

| α° | CYLINDRICAL SHELL C_p | HEMISPHERICAL SHELL C_p |
|----------------|-------------------------|---------------------------|
| 0 | 1.0 | 1.0 |
| 15 | 0.8 | 0.9 |
| 30 | 0.1 | 0.5 |
| 45 | -0.7 | -0.1 |
| 60 | -1.2 | -0.7 |
| 75 | -1.6 | -1.1 |
| 90 | -1.7 | -1.2 |
| 105 | -1.2 | -1.0 |
| 120 | -0.7 | -0.6 |
| 135 | -0.5 | -0.2 |
| 150 | -0.4 | 0.1 |
| 165 | -0.4 | 0.3 |
| 180 | -0.4 | 0.4 |

$$P = C_p \times q$$

WHERE;

P - DESIGN PRESSURE

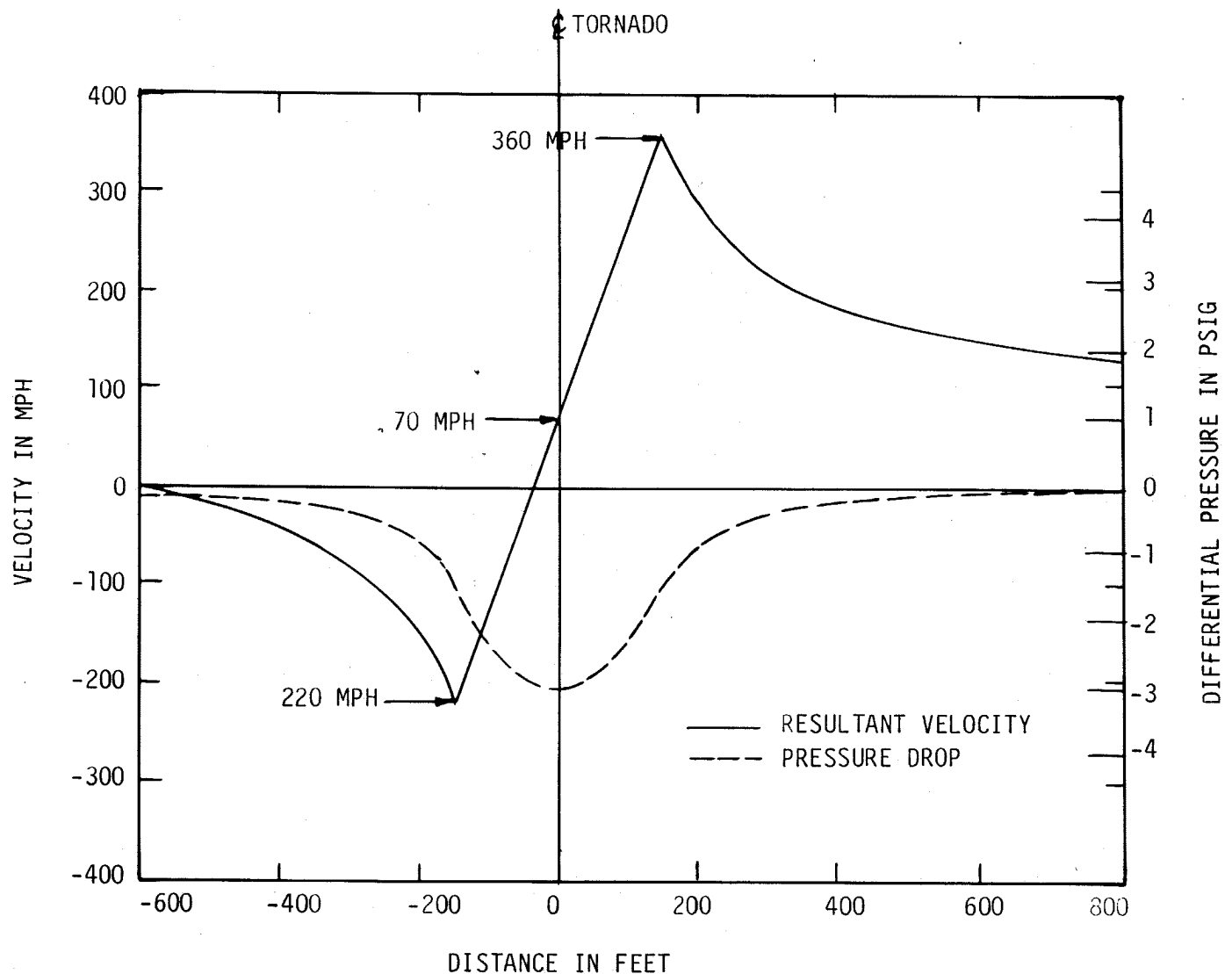
C_p - COEFFICIENT FOR DESIGN PRESSURE

q - DYNAMIC PRESSURE

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FIGURE 3.3-2

WIND PRESSURE DISTRIBUTION
FOR CONTAINMENT STRUCTURES

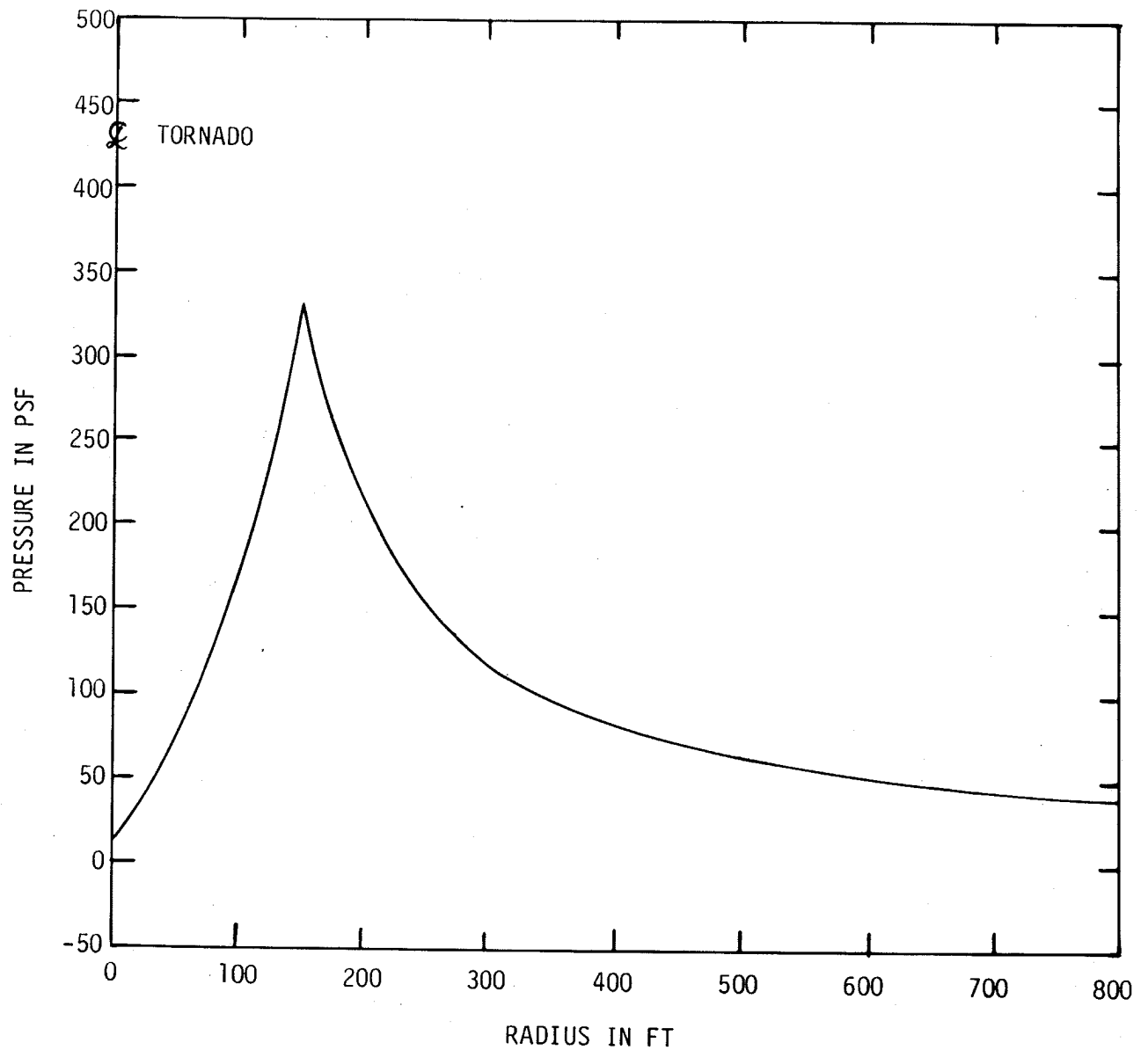


TRANSLATION VELOCITY = 70 MPH
TANGENTIAL VELOCITY = 290 MPH AT RADIUS OF 150 FT
PRESSURE DROP = 3 PSI WITHIN 1.5 SECONDS

**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.3-3

PRESSURE AND VELOCITY
DISTRIBUTION FOR
THE DESIGN-BASIS TORNADO

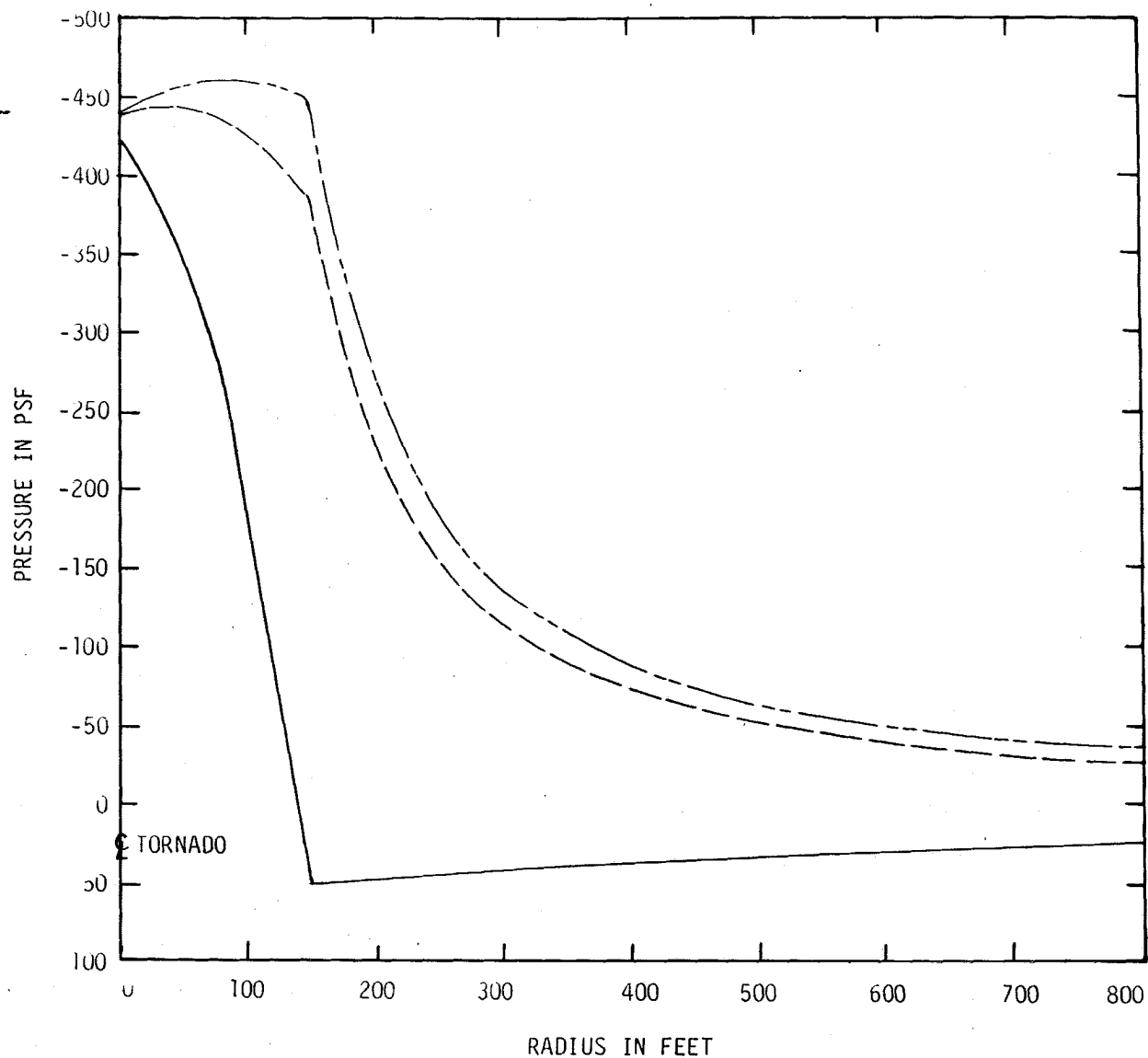


TRANSLATION VELOCITY = 70 MPH
TANGENTIAL VELOCITY = 290 MPH AT RADIUS OF 150 FT

**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.3-4

EFFECTIVE VELOCITY PRESSURE
DISTRIBUTION FOR
THE DESIGN-BASIS TORNADO



KEY

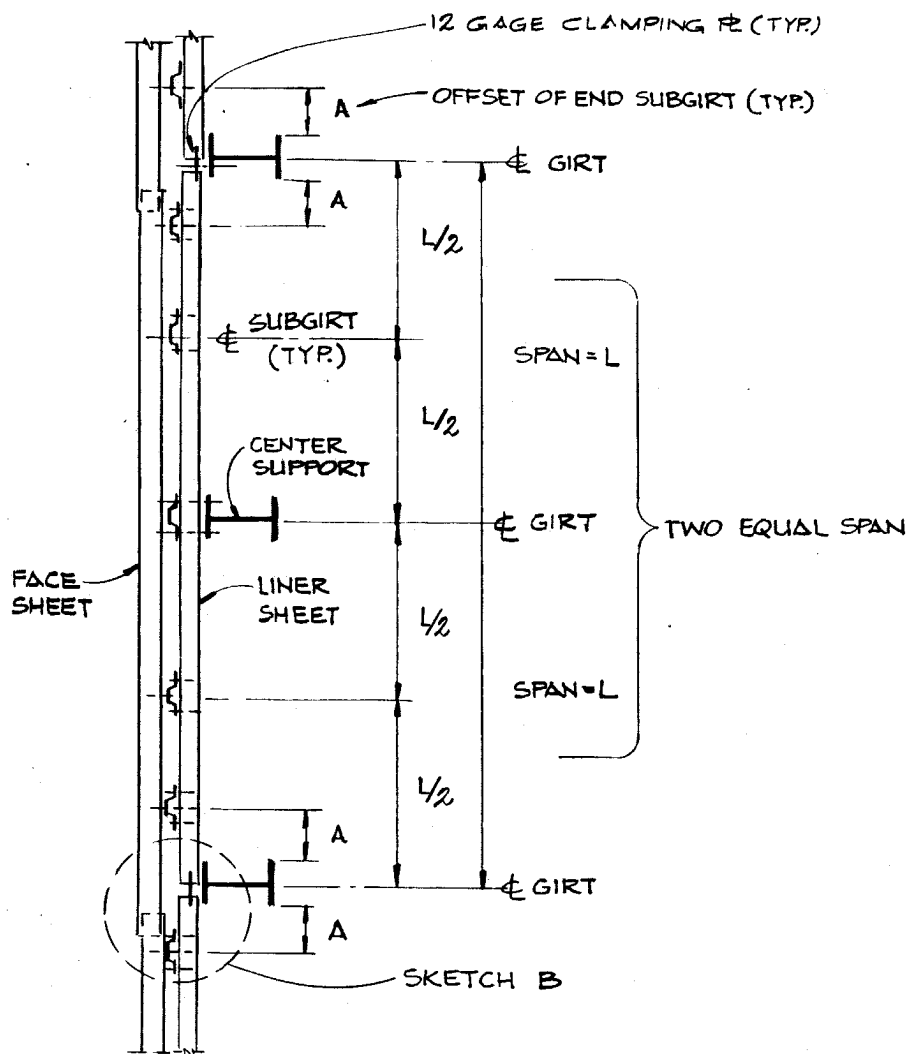
- RESULTANT SURFACE PRESSURE FOR WINDWARD WALLS
- - - - - RESULTANT SURFACE PRESSURE FOR LEEWARD WALLS
- · - · - · - RESULTANT SURFACE PRESSURE FOR SIDEWALLS AND ROOFS

TRANSLATION VELOCITY = 70 MPH
TANGENTIAL VELOCITY = 290 MPH AT RADIUS OF 150 FT
PRESSURE DROP = 3 PSI WITHIN 1.5 SECONDS

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

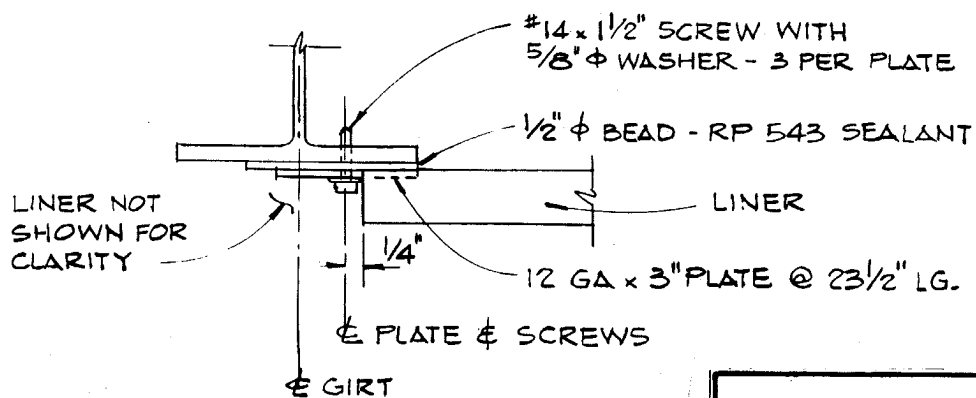
FIGURE 3.3-5

RESULTANT SURFACE PRESSURES FOR
THE DESIGN-BASIS TORNADO FOR
RECTANGULAR FLAT-TOPPED STRUCTURES



INSULATION NOT SHOWN FOR CLARITY

SKETCH A



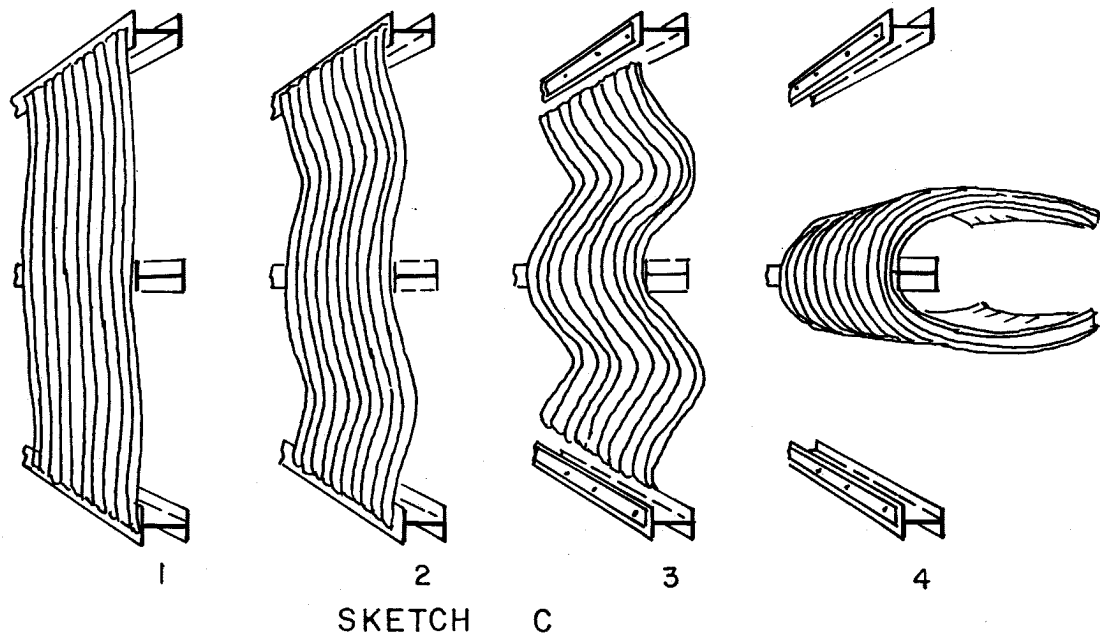
SKETCH B

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UPDATED SAFETY ANALYSIS REPORT

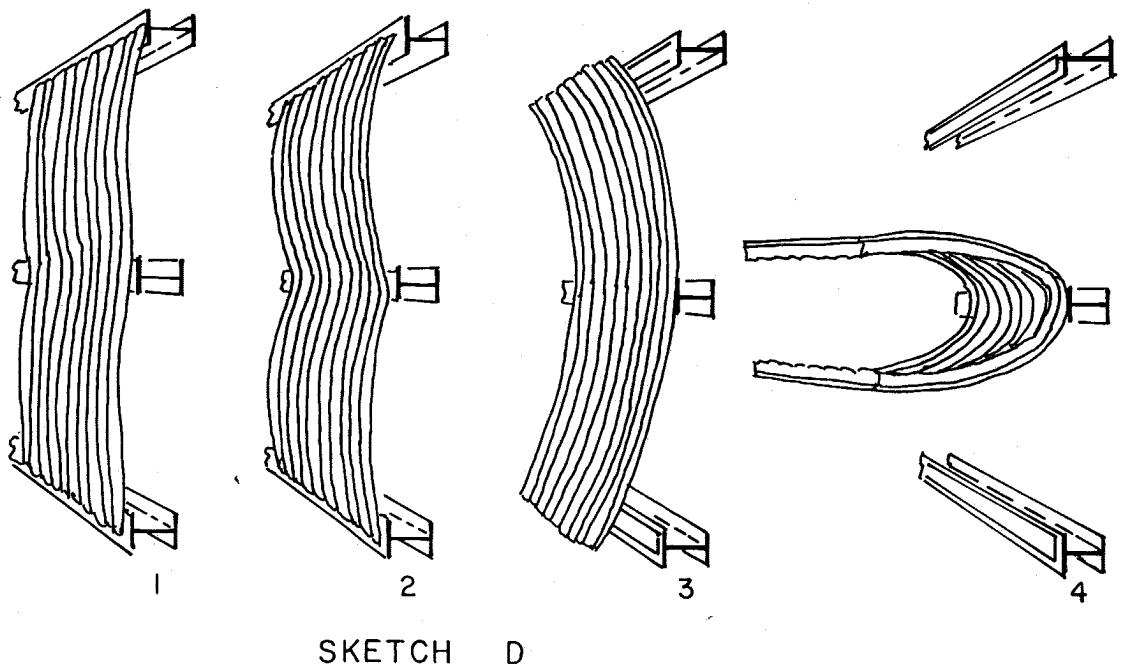
Figure 3.3-6
(Q & R 220.03)

TURBINE BUILDING SIDING
(SKETCHES A & B)

INWARD RELEASE MECHANISM



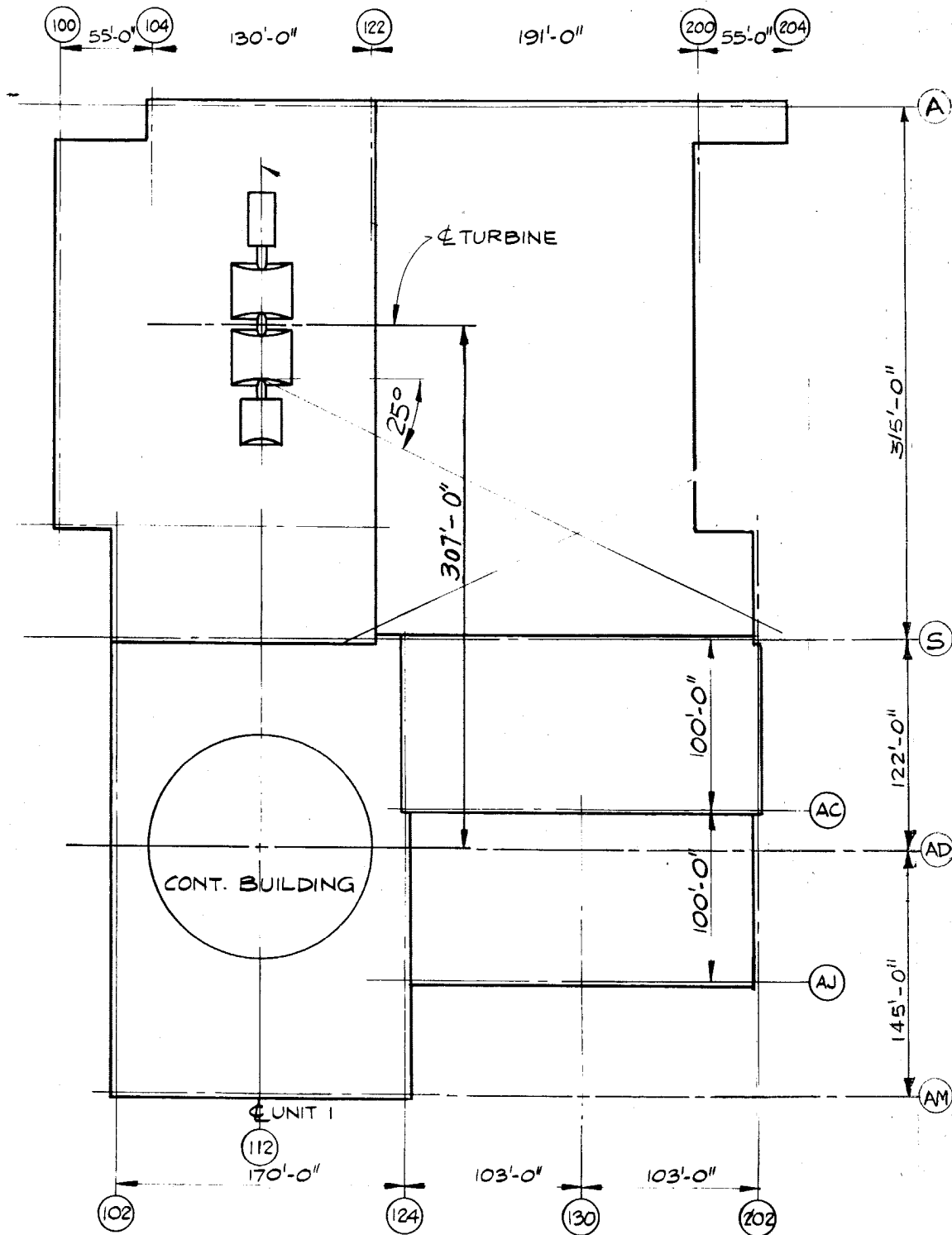
OUTWARD RELEASE MECHANISM



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

Figure 3.3-7
(Q & R 220.03)

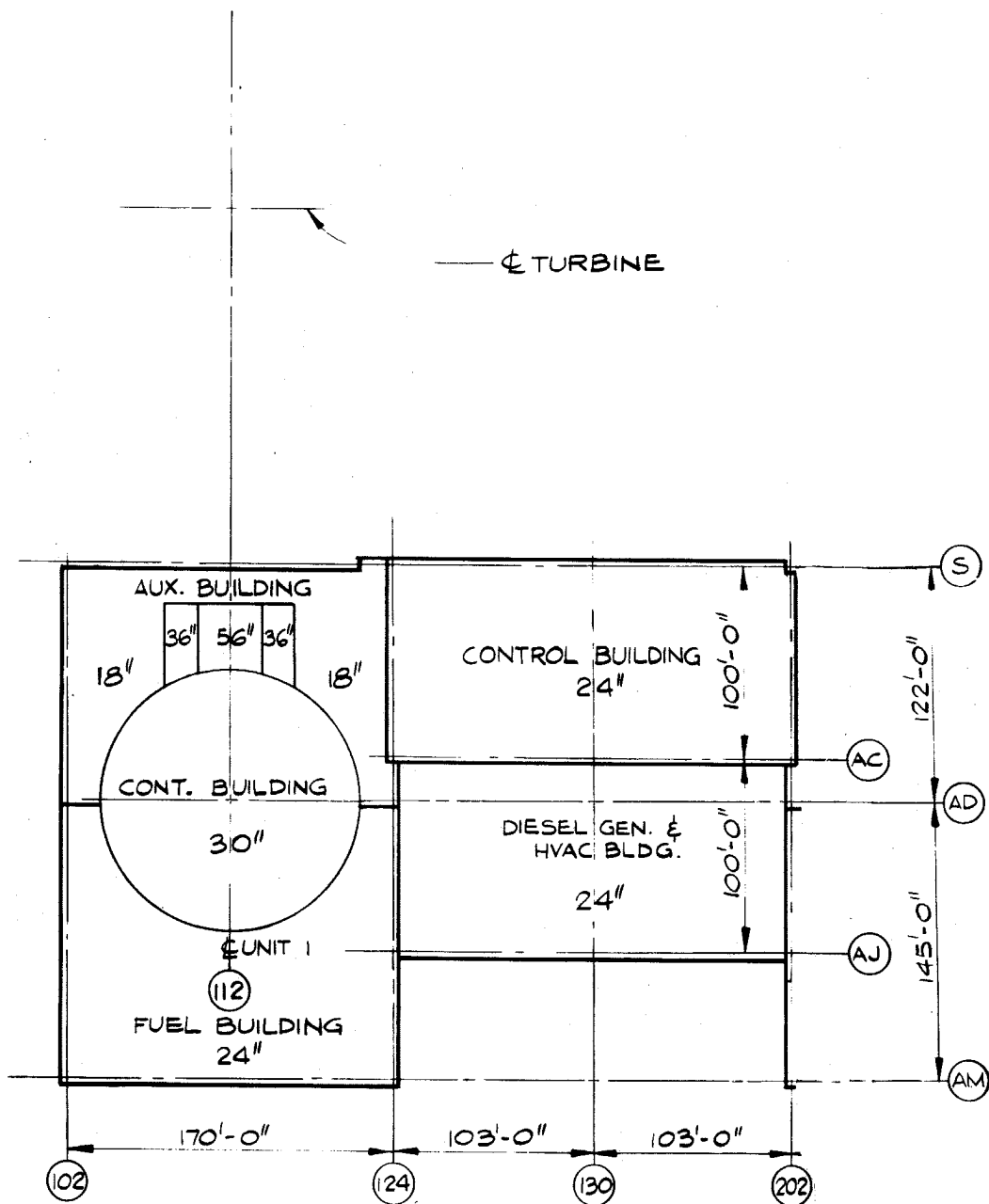
RELEASE MECHANISMS
(SKETCHES C & D)



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FIGURE 3.5-1

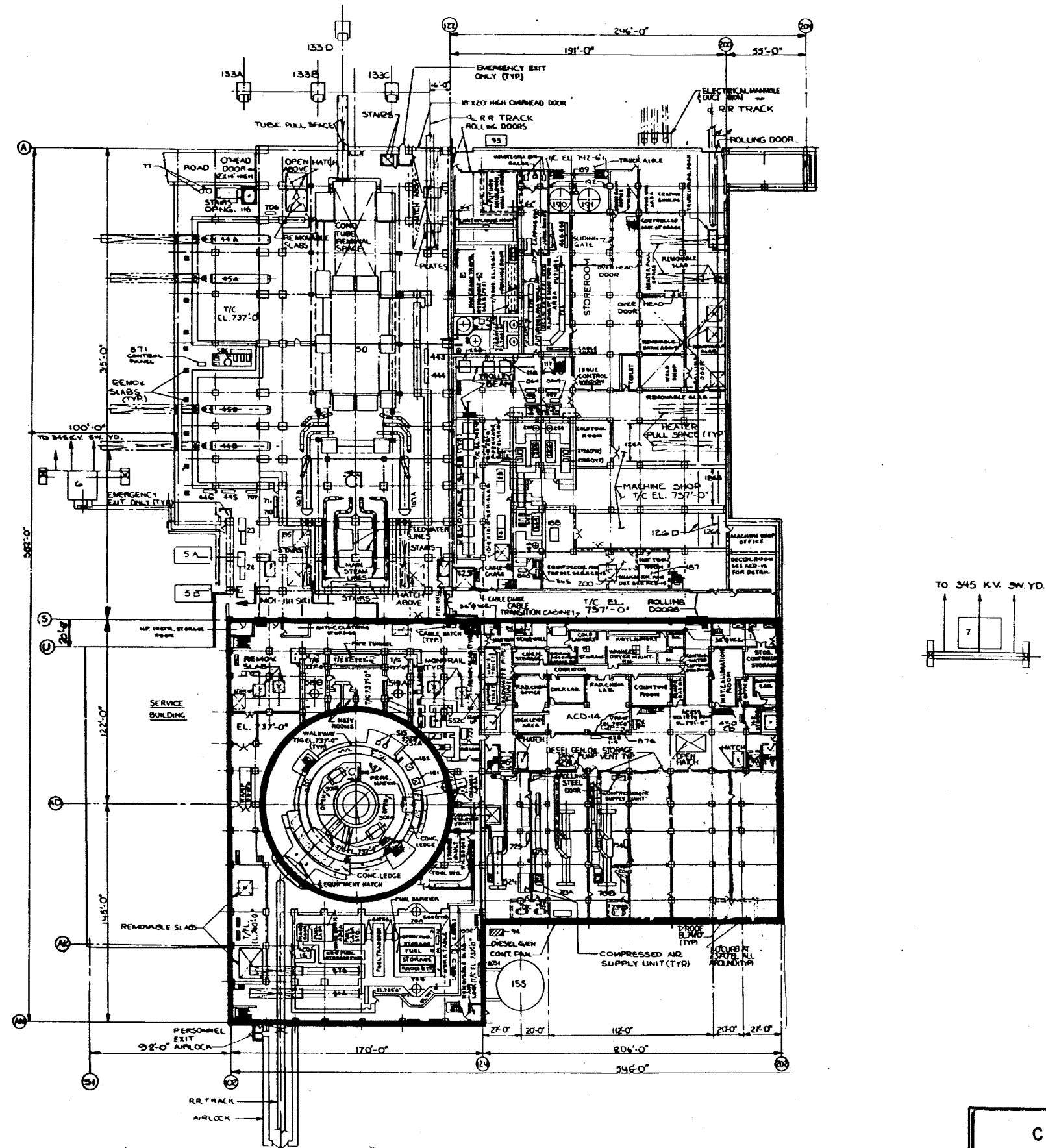
TURBINE ORIENTATION AND LOCATION



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.5-2

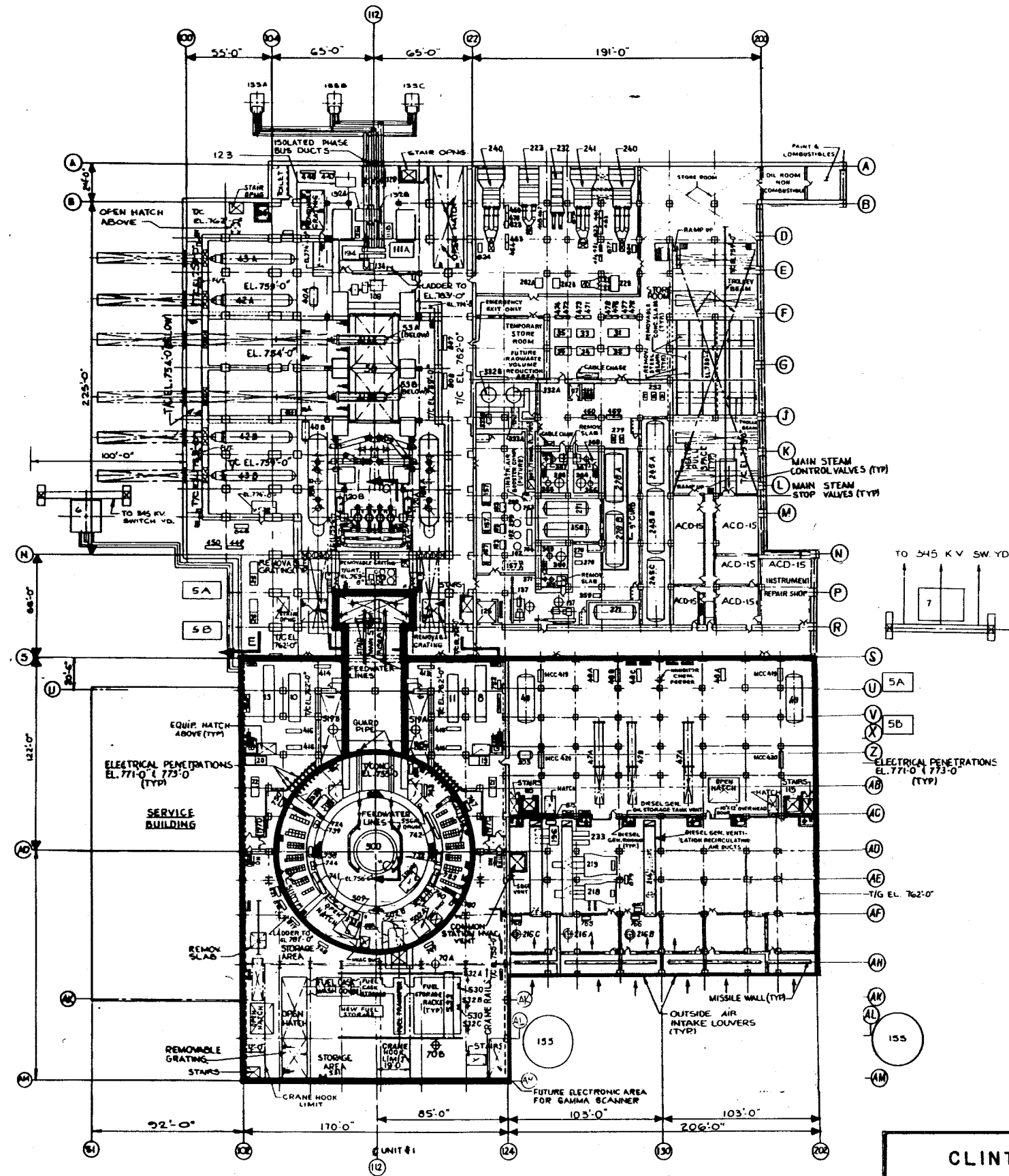
SAFETY RELATED STRUCTURES,
DIMENSION AND ROOF THICKNESS



MISSILE PROOF WALLS
EL. 737'-0"

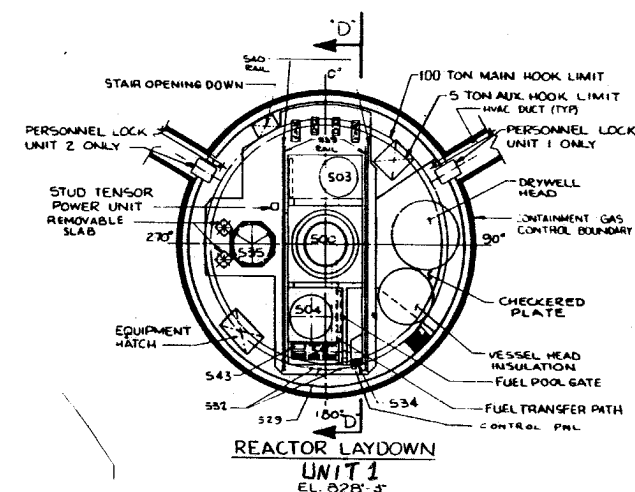
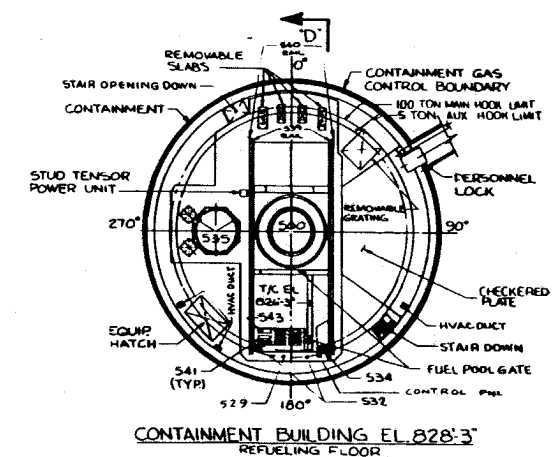
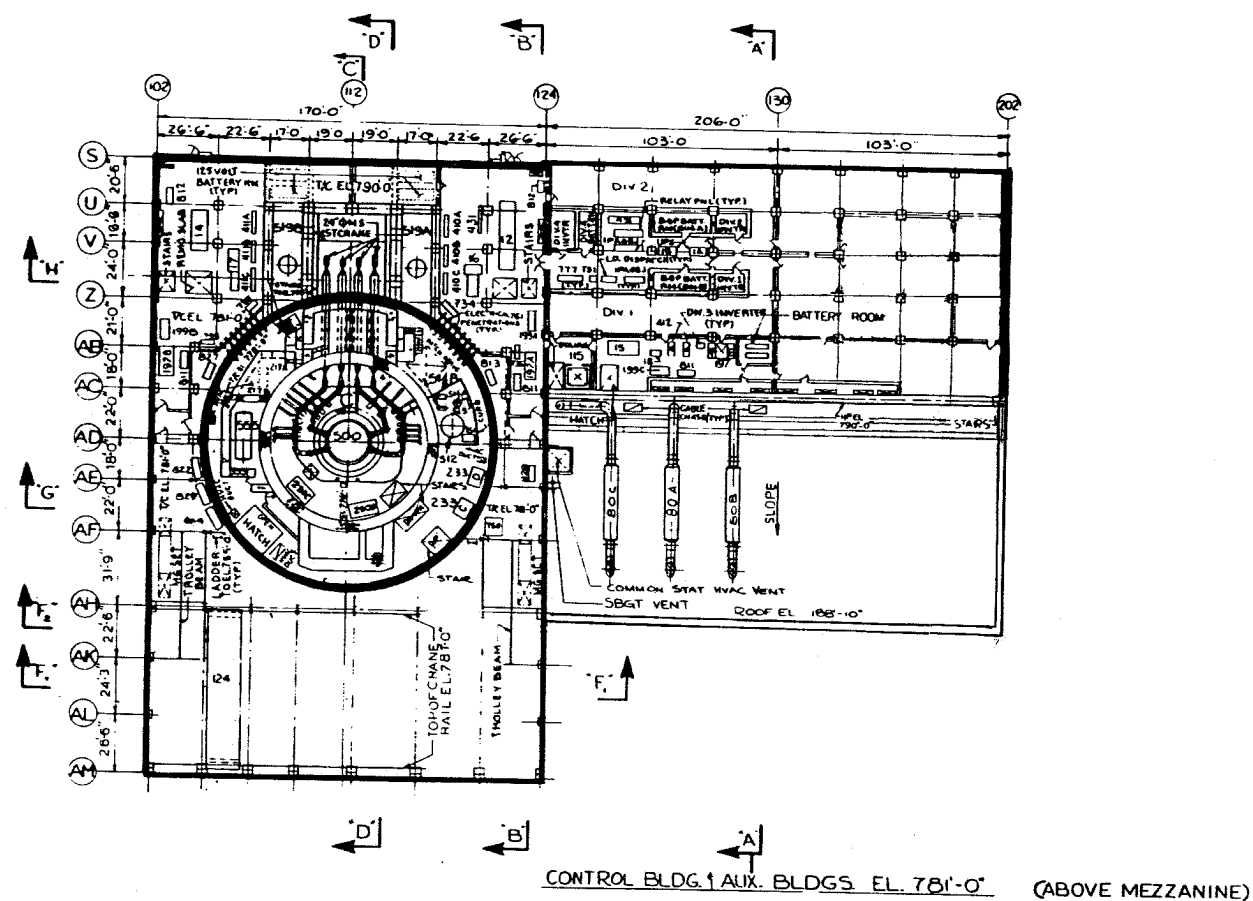
CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.5-3
MISSILE PROOF WALLS
(SHEET 1 OF 5)

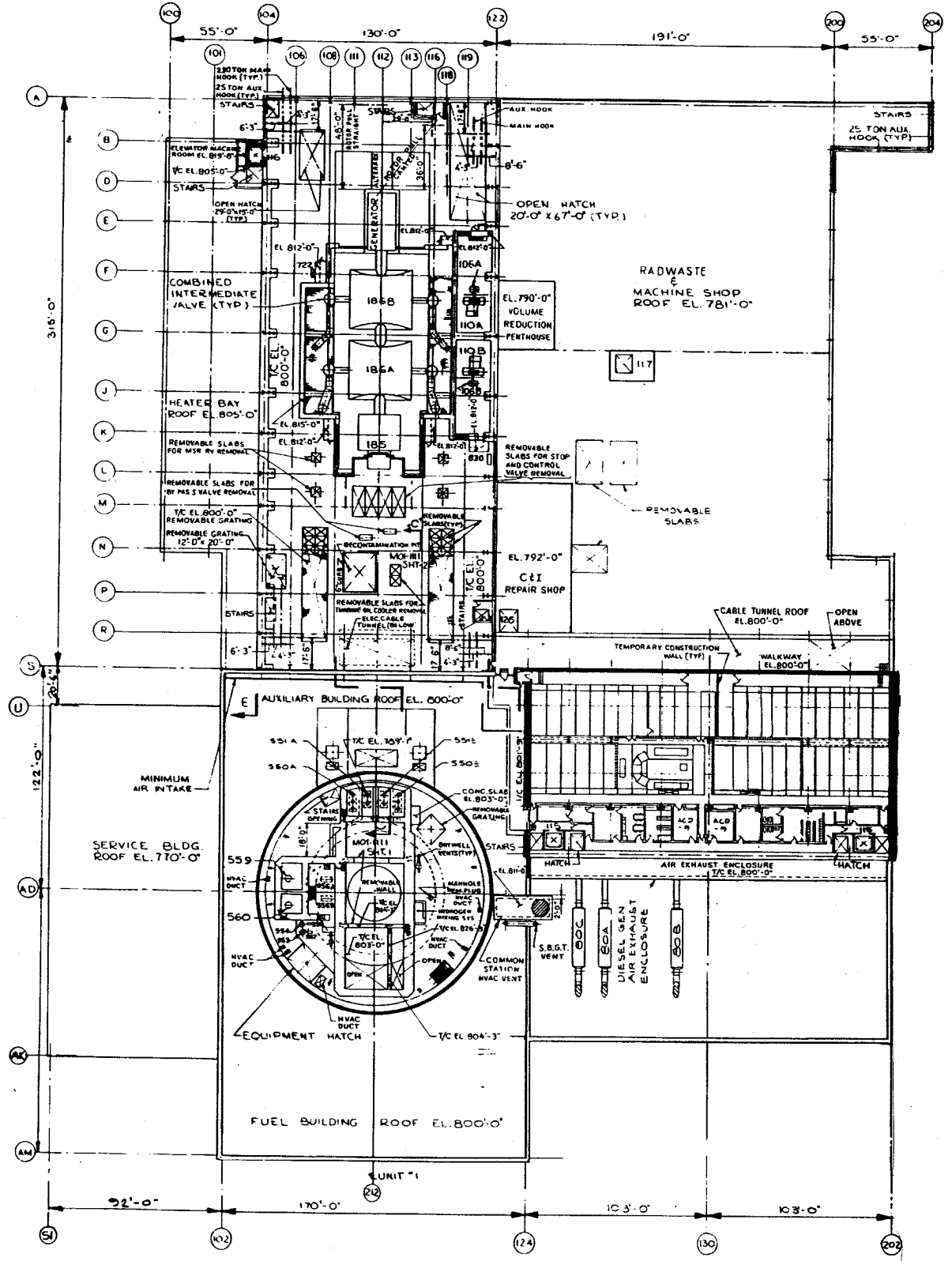


MISSILE PROOF WALLS
EL. 755'-0"

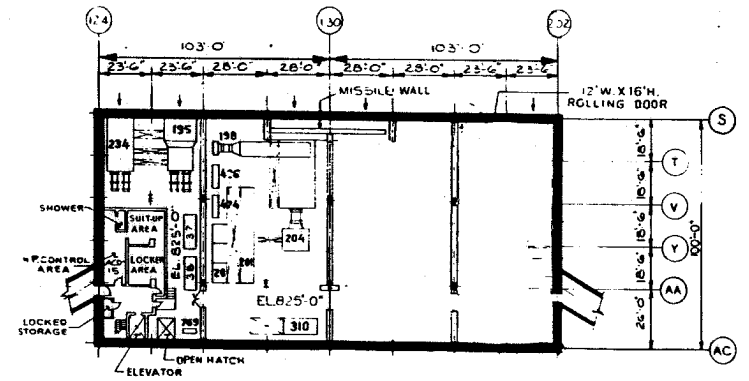
| |
|---|
| CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT |
| FIGURE 3.5-3 MISSILE PROOF WALLS (SHEET 2 OF 5) |



MISSILE PROOF WALLS
EL. 778'-0"



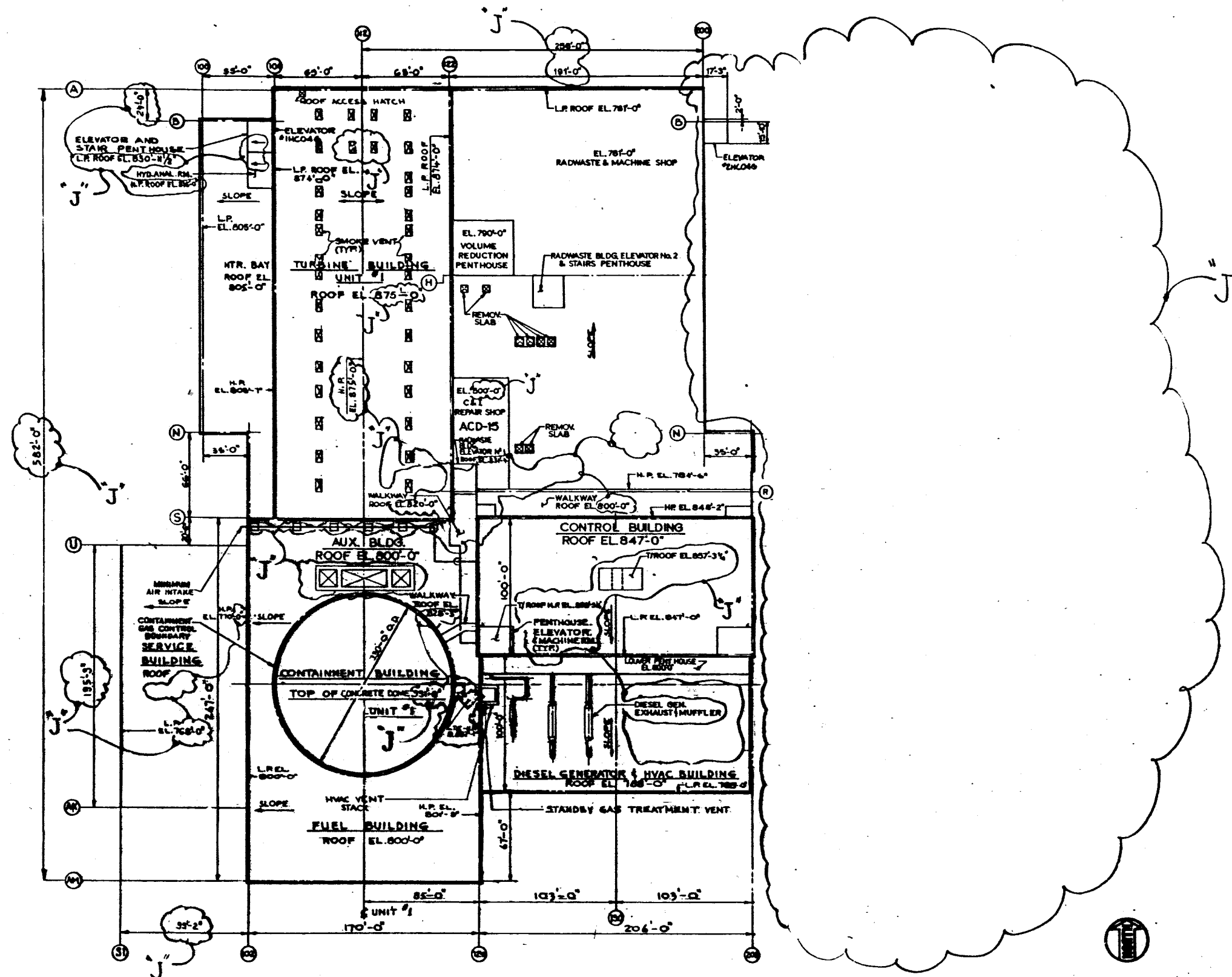
MISSILE PROOF WALLS
EL. 803'-3"



HVAC FLOOR EL. 825'-0"
(ABOVE CONTROL ROOM)

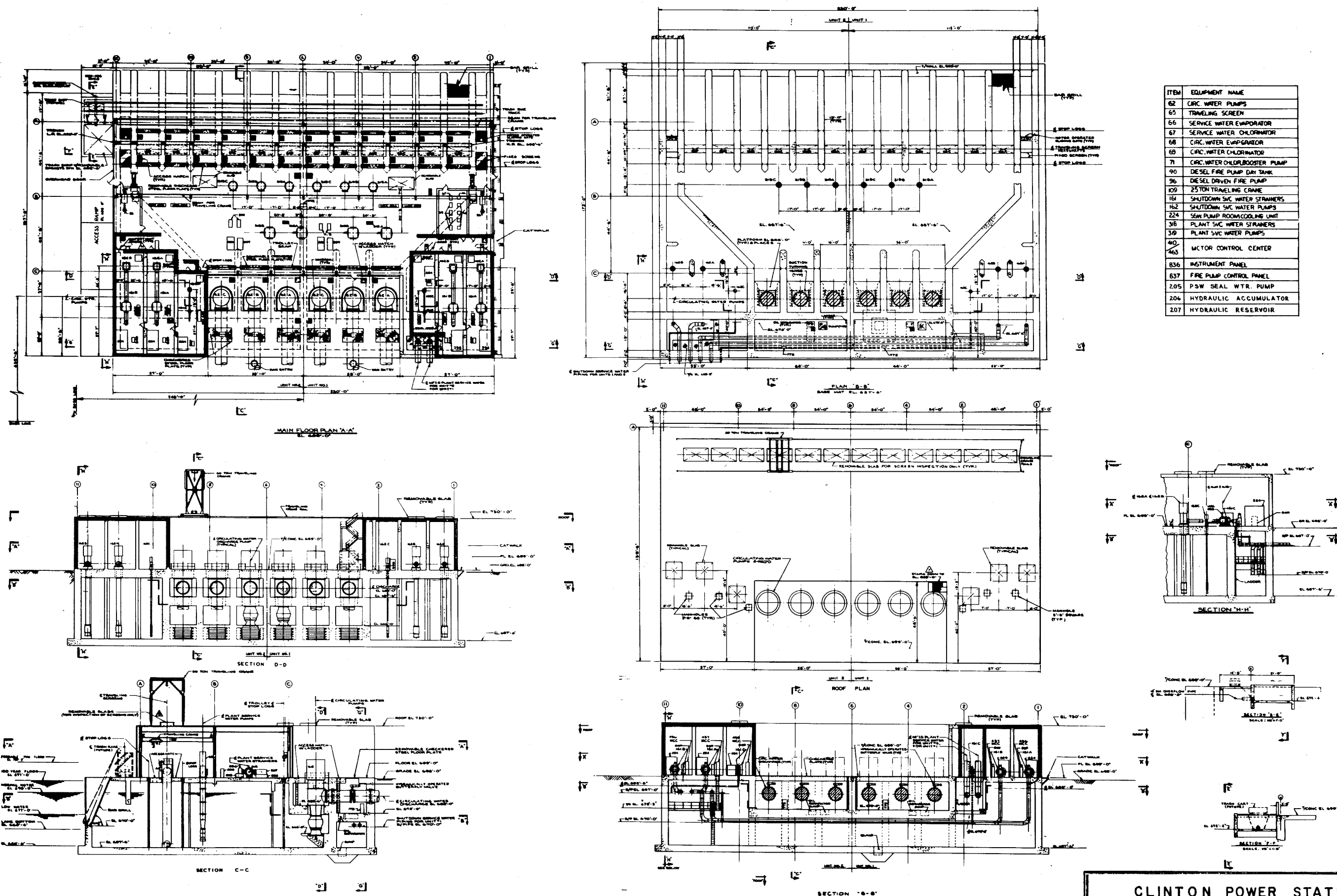
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UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.5-3
MISSILE PROOF WALLS
(SHEET 4 OF 5)



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UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.5-3
MISSILE PROOF WALLS
(SHEET 5 OF 5)

