

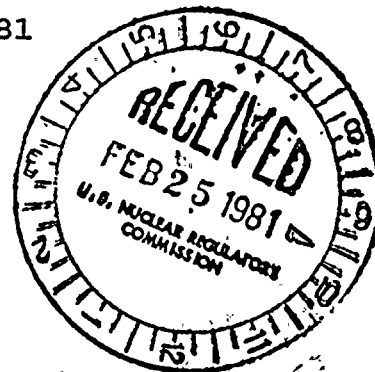


ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

JOHN E. MAIER
VICE PRESIDENT

TELEPHONE
AREA CODE 716 546-2700

January 30, 1981



Mr. Boyce H. Grier, Director
U.S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Subject: IE Bulletin No. 80-11 "Masonry Wall Design"
Supplemental Information to 180 Day Response
R. E. Ginna Nuclear Power Plant
Docket No. 50-244 *see Repts.*

Dear Mr. Grier:

Enclosed please find supplemental information to be included in our response to Inspection and Enforcement Bulletin 80-11.

Masonry block wall modifications have been installed in accordance with the structural drawings submitted on November 4, 1980 and those enclosed herewith, with the exception of minor changes due to field interferences.

This information completes our response to the subject bulletin.

Very truly yours,

John E. Maier
J. E. Maier

Enclosure

Subscribed and sworn to me

on this 30th day of January 1981

Gary L. Reiss

GARY L. REISS
NOTARY PUBLIC, State of N. Y. Monroe Co.
My Commission Expires March 30, 1981

xc: U. S. Nuclear Regulatory Commission
Office of Inspection and Enforcement
Division of Reactor Operation's Inspection
Washington, DC 20555

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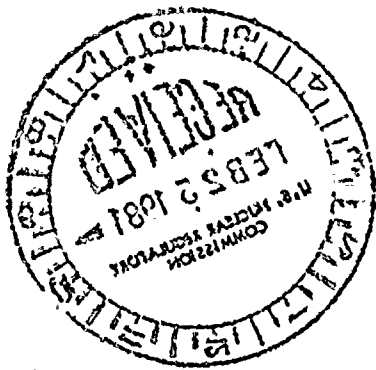


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ATTACHMENTS

- 1. I.E. Bulletin 80-11
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- 4. Tests Performed on Masonry Block Units from Ginna Station
- 5. Ground Response Spectra

Control #8103060199

REGULATORY DOCKET FILE COPY

4.0 Conclusions

All masonry block walls at Ginna Station have been inspected and found to be built in accordance with the original specifications and with appropriate inspection and construction techniques applicable at the time of construction.

Detailed drawings of all safety related masonry block walls at R. E. Ginna Nuclear Power Station are complete. Modifications necessary to insure assumed boundary conditions have been installed. Each wall has undergone an analysis and has been shown to perform its intended function within allowable stress values.

ATTACHMENT 3

DETAILED DRAWINGS OF MASONRY BLOCK WALLS

<u>Drawing No.</u>	<u>Wall No.</u>	<u>Reference Drawing</u>
SS-581-401 Sh. 1&2	1C	33013-971
SS-581-402 Sh. 1-3	2C	33013-971
SS-581-403	3C	33013-971
SS-581-404 Sh. 1&2	4C	33013-971
SS-581-405 Sh. 1&2	5C & 6C	33013-971
SS-581-407 Sh. 1&2	1I	33013-971
SS-581-408	2I	33013-971
SS-581-409 Sh. 1&2	3I	33013-971
SS-581-410	4I	33013-971
SS-581-411	5I	33013-971
SS-581-412	6I	33013-971
SS-581-413 Sh. 1&2	7I & 8I	33013-971
SS-581-415	9I	33013-971
SS-581-416	10I	33013-971
SS-581-417	11I	33013-971
SS-581-418	12I	33013-971
SS-581-419 Sh. 1&2	13I	33013-971
SS-581-420 Sh. 1&2	14I	33013-971
SS-581-421	15I	33013-971
SS-581-422	16I	33013-971
SS-581-423	17I	33013-971
SS-581-424	18I	33013-971
SS-581-425	1A	33013-971
SS-581-426	2A	33013-971
SS-581-427	3A	33013-971
SS-581-428-SH. 1-3 Rev. 1	1M	33013-971
04 4780 581-210 Rev. 1	2M	33013-971
04 4780 581-210 Rev. 1	3M	33013-971
SS-581-436 Sh. 1-3	1C	33013-972
SS-581-437	2C	33013-972
SS-581-438	3C	33013-972
SS-581-439 Sh. 1-3	4C & 5C	33013-972
SS-581-441 Sh. 1&2	6C	33013-972
SS-581-442	7C	33013-972
SS-581-443 Sh. 1&2	1I	33013-972
SS-581-444	2I	33013-972
SS-581-445 Sh. 1&2	3I	33013-972
SS-581-446 Sh. 1&2	4I & 5I	33013-972
SS-581-448	6I	33013-972
SS-581-449	7I	33013-972
SS-581-450	8I	33013-972
SS-581-451	9I	33013-972
SS-581-452 Sh. 1&2	10I	33013-972
SS-581-453 Sh. 1-4	12I	33013-972
SS-581-454 Sh. 1&2	13I	33013-972
SS-581-455	15I	33013-972
SS-581-456 Sh. 1&2	16I	33013-972
SS-581-457	18I	33013-972
SS-581-458	11I	33013-972
SS-581-459 Sh. 1-3 Rev. 1	1M	33013-972

<u>Drawing No.</u>	<u>Wall No.</u>	<u>Reference Drawing</u>
SS-581-460	3A	33013-972
SS-581-466	3C	33013-973
SS-581-467	4C	33013-973
SS-581-468	5C	33013-973
SS-581-469 Sh. 1-4	1I	33013-973
SS-581-470	2I	33013-973
SS-581-471	3I	33013-973
SS-581-472 Sh. 1&2	4I	33013-973
SS-581-473	5I	33013-973
SS-581-474	6I	33013-973
SS-581-475 Sh. 1&2	7I	33013-973
SS-581-476	8I	33013-973
SS-581-477 Sh. 1-3	8I(P)	33013-973
SS-581-478	9I(P)	33013-973
SS-581-479	11I(P)	33013-973
SS-581-480	12I(P)	33013-973
SS-581-481 Sh. 1&2	4I-A	33013-973
SS-581-482	4J-A	33013-973
SS-581-483	10A	33013-973
SS-581-484 Sh. 1&2	16A	33013-973
SS-581-486 Sh. 1-5	17A	33013-973
SS-581-487	8A	33013-973
SS-581-488	9A	33013-973
SS-581-489 Sh. 1&2	1A	33013-973
SS-581-490 Sh. 1&2	Turbine Side of 1I-4I	33013-971
	Turbine Side of 1I-5I	33013-972
	Turbine Side of 1I	33013-973
	Turbine Side of 8(P)	33013-973
SS-581-486 Sh. 1-3 Rev. 1	1M	33013-973
04 4780 581-214 Rev. 1	2M	33013-973

The following drawings present the details of the masonry wall boundary conditions and intermediate supports.

<u>Drawing No.</u>	<u>Revision</u>	<u>Title</u>
SS-581-250	10	Index of drawings
SS-581-251	5	General notes and references
SS-581-252	2	Types 1 and 2/block to concrete
SS-581-253	2	Types 1 and 2/block to Q decking
SS-251-254	3	Type 3/block to steel
SS-581-255	2	Type 4/block to steel
SS-581-256 (Sh. 1) Rev. 3 (Sh. 2) Rev. 0		Type 5/block to steel
SS-581-257 (Sh. 1) Rev. 3 (Sh. 2) Rev. 0		Type 6/block to steel
SS-581-258	4	Type 7/block to steel
SS-581-259	3	Type 8/block to block
SS-581-260 (Sh. 1) Rev. 0 (Sh. 2) Rev. 1		Type 9/block to steel
SS-581-261 (Sh. 1) Rev. 1 (Sh. 2) Rev. 1		Type 10/block to steel & concrete
SS-581-262	1	Type 11/block to block with mastic joint
SS-581-263 (Sh. 1) Rev. 2 (Sh. 2) Rev. 0		Type 12/block to concrete
SS-581-264 (Sh. 1) Rev. 1 (Sh. 2) Rev. 1		Type 13/block to steel
SS-581-265 (Sh. 1) Rev. 1 (Sh. 2) Rev. 0		Type 14/block to steel
SS-581-266 (Sh. 1) Rev. 2 (Sh. 2) Rev. 2		Type 15/block to steel

Drawing No.RevisionTitle

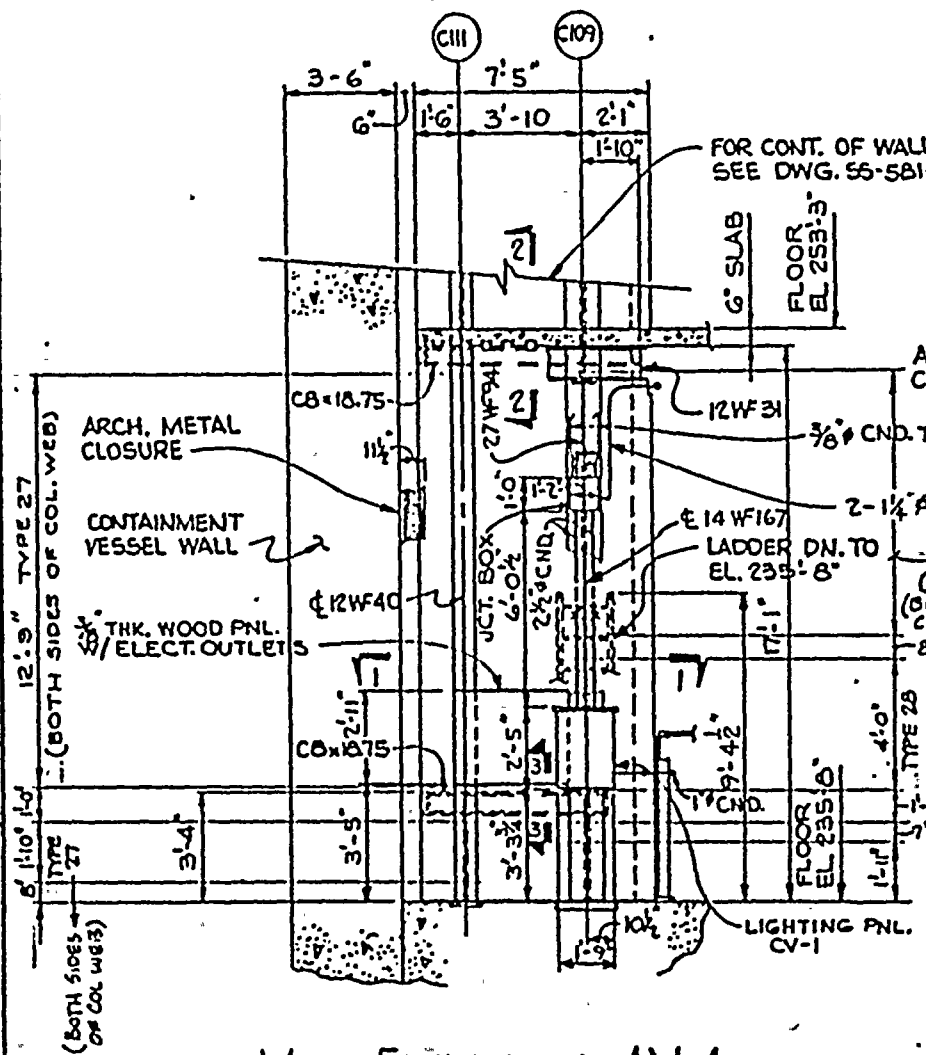
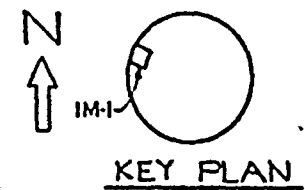
SS-581-267 (Sh. 1&2)	0	Type 16/block to steel
SS-581-268	0	Type 17/block to steel
SS-581-269 (Sh. 1) Rev. 1 (Sh. 2) Rev. 2		Type 18/block to steel
SS-581-270	0	Type 19/block to steel
SS-581-271 (Sh. 1) Rev. 1 (Sh. 2) Rev. 0		Type 20/block to steel
SS-581-272	0	Type 21/block to steel
SS-581-273 (Sh. 1&2) Rev. 0		Type 22/block to steel
SS-581-274	0	Type 23/block to steel
SS-581-275 (Sh. 1&2) Rev. 1		Type 24/block to steel
SS-581-276 (Sh. 1&2) Rev. 1		Type 25/block to steel
SS-581-277	1	Type 26/block with embedded steel
SS-581-278 (Sh. 1&2) Rev. 1		Type 27/block to steel
SS-581-279 (Sh. 1) Rev. 1 (Sh. 2) Rev. 0		Type 28/block to steel
SS-581-280	2	Type 29/block against shear pins

CONSTRUCTION	ENGR.
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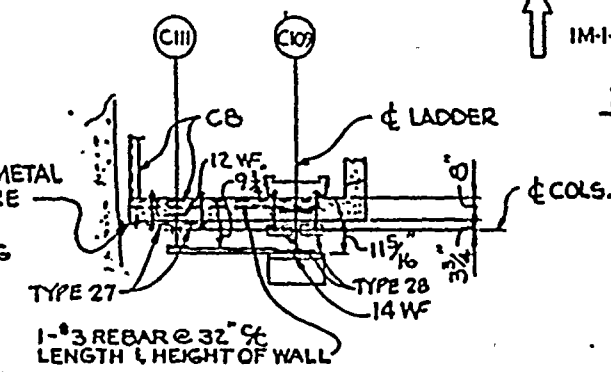
ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
CONTAINMENT BUILDING
MASONRY WALL 1M
FLOOR EL 235'-8"
ELEVATION & SECTIONS (EWR 2846)

DATE	DRAWING NO.	TR. NO.	REV
11-12-85	04 4947 SS-581-428	10F3	1
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11-15-80	---	---	
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REV. MADE	---	DATE	
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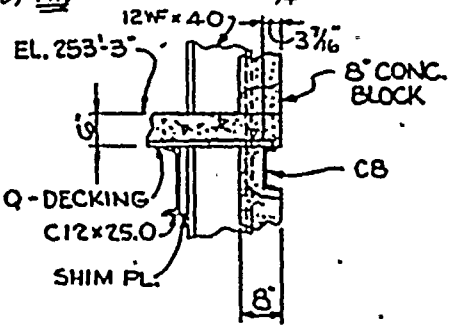
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RG & E DWG. 33013-971



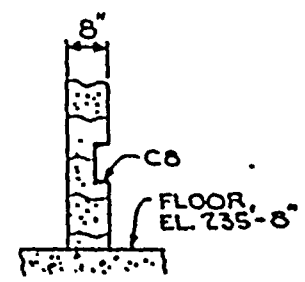
WALL ELEVATION 1M-1
SCALE: 1/4" = 1'-0"



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



SECTION 2-2
SCALE: 1/2" = 1'-0"



SECTION 3-3
SCALE: 1/2" = 1'-0"

NOTE:-
TYPE 27 REFERENCE DWG 55-581-27B
TYPE 28 REFERENCE DWG 55-581-27A

1

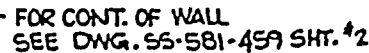


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WALL ELEVATION 1M-2

NOTES:-

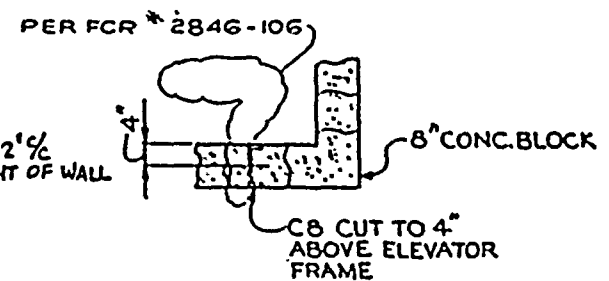
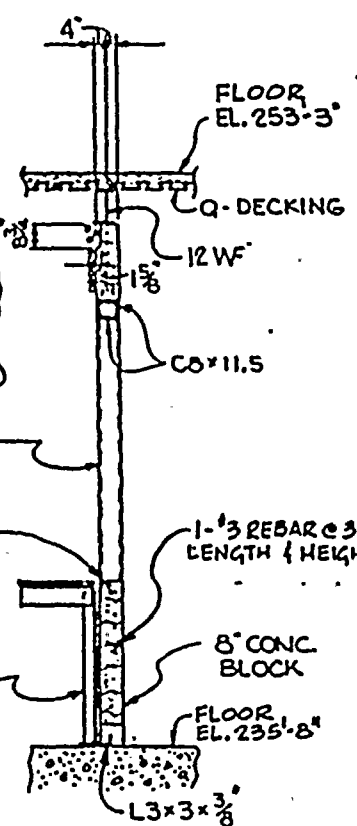
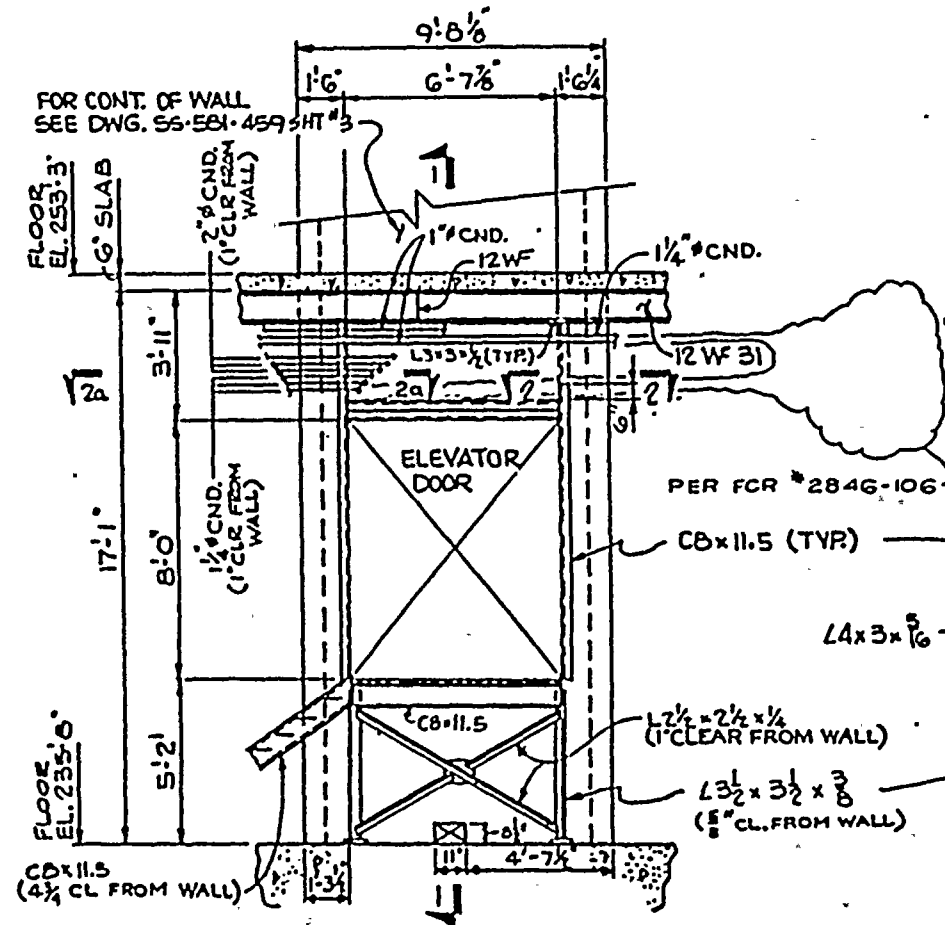
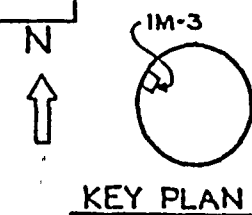
TYPE 27 REFERENCE DWG SS-581-278
TYPE 28 REFERENCE DWG SS-581-279

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ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
CONTAINMENT BUILDING
MASONRY WALL 1M
FLOOR EL. 235'-8"
ELEVATION & SECTIONS (EWR 284G)

REFERENCE:-
R.G. & E. DWG. 33013-971



NOTES:-
TYPE 26 REFERENCE DWG 55-581-277

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2-10-2



WALL ELEVATION 1-M-1

HABIT	DARRING NO.	IN. NO.	ALL
MURGEN EMMAHED 11-2-68	04 4947	SS-581-459	2 OF 3 1
SQ LOR SCOTT FBI NEW YORK 11-15-68	(IN INTER) NAME -- LAST	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE 4-1-00	(1) NR. 00	CNLT 11-15-68	
4-1-00	(1) NR. 00	APPVAL - BEST - BEST	
REV. 11-15-68	(1) NR. 00	APPVAL - BEST - BEST	
AS-BUILT	JM KUK IN 41		

Hand-drawn cross-section diagram of a containment wall and floor assembly. The wall is labeled "CONTAINMENT WALL" and shows a vertical section with a rebar labeled "1-3 REBAR @ 32" O.C. LENGTH & HEIGHT OF WALL". The floor assembly includes a "4 1/2" SST. PIPE" and a "TYPE 28" slab. Other labels include "TYPE 27", "12" W.F.", "14" W.F.", and "16" W.F.". Dimensions are given as 8", 16", and 3'-10".

