

SECURITY-RELATED INFORMATION
WITHHELD UNDER 5 USC SECTION 552(b)
(4) AND 5 USC SECTION 552(b)(7)(F)

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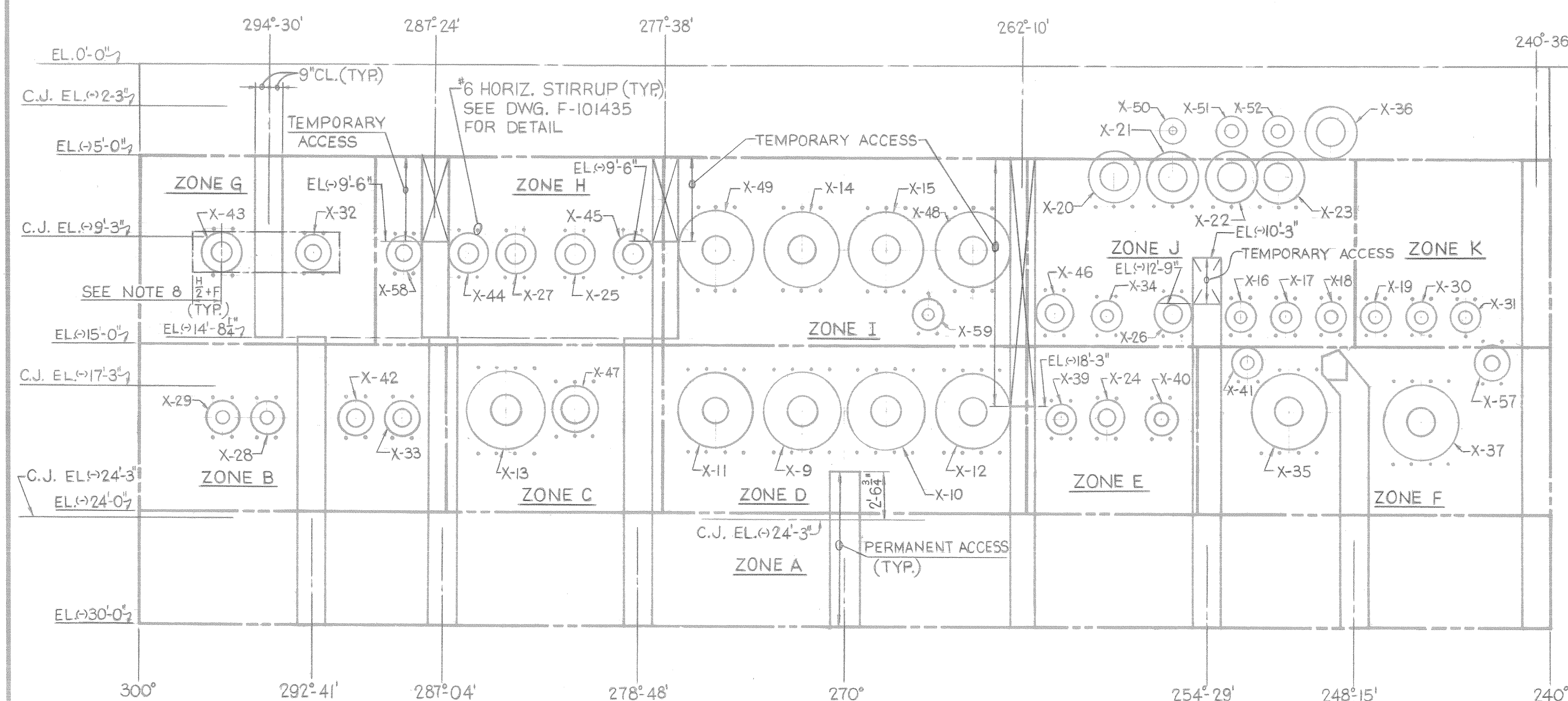
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WALL REINFORCEMENT AT EQUIPMENT HATCH
ELEVATION
3/16" = 1'-0"

STIRRUP ANCHOR PLATE SCHEDULE (UNIT #1)				
CADWELD TO BAR SIZE	CADWELD SERIES NO.	ANCHOR PLATE SIZE	CADWELD ASSEMBLIES REQ'D.	TEST ASSEMBLIES REQ'D.
*6	RBB-692-JA	$\frac{1}{2} \times 5 \times 3'$	90	7
*8	RBB-810-IJA	$\frac{3}{4} \times 5 \times 5'$	540	40
*10	RBB-1092-JA	$1 \times 4 \times 6'$	—	—
*110	RBB-1101-JA	$\frac{1}{2} \times 4 \frac{1}{2} \times 7'$	90	7



STIRRUP ARRANGEMENT FROM 240° TO 300° AZIMUTH

DIAGONAL REINFORCEMENT AT EQUIPMENT HATCH

TABLE OF INCLINED SHEAR REINFORCING			
ZONE	ELEV. TO ELEV.	AZIMUTH TO AZIMUTH	TOTAL AREA OF REINF. REQ'D.
A	EL+30' TO EL+24'	240° TO 300°	240.70 IN. ²
B	EL+24' TO EL+15'	287° TO 300°	85.85 IN. ²
C		277°45' TO 287°	61.10 IN. ²
D		262°-15' TO 277°45'	102.38 IN. ²
E		255° TO 262°-15'	47.87 IN. ²
F		240° TO 255°	99.08 IN. ²
G	EL+15' TO EL+5'	290° TO 300°	36.21 IN. ²
H		277°45' TO 290°	44.39 IN. ²
I		262°-15' TO 277°45'	56.15 IN. ²
J		248°-15' TO 262°-15'	50.70 IN. ²
K		240° TO 248°-15'	29.90 IN. ²

*INCLUDED IN TOTAL AREA OF REINF. REQ'D.