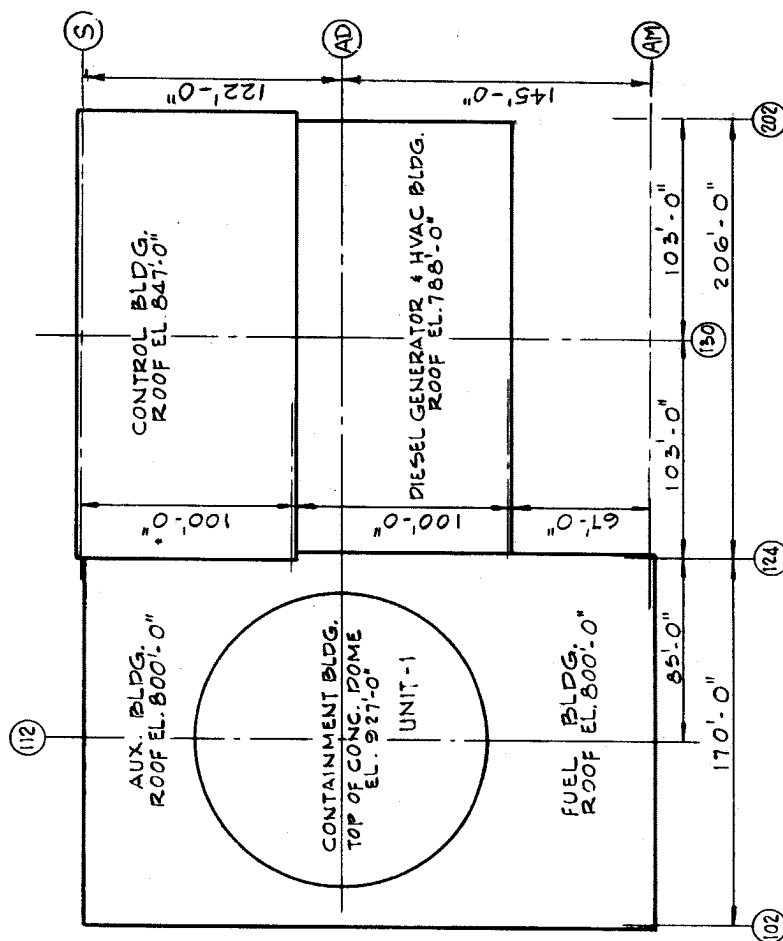


MISSILE PROOF WALLS
CIRCULATING WATER SCREEN HOUSE

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FIGURE 3.5-4

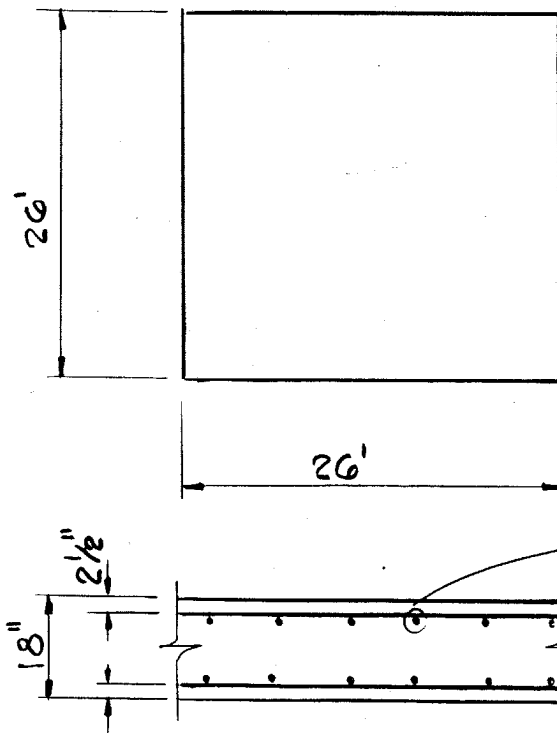
MISSILE PROOF WALLS
CIRCULATING WATER SCREEN HOUSE



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.5-5

ROOF SLAB FOR MISSILE BARRIER



$f'_c = 3500 \text{ PSI}$

$f_y = 60 \text{ KSI}$

MISSILE-RESISTANT CONCRETE PANEL

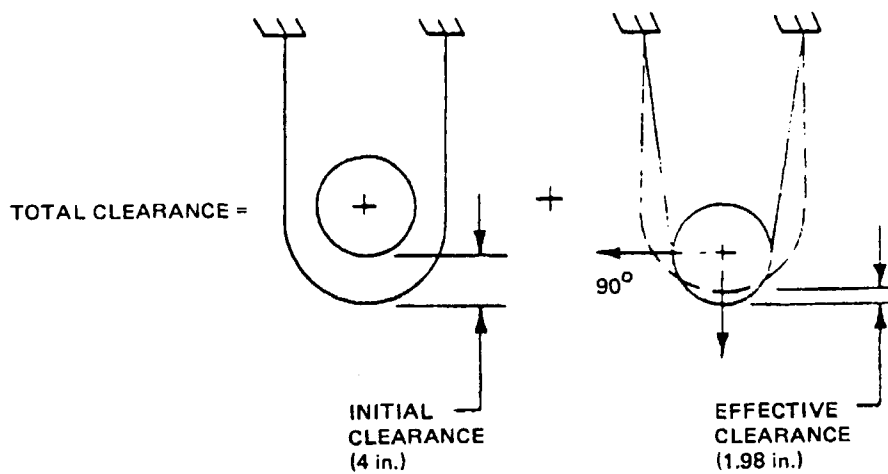
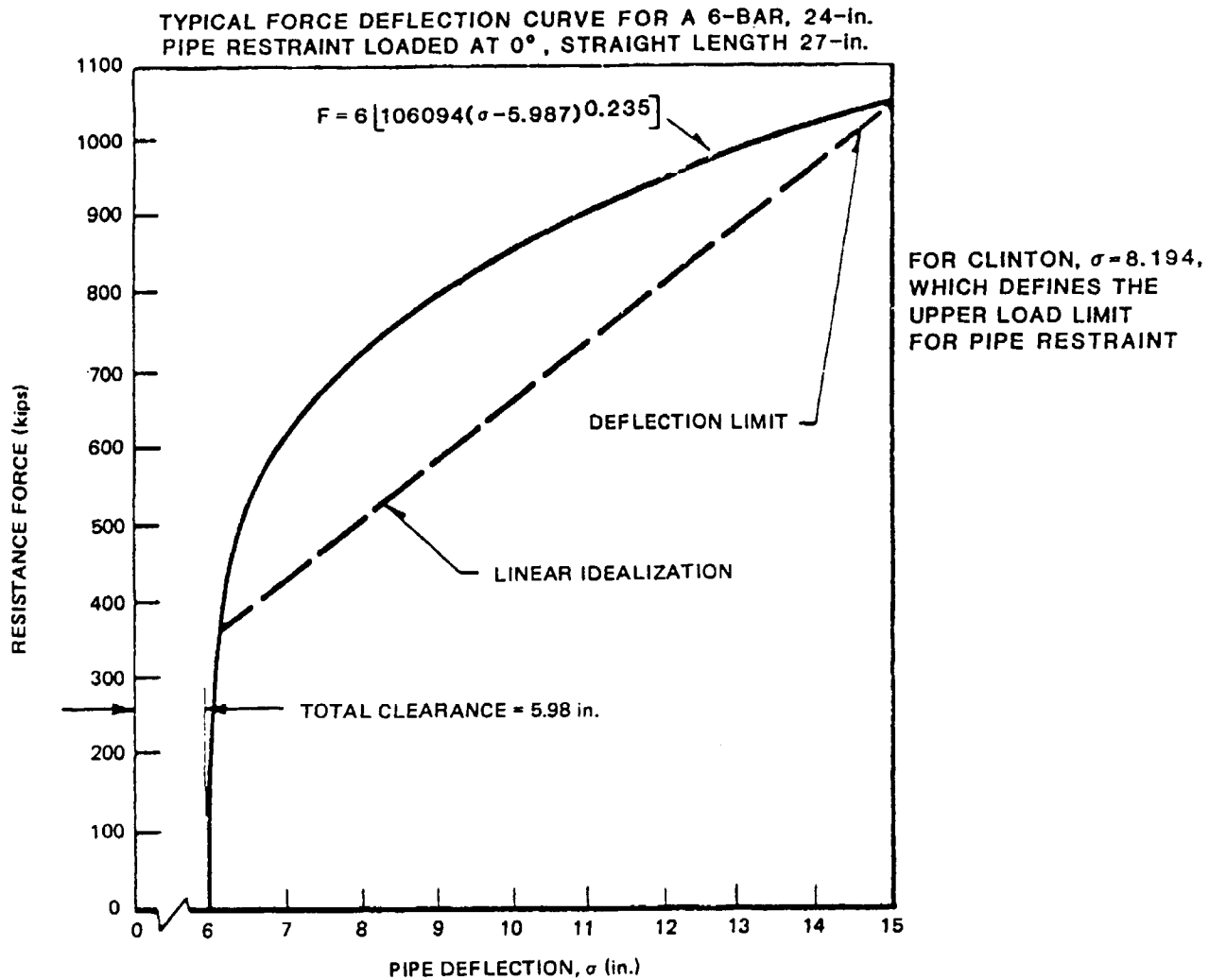
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

Figure 3.5-6
(Q & R 220.07)

MISSILE-RESISTANT CONCRETE PANEL

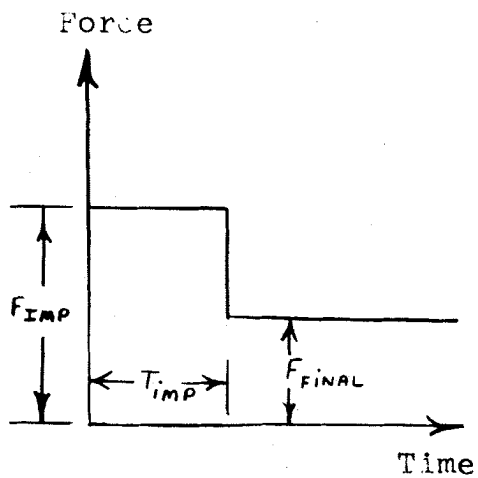


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January 2001

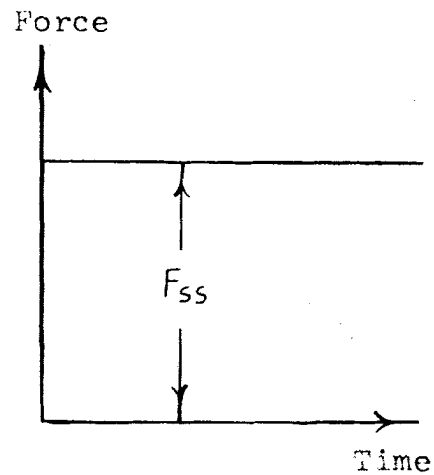


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-2
TYPICAL RESTRAINT
FORCE-DEFLECTION CURVE



$$F_{SS} < F_{IMP}$$



$$F_{SS} > F_{IMP}$$

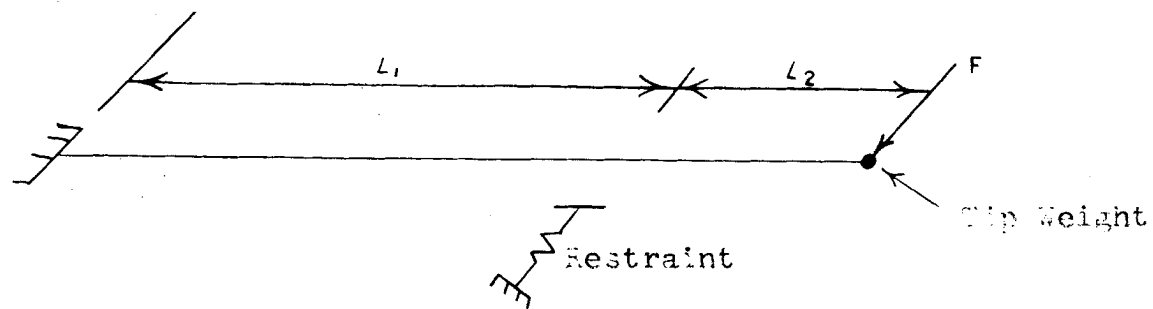
PIPE THRUST
RESULTING FROM A CIRCUMFERENTIAL BREAK

CLINTON POWER STATION
 UPDATED SAFETY ANALYSIS REPORT

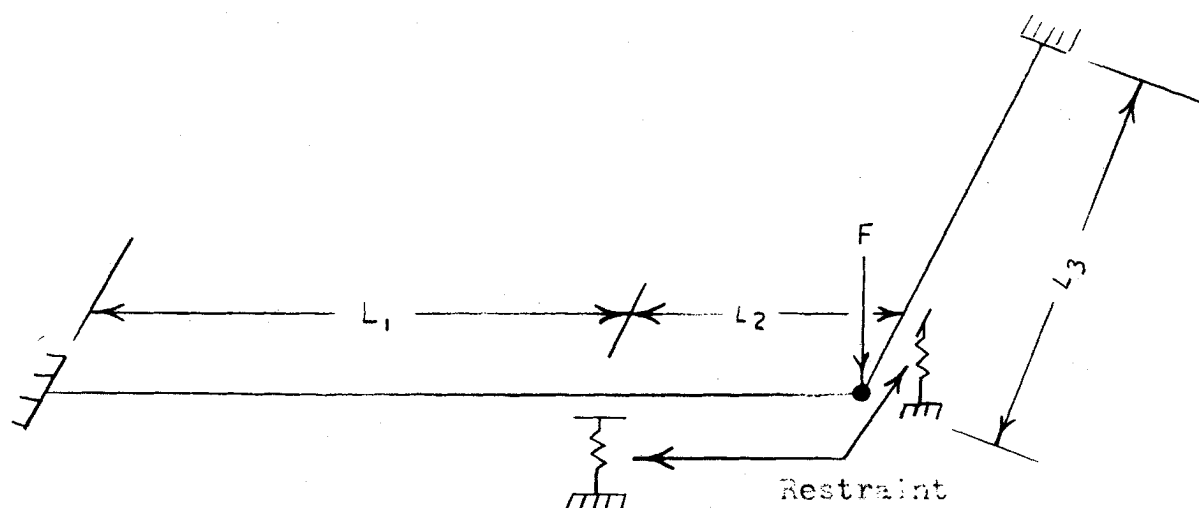
FIGURE 3.6-3

PIPE THRUST

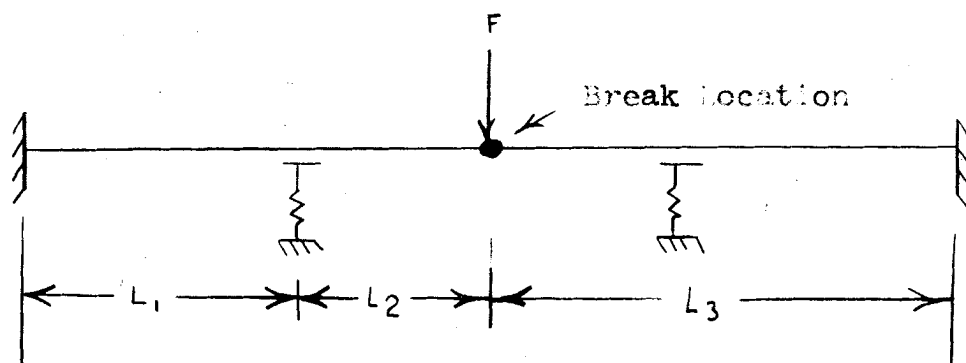
FIGURE 3.6-4
HAS BEEN DELETED



Circumferential Break at Elbow



Longitudinal Break at an Elbow



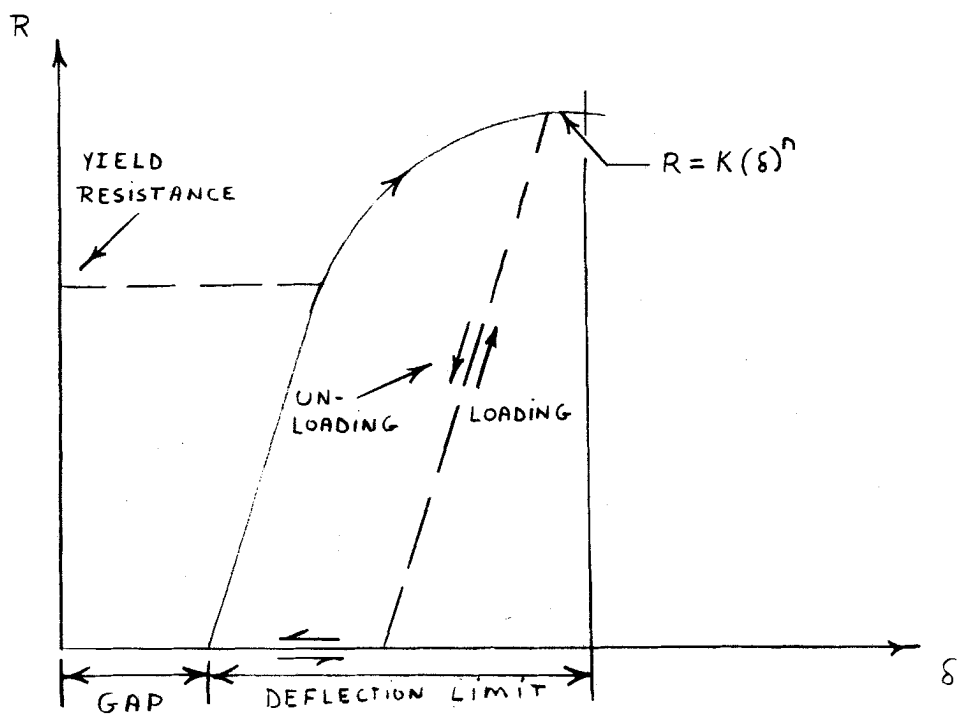
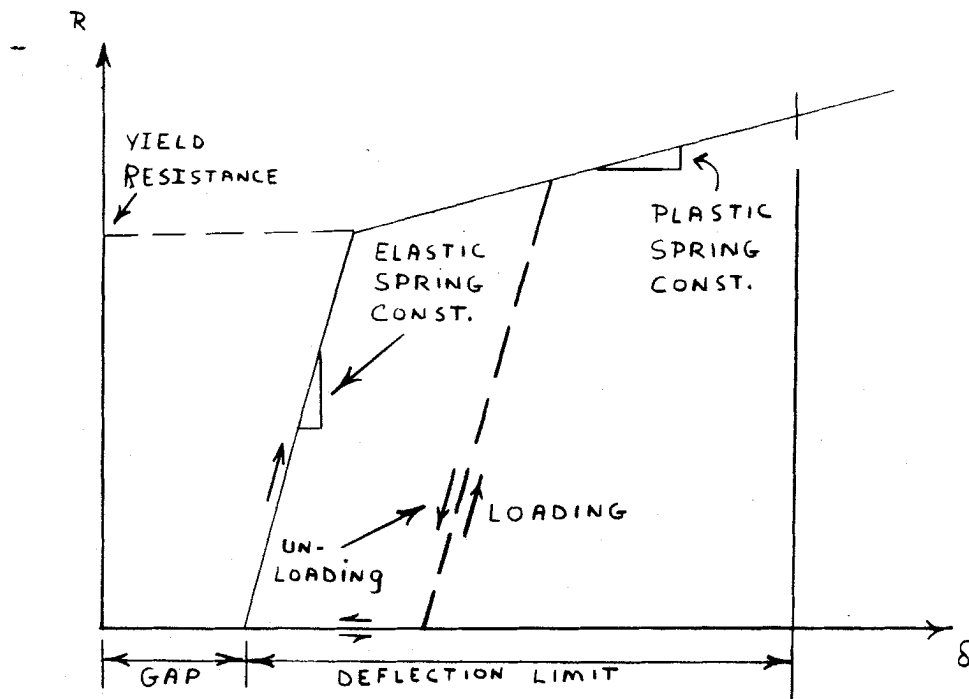
Longitudinal Break at an Interior Point

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-5

PIPE WHIP MODELS - FINITE
DIFFERENCE METHOD

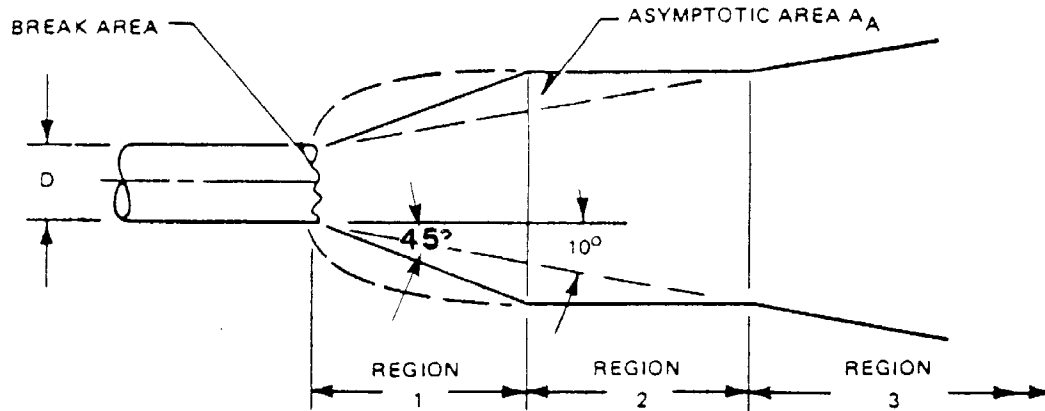
FIGURE 3.6-6
HAS BEEN DELETED



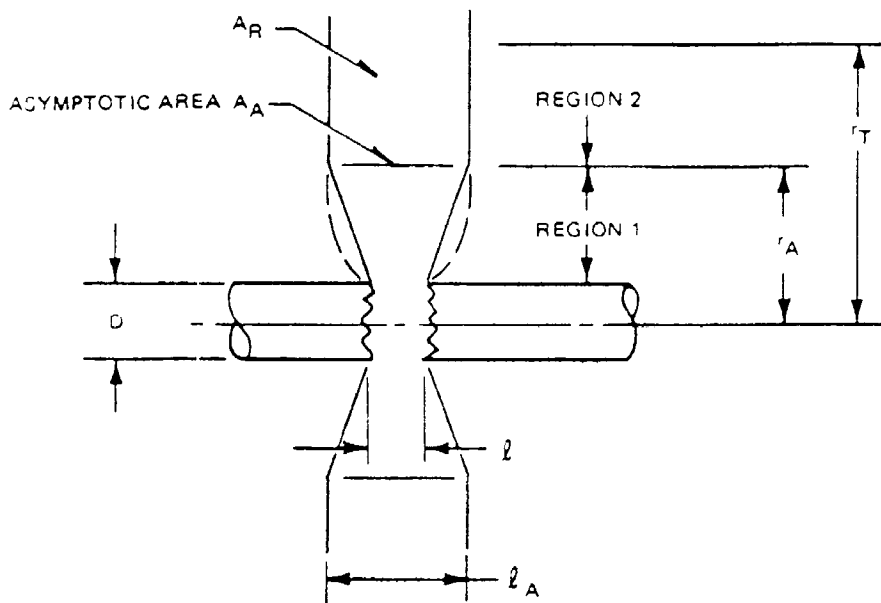
CLINTON POWER STATION
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FIGURE 3.6-7

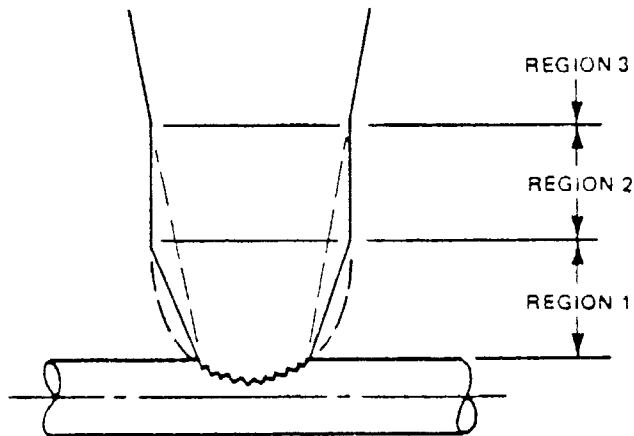
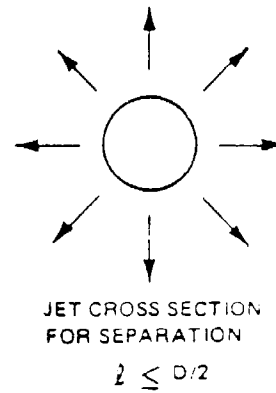
RESTRAINT PROPERTIES



(A) CIRCUMFERENTIAL BREAK – FULL SEPARATION

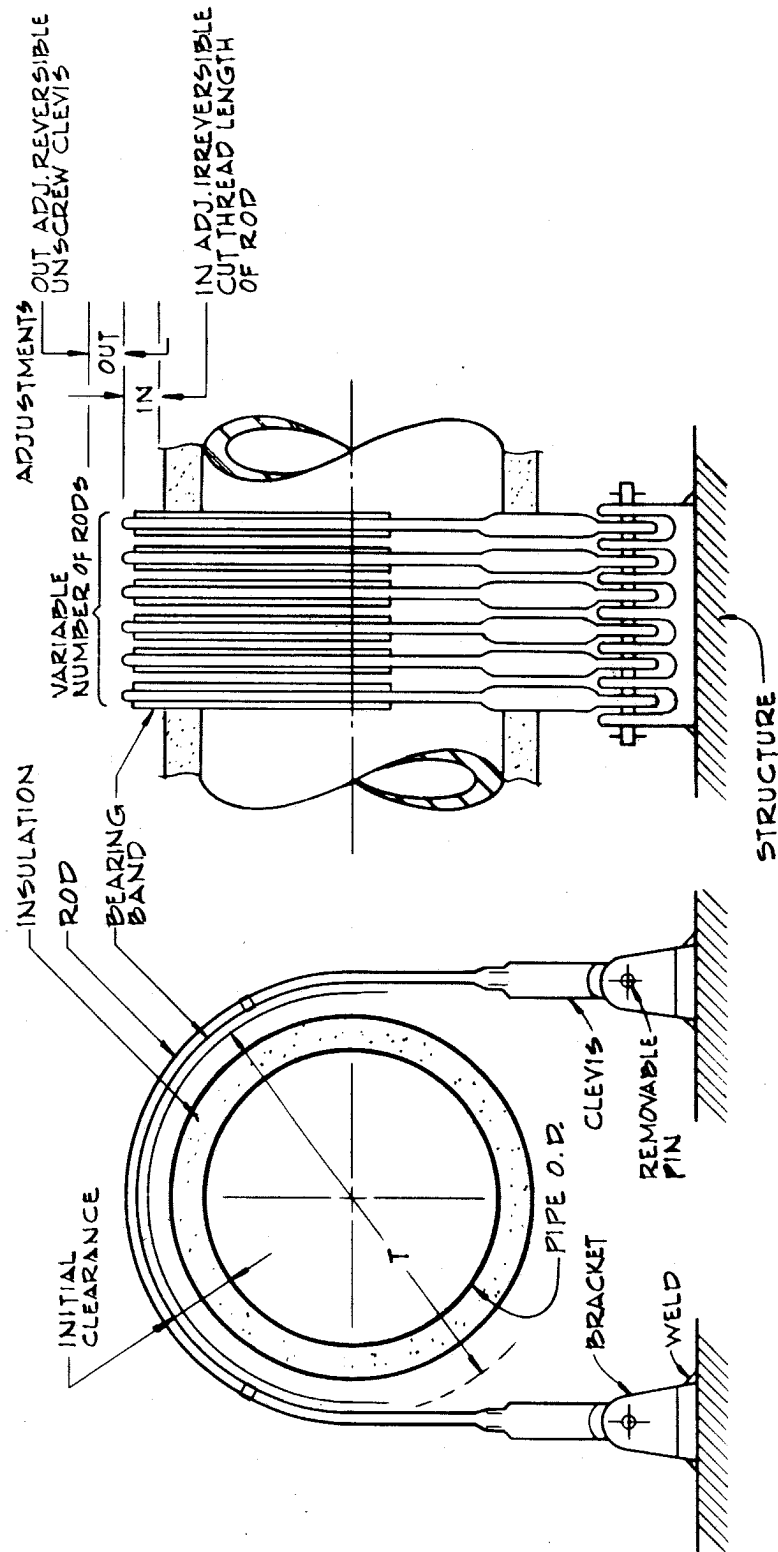


(B) CIRCUMFERENTIAL BREAK – PARTIAL SEPARATION



(C) LONGITUDINAL BREAK

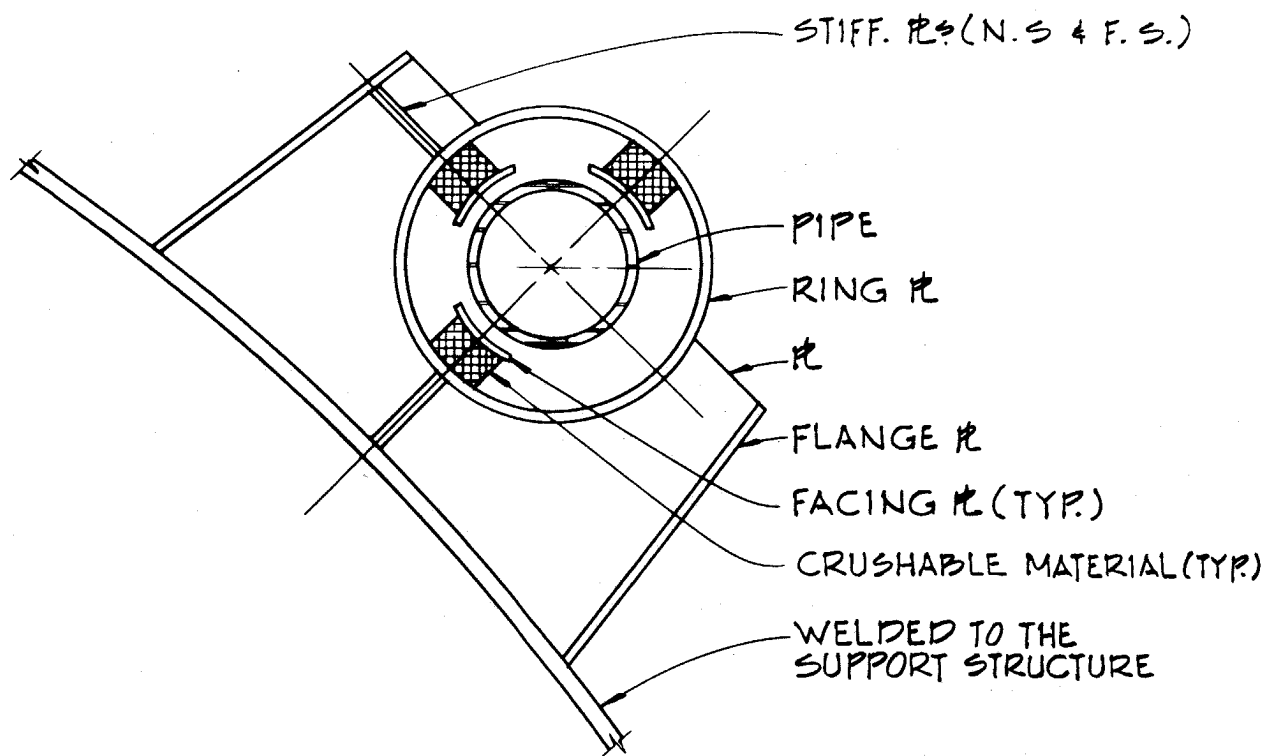
FIGURES 3.6-9 AND 3.6-10
HAVE BEEN DELETED



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-11

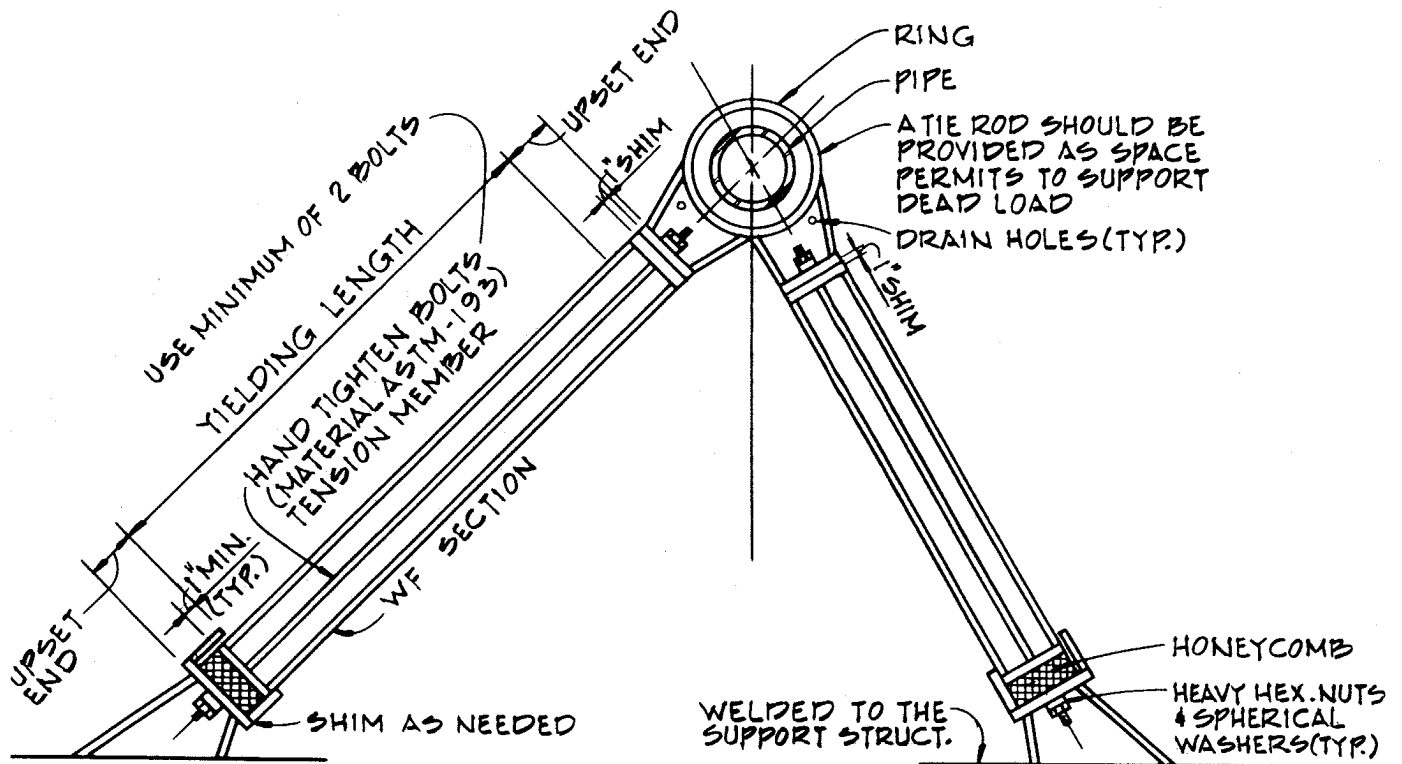
TYPICAL TENSION RESTRAINT



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-12

TYPICAL CRUSHABLE MATERIAL RESTRAINT

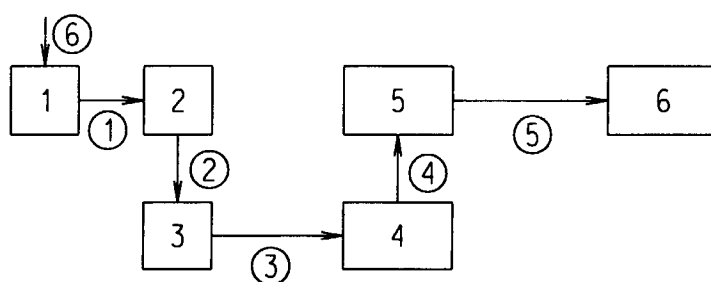


CLINTON POWER STATION
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FIGURE 3.6-13

TYPICAL TWO-LEGGED RESTRAINT

Figure 3.6-14
Deleted



NODE

DESCRIPTION

| | |
|---|---|
| 1 | MAIN STEAM TUNNEL |
| 2 | MAIN STEAM TUNNEL |
| 3 | MAIN STEAM TUNNEL |
| 4 | BASEMENT, GRADE FLOOR, MEZZANINE FLOOR |
| 5 | TURBINE FLOOR |
| 6 | ATMOSPHERE |

□ ≡ NODE

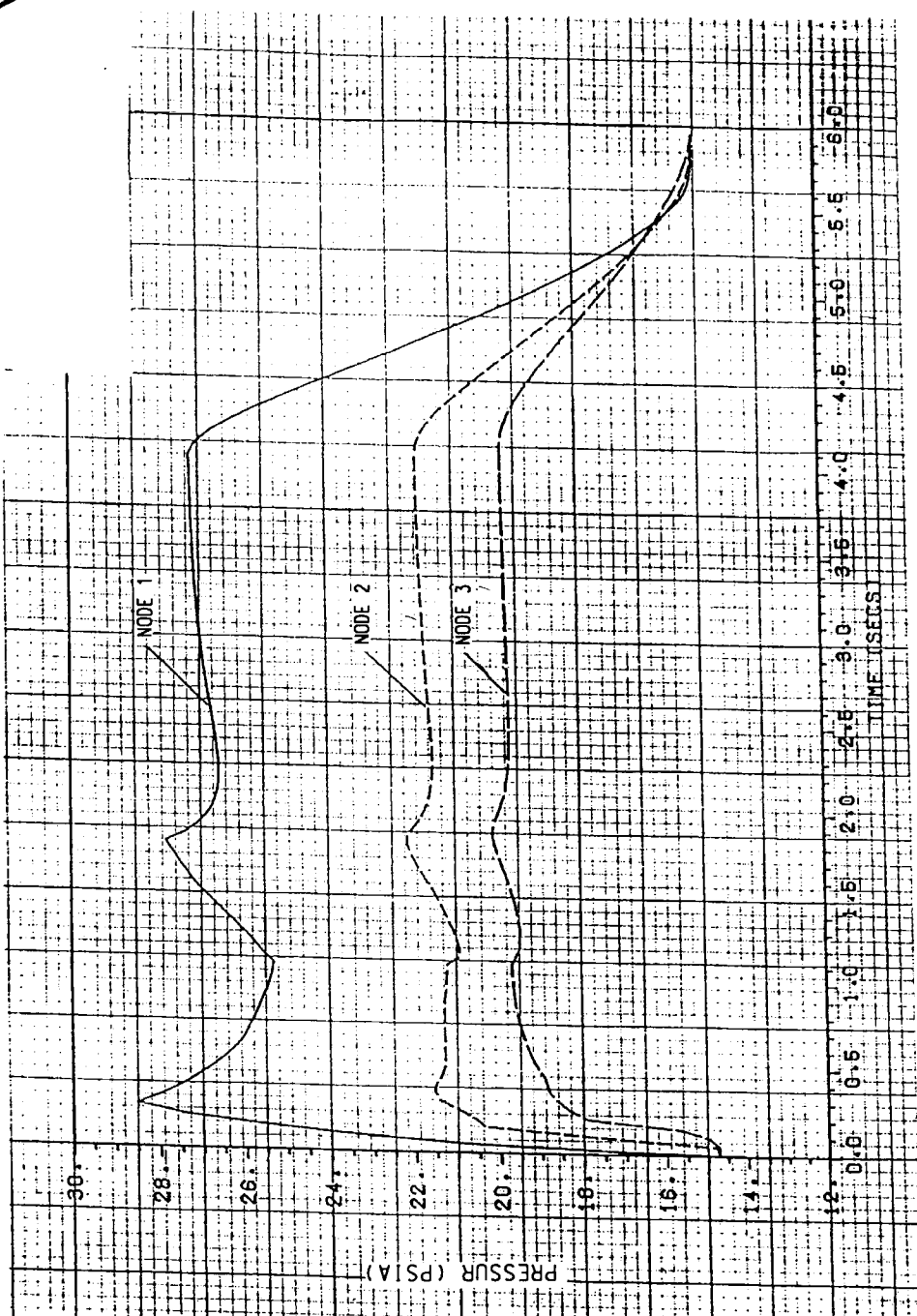
○ ≡ FLOW PATH

NOTE:

SEE TABLE 3.6-8 FOR A DESCRIPTION
OF THE NODES AND TABLE 3.6-9 FOR
A DESCRIPTION OF THE VENT PATHS.

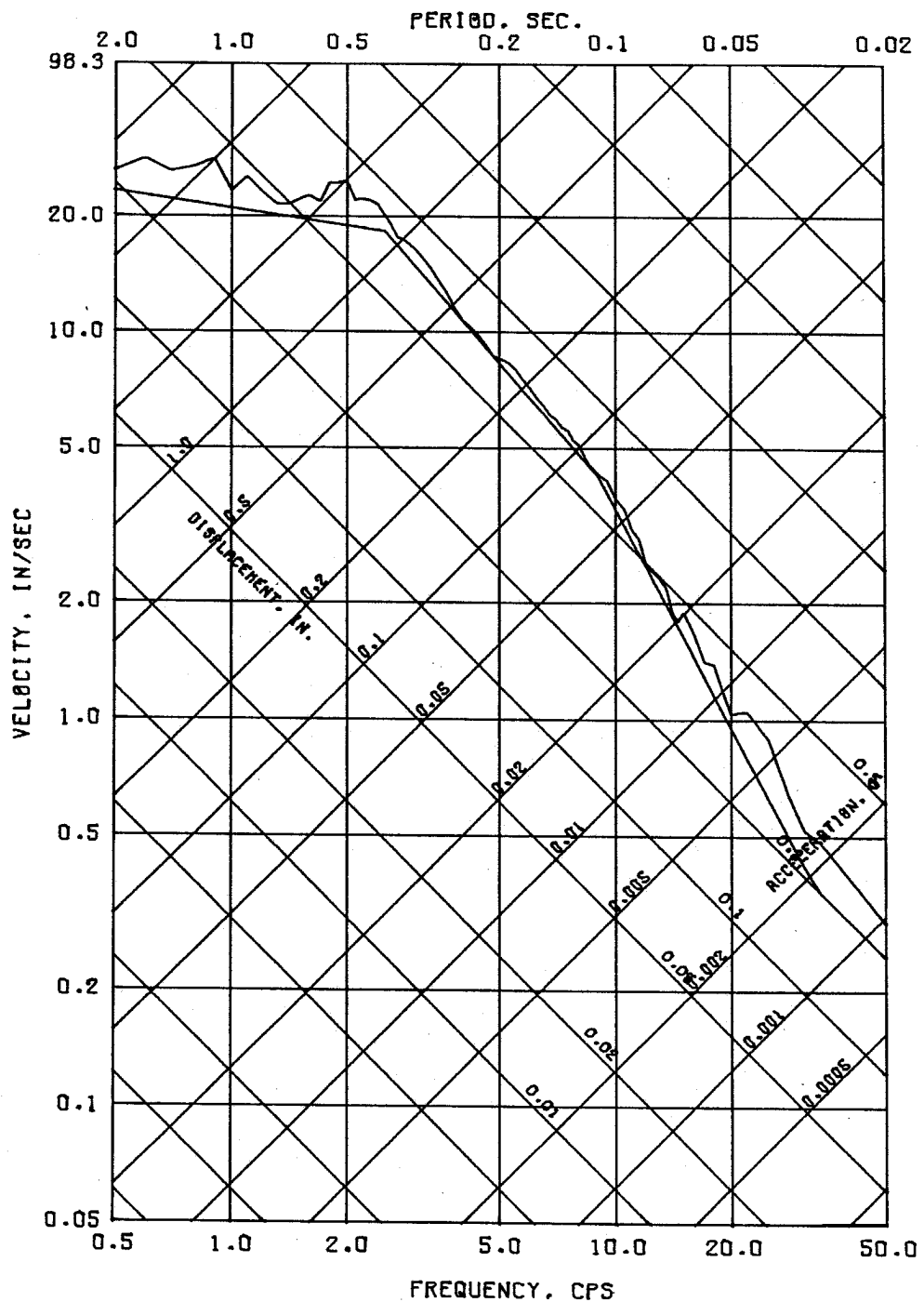
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-15
NODALIZATION SCHEMATIC FOR
SIMULTANEOUS MAIN STEAMLINE AND
FEEDWATER LINE BREAK IN
THE STEAM TUNNEL



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UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.6-16
PRESSURE VS. TIME -
LINE BREAK IN STEAM TUNNEL

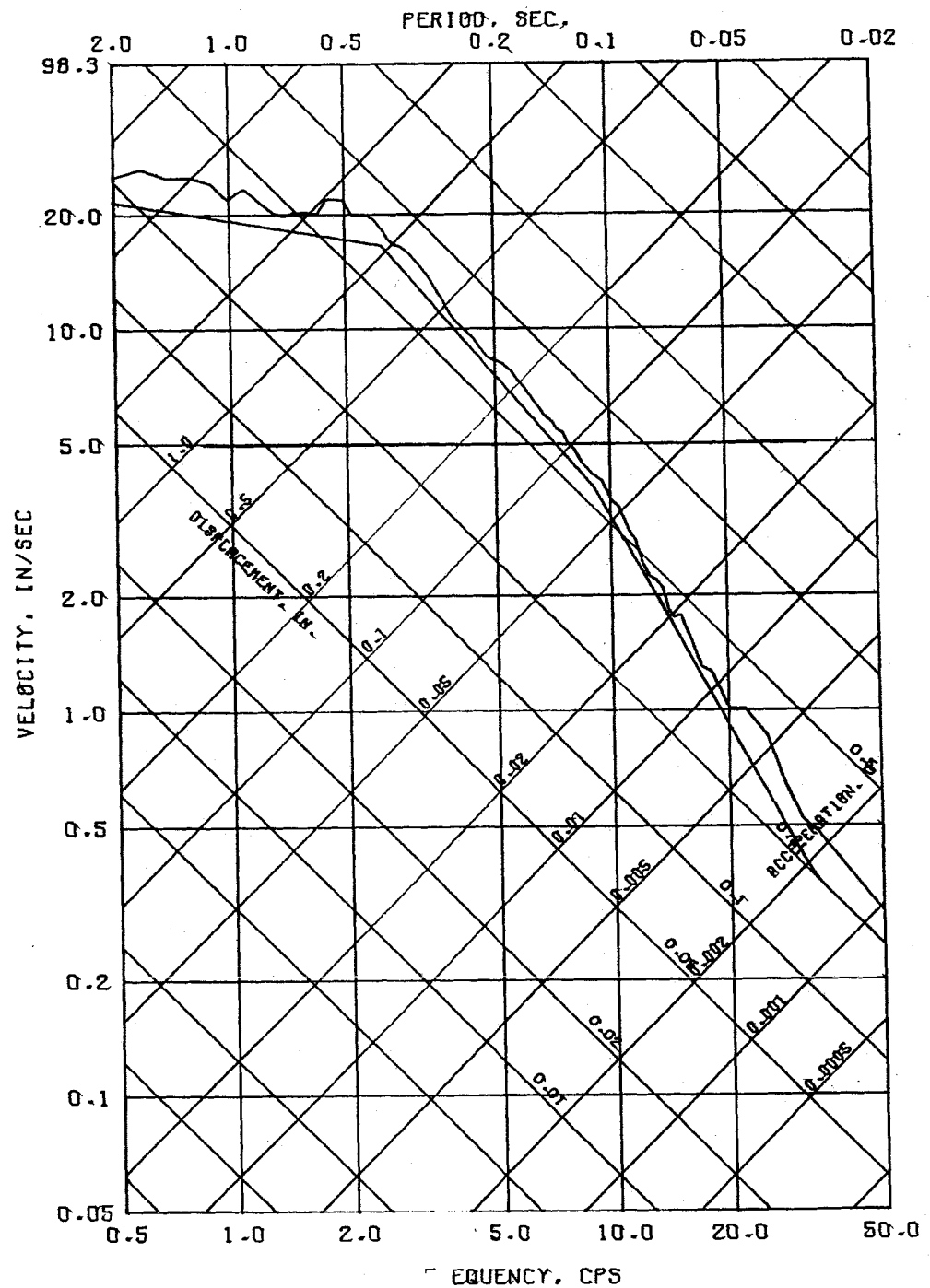


SLH MATCH WITH HORIZ R.G. SPEC 3 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-2

HORIZONTAL RESPONSE SPECTRA
(3% DAMPING).

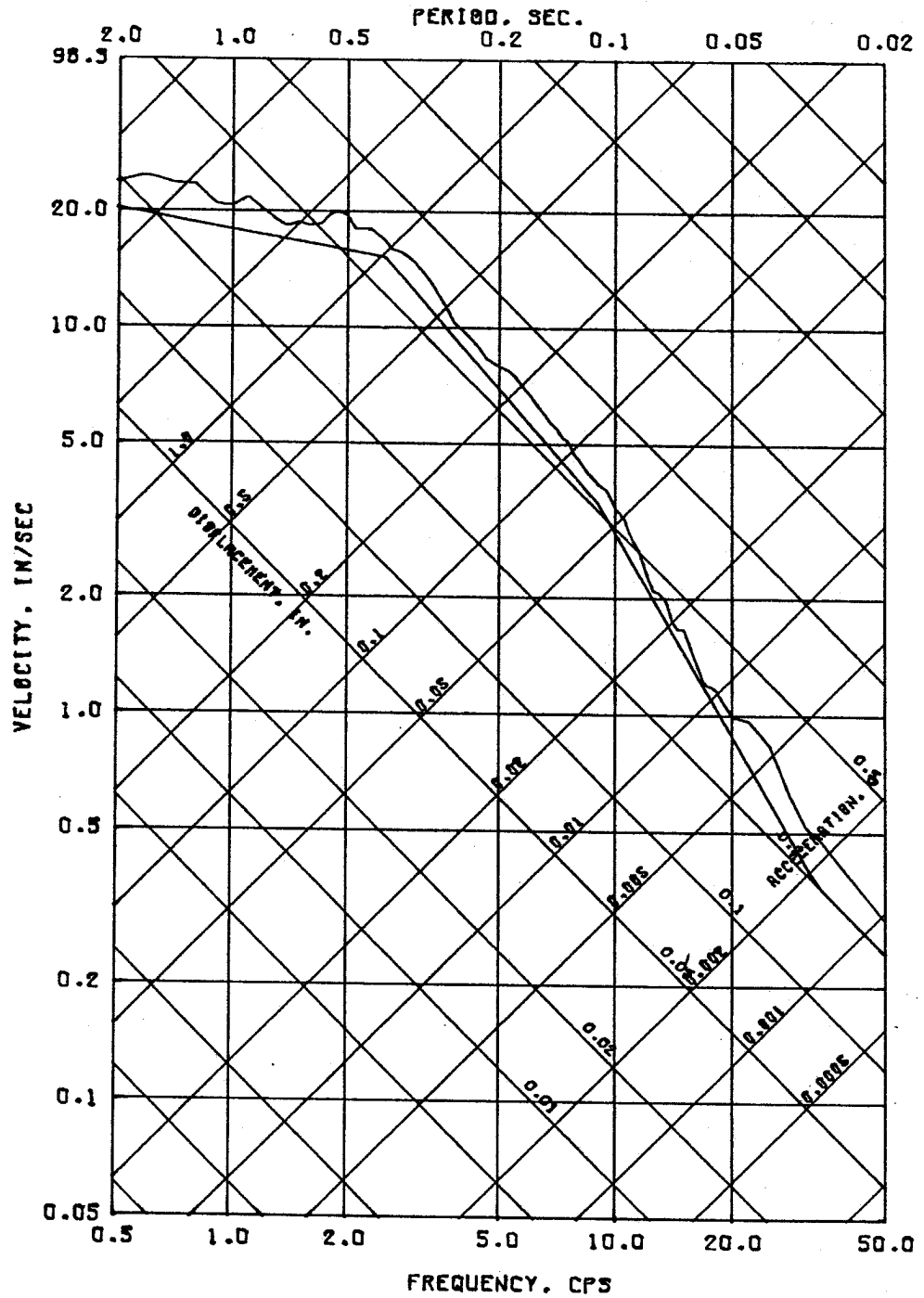


SLH MATCH WITH HORIZ R.G. SPEC 4 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-3

HORIZONTAL RESPONSE SPECTRA
(4% DAMPING)

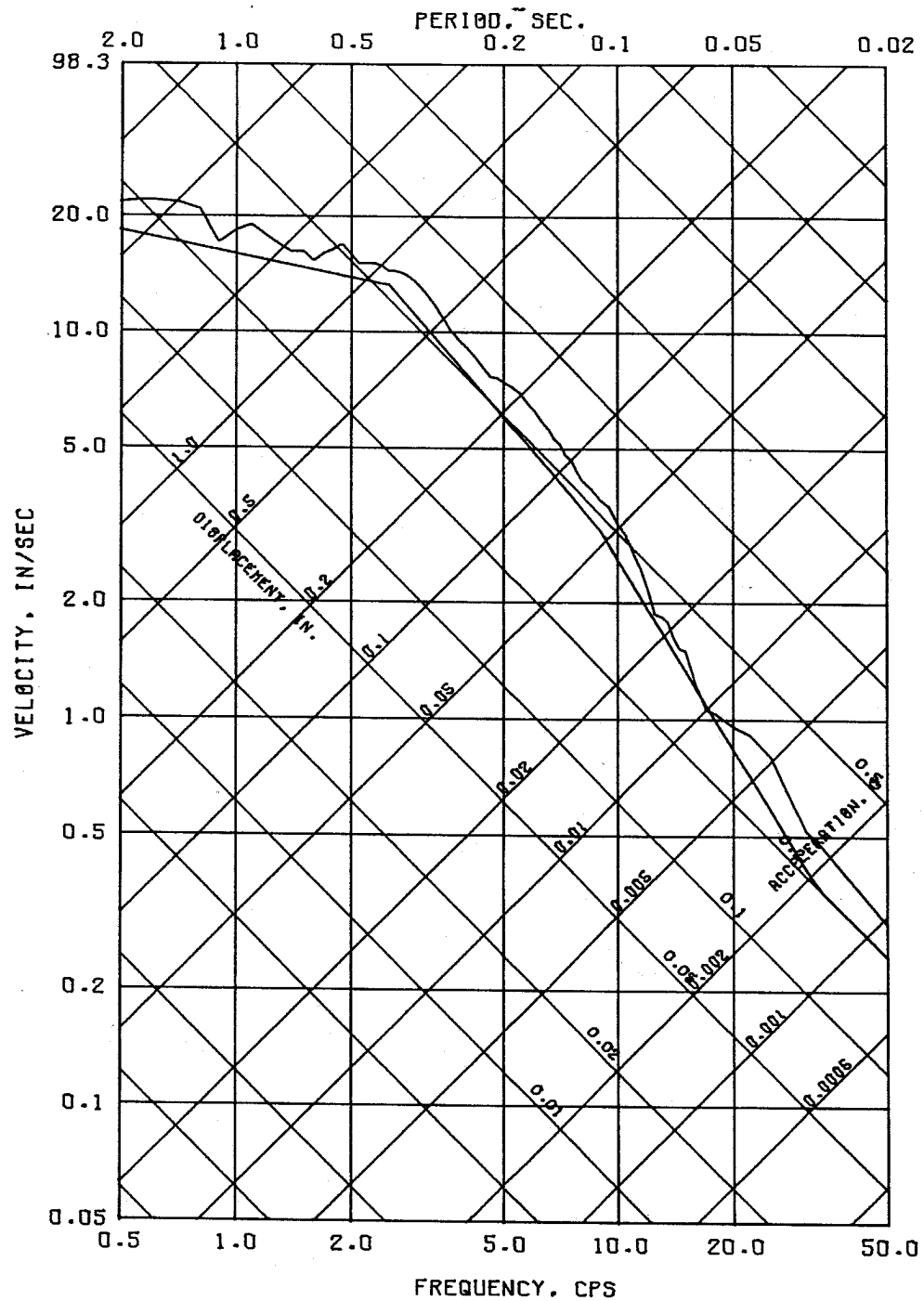


SLH MATCH WITH HORIZ R.G. SPEC 5 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-4

HORIZONTAL RESPONSE SPECTRA
(5% DAMPING)

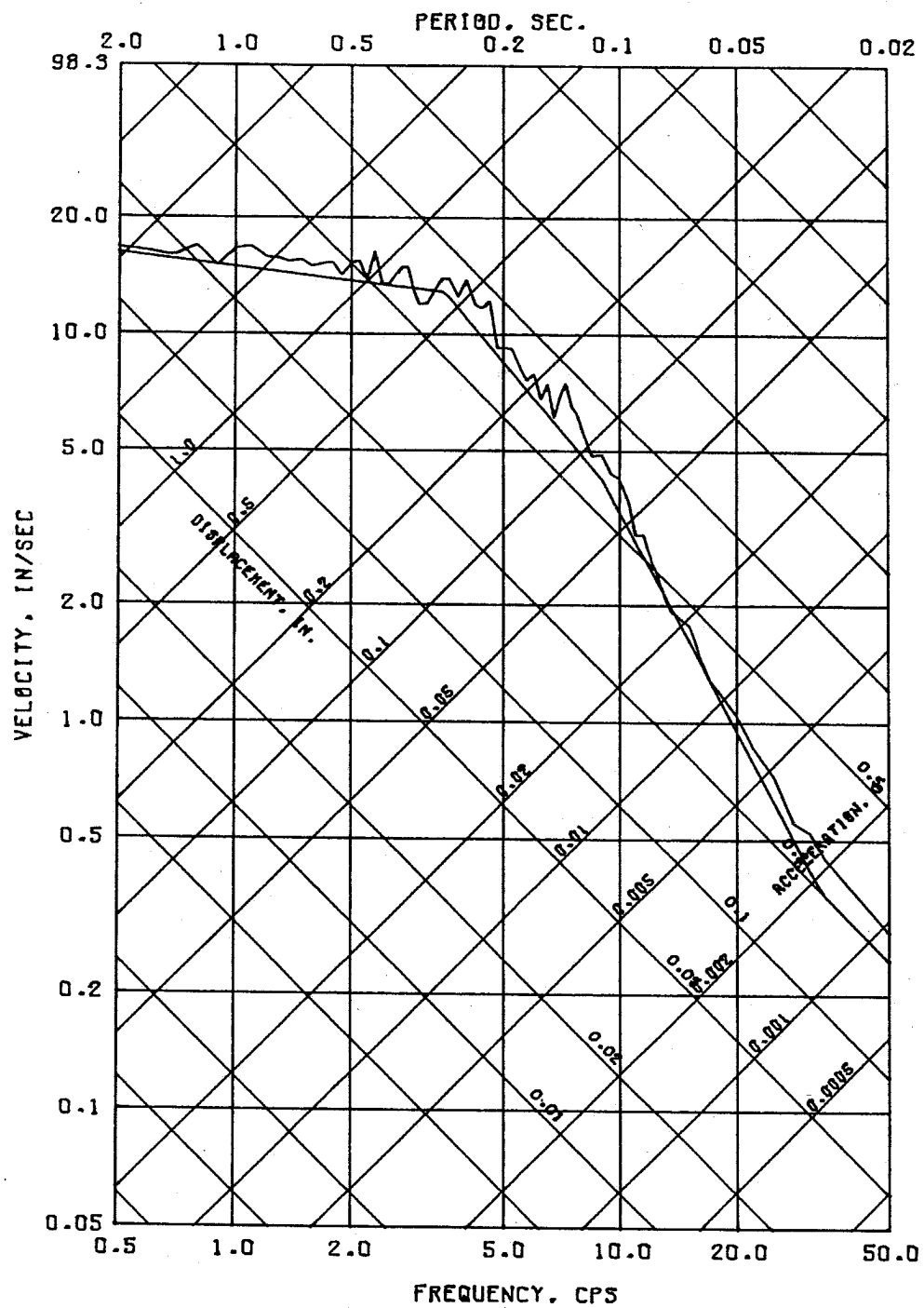


SLH MATCH WITH HORIZ R.G. SPEC 7 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-5

HORIZONTAL RESPONSE SPECTRA
(7% DAMPING)

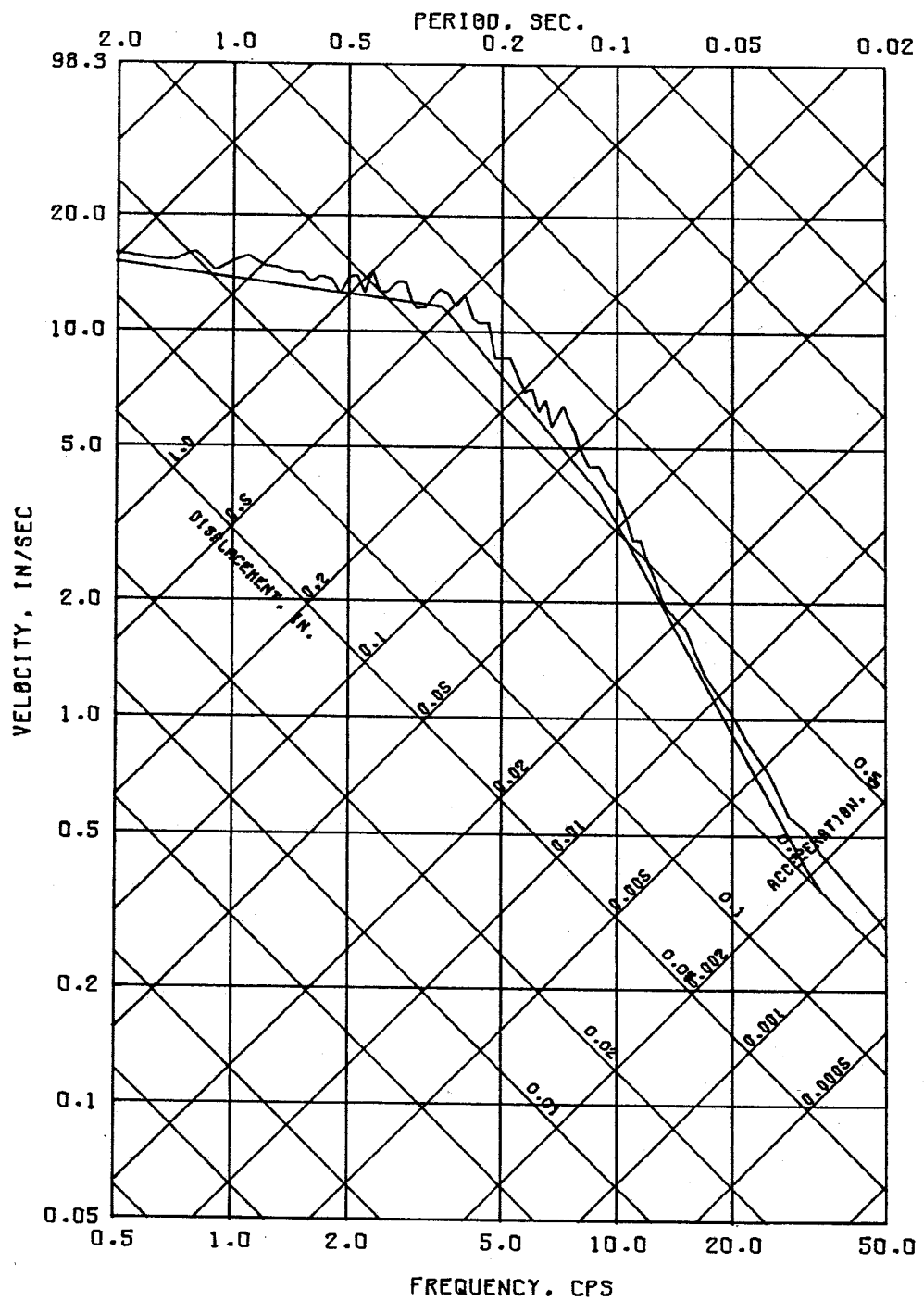


SLV MATCH WITH VERT R.G. SPEC 3 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-7