SECTION 3-3

FOR CONTINUATION OF WALL BELOW
FLR EL 253'-3" SEE DWG SS-SBI-428 SHT #2

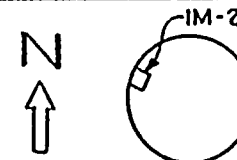
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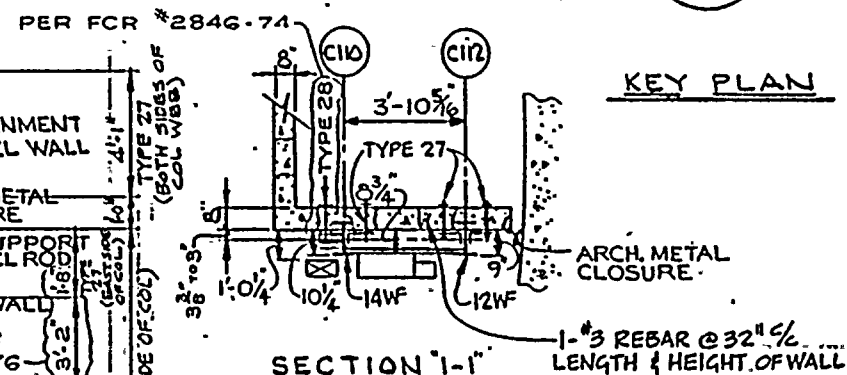
ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
CONTAINMENT BUILDING
MASONRY WALL IM
FLOOR ELEV. 278'-4"
ELEVATION & SECTIONS (EWR284C)

MADE BY JUERGEN EMMARTH 11-12-80	DRAWING NO. 04 4947 SS-581-486		SH. NO. 20F3		REV. 1
SO LOR SCOTT ESTELMAN 11-15-80	ENGINEER KKK 11-15-80		GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.		
SCALE 1/4" = 1'-0"	Q.M. Gilmay - G.R. J.H. G. - W.O. 044947000 - REVI MADE CH SOL APP DATE REVI MADE CH SOL APP DATE				
1 USE USE USE					
AS - BUILT					

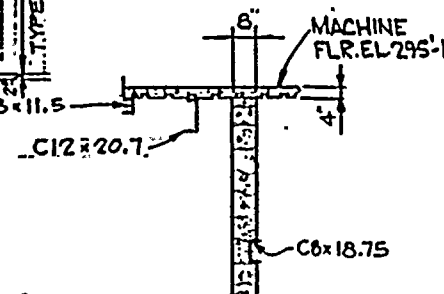
REFERENCE:-
RG & E DWG. 33013-973



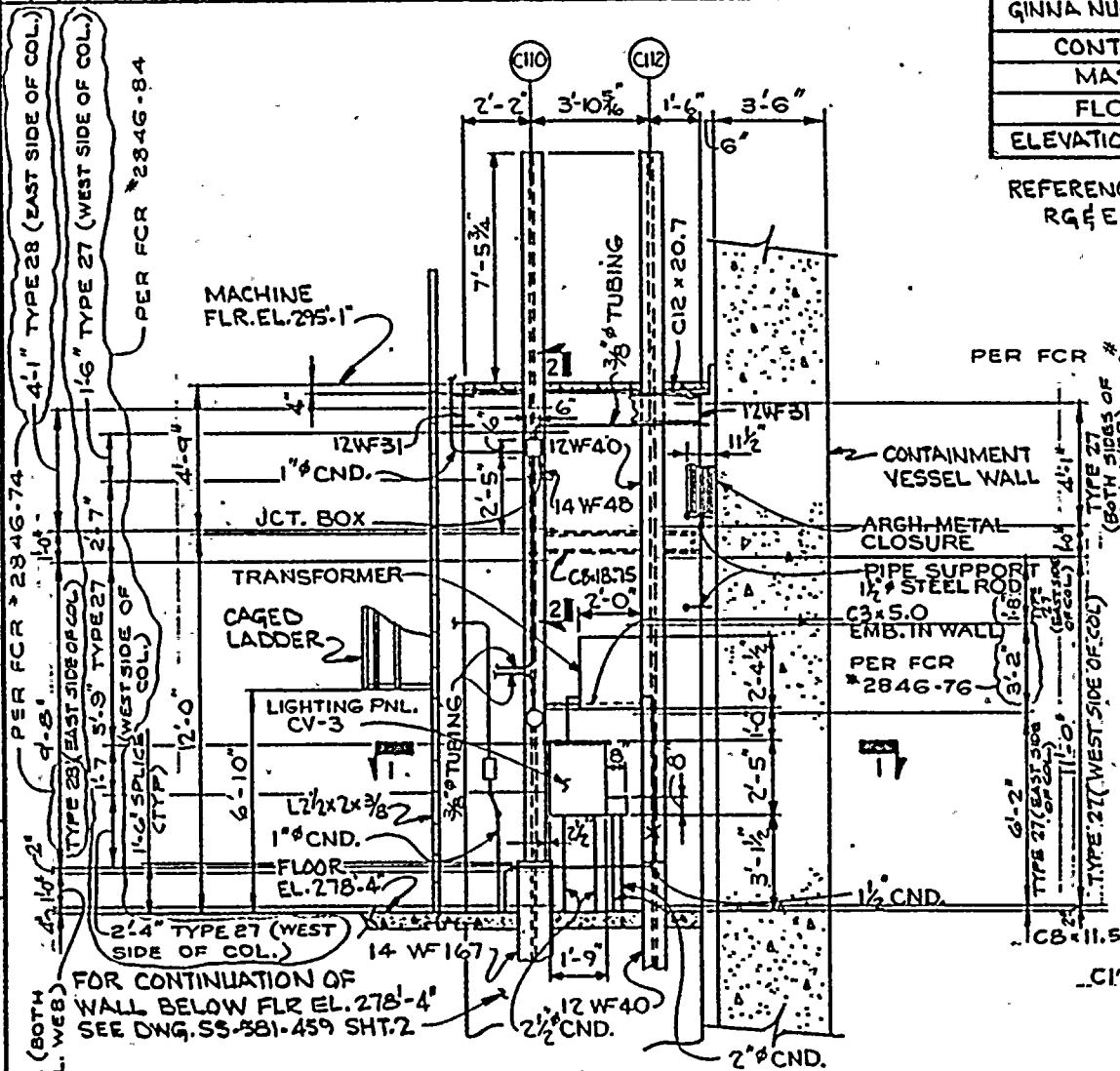
KEY PLAN



SECTION 'I-I'



SECTION 2-2



WALL ELEVATION IM-2

NOTES:-

NOTES:-
TYPE 27 REFERENCE DWG 55-581-278

TYPE 28 REFERENCE DWG SS-581:279

FOR CONTINUATION OF
WALL BELOW FLR EL. 278'-4"
SEE DWG. SS-381-459 SHT. 2 -

$$\frac{1}{4}^\circ = 1'-0''$$



CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

BOUNDARY DETAIL DRAWINGS

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DWG. NO.	REV.
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SS-581-253	2
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SS-581-255	2
SS-581-256 (SHT. 1) REV. 3 (SHT. 2) REV. 0	
SS-581-257 (SHT. 1) REV. 3 (SHT. 2) REV. 0	
SS-581-258	4
SS-581-259	3
SS-581-260 (SHT. 1) REV. 0 (SHT. 2) REV. 1	
SS-581-261 (SHT. 1) REV. 1 (SHT. 2) REV. 1	
SS-581-262	1
SS-581-263 (SHT. 1) REV. 2 (SHT. 2) REV. 0	
SS-581-264 (SHT. 1) REV. 1 (SHT. 2) REV. 1	
SS-581-265 (SHT. 1) REV. 1 (SHT. 2) REV. 0	
SS-581-266 (SHT. 1) REV. 2 (SHT. 2) REV. 2	
SS-581-267 (SHT. 1 & 2)	0
SS-581-268	0
SS-581-269 (SHT. 1) REV. 1 (SHT. 2) REV. 2	
SS-581-270	0
SS-581-271 (SHT. 1) REV. 1 (SHT. 2) REV. 0	
SS-581-272	0
SS-581-273 (SHT. 1 & 2)	0
SS-581-274	0
SS-581-275 (SHT. 1 & 2)	1
SS-581-276 (SHT. 1 & 2)	1
SS-581-277	1
SS-581-278 (SHT. 1 & 2)	1
SS-581-279 (SHT. 1) REV. 1 (SHT. 2) REV. 0	
SS-581-280	2

TITLE

INDEX OF DRAWINGS
GENERAL NOTES AND REFERENCES
TYPES 1 AND 2 / BLOCK TO CONC.
TYPES 1 AND 2 / BLOCK TO Q DECKING
TYPE 3 / BLOCK TO STEEL
TYPE 4 / BLOCK TO STEEL
TYPE 5 / BLOCK TO STEEL
TYPE 6 / BLOCK TO STEEL
TYPE 7 / BLOCK TO STEEL
TYPE 8 / BLOCK TO BLOCK
TYPE 9 / BLOCK TO STEEL
TYPE 10 / BLOCK TO CONCRETE
TYPE 11 / BLOCK TO BLOCK WITH MASTIC JOINT
TYPE 12 / BLOCK TO CONCRETE
TYPE 13 / BLOCK TO STEEL
TYPE 14 / BLOCK TO STEEL
TYPE 15 / BLOCK TO STEEL
TYPE 16 / BLOCK TO STEEL
TYPE 17 / BLOCK TO STEEL
TYPE 18 / BLOCK TO STEEL
TYPE 19 / BLOCK TO STEEL
TYPE 20 / BLOCK TO STEEL
TYPE 21 / BLOCK TO STEEL
TYPE 22 / BLOCK TO STEEL
TYPE 23 / BLOCK TO STEEL
TYPE 24 / BLOCK TO STEEL
TYPE 25 / BLOCK TO STEEL
TYPE 26 / BLOCK WITH EMBEDDED STEEL
TYPE 27 / BLOCK TO STEEL
TYPE 28 / BLOCK TO STEEL
TYPE 29 / BLOCK AGAINST SHEAR PINS

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
INDEX
(EWR 2846)

MADE PINKY 2-9-70	DRAWING NO. 04 4917 SS-581-250	SH. NO. 10
SO LOR JFE 7-4-70	ENG. INTER. JMA 10-3-70	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.
SCALE	10' = 1" - 0' 2" - 10' 0"	
REV. MADE CH. BY APP. DATE	REV. MADE CH. BY APP. DATE	REV. MADE CH. BY APP. DATE
9 JSE JM JM JMA 2-11-70	10 JSE JM JM JMA 1-1-70	11 JSE JM JM JMA 1-1-70

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

GENERAL NOTES AND REFERENCES :

- 1) FURNISHING OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH TECHNICAL SPECIFICATION TS-201-044594-(G5.)
- 2) INSTALLATION OF STRUCTURAL STEEL SHALL BE AS SHOWN ON DRAWINGS AND IN ACCORDANCE WITH TECHNICAL SPECIFICATION TS-202-044595-(G5.)
- 3) HILTI KWIK BOLTS SHALL BE INSTALLED AS PER ROCHESTER GAS & ELECTRIC TECHNICAL SPECIFICATION ME-130.
- 4) ENGINEERING SHALL SPECIFY LENGTH OVER WHICH FIX SHALL BE APPLIED.
- 5) CONTRACTOR SHALL INSTALL FIX TIGHT TO WALL. MINOR GAPS OF UP TO $\frac{1}{4}$ " BETWEEN WALL AND FIX DUE TO IRREGULARITIES IN THE WALL OR INDIVIDUAL BLOCK ARE ACCEPTABLE. WHEN LENGTH OF FIX DOES NOT PERMIT PROPER BEARING AGAINST CONCRETE OR BLOCK SURFACE, CONTRACTOR MAY USE SHORTER LENGTHS AS REQ'D TO MEET $\frac{1}{4}$ " GAP TOLERANCE. MINIMUM LENGTH OF ANY FIX TO BE 6". GAP BETWEEN SHORTER LENGTHS TO BE $1' \pm \frac{1}{2}$ "
- 6) FIELD TOLERANCES ON LENGTHS OF GENERIC FIXES TO BE $\pm 2'$

ROCHESTER GAS & ELECTRIC CO.		DRAWING NO.		SH. NO.		REV	
GINNA NUCLEAR POWER STATION		04 1947		SS-581-251		5	
MASONRY WALL BOUNDARY DETAIL		SO LON		EWO INTER		GILBERT ASSOCIATES, INC.	
GENERAL NOTES & REFERENCES		MA		1		ENGINEERS AND CONSULTANTS	
(EWR 2846)		SCALE		1/8" = 1'-0"		READING, PA.	
		NO. 041947-000		ENGINEER APPROVAL		DATE	
		REV MADE CH		REV MADE CH		REV MADE CH	
		5 USE JM		4		4	

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

$\frac{1}{2}$ " x $\frac{5}{8}$ " LG HILTI KWIK BOLT
 3" MIN EMBEDMENT FOR CONCRETE
 WALL OR SLAB 6" THICK OR GREATER. FOR
 5" THICK SLAB, EMBEDMENT DEPTH TO BE
 3" (1" 0") WITH MAXIMUM DEPTH OF DRILLED
 HOLE TO BE (4") FOR ANGLE CONNECTION
 DETAIL TO SLABS WITH Q-DECKING SEE
 PER FCR
 2846-17

VARIES

$\frac{1}{2}$ " x $\frac{3}{4}$ " x $\frac{3}{4}$ " PLATE
 WASHER - SEE DETAIL C
 DWG SS-581-253
 (USE WITH 5" SLAB ONLY)

L4 x 4 x $\frac{3}{8}$ OR
 ALLOWABLE SUBSTITUTE
 SEE NOTE 2 & DET. 'A'

EXISTING
 CONCRETE WALL
 OR SLAB

EXISTING
 Q-DECKING
 IN SLAB
 EXISTING
 MASONRY
 WALL

L4 x 4 OR ALLOWABLE SUBSTITUTE
 SEE NOTE 2

$\frac{1}{2}$ " x $\frac{5}{8}$ " HOLE FOR
 $\frac{1}{2}$ " HILTI

TYPE 1	VARIES
6" TO 9" LG	9" MAX 6" MIN
TYPE 2	VARIES
6" TO 10" LG	10" MAX 6" MIN

PLAN OR SECTION

ROCHESTER GAS & ELECTRIC CO
 GINNA NUCLEAR POWER STATION

MASONRY WALL BOUNDARY DETAILS

TYPES 1 AND 2

BLOCK TO CONCRETE

(EWR 2846)

MADE BY J. E. ROBERTSON 10-3-80	DRAWING NO. 04 4947 SS-581-252	SN. NO.	REV 2
SCALE VARIES	ENGINEER J. E. ROBERTSON	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	DATE 10-3-80
REV. 1 10-3-80	REV. 2 10-3-80	REV. 3 10-3-80	REV. 4 10-3-80

BLOCK

L4 x 4 OR ALLOWABLE SUBSTITUTE
 SEE NOTE 2

CONCRETE

$\frac{1}{2}$ " x $\frac{5}{8}$ " HOLES FOR
 $\frac{1}{2}$ " HILTI

TYPE 1	VARIES	VARIES	VARIES
10" TO 3' 0" LG	9" MAX 2 1/2" MIN	1' 0" MAX 5" MIN	9" MAX 2 1/2" MIN
TYPE 2	VARIES	VARIES	VARIES
1' 7" TO 6' 0"	1' 0" MAX 2 1/2" MIN	3' 0" MAX 5" MIN	1' 0" MAX 2 1/2" MIN

DETAIL 'A'

ONE BOLT CONNECTION

DETAIL 'A'

TWO BOLT CONNECTION

BLOCK	L4 x 4 OR ALLOWABLE SUBSTITUTE - SEE NOTE 2	$\frac{1}{2}$ " x $\frac{5}{8}$ " HOLES FOR $\frac{1}{2}$ " HILTI			
CONCRETE					
TYPE 1	VARIES	VARIES	VARIES	VARIES	VARIES
L GREATER THAN 3' 0"	9" MAX 2 1/2" MIN	1' 0" MAX 5" MIN	1' 0" MAX 5" MIN	1' 0" MAX 5" MIN	1' 0" MAX 5" MIN
TYPE 2	VARIES	VARIES	VARIES	VARIES	VARIES
L GREATER THAN 6' 0"	1' 0" MAX 2 1/2" MIN	3' 0" MAX 5" MIN	3' 0" MAX 5" MIN	3' 0" MAX 5" MIN	3' 0" MAX 5" MIN

DETAIL 'A'

MULTIPLE BOLT CONNECTION

NOTES:-

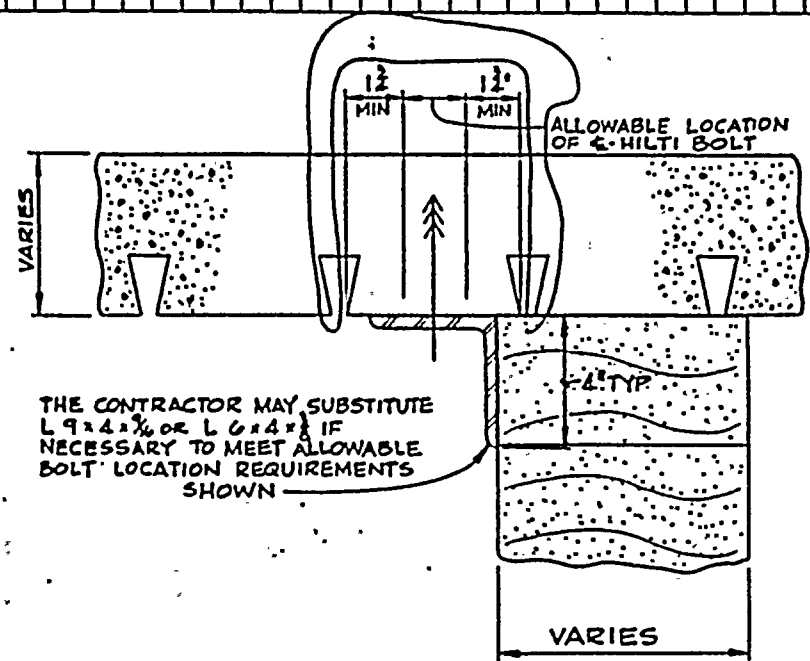
- BOLT SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED BOLT HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL BOLTS REQ'D TO MEET THE TOLERANCES SHOWN.
- THE CONTRACTOR MAY SUBSTITUTE L4 x 4 x $\frac{3}{8}$ OR L6 x 4 x $\frac{3}{8}$ IF NECESSARY TO MEET ALLOWABLE BOLT LOCATION REQUIREMENTS. SEE DETAIL 'B' DWG SS-581-253
- FOR ADDITIONAL NOTES AND REFERENCES SEE DWG SS-581-251



CONSTRUCTION
BIDDING PURPOSES
RELEASED FOR
ENGR.
DATE

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPES 1 AND 2
BLOCK TO Q-DECKING
DETAILS 'B' AND 'C' (EWR 2846)

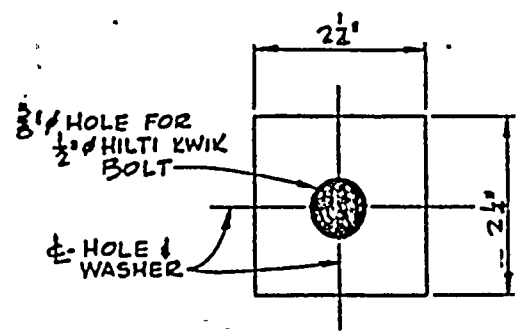
WJC JUL 26/80 EMHAKOT 10-7-80	DRAWING NO. 044947SS-581-253	SH NO. 2	REV
TO LDR HFE 705-580	ENG. INTER 1.3.5	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	1/1	APPROVAL	DATE
00044947000	10/1/80	2	0000
REV	DATE	BY	APP
1	01/01/80	JL	01/01/80



THE CONTRACTOR MAY SUBSTITUTE
L 9x4x1/8 OR L 6x4x1/8 IF
NECESSARY TO MEET ALLOWABLE
BOLT LOCATION REQUIREMENTS
SHOWN

NOTE:-
THE SAME BOLT LOCATION
REQUIREMENTS SHALL
BE MAINTAINED WHEN RIBS
OF Q-DECKING ARE RUNNING
PERPENDICULAR TO WALLS,
AND ALSO WHEN BOLTING
INTO TOP OF SLAB

DETAIL 'B'



DETAIL 'C'

NOTES:-
1. FOR NOTES AND REFERENCES
SEE DWG 55-581-251

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION

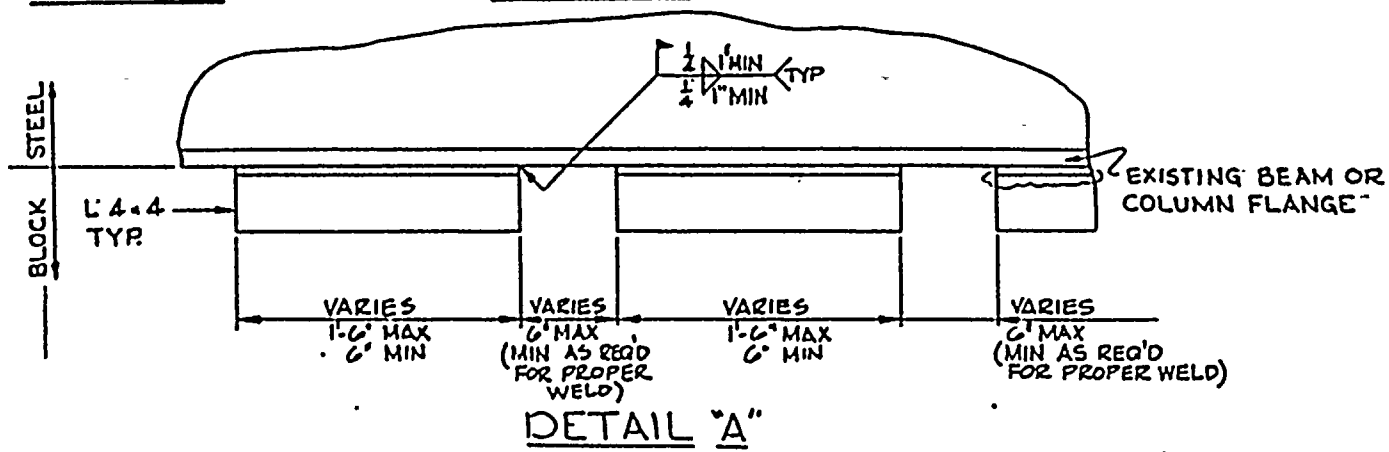
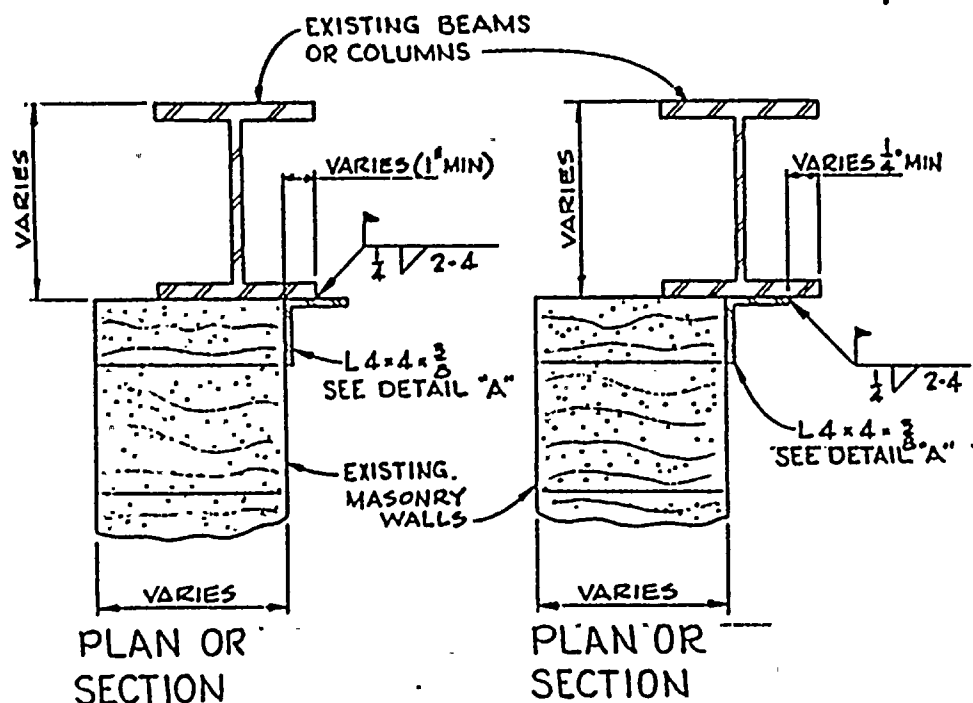
MASONRY WALL BOUNDARY DETAILS

TYPE 3

BLOCK TO STEEL

(EWR 2846)

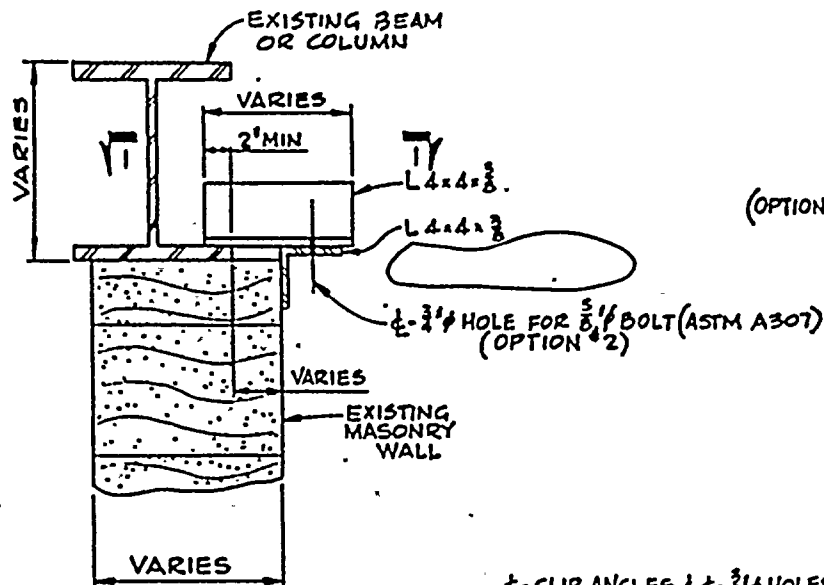
MADE BY JURGEN EMHARDT 10-3-80	DRAWING NO. 04 4947 SS-581-254	SH. NO. 3	REV
SO LOR JFE 10-9-80	ENGINEER JMA 5-1-85	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	APPROVAL JMA 10-12-80	DATE	DATE
REV MADE	CM	APP	DATE
1	0-0-80	FE	10-12-80
3	JSE	JM	1-9-81



