NO.		PROJECT WELD SUPERVISOR: LISTED OPERTS INSPTS & EXAMINS WERE PERFORMED. RESULTS EVALUATED & ACCEPTED: INITIALS	DATE	AUTHORIZED INSPECTOR: SPOT-WITNESSED LISTED OPERTS INSPECTIONS & EXAMINATIONS: INITIALS	DATE		
38		PT EXAMINE ATTACHMENT WELDS										
		OF STIFFENERS (40-1) OR (40-2)										
		OR (40-A) OR (40-5) TO LINER										
		BOTTOM AND KWU EMBED FOR										
		THE FOLLOWING KWU EMBEDS &										
		ADJACENT BOTTOM.										
			1.3 Document									
		EMBED (23-A) & ADJACENT BOTT.	PT5 45	1	N/A		FAL	5-14-79				
		EMBED (23-B) & ADJACENT BOTT.	-Do- 44	1	N/A		FAL	5-15-79				
		EMBED (24-A) & ADJACENT BOTT.	-Do- 43	1	N/A		FAL	5-11-79				
		EMBED (24-B) & ADJACENT BOTT.	-Do- 41	1	N/A		FAL	5-16-79				
		EMBED (25-A) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-14-79				
		EMBED (25-B) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-17-79				
		EMBED (26-A) & ADJACENT BOTT.	-Do- 42	1	N/A		FAL	5-16-79				
		EMBED (26-B) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-16-79				
		EMBED (27-A) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-11-79				
		EMBED (27-B) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-11-79				
		EMBED (28-A) & ADJACENT BOTT.	-Do- 42	1	N/A		FAL	5-16-79				
		EMBED (28-B) & ADJACENT BOTT.	-Do- 45	1	N/A		FAL	5-14-79				
		EMBED (29-A) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-16-79				
		EMBED (29-B) & ADJACENT BOTT.	-Do- 41	1	N/A		FAL	5-16-79				
		EMBED (30-A) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-17-79				
		EMBED (30-B) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-17-79				
		EMBED (31-A) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-17-79				
		EMBED (31-B) & ADJACENT BOTT.	-Do- [illegible]	1	N/A		FAL	5-16-79				