PENETRATIONS	ELEV. TO ELEV. (APPROXIMATE)	AREA REQUIRED* (UNIFORMLY DISTR.)
X-29 TO X-33	↗19'-10" TO ↗17'-11"	13.85 IN. ²
X-13 TO X-47	↗20'-7" TO ↗16'-5"	20.90 IN. ²
X-11 TO X-12	↗20'-7" TO ↗16'-5"	48.94 IN. ²
X-39 TO X-40	↗19'-10" TO ↗17'-11"	8.94 IN. ²
X-35 TO X-37	↗21'-0" TO ↗16'-6"	35.00 IN. ²
X-43 TO X-32	↗11'-2" TO ↗9'-1"	9.09 IN. ²
X-58 TO X-45	↗11'-2" TO ↗9'-1"	4.67 IN. ²
X-49 TO X-48	↗12'-0" TO ↗8'-0"	23.19 IN. ²
X-46 TO X-18	↗14'-4" TO ↗12'-5"	10.52 IN. ²
X-20 TO X-23	↗17'-5" TO ↗5'-0"	8.95 IN. ²
X-19 TO X-31	↗14'-3" TO ↗12'-6"	3.76 IN. ²

NOTES FOR PENETRATION AREA (240° TO 300°)

1. SPACING OF INCLINED STIRRUPS MUST NOT EXCEED 18" AT THE OUTSIDE FACE OF WALL.
2. ZONES OF INCLINED STIRRUPS INDICATE REQUIRED AREA OF REINFORCING AT OUTSIDE FACE OF WALL USE #6, 8 OR #10 INCLINED STIRRUPS IN ANY COMBINATION TO OBTAIN REQUIRED AREA FOR A GIVEN ZONE.
3. PENETRATIONS ARE SHOWN AT MIDDLE SURFACE AND ACCESS OPENINGS ARE SHOWN AT OUTSIDE FACE OF WALL.
4. ALL ADDITIONAL ACCESS OPENINGS REQUIRED BY FIELD ARE CONSIDERED TEMPORARY AND STIRRUPS MUST BE PLACED PRIOR TO CONCRETE PLACEMENT.
5. WHEREVER ANCHOR PLATES ARE USED WITH STIRRUPS, PLATE SHOULD REST IN THE PLANE OF LAYER 1 OR 2 ON THE INSIDE AND LAYER 6 OR 7 ON THE OUTSIDE.
6. FINAL AS-BUILT STIRRUP ARRANGEMENT SHALL BE SKETCHED, SHOWING BAR SIZE AND LOCATION (BY VISUAL INSPECTION) AND SUBMITTED TO THE RESIDENT CONSTRUCTION ENGINEER FOR APPROVAL PRIOR TO CONCRETE PLACEMENT. CONSTRUCTION MANAGERS SHALL BE NOTIFIED WHEN STIRRUPS ARE IN PLACE, IN ORDER THAT A U.E.&C. FIELD ENG. HAVE THE OPTION OF INSPECTING THE DISTRIBUTION.
7. REFER TO DRAWING 9763-F-101497 FOR F&H DIMENSIONS.
8. PROPER ANCHOR PLATES MAY BE USED WITH ANY SIZE STIRRUP IF REQUIRED FOR INSTALLATION. SEE ANCHOR PLATE SCHEDULE THIS DRAWING.

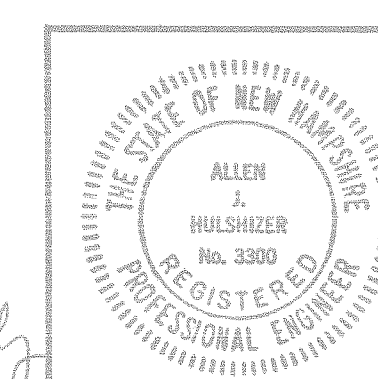
NOTES:


2. PROVIDE #8 SPACER BARS AS REQUIRED BETWEEN LAYERS OF PARALLEL EQUIPMENT HATCH BENT BARS TO MAINTAIN 1" MINIMUM CLEARANCE BETWEEN LAYERS.

REFERENCE DWGS.