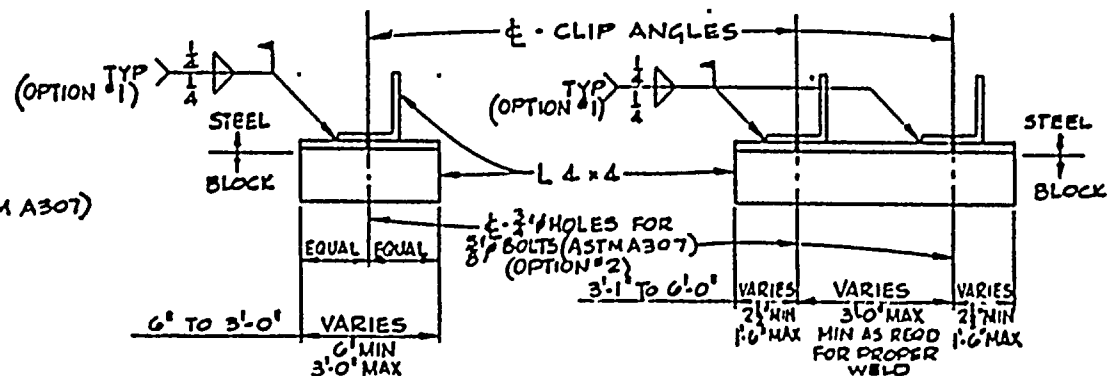
NOTES:-
1. FOR NOTES & REFERENCES
SEE DWG SS-581-251

ROCHESTER GAS & ELECTRIC CO GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 4
BLOCK TO STEEL
(EWR 2846)

DATE JAN 20 1975	DRAWING NO. 04 4947 SS-581-255	REV 2
ENGINEER JL	DESIGNER MA	CHECKER JL
SCALE VARIES	DATE JAN 20 1975	DATE JAN 20 1975
APPROVED JL	APPROVED JL	APPROVED JL



PLAN OR SECTION



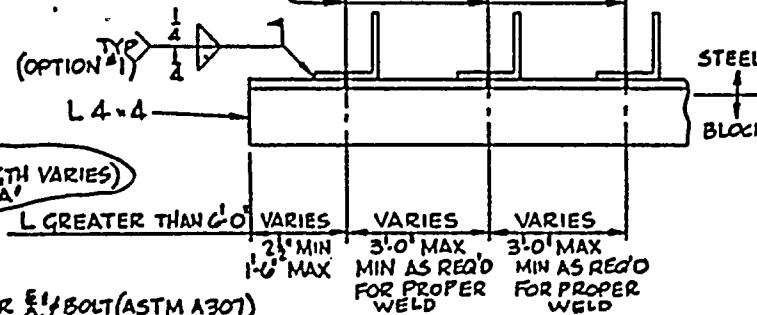
DETAIL 'A'

DETAIL 'A'

ONE CLIP ANGLE CONNECTION

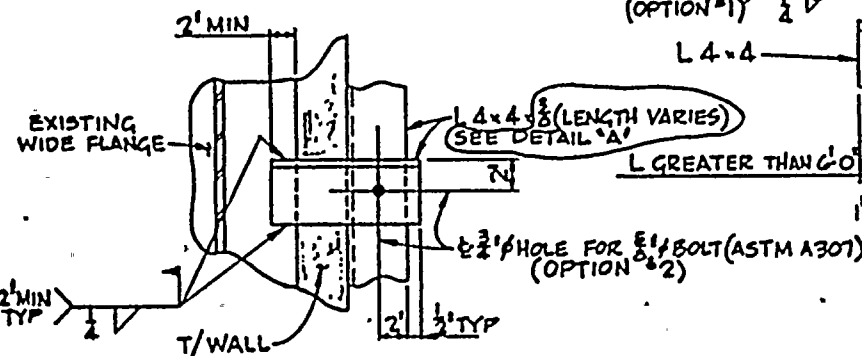
TWO CLIP ANGLE CONNECTION

CLIP ANGLES & 1/2\"/>



DETAIL 'A'

MULTIPLE CLIP ANGLE CONNECTION



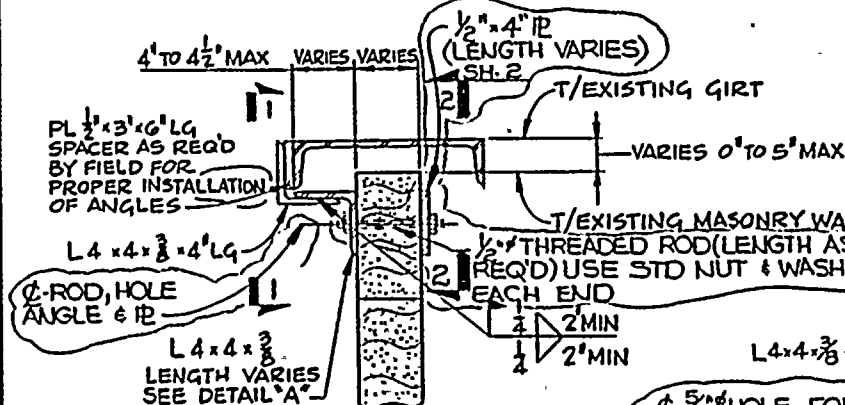
SECTION 1-1

NOTES:-

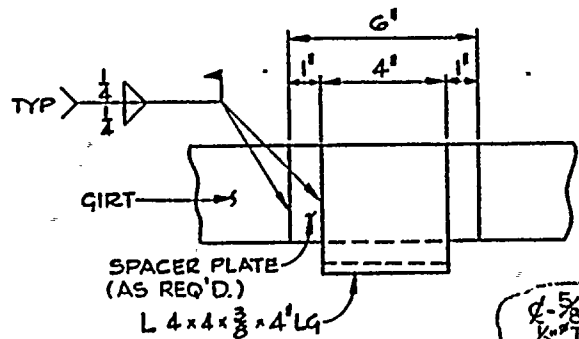
1. CLIP ANGLE SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED BOLT HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL CLIP ANGLES REQUIRED TO MEET TOLERANCES SHOWN.
2. CONTRACTOR MAY INSTALL BOUNDARY DETAILS BY USING EITHER WELOS (OPTION #1) OR BOLTS (OPTION #2) TO FASTEN THE TWO COMPONENTS OF THE BOUNDARY DETAILS TOGETHER.
3. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG SS-581-2

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE S
BLOCK TO STEEL
(EWR 2846)

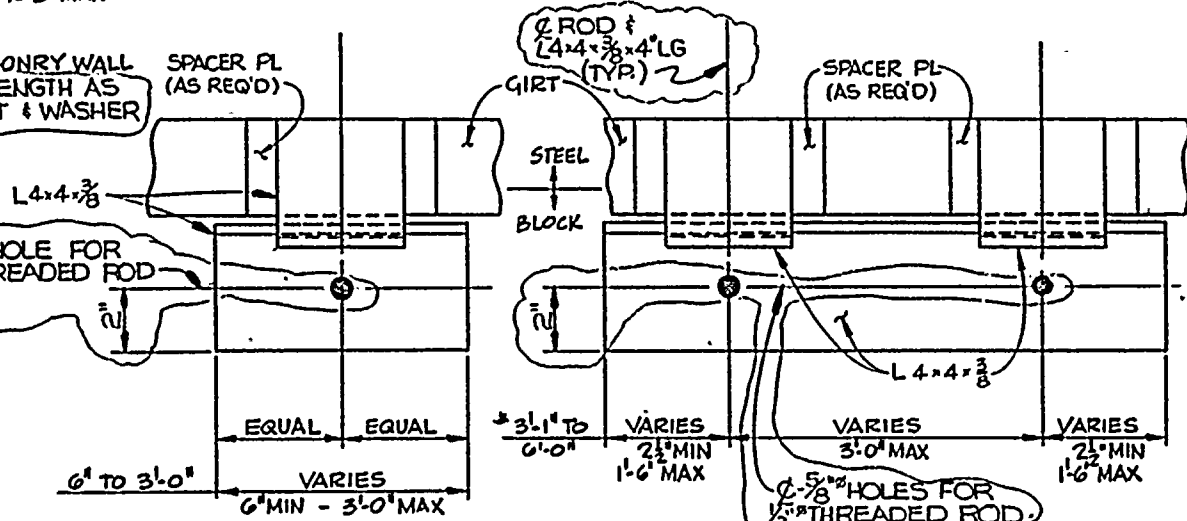
MADE	DRAWING NO.	SH. NO.	REV
JUERGEN EMHARDT 10-8-80	04 4947 SS-581-256	10F2	3
SO LDR JFE	ENG INTERP JFE	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	W.O. 044947000	ENGINEER APPROVAL	DEPT. DATE
REV. MADE	CH. SOL APP. DATE	REV. MADE	CH. SOL APP. DATE
3	10/13/80	2	10/13/80



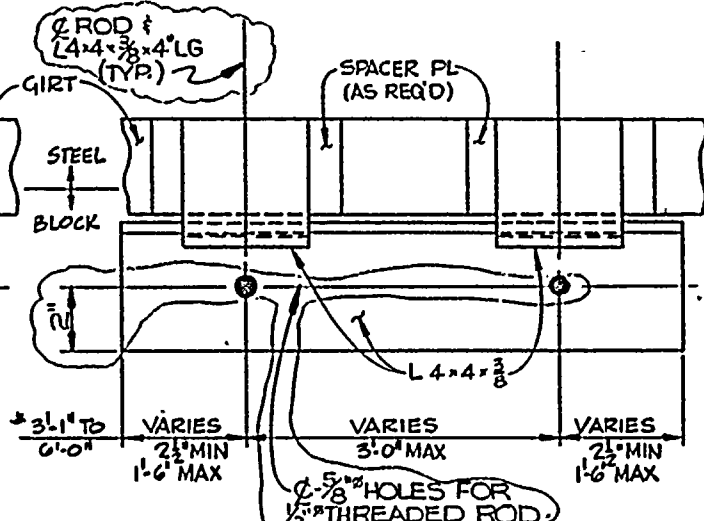
SECTION 1



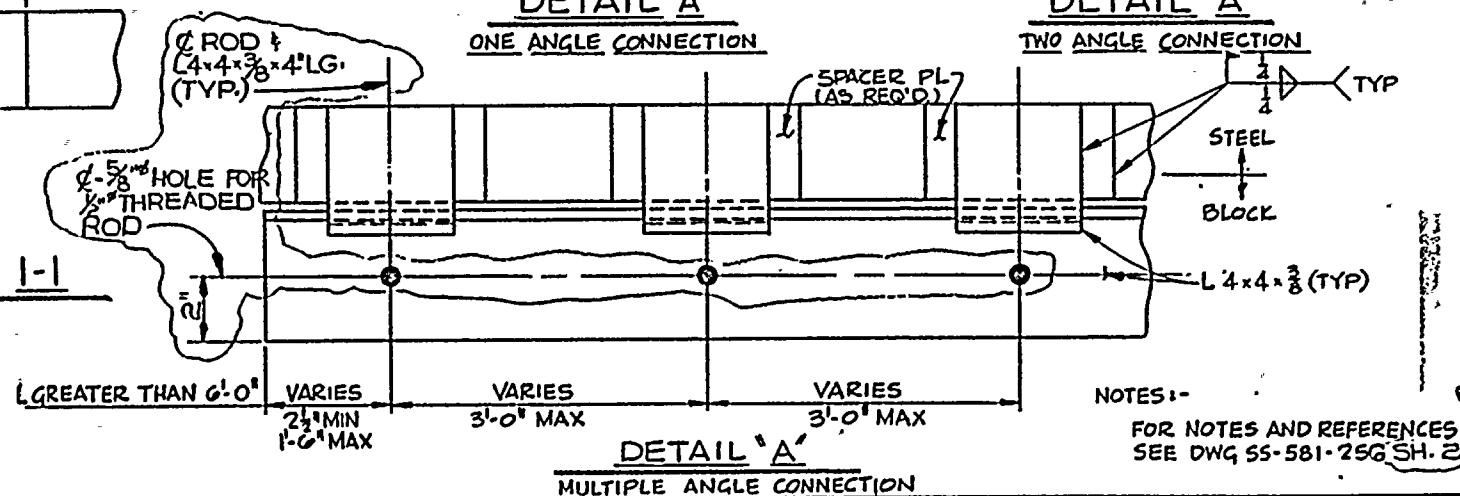
ELEVATION 1-1



DETAIL "A"
ONE ANGLE CONNECTION



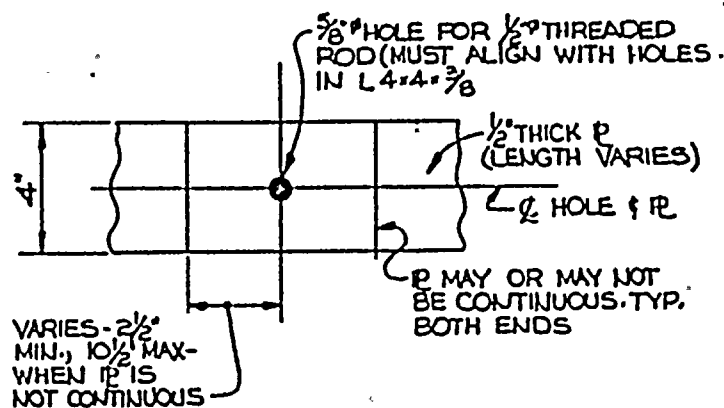
DETAIL "A"
TWO ANGLE CONNECTION



DETAIL "A"
MULTIPLE ANGLE CONNECTION

NOTES:-
FOR NOTES AND REFERENCES
SEE DWG SS-581-256 SH. 2

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



ELEVATION 2-2

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 5
BLOCK TO BLOCK
(EWR 284G)

DATE CHG	04	4947	SS-581-25G	20F2	0
11-2-82	11-2-82	11-2-82	11-2-82	11-2-82	11-2-82
SCALE 3"=1'-0"	SCALE 3"=1'-0"	SCALE 3"=1'-0"	SCALE 3"=1'-0"	SCALE 3"=1'-0"	SCALE 3"=1'-0"
0004947-00	0004947-00	0004947-00	0004947-00	0004947-00	0004947-00
REV	MADE	CH	101	APP	DATE
REV	MADE	CH	101	APP	DATE

- NOTES:
1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN.
 2. ALL THREADED RODS TO BE ASTM A307
 3. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG SS-581-251

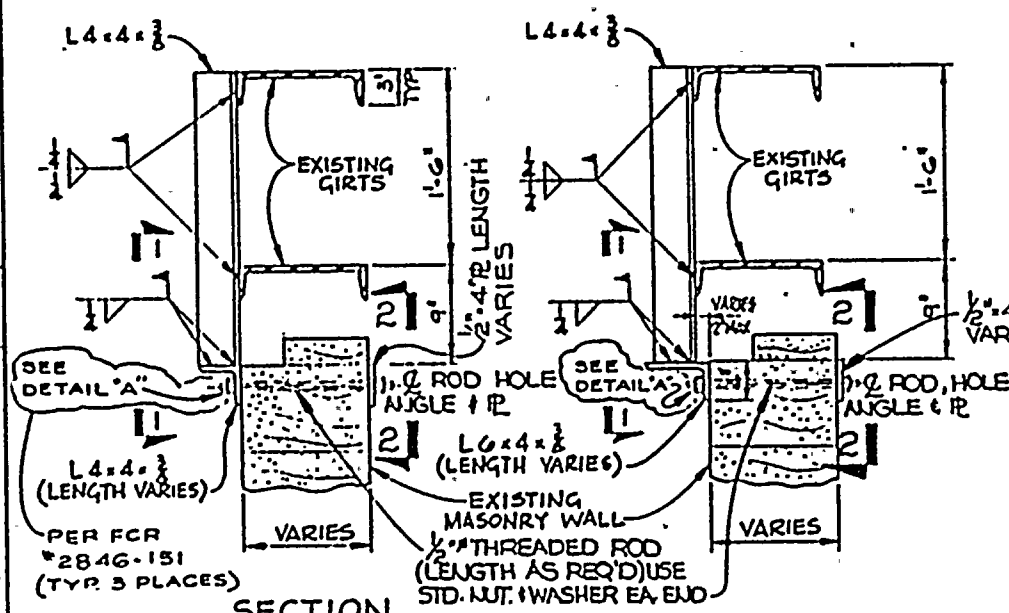


ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION

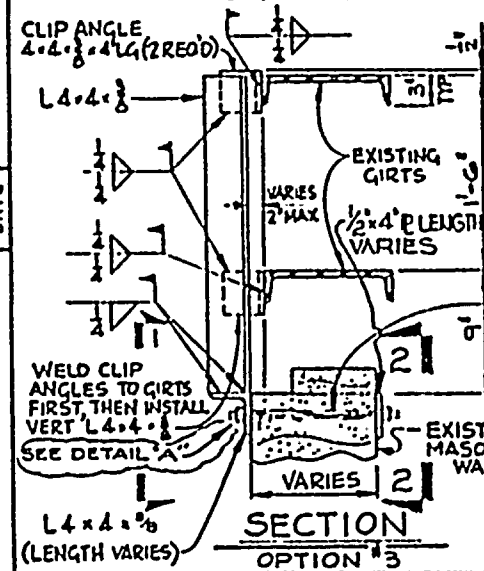
MASONRY WALL BOUNDARY DETAILS
TYPE G
BLOCK TO STEEL
(EWR 284G)

W. J. URGENT SAFETY 10-12-65	04 4947 SS-581-257	10-2	3
SCALE VARIES	0004476700	ENGINEER APPROVAL	012
REV. MADE CH	100	APP. DATE	10-12-65
3	USE	JM	1-7-61
2	1-7-61	2	1-7-61
1	1-7-61	1	1-7-61

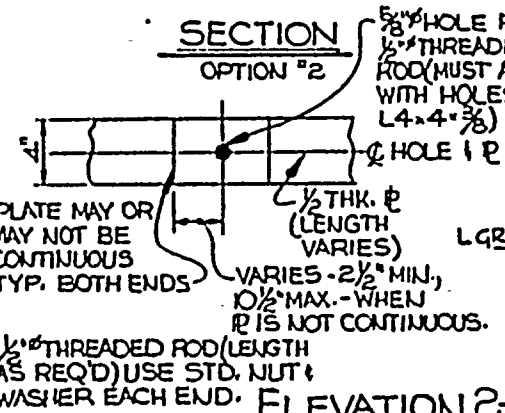
CONSTRUCTION BIDDING PURPOSES
RELEASED FOR
ENGR.
DATE



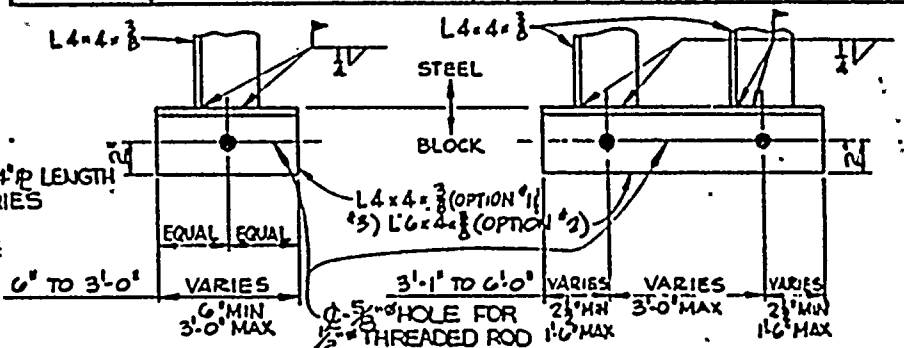
SECTION
OPTION #1



SECTION
OPTION #3

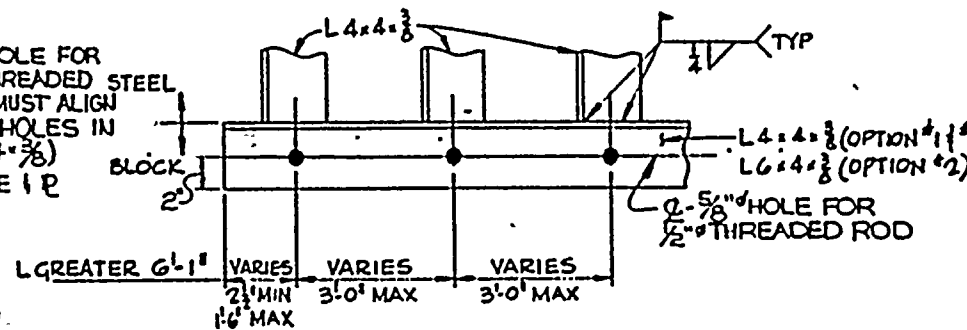


SECTION
OPTION #2



ELEVATION 1-1
ONE ANGLE CONNECTION

ELEVATION 1-1
TWO ANGLE CONNECTION



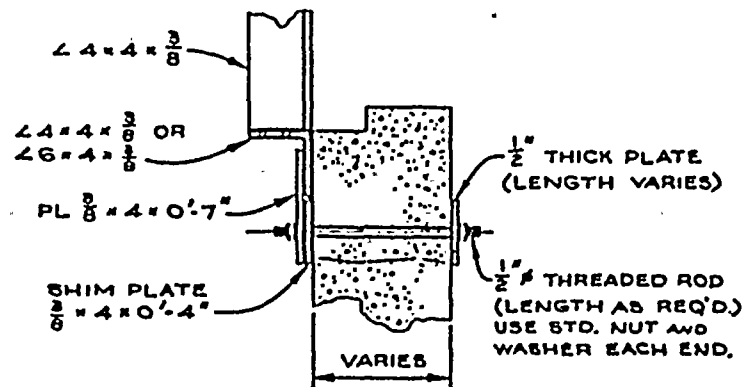
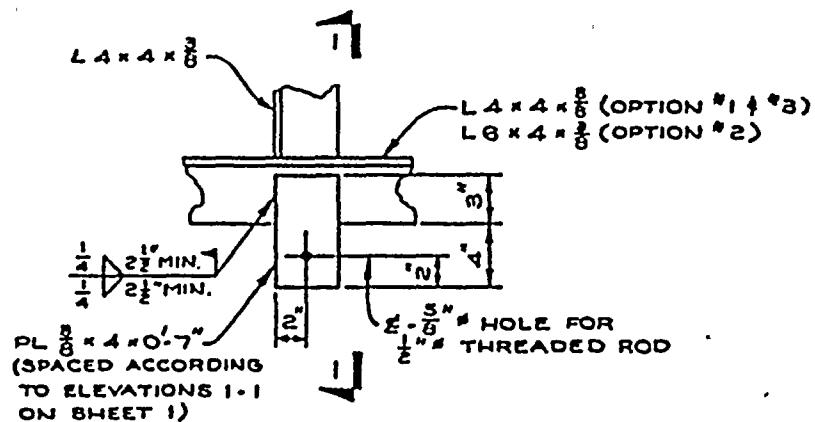
ELEVATION 1-1
MULTIPLE ANGLE CONNECTION

NOTES:-

1. THE CONTRACTOR SHALL INSTALL BOUNDARY DETAILS USING OPTION 1, 2 OR 3 AS DETERMINED BY FIELD CONDITIONS
2. ALL THREADED RODS TO BE ASTM A307

3. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN
4. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG. SS-581-521

CONSTRUCTION BIDDING PURPOSES RELEASED FOR	ENGR.
DATE	



ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION

MASONRY WALL BOUNDARY DETAILS

TYPE 6

BLOCK TO STEEL

(EWR 2846)

MADE SCOTT REHELMAN 1-7-80	DRAWING NO. 04 4947SS-581-257	SH. NO. 2 of 2	REV 0
SO LOR JMM 1-9-80	ENGINEER JL 1-7-81	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE 1/4" = 1'-0"	ENGINEER APPROVAL	DEPT	DATE
NO 044947000	DATE	DATE	DATE
REV MADE CH	DATE	DATE	DATE

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 7
BLOCK TO STEEL
(EWR 2846)

The diagram illustrates two cross-sectional views of a structural connection between an existing beam and a new steel member. Key components and dimensions are labeled as follows:

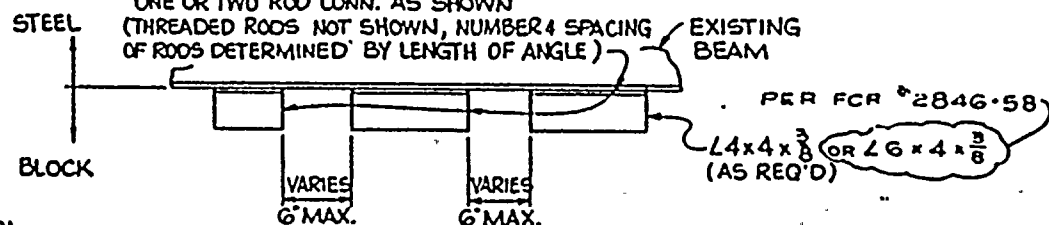
- EXISTING BEAM**: The top horizontal element.
- STEEL**: The vertical member being connected.
- BLOCK**: A horizontal plate placed between the beam and the steel member.
- FOR ED ROD**: Label pointing to the vertical reinforcement bars in the column.
- EQUAL**: Label indicating equal dimensions for the two vertical segments of the column.
- VARIES**: Label indicating variable dimensions for certain parts of the connection.
- PER FCR 2846-58**: Reference to the Federal Construction Regulations.
- HOLES FOR THREADED ROD**: Label pointing to the holes in the beam flange.