APPROVED PER NUCLEAR Q.A. MANUAL RELEASED FOR USE

R. Bentley 4-5-79

Certified by Date

UPDATED BY _____ REV. _____ DATE _____

MADE BY [illegible] DATE 3 20 79

CHKD BY RLB DATE 3/20/79

REVISIONS: MADE _____ CHKD _____ DATE _____

Line No. 16

Folder No. 1

CONTRACT NO. 33671

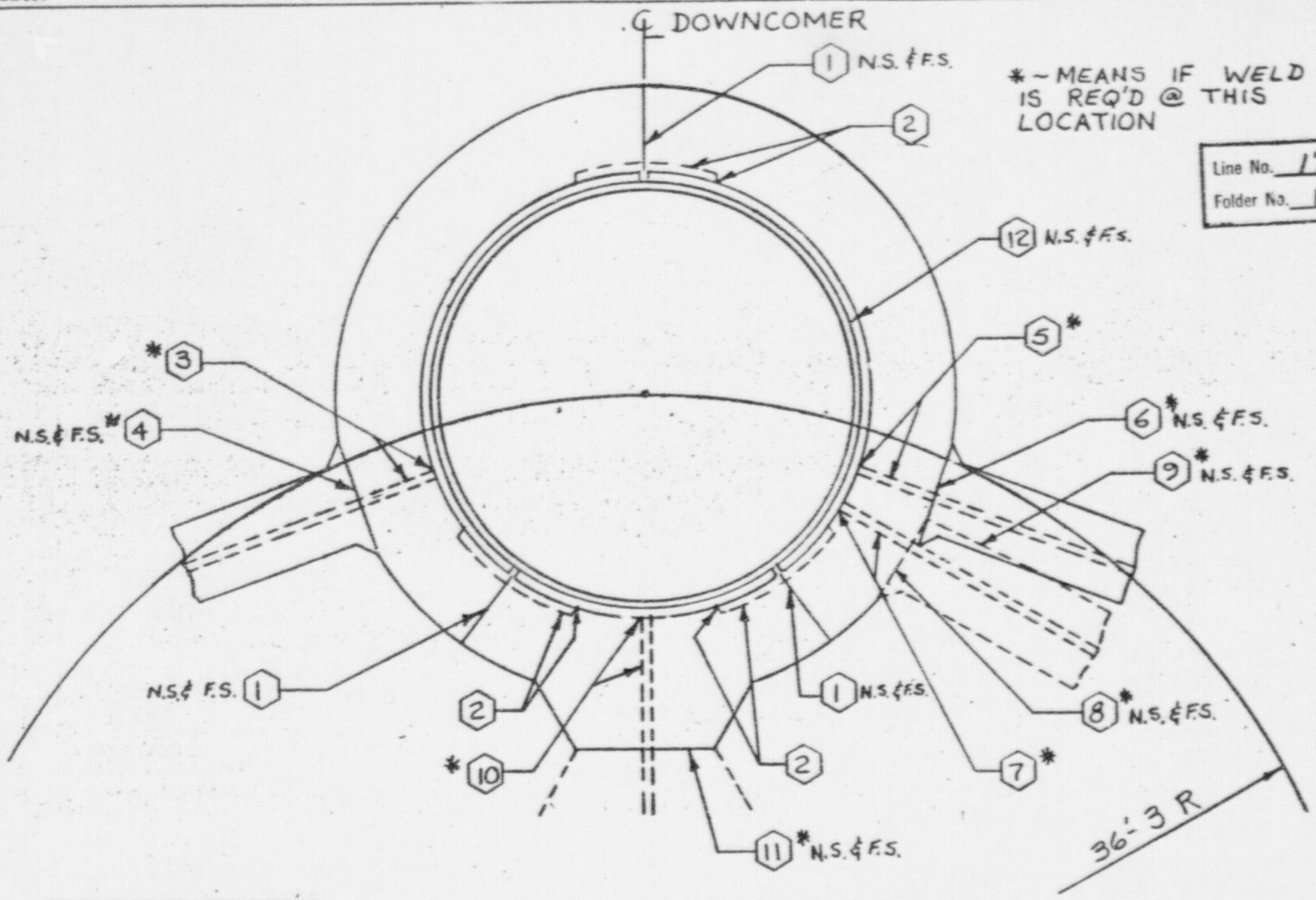
SHEET DC-11

GE 682 REV APR 76

GE683

CHECK LIST SKETCH

CHICAGO BRIDGE & IRON COMPANY



*~MEANS IF WELD IS REQ'D @ THIS LOCATION

Line No. 17
Folder No. 1

TYP PLAN VIEW STIFF ON 36'-3 RAD.