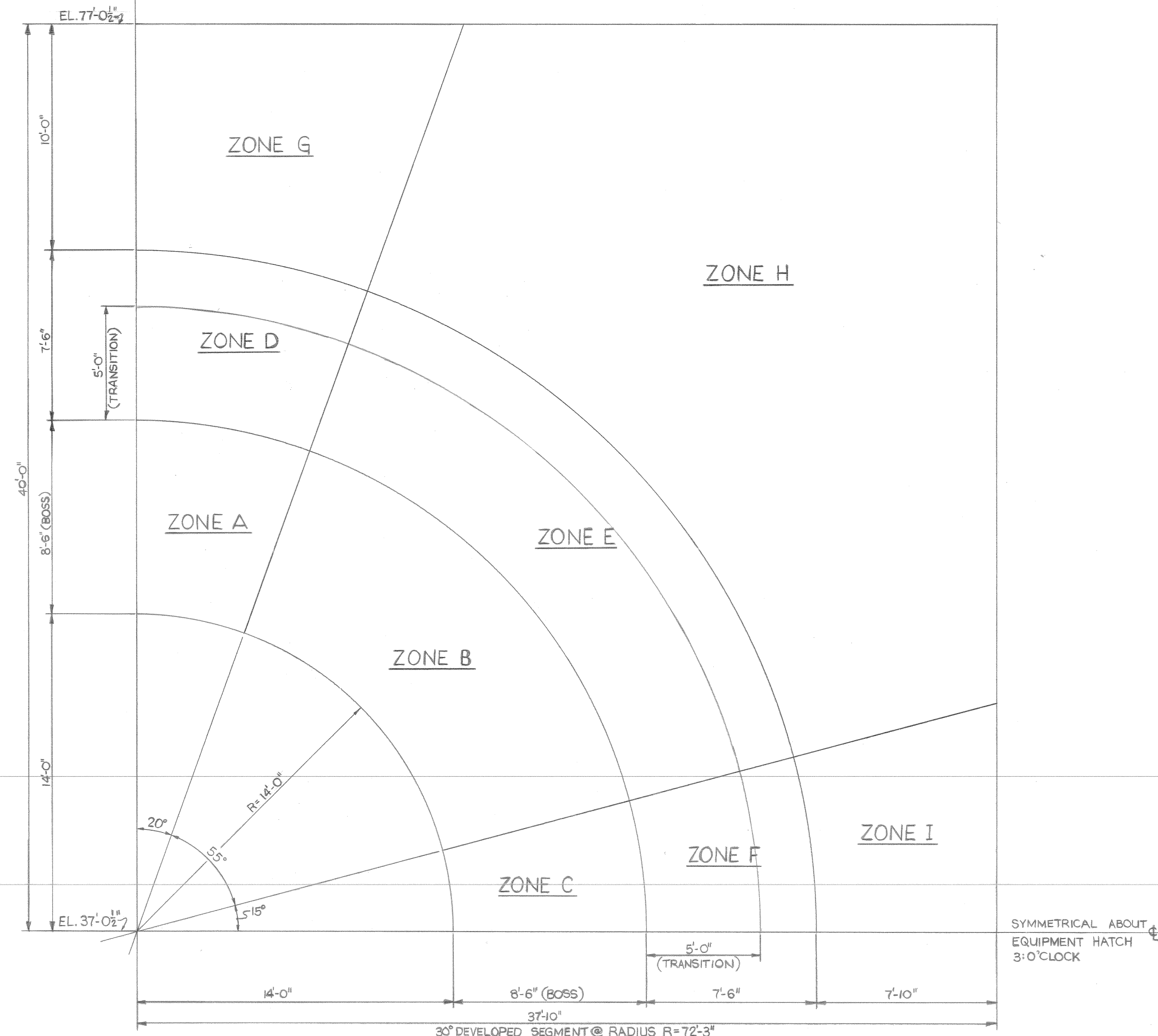
1. 9763-F-101435 - CONTAINMENT CONCRETE
TYPICAL REINFORCING.
2. 9763-F-101440 - CONTAINMENT CONCRETE
EQUIPMENT HATCH REINF. SHT 1.
3. 9763-F-101495 - CONTAINMENT LINER-VERTICAL WALL.
4. 9763-F-101496 - CONTAINMENT LINER-WALL OPNGS. &
PENETRATIONS.
5. 9763-F-101497 - CONTAINMENT LINER- PENETRATIONS
SCHEDULE.

N-STAMP ITEM
HOQAE *P.C. Lomax*



3	1-3-81	REVD PENETRATION NOTES 6/1 PER SCA 21/15/20.F.	E4	1/24	1/24	006
1	5-3-76	FOR CONSTRUCTION	60M	1/24	1/24	006
0	7-16-76	FOR FABRICATION	60M	1/24	1/24	006
REV.	DATE	DESCRIPTION	DWN BY	CHK BY	ENGR.	SUP. ENGR.
<p style="text-align: center;">CONTAINMENT CONCRETE EQUIPMENT HATCH REINF. - SHEET 2</p> <p style="text-align: center;">PUBLIC SERVICE CO. OF NEW HAMPSHIRE</p> <p style="text-align: center;">SEABROOK STATION</p> <p style="text-align: center;"> united engineers & constructors inc.</p>						
JUNITC 1 AND 2			Q762 E 101441			

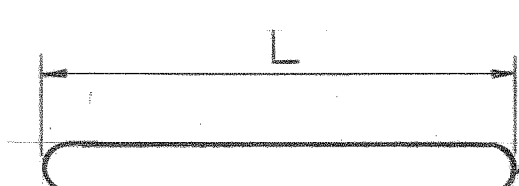
SYMMETRICAL ABOUT EQUIPMENT HATCH
12:00'CLOCK



TYPICAL STIRRUP ARRANGEMENT FOR QUARTER SEGMENT
(LOOKING FROM OUTSIDE)
SCALE: $\frac{3}{8}$ "=1'-0"

REGION	ZONE	SIZE OF STIRRUP	SPACING R X H	TOTAL NO.	STIRRUP LENGTH (L)	AREA FT. ²	REMARKS
BOSS	A	#6	15" X 12"	45	7'-3 $\frac{1}{4}$ "	54.15	—
	B		12" X 9"	200	7'-3 $\frac{1}{4}$ "	148.91	—
	C		15" X 12"	35	7'-3 $\frac{1}{4}$ "	40.61	—
TRANS. & SHELL	D		12" X 9"	92	VARIES	68.72	PROVIDE MIN. OF 5% EXTRA STIRRUP (QUAD. FOR EACH VARIABLE LENGTH)
	E		8" X 8"	425	VARIES	188.99	DO
	F		12" X 9"	70	VARIES	51.54	DO
SHELL	G		18" X 15"	72	3'-6 $\frac{1}{4}$ "	134.12	—
	H		18" X 15"	320	3'-6 $\frac{1}{4}$ "	598.23	—
	I		21" X 21"	24	3'-6 $\frac{1}{4}$ "	73.99	—