Dimensions shown include:

- Column width: 6' TO 1'-0"
- Plate height: 1'-0" MAX 6' MIN
- Block length: 1'-1" TO 3'-0"
- Column width (right): VARIES 9' MAX 2 1/2' MIN
- Plate height (right): VARIES 1'-6" MAX 8' MIN
- Block length (right): VARIES 9' MAX 2 1/2' MIN

.ELEVATION 1-1
ONE ROD CONNECTION

ELEVATION 1-1
TWO ROD CONNECTION



ELEVATION 1-1
MULTIPLE ROD CONNECTION

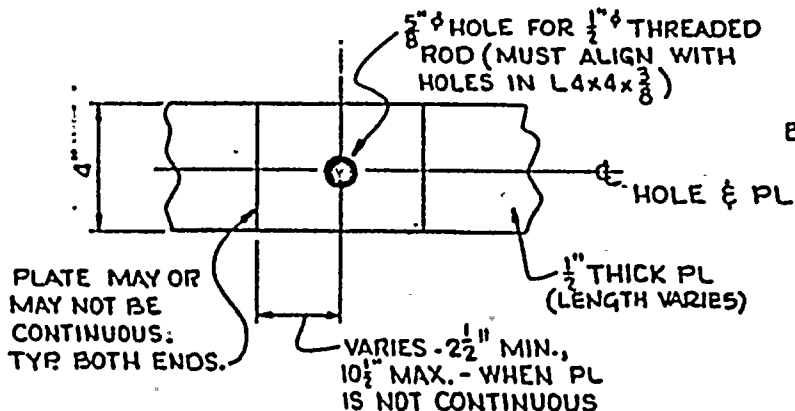
FOR MULTIPLE ROD CONNECTION (FIX LENGTH
GREATER THAN 3'-0") CONTRACTOR TO USE ONE &
TWO ROD CONNECTION DETAILS AS REQ'D. WITH
MAX. SPACING BETWEEN ADJACENT ANGLES TO BE

NOTES:-

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN

2. ALL THREADED RODS TO BE ASTM A307
3. FOR ADDITIONAL NOTES AND REFERENCES SEE
DWG 55-581-251

ELÉVATION 2-2



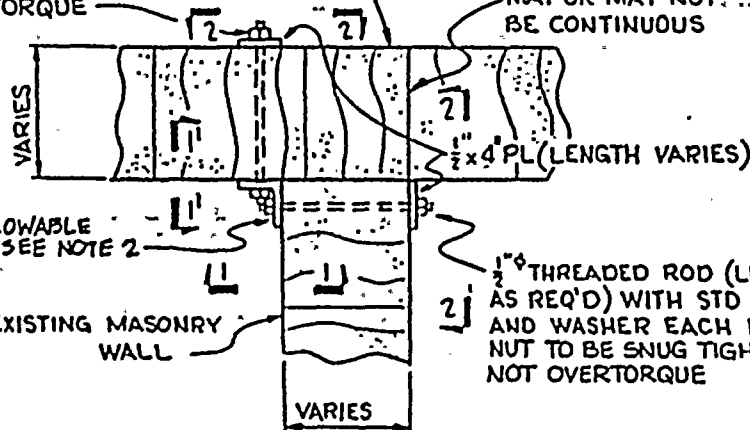
ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 8
BLOCK TO BLOCK
(EWR 2846)

MADE DL OWENS 12-17-60	DRAWING NO. 04 1947SS-581-259	IN NO 3	REV 3
TO LOR 1/1/61	ENGINEER GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	DATE 12-17-60	DATE 12-17-60
SCALE VARIES	ENGINEER APPROVAL DATE 12-17-60	DATE 12-17-60	DATE 12-17-60
REV 3	MADE 12-17-60	DATE 12-17-60	DATE 12-17-60

$\frac{1}{2}$ " THREADED ROD (LENGTH AS REQ'D.) WITH STD. NUT AND WASHER EACH END. NUT TO BE SNUG TIGHT, DO NOT OVERTORQUE

EXISTING MASONRY WALL

MAY OR MAY NOT BE CONTINUOUS



NOTES:

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN.
2. THE CONTRACTOR MAY SUBSTITUTE $L 4 \times 4 \times \frac{3}{8}$ OR $L 6 \times 4 \times \frac{3}{8}$, IF NECESSARY TO ALLOW INSTALLATION OF THREADED ROD.
3. ALL THREADED RODS TO BE ASTM A307
4. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG 55-581-251

PLAN

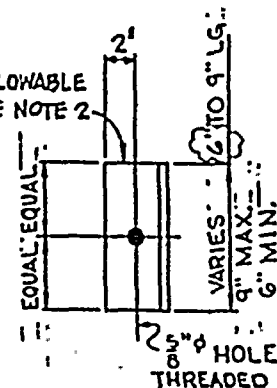
$L 4 \times 4$ OR ALLOWABLE SUBSTITUTE SEE NOTE 2

VARIES - $2\frac{1}{2}$ " MIN. $10\frac{1}{2}$ " MAX. WHEN PLATE IS NOT CONTINUOUS (TYP)

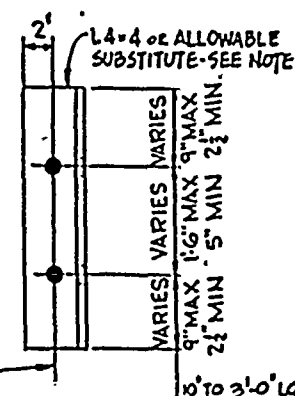
$\frac{3}{8}$ " HOLE FOR $\frac{1}{2}$ " THREADED ROD (MUST ALIGN WITH HOLES IN $L 4 \times 4 \times \frac{3}{8}$)

PLATE MAY OR MAY NOT BE CONTINUOUS. (TYP BOTH ENDS)

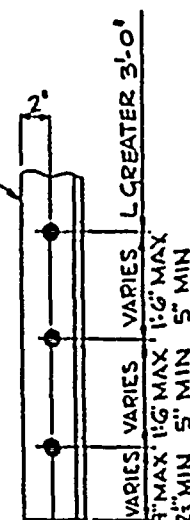
SECTION 2-2



SECTION 1-1
SECTION 1'-1' OPP HAND
ONE ROD CONNECTION



SECTION 1-1
SECTION 1'-1' OPP HAND
TWO ROD CONNECTION



SECTION 1-1
SECTION 1'-1' OPP HAND
MULTIPLE ROD CONNECTION

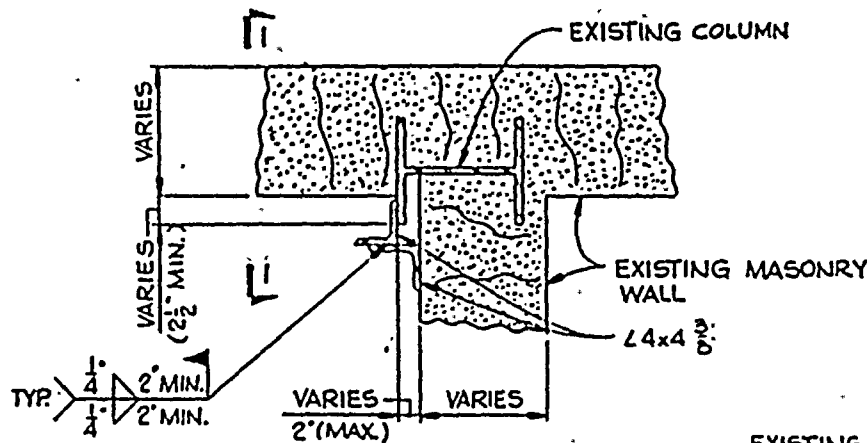
CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



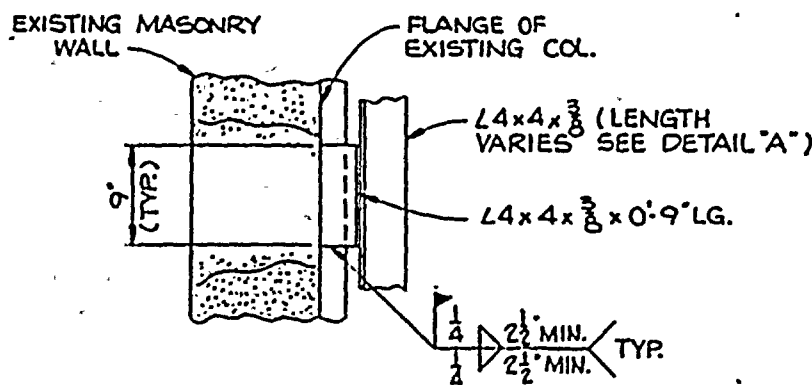
CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 9
BLOCK TO STEEL
(EWR 284G)

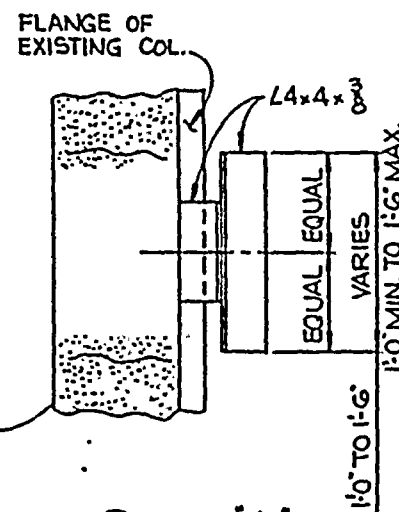
DATE	DRAWING NO.	IN NO.	REV.
PINKY 10-12-80	04 4947 155-581-260	10F 2	0
SO LOR JFE 10-17-80	ENC. 155-581-260 155-581-260	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE 1"=1'-0"	ENGINEER APPROVAL	DEPT.	DATE
REV. MADE	CM	SOL	APP. DATE



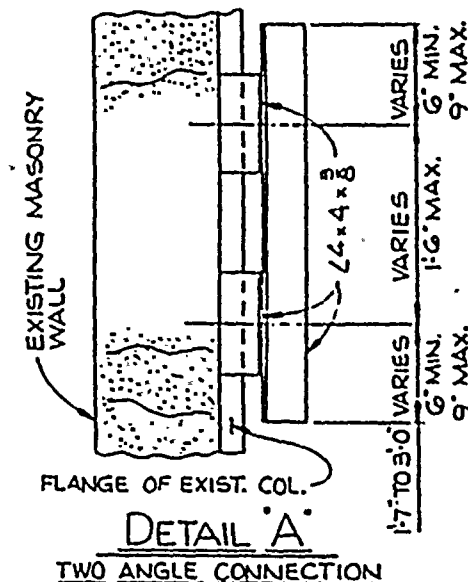
PLAN



SECTION I-I

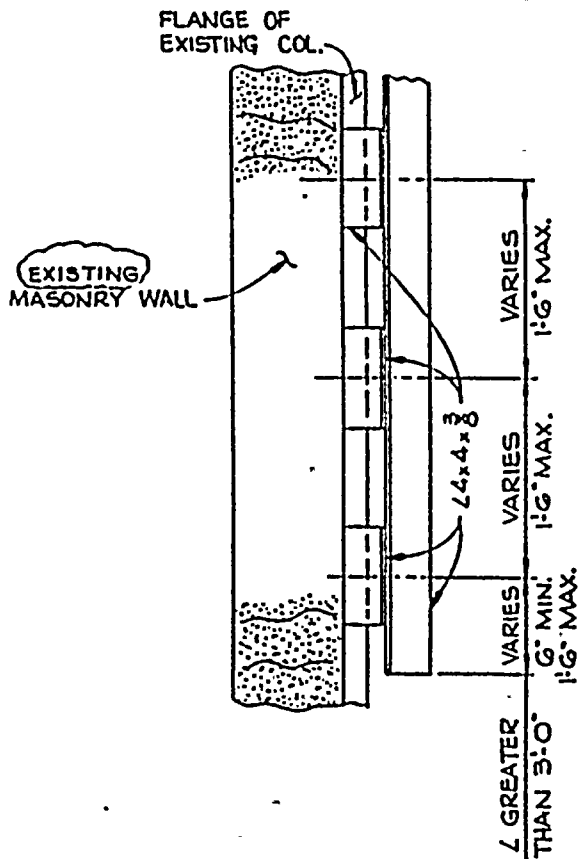


DETAIL A
ONE ANGLE CONNECTION



NOTES:
FOR NOTES & REFERENCES
SEE DWG. 55-581-251

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



DETAIL "A"
MULTIPLE ANGLE CONNECTION

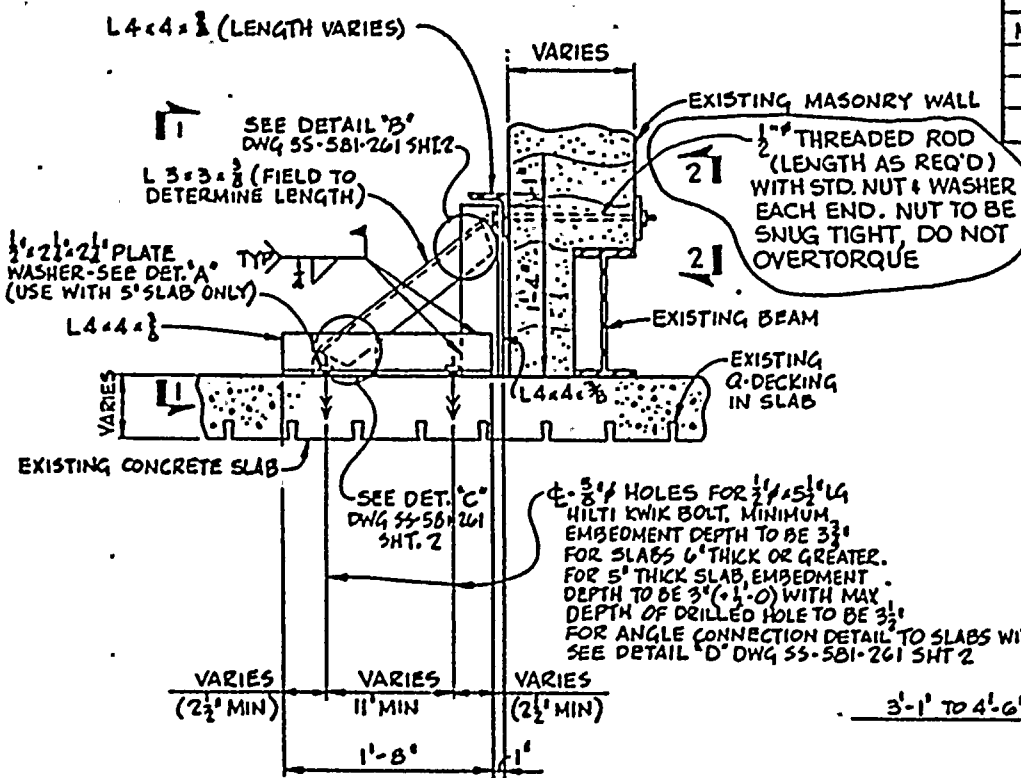
ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAIL
TYPE 9
BLOCK TO STEEL
(EWR 284G)

DATE	DRAWING NO.	SN NO.	REV
PWKY 12-17-72	04 4947 SS-581-260	20F 2	1
SO LDR	END INTERP	GILBERT ASSOCIATES, INC.	
DATE	JMA	ENGINEERS AND CONSULTANTS	
10-17-80	10-17-80	READING, PA.	
SCALE 1"=1'-0"	10-17-80	10-17-80	
REV	DATE	APP	DATE
1	USE	JM	10-17-80

NOTES:
FOR NOTES & REFERENCES
SEE DWG. SS-581-251

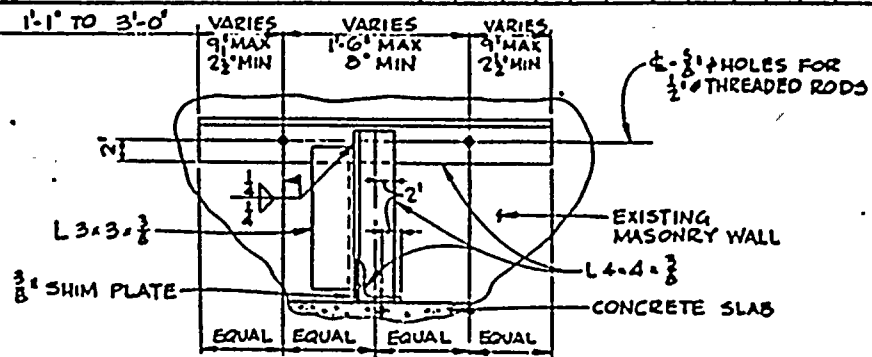
CONSTRUCTION	ENG.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

ROCHESTER GAS & ELECTRIC CO	MADE	DRAWING NO.	SH NO	REV
GINNA NUCLEAR POWER STATION	JUSEGEN	044947SS-581-261	1 OF 2	1
MASONRY WALL BOUNDARY DETAILS	EMHARDT			
TYPE 10	10-17-60			
BLOCK TO STEEL & CONCRETE	OWENS			
(EWR 2846)	10-18-62			
	SCALE VARIES			
	0004947000			
	REV MADE CH			
	1/Rev			

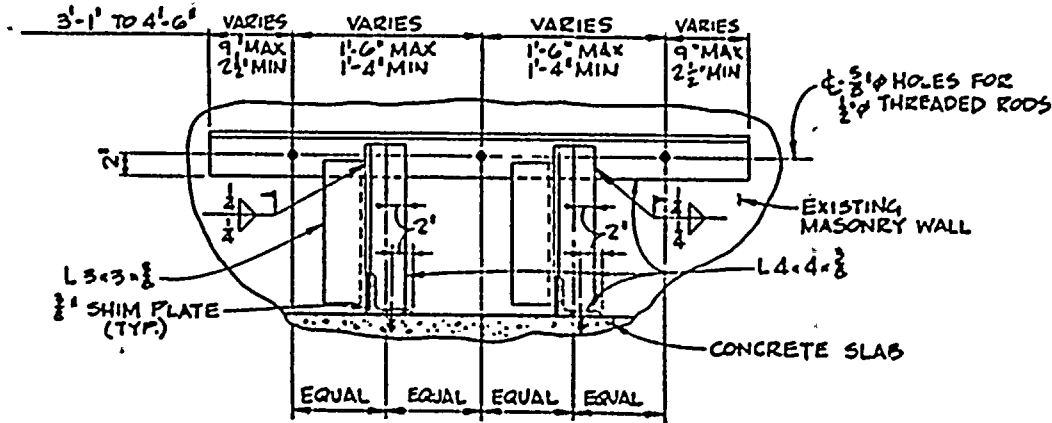


SECTION

NOTES:-
FOR NOTES SEE DWG SS-581-261 SHT 2



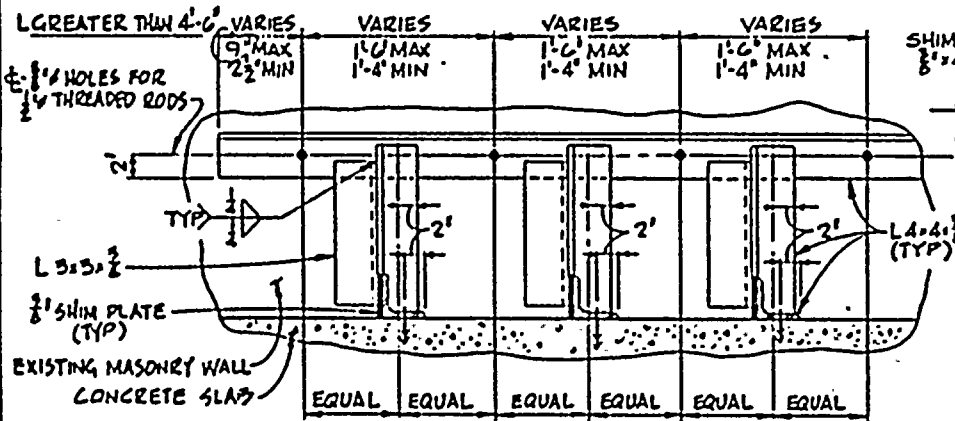
SECTION I-I
ONE ANGLE CONNECTION
WITH TWO ROD CONNECTION



SECTION I-I
TWO ANGLE CONNECTION
WITH THREE ROD CONNECTION

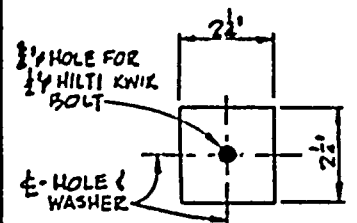
CONSTRUCTION BIDDING PURPOSES
RELEASED FOR
ENGR.
DATE

ROCHESTER GAS & ELECTRIC CO		DRAWING NO.		SH NO	REV
GINNA NUCLEAR POWER STATION		04-14947SS-581-261		2002	1
MASONRY WALL BOUNDARY DETAILS		GILBERT ASSOCIATES, INC.		ENGINEERS AND CONSULTANTS	
TYPE 10		READING, PA.			
BLOCK TO STEEL & CONCRETE		SCALE VARIES			
SECTIONS & DETAILS		REV		DATE	
		1/24/82		JSE	

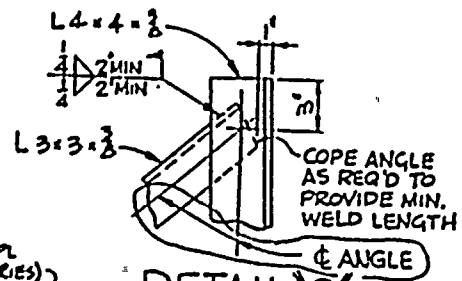


SECTION 1-1

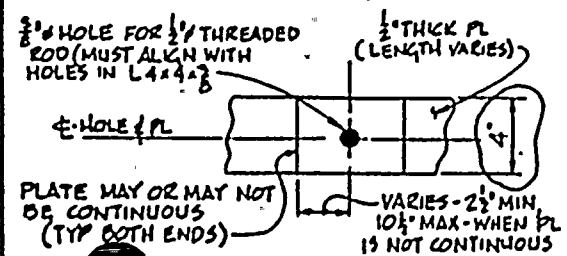
MULTIPLE ANGLE CONNECTION
WITH MULTIPLE ROD CONNECTION



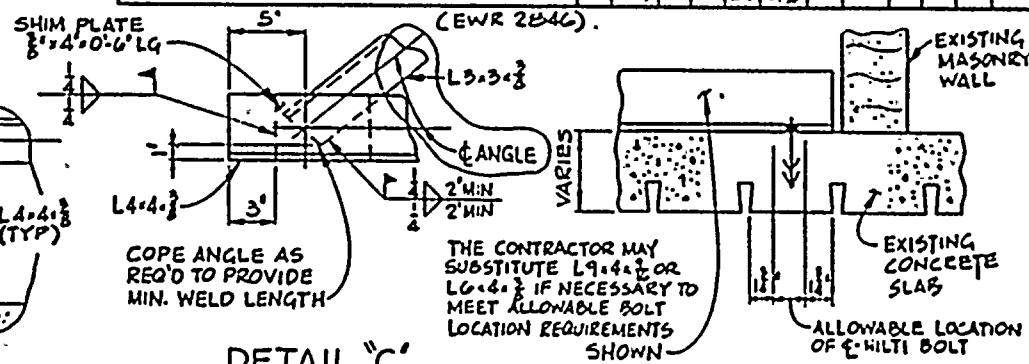
DETAIL 'A'



DETAIL 'B'



ELEVATION 2-2



DETAIL 'C'

DETAIL 'D'