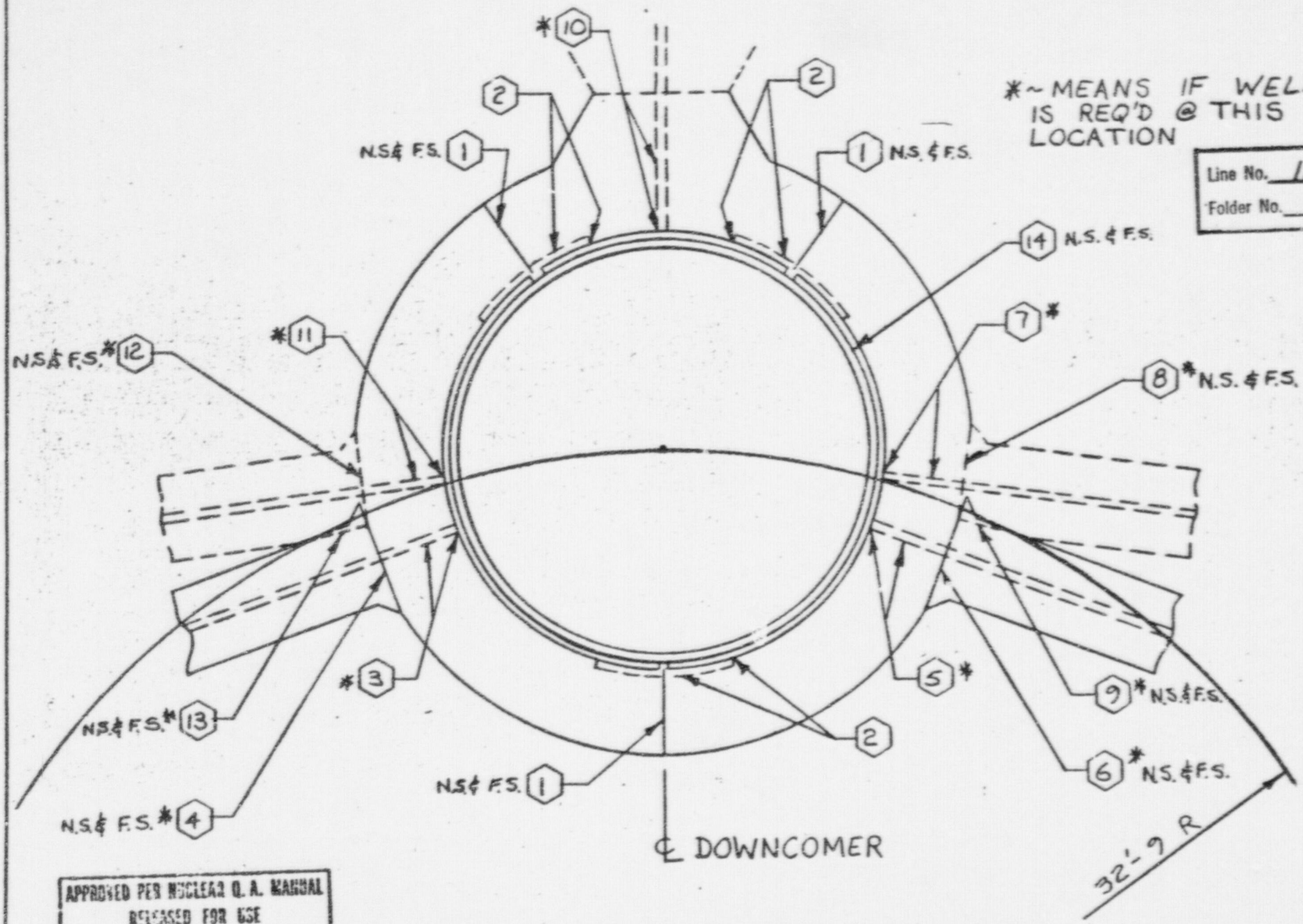
APPROVED PER NUCLEAR Q. A. MANUAL
RELEASED FOR USE
R.L. Bentley 9-14-78
Certified by Date
Updated By Rev. Date

MADE BY	CHKD BY	AUTHD BY	REV	BY			CONTRACT NO.	SKETCH NO.
CMK JR	LVW			AUTHD			83671	S-1
DATE 9-6-78	DATE 9-8-78	DATE		DATE				

GE 683

CHECK LIST SKETCH

CHICAGO BRIDGE & IRON COMPANY



APPROVED PER NUCLEAR Q. A. MANUAL
RELEASED FOR USE
RL Bentley 9-14-78
Certified by Date
Checked By Rev. Date