R=RADIAL
H=HOOP



HOOK TO BE BETWEEN 90° & 180° ON INSIDE
END TO SUIT FIELD CONDITION

NOTE:
WHEREVER #6 STIRRUPS DO NOT FIT, SUBSTITUTE THREE (3) OF #5 STIRRUPS FOR EVERY TWO (2) OF #6 STIRRUPS.
SUBSTITUTION OF #3 & #4 STIRRUPS IS ALSO PERMITTED PROVIDED THE TOTAL REQUIRED AREA IS FURNISHED IN EACH ZONE. BUNDLED (2) STIRRUPS MAY BE USED.

REGION	ZONE	SIZE OF STIRRUP	TOTAL NO.	STIRRUP LENGTH (L)	REMARKS
BOSS	A	#5	7	7'-3"	—
	B		15	7'-3"	—
	C		6	7'-3"	—
TRANS. & SHELL	D		15	VARIES	—
	E		32	VARIES	—
	F		10	VARIES	—
SHELL	G		10	3'-6"	—
	H		24	3'-6"	—
	I		4	3'-6"	—

NOTES

- FOR GENERAL NOTES AND REFERENCE DWGS. SEE DWG. NO. 9763-F-101435.
- WORK THIS DWG. WITH DWG. NO. 9763-F-101434 & 101440.
- TOTAL NUMBER OF STIRRUPS MUST BE PLACED IN A GIVEN ZONE AS SHOWN IN THE TABLE ON THIS DWG.
- STIRRUP SPACING IS PROVIDED IN RADIAL AND HOOP PATTERN. STIRRUPS MAY BE PLACED IN ORTHOGONAL PATTERN AND SPACING MAY BE INCREASED OR DECREASED BY A MAXIMUM OF HALF THE STIRRUP SPACING FOR A GIVEN ZONE IF REQUIRED FOR PLACEMENT.
- HEAT NUMBERS (IDENTIFICATION TAGS) ON STIRRUP BUNDLES SHALL BE MAINTAINED WITH THE BATCH OF STIRRUPS FOR FUTURE IDENTIFICATION FOR USE IN UNIT #2.
- ALL STIRRUPS IN BOSS AND TRANSITION ZONE MUST HOOK AROUND EXTREME OUTSIDE LAYER AND IN SHELL, AROUND LAYER #7.

N-STAMP ITEM
HOQAE

CONTAINMENT CONCRETE EQUIPMENT HATCH TRANSVERSE SHEAR REINFORCING PUBLIC SERVICE CO. OF NEW HAMPSHIRE SEABROOK STATION UNITED ENGINEERS & CONSTRUCTORS INC.	
UNITS 1 AND 2	9763-F-101444

REV.	DATE	DESCRIPTION	DWN. BY	CKD. BY	ENGR.	SUP. ENGR.
3	8/20/80	REVISED PER ECA 01/2019 A	EH	ALLEN	ALLEN	ALLEN
2	6/27/80	REVISED TRANSVERSE SHEAR REINFORCING TABLES & NOTE 2	EH	ALLEN	ALLEN	ALLEN
1	5/25/79	STIRRUP LENGTHS CHANGED & NOTE ADDED	EH	ALLEN	ALLEN	ALLEN
0	4/16/78	ISSUED FOR CONSTRUCTION	EH	ALLEN	ALLEN	ALLEN
4	11-11-82	REV. PER ECA 01/82 G/A NEW 10" DIA. BOSS	EH	ALLEN	ALLEN	ALLEN