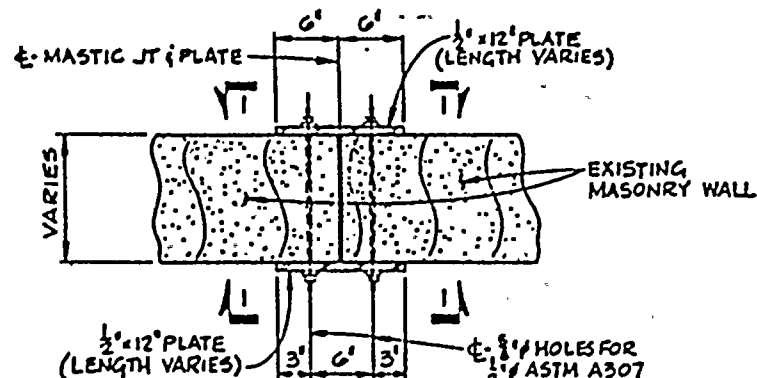
NOTE:-

THE SAME BOLT LOCATION REQUIREMENTS SHALL BE MAINTAINED WHEN RIBS OF G-DECKING ARE RUNNING PERPENDICULAR TO WALLS AND ALSO WHEN BOLTING INTO BOTTOM OF SLAB

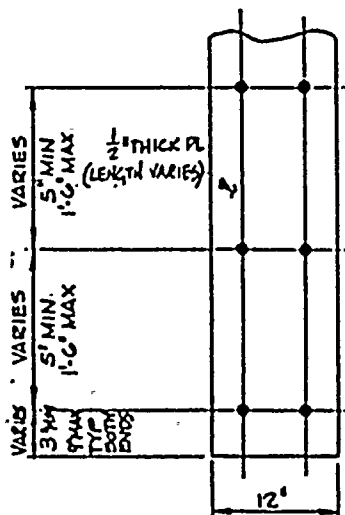
NOTES:-

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN. THE SAME APPLIES TO BOLTS.
2. ALL THREADED RODS TO BE ASTM A307
3. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG SS-581-321

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



PLAN



ELEVATION 1-1

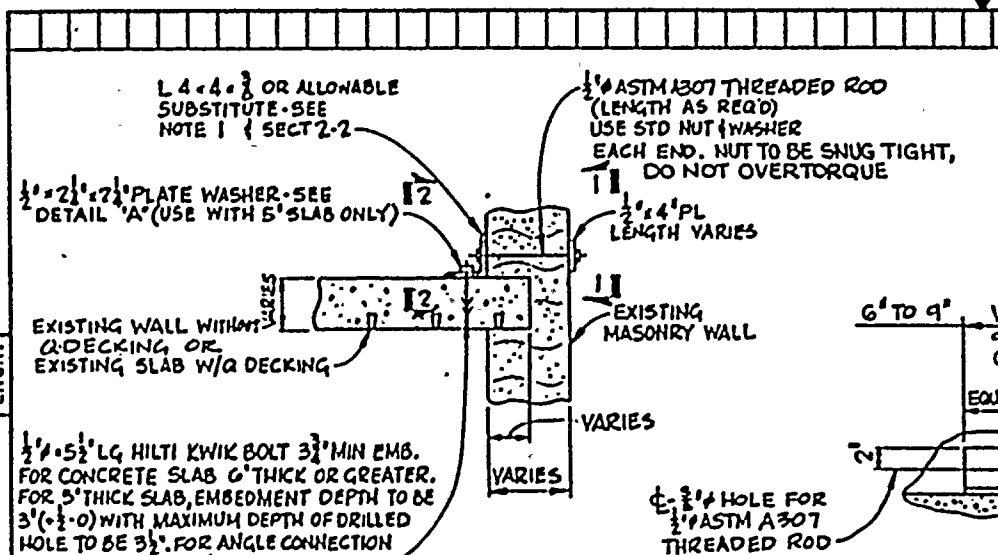
ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE II
BLOCK TO BLOCK WITH MASTIC JOINT
(EWR 2846)

MADE JULY 1971 BY R. J. AD	DRAWING NO. 0414917SS-581-262	SH. NO. 1
SO LOR D. J. AD	ENGINEER JMA	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.
SCALE VARIES	DATE 10-1-71	DEPT -10-1-71
NO 0414917000	ENGINEER APPROVAL	DATE
REV MADE CH SOL APP DATE	REV MADE CH SOL APP DATE	REV MADE CH SOL APP DATE
1 DRH USE USE 31/7/71		

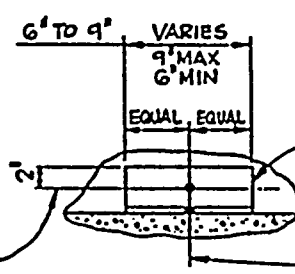
NOTES:-

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN
2. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG 581-521

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

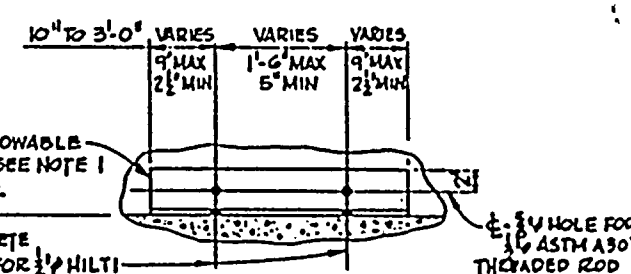


SECTION OR PLAN



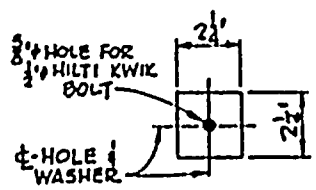
SECTION 2-2

ONE ROD CONNECTION
W/ ONE BOLT CONNECTION

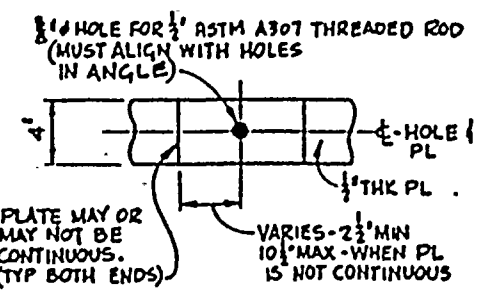


SECTION 2-2

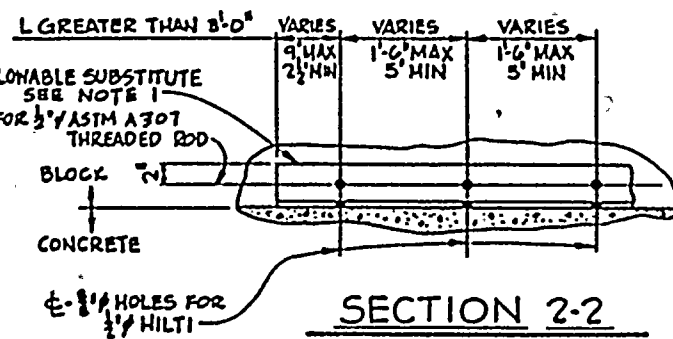
TWO ROD CONNECTION
W/ TWO BOLT CONNECTION



DETAIL 'A'



ELEVATION 1-1



SECTION 2-2

MULTIPLE ROD CONNECTION
W/ MULTIPLE BOLT CONNECTION

NOTES:

1. THE CONTRACTOR MAY SUBSTITUTE L9x4x1/2 OR L6x4x1/2 IF NECESSARY TO MEET ALLOWABLE BOLT LOCATION REQUIREMENTS. SEE DETAIL 'B' DWG 55-581-263 SHT 2.
2. BOLT SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED BOLT HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL BOLTS REQ'D TO MEET TOLERANCES SHOWN. THE SAME APPLIES TO RODS.
3. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG 55-581-251.
4. AT INTERSECTION OF FLOOR AND WALL OR WALL AND WALL NOT AT A 90° ANGLE, THE CONTRACTOR MAY SHIM (MAX 1/2") AS REQUIRED BETWEEN ANGLE AND FLOOR OR WALL AT HILTI KWIK BOLT LOCATIONS AND COSMETICALLY GROUT

PER FCR
2846-37

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 12
BLOCK TO CONCRETE
(EWR 2846)

MADE J. J. JENKINS 10-12-65	DRAWING NO. 04 4947 ISS-581-263	SH. NO. 1 of 2	REV 2
SCALE VARIES	ENGINEER J. J. JENKINS	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	DATE 10-20-65
REV 1	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 2	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 3	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 4	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 5	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 6	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 7	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 8	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 9	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65
REV 10	DATE 10-20-65	APP J. J. JENKINS	DATE 10-20-65

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

THE CONTRACTOR MAY SUBSTITUTE $L9 \times 4 \times \frac{3}{8}$ OR $L6 \times 4 \times \frac{3}{8}$ IF NECESSARY TO MEET ALLOWABLE BOLT LOCATION REQUIREMENTS SHOWN.

EXISTING SLAB WITH Q-DECKING OR EXISTING WALL WITHOUT Q-DECKING

VARIES

VARIES

VARIES

A TYP.

EXISTING MASONRY WALL

NOTE 1:-

THE SAME BOLT LOCATION REQUIREMENTS SHALL BE MAINTAINED WHEN RIBS OF Q-DECKING ARE RUNNING PERPENDICULAR TO WALLS, AND ALSO WHEN BOLTING INTO BOTTOM OF SLAB

ALLOWABLE LOCATION OF E-HILTI BOLT

DETAIL "B"
PLAN OR SECTION

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION

MASONRY WALL BOUNDARY DETAILS

TYPE 12

BLOCK TO CONCRETE

DETAIL "B" (EWR 2846)

MADE UVERGEN EMHARDT D. G. RO	DRAWING NO. 04 4947SS-501-263	SH. NO. 2002	REV 0
10 LOR OL QYXLS 10-10-83	ENG. INTER JMA	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	W. O. 0494700	ENGINEER APPROVAL	DEPT. - DATE -
REV. MADE	CH. 101	APP. DATE	REV. MADE

NOTES:-

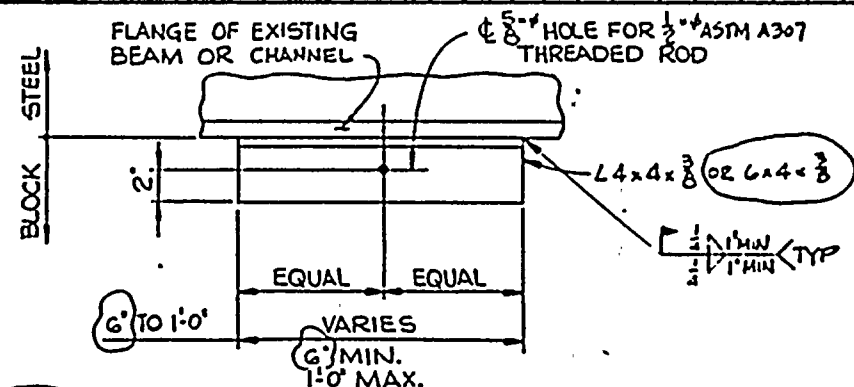
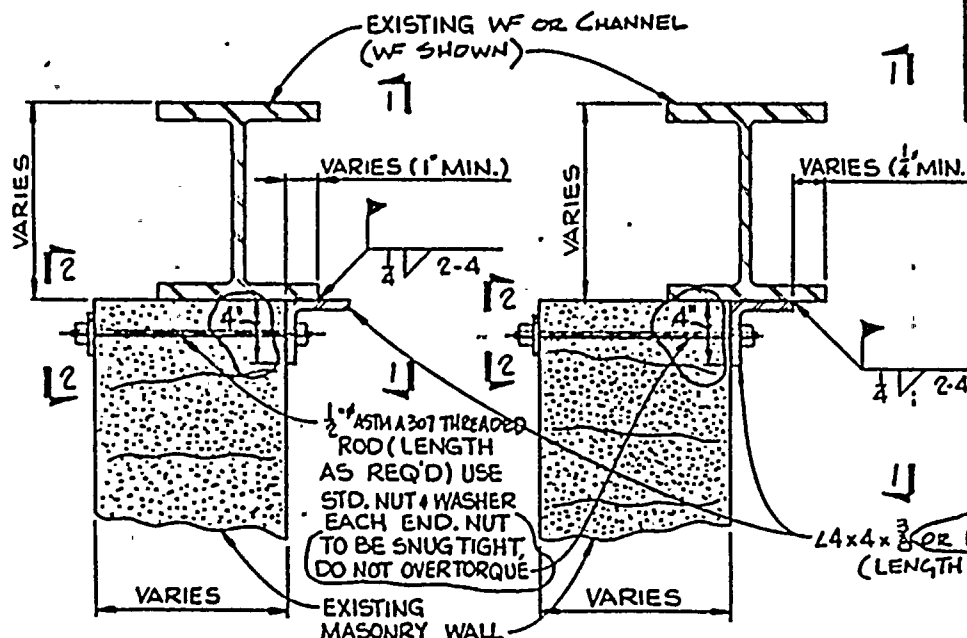
- FOR NOTES AND REFERENCES SEE DWG SS-581-251

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 13
BLOCK TO STEEL
(EWR 2846)

MADE	04	4947	SS-581-264	10F2	1
TO LOC	ENCLOSURE				
SCALE VARIES	YES	NO	YES	NO	YES
REV	DATE	APP	DATE	REV	DATE
1	10-1-76	1	10-1-76	1	10-1-76

GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS
READING, PA.

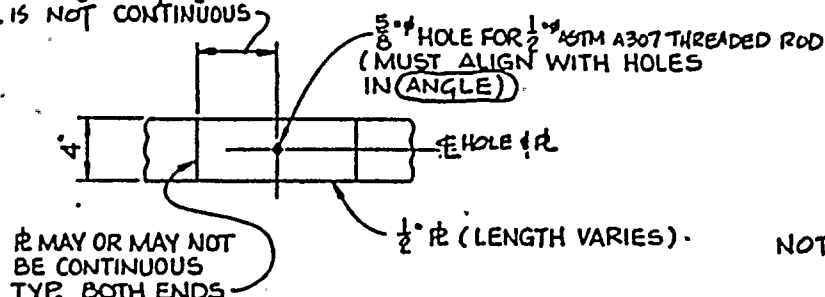


ELEVATION 1-1
ONE ROD CONNECTION

PLAN OR SECTION

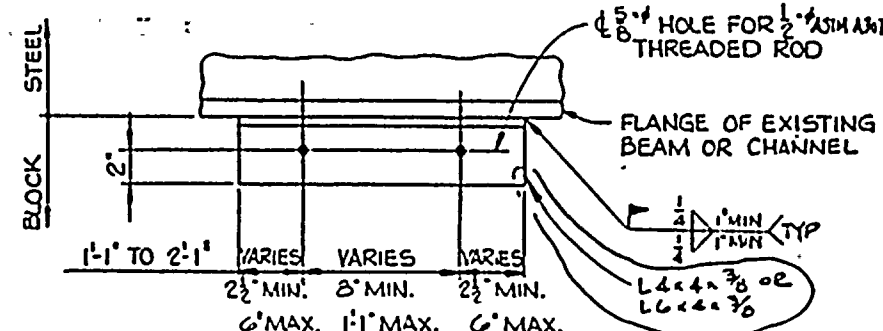
PLAN OR SECTION

VARIES - 2 1/2\" MIN. 10 1/2\" MAX.
WHEN R IS NOT CONTINUOUS



R MAY OR MAY NOT
BE CONTINUOUS
TYP. BOTH ENDS

ELEVATION 2-2



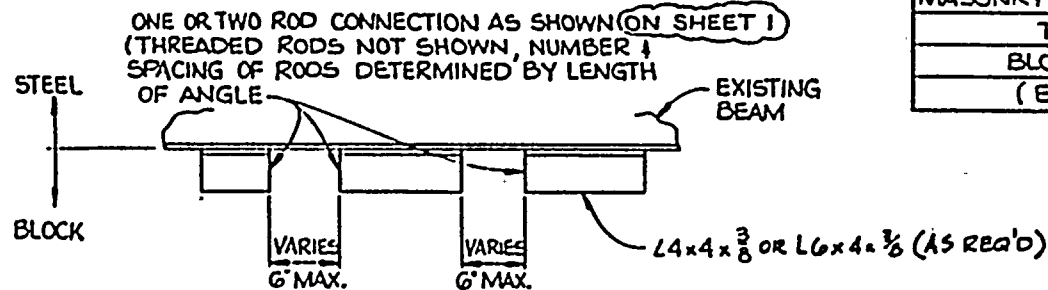
ELEVATION 1-1
TWO ROD CONNECTION

NOTES:-

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN.

2. FOR ADDITIONAL NOTES & REFERENCES SEE DWG SS-581-251.

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



ELEVATION 1-1

MULTIPLE ROD CONNECTION

FOR MULTIPLE ROD CONNECTION (FIX LENGTH GREATER THAN 3'-0") CONTRACTOR TO USE ONE TWO ROD CONNECTION DETAILS AS REQ'D. WITH MAX. SPACING BETWEEN ADJACENT ANGLES TO BE 6"

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 13
BLOCK TO STEEL
(EWR 2846)

MADE P.W.K.Y. 10-11-60	DRAWING NO. 04 1947	SS-581-264	20F 2	REV 1
SCALE 1"=1'-0"	ENGINEER J.M.A.	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	10-23-60	DATE
REV 1	USE J.M.	J.M.	11-11-61	DATE

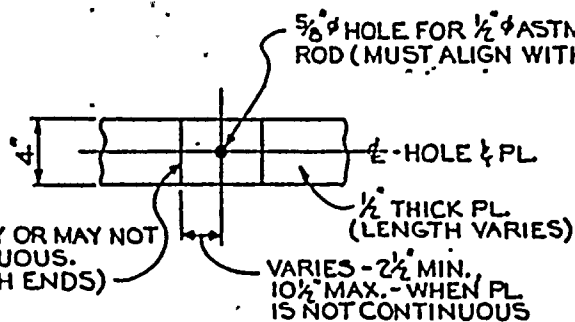
NOTES:-

1. FOR NOTES AND REFERENCES SEE DWG SS-581-251

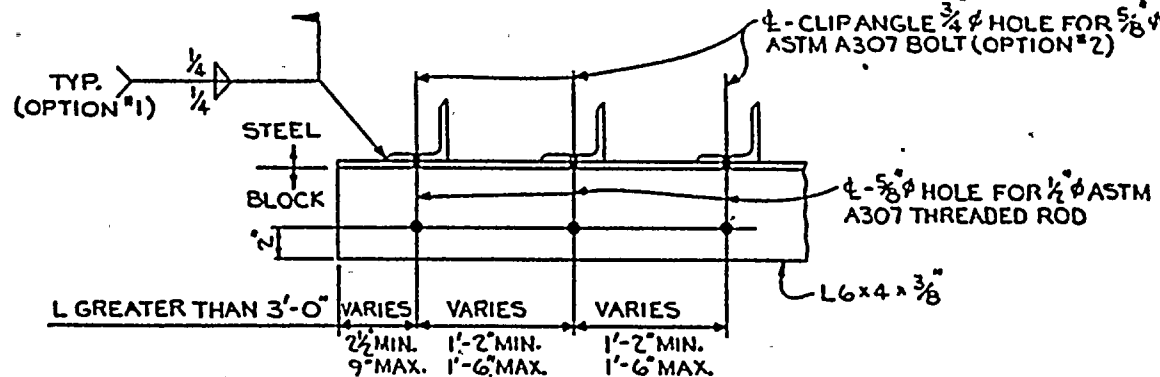
DATE	CONSTRUCTION	ENGR.
	BIDDING PURPOSES	
	RELEASED FOR	



CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



ELEVATION 3-3



ELEVATION 2-2

MULTIPLE CLIP ANGLE CONNECTION
WITH MULTIPLE ROD CONNECTION

NOTE:

1. FOR NOTES AND REFERENCES
SEE DWG. SS-581-265, SHEET 1

ROCHESTER GAS & ELECTRIC CO.
GINNA, NUCLEAR POWER STATION

MASONRY WALL BOUNDARY DETAILS

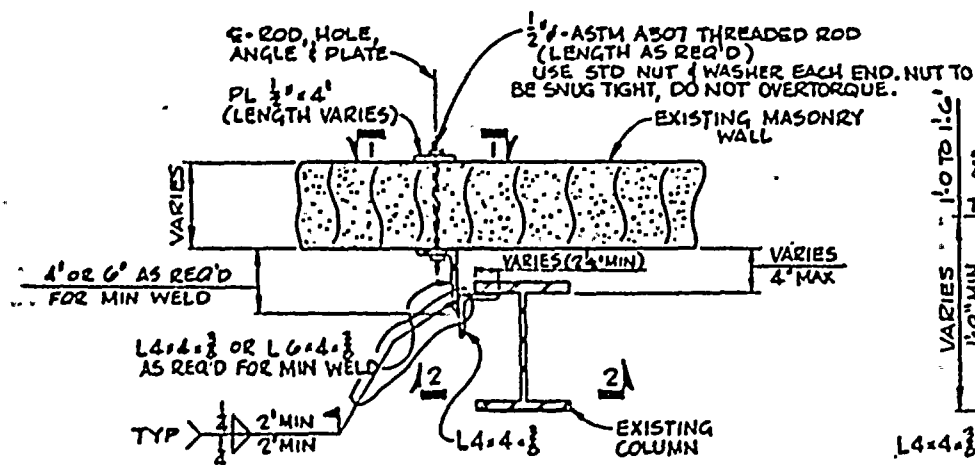
TYPE 14

BLOCK TO STEEL

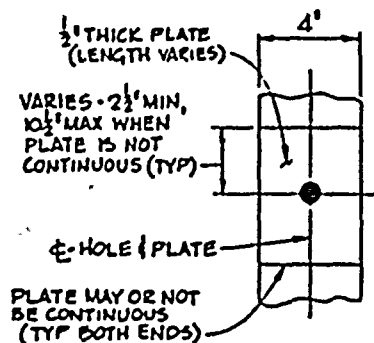
(EWR 2846)

MADE	DRAWING NO.	IN NO	REV
D. WENTZ 10-20-78	044947SS-581-265	2 OF 2	0
SO LDR	ENG. IN CHARGE	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
DATE	SCALE	BY	CHECKED
10-20-78	1/4\"=1'-0\"	W. J. GILBERT	W. J. GILBERT
REV	MADE	CM	APP

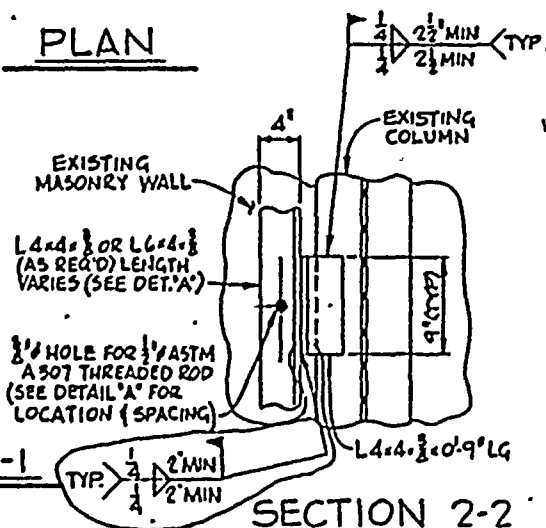
	CONSTRUCTION	.
	BIDDING PURPOSES	
DATE	RELEASED FOR	ENGR.