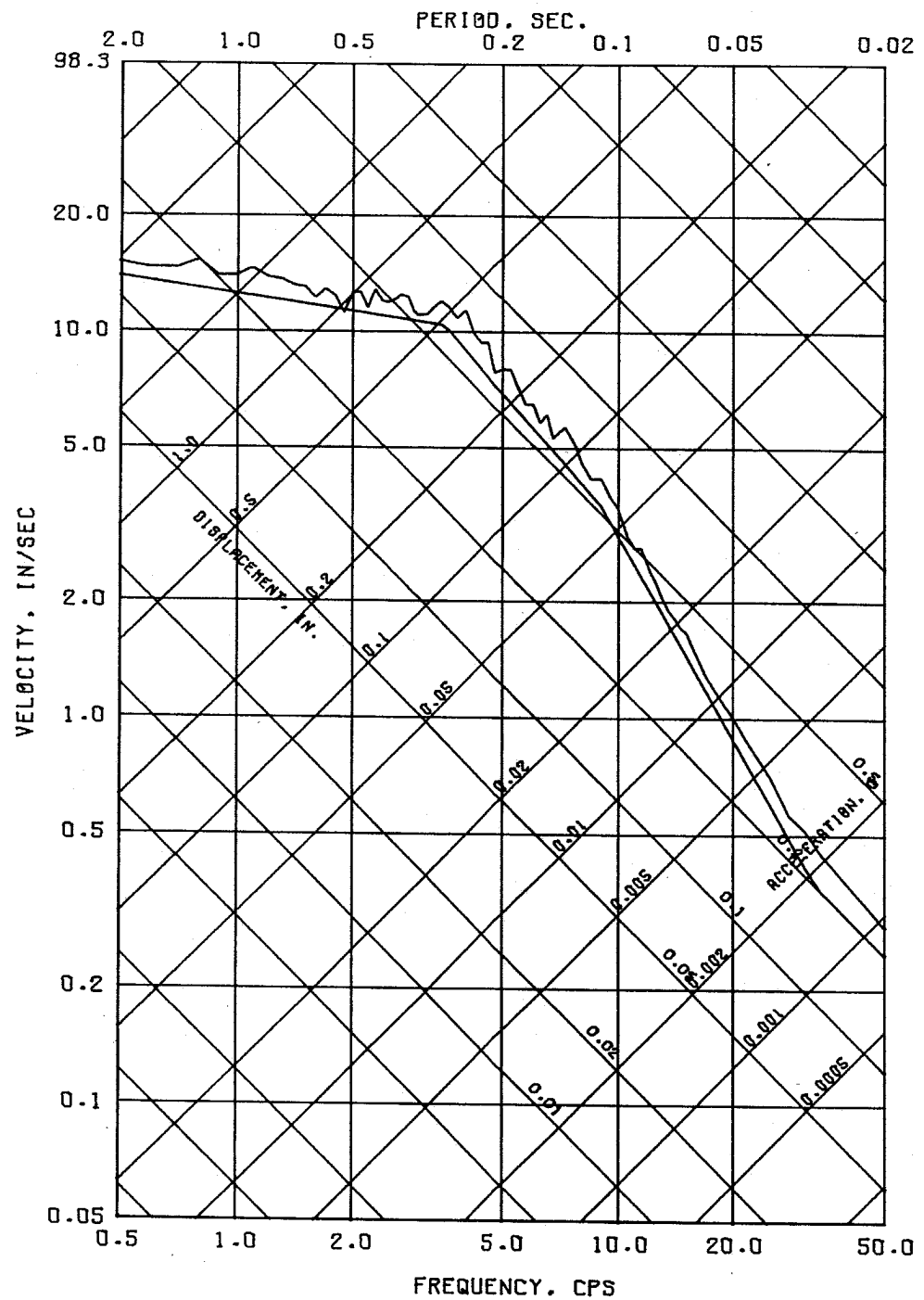
VERTICAL RESPONSE SPECTRA
(3% DAMPING)



SLV MATCH WITH VERT R.G. SPEC 4 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

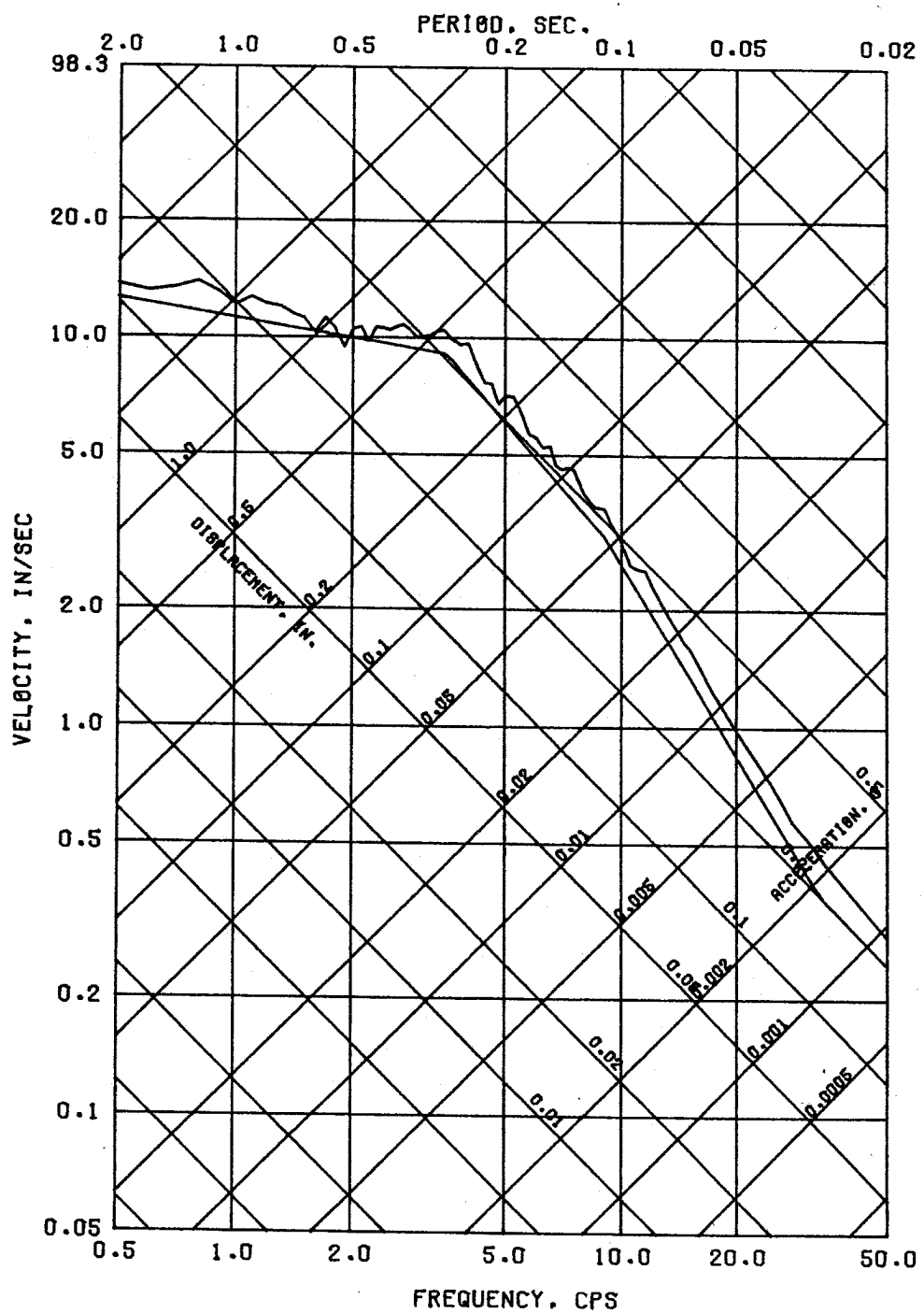
FIGURE 3.7-8
VERTICAL RESPONSE SPECTRA
(4% DAMPING)



SLV MATCH WITH VERT R.G. SPEC 5 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-9
VERTICAL RESPONSE SPECTRA
(5% DAMPING)

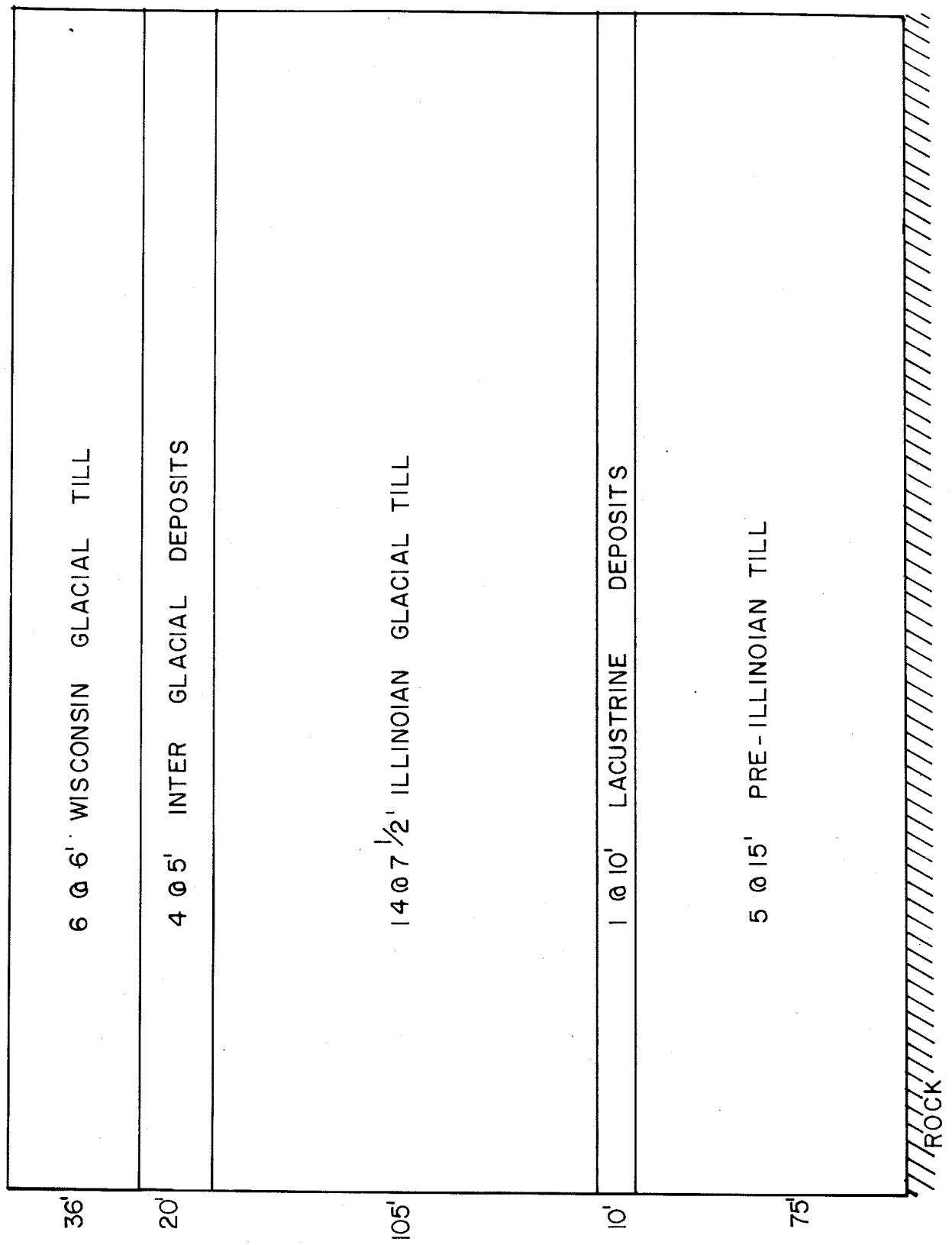


SLV MATCH WITH VERT R.G. SPEC 7 PER DAMP

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-10

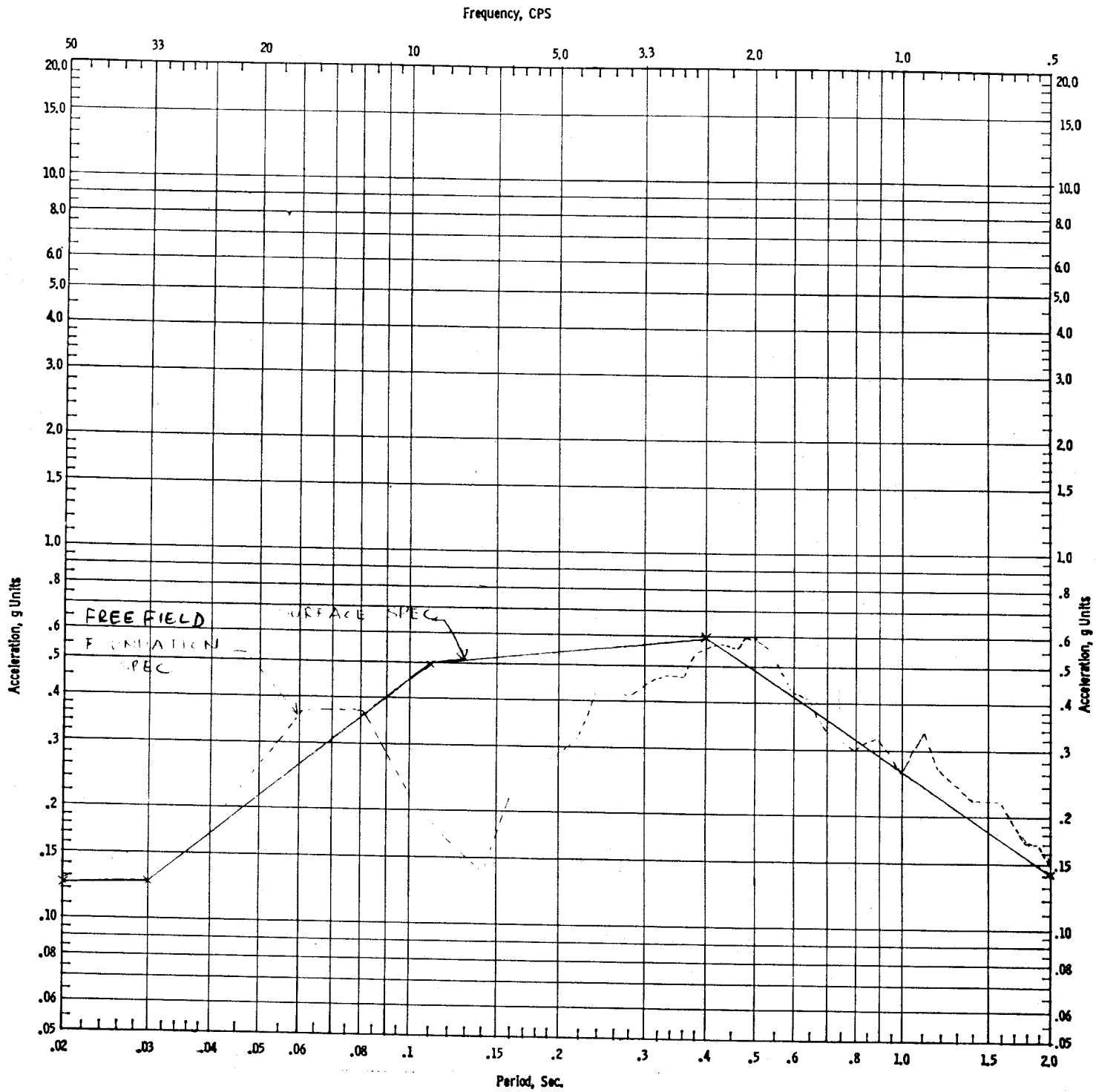
VERTICAL RESPONSE SPECTRA
(7% DAMPING)



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-11

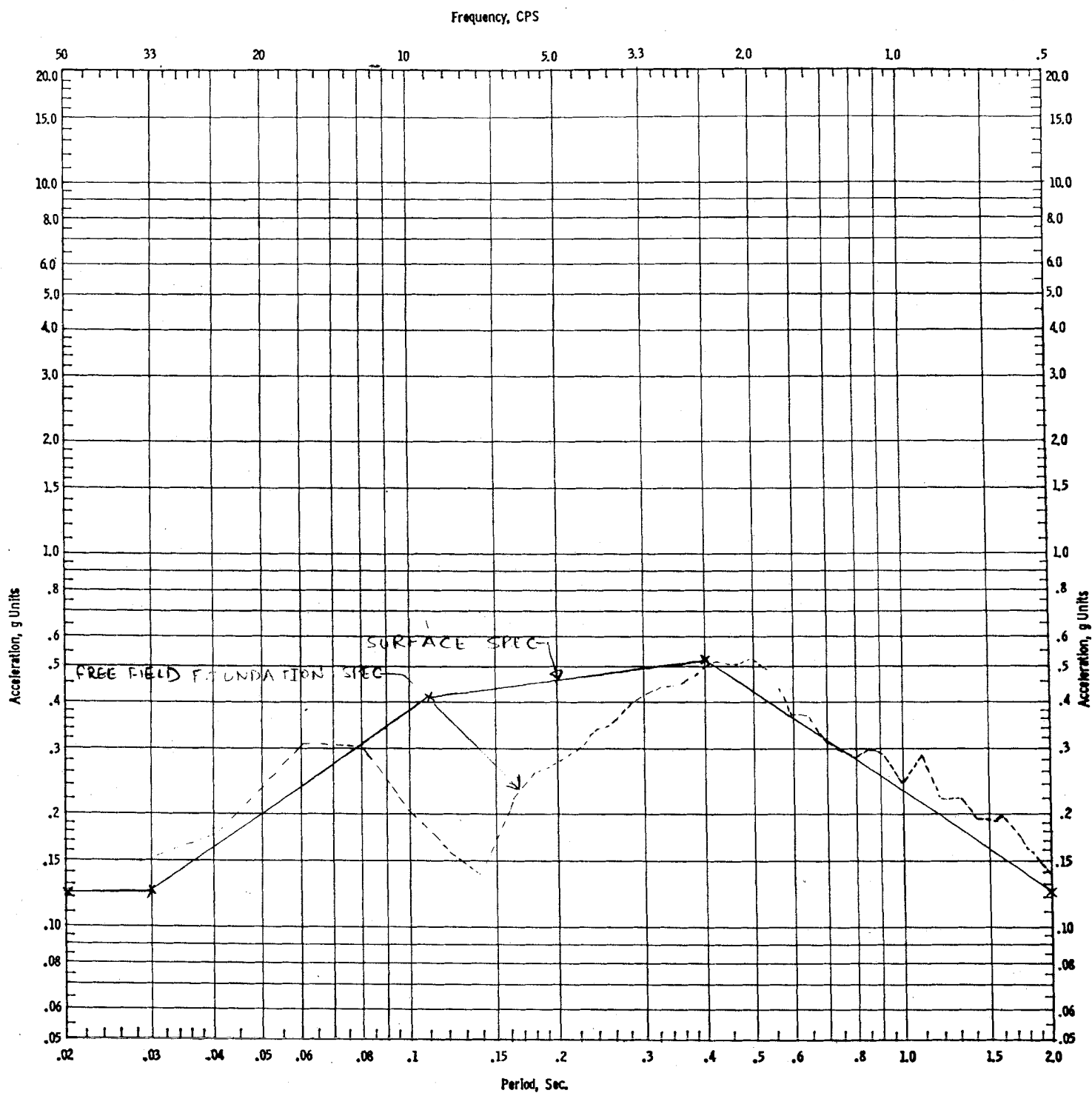
SOIL LAYERING MODEL
USED IN SHAKE



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-12

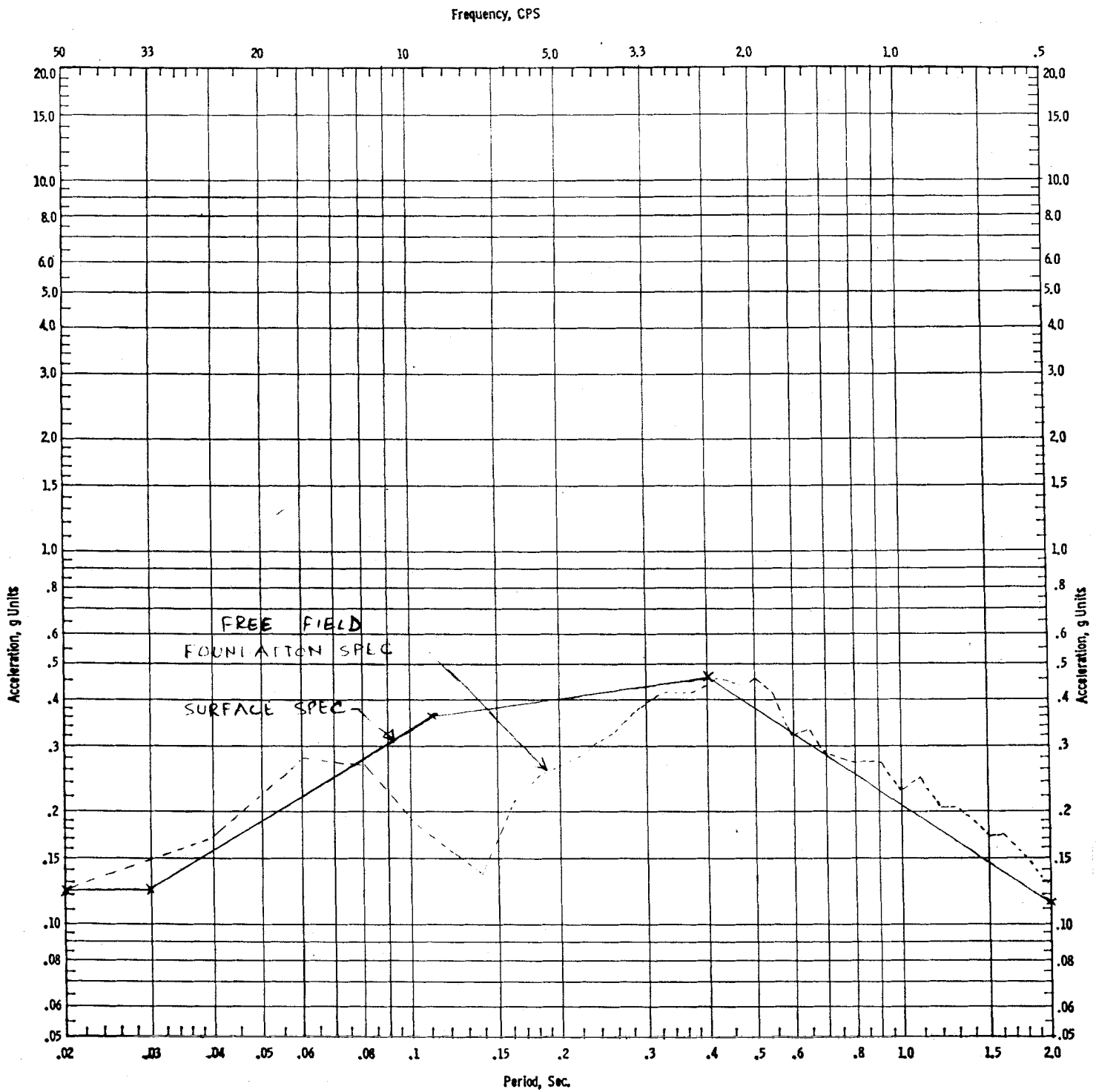
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE HORIZONTAL 1% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-13

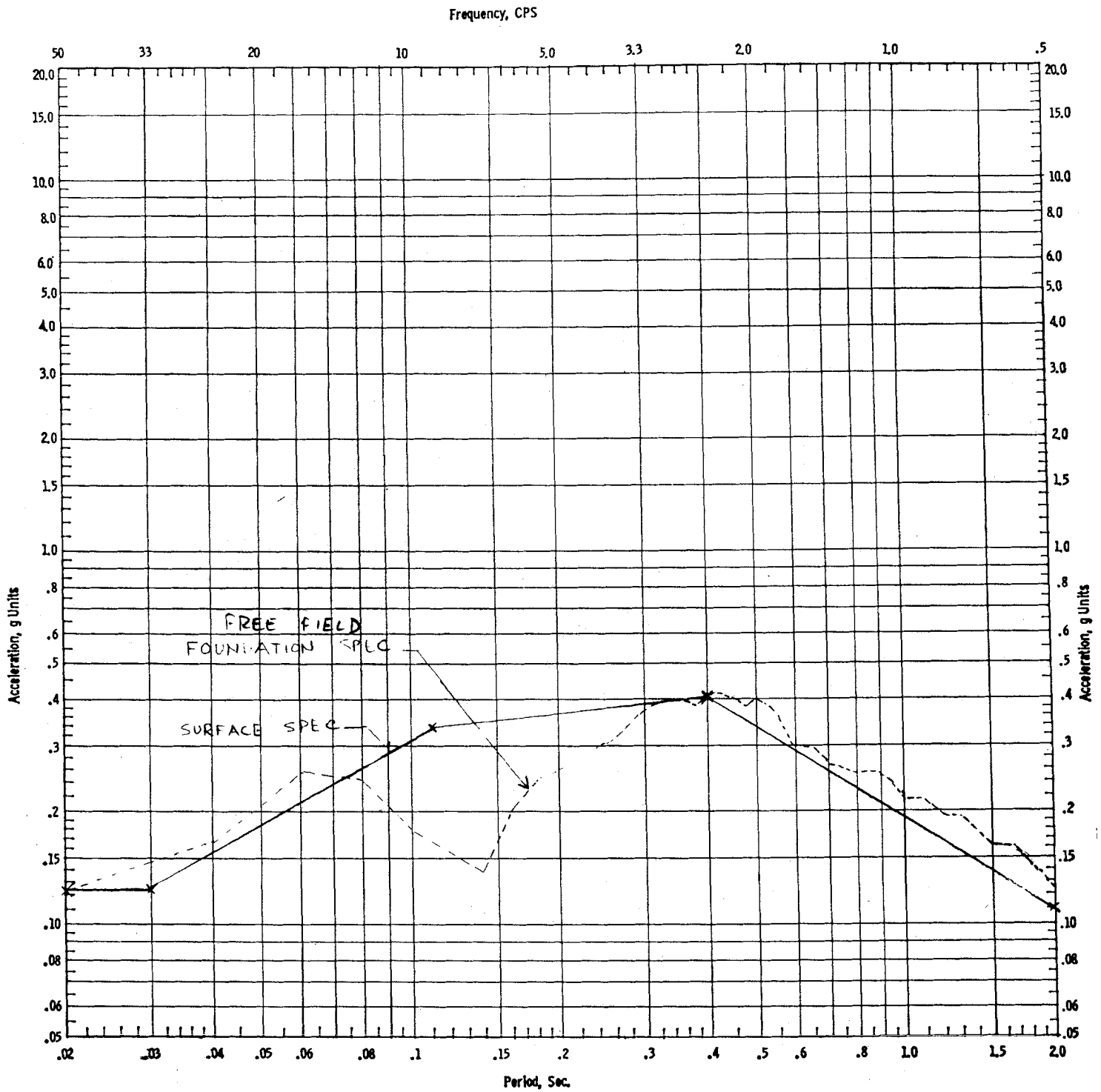
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE HORIZONTAL 2% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-14

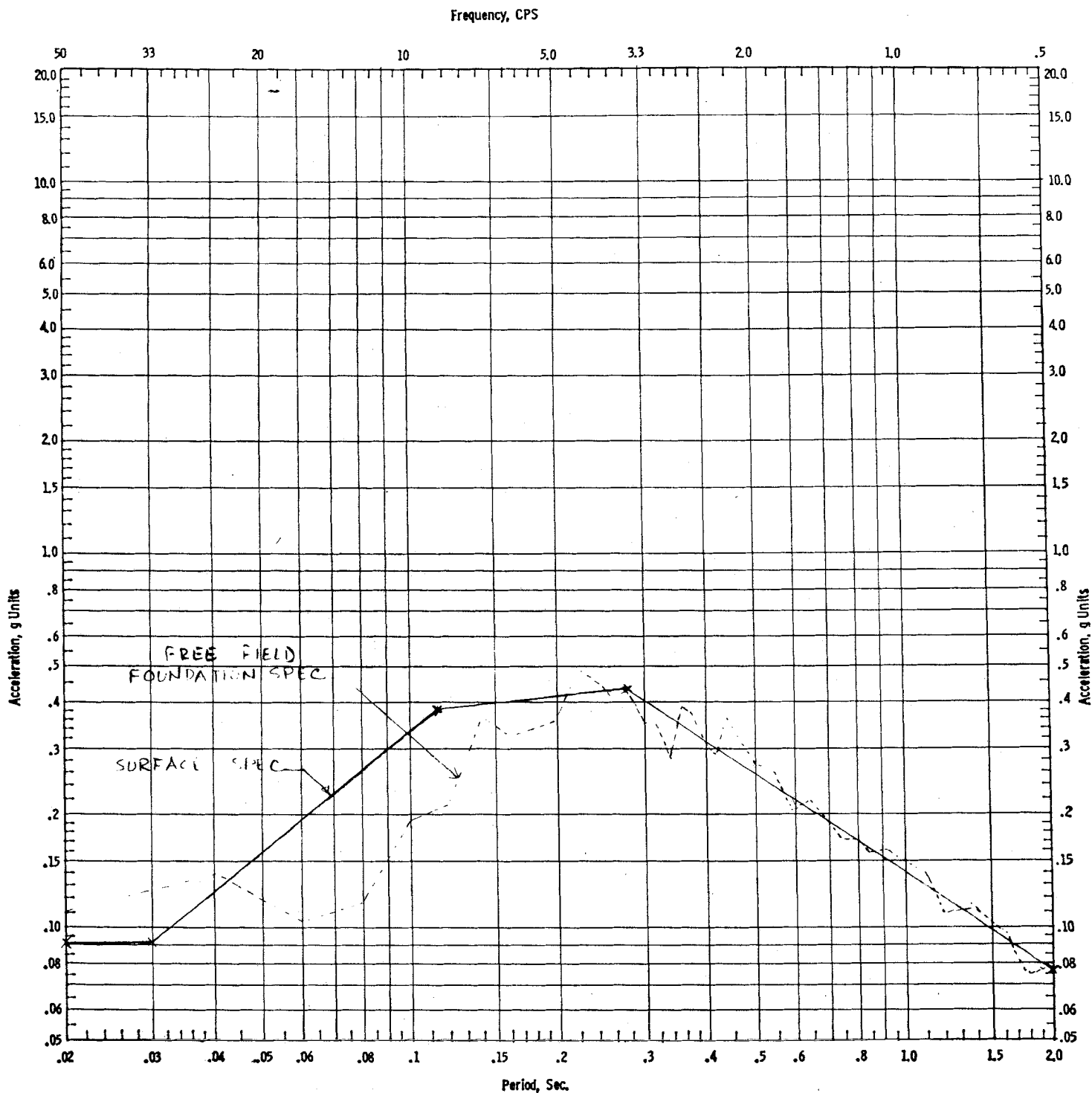
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE HORIZONTAL 3% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-15

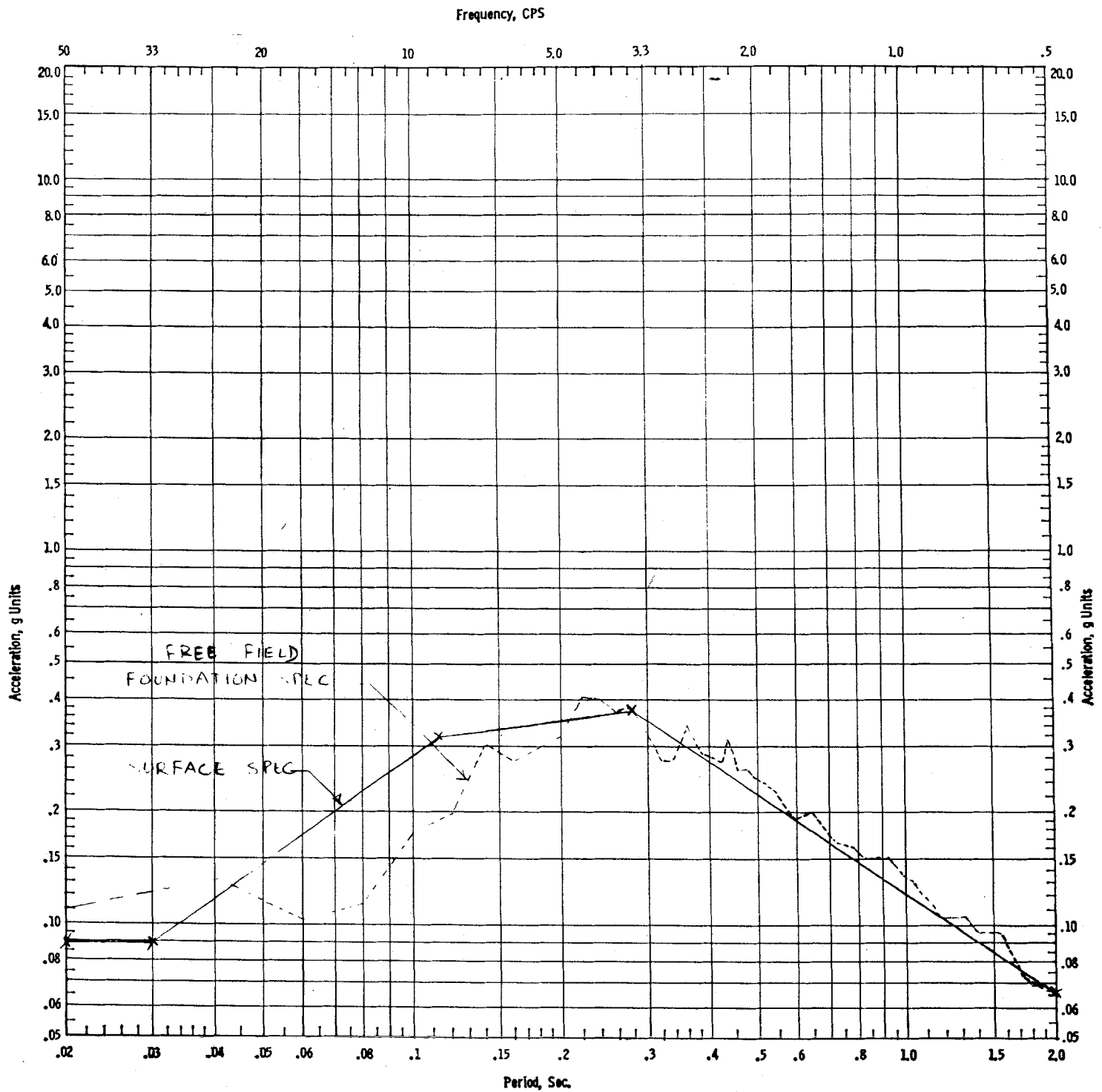
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE HORIZONTAL 4% DAMPING



**CLINTON POWER STATION
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FIGURE 3.7-16

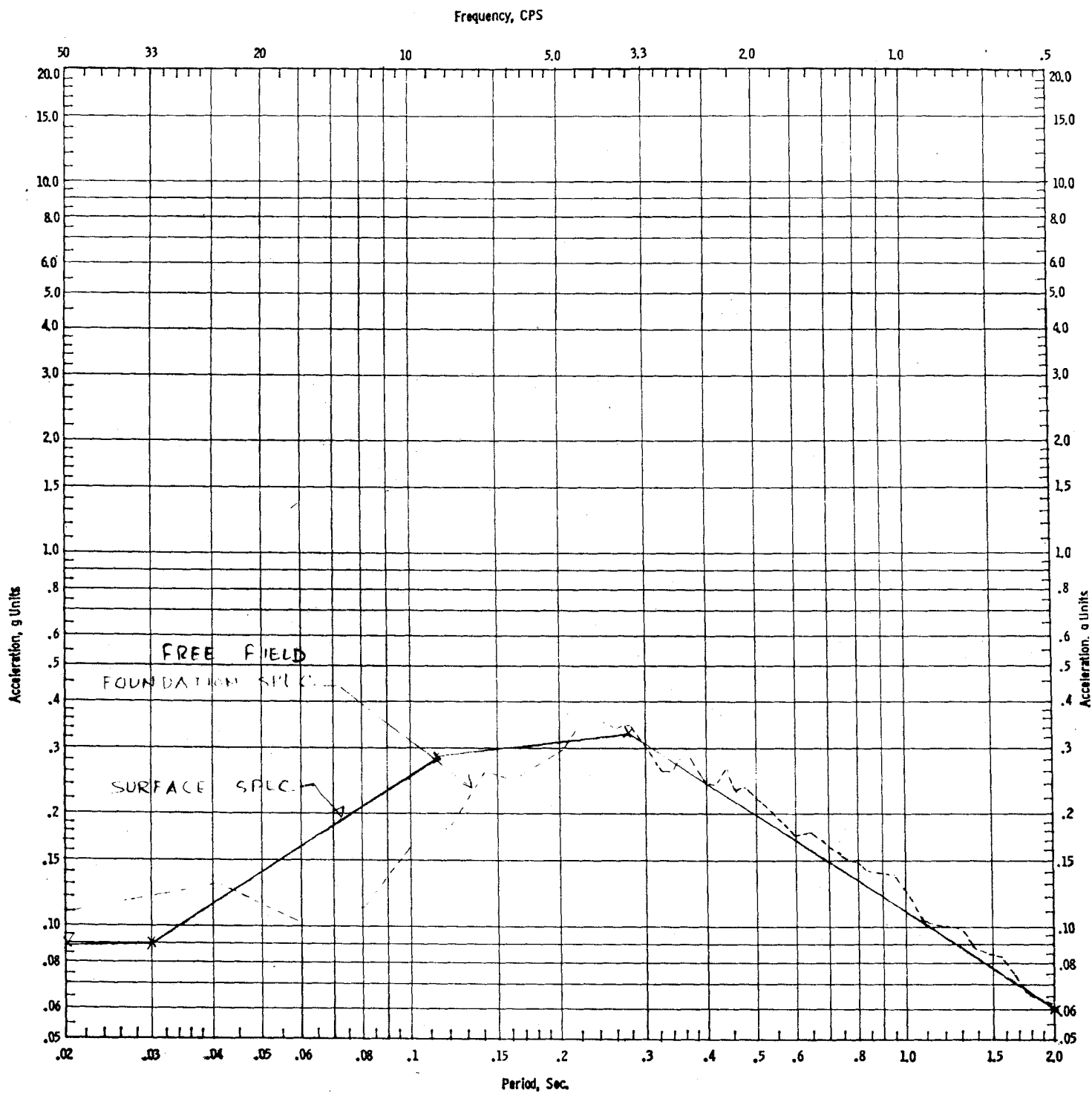
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE VERTICAL 1% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-17

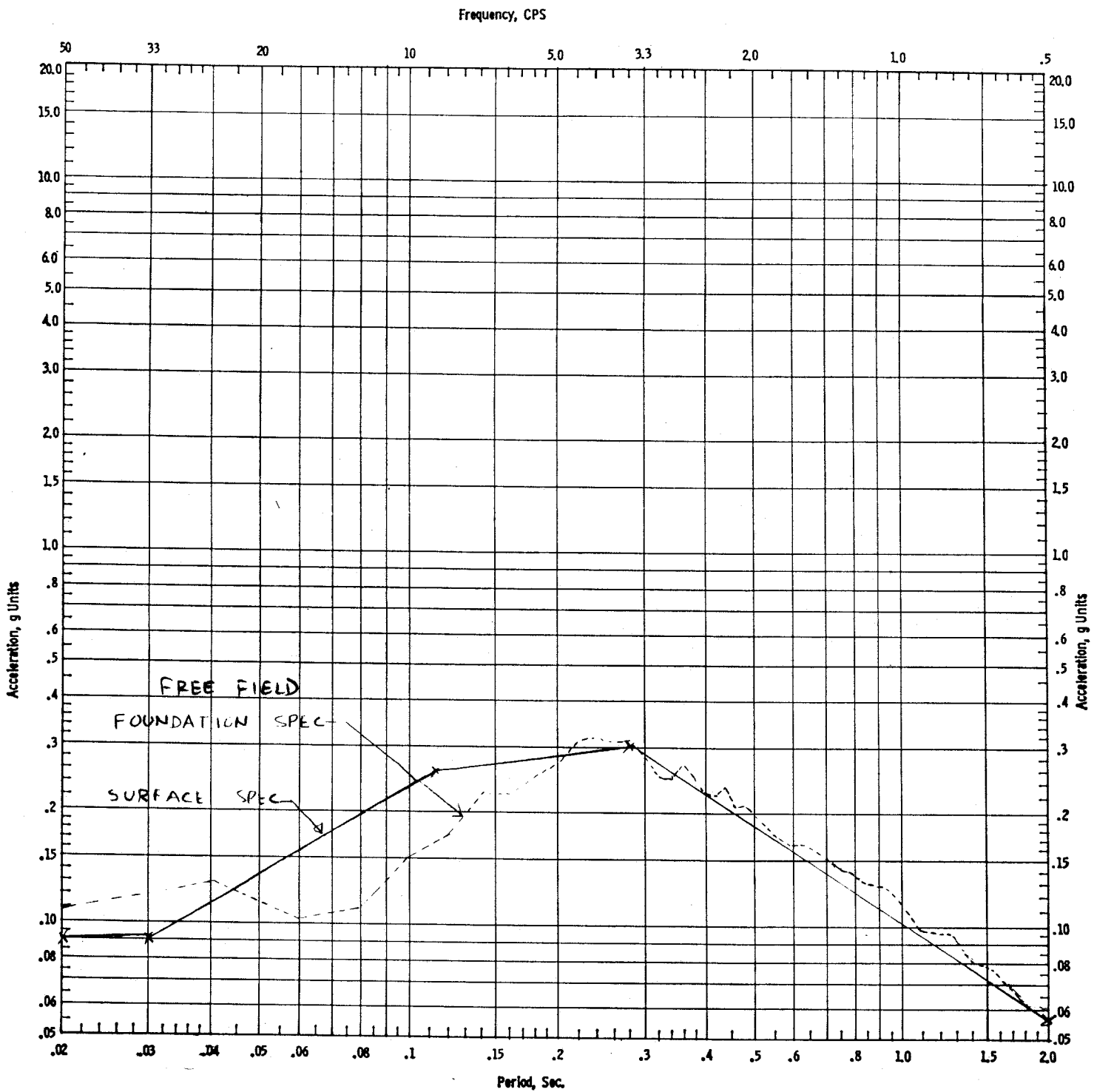
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE VERTICAL 2% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-18

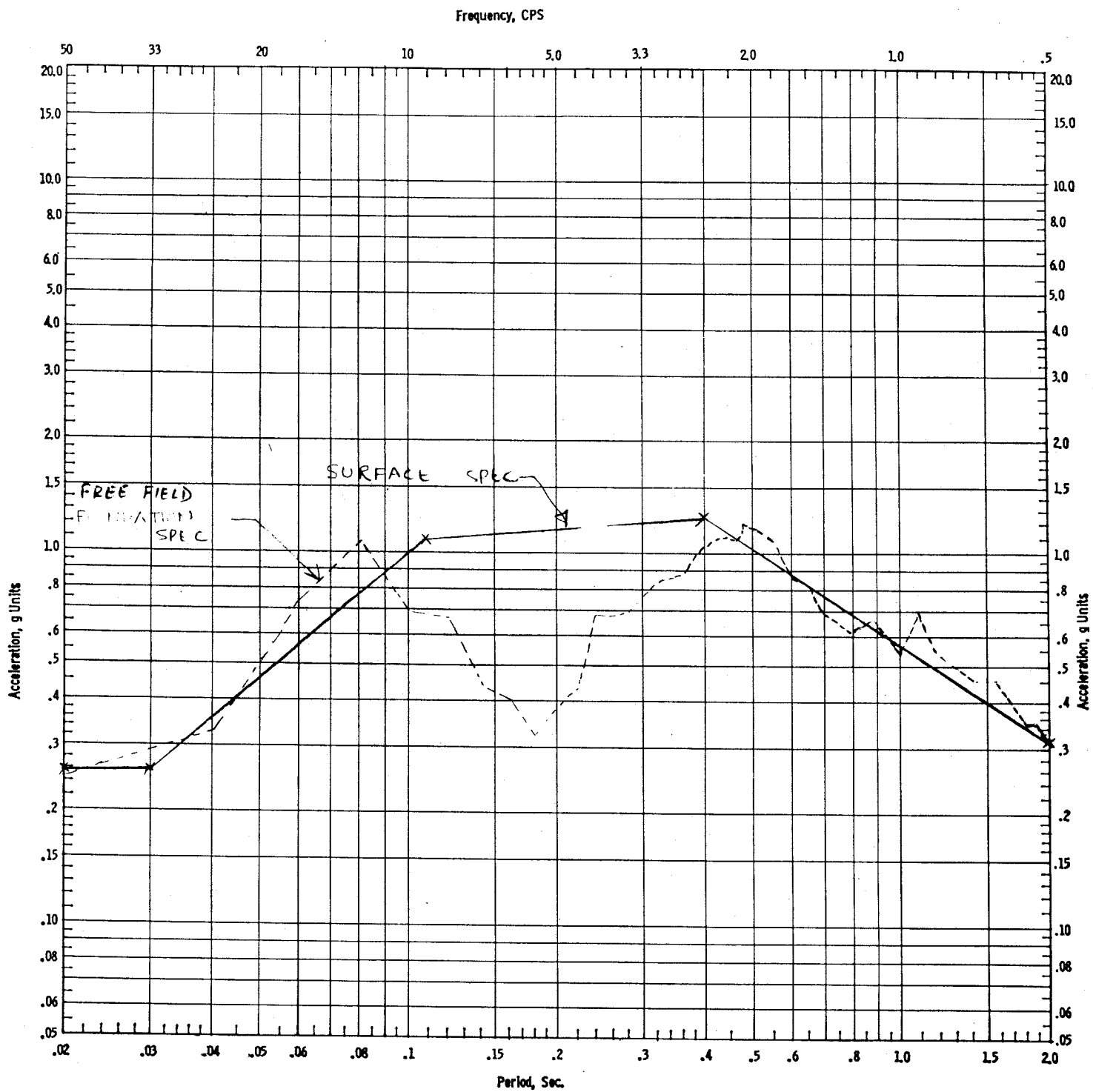
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE VERTICAL 3% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-19

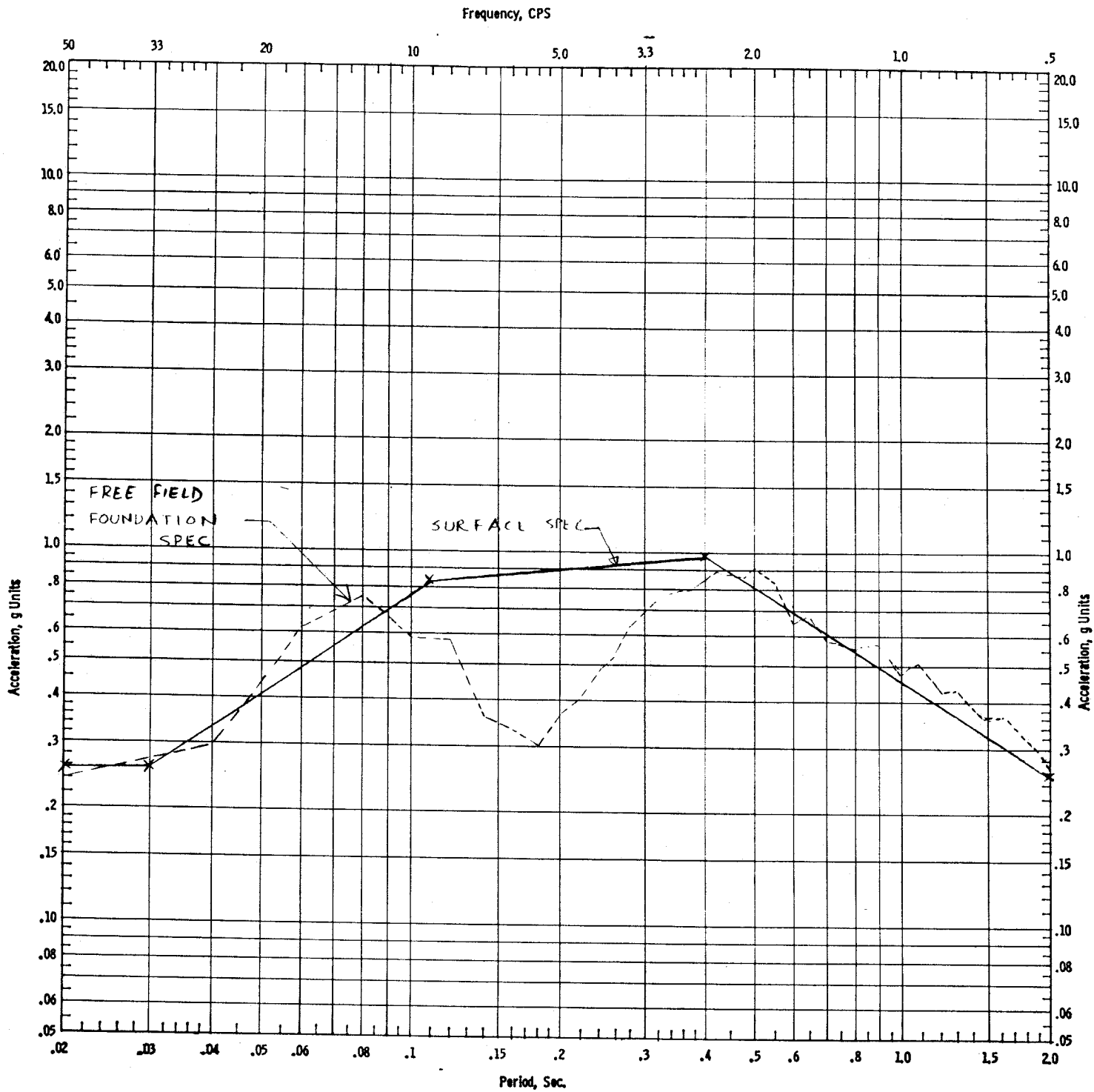
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR OBE VERTICAL 4% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-20

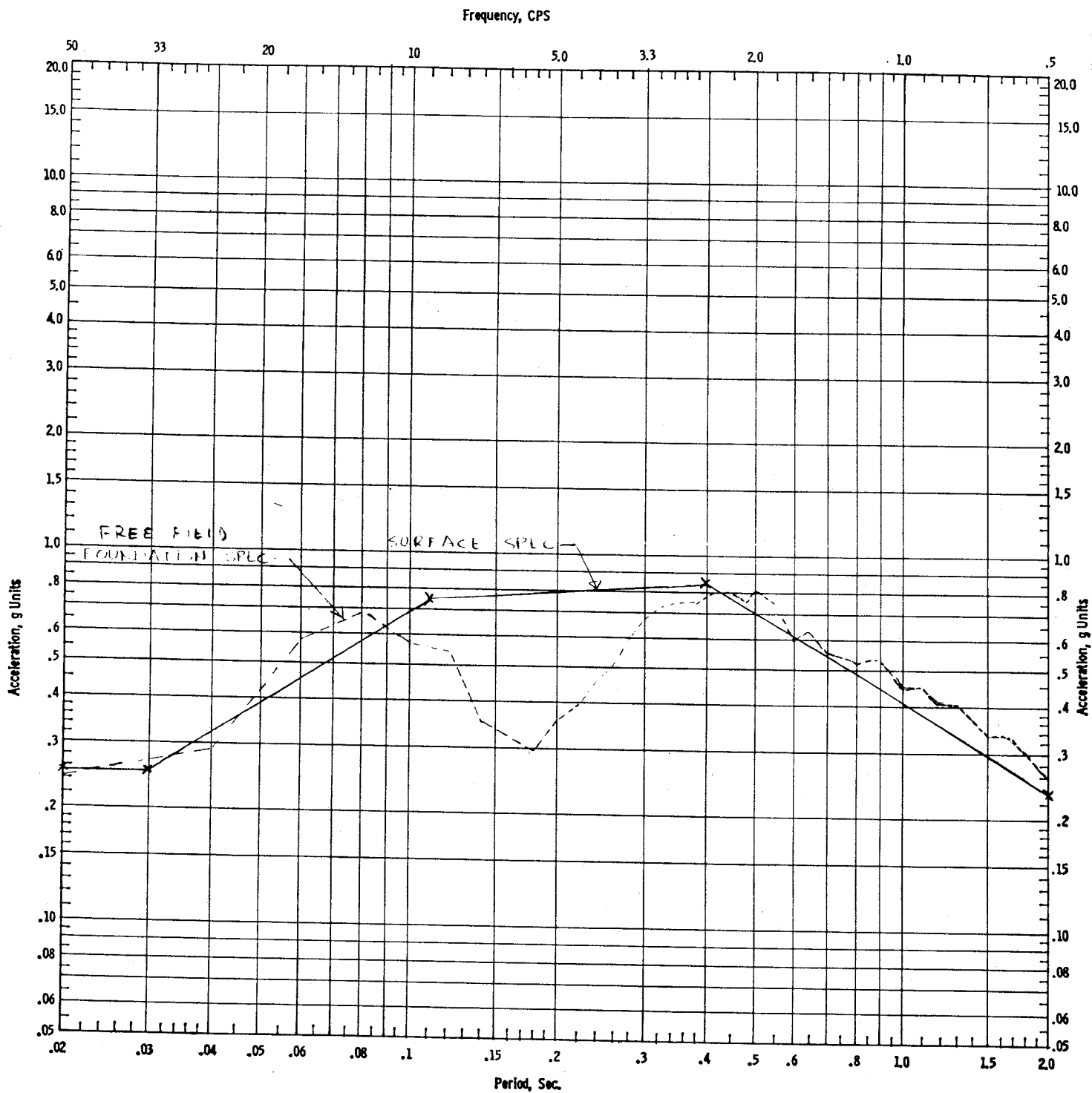
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE HORIZONTAL 1% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-21

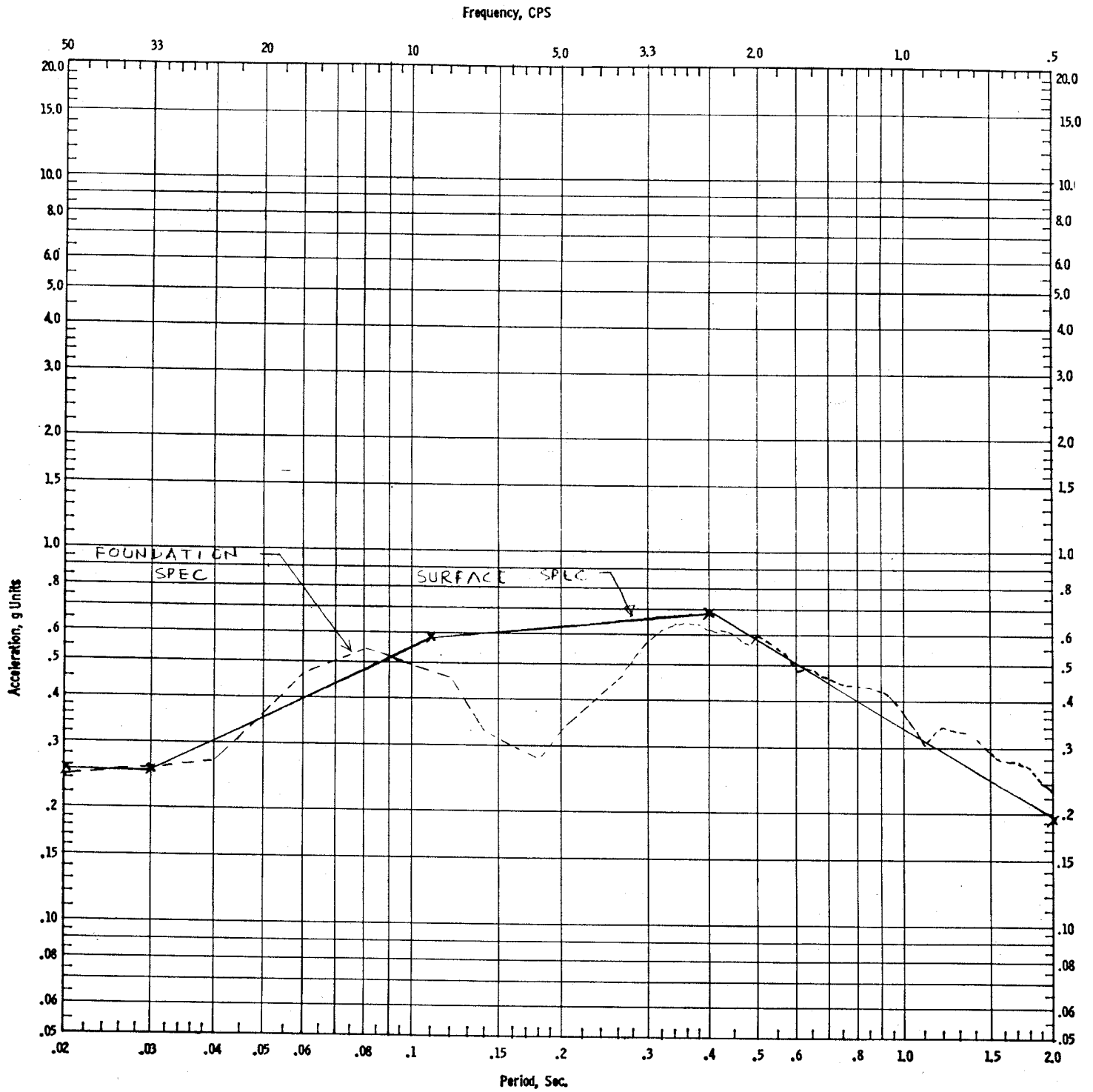
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE HORIZONTAL 3% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-22