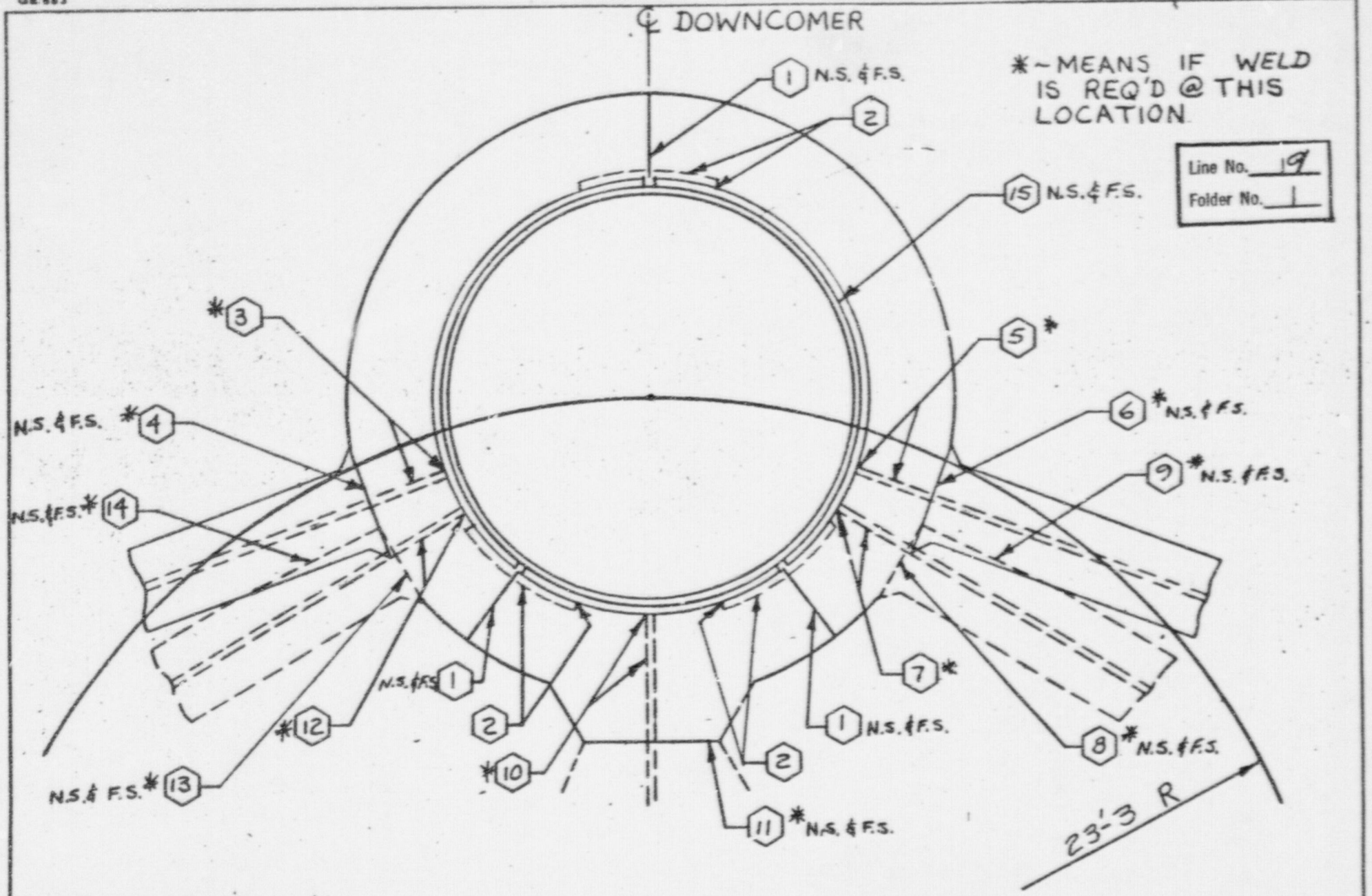
TYP PLAN VIEW STIFF ON 32'-9 RAD

MADE BY	CHKD BY	AUTHD BY	REV	BY			CONTRACT NO.	SKETCH NO.
CMK JR				AUTHD			83671	S-2
DATE 6-9-78	DATE 9-8-78	DATE		DATE				

GE 683

CHECK LIST SKETCH

CHICAGO BRIDGE & IRON COMPANY



TYP PLAN VIEW STIFF ON 23'-3 RAD

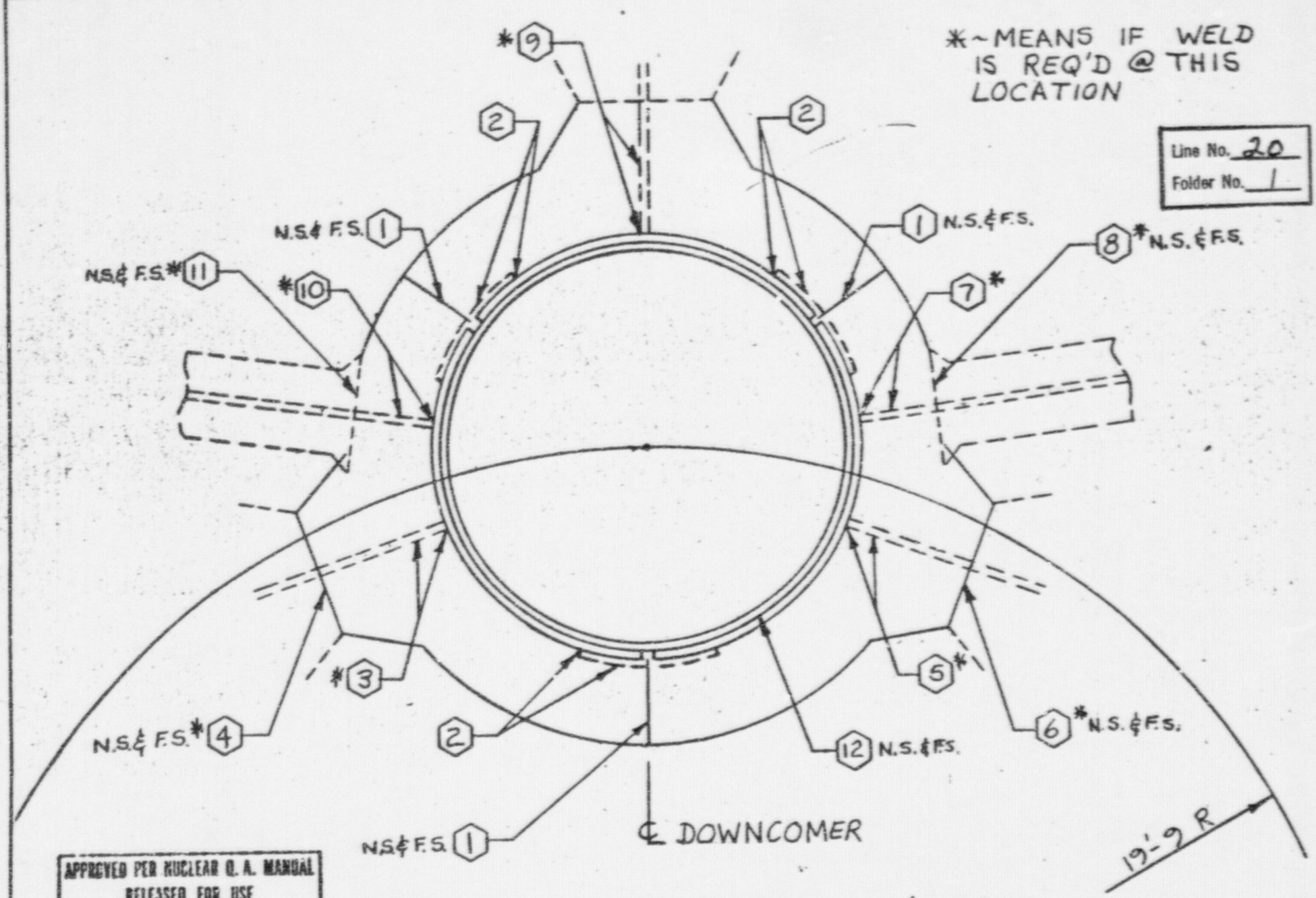
APPROVED PER NUCLEAR Q. A. MANUAL
RELEASED FOR USE
R.L. Bentley 2-14-78
Corrected by Date
Updated By ..... Rev. ..... Date .....

MADE BY	CHKD BY	AUTHD BY	REV	BY			CONTRACT NO.	SKETCH NO.
CMK JR				AUTHD			83671	S-3
DATE 9-6-78	DATE 9-8-78	DATE		DATE				

GE 583

CHECK LIST SKETCH

CHICAGO BRIDGE & IRON COMPANY



APPROVED PER NUCLEAR Q. A. MANUAL
RELEASED FOR USE
RL Bentley 9-14-78
Certified by Date
Updated By Rev. Date

TYP PLAN VIEW STIFF ON 19'-9 RAD

MADE BY	CHKD BY	AUTHD BY	REV	BY			CONTRACT NO.	SKETCH NO.
CMK JR	[illegible]			AUTHD			83671	S-4
DATE 9-6-78	DATE 9-8-78	DATE		DATE				