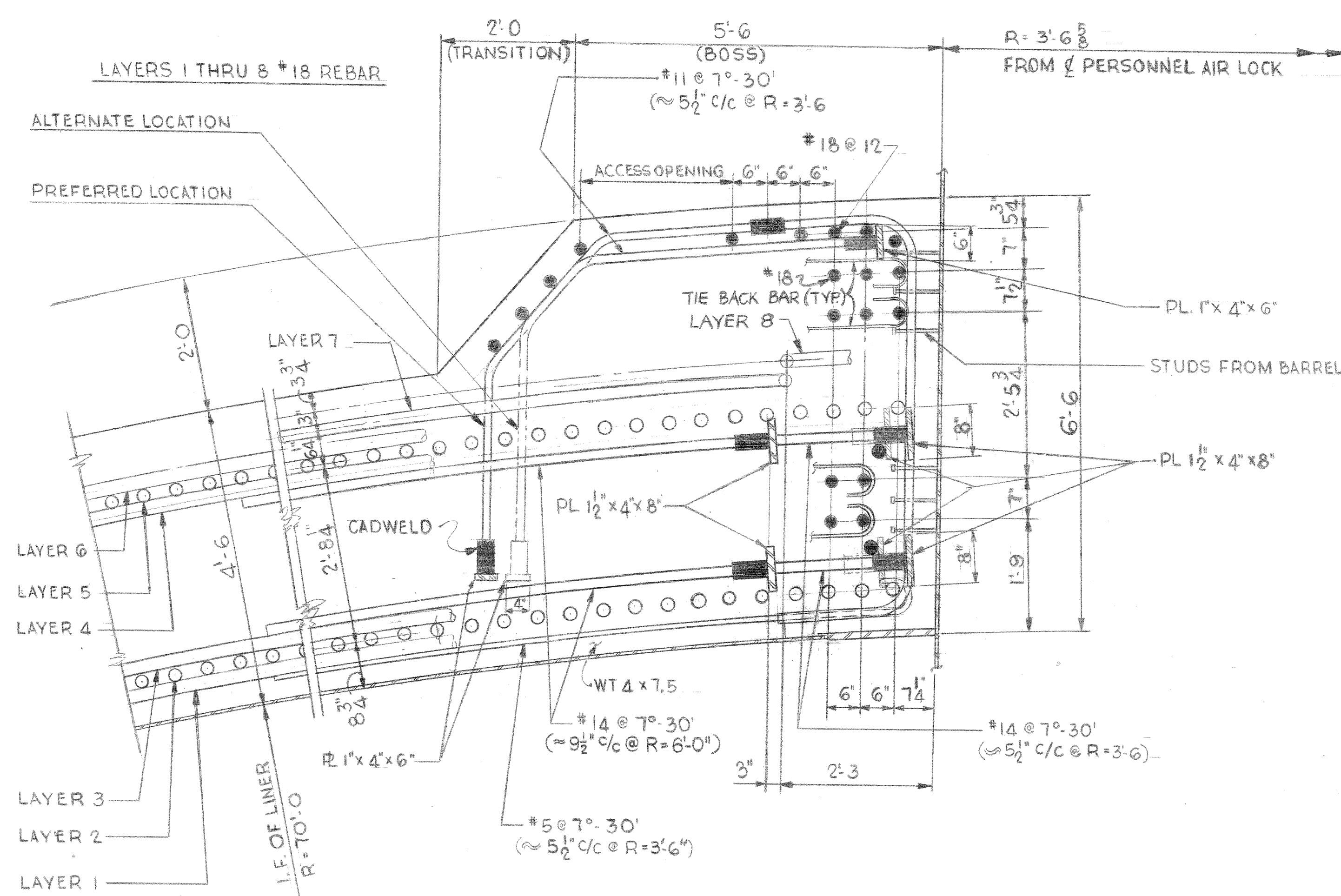
DISCIPLINE	CKD. BY	DATE	DISCIPLINE	CKD. BY	DATE
STRUCT.	ALLEN	7/8/80	INST. & CONTR.	N/A	
MECH.	N/A		ELECT.	N/A	
NUCLEAR	N/A		MECH. SVCS.	N/A	