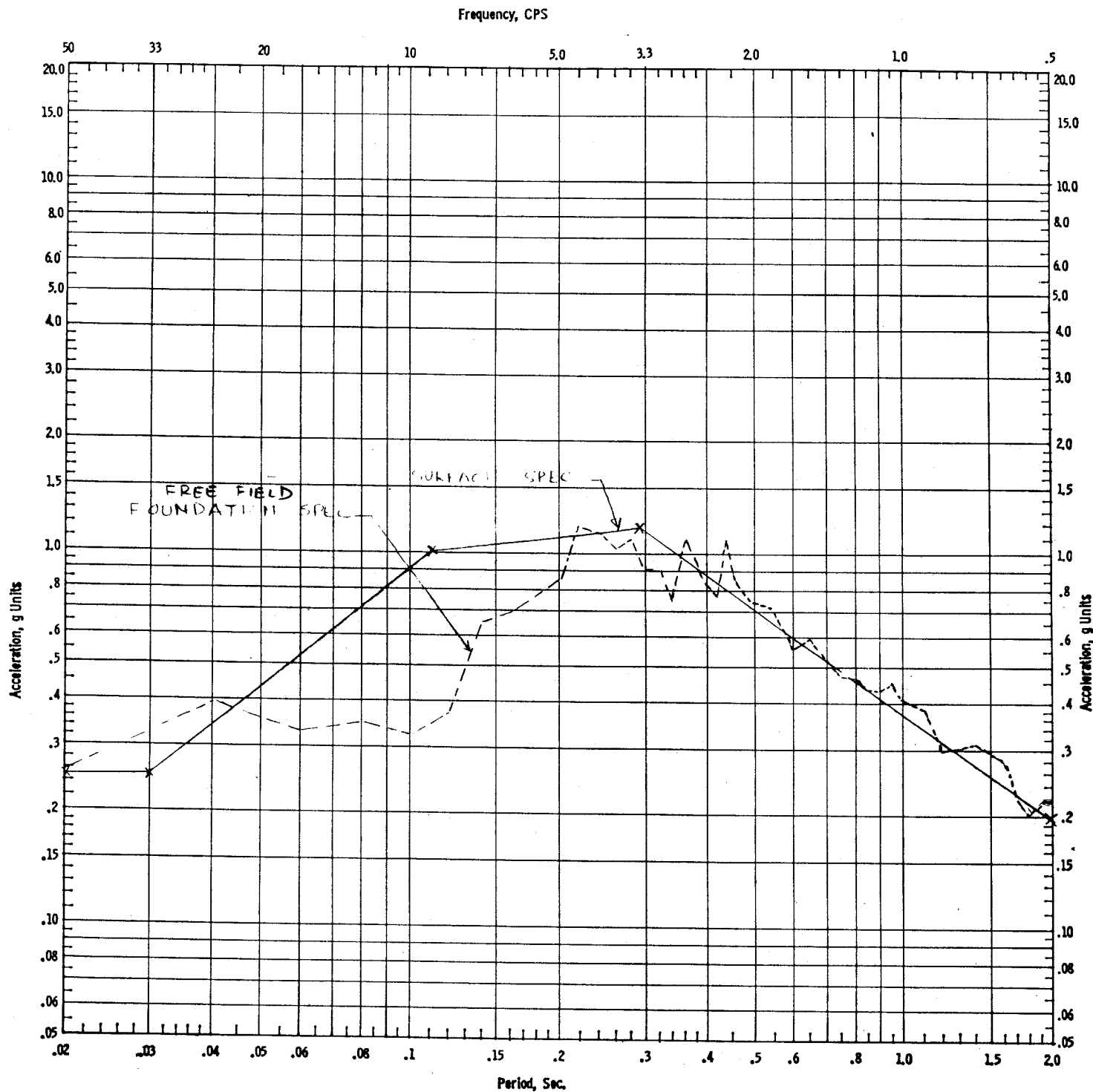
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE HORIZONTAL 4% DAMPING



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-23

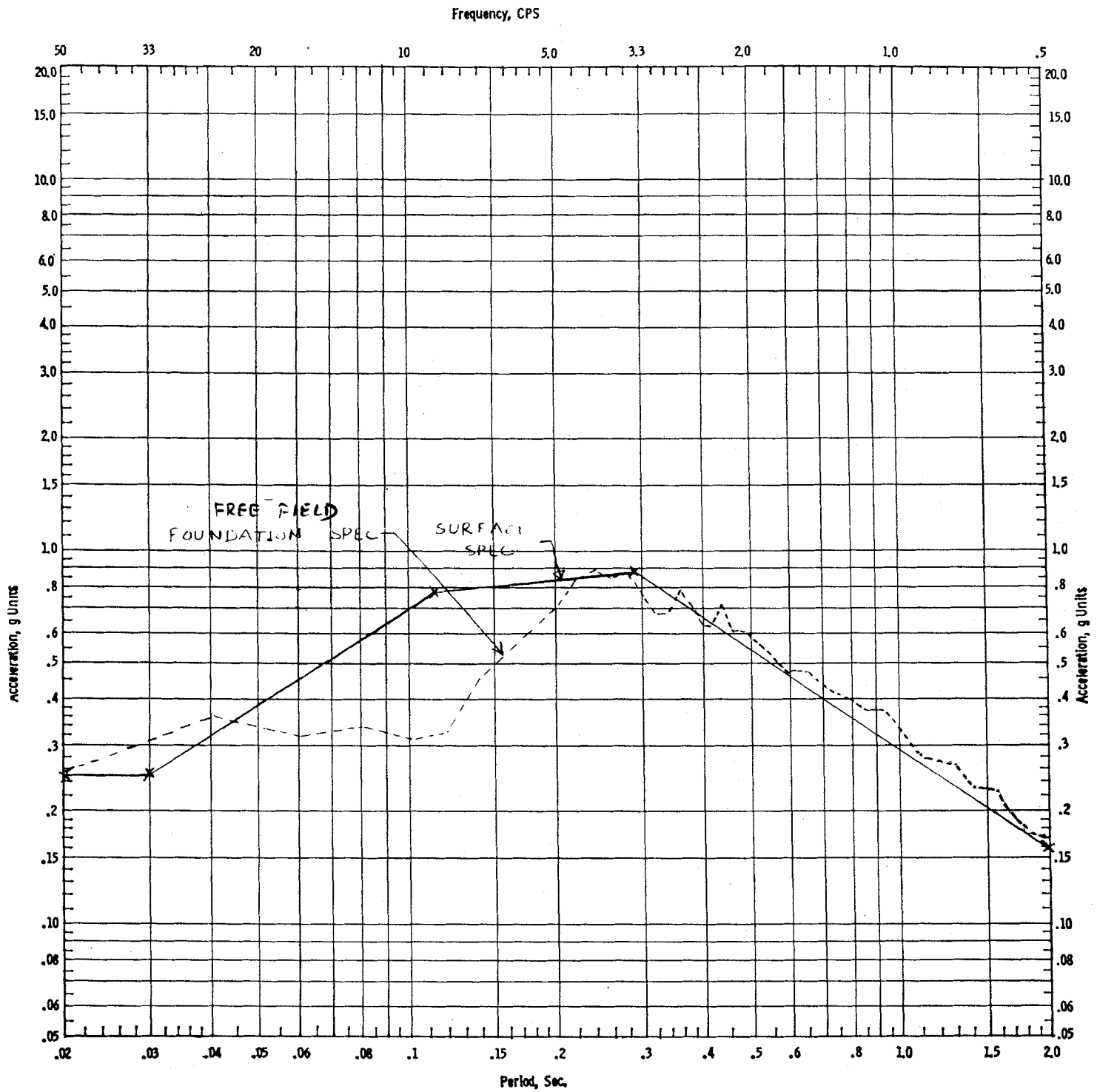
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE HORIZONTAL 7% DAMPING



CLINTON POWER STATION
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FIGURE 3.7-24

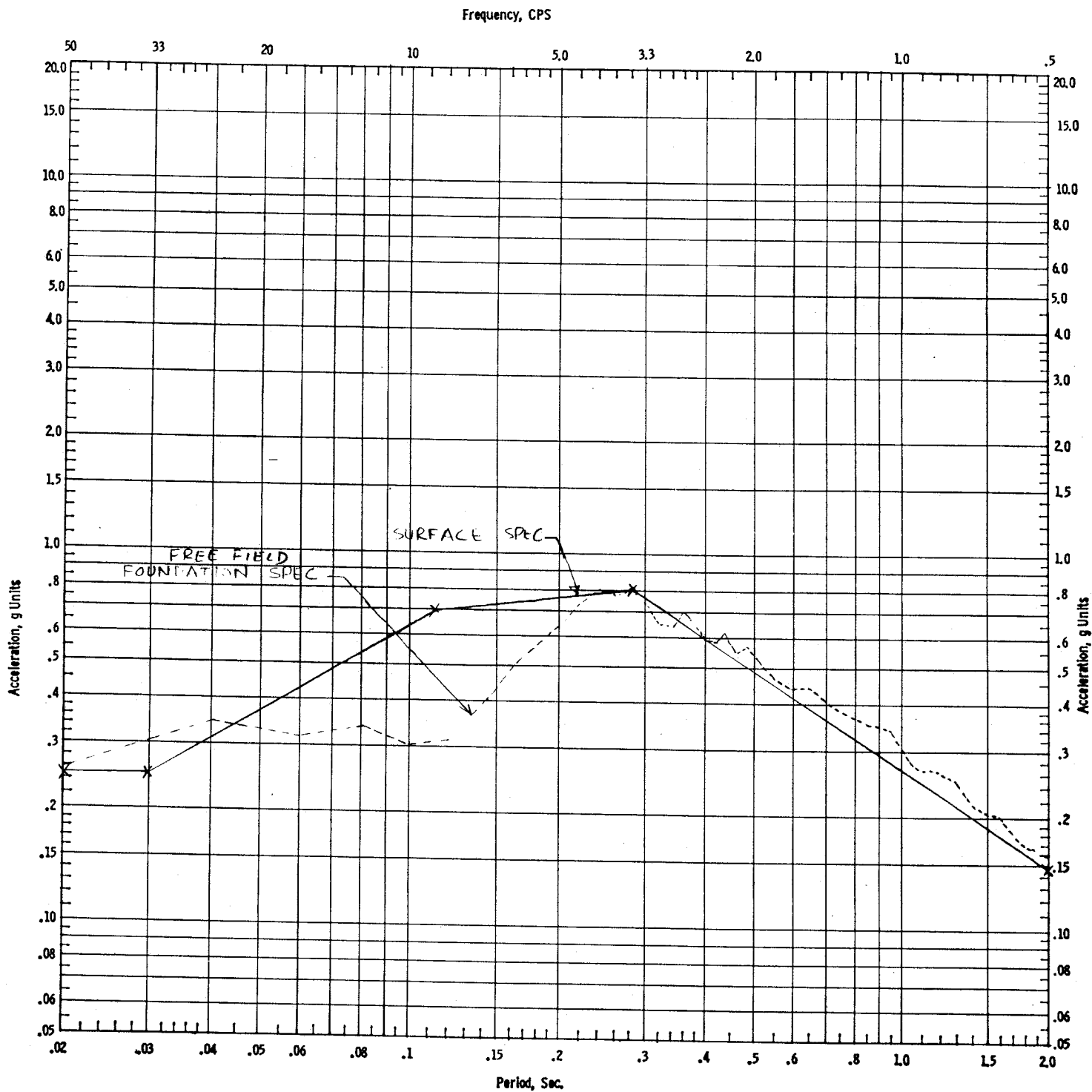
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE VERTICAL 1% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-25

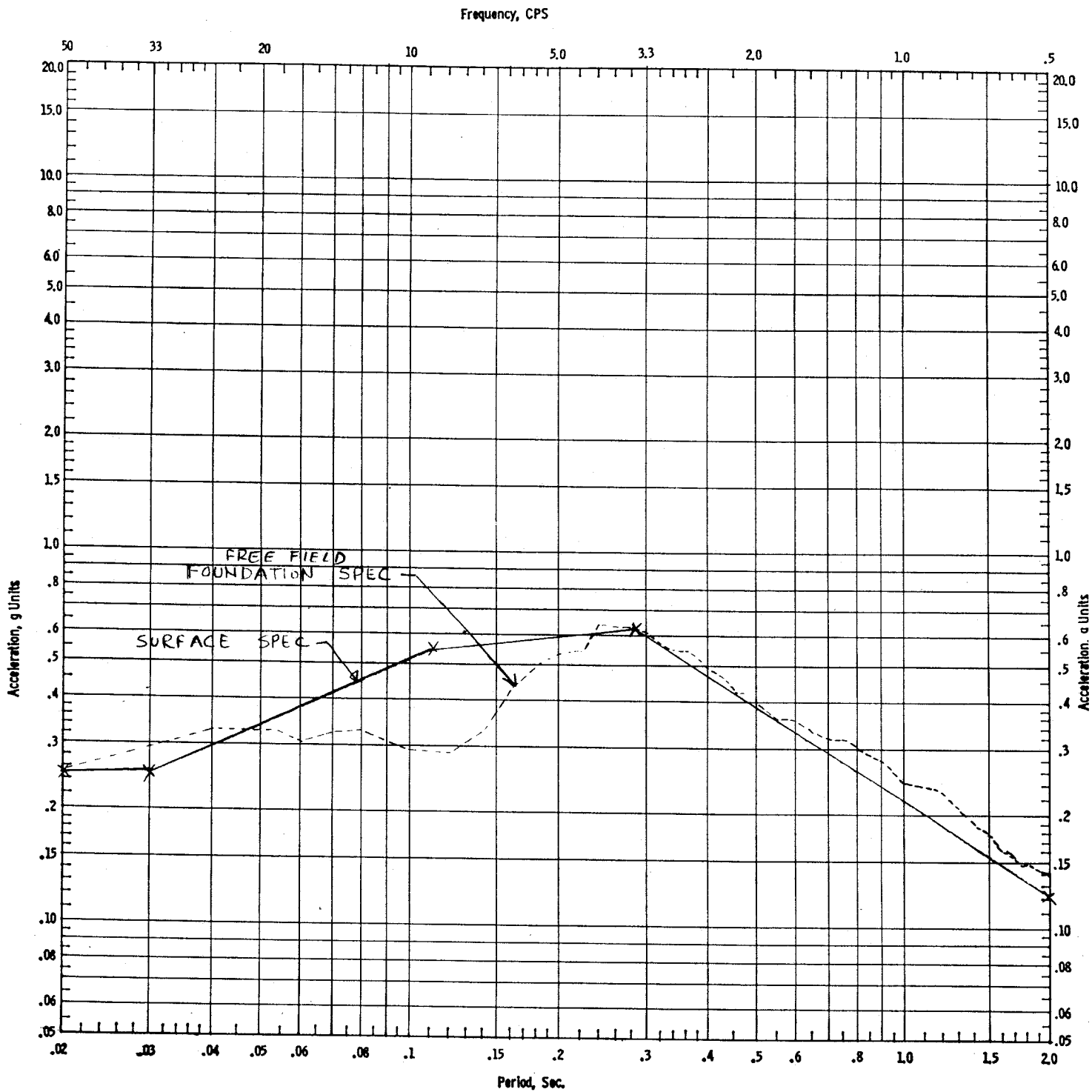
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE VERTICAL 3% DAMPING



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-26

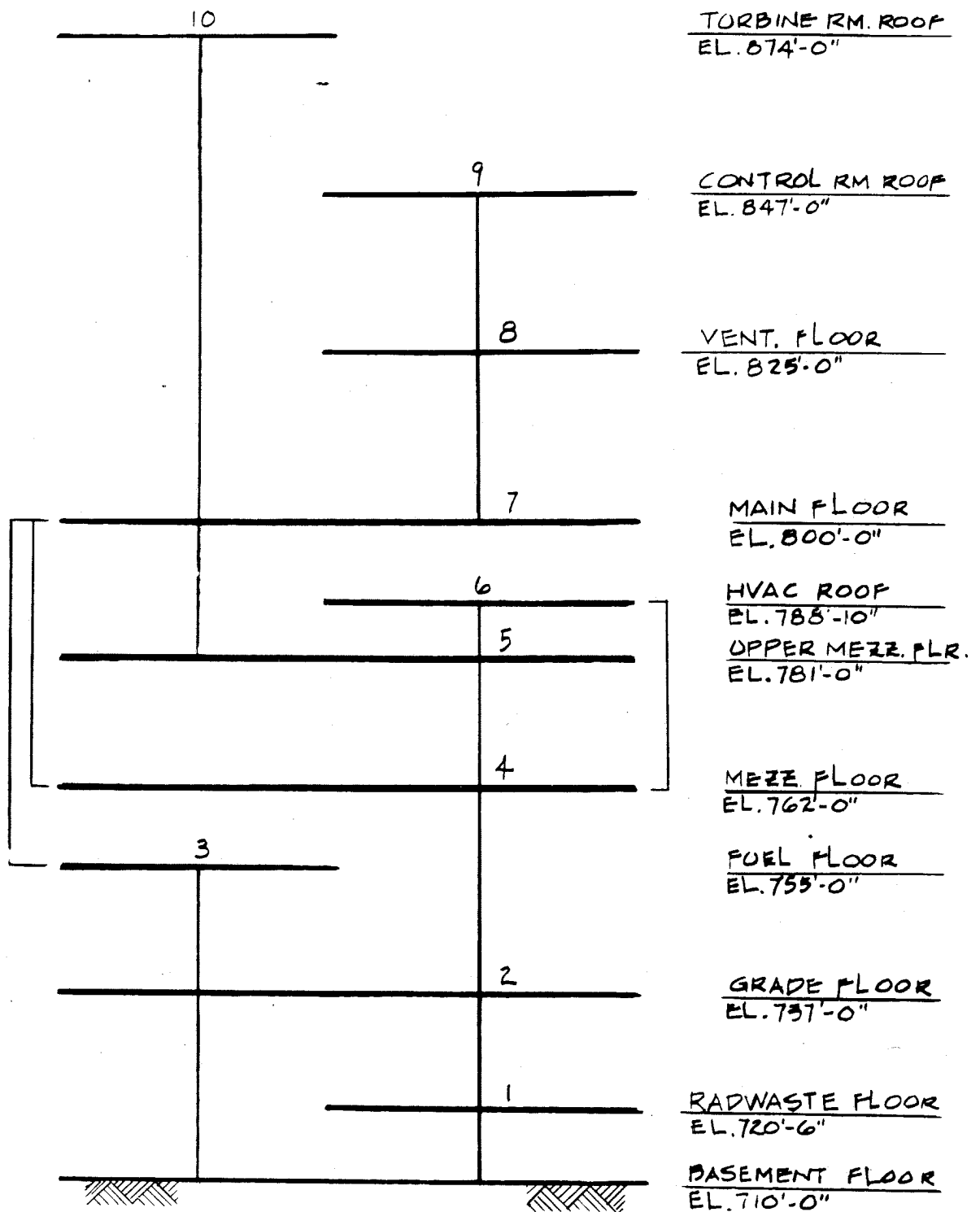
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE VERTICAL 4% DAMPING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-27

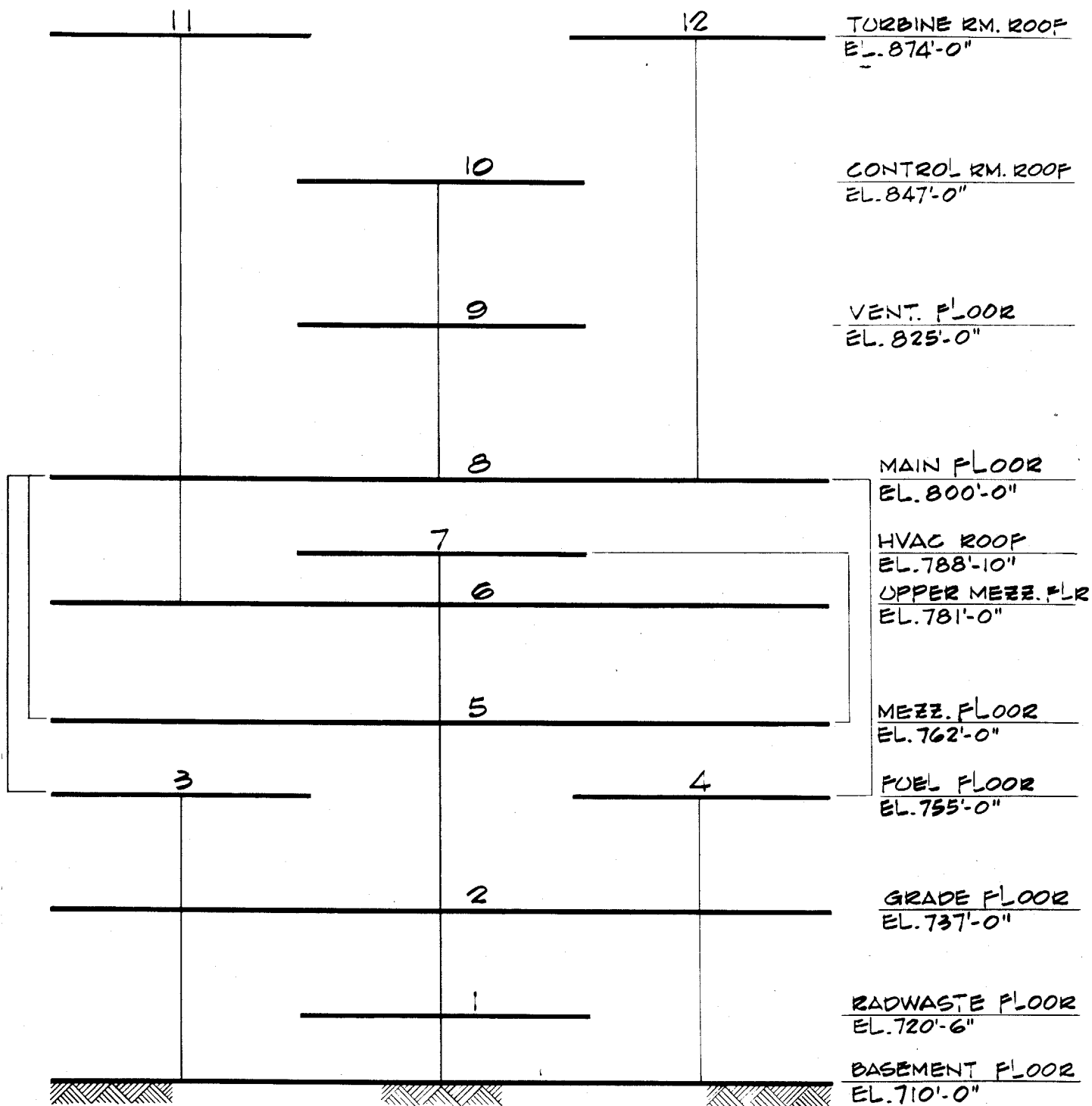
COMPARISON BETWEEN FREE FIELD
FOUNDATION AND SURFACE SPECTRA
FOR SSE VERTICAL 7% DAMPING



CLINTON POWER STATION
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FIGURE 3.7-28

ONE UNIT - HORIZONTAL
BUILDING MODEL

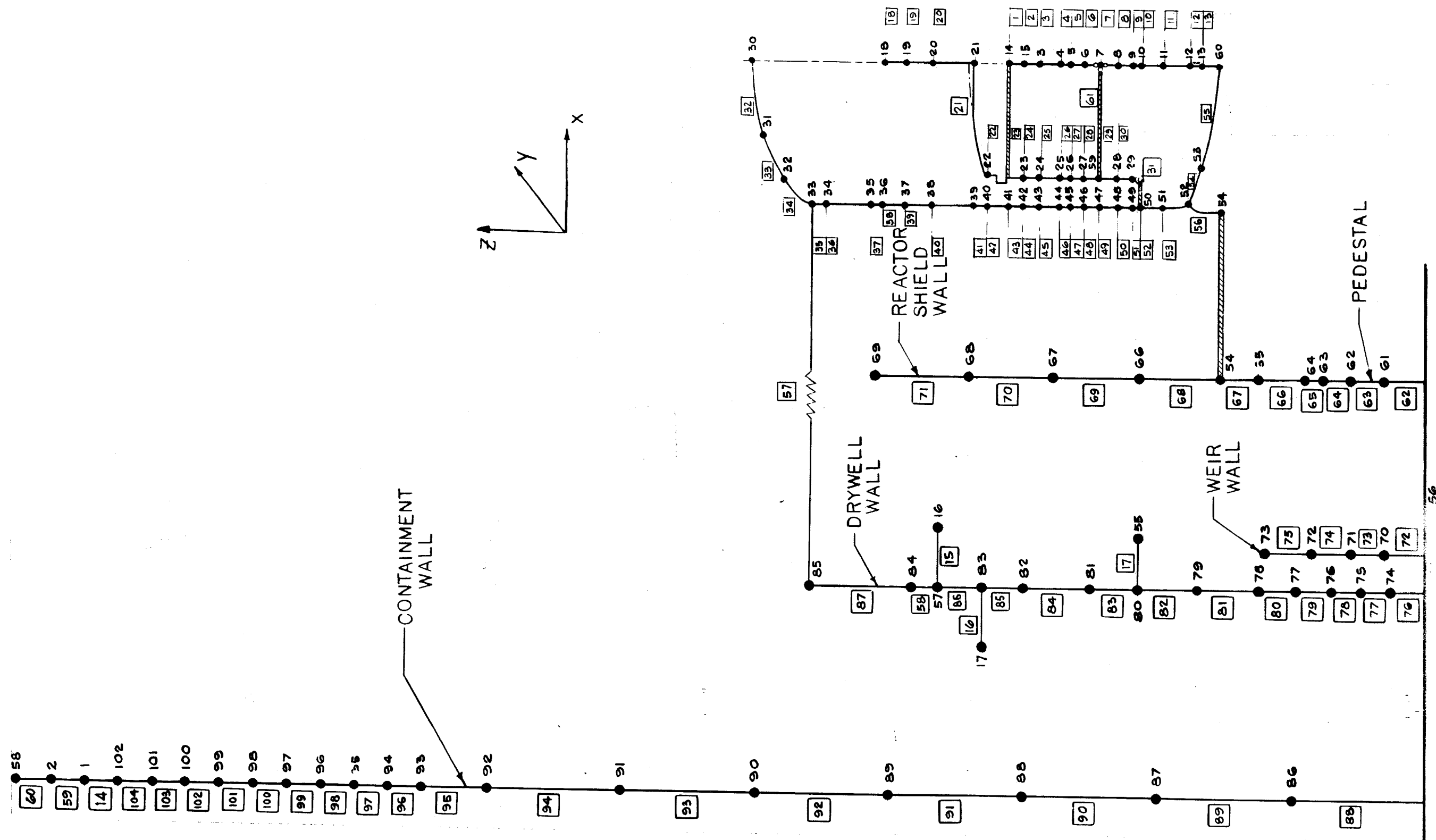


NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-29

TWO UNIT - HORIZONTAL
BUILDING MODEL

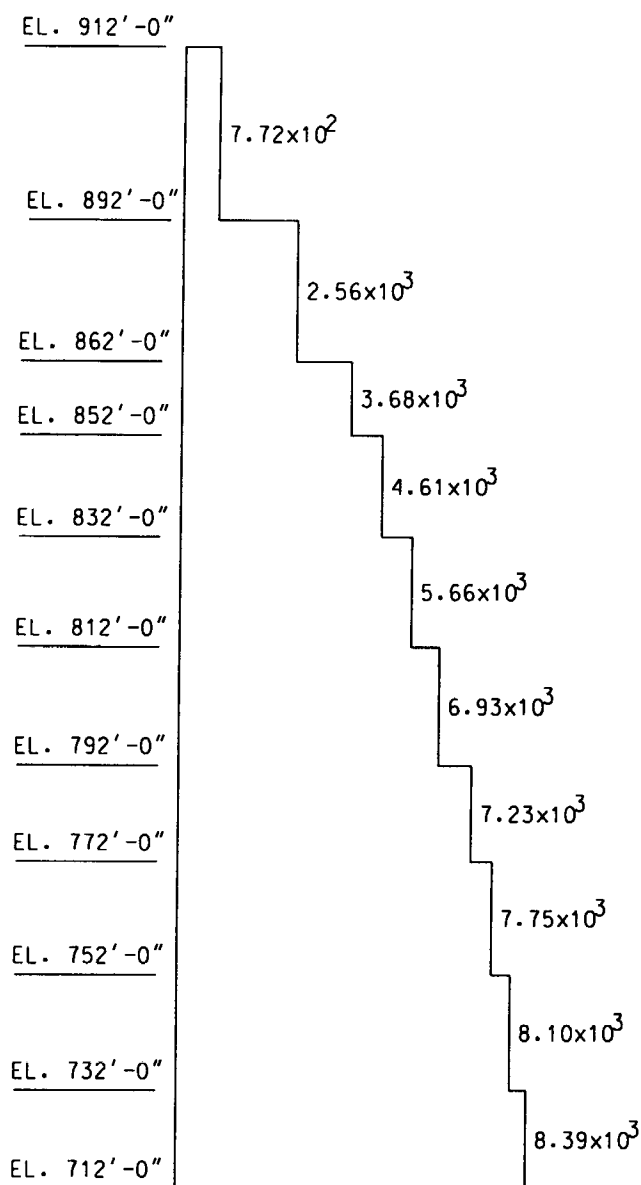


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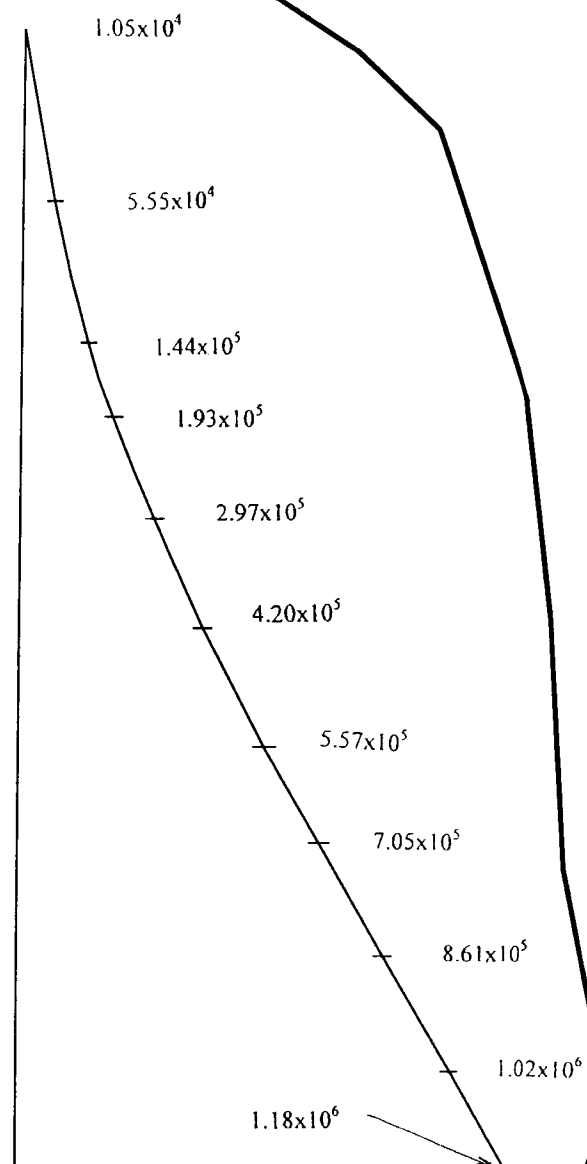
FIGURE 3.7-30

CONTAINMENT BUILDING
 HORIZONTAL MODEL

NOTE: NUMBERS IN □ REPRESENT ELEMENT NUMBERS.



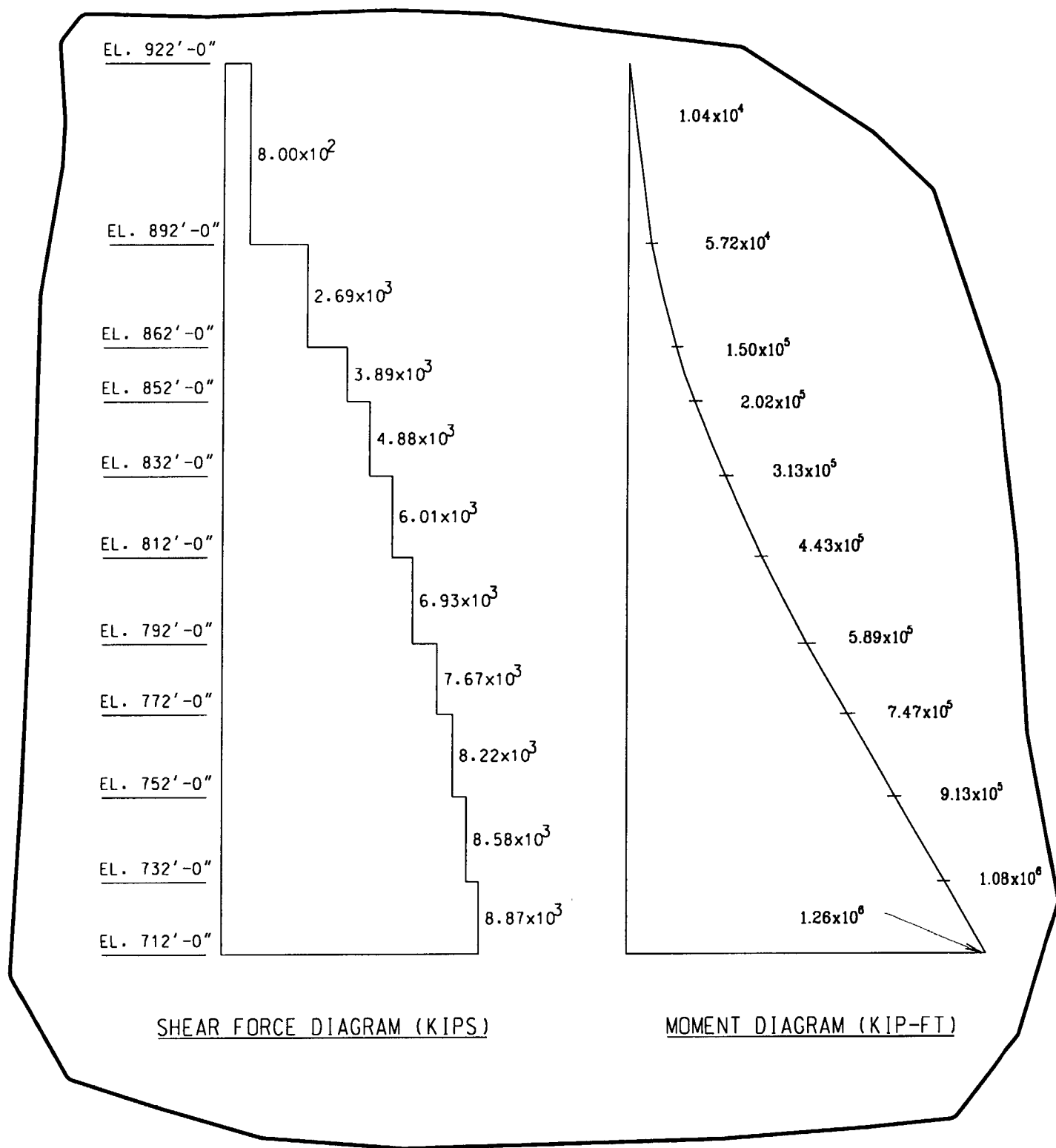
SHEAR FORCE DIAGRAM (KIPS)



MOMENT DIAGRAM (KIP-FT)

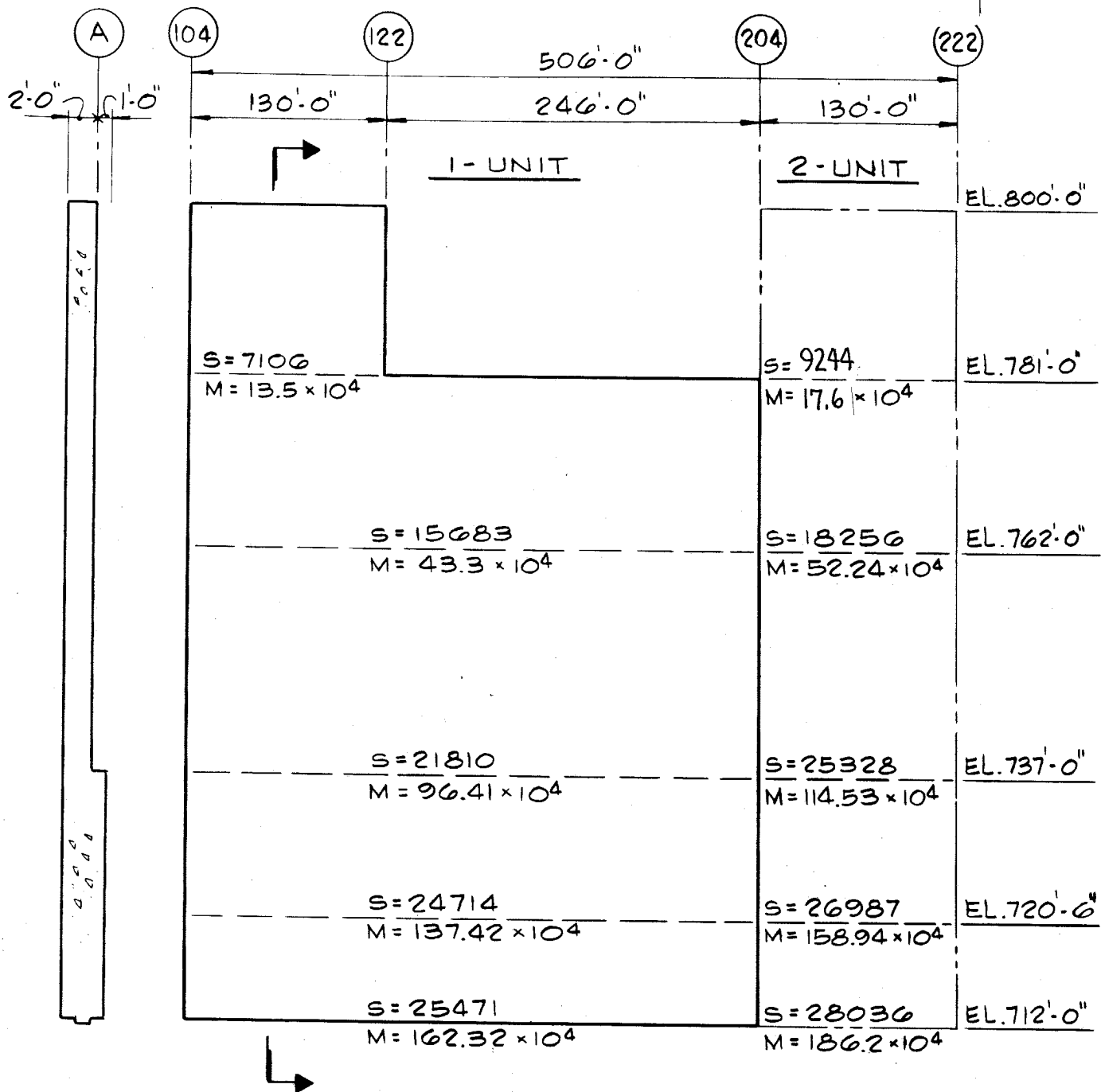
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FIGURE 3.7-31
SEISMIC RESPONSE LOADS (E-W)
FOR SSE FOR THE CONTAINMENT



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FIGURE 3.7-32
SEISMIC RESPONSE LOADS (N-S)
FOR SSE FOR THE CONTAINMENT



ELEVATION OF SHEAR WALL ALONG COLUMN ROW "A"

NOTES:

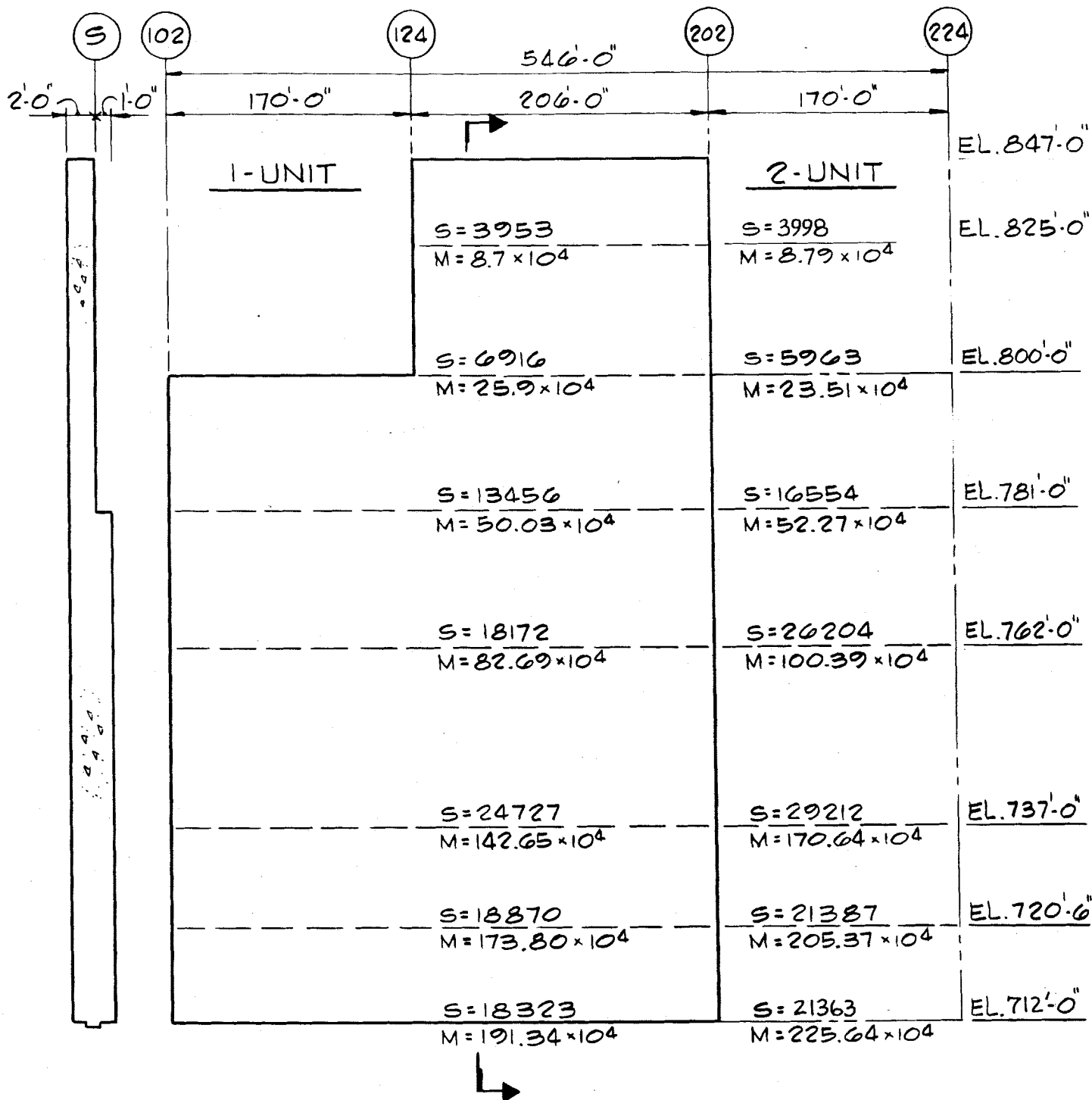
1. "S" DENOTES SHEAR FORCE (KIPS)
"M" DENOTES OVERTURNING MOMENTS (KIP-FT.)
2. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-33

SEISMIC RESPONSE LOADS FOR SSE
FOR SHEAR WALLS - COLUMN ROW "A"



ELEVATION OF SHEAR WALL ALONG COLUMN ROW "S"

NOTES:

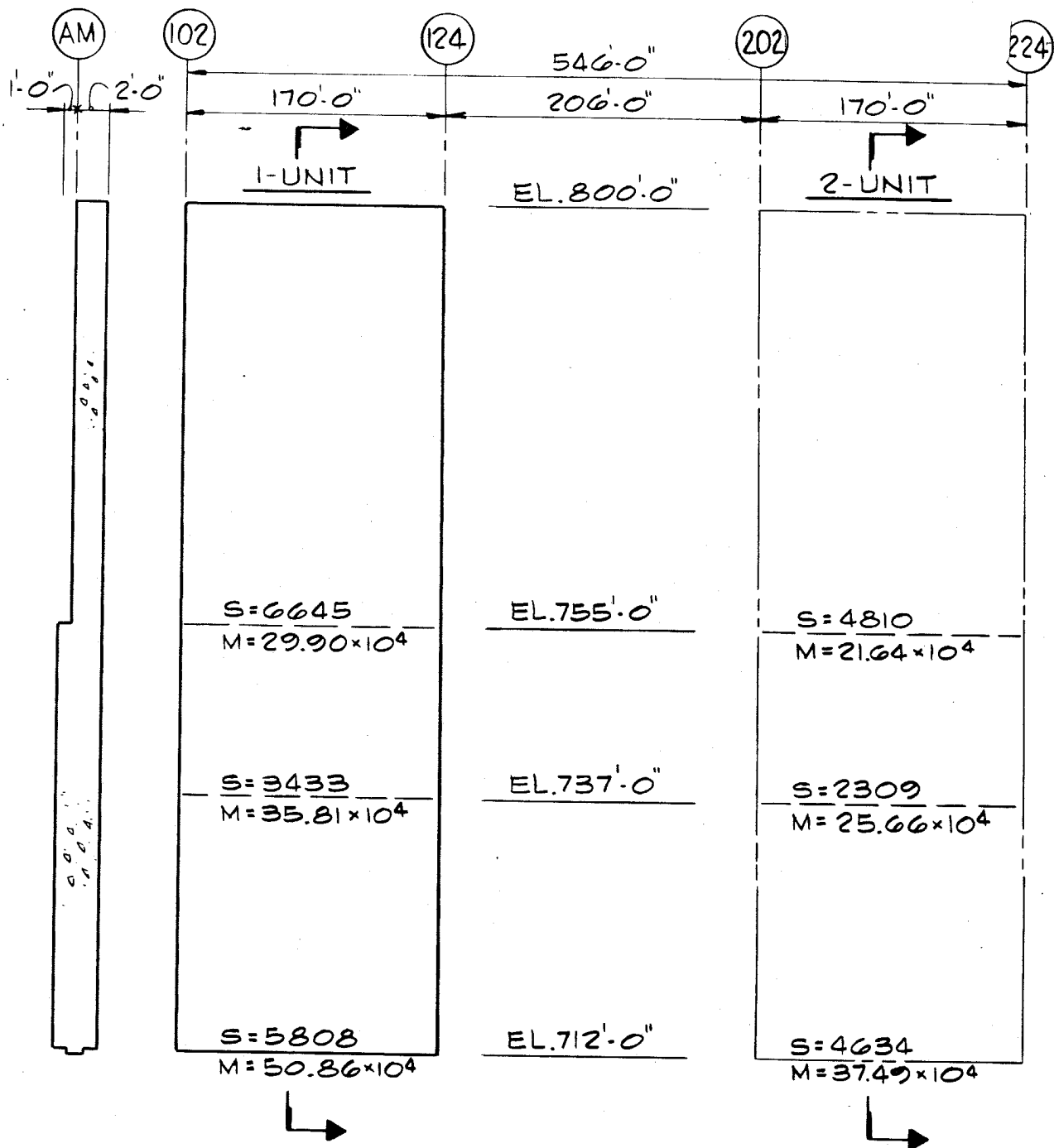
1. "S" DENOTES SHEAR FORCE (KIPS)
- "M" DENOTES OVERTURNING MOMENTS (KIP-FT.)
2. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-34

SEISMIC RESPONSE LOAD FOR SSE
FOR SHEAR WALLS - COLUMN ROW "S"



ELEVATION OF SHEAR WALLS ALONG COLUMN ROW "AM"

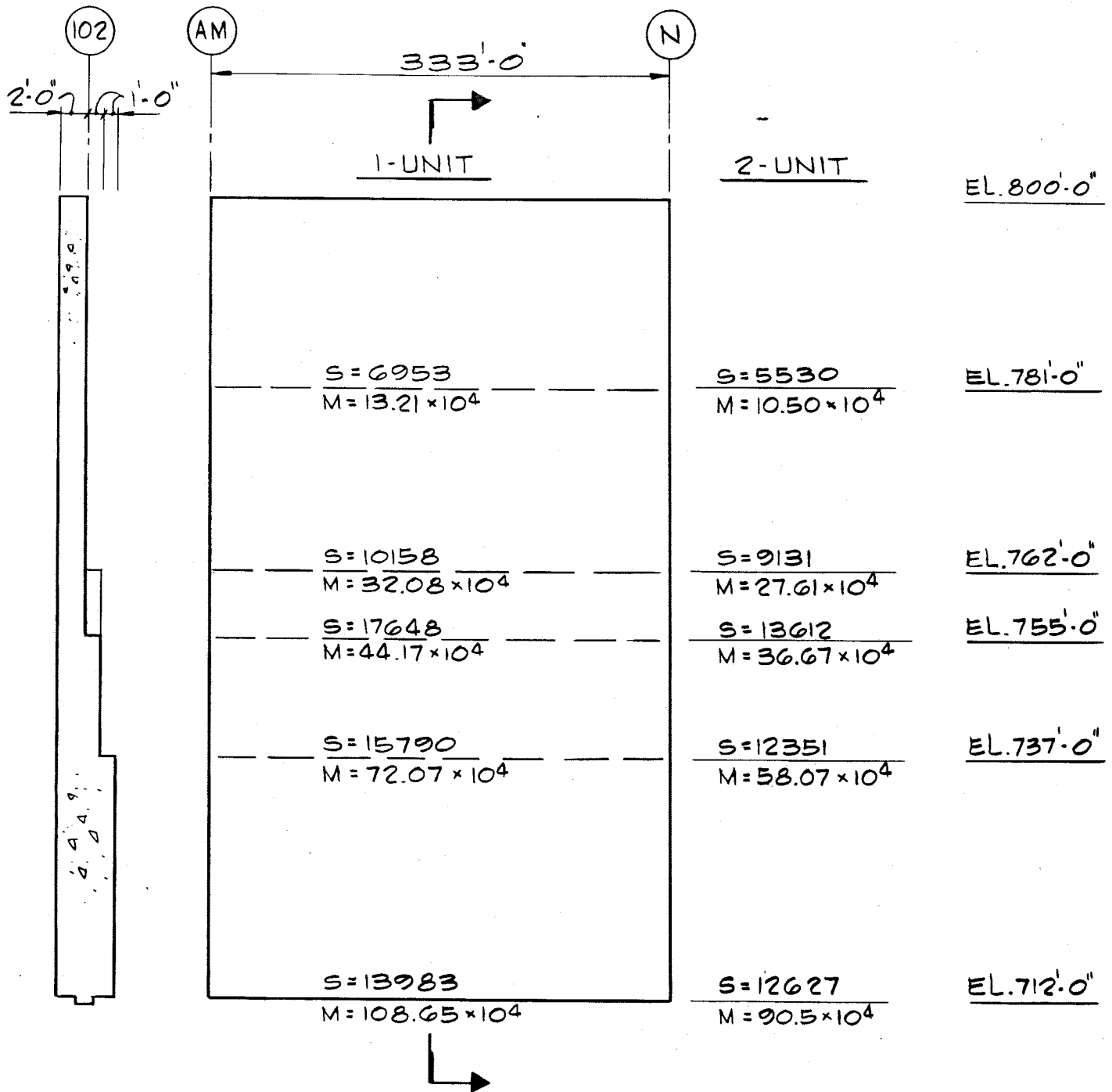
- NOTES:
1. "S" DENOTES SHEAR FORCE (KIPS)
 2. "M" DENOTES OVERTURNING MOMENTS (KIP-FT.)
 3. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-35

SEISMIC RESPONSE LOAD FOR SSE
FOR SHEAR WALLS - COLUMN ROW "AM"



ELEVATION OF SHEAR WALL ALONG COLUMN ROW "102"

NOTES:

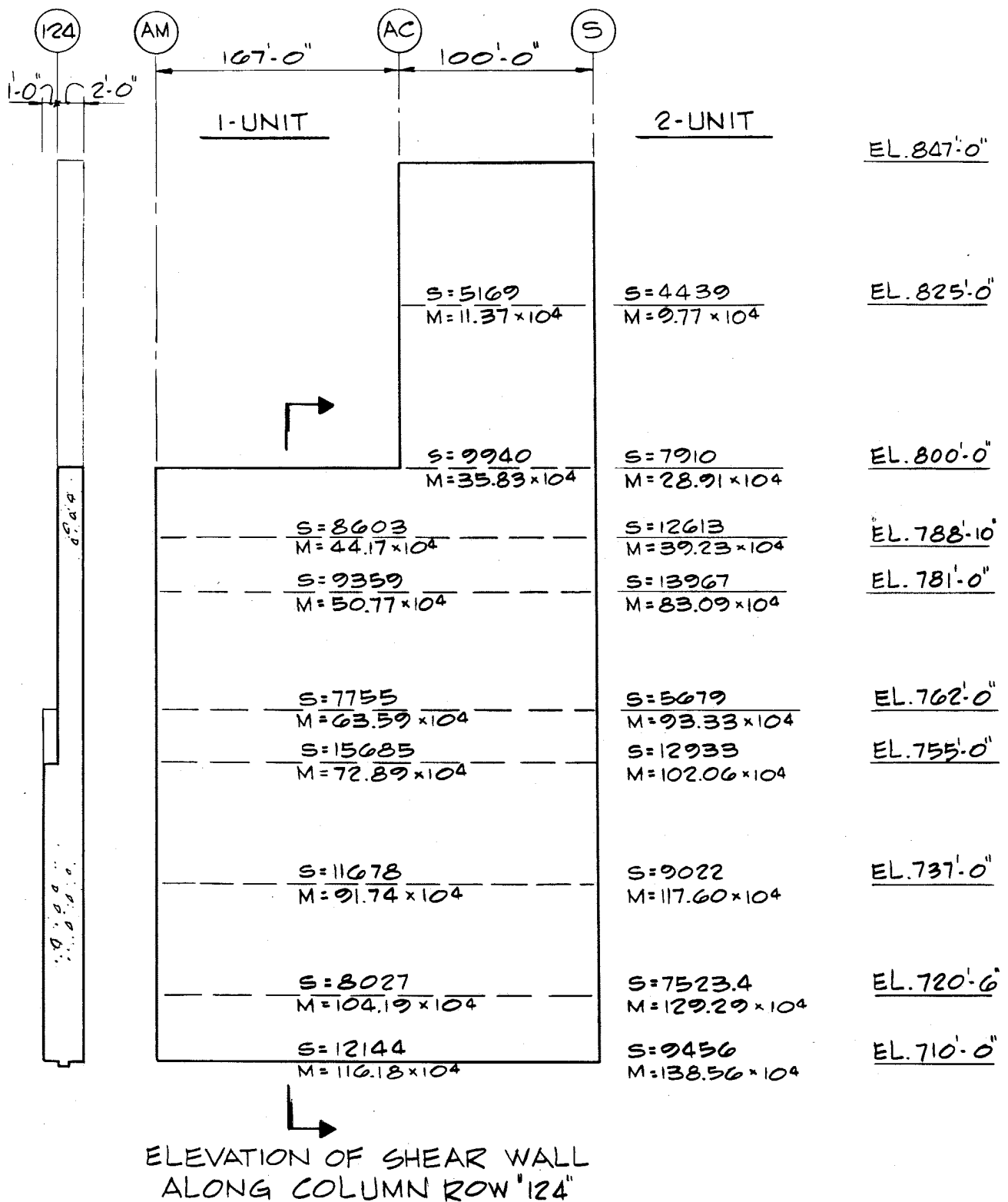
1. "S" DENOTES SHEAR FORCE (KIPS).
- "M" DENOTES OVERTURNING MOMENTS (KIP-FT.).
2. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-36

SEISMIC RESPONSE LOAD FOR SSE
FOR SHEAR WALLS - COLUMN ROW "102"



NOTES:

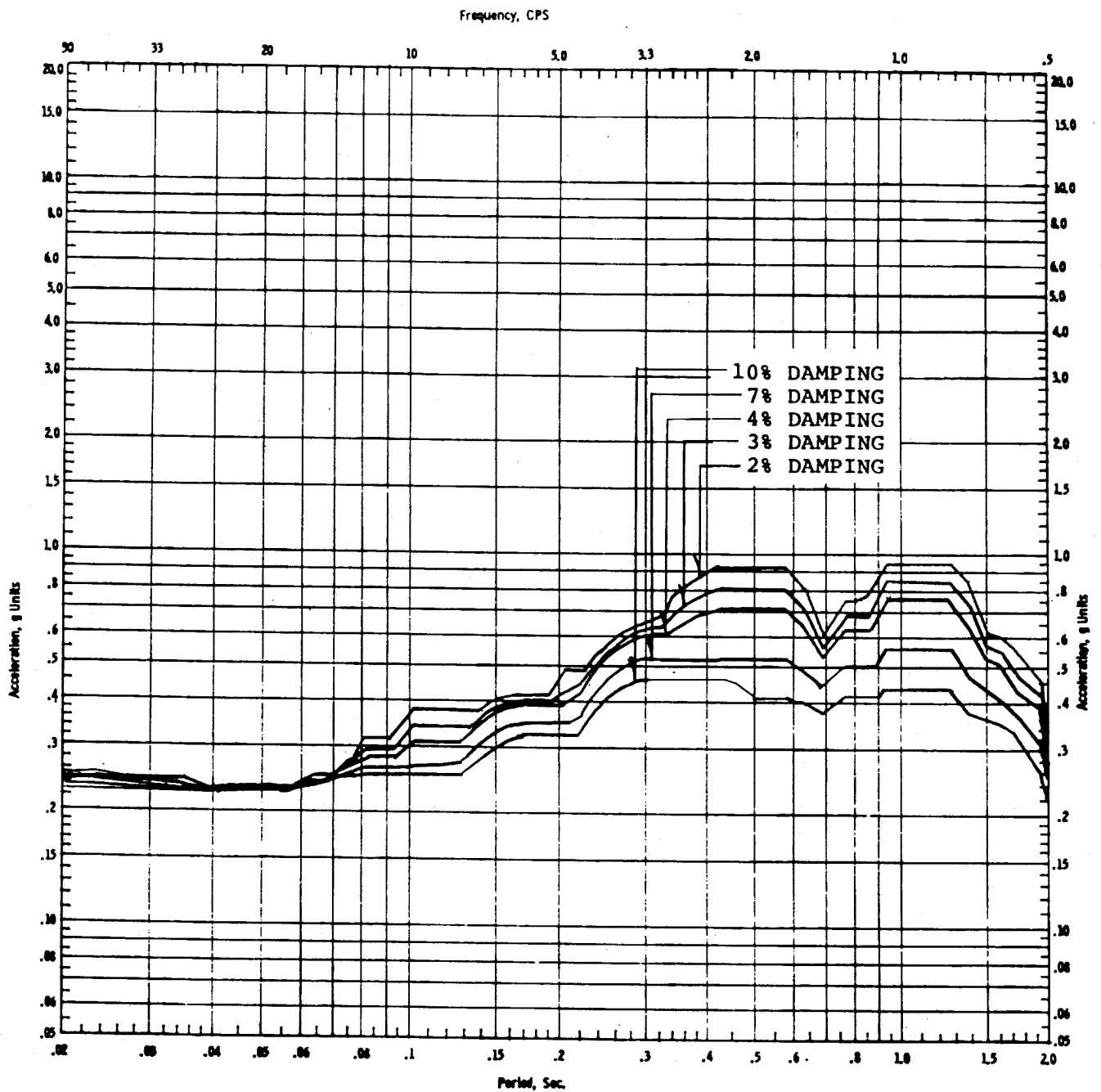
1. "S" DENOTES SHEAR FORCE (KIPS)
- "M" DENOTES OVERTURNING MOMENTS (KIP-FT.)
2. SHEAR FORCES AND MOMENTS SHOWN ARE FOR SSE LOADING.

NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-37

SEISMIC RESPONSE LOAD FOR SSE
FOR SHEAR WALLS - COLUMN ROW "124"



SPECTRA NO. 100-SS-EW
200-SS-EW

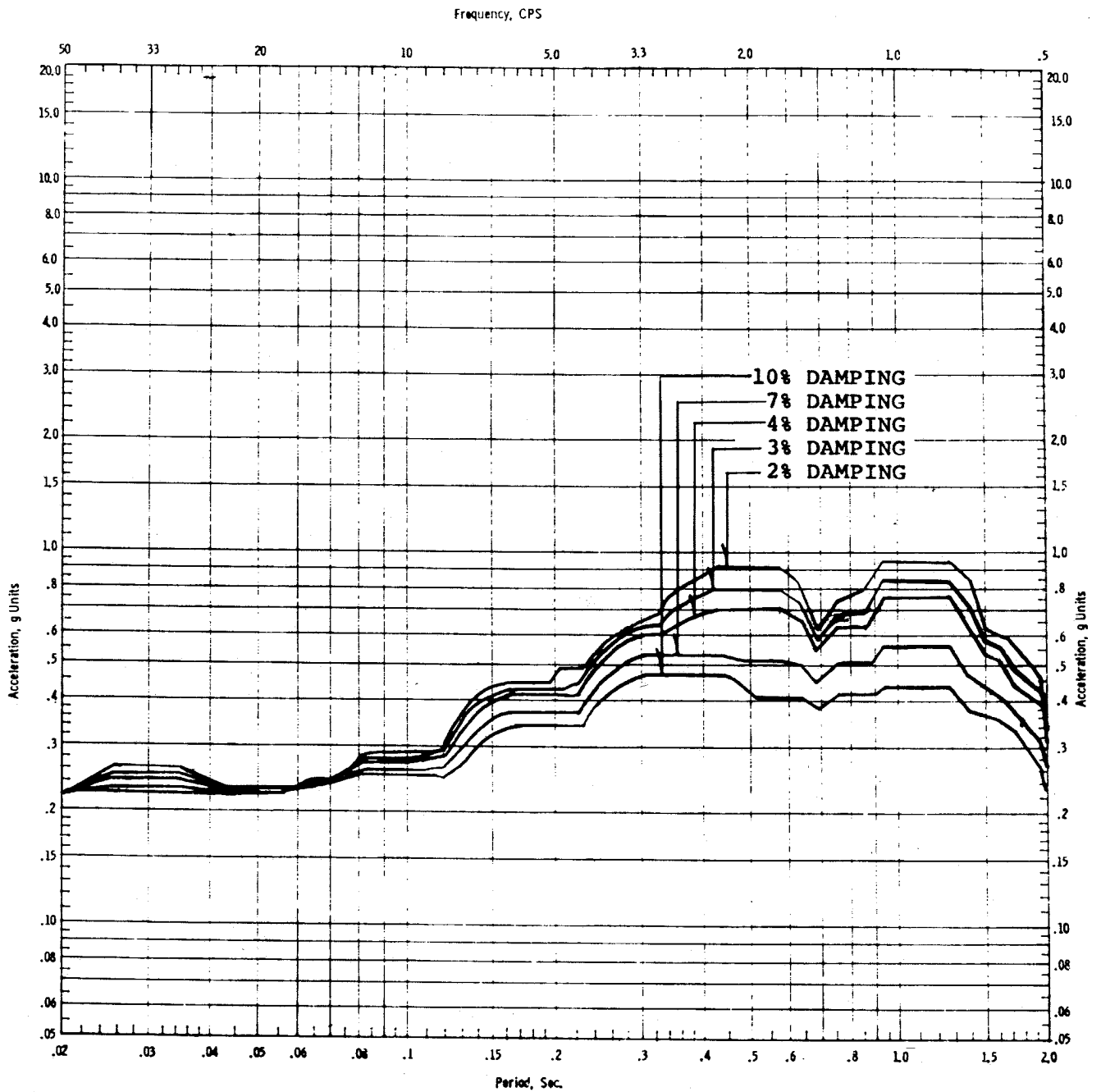
LOCATION: Aux., Fuel, Control, Diesel,
Radwaste & Turbine Bldgs.

ELEVATION: Basemat Floor

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FIGURE 3.7-38

HORIZONTAL SSE RESPONSE SPECTRA
AT BASE MAT FLOOR - X DIRECTION



SPECTRA NO. 100-SS-NS
 200-SS-NS.

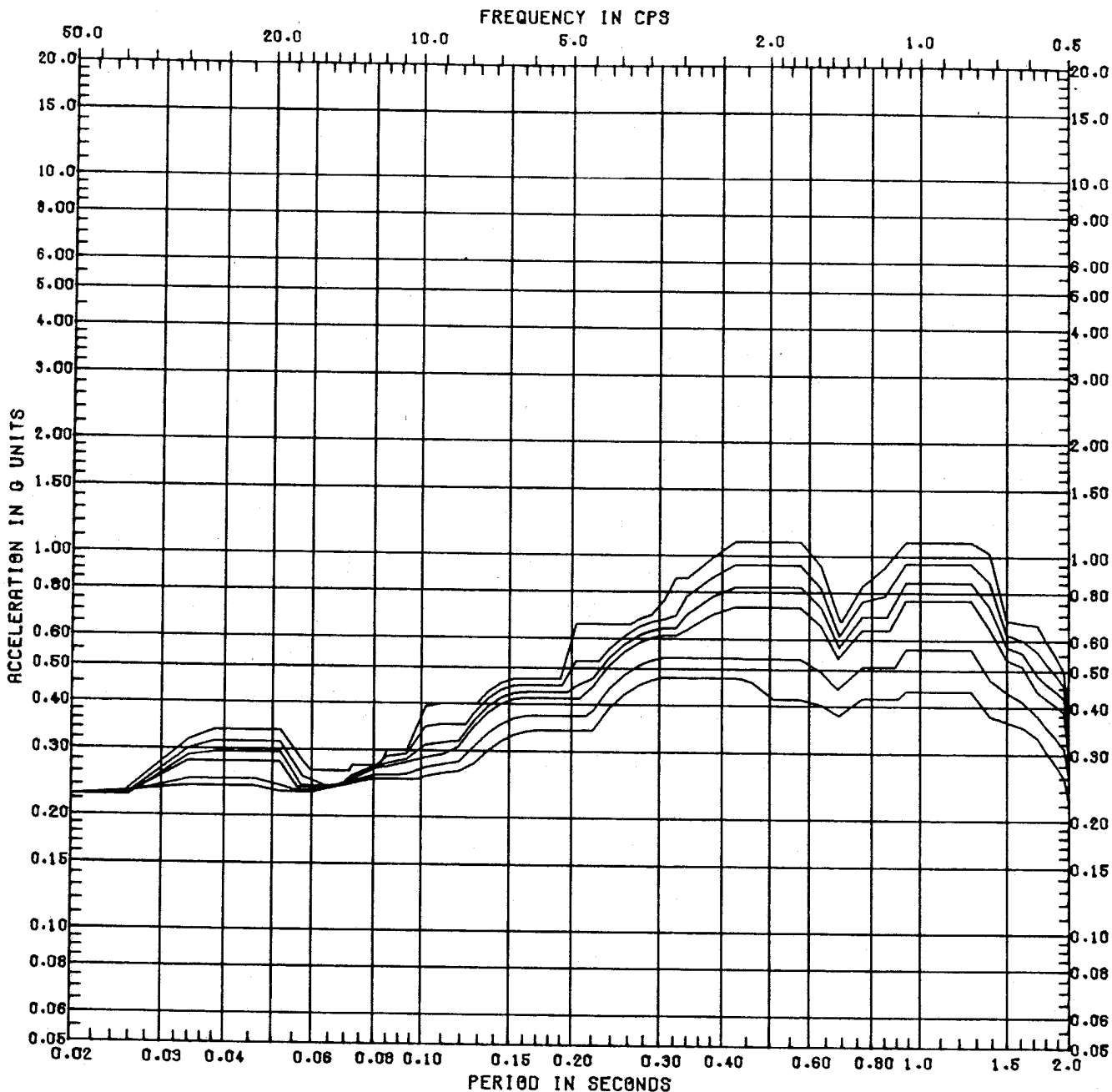
LOCATION: Aux., Fuel, Control,
 Diesel, Radwaste & Turbine
 Bldgs.
 ELEVATION:

Basemat Floor

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FIGURE 3.7-39

HORIZONTAL SSE RESPONSE SPECTRA
 AT BASE MAT FLOOR - Y DIRECTION



HORIZ. RESPONSE SPECTRA
 ELEVATION 742'-8"
 LOCATION Sacrificial Shield,
 Pedestal (RPV)

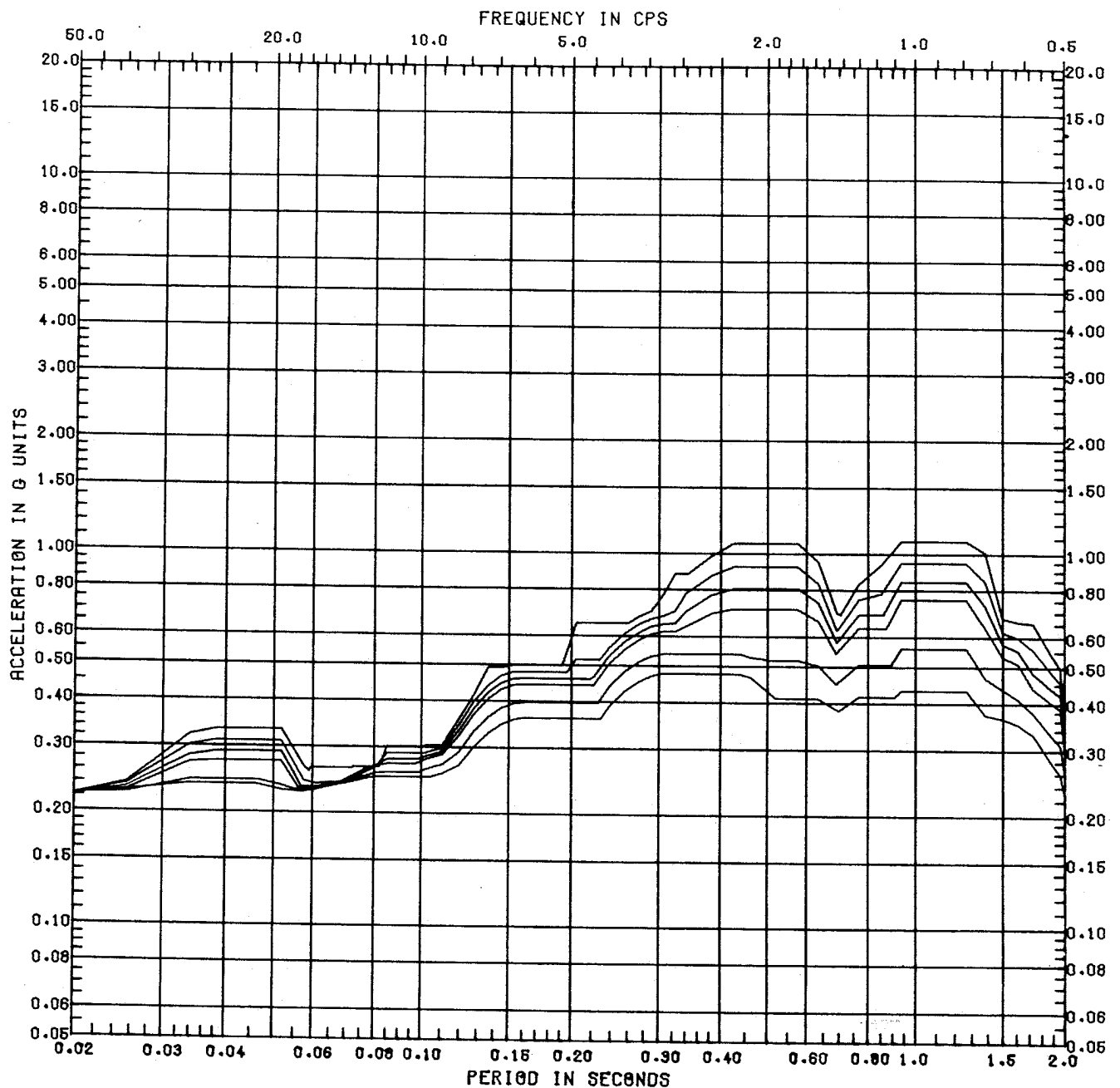
SPECTRA NO. 317-SS-EW
 322-SS-EW

REVISION NO. 02

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FIGURE 3.7-40

HORIZONTAL SSE RESPONSE SPECTRA
 AT 742'-8," SACRIFICIAL
 SHIELD PEDESTAL - X DIRECTION



HORIZ RESPONSE SPECTRA
 ELEVATION 742'-8"
 LOCATION Sacrificial Shield,
 Pedestal (RPV)

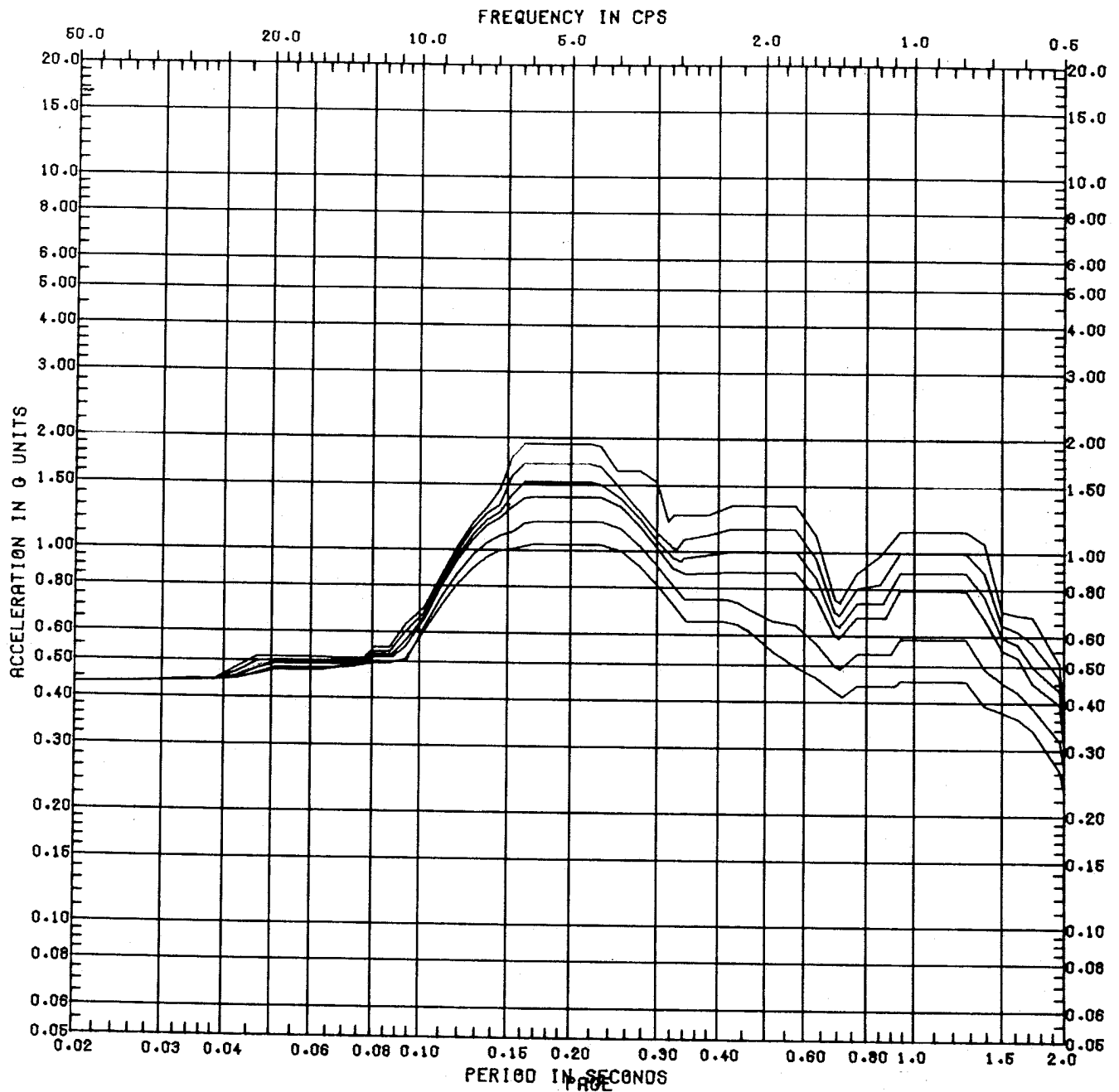
SPECTRA NO. 317-SS-NS
 322-SS-NS

REVISION NO. 02

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FIGURE 3.7-41

HORIZONTAL SSE RESPONSE SPECTRA
 AT 742'-8", SACRIFICIAL
 SHIELD PEDESTAL - Y DIRECTION



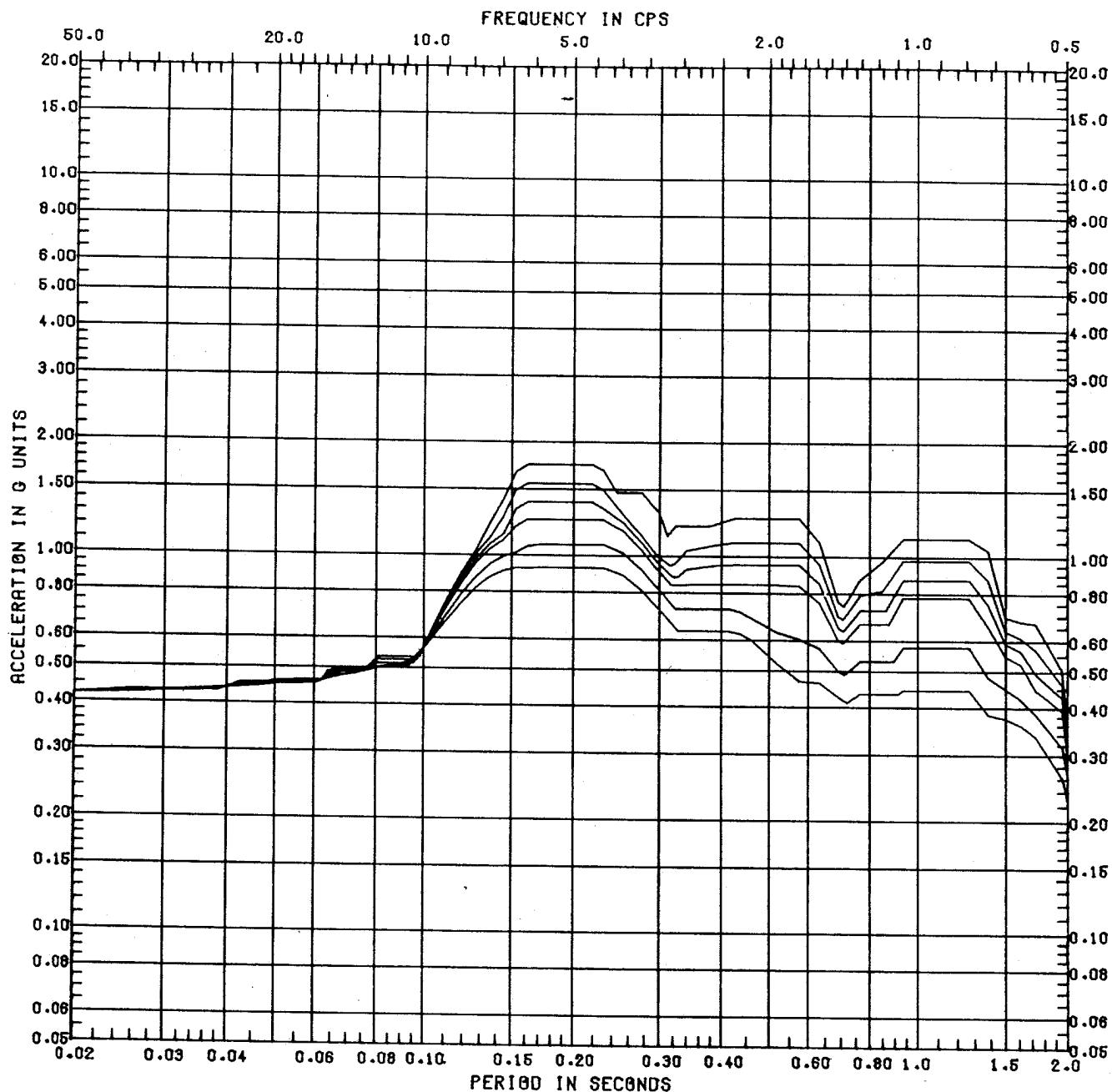
HORIZ. RESPONSE SPECTRA
 ELEVATION 803'-3", 828'-3"
 LOCATION Drywell

SPECTRA NO. 315-SS-EW
 316-SS-EW
 REVISION NO. 02

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FIGURE 3.7-42

HORIZONTAL SSE RESPONSE SPECTRA
 AT 803'-3" AND 828'-3",
 DRYWELL - X DIRECTION



HORIZ. RESPONSE SPECTRA
 ELEVATION 803'-3", 828'-3"
 LOCATION Drywell

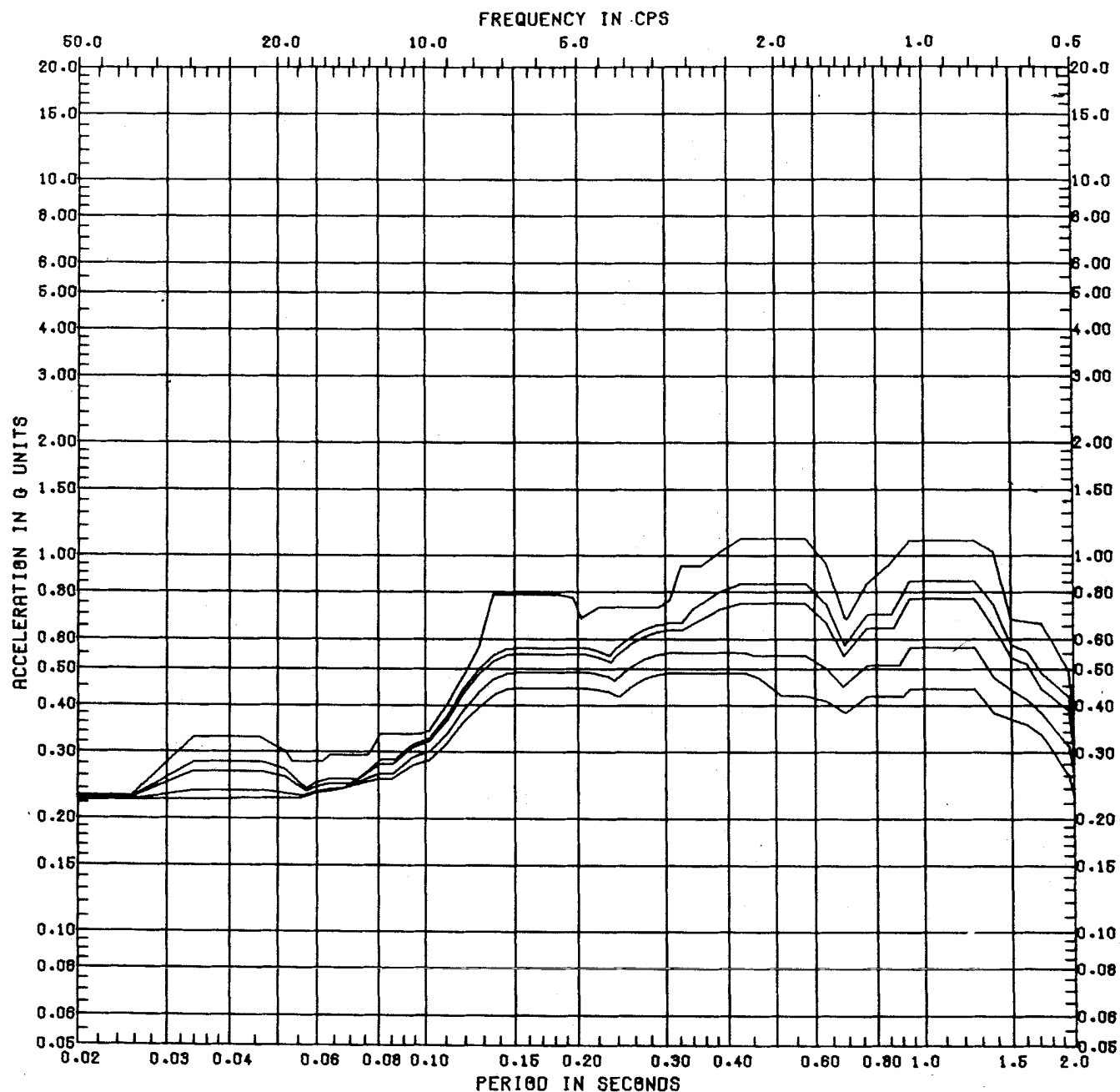
SPECTRA NO. 315-SS-NS
 316-SS-NS

REVISION NO. 02

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FIGURE 3.7-43

HORIZONTAL SSE RESPONSE SPECTRA
 AT 803'-3" AND 828'-3",
 DRYWELL - Y DIRECTION



HORIZ RESPONSE SPECTRA

ELEVATION 737'-0"

LOCATION Aux., Fuel, Control, Diesel,
Radwaste, & Turbine Bldgs.

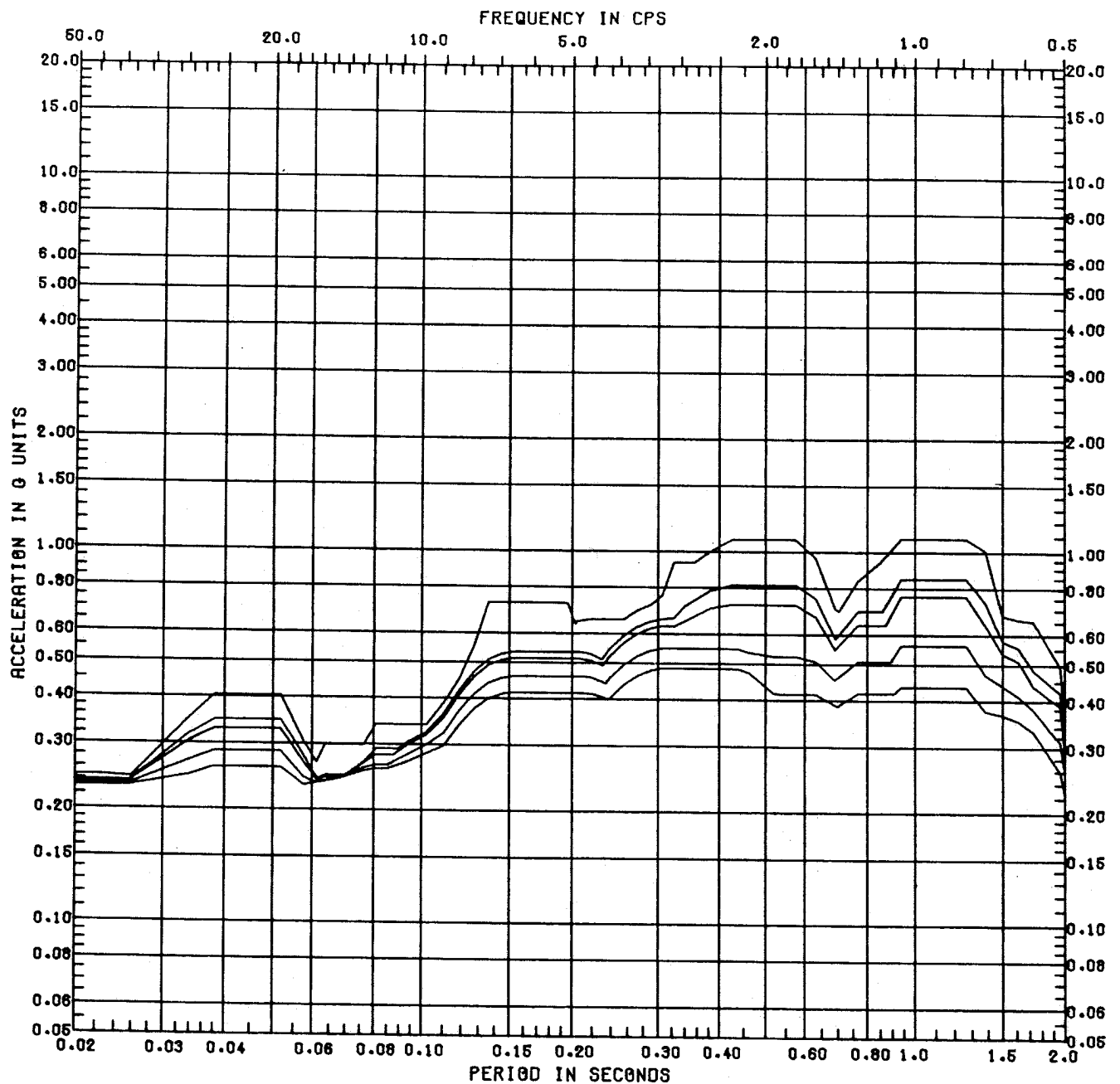
SPECTRA NO 102 to 102e-SS-EW
202-SS-EW

REVISION NO.02

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FIGURE 3.7-44

HORIZONTAL SSE RESPONSE SPECTRA
AT 737'-0" MAIN
BUILDING - X DIRECTION



HORIZ. RESPONSE SPECTRA

SPECTRA NO 102 to 102e-SS-NS
202-SS-NS

ELEVATION 737'-0"

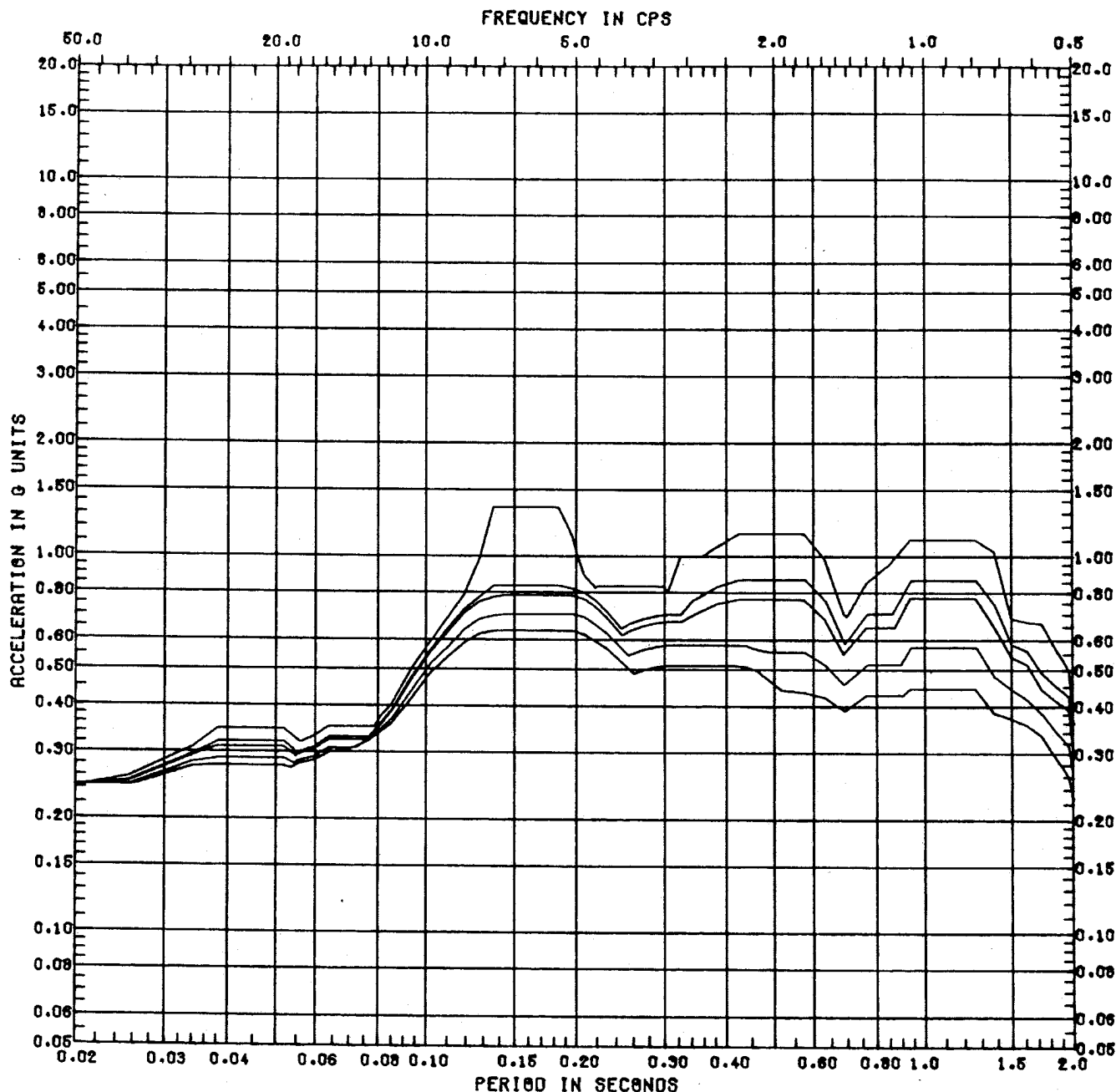
LOCATION Aux., Fuel, Control,
Diesel, Radwaste, & Turbine
Bldgs.

REVISION NO. 02

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FIGURE 3.7-45

HORIZONTAL SSE RESPONSE SPECTRA
AT 737'-0" MAIN
BUILDING - Y DIRECTION



HORIZ. RESPONSE SPECTRA

ELEVATION 762'-0"

LOCATION Aux., Control, Diesel,
Radwaste & Turbine Bldgs.

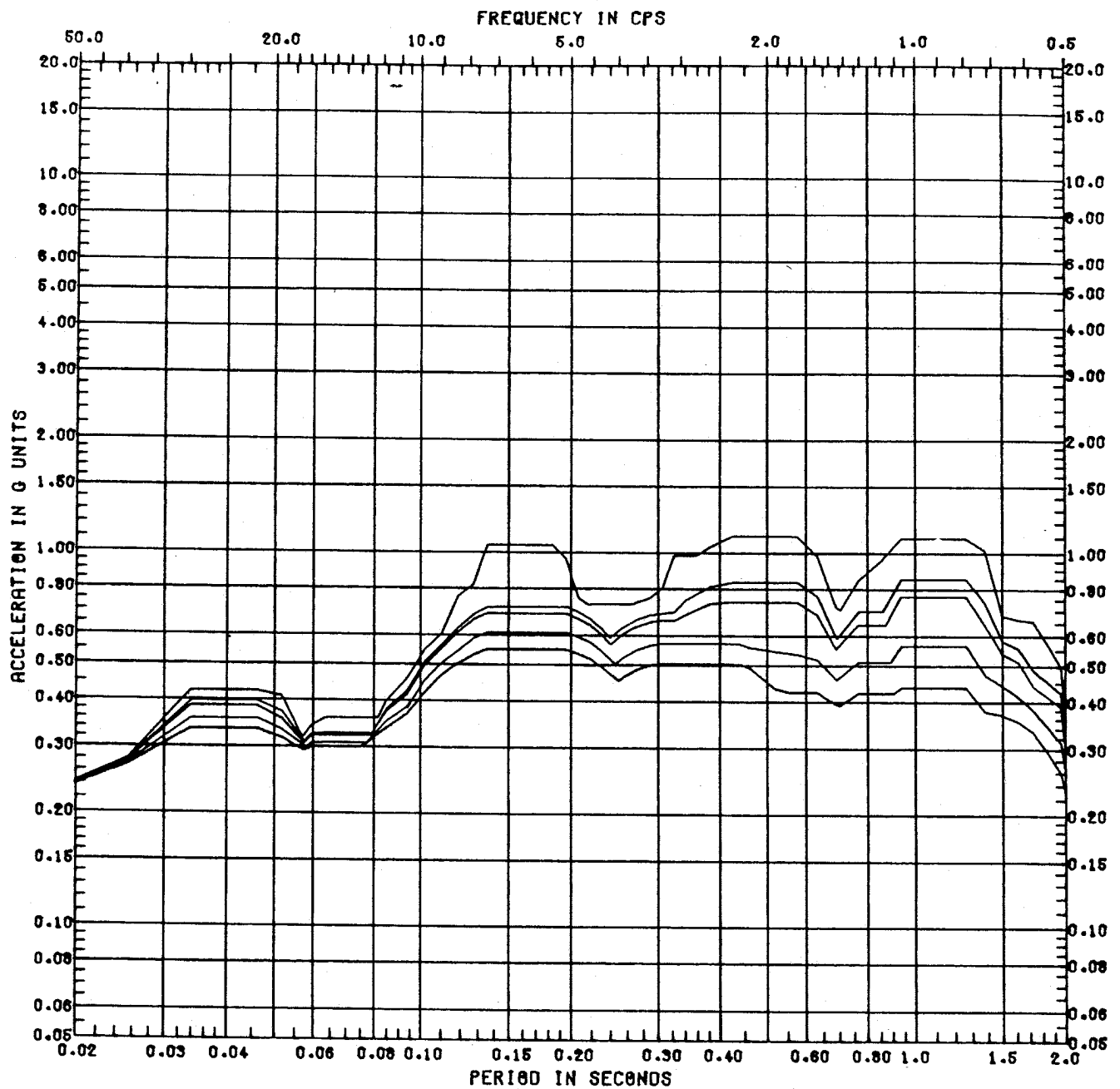
SPECTRA NO. 105 to 105d-SS-EW
205-SS-EW

REVISION NO. 02

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FIGURE 3.7-46

HORIZONTAL SSE RESPONSE SPECTRA
AT 762'-0" MAIN
BUILDING - X DIRECTION



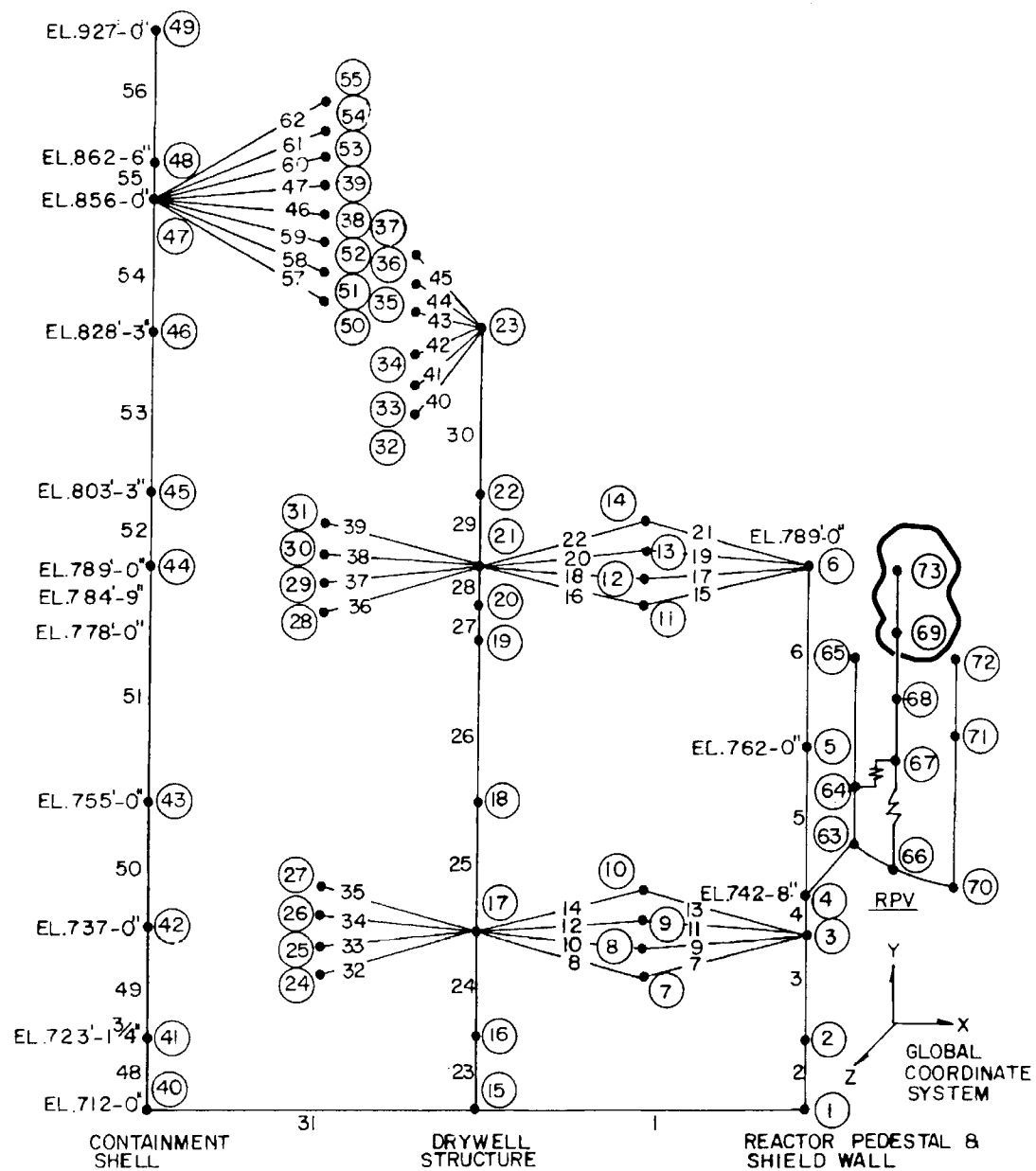
HORIZ. RESPONSE SPECTRA
 ELEVATION 762'-0"
 LOCATION Aux., Control, Diesel,
 Radwaste & Turbine Bldgs

SPECTRA NO. 105 to 105d-SS-NS
 205-SS-NS
 REVISION NO. 02

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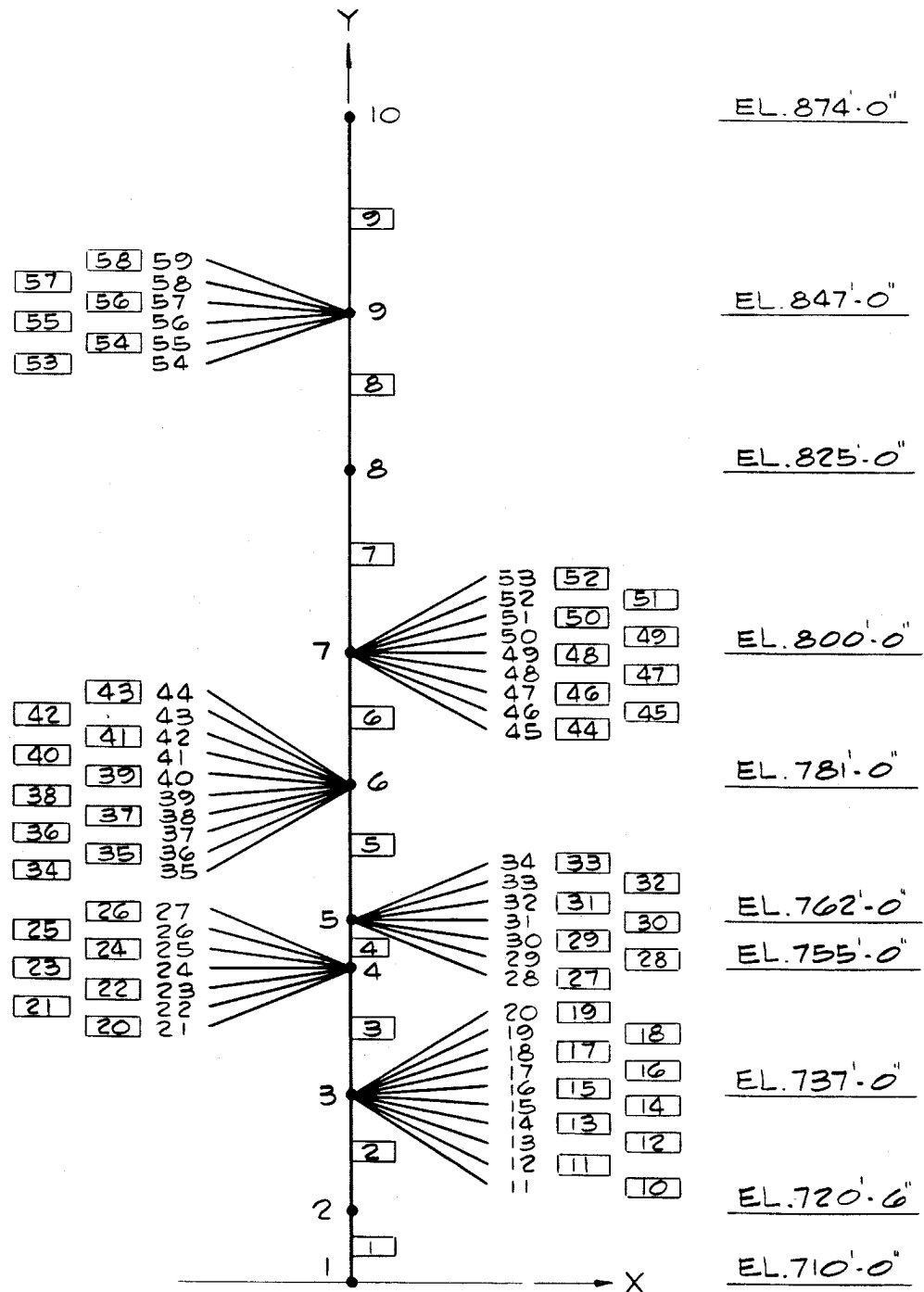
FIGURE 3.7-47

HORIZONTAL SSE RESPONSE SPECTRA
 AT 762'-0" MAIN
 BUILDING - Y DIRECTION



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

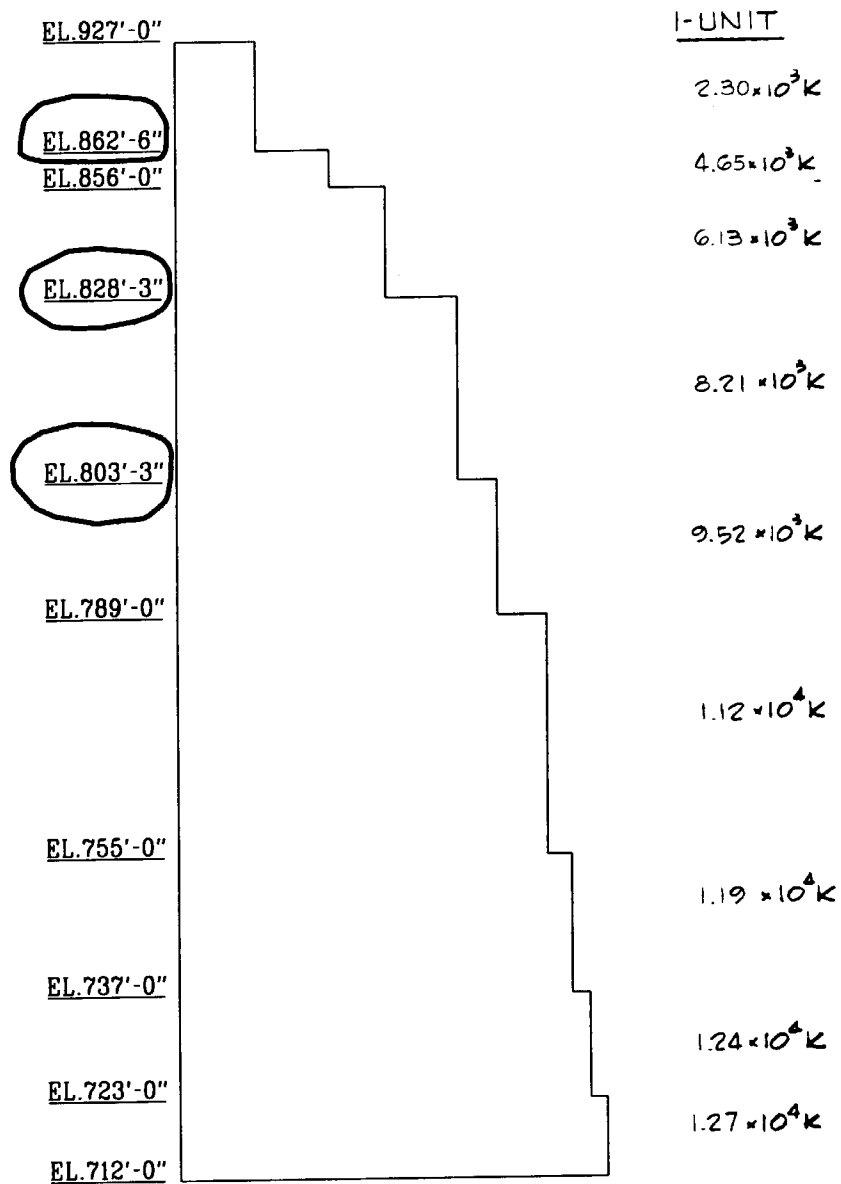
FIGURE 3.7-48
CONTAINMENT BUILDING
MODEL FOR VERTICAL EXCITATION



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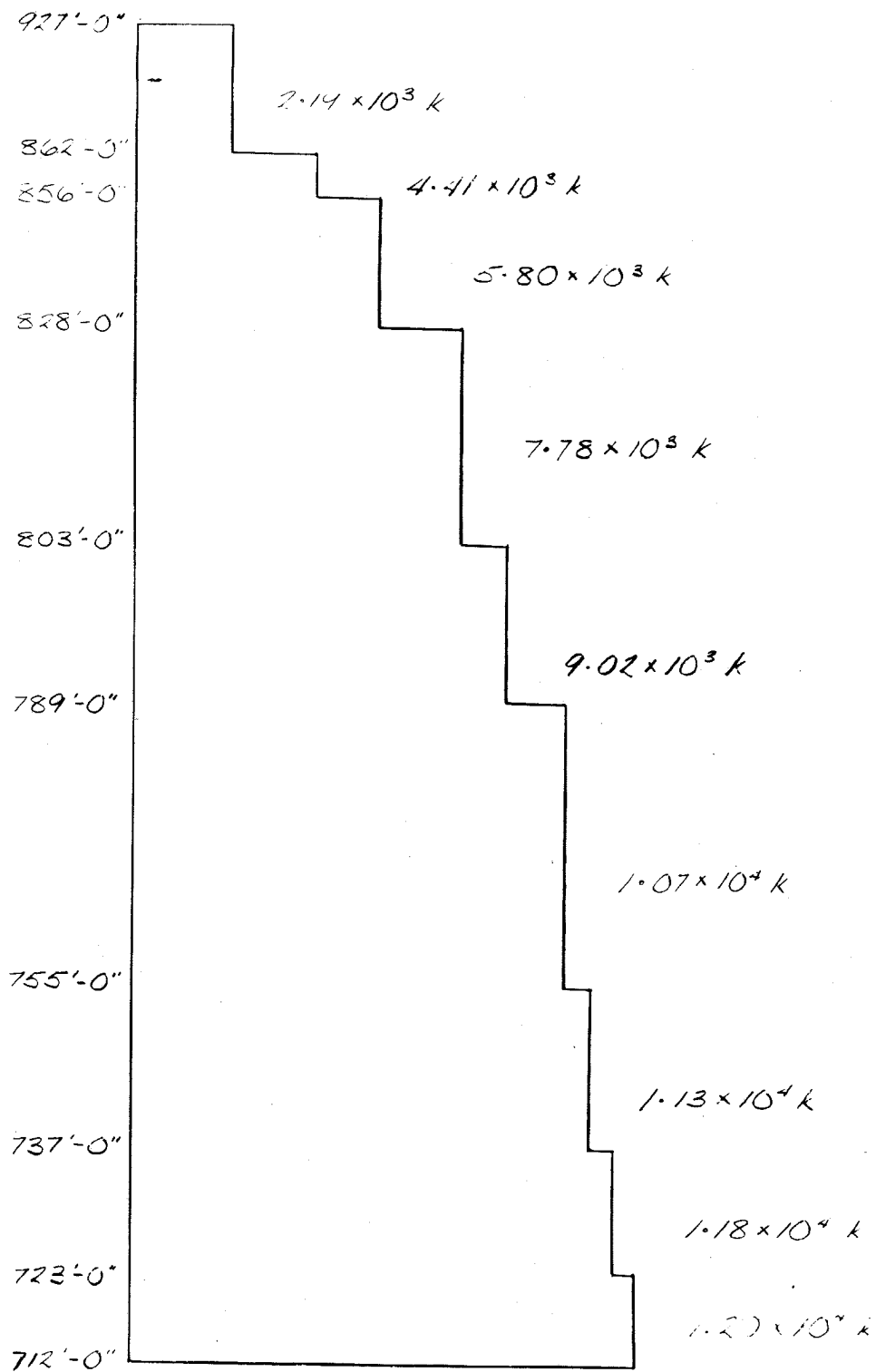
FIGURE 3.7-49

MAIN BUILDING MODEL
FOR VERTICAL EXCITATION



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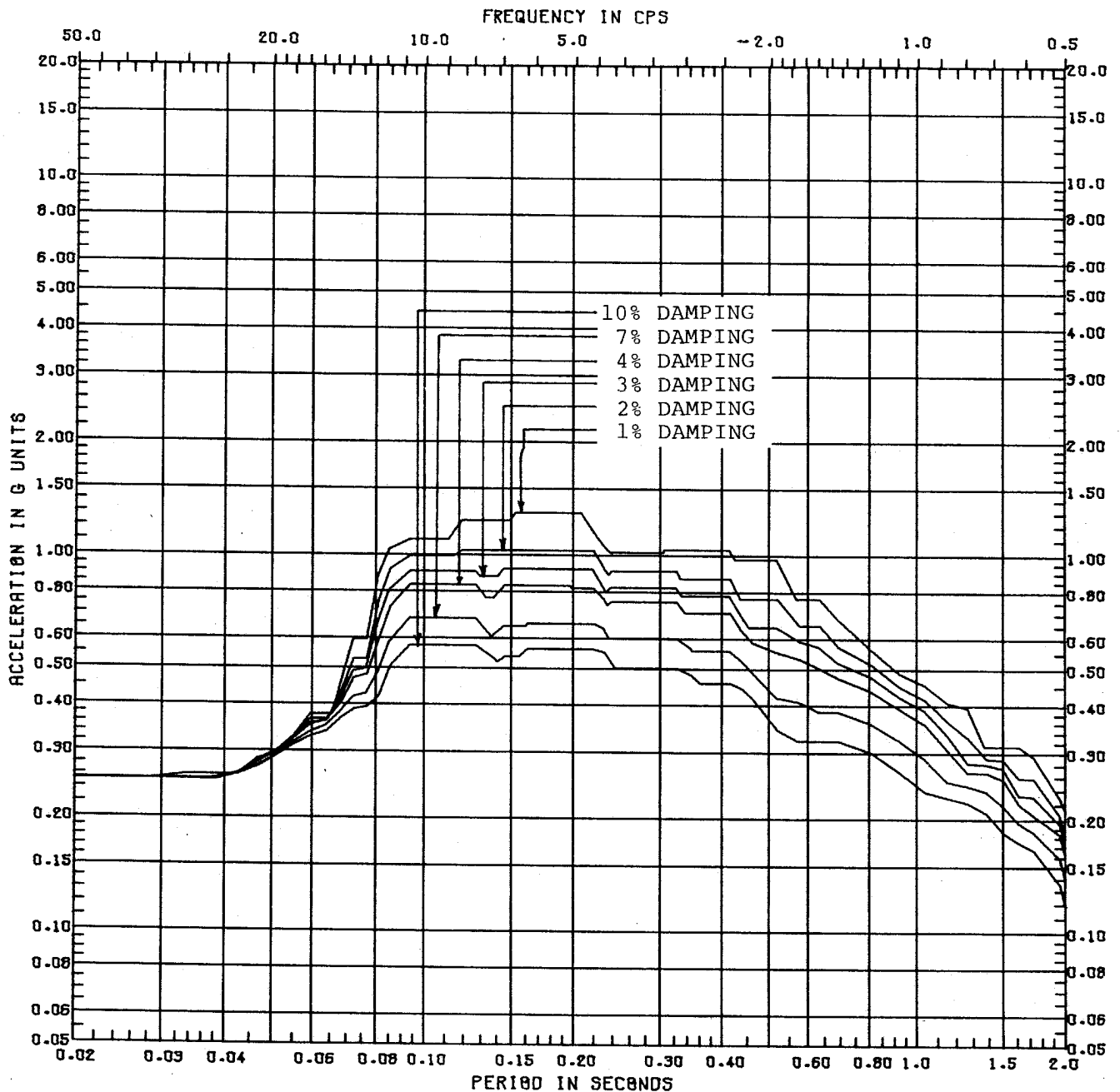
FIGURE 3.7-50
SEISMIC SSE LOAD FOR AXIAL
FORCES FOR CONTAINMENT-1-UNIT



NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-51
TOTAL AXIAL FORCE - CONTAINMENT 2-UNIT
VERTICAL SSE



VERT RESPONSE SPECTRA

SPECTRA NO. 100-SS-VS & VI

ELEVATION Basemat Floor

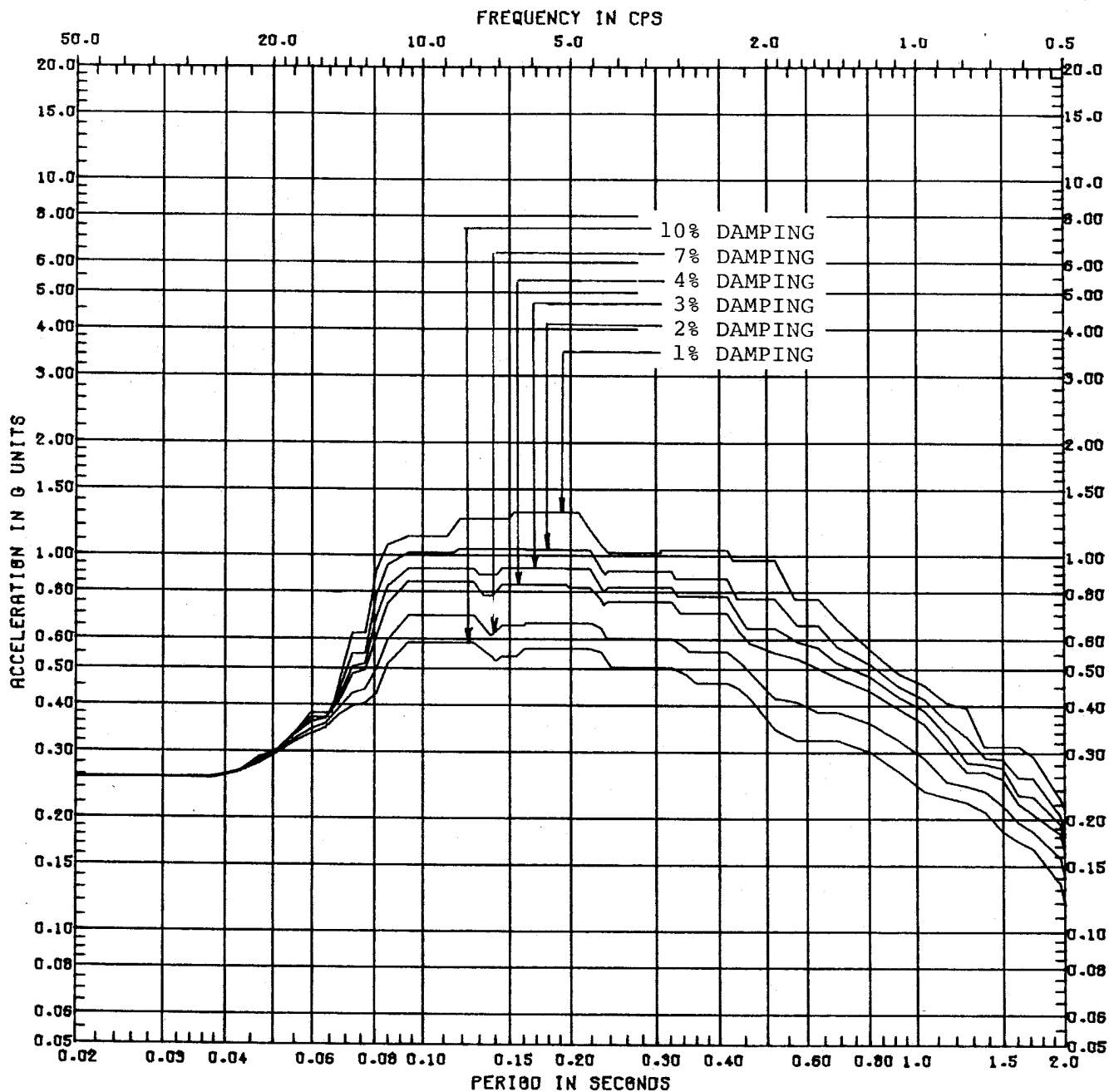
LOCATION Aux., Fuel, Control, Diesel,
Radwaste & Turbine Bldgs.