PLAN



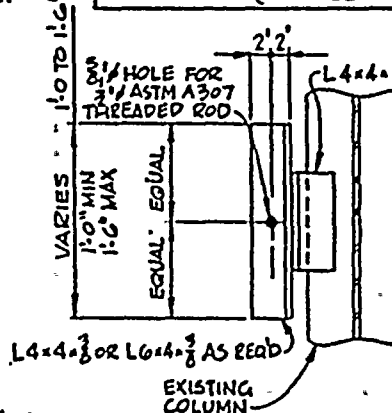
ELEVATION 1-1



SECTION 2-2

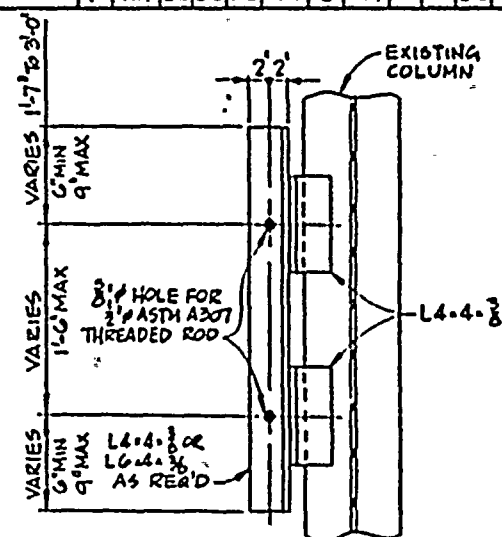
ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 15
BLOCK TO STEEL
(ENR 2846)

MADE BY JUERGEN EMMOLD		DRAWING NO. 04 4947 SS-581-266		SHEET NO 1 OF 2		REV 2	
DATE 10-19-65		BY 04 4947 SS-581-266		CHECKED BY 04 4947 SS-581-266		DATE 10-19-65	
SCALE 1" = 10'-0"		PROJECT MAINTENANCE		FIRM GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.			
SCALE VARIES		ENGINEER'S APPROVAL		DEPT 10-19-65			
REV	DATE	BY	CHK	APP	DATE	BY	CHK
1	10-19-65	0000	11	04 4947 SS-581-266	10-19-65	0000	11



DETAIL 'A'

ONE ANGLE CONNECTION
WITH ONE ROD CONNECTION



DETAIL "A"

**TWO ANGLE CONNECTION
WITH TWO ROD CONNECTION**

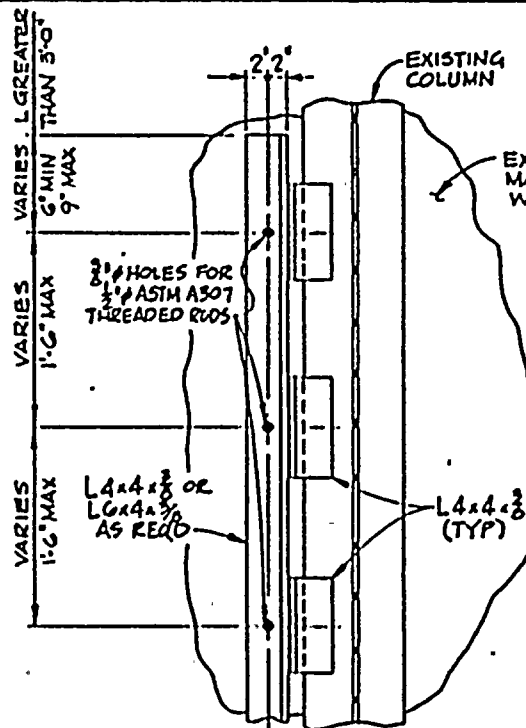
NOTES:-

FOR NOTES SEE DWG SS-581-266 SHT 2

CONSTRUCTION BIDDING PURPOSES	ENGR.
RELEASED FOR	
DATE	

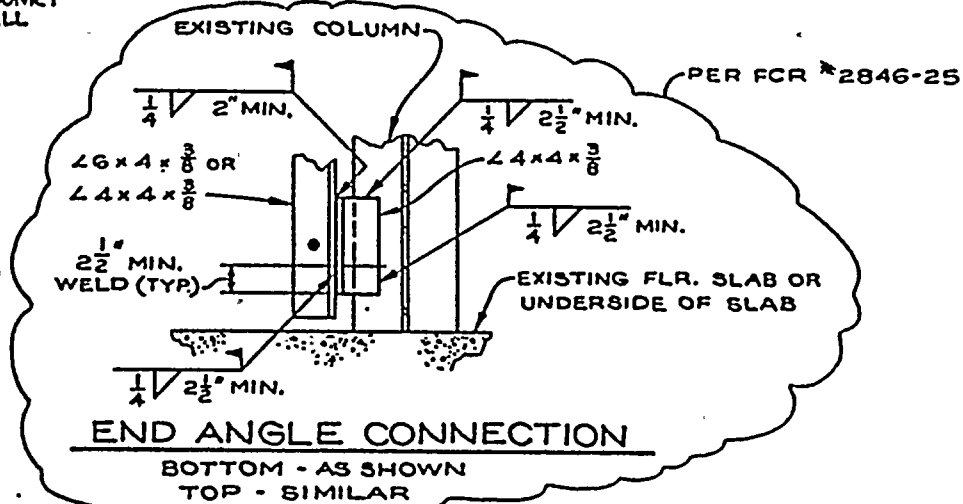
ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 15
BLOCK TO STEEL
(EWR 2846)

DATE	DRWG. NO.	SH. NO.	REV
04/19/80	04 4947	SS-581-266	2 of 2
05/10/80			
06/10/80			
07/10/80			
08/10/80			
09/10/80			
10/10/80			
11/10/80			
12/10/80			
01/10/81			
02/10/81			
03/10/81			
04/10/81			
05/10/81			
06/10/81			
07/10/81			
08/10/81			
09/10/81			
10/10/81			
11/10/81			
12/10/81			



DETAIL 'A'

MULTIPLE ANGLE CONNECTION
WITH MULTIPLE ROD CONNECTION

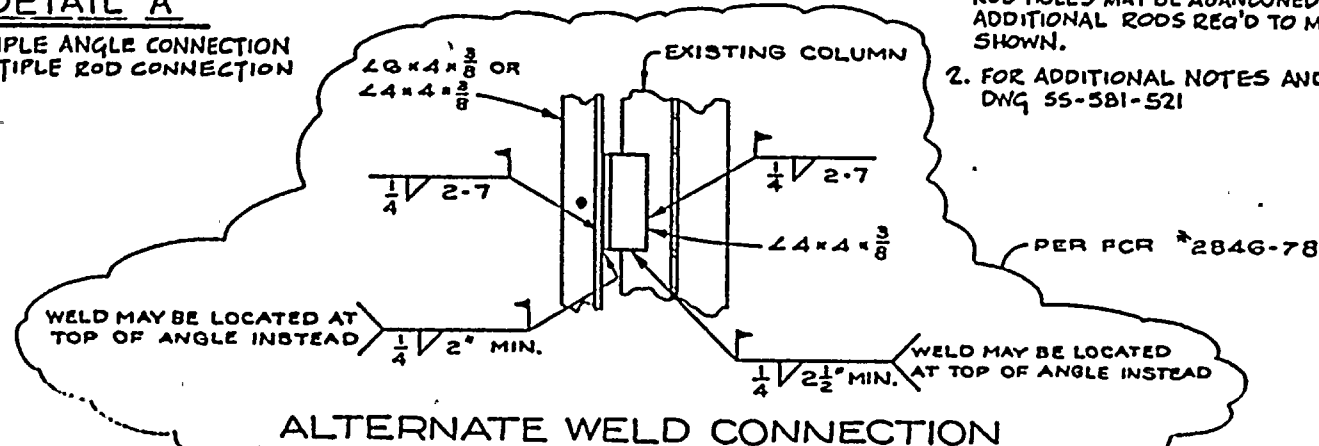


END ANGLE CONNECTION

BOTTOM - AS SHOWN
TOP - SIMILAR

NOTES:

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREFUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN.
2. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG 55-581-521

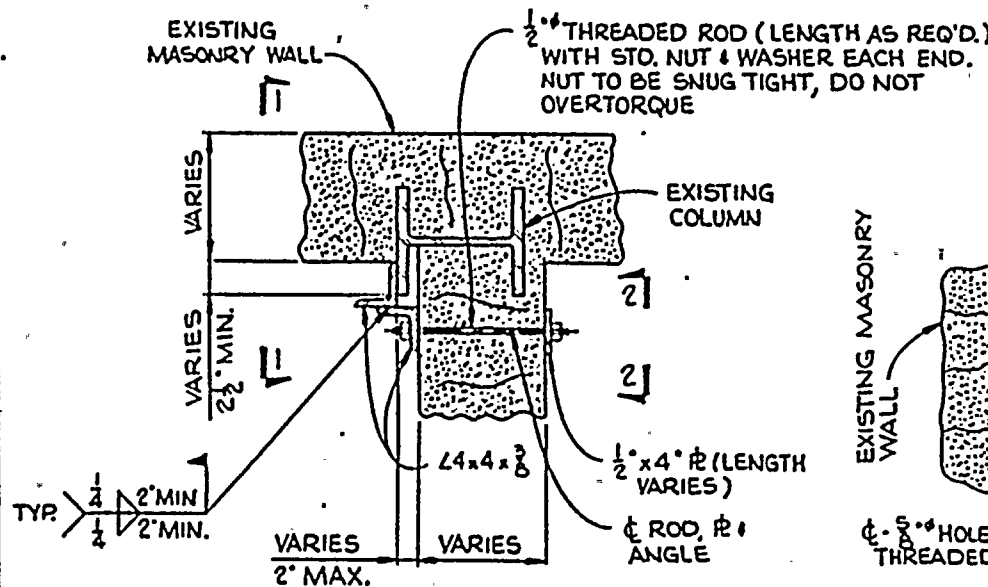


ALTERNATE WELD CONNECTION

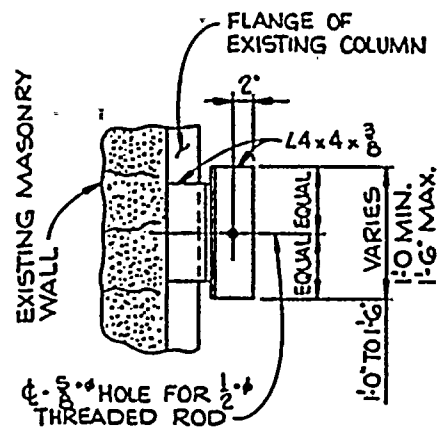
CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 1G
BLOCK TO STEEL
(EWR 2846)

MADE	DRAWING NO.	SW NO	REV
PINKY 10-17-60	04 4947 SS-581-267	10F2	0
SO LOR	ENG INTENT	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
3-7-60	2-7-60		
SCALE 1"=1'-0"	3-1		
NO 04-4947-01	ENGINEER'S APPROVAL	DATE	
REV MOD C	1-11-60	APP DATE	1-11-60

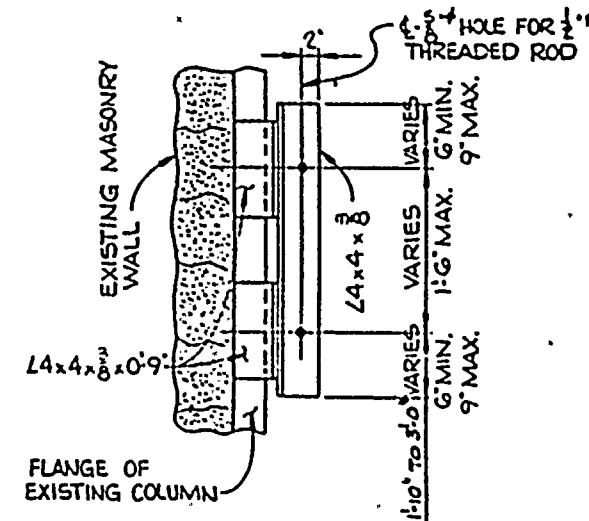


PLAN



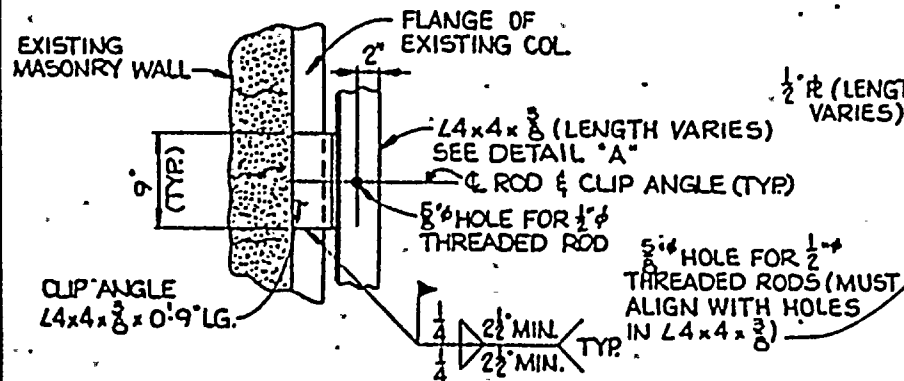
DETAIL "A"

ONE ANGLE CONNECTION WITH
ONE ROD CONNECTION

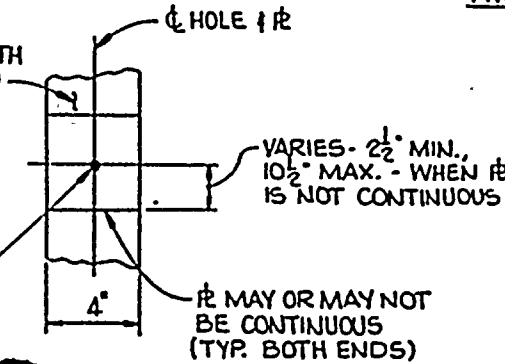


DETAIL "A"

TWO ANGLE CONNECTION WITH
TWO ROD CONNECTION



ELEVATION 1-1



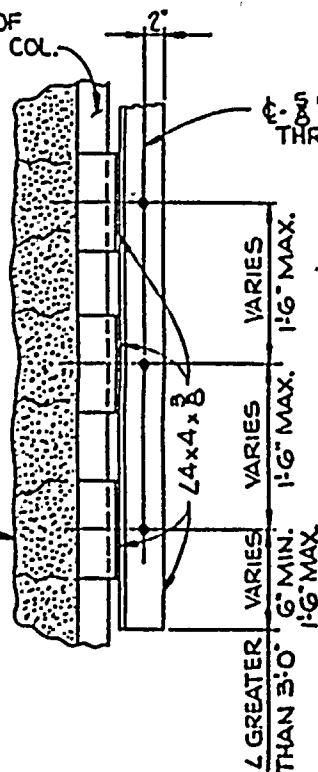
ELEVATION 2-2

NOTES:
1. FOR NOTES SEE DWG.
SS-581-267 SHEET 2

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

FLANGE OF
EXISTING COL.

EXISTING MASONRY
WALL



DETAIL "A"

MULTIPLE ANGLE CONNECTION

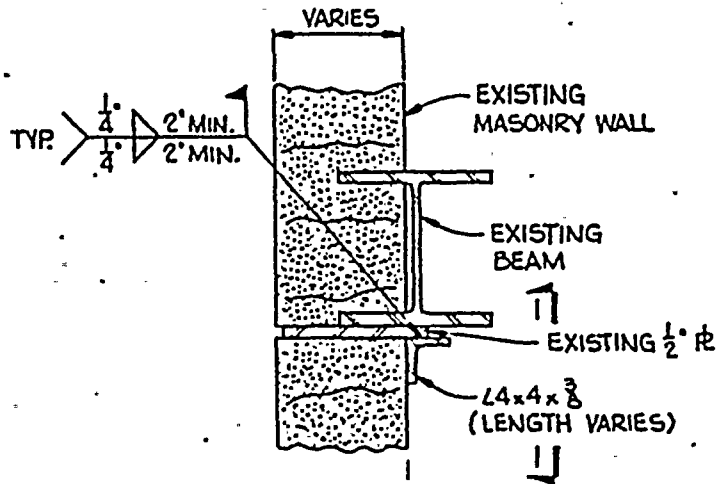
ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 16
BLOCK TO STEEL
SECTIONS & DETAILS

MADE	DRAWING NO.	SN NO	REV
Rev 10-21-77	04 494755-581-267	20F2	0
SOLD FOR	ENGINEER	GILBERT ASSOCIATES, INC.	
10-21-77	10-21-77	ENGINEERS AND CONSULTANTS	
		READING, PA	
SCALE 1"=1'-0"	4/11/77	10-21-77	10-21-77
004947.000	ENGINEER APPROVAL	DATE	DATE
REV MADE	BY	APP	DATE

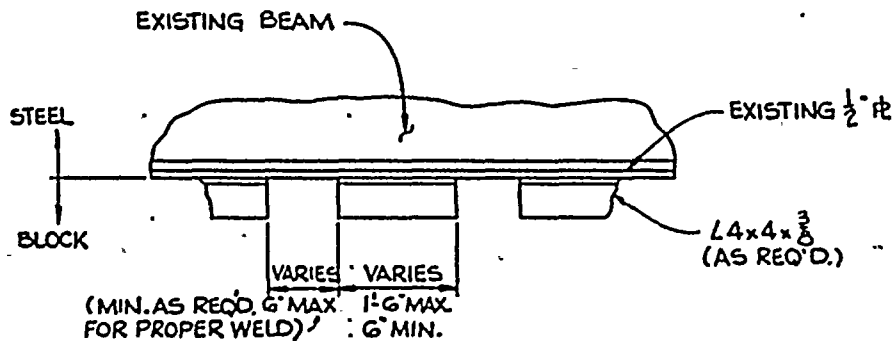
NOTES:

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D. BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D. TO MEET THE TOLERANCES SHOWN.
2. ALL THREADED RODS TO BE ASTM A307
3. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG. 55-581-251





SECTION



ELEVATION 1-1

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 17
BLOCK TO STEEL
(EWR 2846)

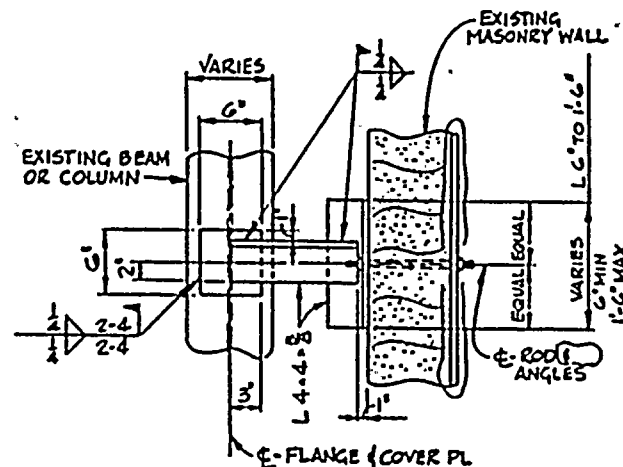
DATE	DRAWING NO.	BY NO.	REV
04/19/75	04 4947 SS-58-268		0
DESIGNED BY	ENGINEER	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE 1/4"=1'-0"	DATE	REV	DATE
04/19/75	04/19/75	01	04/19/75

CONSTRUCTION BIDDING PURPOSES RELEASED FOR	ENGR.
DATE	

NOTES:
1. FOR NOTES & REFERENCES
SEE DWG. 55-58



ROCHESTER GAS & ELECTRIC CO GINNA NUCLEAR POWER STATION	MADE TO ORDER JULIEN EMHART 10-22-82	DRAWING NO.	SH NO	REV
	SO FOR SEHLMAN 10-24-85	0414947SS-561-269	1 of 2	1
MASONRY WALL BOUNDARY DETAILS	SCALE VARIES	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.		
TYPE 18	SCALE VARIES	ENGINEER APPROVAL		
. BLOCK TO STEEL	REV MADE CM	10/24/85	DATE	REV
(EWR 2846)	1	10/24/85	DATE	REV



SECTION 2-2

ONE ANGLE CONNECTION WITH
ONE ROD CONNECTION



FOR NOTES SEE DWG SS-581-269 SHT. 2

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION

MASONRY WALL BOUNDARY DETAILS

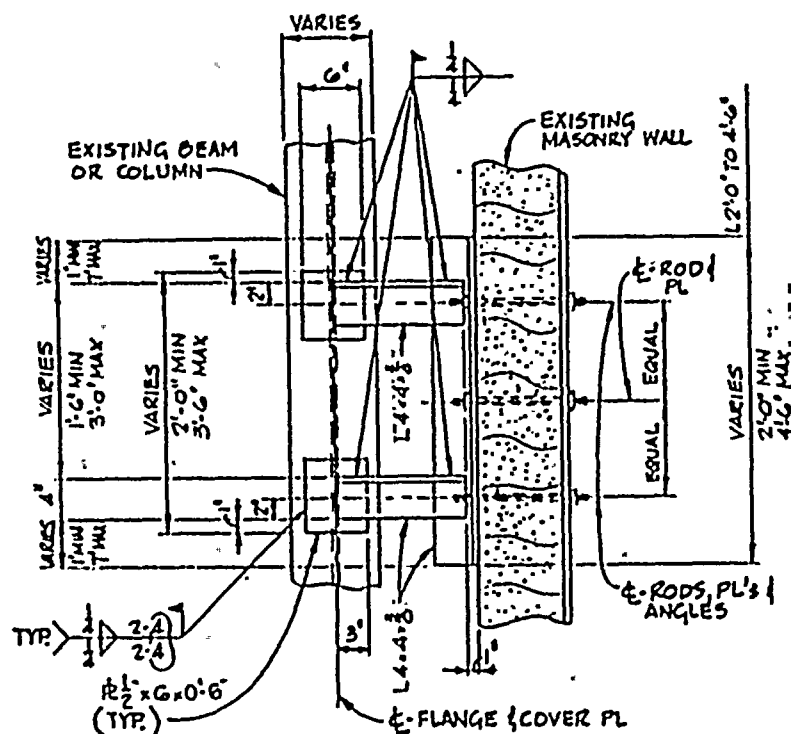
TYPE IB

BLOCK TO STEEL

(EWR 2846)

MADE	DATE	DRAWING NO.	SH. NO.	REV
JUERGEN	04-24-77	SS-501-269	2 OF 2	2
ENGINEER				
DESIGNED BY				
CHECKED BY				
SCALE				
REV	MADE	DATE	REV	MADE
1	Rev	04-24-77	2	Rev

GILBERT ASSOCIATES, INC.
ENGINEERS AND CONSULTANTS
READING, PA.