1 AREA 017 CS

4

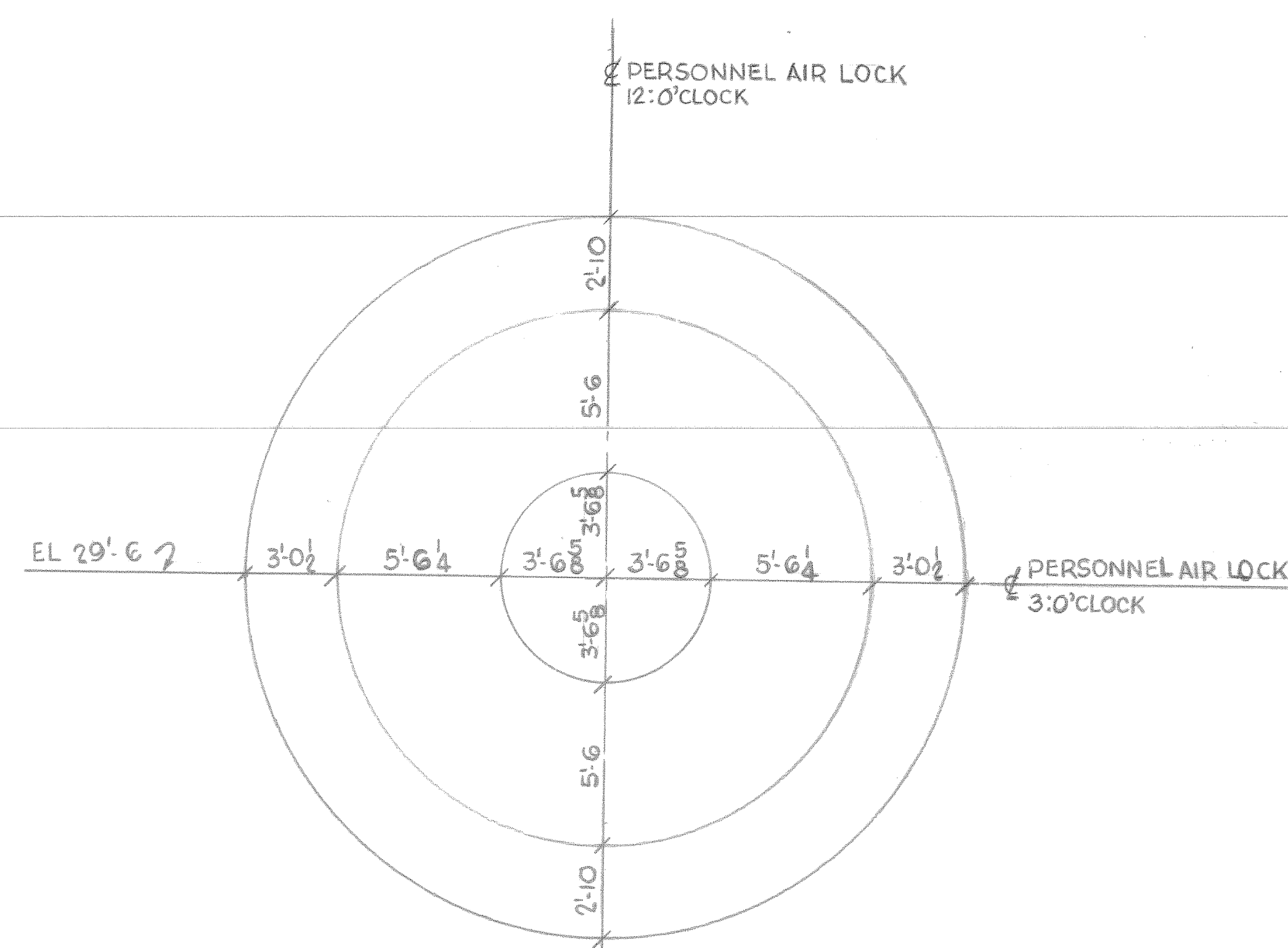
3

2

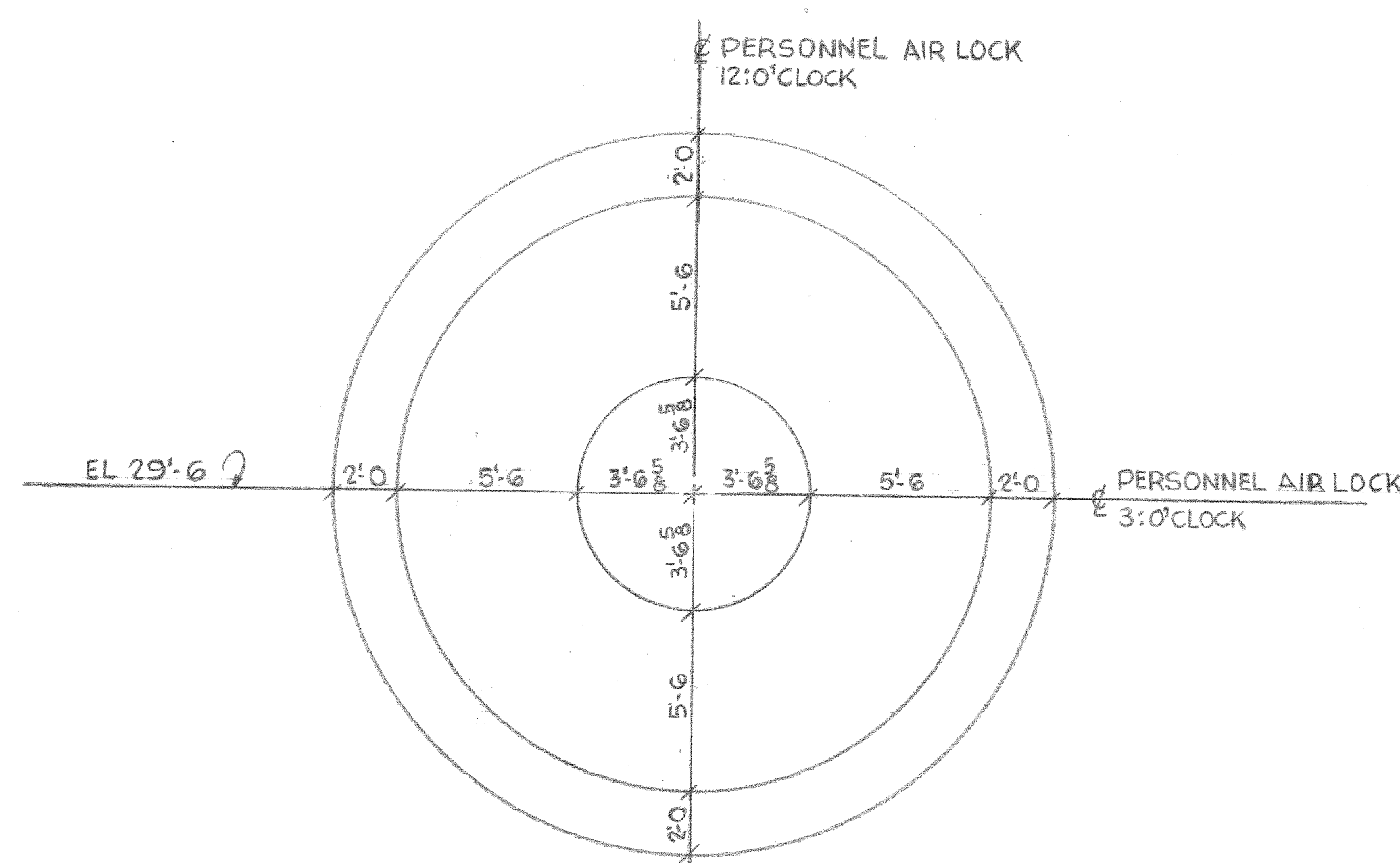


SECTION AT HORIZONTAL ̢ (3:0'CLOCK)