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FIGURE 3.7-52

VERTICAL SSE RESPONSE SPECTRA
AT BASE MAT FLOOR



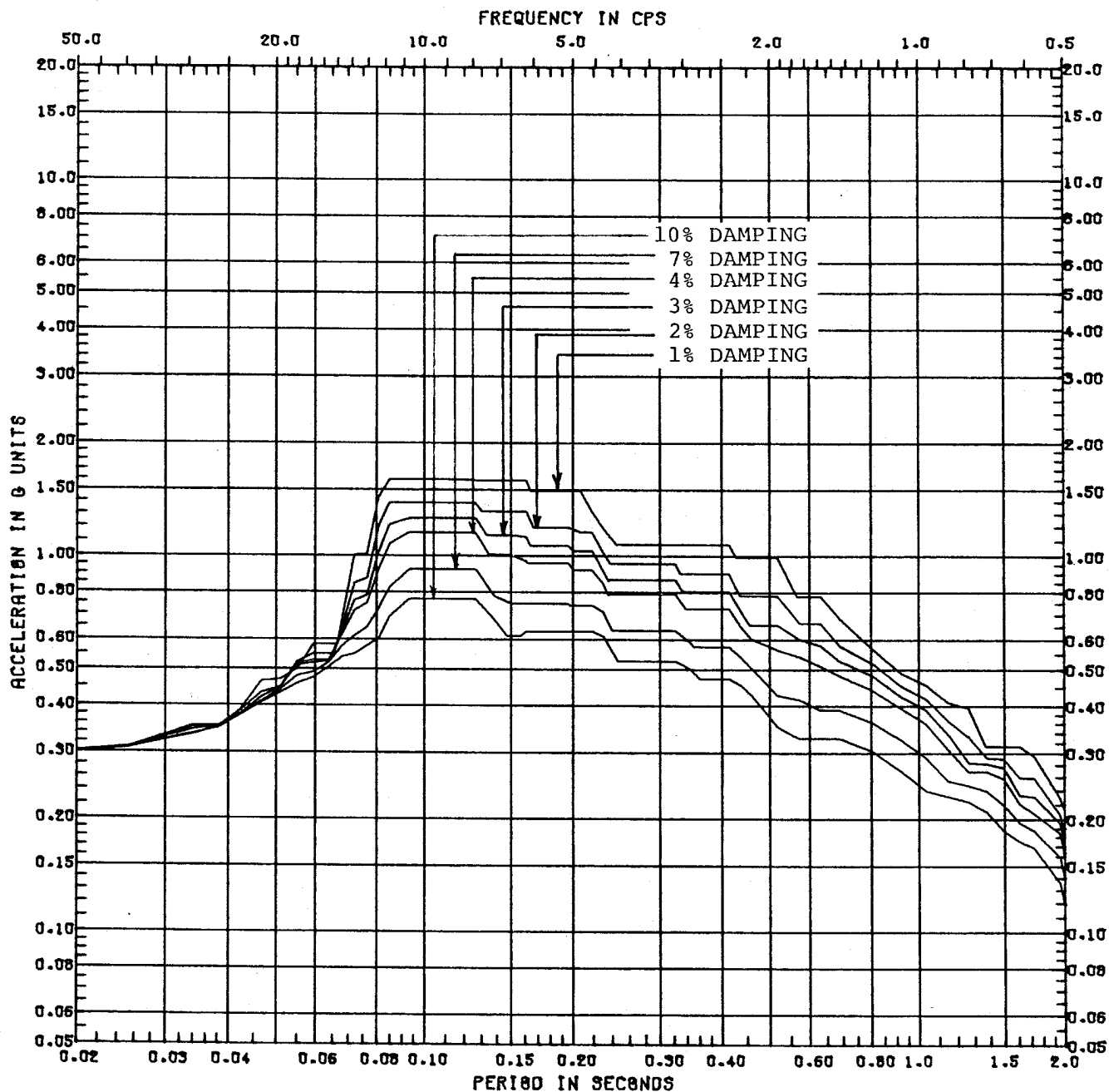
VERT RESPONSE SPECTRA
 ELEVATION 742'-8"
 LOCATION Sacrificial Shield,
 Pedestal, RPV Base

SPECTRA NO. 317-SS-VW
 322-SS-VW
 400-SS-VW
 REVISION NO. 05

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FIGURE 3.7-53

VERTICAL SSE RESPONSE SPECTRA
 AT 742'-8", SACRIFICIAL SHIELD
 PEDESTAL RPV BASE



VERT RESPONSE SPECTRA
ELEVATION 803'-3"
LOCATION Drywell

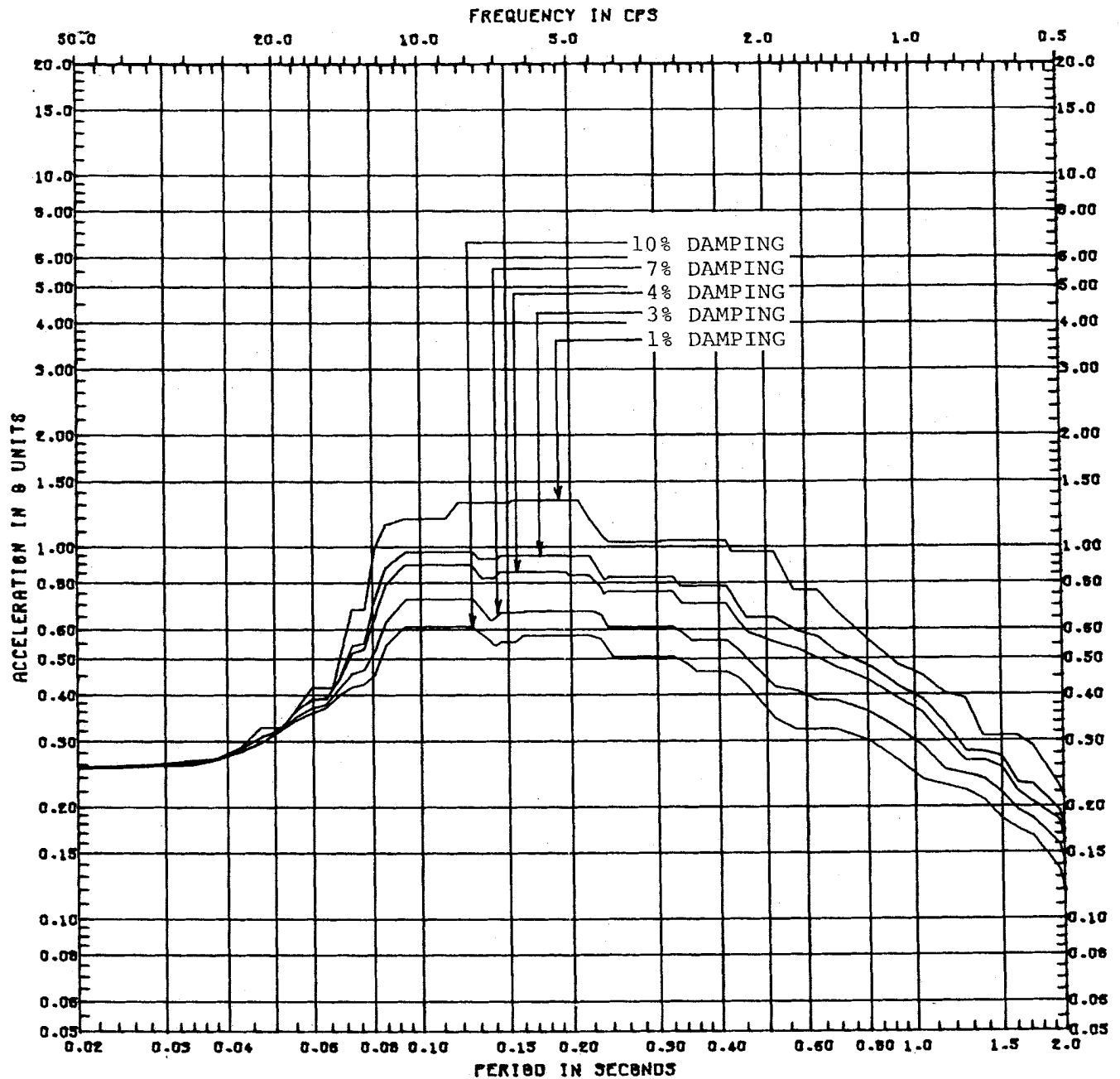
SPECTRA NO. 315-SS-VW

REVISION NO. 05

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FIGURE 3.7-54

VERTICAL SSE RESPONSE SPECTRA
AT 803'-3" DRYWELL



VERT RESPONSE SPECTRA

SPECTRA NO. 102 to 102e-SS-VW

ELEVATION 737'-0"

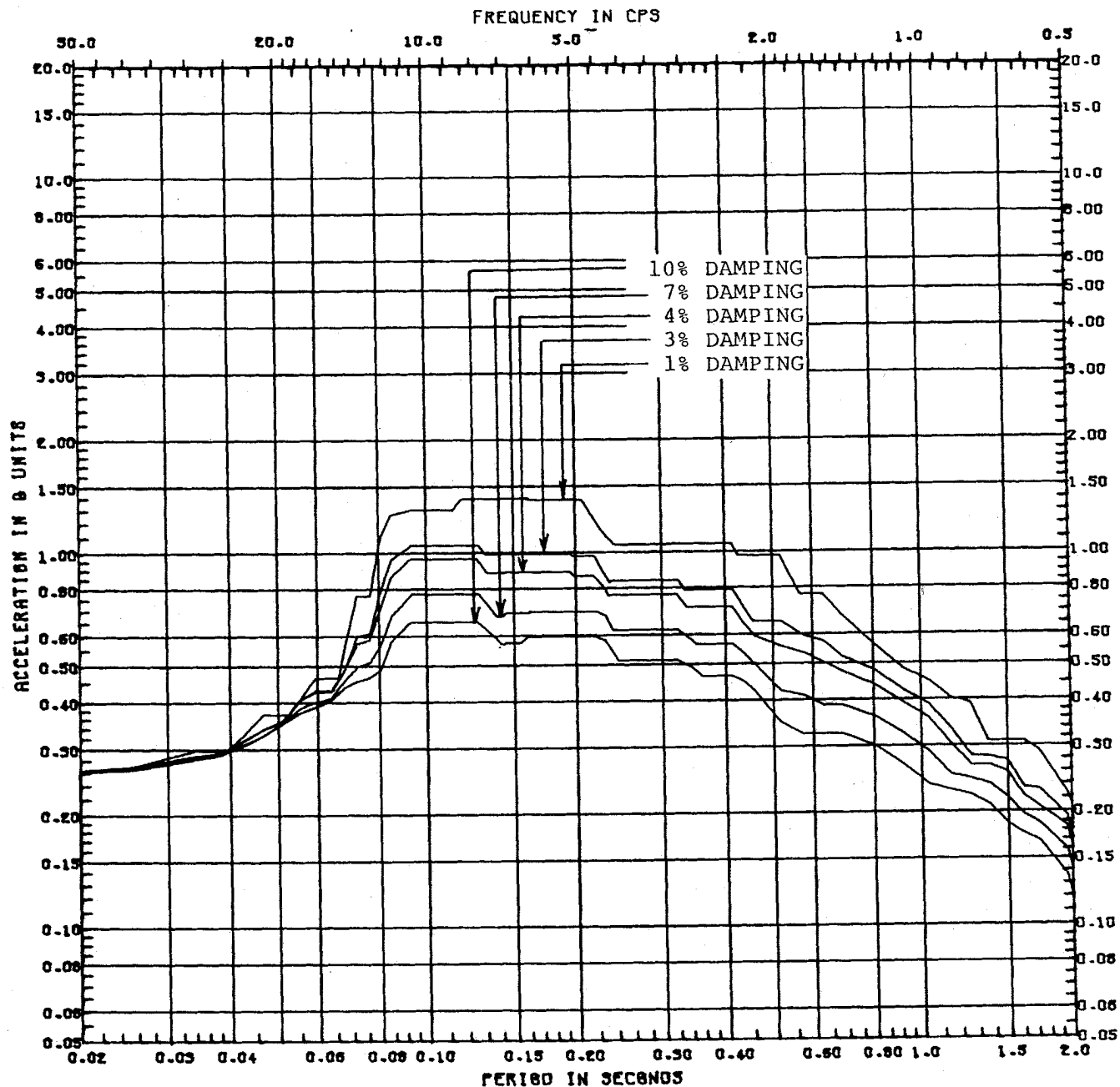
LOCATION Aux, Fuel, Control, Radwaste, Diesel Bldgs.

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FIGURE 3.7-55

VERTICAL SSE RESPONSE SPECTRA
AT 737'-0" MAIN BUILDING



VERT RESPONSE SPECTRA

ELEVATION 762'-0"

LOCATION Aux., Control, Radwaste,
Diesel Bldgs.

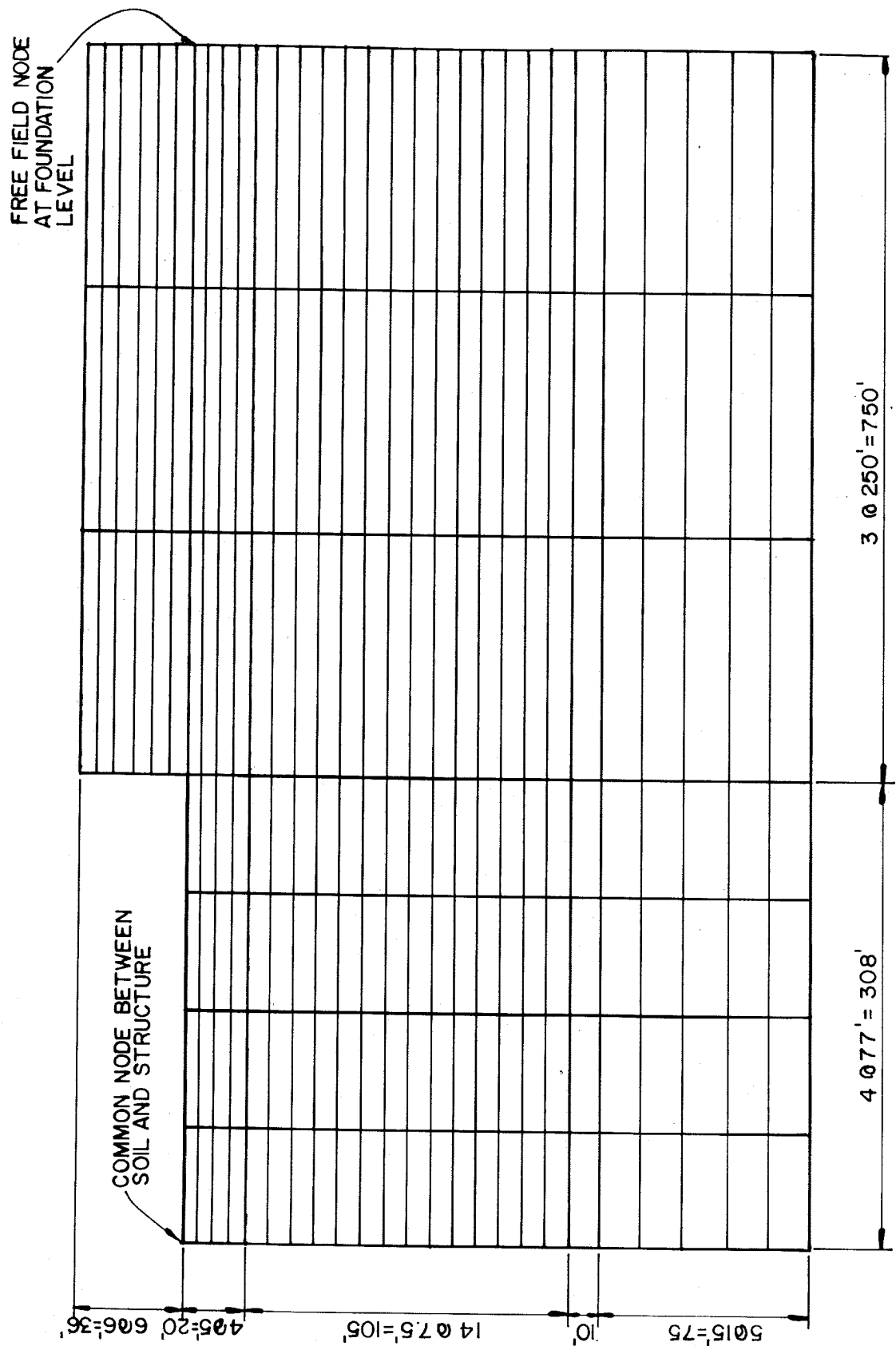
SPECTRA NO. 105 to 105d-SS-VW

REVISION NO. 05

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FIGURE 3.7-56

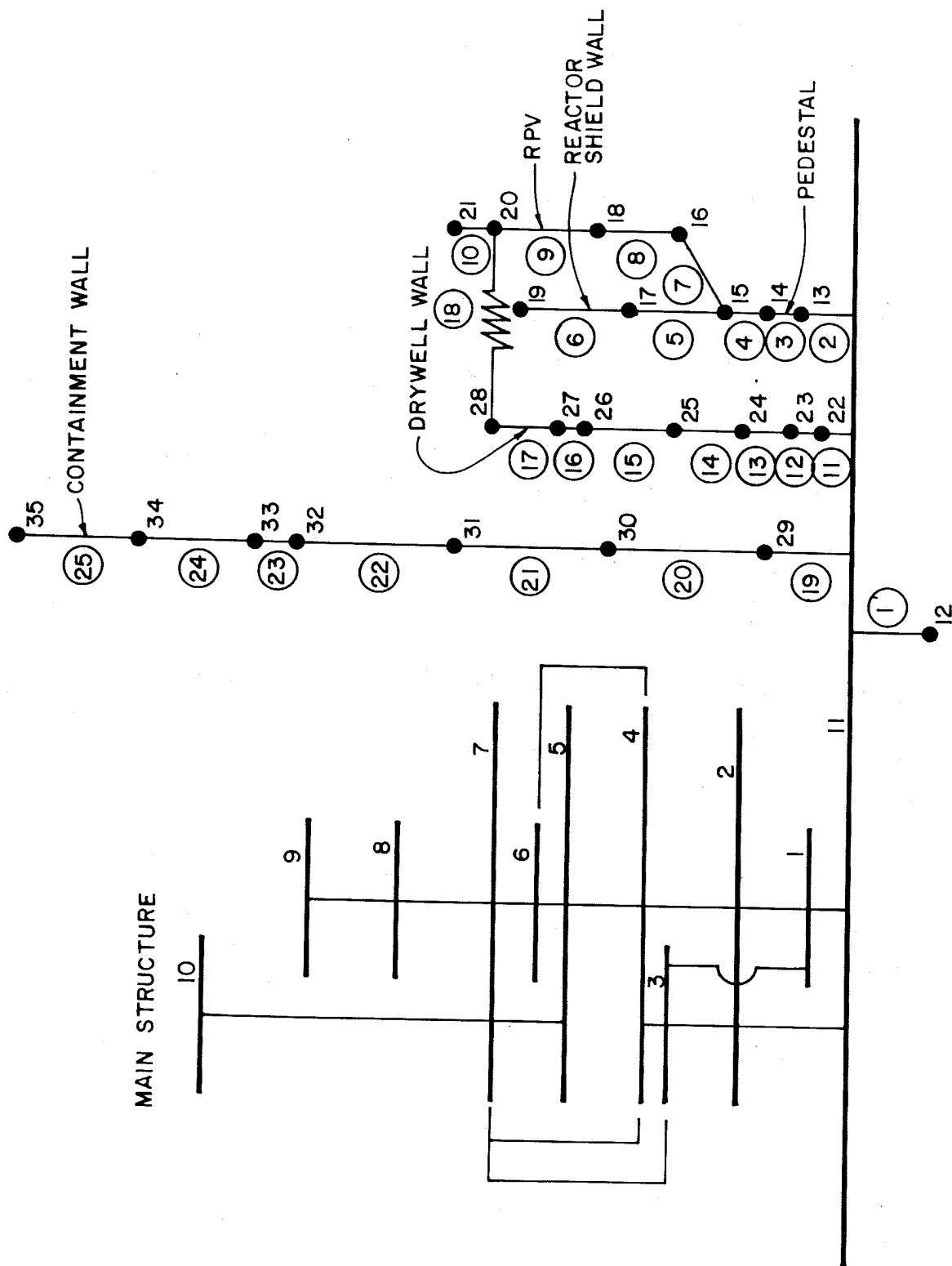
VERTICAL SSE RESPONSE SPECTRA
AT 762'-0" MAIN BUILDING



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FIGURE 3.7-57

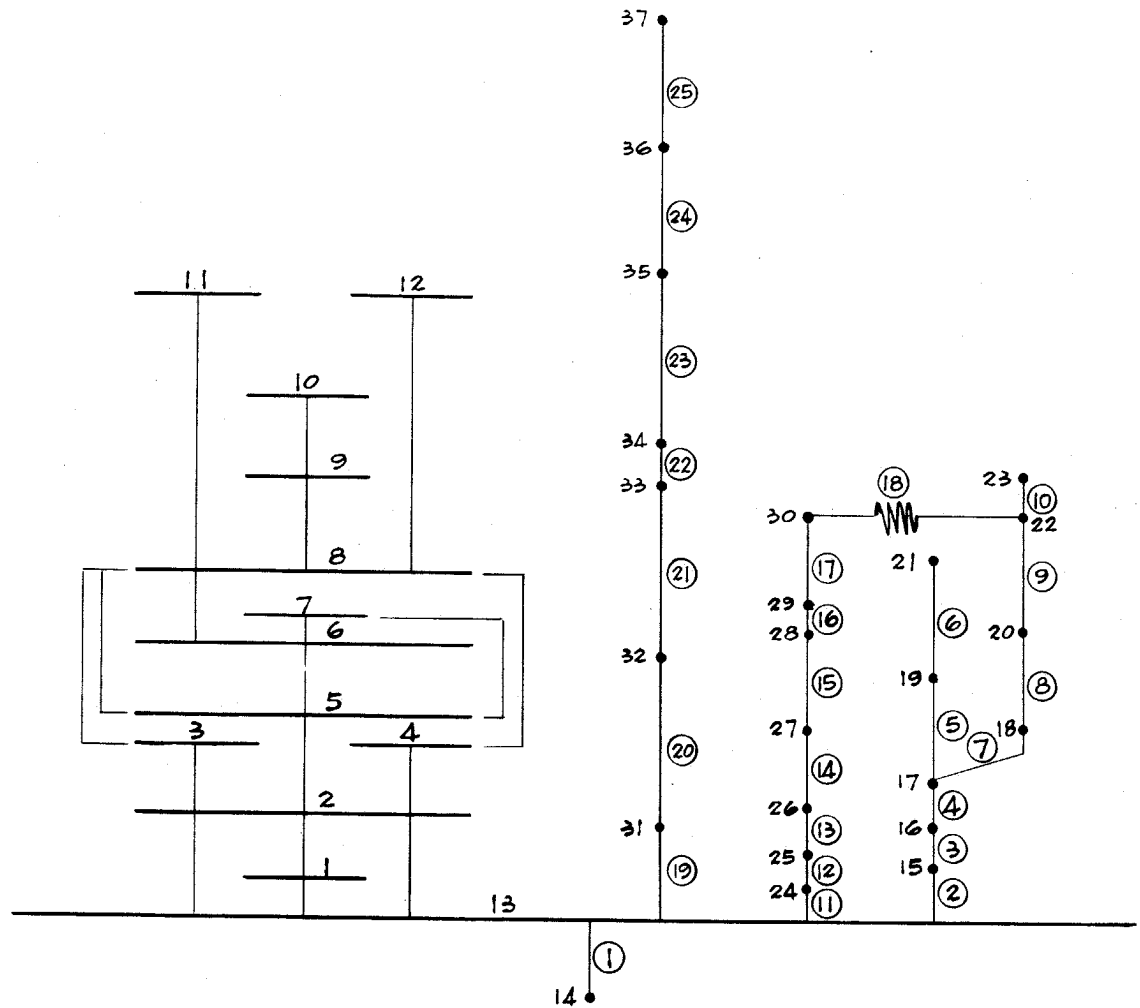
3-D AXISYMMETRIC FINITE
ELEMENT DYNAX SOIL MODEL



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FIGURE 3.7-58

HORIZONTAL 1-UNIT
BUILDING MODEL FOR
SOIL STRUCTURE INTERACTION



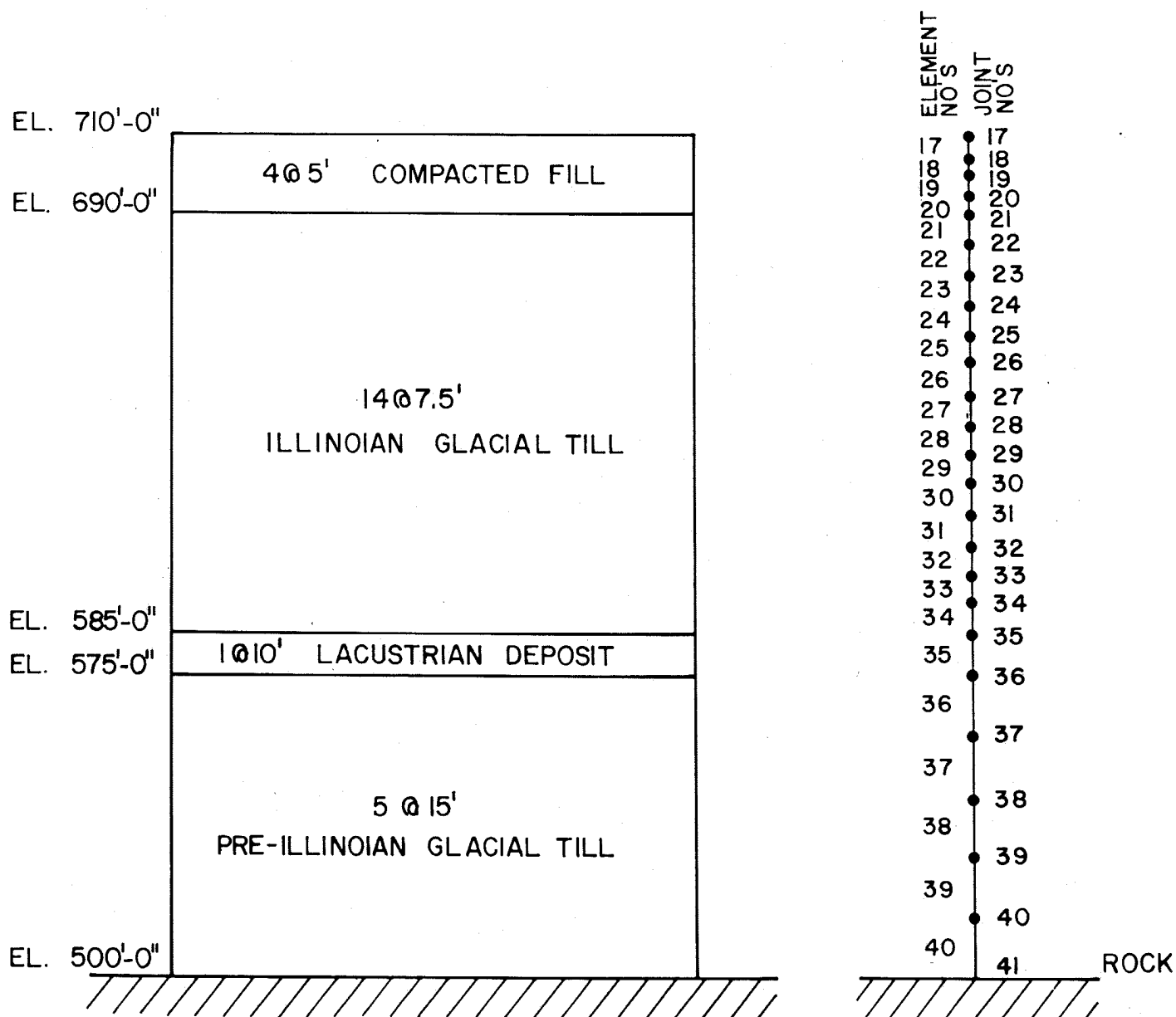
NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-59

HORIZONTAL 2-UNIT BUILDING
MODEL FOR SOIL
STRUCTURE INTERACTION

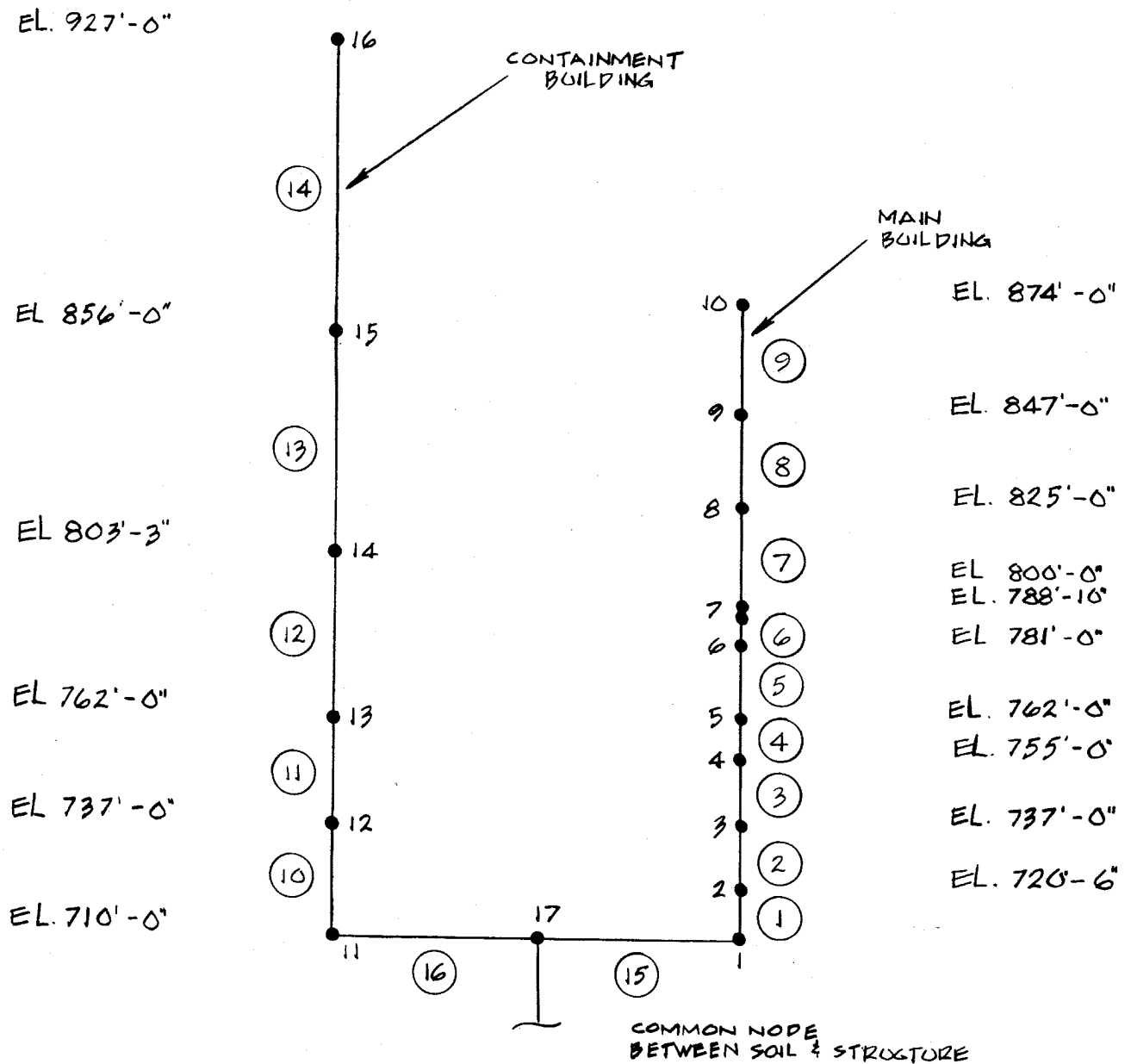
FIGURES 3.7-60 THROUGH 3.7-67
HAVE BEEN DELETED



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FIGURE 3.7-68

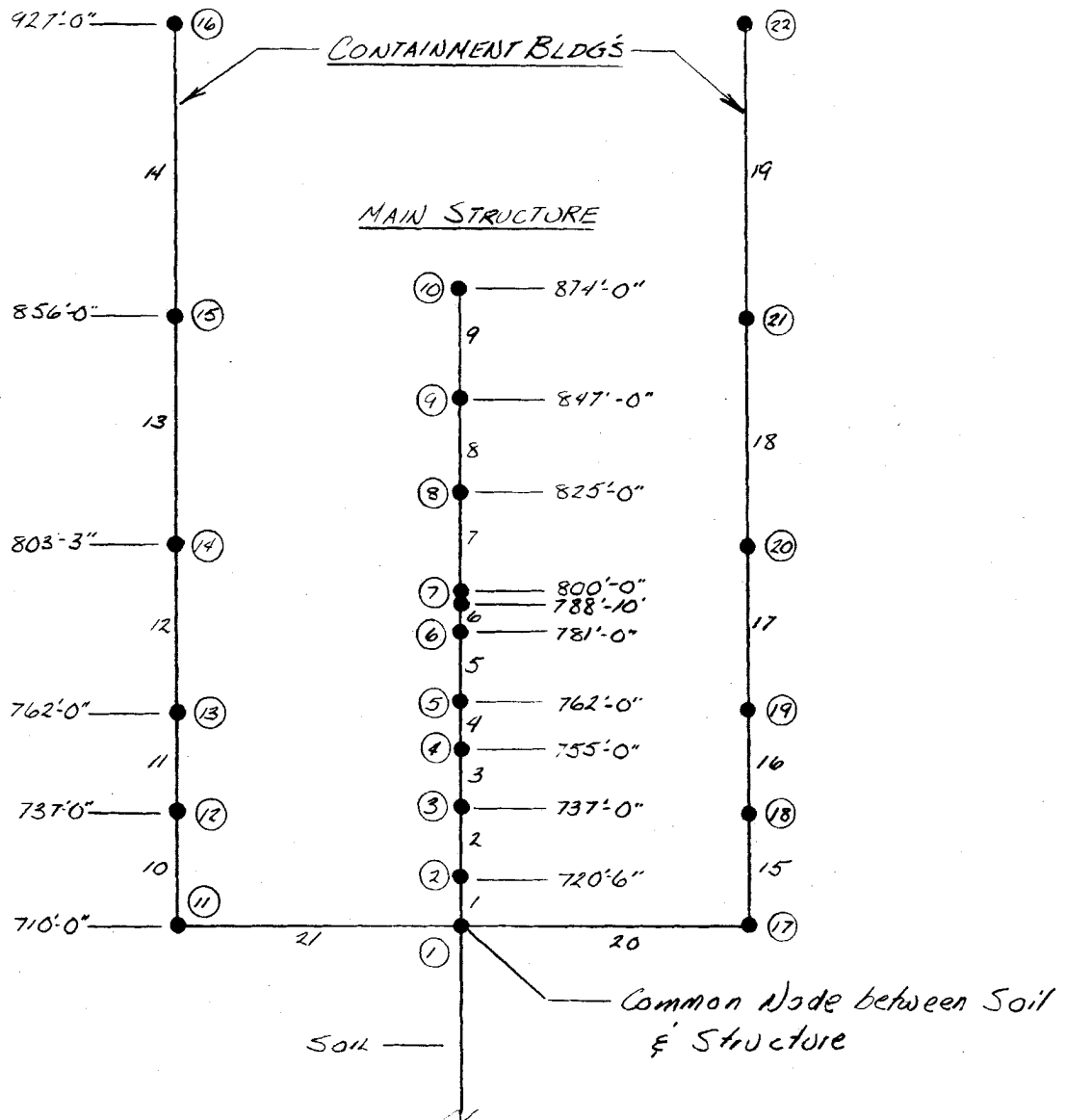
VERTICAL SOIL MODEL FOR
SOIL STRUCTURE INTERACTION



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FIGURE 3.7-69

1-UNIT BUILDING MODEL FOR
VERTICAL SOIL-STRUCTURE INTERACTION

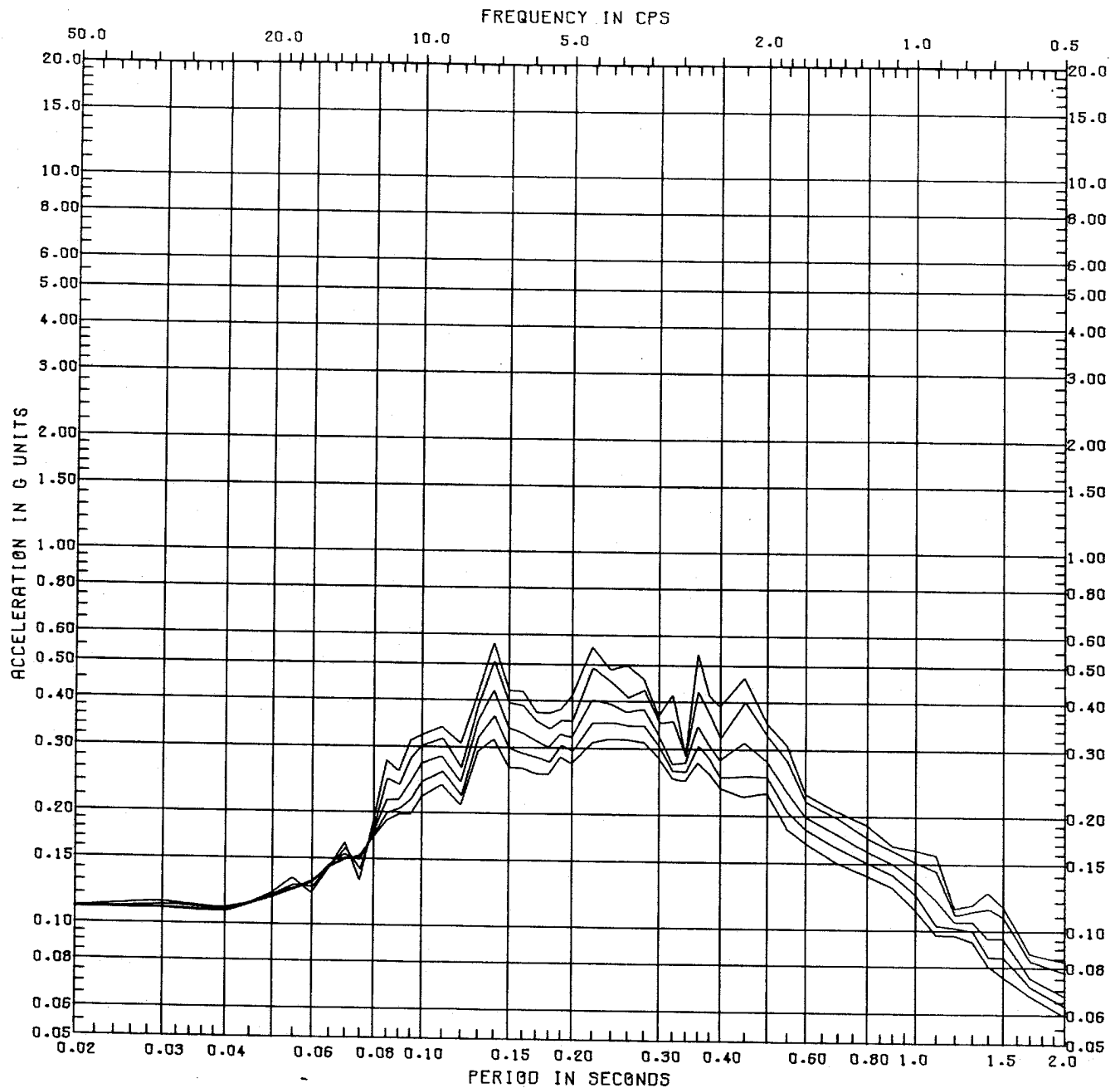


NOTE: UNIT 2 HAS BEEN CANCELLED.

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FIGURE 3.7-70

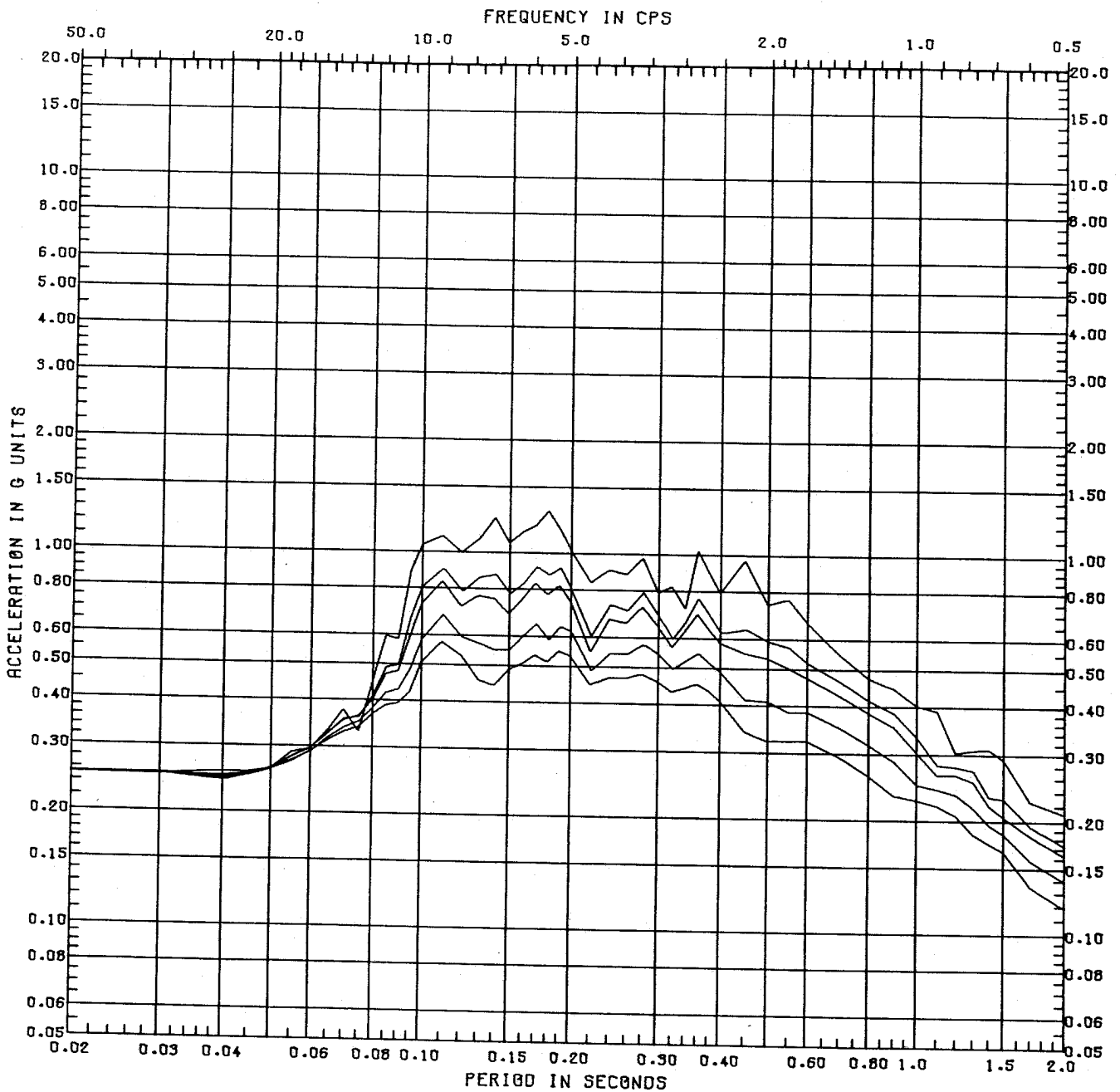
2-UNIT BUILDING MODEL FOR
VERTICAL SOIL STRUCTURE INTERACTION



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FIGURE 3.7-71

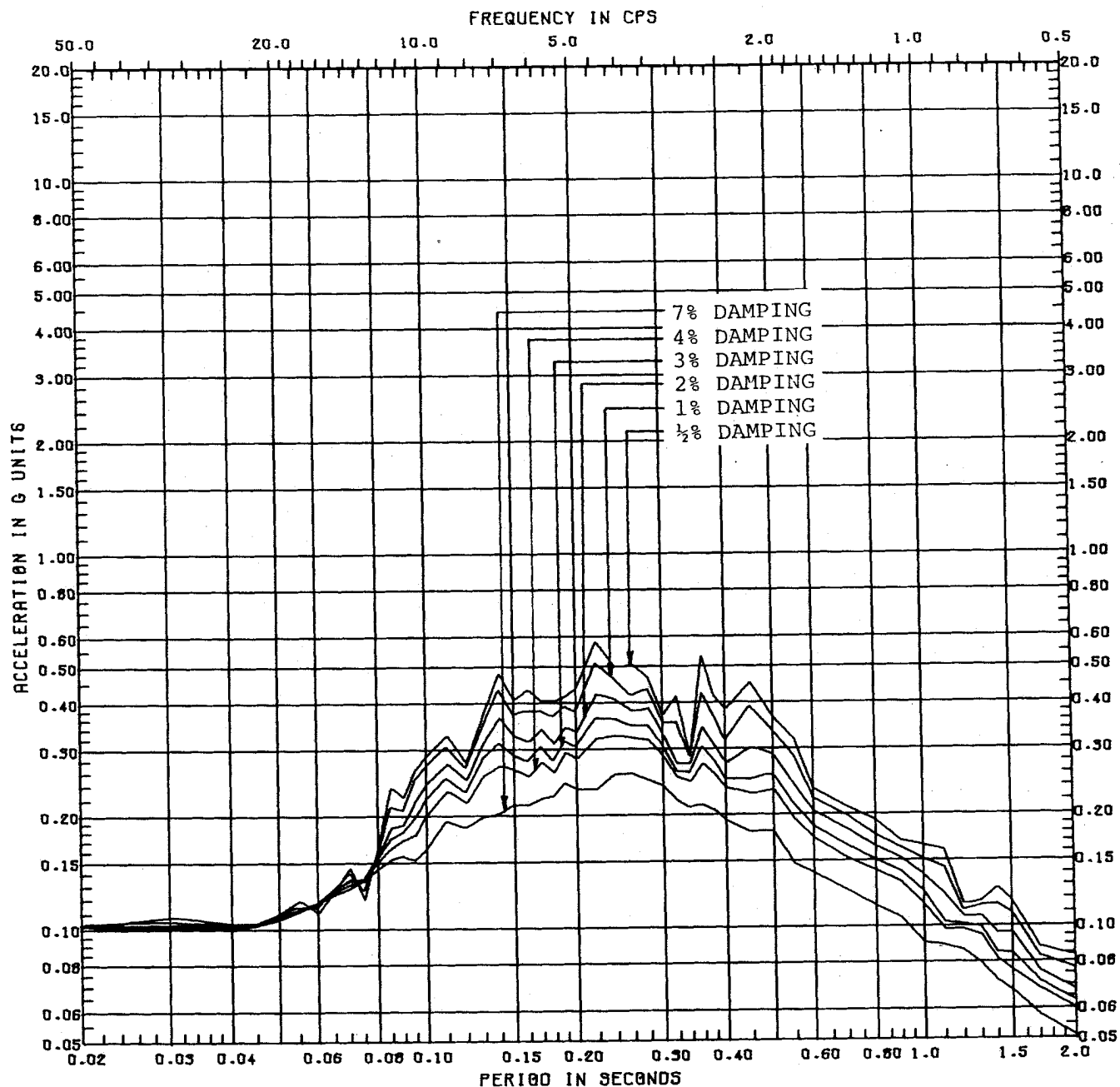
OBE VERTICAL FOUNDATION INTERACTION
SPECTRA FOR 1-UNIT BUILDING MODEL



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FIGURE 3.7-72

SSE VERTICAL FOUNDATION INTERACTION
SPECTRA FOR 1-UNIT BUILDING MODEL

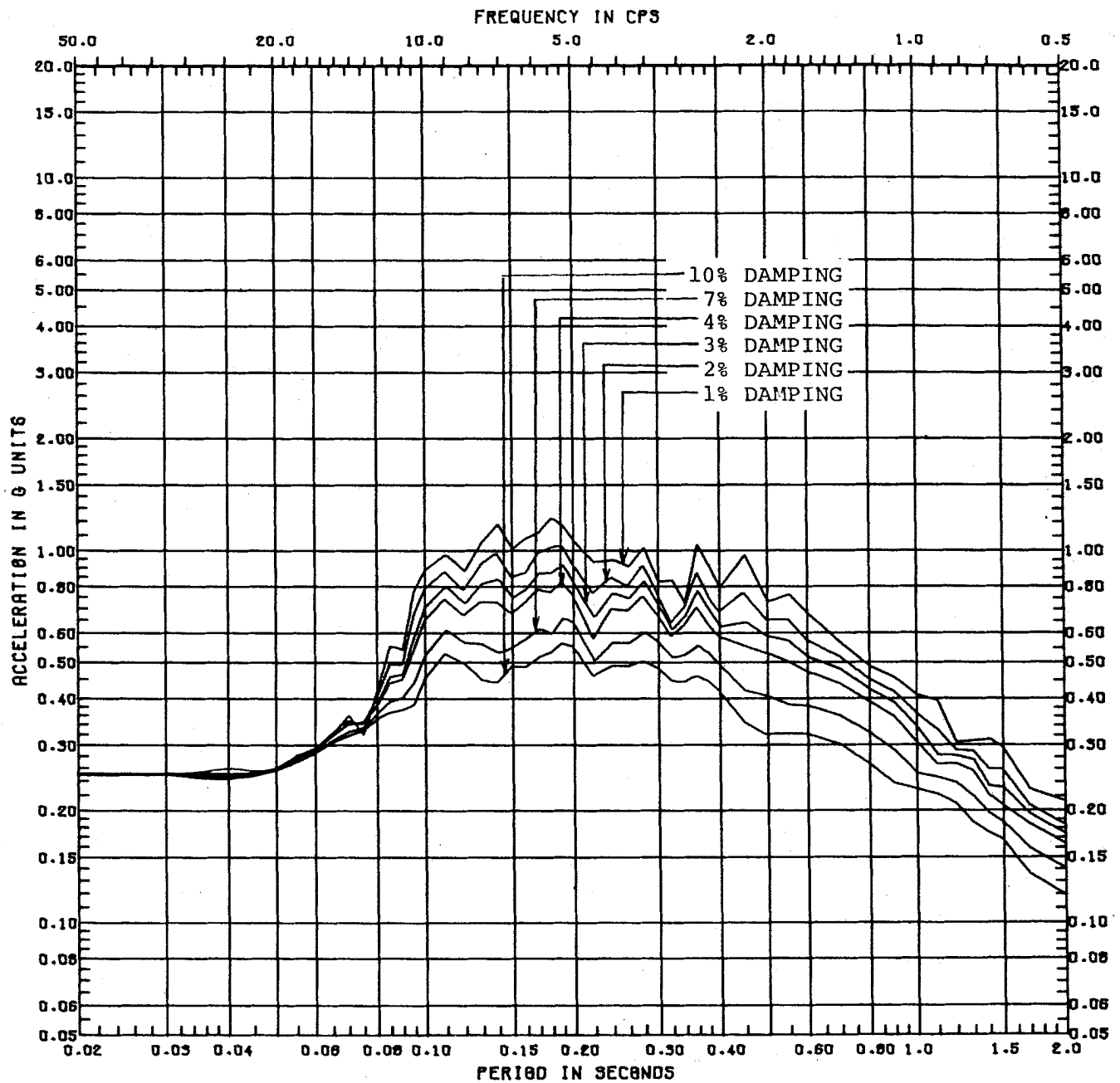


NOTE: UNIT 2 HAS BEEN CANCELLED.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-73

OBE VERTICAL FOUNDATION
INTERACTION SPECTRA FOR
2-UNIT BUILDING MODEL



NOTE: UNIT 2 HAS BEEN CANCELLED.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-74

SSE VERTICAL FOUNDATION
INTERACTION SPECTRA FOR
2-UNIT BUILDING MODEL

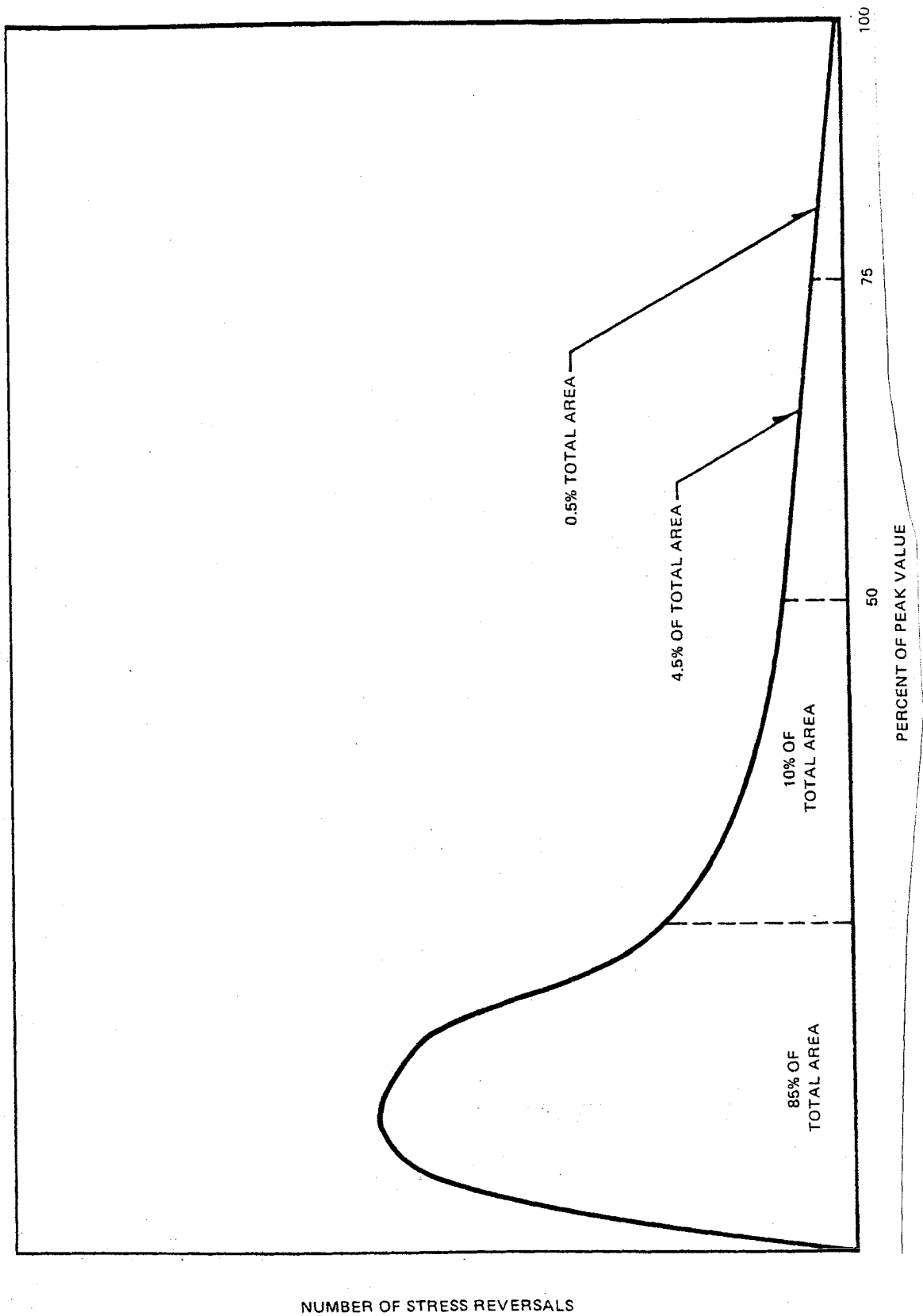
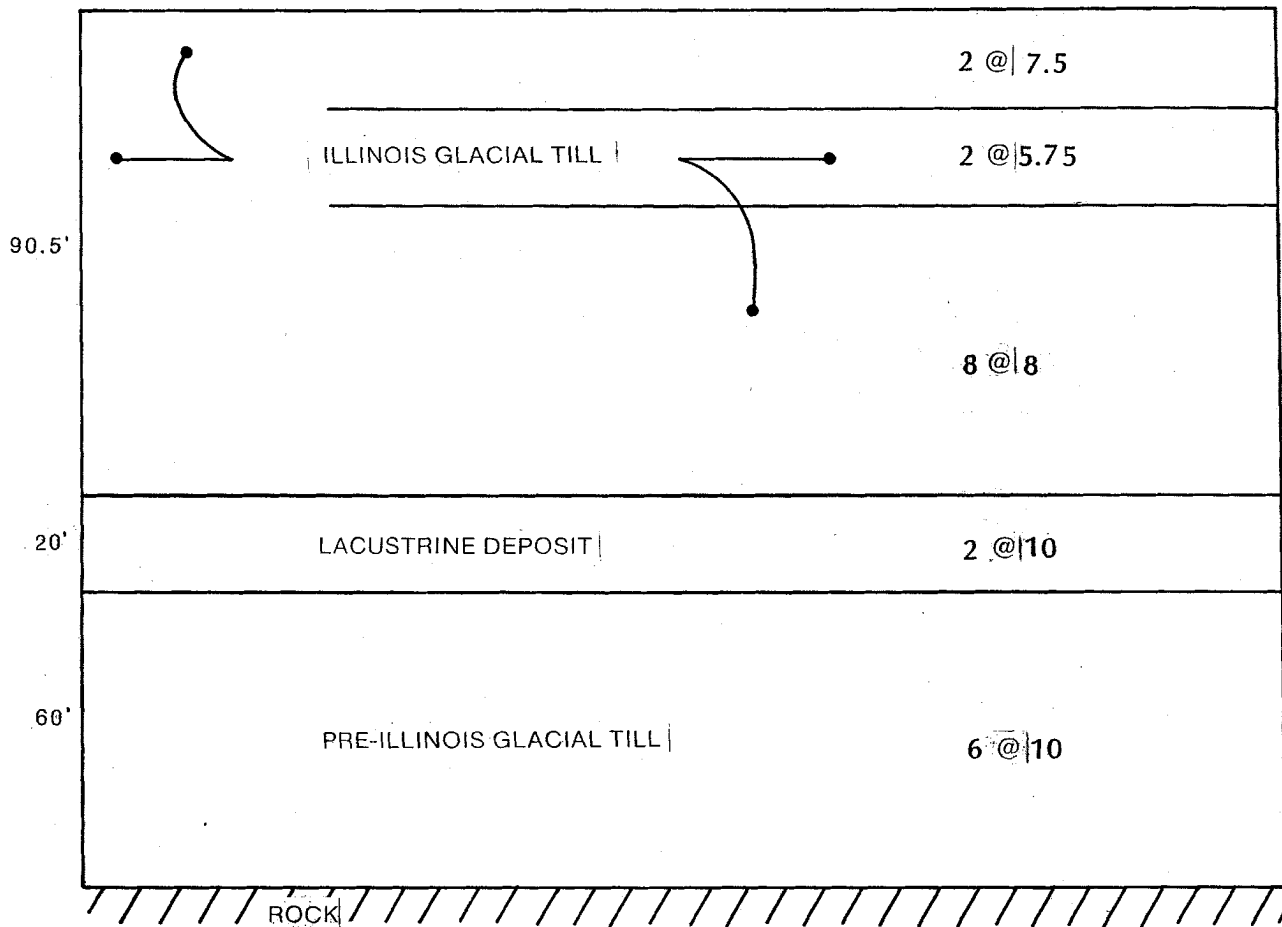