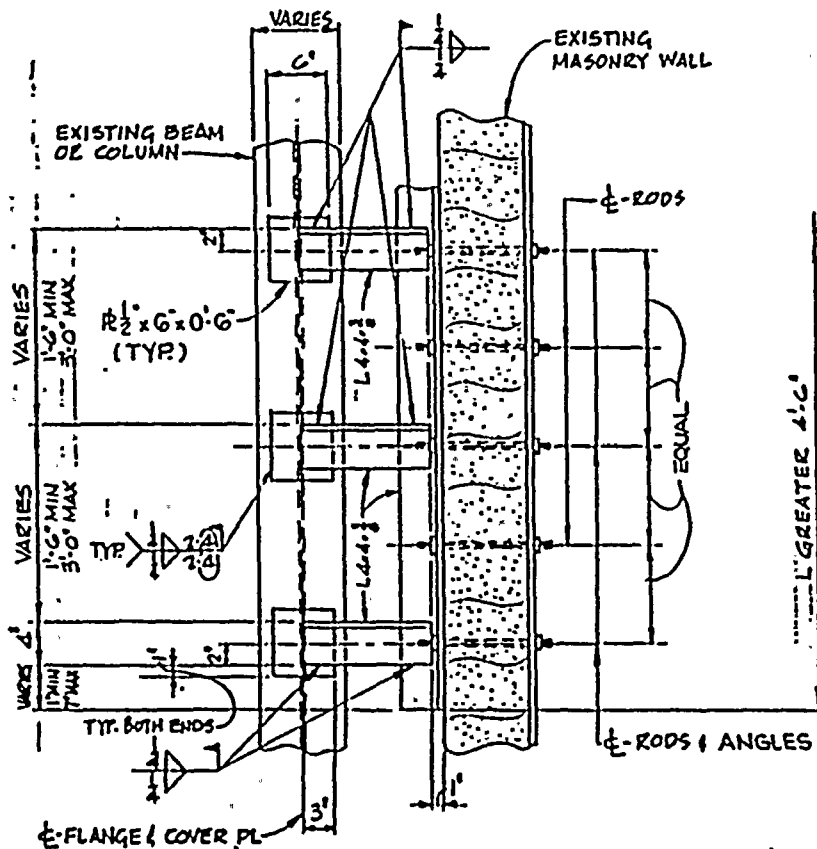


SECTION 2-2

TWO ANGLE CONNECTION WITH
THREE ROD CONNECTION

NOTES:-

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN.
2. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG SS-501-251

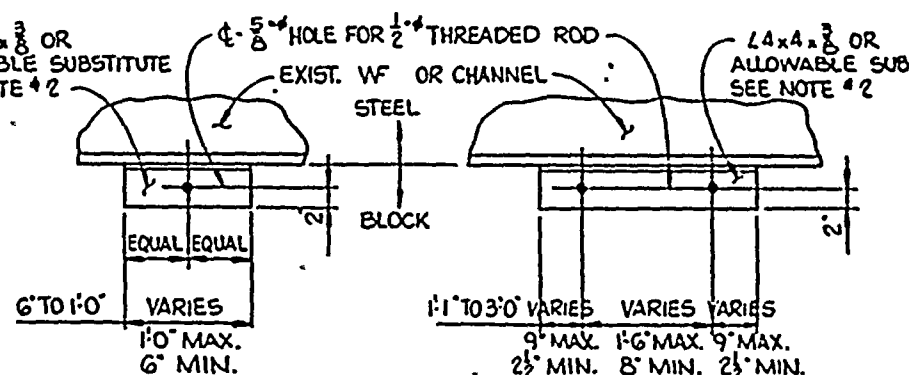


SECTION 2-2

MULTIPLE ANGLE CONNECTION WITH
MULTIPLE ROD CONNECTION

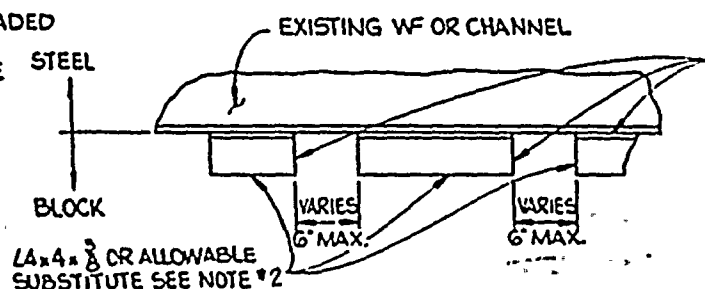


ROCHESTER GAS & ELECTRIC CO.	MADE	DRAWING NO.	SH. NO.	REV.
GINNA NUCLEAR POWER STATION	PINKY R-22-52	04 1947 SS-581-270		0
MASONRY WALL BOUNDARY DETAIL	SO LOR LF D-22-52	ENGINEER	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
TYPE 19	SCALE 1/8"=1'-0"	- 1/2	- 2/3	
BLOCK TO STEEL	0041947 000	ENGINEER APPROVAL	DEPT	DATE
(EWR 2846)	REV MADE CM	101 APP DATE	REV MADE CM	101 APP DATE



ELEVATION 1-1
ONE ROD CONNECTION

ELEVATION 1-1
TWO ROD CONNECTION



ELEVATION 1-1

MULTIPLE ROD CONNECTION

FOR MULTIPLE ROD CONNECTION (FIX LENGTH GREATER THAN 3'-0") CONTRACTOR TO USE ONE OR TWO ROD CONNECTION DETAILS AS REQ'D. WITH MAX. SPACING BETWEEN ADJACENT ANGLES TO BE 6'

ELEVATION 2-2

1. ROD SPACING MAY BE ADJ. WITHIN TOLERANCES SHOWN AS REQ'D. BY FIELD CONDITIONS. ANY PREPUNCHED HOLES MAY BE ABANDONED & REPLACED WITH ADDITIONAL HOLES REQ'D. TO MEET THE TOLERANCES SHOWN.
2. THE CONTRACTOR MAY SUBSTITUTE 1/4" OR 1/2" IF NECESSARY TO OBTAIN REQUIRED LENGTH & WELD.
3. ALL THREADED RODS TO BE ASTM A307
4. FOR ADDITIONAL MATERIAL REFERENCES SEE DWG. 55-581-251.



NOTES:
1. FOR NOTES AND REFERENCES
SEE DWG. 55-581-271 SH. 2

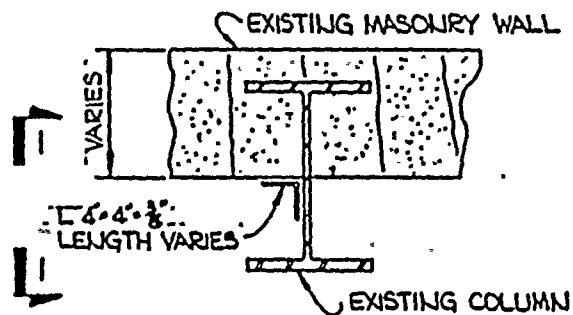
ROCHESTER GAS & ELECTRIC CO. GINNA NUCLEAR POWER STATION MASONRY WALL BOUNDARY DETAILS TYPE 20 BLOCK TO STEEL (EWR 284G)	MADE <i>Pinky</i> <i>2-29-66</i>	DRAWING NO. <i>04 4947 SS-581-271</i>		SH NO. <i>2 OF 2</i>	REV <i>0</i>
	10 LOR <i>JE</i> <i>10-30-68</i>	(ENGINEER) <i>---</i>		GILBERT ASSOCIATES, INC. (ENGINEERS AND CONSULTANTS) READING, PA.	
	SCALE <i>1/4" = 1'-0"</i>	<i>1 1/2</i>		<i>1 1/2</i>	
	<i>04 4947 SS-581-271</i>	(ENGINEER APPROVAL)		DEPT	DATE
	REV MADE CM	10L APP DATE	REV MADE CM	10L APP DATE	



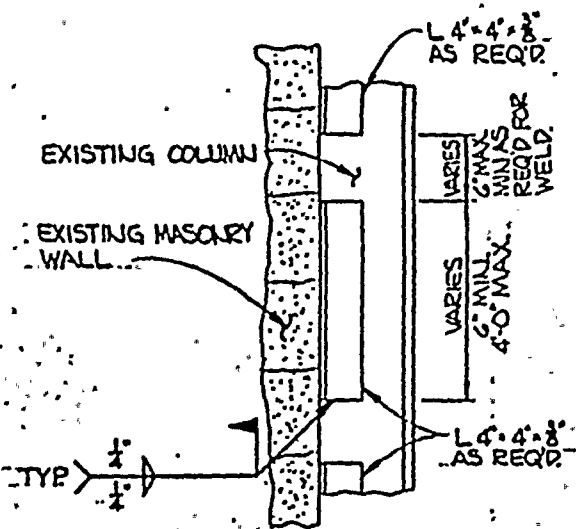
1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D. TO MEET THE TOLERANCES SHOWN.
2. THE CONTRACTOR MAY SUBSTITUTE $L9 \times 4 \times \frac{3}{8}$ OR $L6 \times 4 \times \frac{3}{8}$ IF NECESSARY TO ALLOW INSTALLATION OF BEAM.
3. ALL THREADED RODS TO BE ASTM A307.
4. FOR ADDITIONAL NOTES & REFERENCES SEE DWG. 55-381-251



CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



PLAN



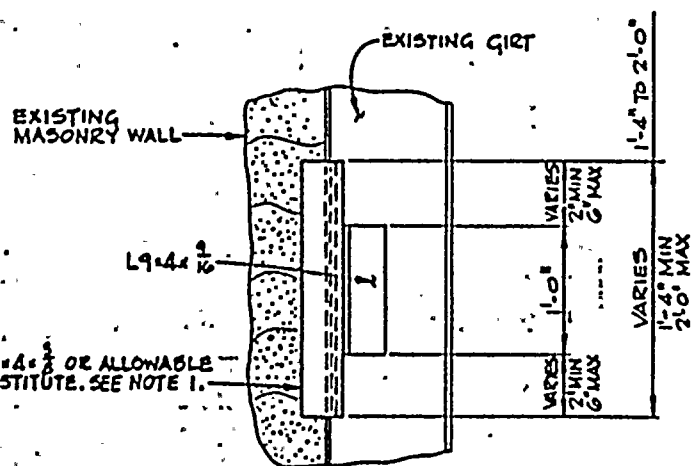
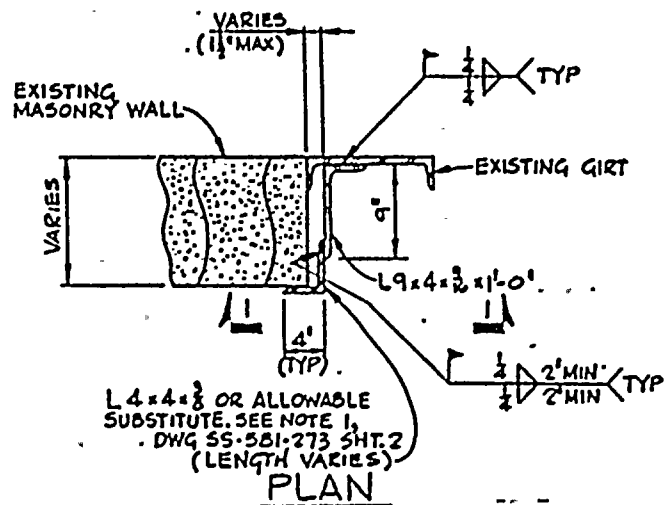
SECTION I-I

ROCHESTER GAS & ELECTRIC COMPANY	DATE 10-19-80	DRAWING NO. 04 4947:SS-581-272	SN NO. 0	REV
GINNIA NUCLEAR POWER STATION	SCALE 1"=1'-0"	ENGINEER J.A.A.	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
MASONRY WALL BOUNDARY DETAILS	W.O. 4947-000	ENGINEER APPROVAL	DEPT	DATE
TYPE 21	REV	MADE	CH	10-19-80
BLOCK TO STEEL				
(EWR 2846)				

NOTES:

1. FOR NOTES AND REFERENCES
.. SEE DWG. SS-581-251

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION

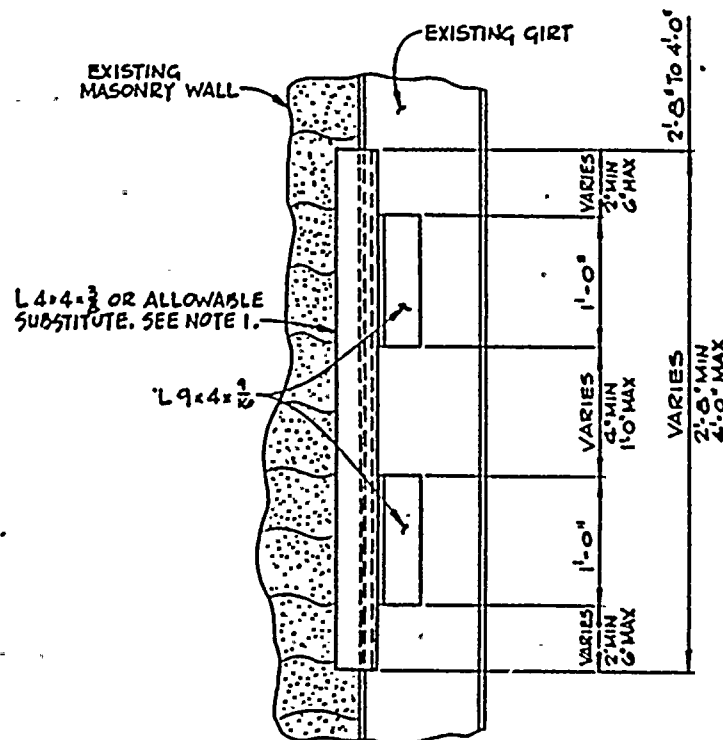
MASONRY WALL BOUNDARY DETAILS

TYPE 22

BLOCK TO STEEL

(EWR 2846)

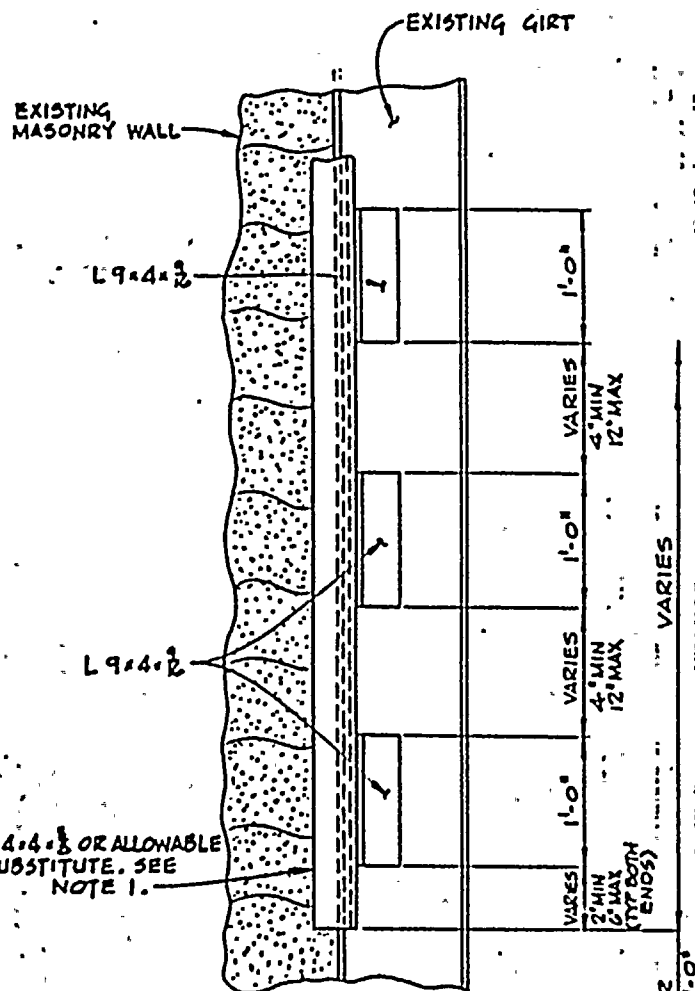
MADE JUL 1968 BY 10-10-68	DRIVING NO. 04 4947 SS-581-273	SH NO. 1 of 2	REV 0
SO LOR DKH	ENG IN CHARGE JMA	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	10-29-80	DATE	DATE
00 044-411000	ENGINEER APPROVAL	DEPT	DATE
REV MADE BY	DATE	REV MADE BY	DATE



NOTES:-

1 FOR NOTES SEE DWG SS-581-273 SHT. 1

CONSTRUCTION BIDDING PURPOSES RELEASED FOR	ENGR.
DATE	



ELEVATION I-I

MULTIPLE ANGLE CONNECTION

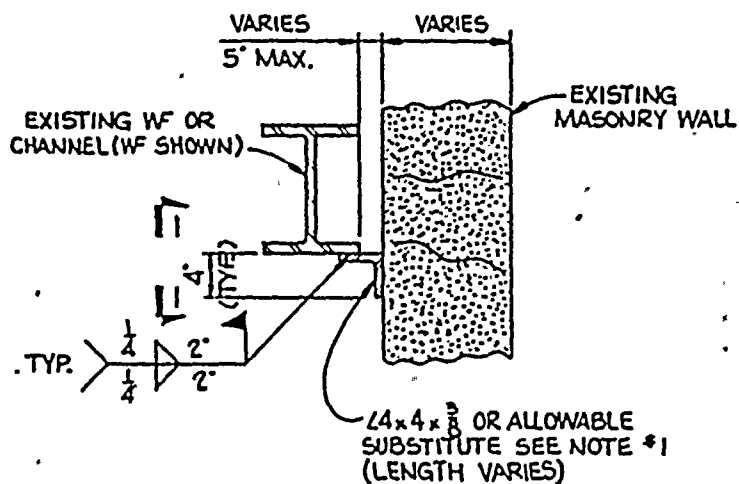
ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 22
BLOCK TO STEEL
(EWR 2846)

DATE	ENGINEER	DRAWING NO.	ENR NO.	REV
10-27-66	EMMA	04 4947 SS-581-273	2002	0
10-27-66	DKH	2MA		
10-27-66	SCALE VARIES			
10-27-66	10-27-66	10-27-66	10-27-66	10-27-66
10-27-66	10-27-66	10-27-66	10-27-66	10-27-66

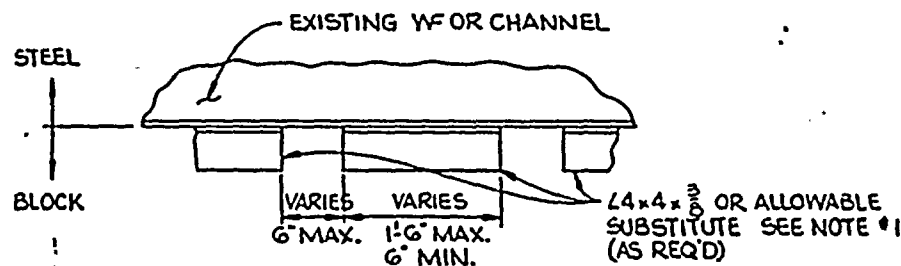
NOTES:-

1. THE CONTRACTOR MAY SUBSTITUTE L9x4x1/2 OR L6x4x3/8 IF NECESSARY TO OBTAIN REQUIRED LENGTH OF WELD.
2. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG 55-581-251.

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



PLAN OR SECTION



ELEVATION 1-1

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 23
BLOCK TO STEEL
(EWR 284G)

DATE	DRAWING NO.	SH. NO.	REV.
PINKY 2-27-70	04 4947 SS-581-274		0
SO LOR JFE	ENG. INTER. JMA	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE 1"=1'-0"	DESIGNED BY JFE	APPROVED BY JFE	DATE 10-2-70
REV. MADE BY C-1	DATE 10-2-70	REV. MADE BY C-1	DATE 10-2-70

- NOTES:
1. THE CONTRACTOR MAY SUBSTITUTE L9x4x3/8 OR L6x4x3/8 IF NECESSARY TO OBTAIN REQ'D. LENGTH OF WELD.
 2. FOR ADDITIONAL NOTES & REFERENCES SEE DWG. SS-581-251

MADE BY JERGEN EMHARDT 11-5-60	DRAWING NO. 04497SS-501-275	SH. NO. 1 of 2	REV 1
FOR JOB KAK 11-7-60	ENGINEER -- --	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	C/M Colonel - 5412 - 1-7-60		
U.O. 04497000			
REV MADE BY	CHK	APP DATE	REV MADE BY
1 JSE	JM	APP DATE	1 JSE



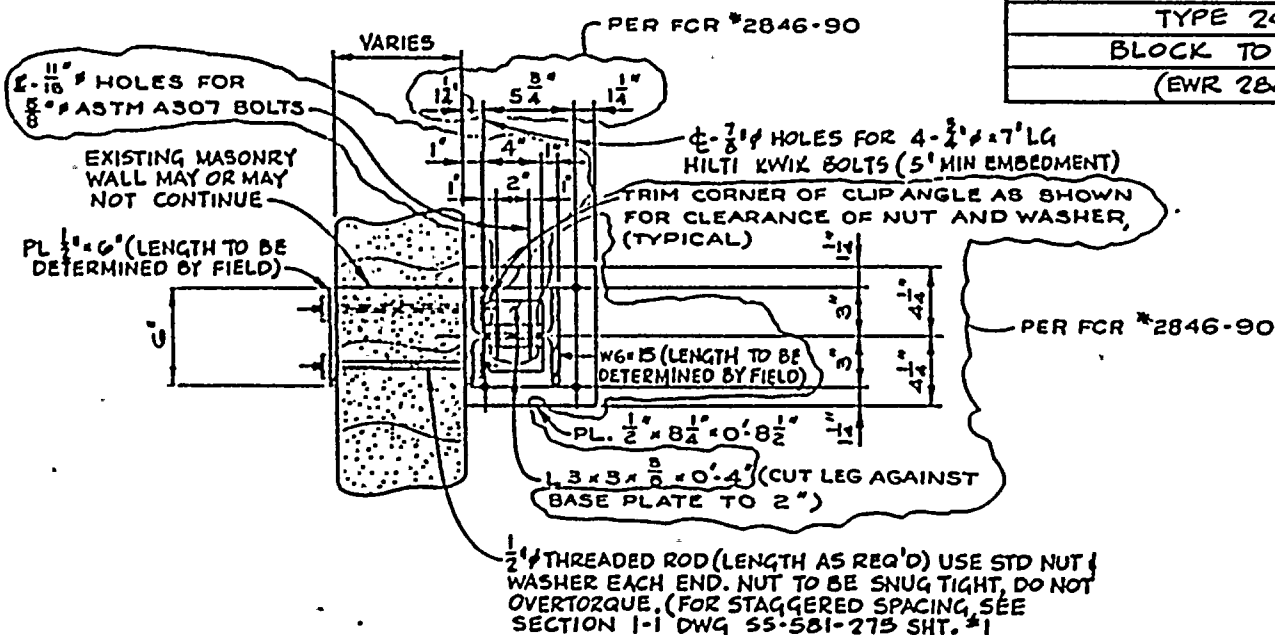
NOTES:-

1. FOR NOTES AND REFERENCES
SEE DWG 55-581-275 SHT. 2.

	CONSTRUCTION	
	BIDDING PURPOSES	
DATE	RELEASED FOR	ENGR.

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 24
BLOCK TO STEEL
(EWR 2846)

DRAWING NO.		EM. NO.	REV
044947SS-581-275		2 of 2	1
SO LOR SCOTT ESPELMAN 11-5-80		ENG INTER X H K T T B O	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.
SCALE VARIES		(1) 11/16" = 1"	0417-11-7-11
REV 044947000		ENGINEER APPROVAL	DEPT DATE
1	JSE	JM	11/11/81



SECTION 3-3

NOTES:-

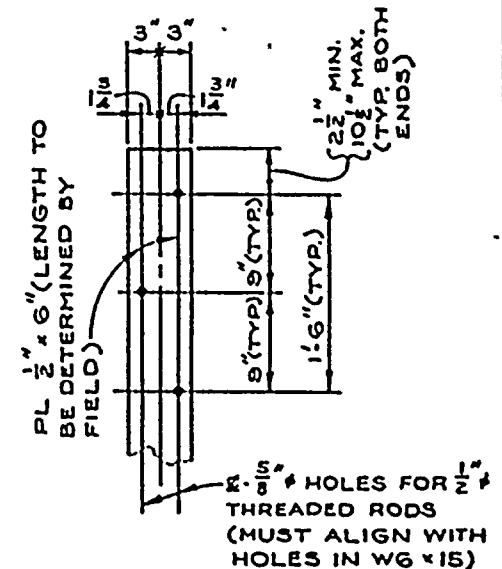
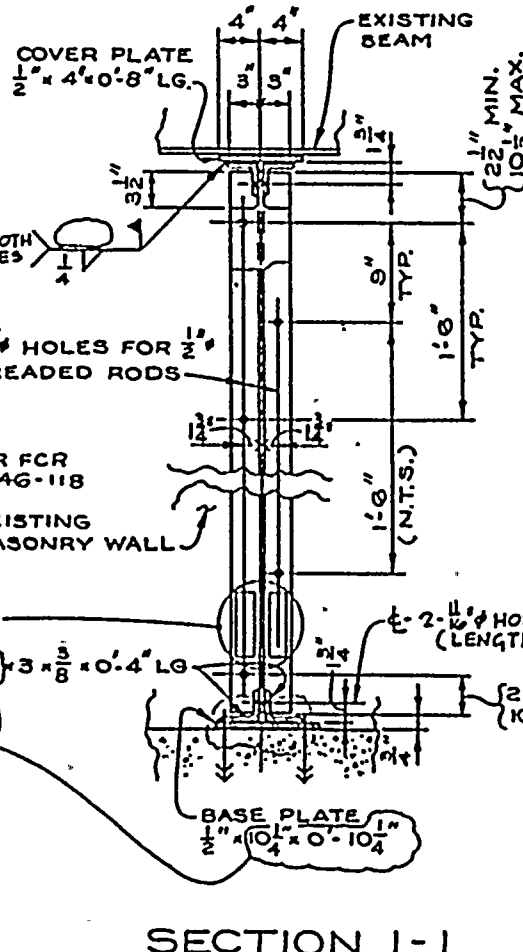
1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN.
2. ALL THREADED RODS TO BE ASTM A307
3. W6 x 15 MAY BE INSTALLED IN TWO PIECES AS REQ'D FOR INSTALLATION USING THE SPLICE DETAIL SHOWN ON DWG 55-581-276 SHT 2 of 2.
4. FOR ADDITIONAL NOTES & REFERENCES SEE DWG. 55-581-251.
5. WHERE INACCESSIBLE CONDITIONS OCCUR ON PLATE SIDE OF FIX TO DRILL THRU WALL, FIELD IS ALLOWED TO DRILL OPPOSITE FLANGE FROM WALL OF W6 x 15 TO FACILITATE DRILLING AND BOLT INSTALLATION AS REQUIRED, USING SAME HOLE PATTERN.