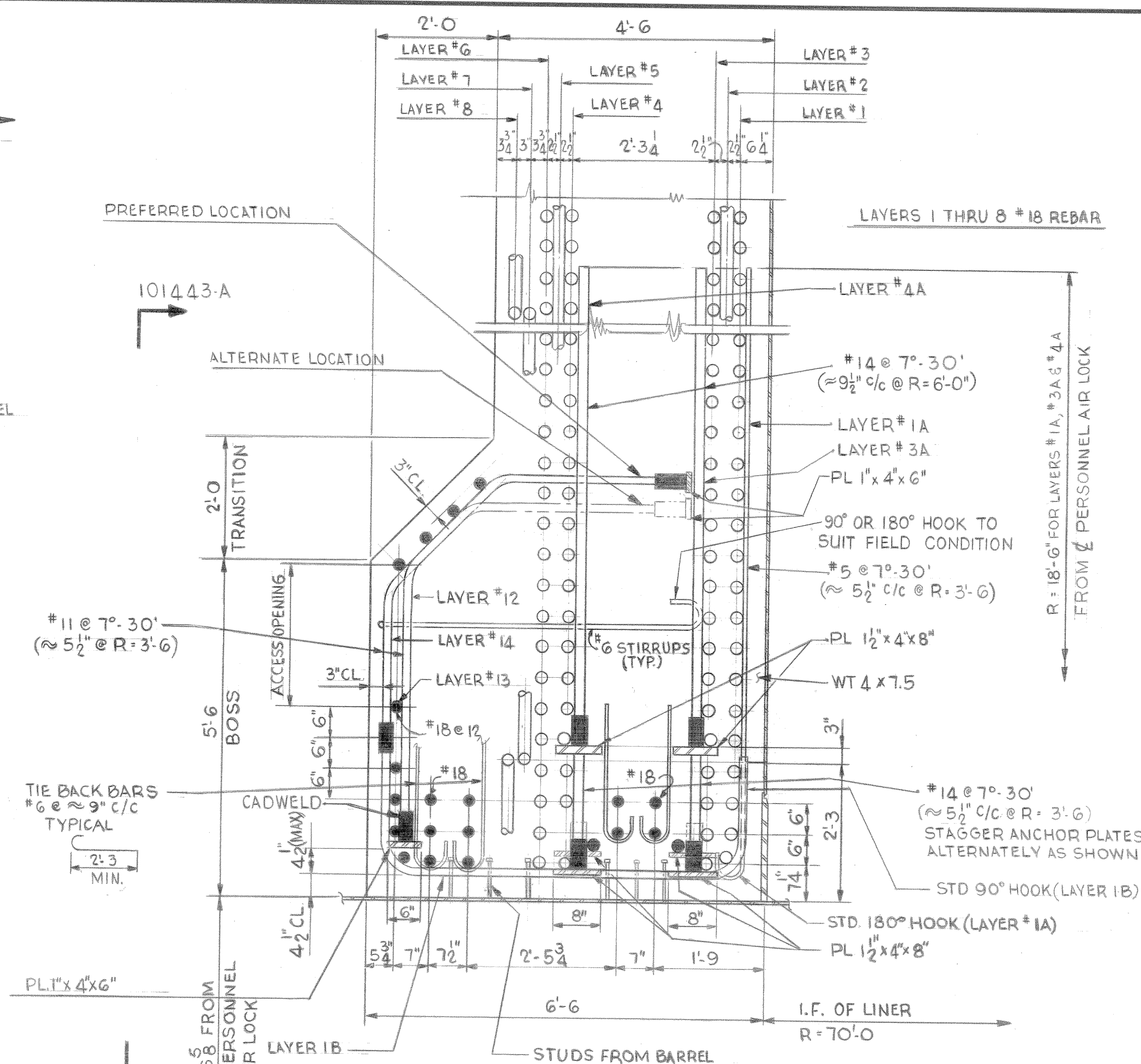
SCALE 3/4" = 1'-0"

DEVELOPED ELEVATION
(LOOKING FROM OUTSIDE)

SCALE 1/4" = 1'-0"

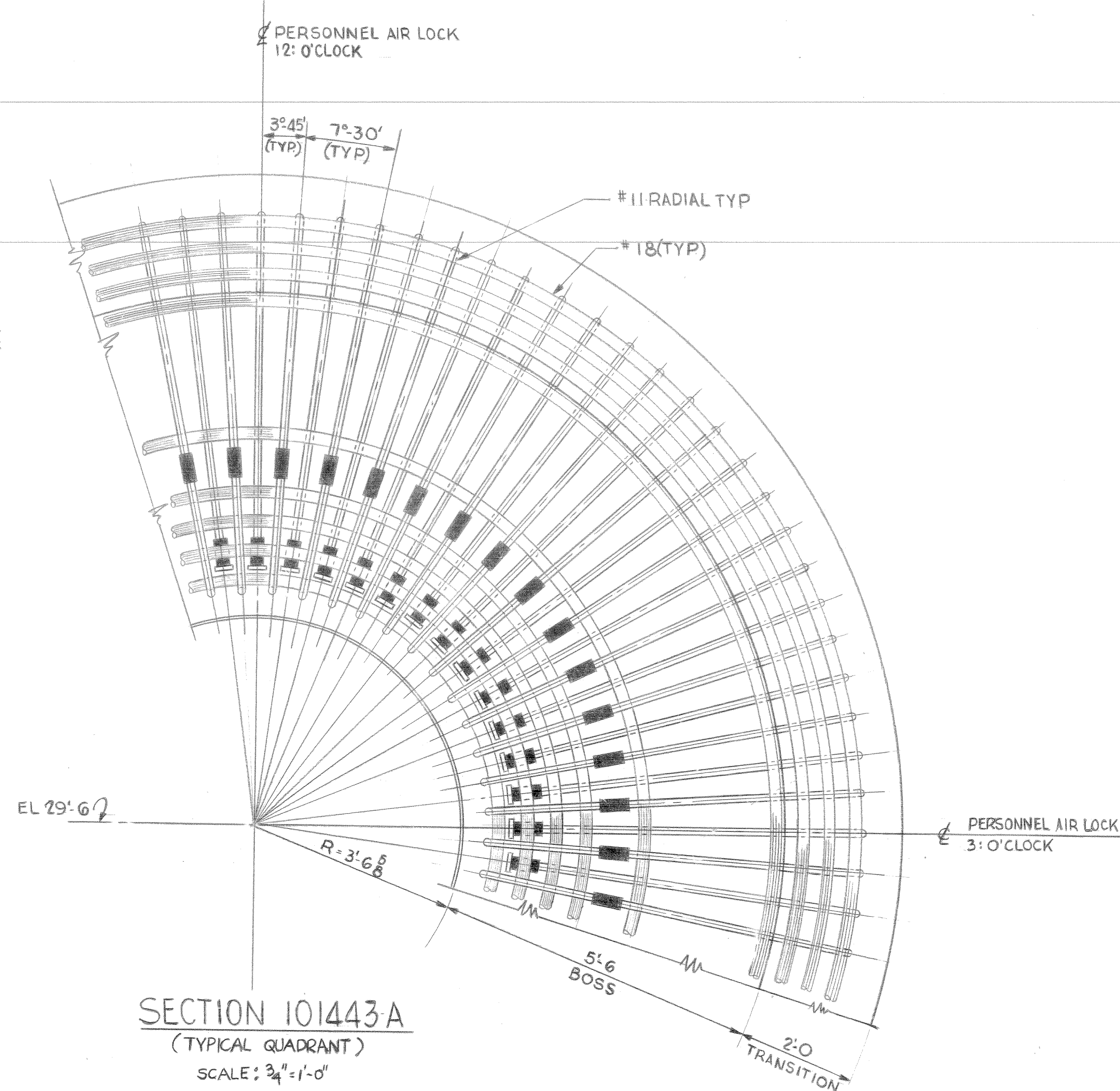
PROJECTED ELEVATION
(LOOKING FROM OUTSIDE)