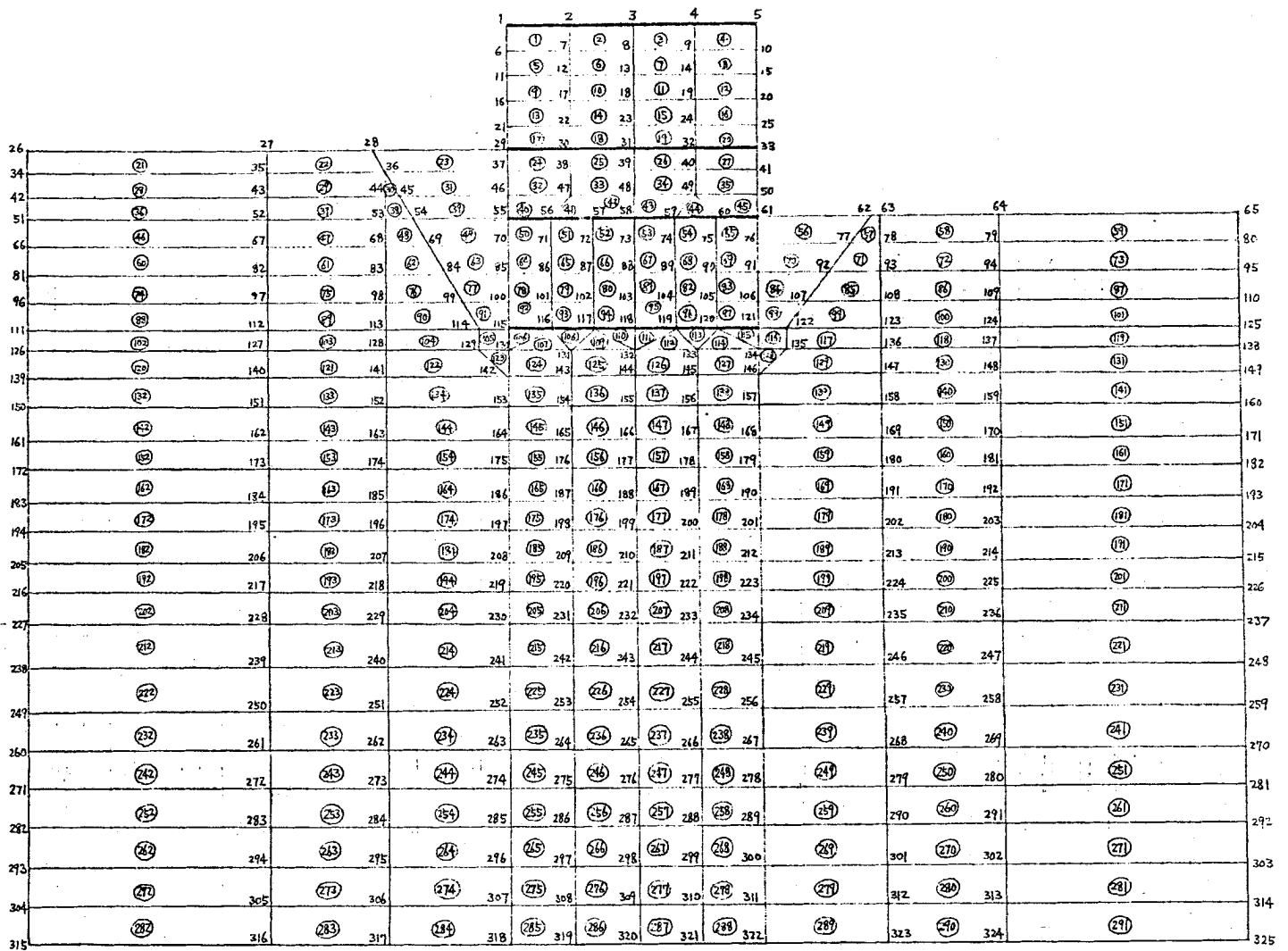
FIGURE 3.7-75 DENSITY OF STRESS REVERSALS



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FIGURE 3.7-76

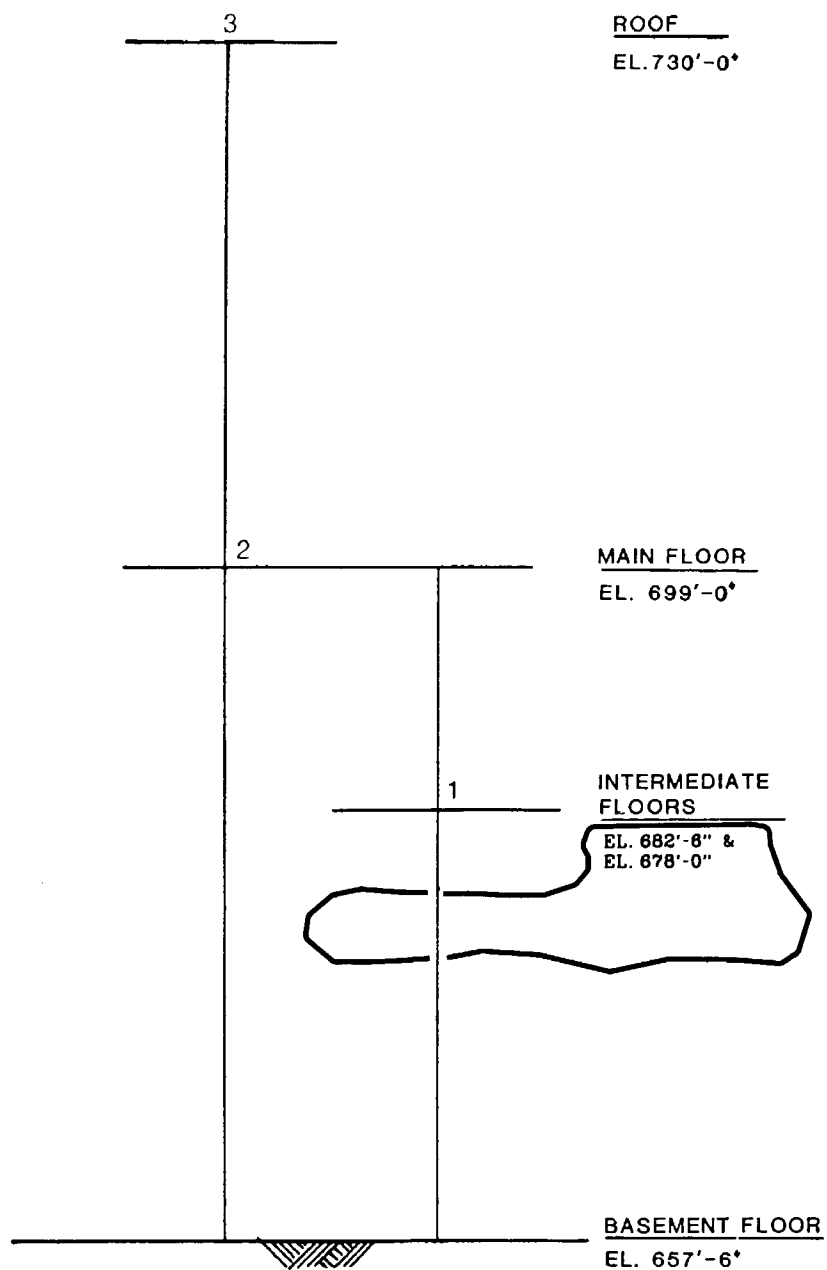
SHAKE SOIL MODEL FOR CIRCULATING
WATER SCREEN HOUSE ANALYSIS



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UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-78

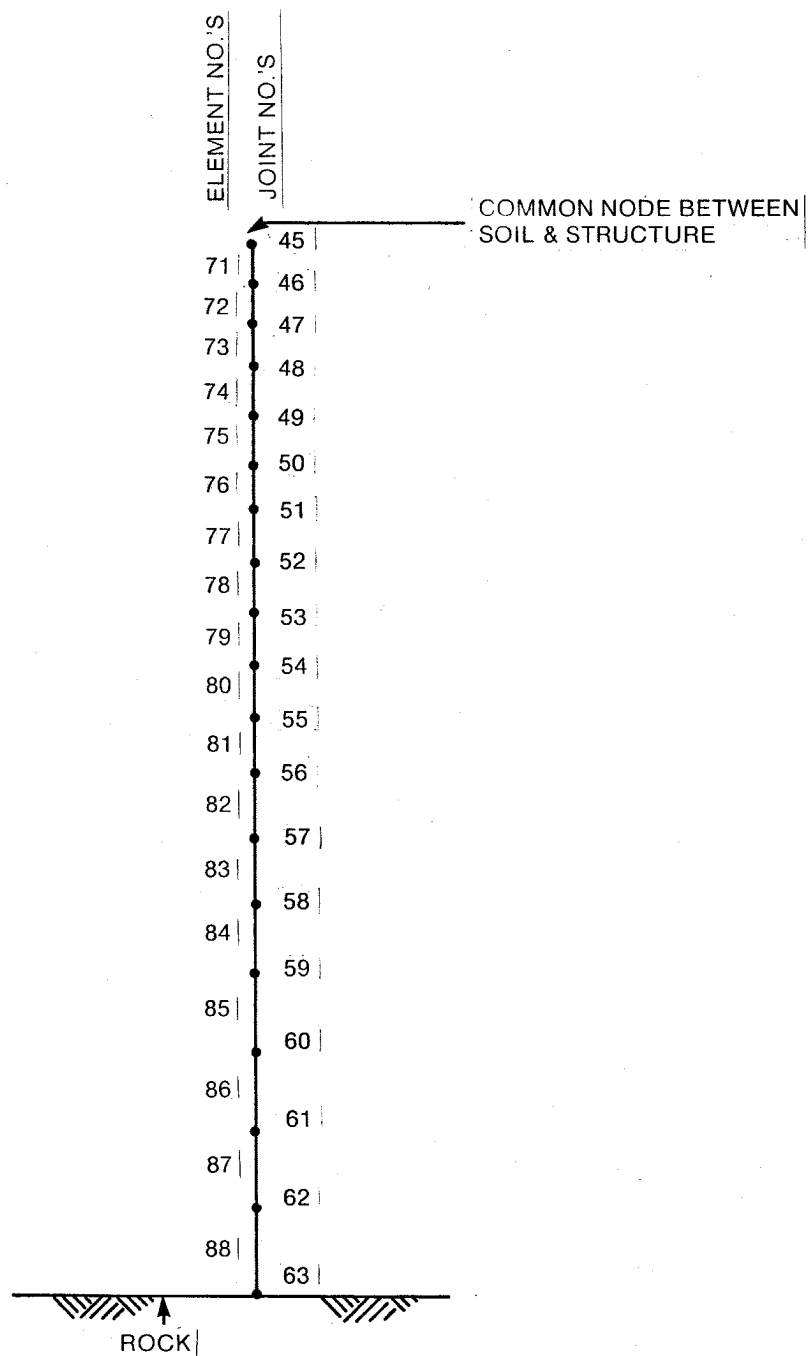
NORTH-SOUTH HORIZONTAL SOIL
STRUCTURE INTERACTION MODEL
FOR CWSH



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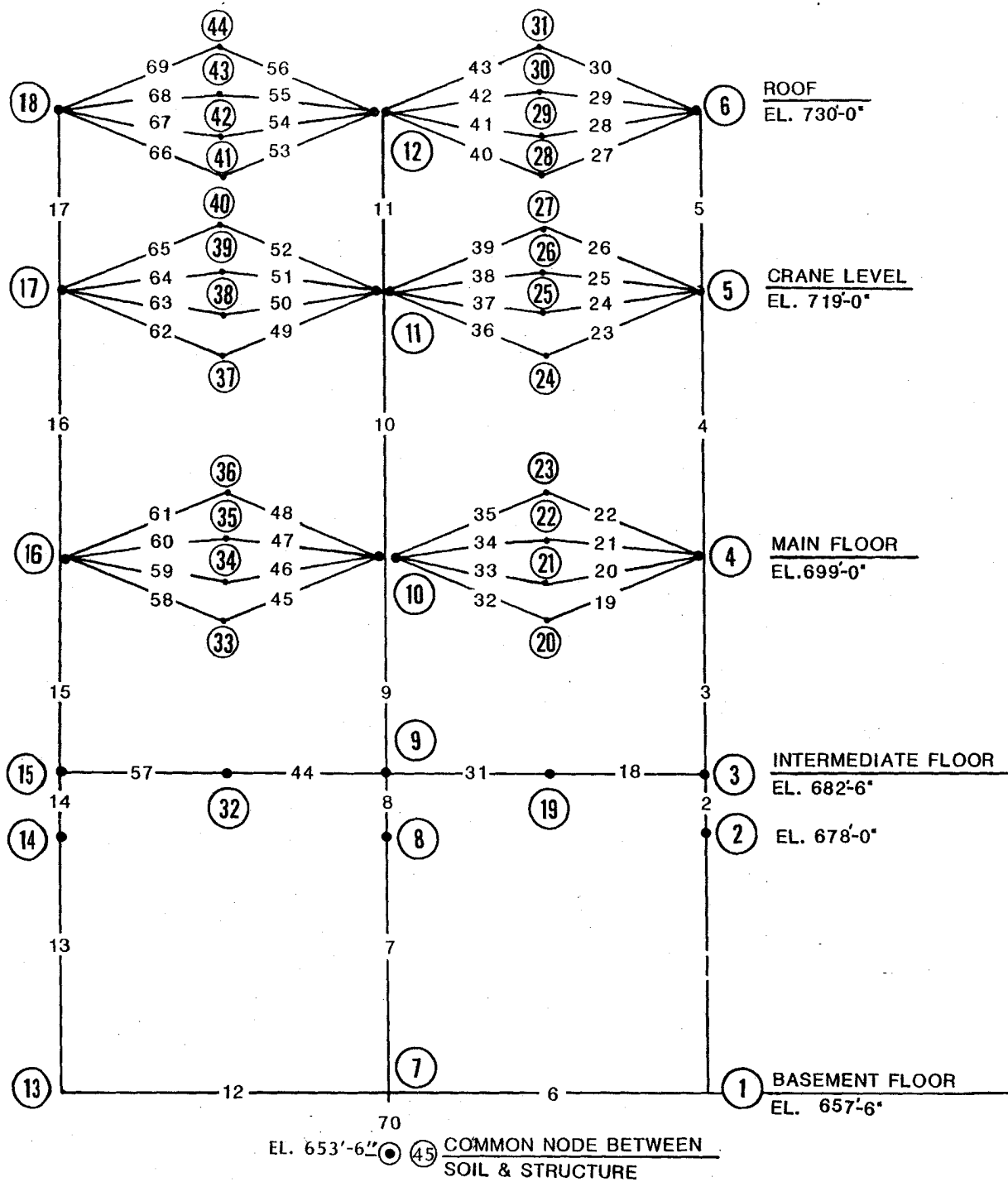
FIGURE 3.7-79

HORIZONTAL MODEL FOR CWSH



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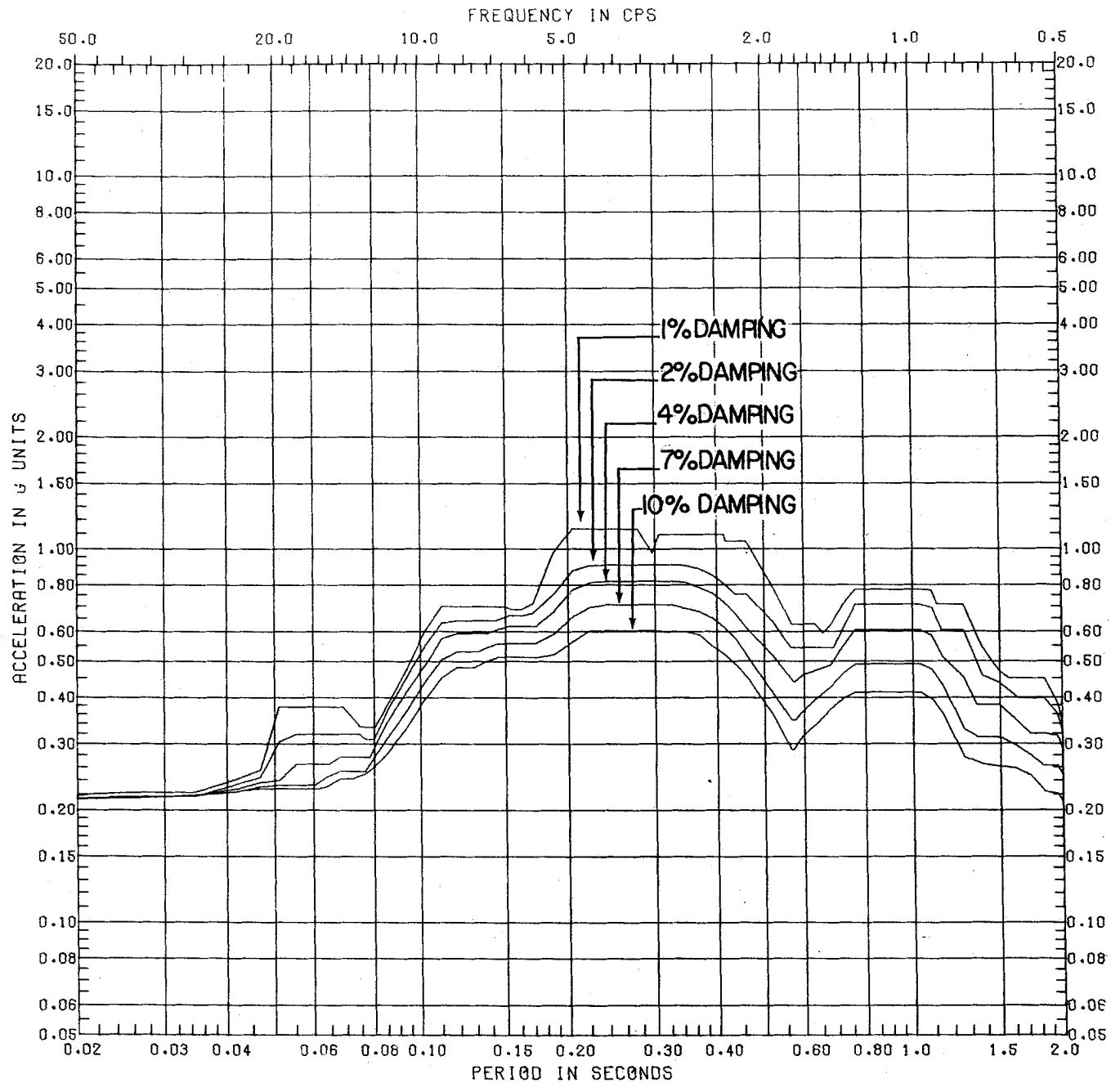
**FIGURE 3.7-80
SOIL COLUMN FOR
VERTICAL CWSH ANALYSIS**



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UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-81

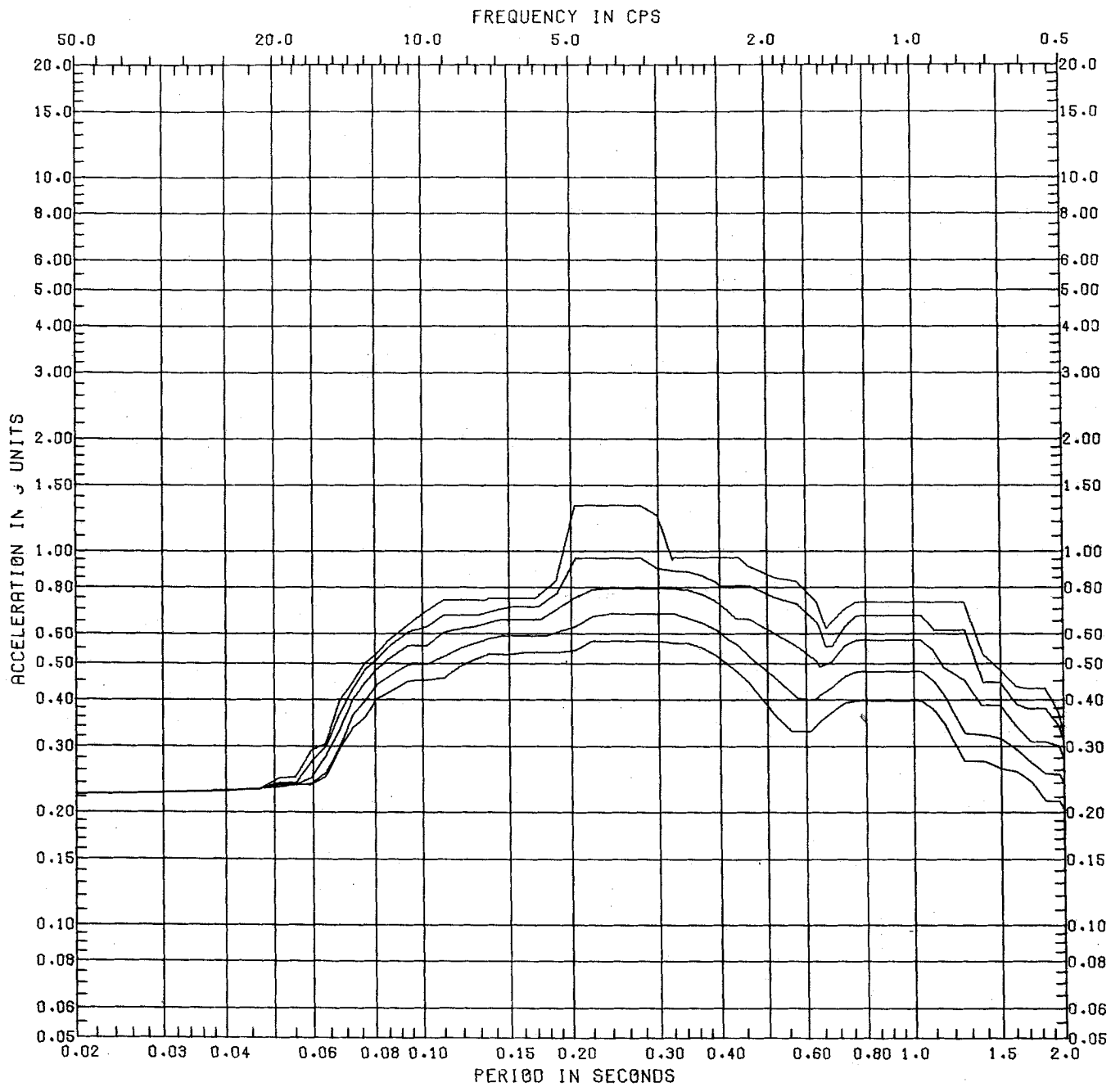
VERTICAL MODEL FOR CWSH



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FIGURE 3.7-82

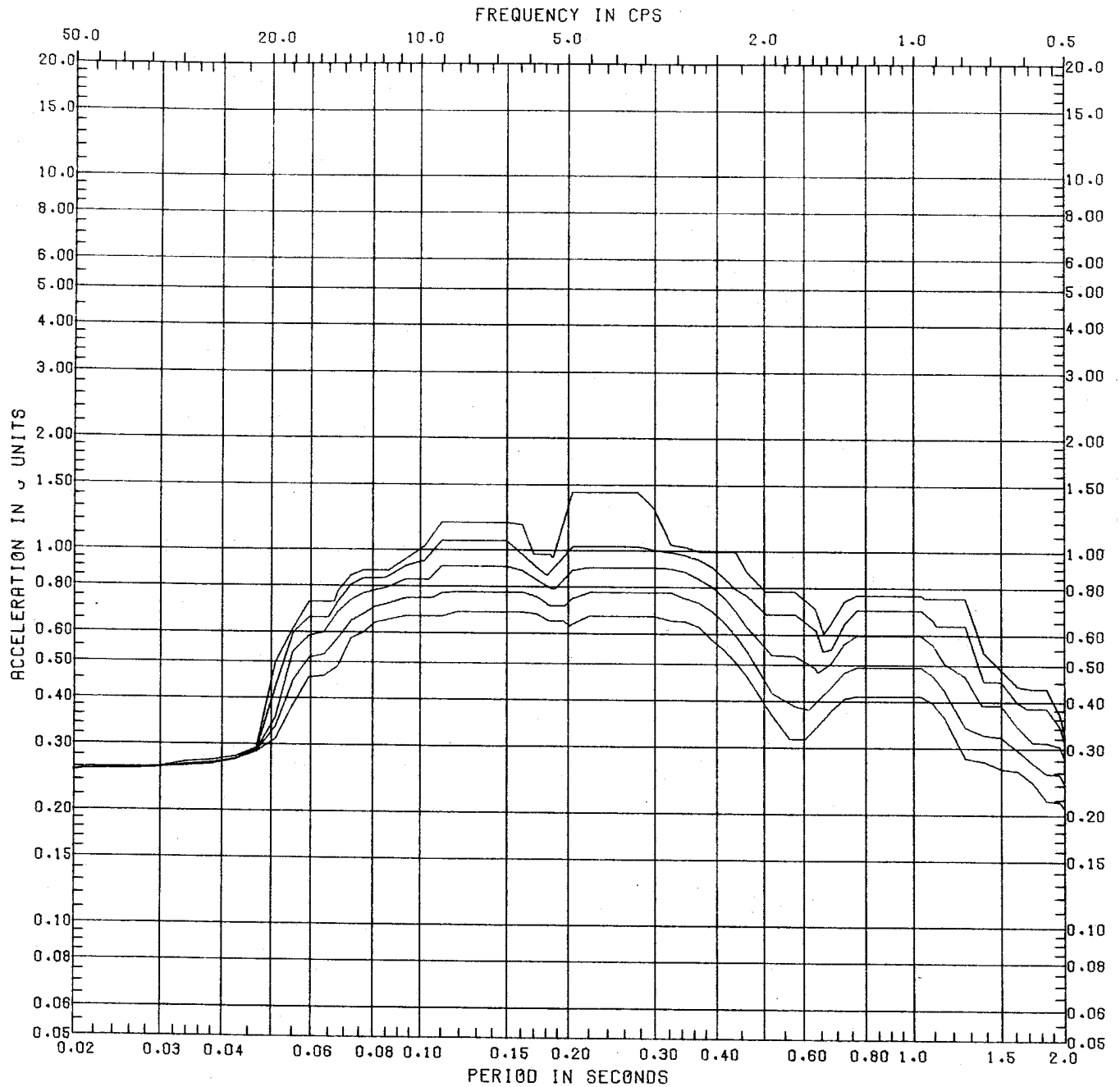
HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
BASE ELEVATION 653'-6" N-S



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-83

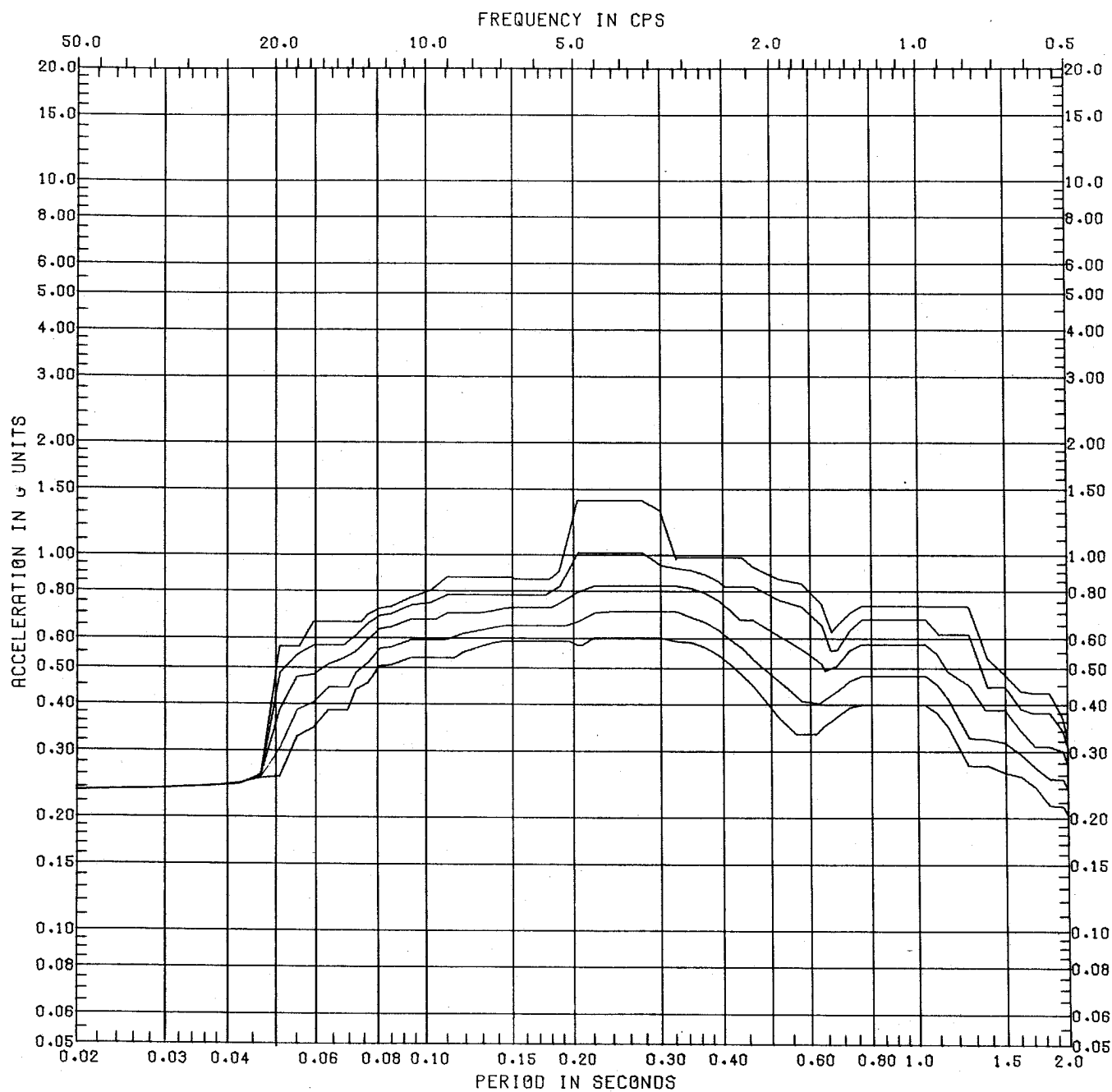
HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
BASE ELEVATION 653'-6" E-W



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FIGURE 3.7-84

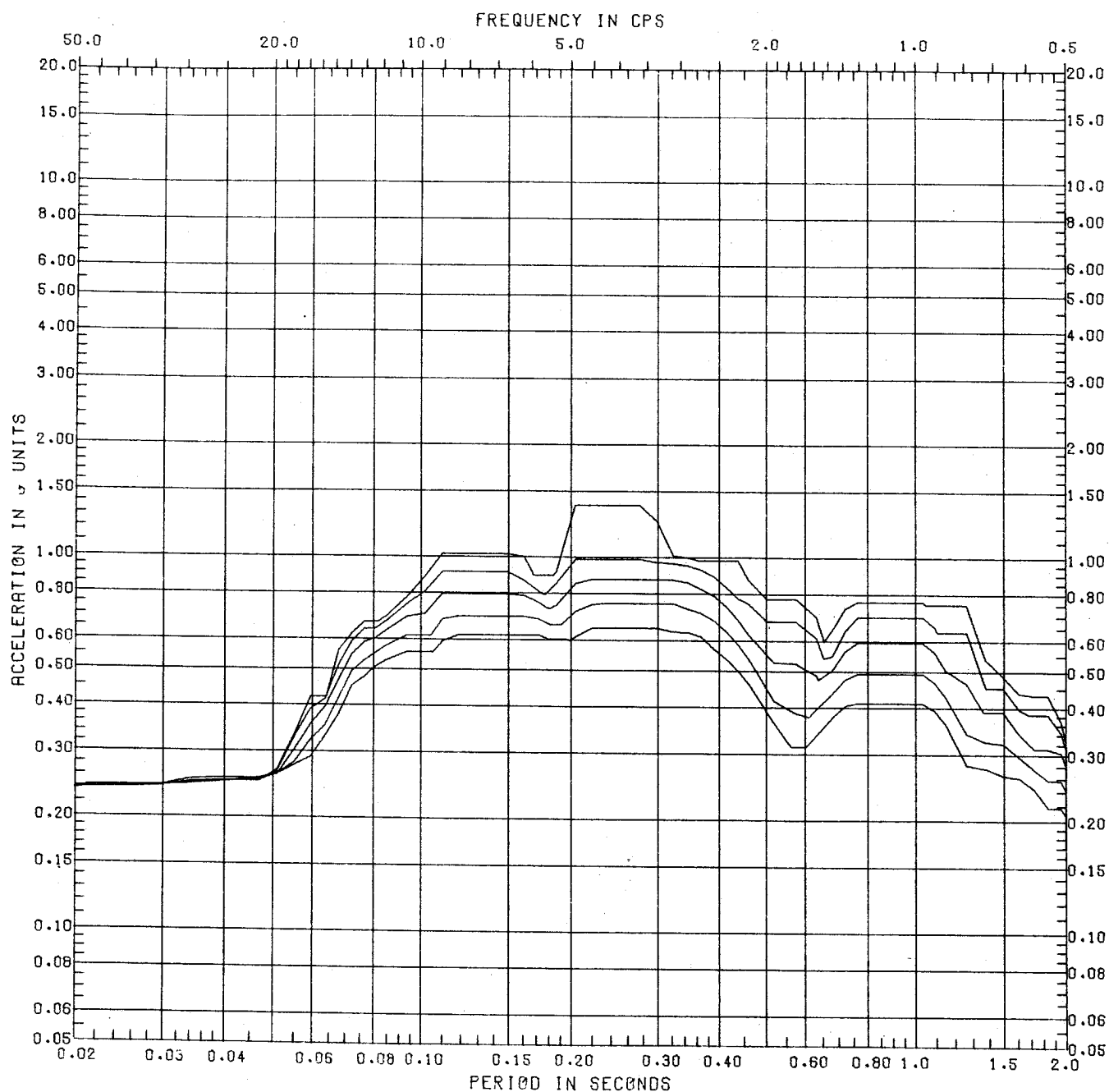
HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
MAIN FLOOR ELEVATION 699'-0" N-S



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FIGURE 3.7-85

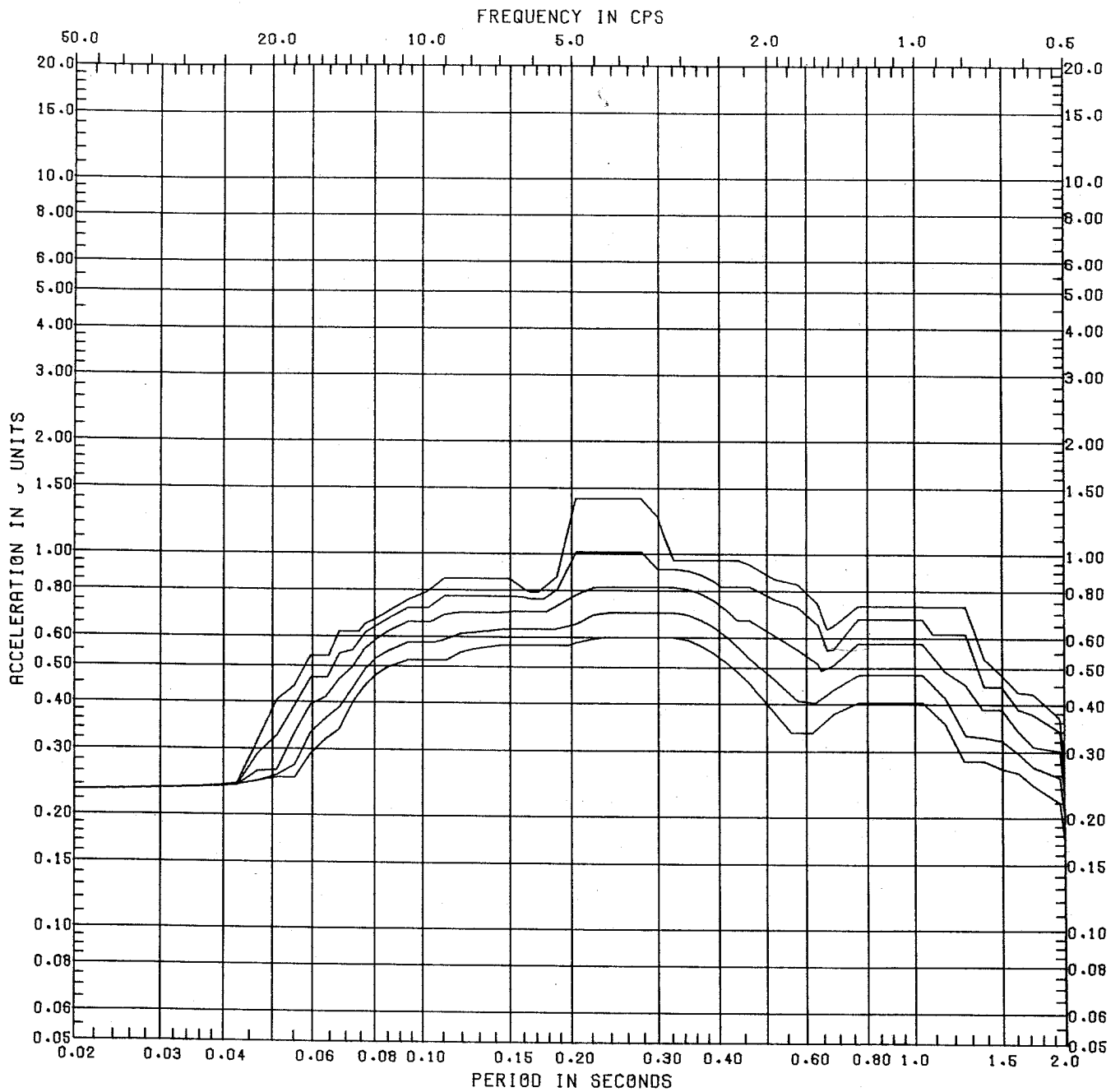
HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
MAIN FLOOR ELEVATION 699'-0" E-W



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FIGURE 3.7-86

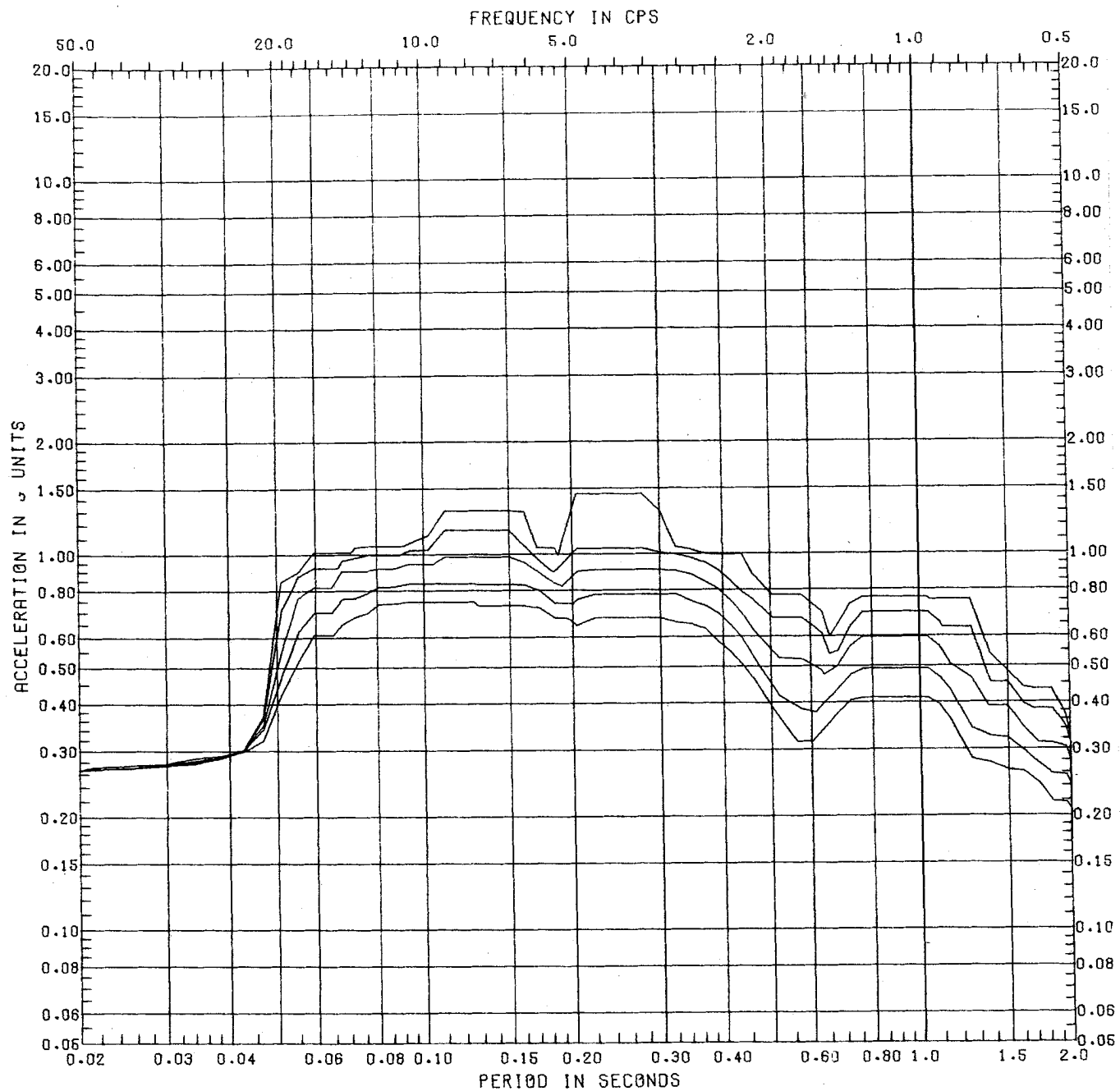
**HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
INTERMEDIATE FLOOR
ELEVATION 682'-6" N-S**



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-87

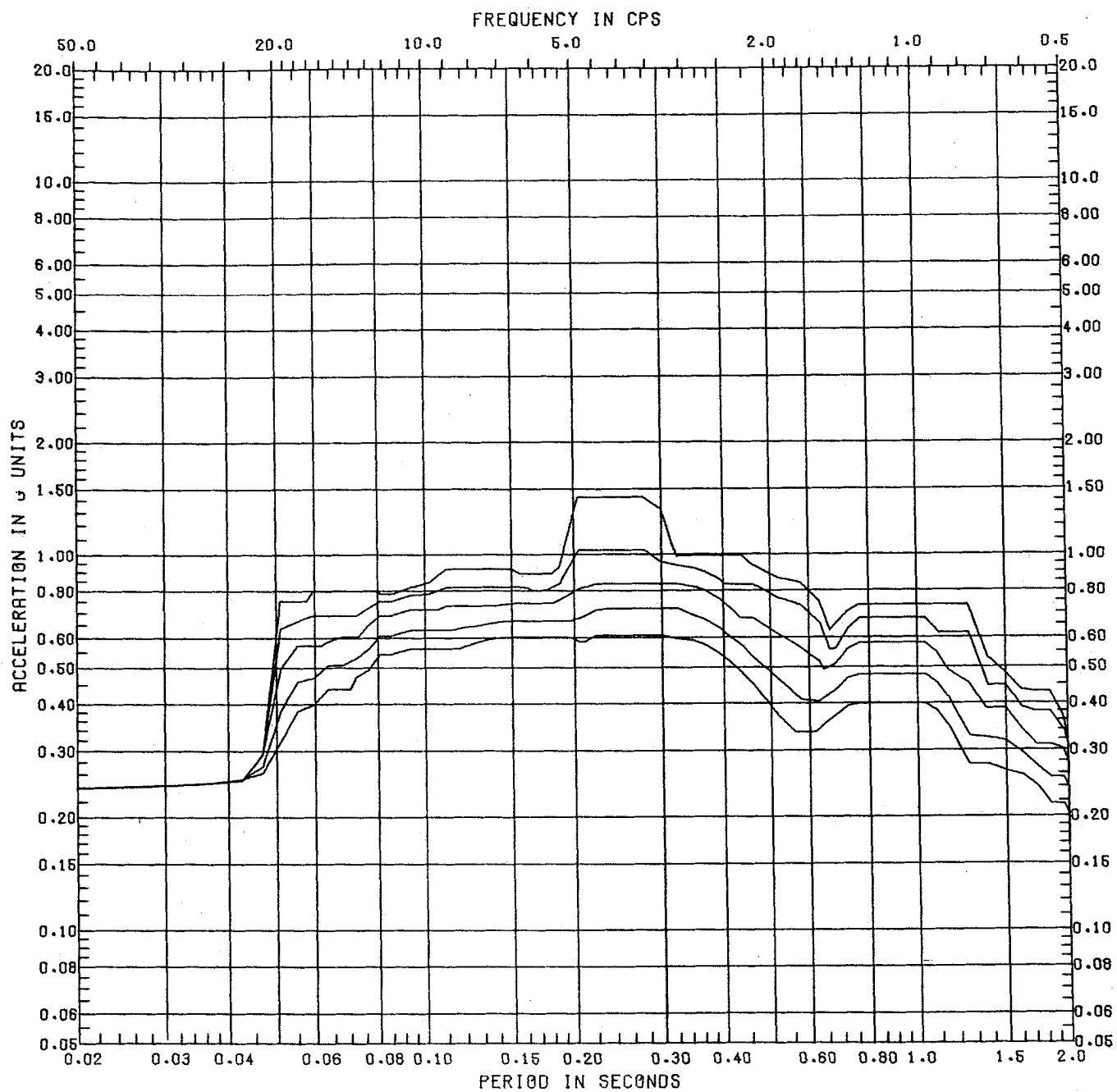
HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
INTERMEDIATE FLOOR
ELEVATION 682'-6" E-W



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-88

HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
ROOF ELEVATION 730'-0" N-S

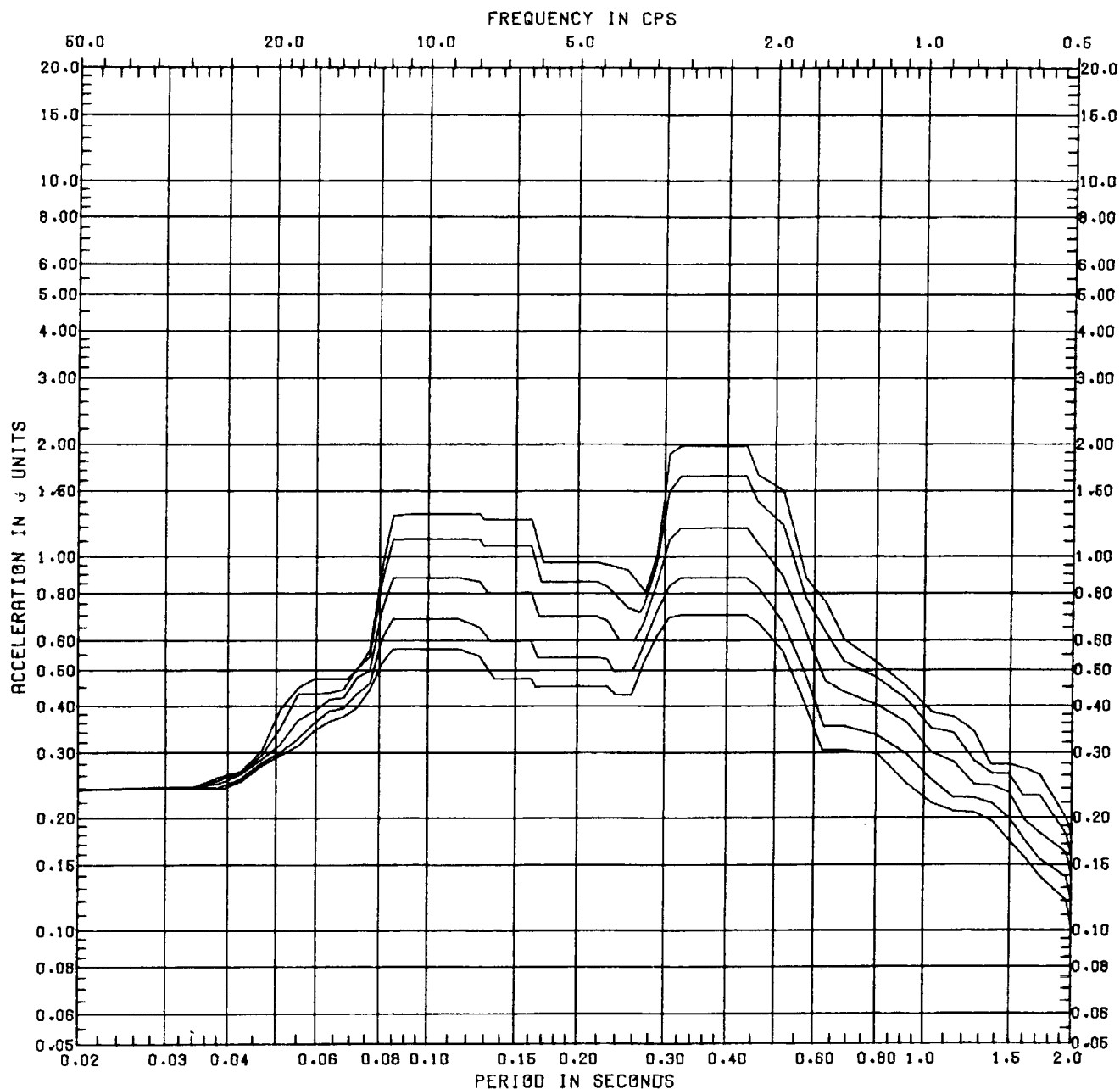


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UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-89

**HORIZONTAL
SSE RESPONSE SPECTRA CWSH -
ROOF ELEVATION 730'-0" E-W**

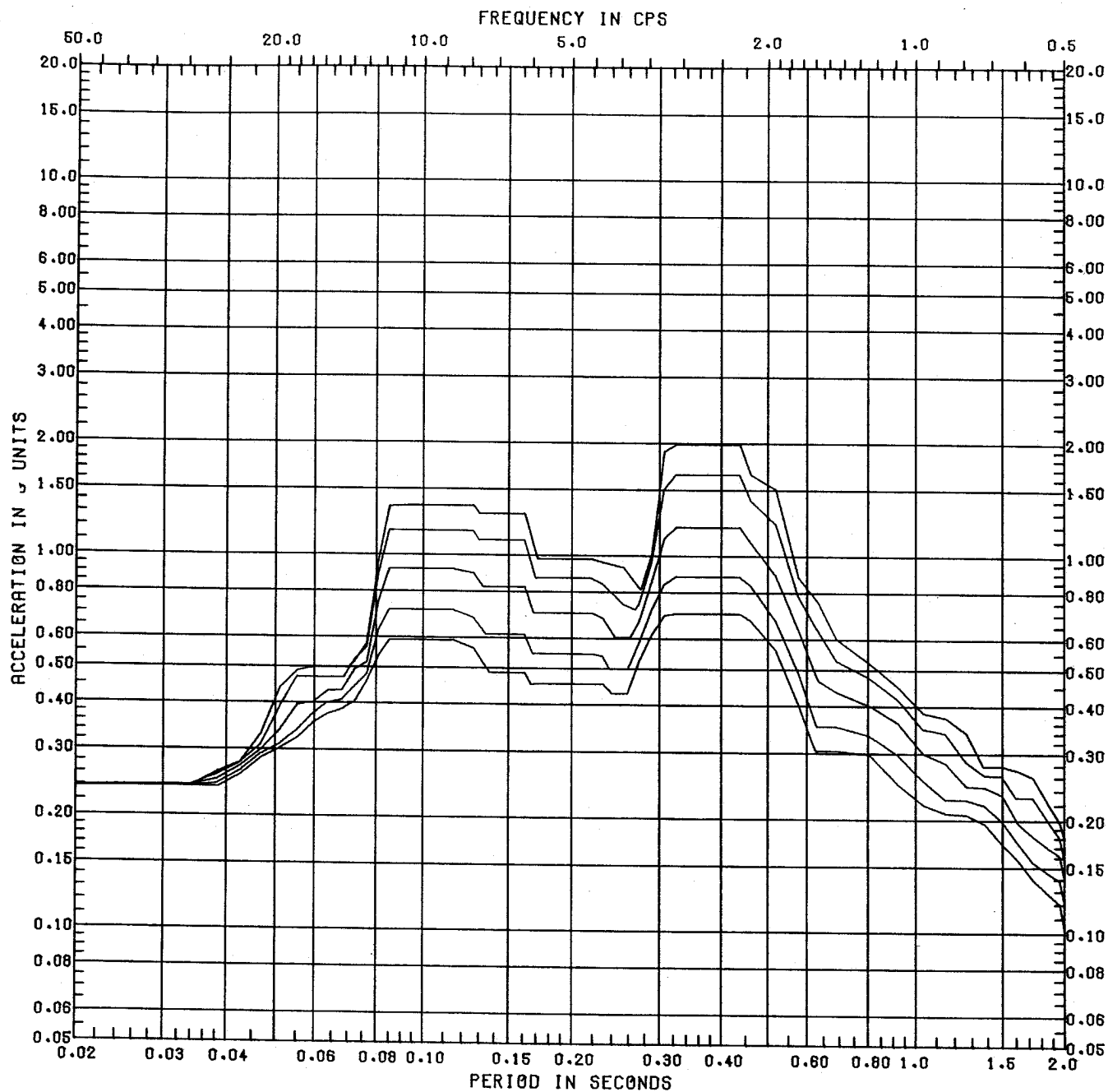
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FIGURE 3.7-90