PER FCR
#2846-96

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



MADE SCOTT ESHELMAN 11-6-80		DRAWING NO. 04 494755-581-276		IN NO. 1 of 2		REV 1	
SCALE 1"=1'-0"		(ENGINEER) S.E. -- 11-7-80		GILBERT ASSOCIATES, INC. (ENGINEERS AND CONSULTANTS) READING, PA.			
SCALE 1"=1'-0"		1) M. Gabor 5-5912-11-1-5					
00 000000000		ENGINEER APPROVAL					
REV MADE		CM	101	APP DATE	REV MADE	CM	101
1		JSE	JM	11-1-81			

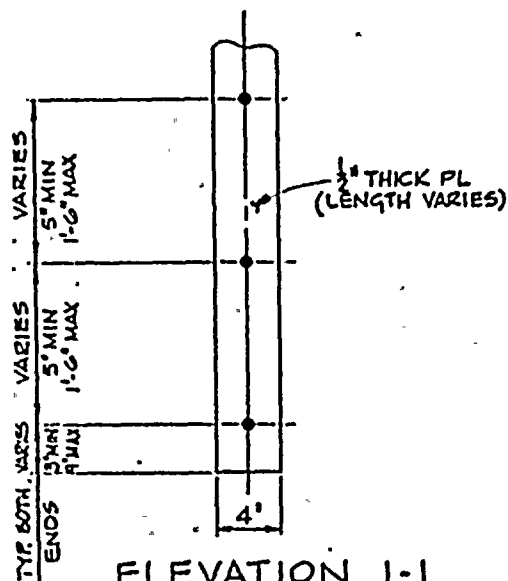
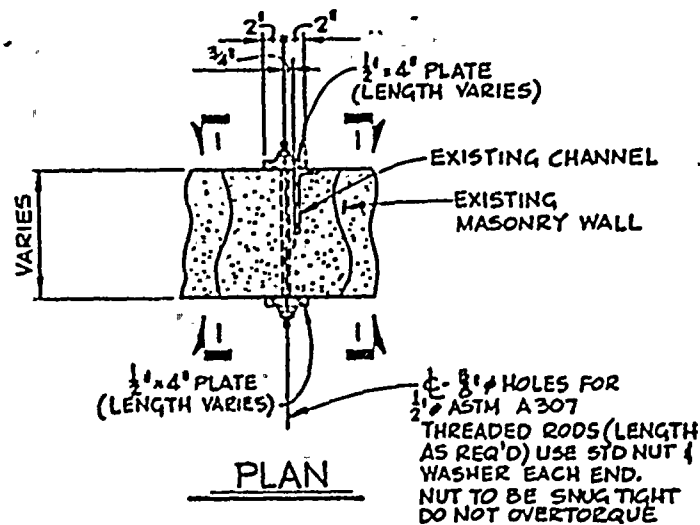


ELEVATION 2-2

NOTES:
1. FOR NOTES AND REFERENCES
SEE DWG. 88-581-276 SHEET 72

	CONSTRUCTION	
	BIDDING PURPOSES	
DATE	RELEASED FOR	ENGR.

CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	



ROCHESTER GAS & ELECTRIC CO.,
GINNA NUCLEAR POWER STATION.
MASONRY WALL BOUNDARY DETAILS
TYPE 20
BLOCK WITH EMBEDDED STEEL
(EWR 2846)

MADE JUEZGEN EMHARDT 11-11-65	DRAWING NO. 04 4947 SS-581-277	SW NO.	REV 1
SO LOR SCOTT EMELMAN 11-12-65	ENGINEER J.K.K.	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	1" = 1'-0"	DATE	11-12-65
REV	MADE	SW	REV
1	JUE	JM	11-11-65

NOTES:-

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN
2. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG SS-581-251

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION

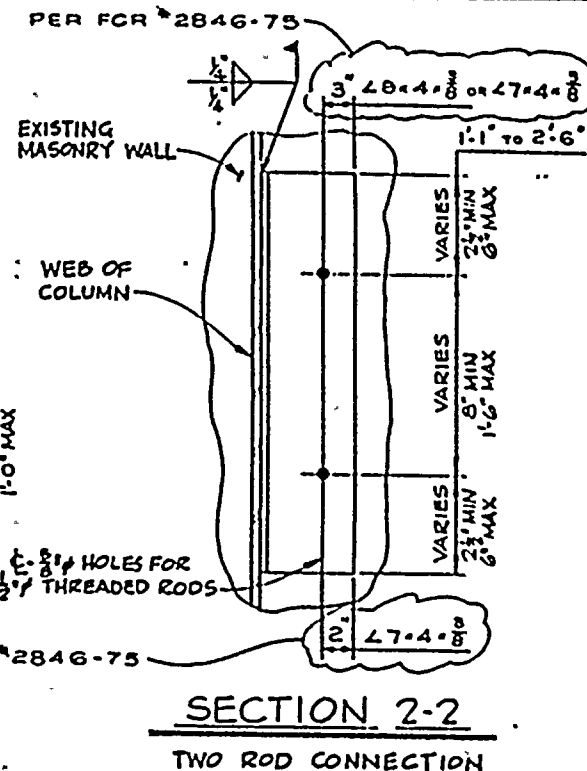
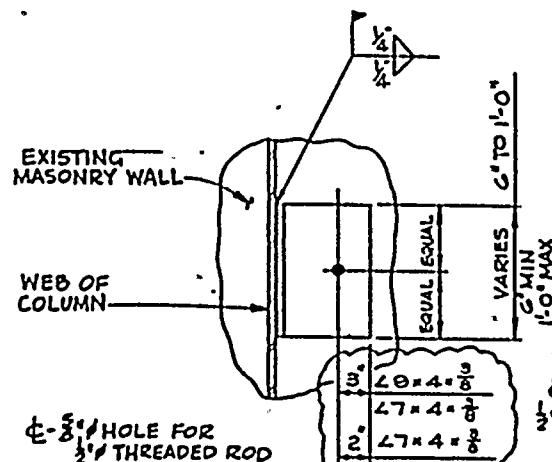
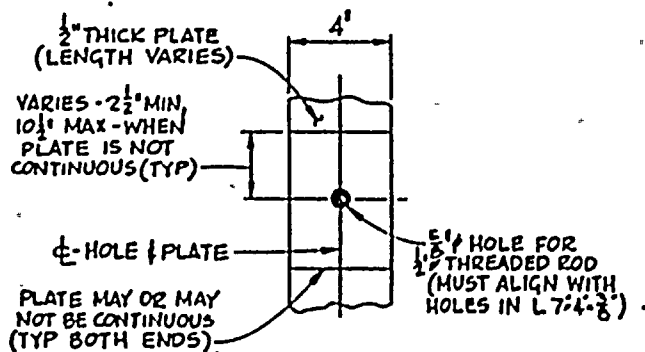
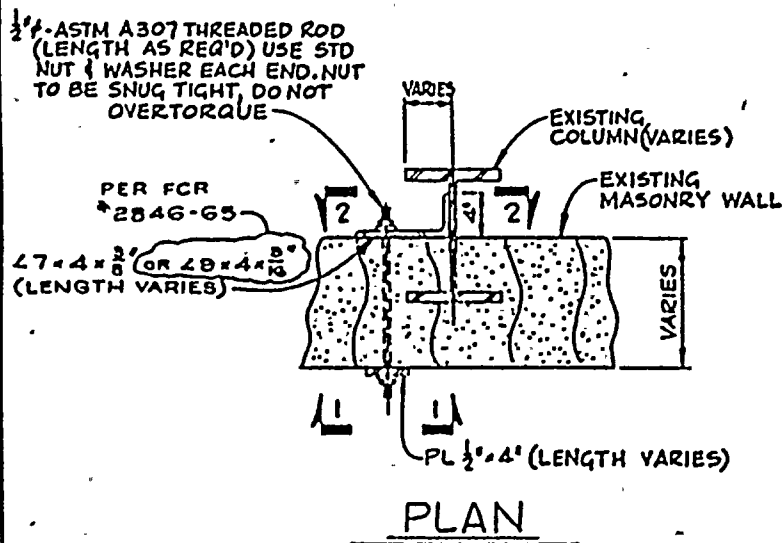
MASONRY WALL BOUNDARY DETAILS

TYPE 27

BLOCK TO STEEL

(EWR 2846)

DATE	DRAWING NO.	SH. NO.	REV
11-17-80	04 4947 ISS-581-278	1 of 2	1
SO FOR SCOTT ESMELMAN 11-18-80	ENG. INTENT C. M. GILBERT 11-18-80	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	
SCALE VARIES	04 4167000	ENGINEER APPROVAL	DATE
REV MADE CH	1	REV MADE CH	1
JSE	JM	JM	11-18-80



NOTES:-

1. FOR NOTES AND REFERENCES SEE DWG 55-581-278 SHET 2

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION

MASONRY WALL BOUNDARY DETAILS

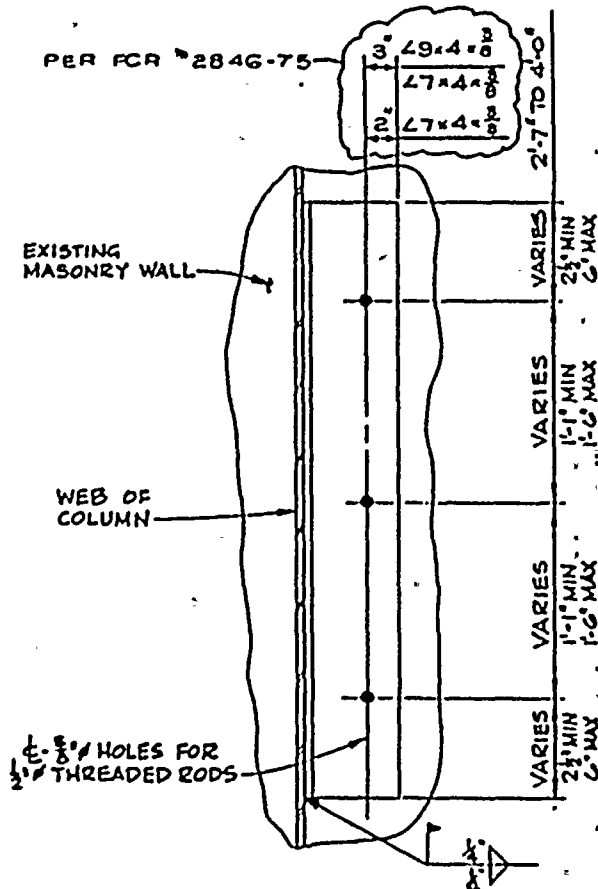
TYPE 27

BLOCK TO STEEL

(EWR 2846)

DATE	DRAWING NO.		IN. NO.	REV
MERGEN EMARD 11-12-80	044947ISS-581-278		2 of 2	1
FOR LOR SHELMAN 11-15-85	ENGINEER B. K. 11-15-85	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.		
SCALE VARIES	A. M. O'NEILL - 0411-1111			
99044371000	ENGINEER APPROVAL DEPT DATE			
REV MADE CH	SOL APP DATE	REV MADE CH	SOL APP DATE	
1 USE JM	JM	11/11		

PER FCR 2846-75



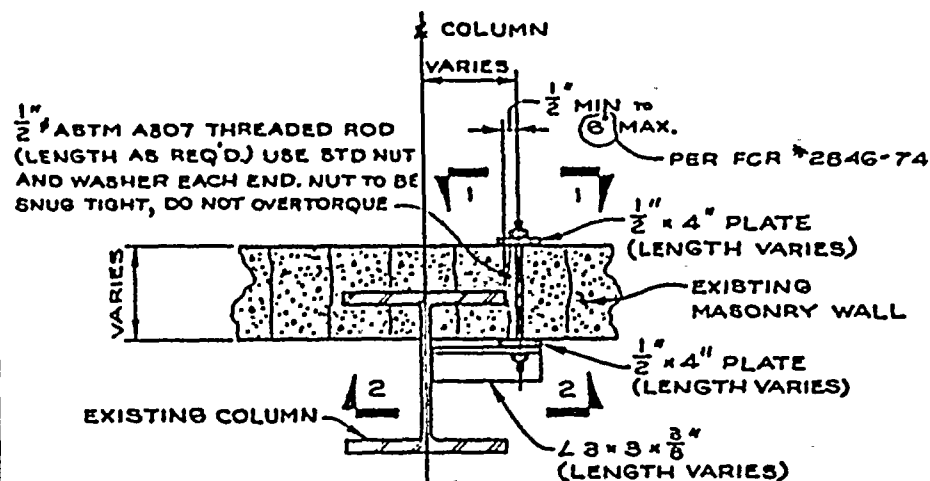
SECTION 2-2

THREE ROD CONNECTION

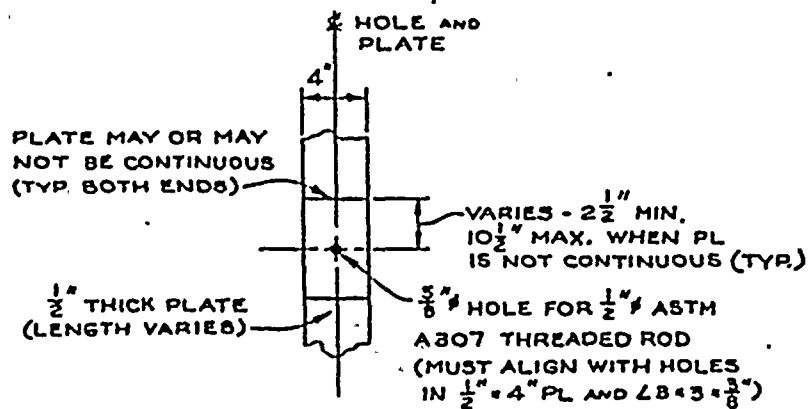
NOTES:-

1. FOR FIX LENGTHS GREATER THAN 4'-0", CONTRACTOR TO USE ONE, TWO, AND/OR THREE ROD CONNECTION DETAILS AS REQ'D WITH MAXIMUM SPACING BETWEEN ADJACENT ANGLES TO BE 6'.
2. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D TO MEET THE TOLERANCES SHOWN
3. ALL THREADED RODS TO BE ASTM A307
4. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG SS-581-251

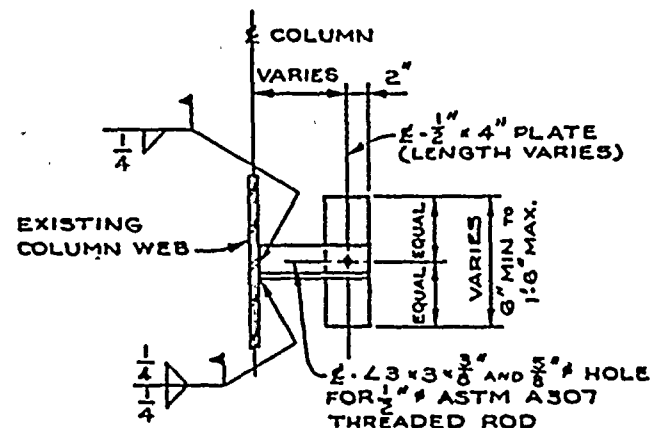
MADE BY SCOTT ESHELMAN 11-17-86		DRAWING NO. 04 4947 SS-581-278		SH. NO. 1 of 2		REV 1	
SOL FOR LIFE 11-17-86		ENGINEER K.E. 11-18-86		GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.			
SCALE VARIES		C.M. Adams		- 0112 11-17-86			
NO 044947-000		ENGINEER APPROVAL		DEPT		DATE	
REV	MADE BY	ISS	APP	DATE	REV	MADE BY	ISS
1	USE JAM	JAM	11-17-86				



PLAN



ELEVATION 1-1



SECTION 2-2

ONE ANGLE CONNECTION
WITH ONE ROD CONNECTION

NOTE :

1. FOR NOTES AND REFERENCES SEE
DWG. 88-581-278 SHEET #2

CONSTRUCTION BIDDING PURPOSES RELEASED FOR	ENGR.
DATE	

ROCHESTER GAS & ELECTRIC CO.
GINNA NUCLEAR POWER STATION

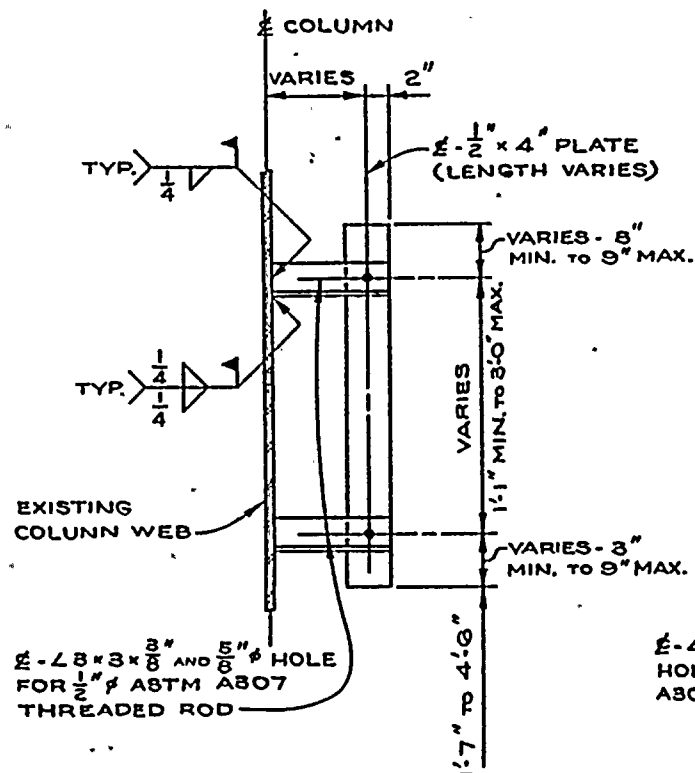
MASONRY WALL BOUNDARY DETAILS

TYPE 28

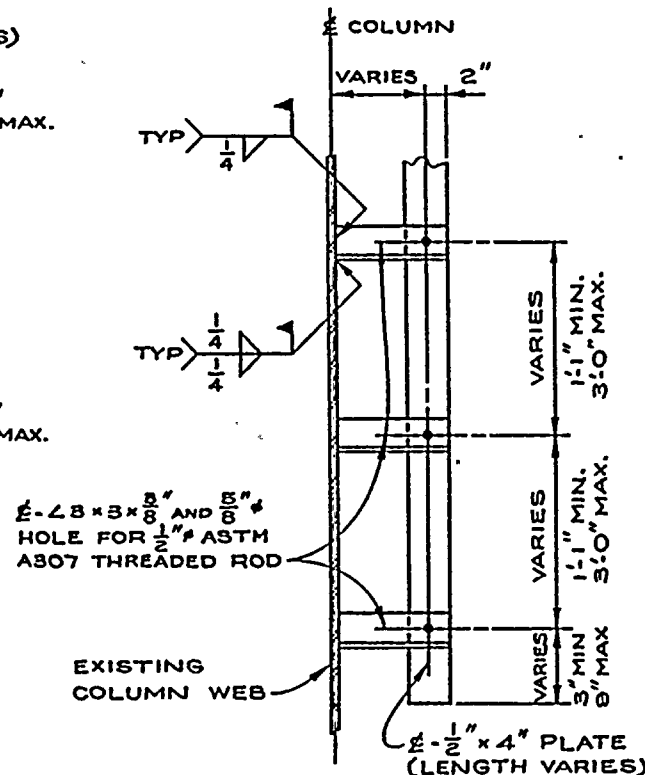
BLOCK TO STEEL

EWR 2846

MADE SCOTT ESHELMAN 11-12-80	DRAWING NO. 04 4947 SS-581-279		SN. NO. 2 of 2	REV 0
SO LDR 7-13-83	ENG INTERF KNE 11-13-80	GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.		
SCALE VARIES	1" = 8'-0" 0411-11-80			
W.O. 044947-000	ENGINEER APPROVAL DEPT. DATE			
REV MADE CH	SQL APP DATE	REV MADE CH	SQL APP DATE	



SECTION 2-2
TWO ANGLE CONNECTION
WITH TWO ROD CONNECTION



SECTION 2-2
MULTIPLE ANGLE CONNECTION
WITH MULTIPLE ROD CONNECTION

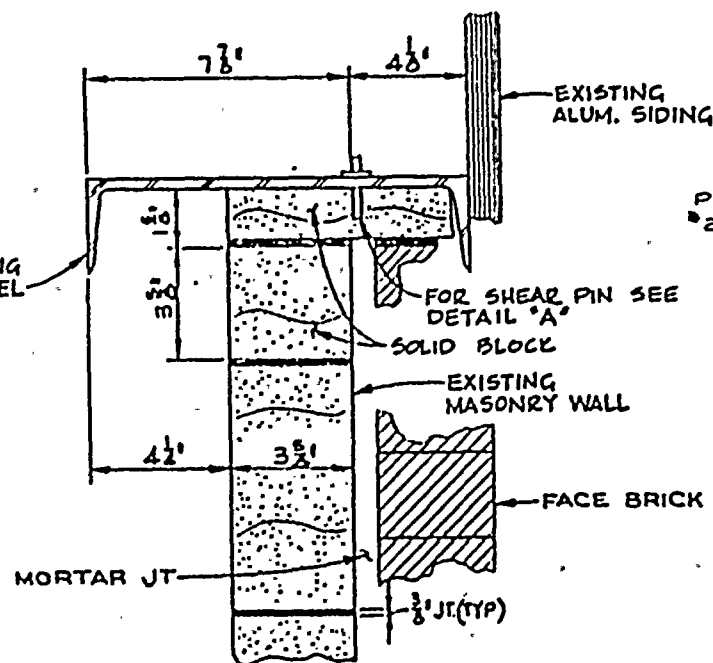
NOTES:-

1. ROD SPACING MAY BE ADJUSTED WITHIN TOLERANCES SHOWN AS REQ'D. BY FIELD CONDITIONS. ANY PREPUNCHED ROD HOLES MAY BE ABANDONED AND REPLACED WITH ADDITIONAL RODS REQ'D. TO MEET THE TOLERANCES SHOWN.
2. FOR ADDITIONAL NOTES AND REFERENCES SEE DWG. 83-581-251

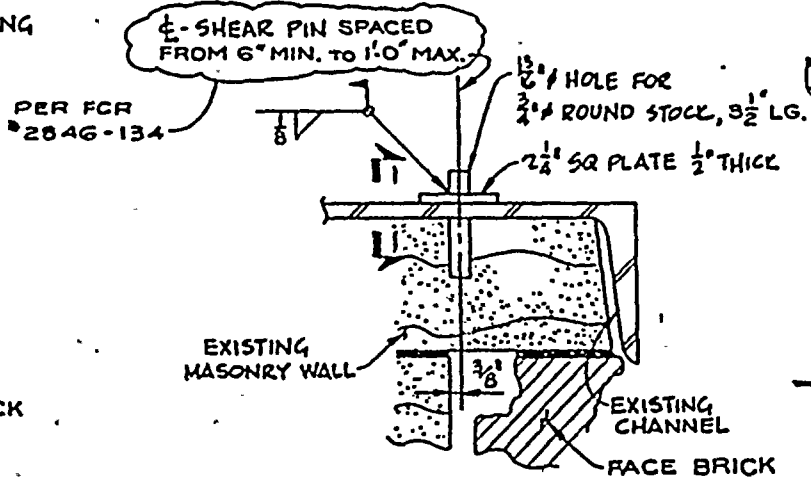
CONSTRUCTION	ENGR.
BIDDING PURPOSES	
RELEASED FOR	
DATE	

ROCHESTER GAS & ELECTRIC CO
GINNA NUCLEAR POWER STATION
MASONRY WALL BOUNDARY DETAILS
TYPE 29
BLOCK AGAINST SHEAR PINS
(EWR 7846)

MADE JURGEN EMKAROT 11-13-85	DRAWING NO. 06 1947SS-581-280	SH. NO. 2
BY SCOTT SMITHMAN 11-16-85	ENGINEER GILBERT ASSOCIATES, INC. ENGINEERS AND CONSULTANTS READING, PA.	DATE 11-16-85
SCALE VARIES	DESIGNER JSE	APPROVAL JSE
REV. NO. 1	DATE 12-22-85	BY JSE
REV. NO. 2	DATE 11-16-85	BY JSE



SECTION



DETAIL 'A'

SECTION 1-1

NOTES:-

1. FOR NOTES AND REFERENCES SEE DWG SS-581-251