SCALE 1/4" = 1'-0"



SECTION AT VERTICAL ̢ 12:0'CLOCK

SCALE 3/4" = 1'-0"

SECTION 101443-A
(TYPICAL QUADRANT)

SCALE 3/4" = 1'-0"

ANCHOR PLATE SCHEDULE

PIECE MARKS (*)	CADWELD TO BAR SIZE	CADWELD SERIES NO.	ANCHOR PLATE SIZE	TOTAL NO. FOR UNIT #1	TOTAL NO. FOR UNIT #2
A6/1, A7/1	#11	RBB-1101-JA	1"x4"x6"	144	144
A205/1, A5/1	#14	RBB-1401-JA	1 1/2"x4"x8"	192	192

(*) PIECES ARE DIFFERENT ONLY FOR ORIENTATION OF TAP HOLES. FOR DETAILS AND QUANTITIES SEE SHOP DWGS. CUE ̢C FP 13610 THRU 13618 & 13634 THRU 13640.

NOTES:

- FOR GENERAL NOTES AND LIST OF REFERENCE DWGS. SEE DWG. NO. 9763-F-101435
- WORK THIS DWG. WITH DWGS. NO. 9763-F-101442 & 9763-F-101434
- HOOP BARS TO BE FABRICATED WITH THE LARGEST CHORD LENGTH PRACTICAL FOR SHIPMENT. HOOP BAR CADWELD SPLICES TO BE STAGGERED MINIMUM OF 18" C/C FROM THE ADJACENT CADWELD SPLICE. CADWELD SPLICES SHOULD BE CENTERED BETWEEN RADIAL BARS WHERE APPLICABLE.
- LAYER #3A, #12 & #14 SHOULD BE BENT WITH A CONSTANT RADIUS IN A GROUP OF 45°. ONE SEGMENT OF 45° SHOULD BE SYMMETRICAL AROUND 12:00'CLOCK.
- SPACING OF LAYERS #12 & #14 BARS MAY BE ADJUSTED IN THE HOOP DIRECTION.
- FOR ANCHOR PLATE DETAIL SEE DWG. NO. 9763-F-101440
- FOR TRANSVERSE SHEAR BARS SEE DWG. NO. F-101442
- SEE ECA 01/2897A FOR THE AS BUILT LOCATION OF THE REBARS AND ANCHORAGE PLATES.

N-STAMP ITEM
HOQUEENGINEER: *[Signature]*
STATE REG. NO. *[Signature]* 3300

CONTAINMENT
CONCRETE
PERSONNEL AIR LOCK REINF.- SHEET 2
PUBLIC SERVICE CO. OF NEW HAMPSHIRE
SEABROOK STATION

united engineers & contractors inc.

UNITS 1 & 2 9763-F-101443

REV. NO.	DATE	DESCRIPTION	PE	DWN. BY	CHK. BY	ENG.	SDE	GAE	PEM
1	5-79	ISSUED FOR CONSTRUCTION							
2	3-2879	REV'D NOTE AND REBAR ARE NOT MOVED NOTE 2 HOLES							
3	5-25-79	RELEASED HOLDING							
4	6-27-80	REV'D STIRRUP HOOK REV'D TIE-BACK BAR PER ECA 01/23320							
5	7-1-81	REV'D STIRRUP HOOK REV'D TIE-BACK BAR PER ECA 01/23320							

DISCIPLINE	CKD BY	DATE	DISCIPLINE	CKD BY	DATE
STRUCT.	PEM	7-1-81	INST. & CONTR.	PEM	7-1-81
MECH.	PEM	7-1-81	ELECT.	PEM	7-1-81
NUCLEAR	PEM	7-1-81	MECH. SVCS.	PEM	7-1-81

1 AREA 017 CS

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