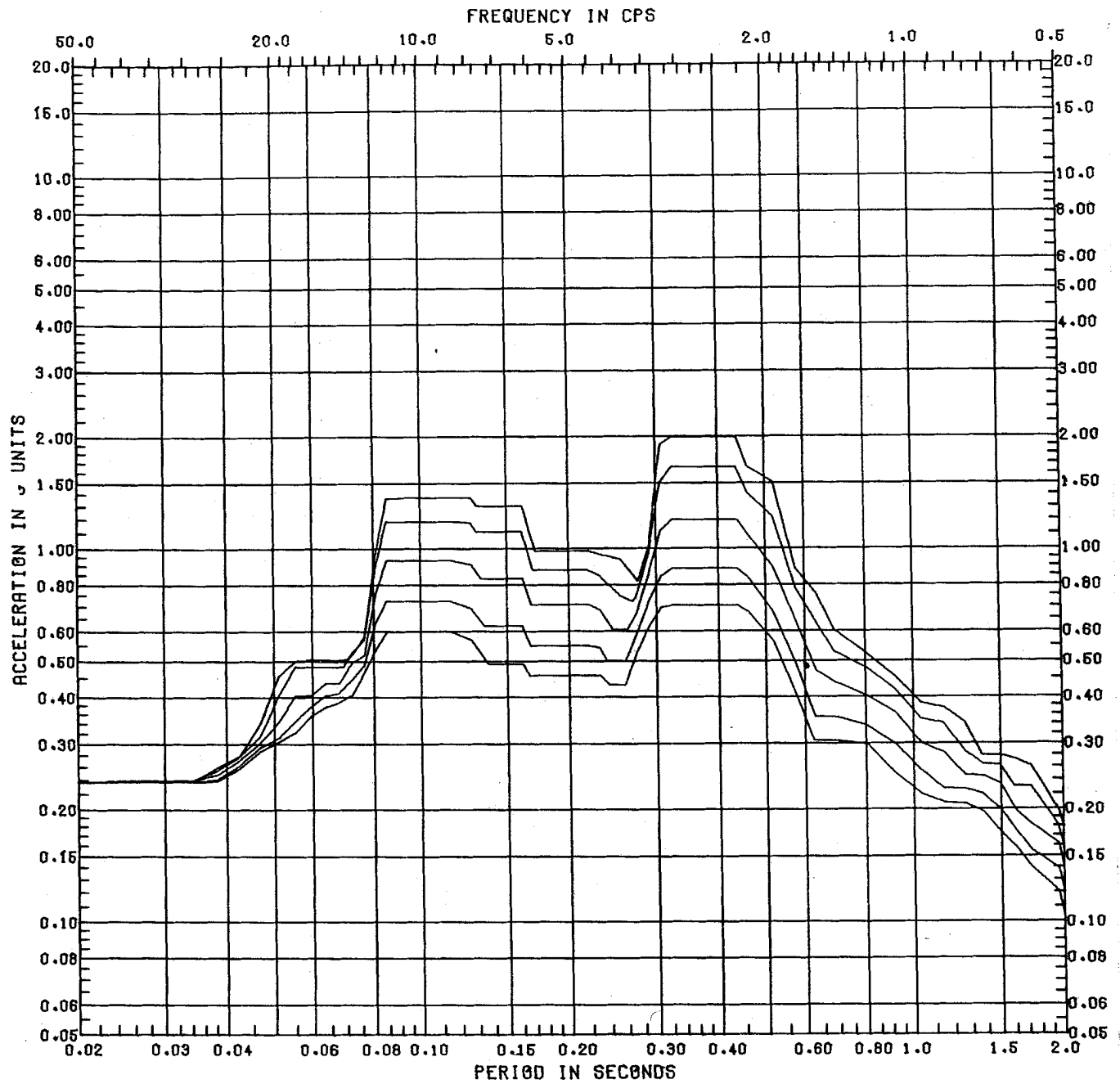
SSE RESPONSE SPECTRA CWSH-
BASE ELEVATION 657'-6"
VERTICAL WALL



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE 3.7-91

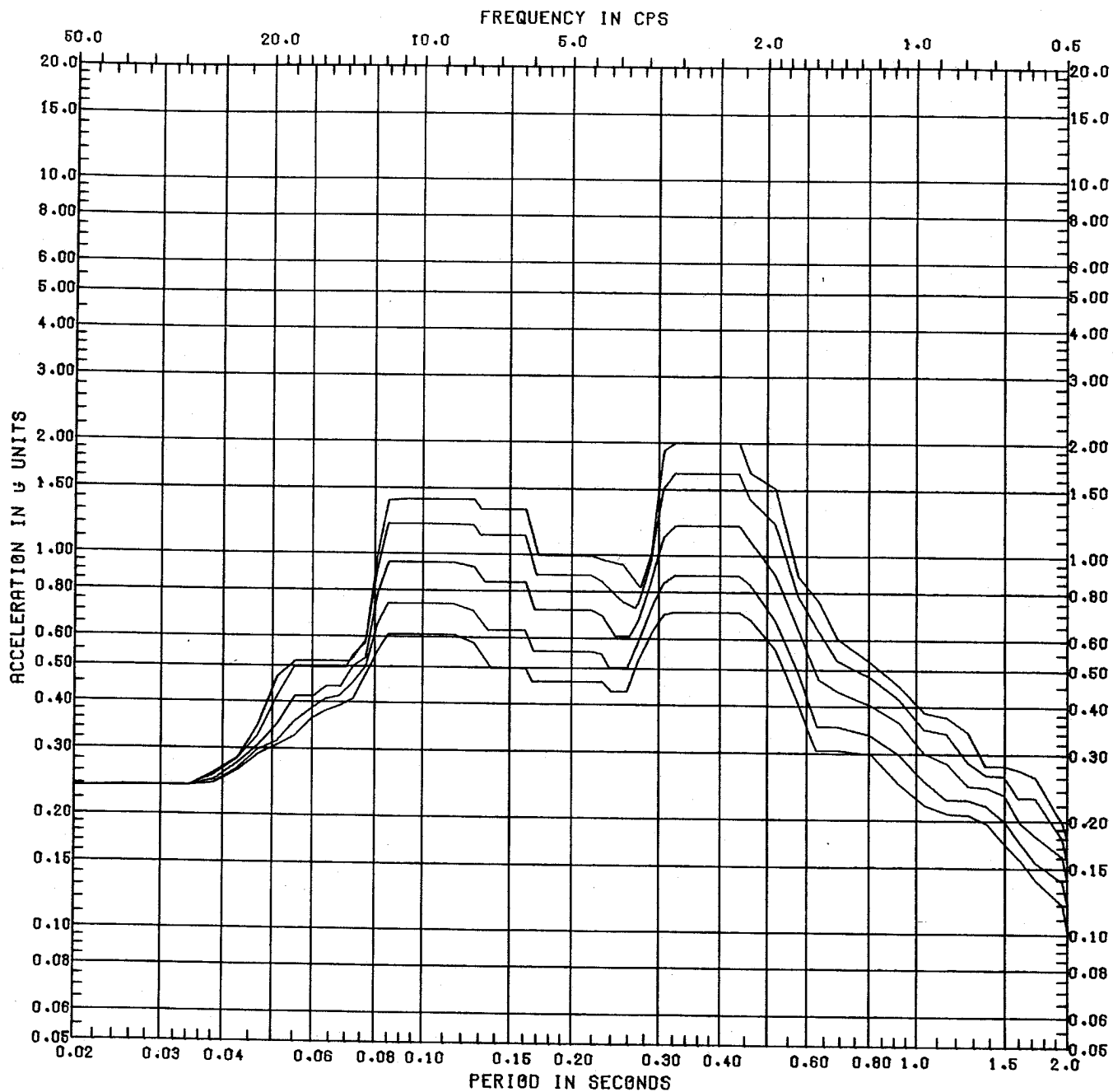
SSE RESPONSE SPECTRA CWSH -
INTERMEDIATE FLOOR
ELEVATION 682'-6"
VERTICAL WALL



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-92

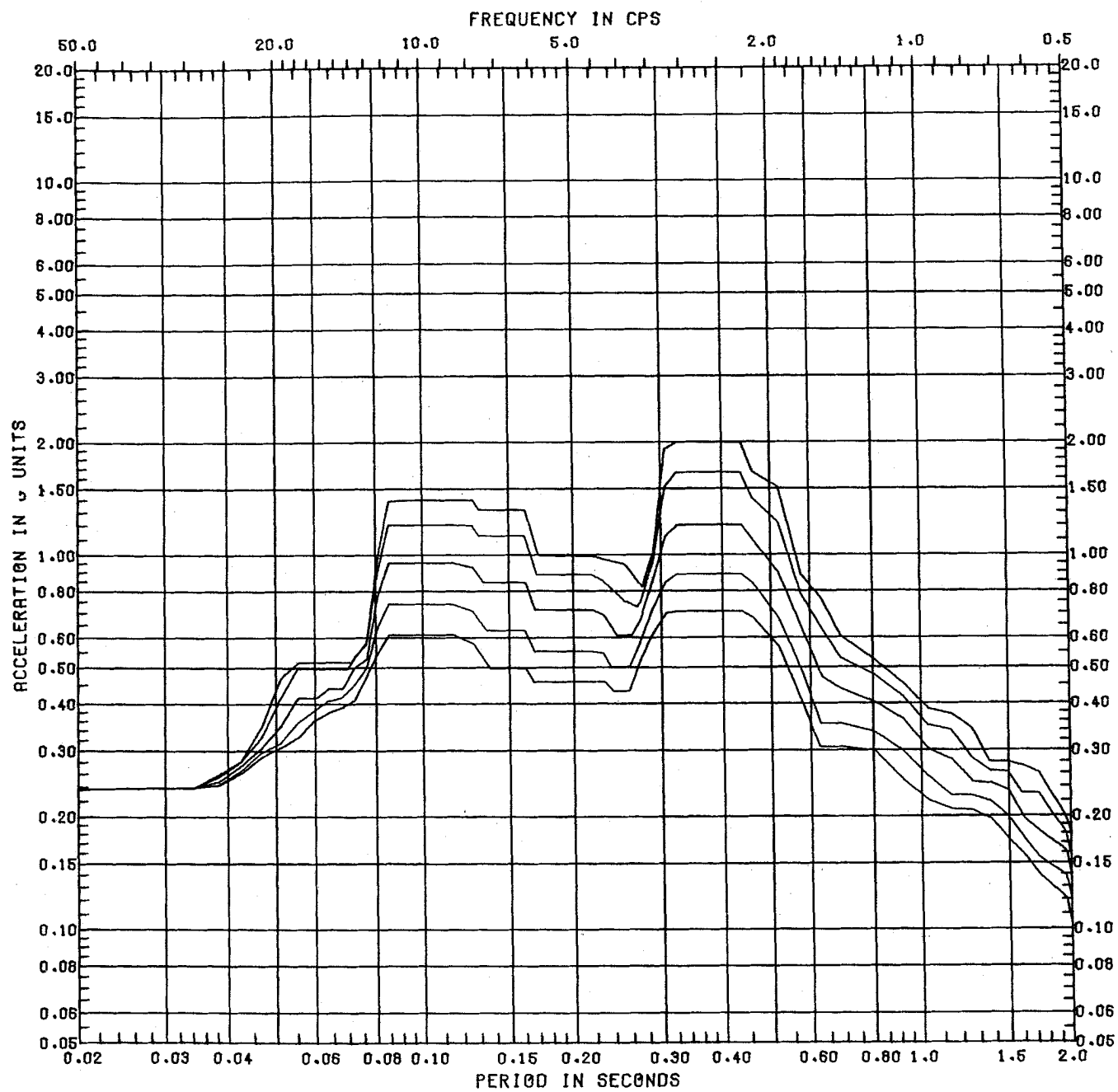
SSE RESPONSE SPECTRA CWSH -
MAIN FLOOR ELEVATION 699'-0"
VERTICAL WALL



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.7-93

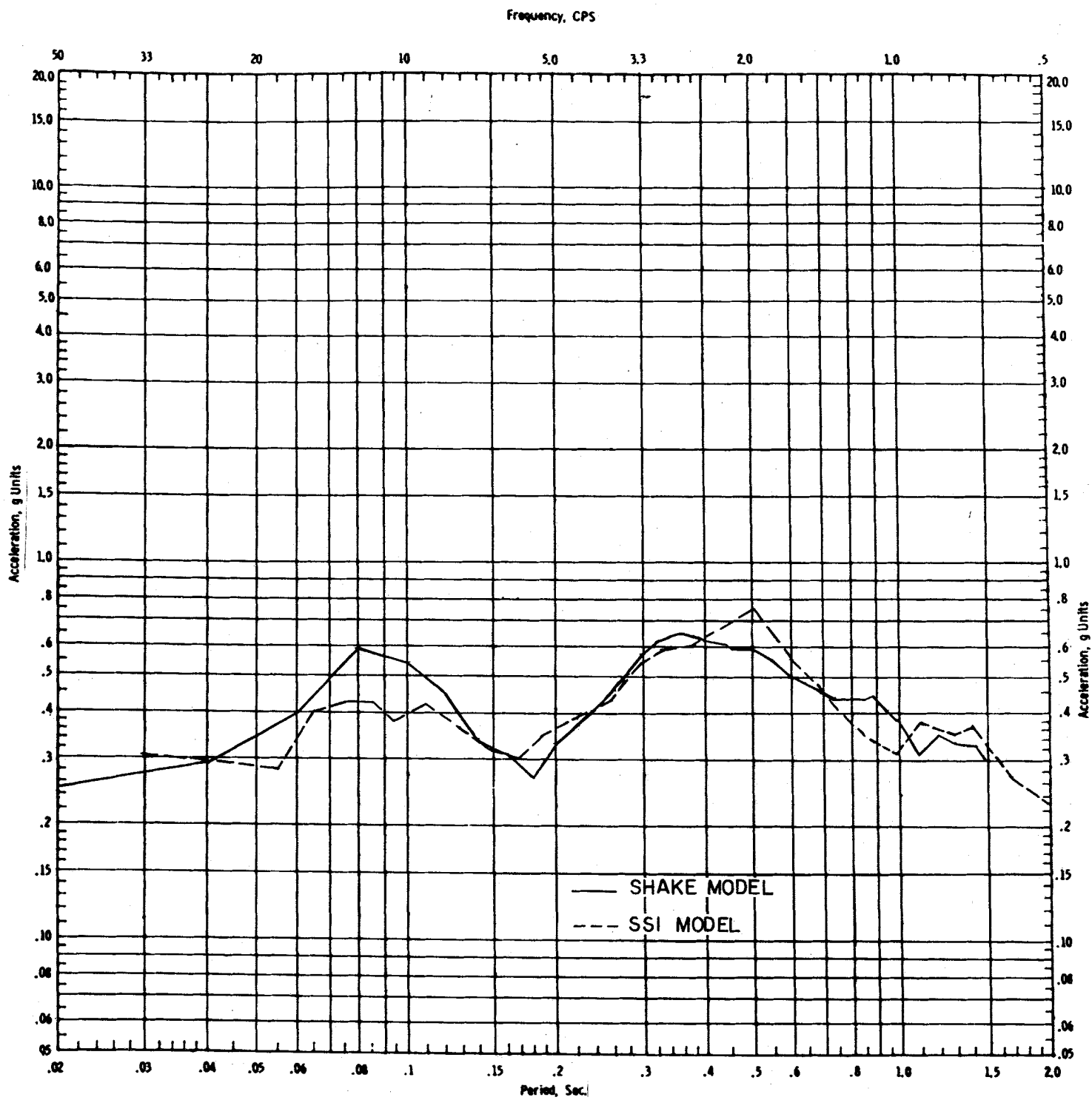
SSE RESPONSE SPECTRA CWSH -
CRANE LEVEL ELEVATION 719'-0"
VERTICAL WALL



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FIGURE 3.7-94

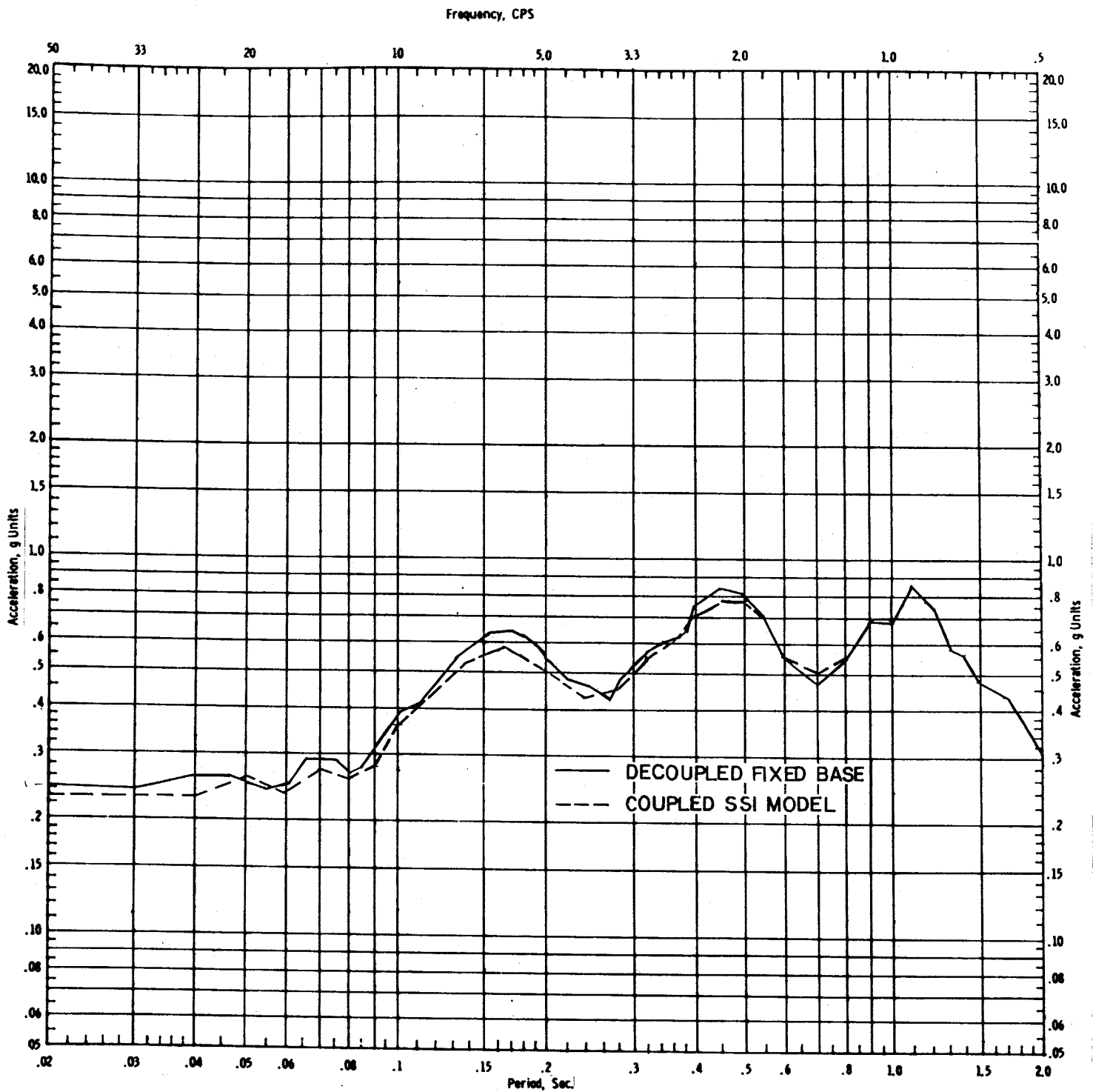
SSE RESPONSE SPECTRA CWSH -
ROOF ELEVATION 730'-0"
VERTICAL WALL



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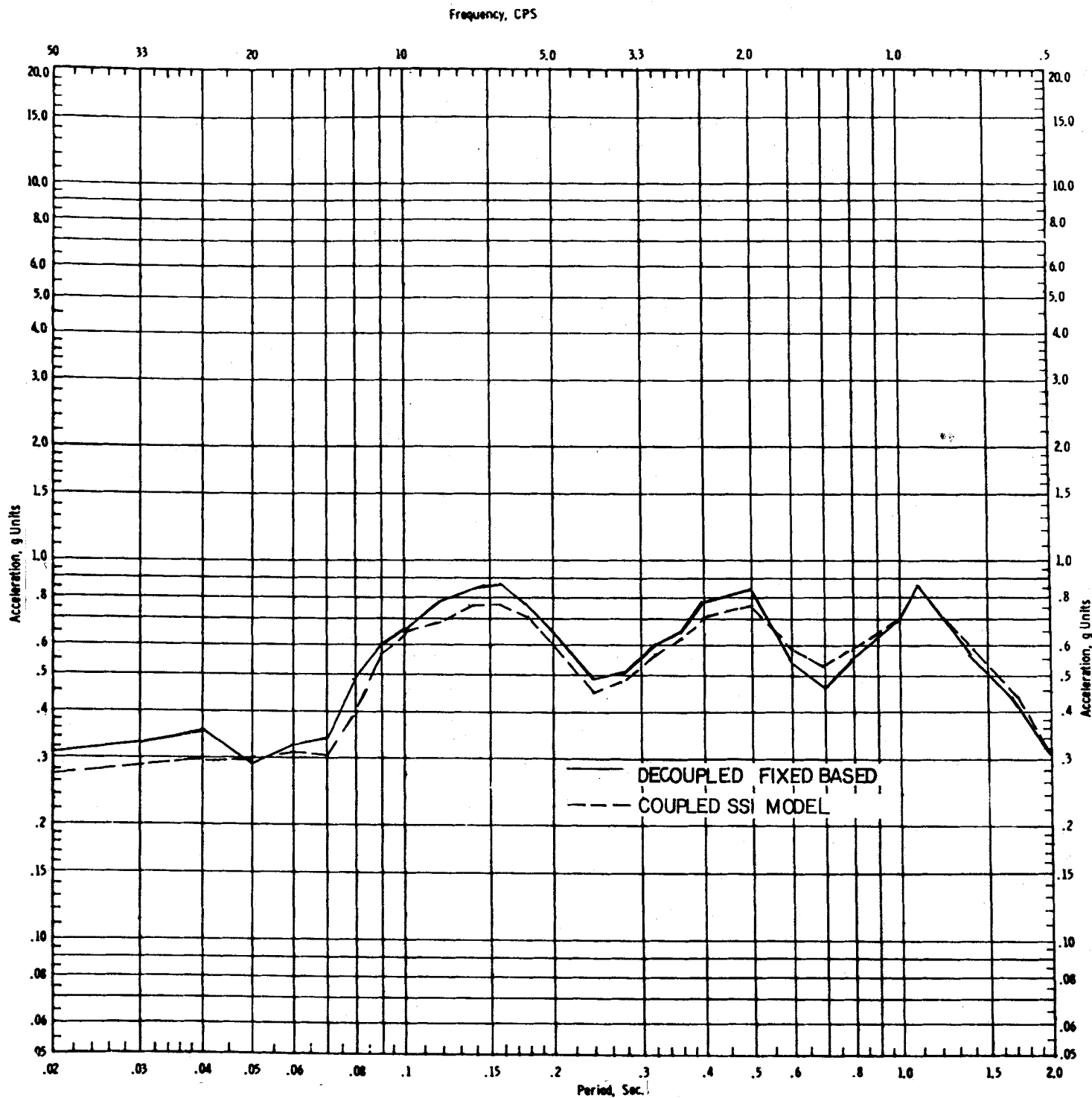
Figure 3.7-95
(Q&R 220.24)

COMPARISON OF FREE FIELD
FOUNDATION LEVEL SPECTRA
FROM THE SHAKE AND SSI ANALYSIS



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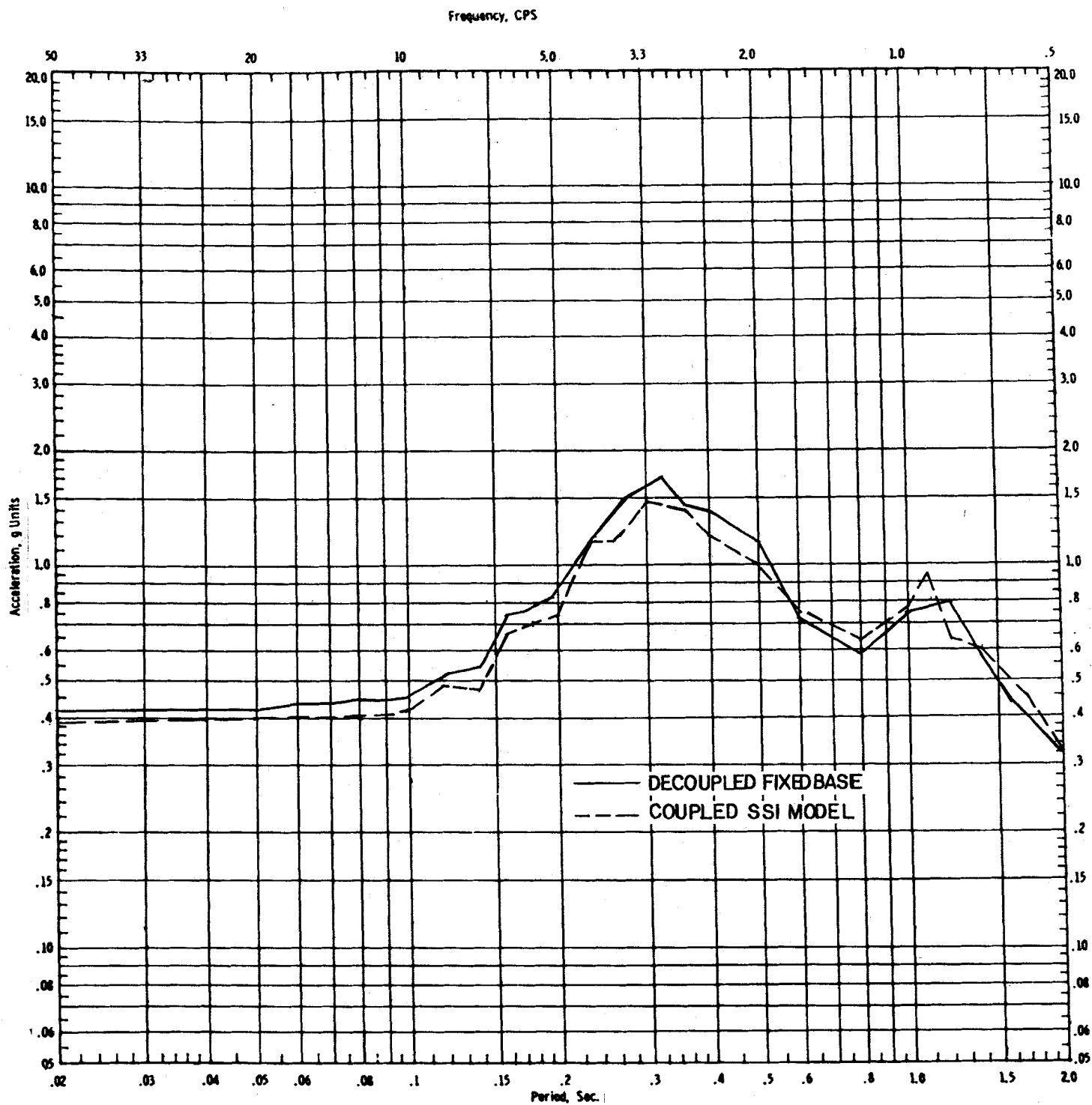
Figure 3.7-96
(Q&R 220.25)
COMPARISON OF DECOUPLED FIXED BASE
AND COUPLED SSI MODEL RESPONSES
AT ELEVATION 781'-0"
(UPPER MEZZANINE FLOOR)



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Figure 3.7-97
(Q&R 220.25)

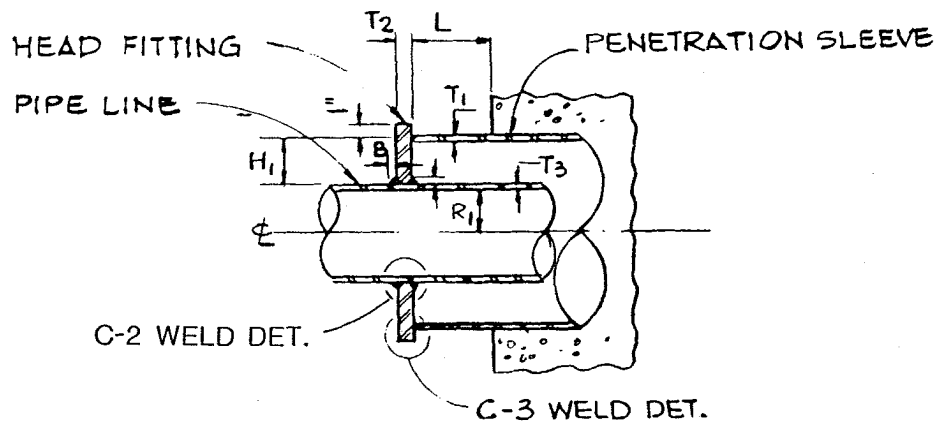
COMPARISON OF DECOUPLED FIXED BASE
AND COUPLED SSI MODEL RESPONSES
AT ELEVATION 825'-0"
(VENT. FLOOR)



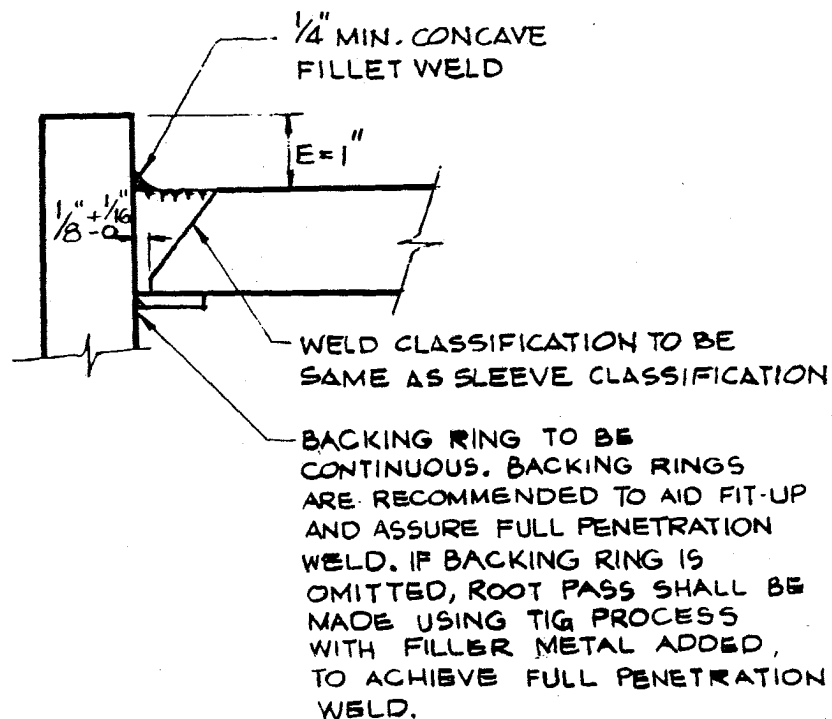
**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

Figure 3.7-98
(Q&R 220.25)

COMPARISON OF DECOUPLED FIXED BASE
AND COUPLED SSI MODEL RESPONSES
AT ELEVATION 874'-0"
(TURBINE ROOM ROOF)



PIPE ATTACHMENT



DETAIL "C-3"

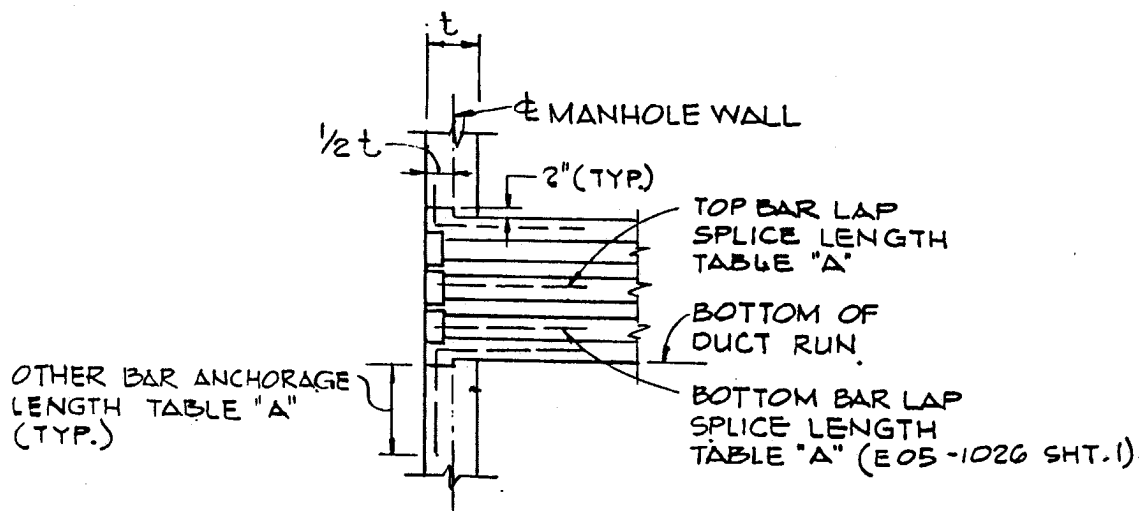
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UPDATED SAFETY ANALYSIS REPORT

Figure 3.7-99
(Q&R 220.36)

DETAIL OF PIPE ATTACHMENT



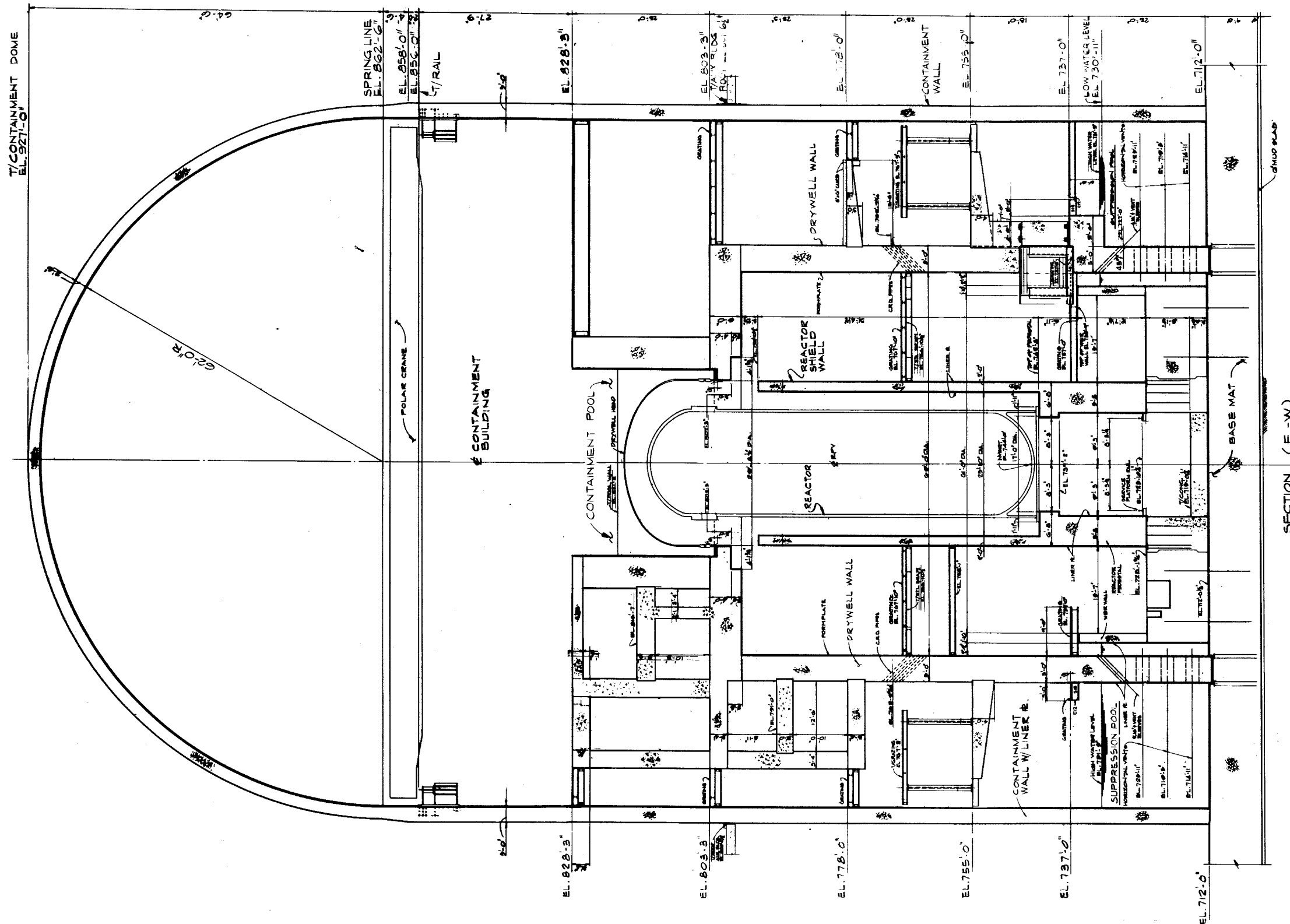
ELECTRICAL MANHOLE CONNECTION DETAILS



TYP. DUCT DETAIL @ MANHOLE WALL
(CATEGORY I)

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Figure 3.7-101
(Q&R 220.36)
TYPICAL DUCT DETAIL
AT MANHOLE WALL
(CATEGORY I)



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FIGURE 3.8-1

CONTAINMENT SYSTEM

(SHEET 1 of 2)

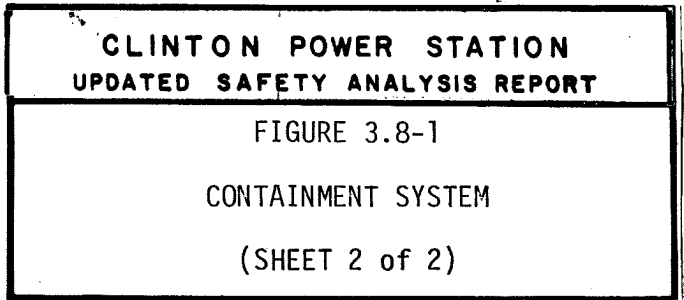
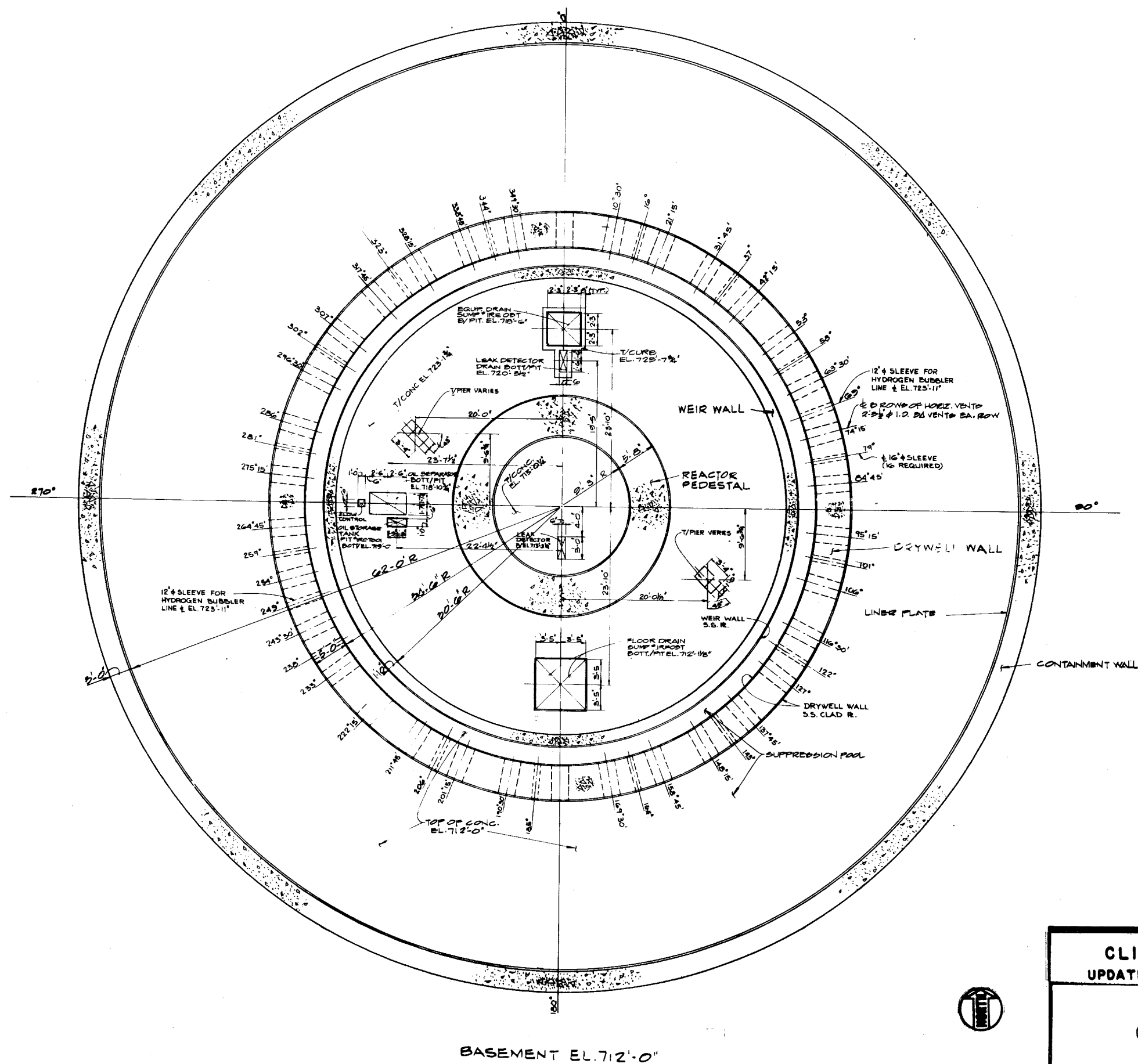


FIGURE 3.8-1
CONTAINMENT SYSTEM
(SHEET 2 of 2)

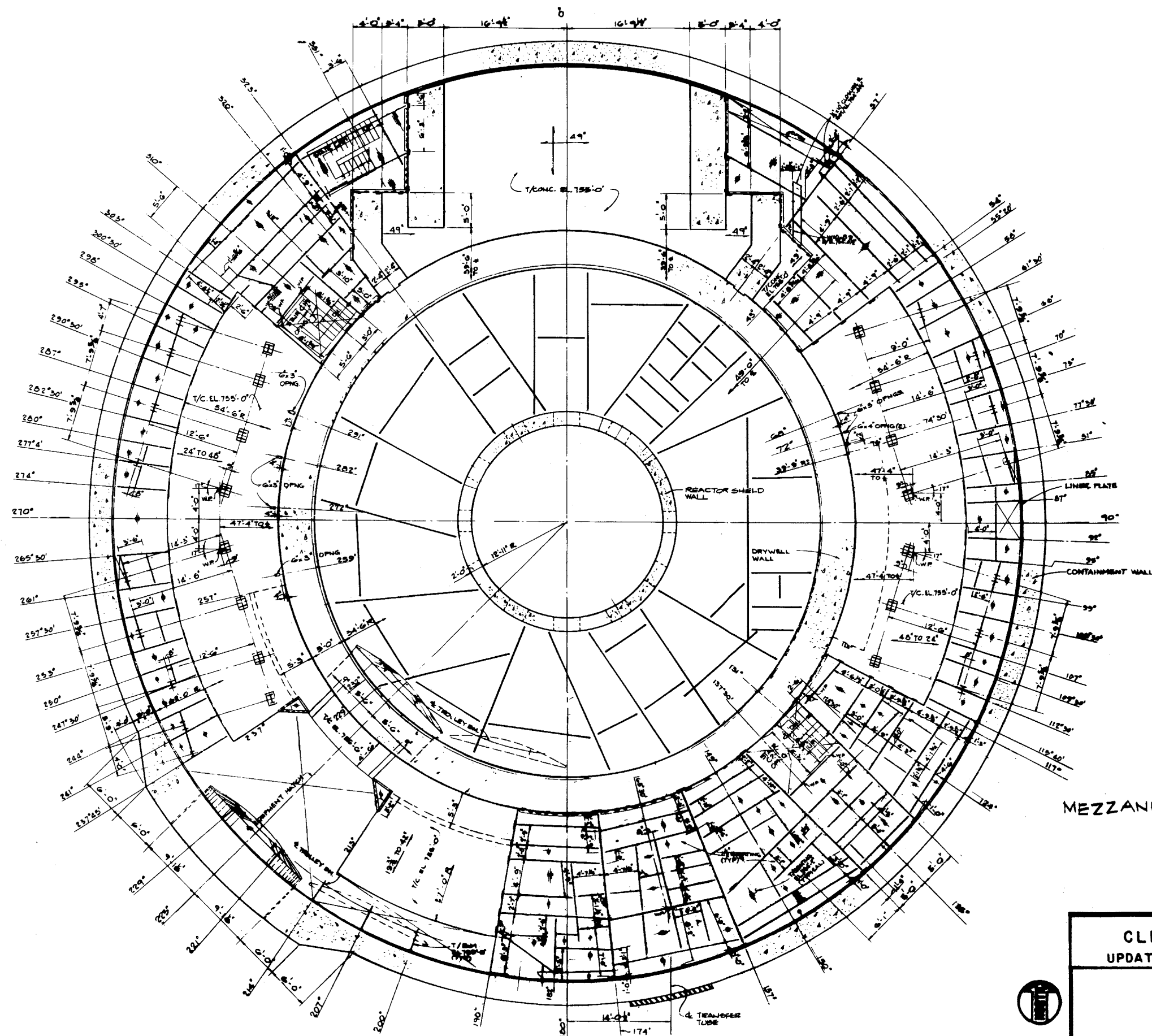


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FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

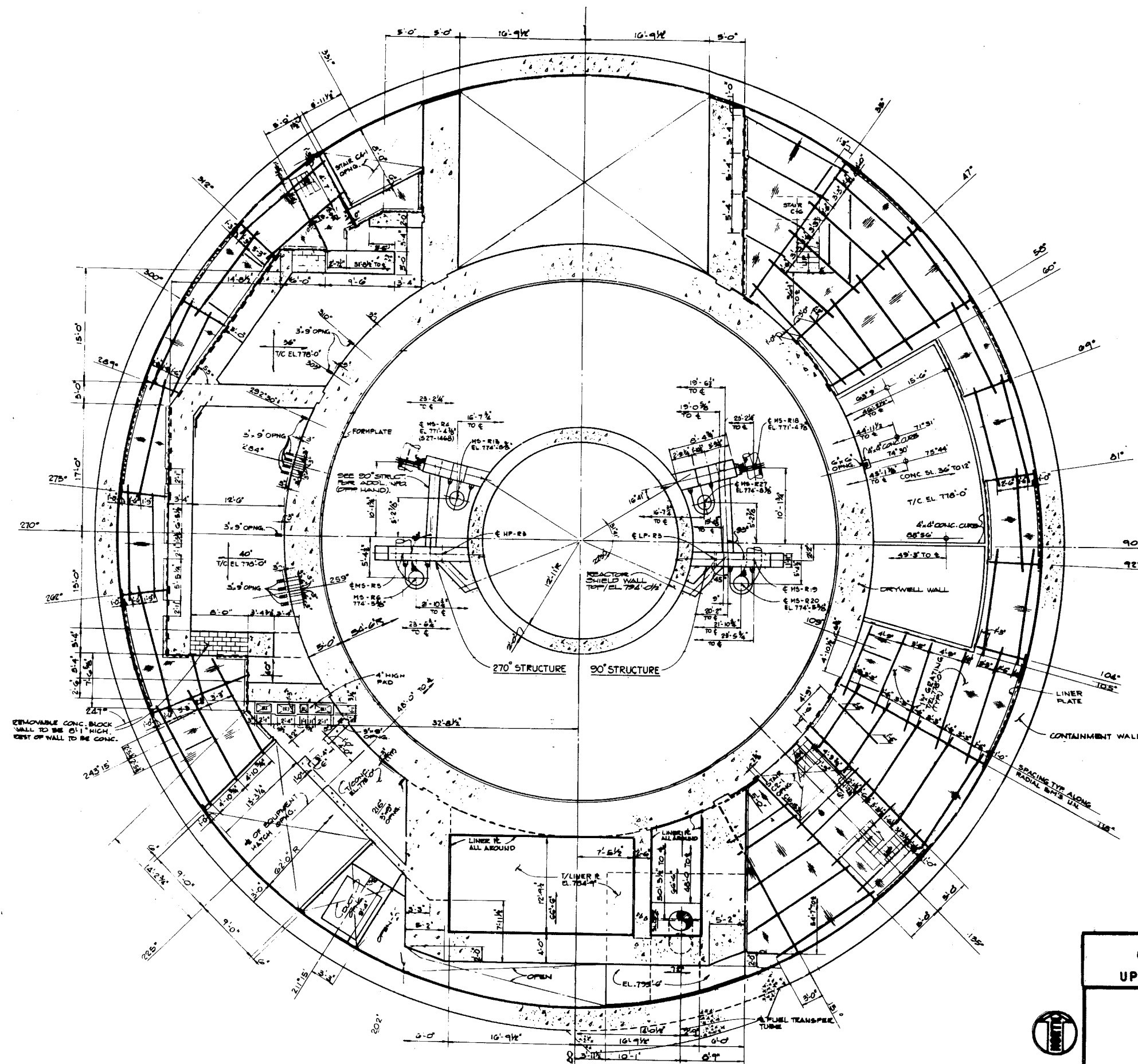
(SHEET 1 of 6)



MEZZANINE FLOOR EL. 755'-0"



| |
|---|
| <p>CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT</p> |
| <p>FIGURE 3.8-2 CONTAINMENT FRAMING PLAN (SHEET 3 of 6)</p> |

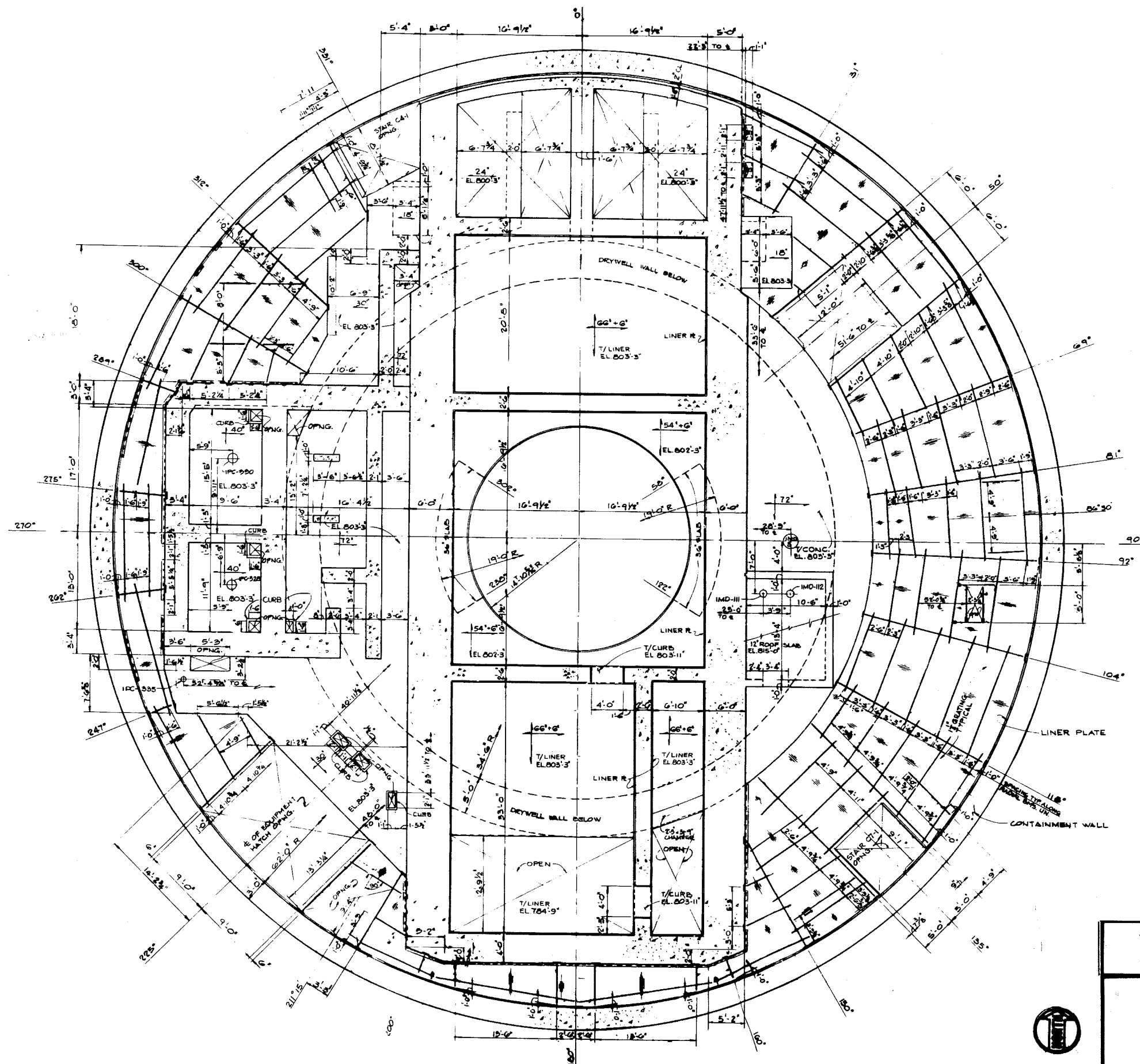


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FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 4 of 6)



FLOOR EL. 803'-3"

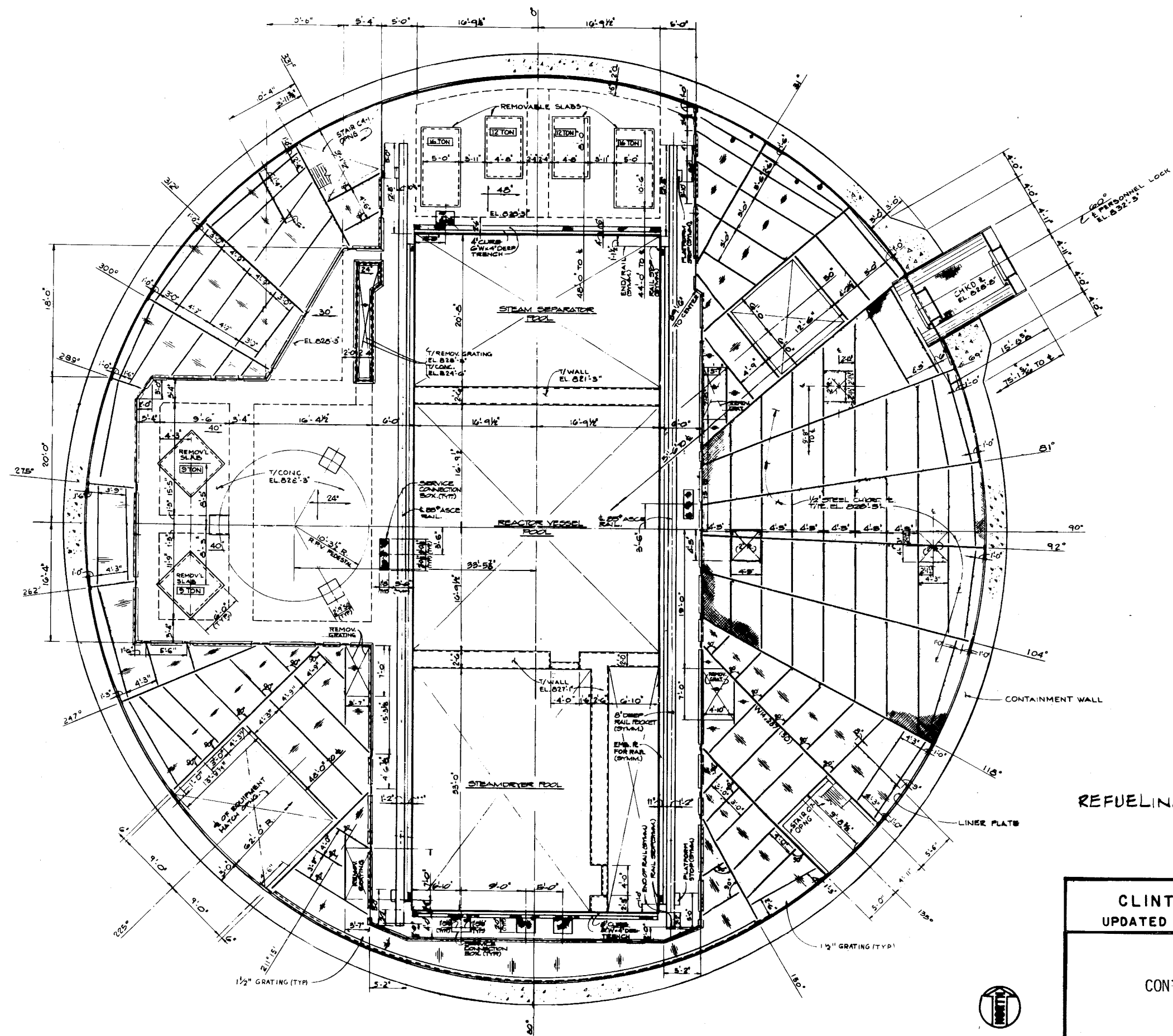
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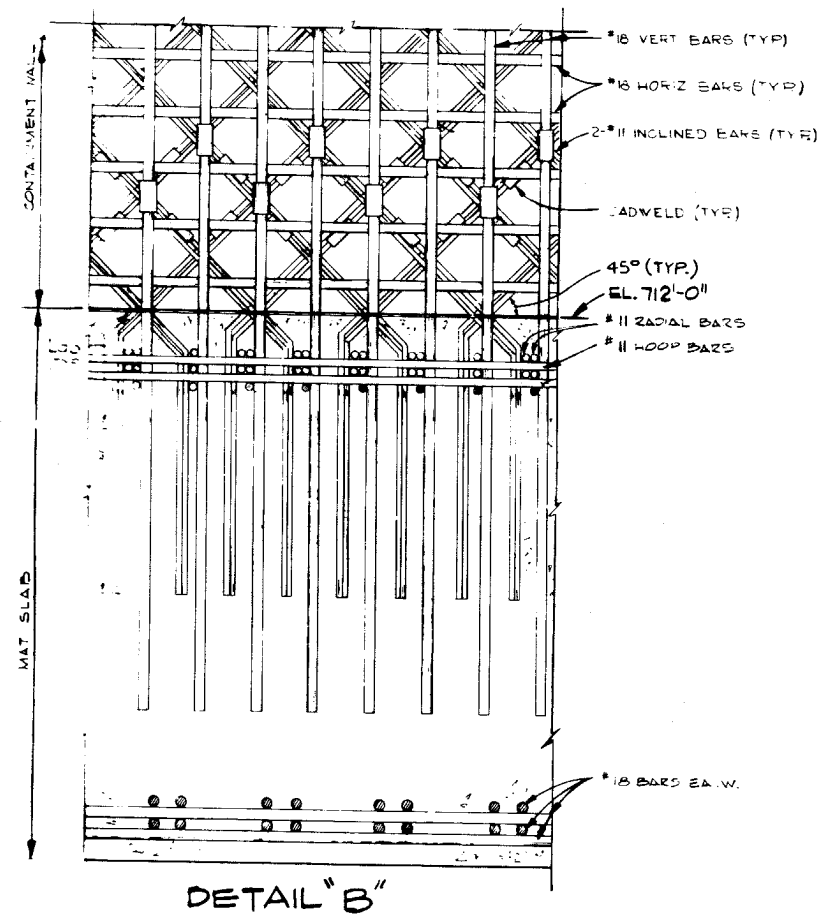
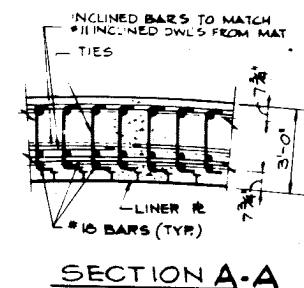
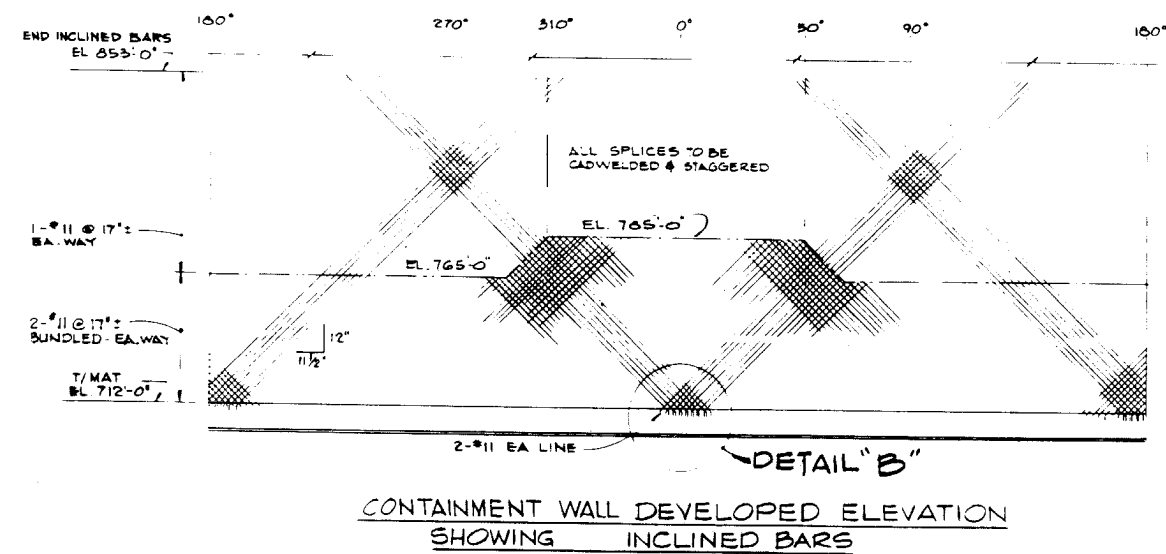
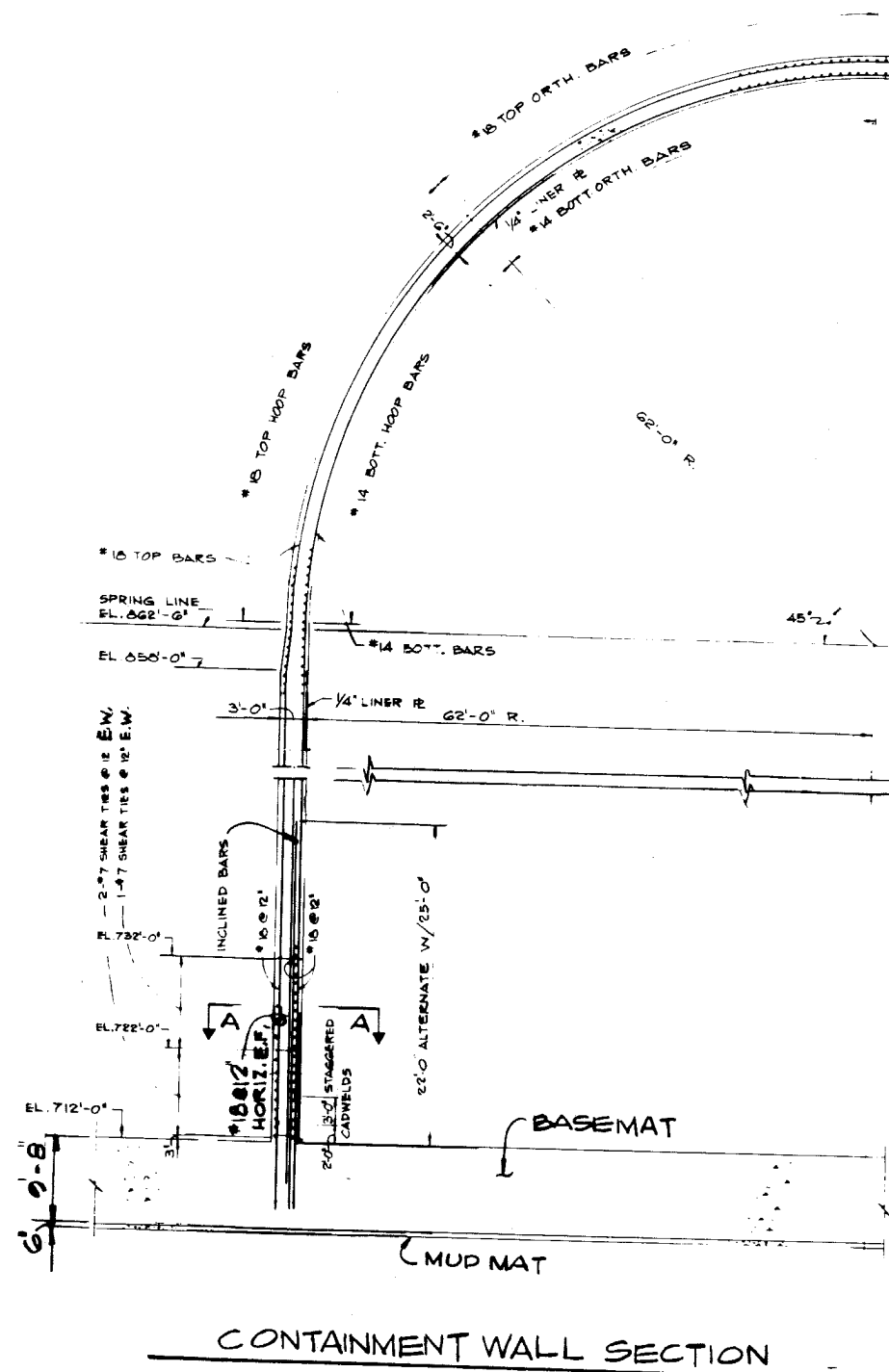
FIGURE 3.8-2

CONTAINMENT FRAMING PLAN

(SHEET 5 of 6)





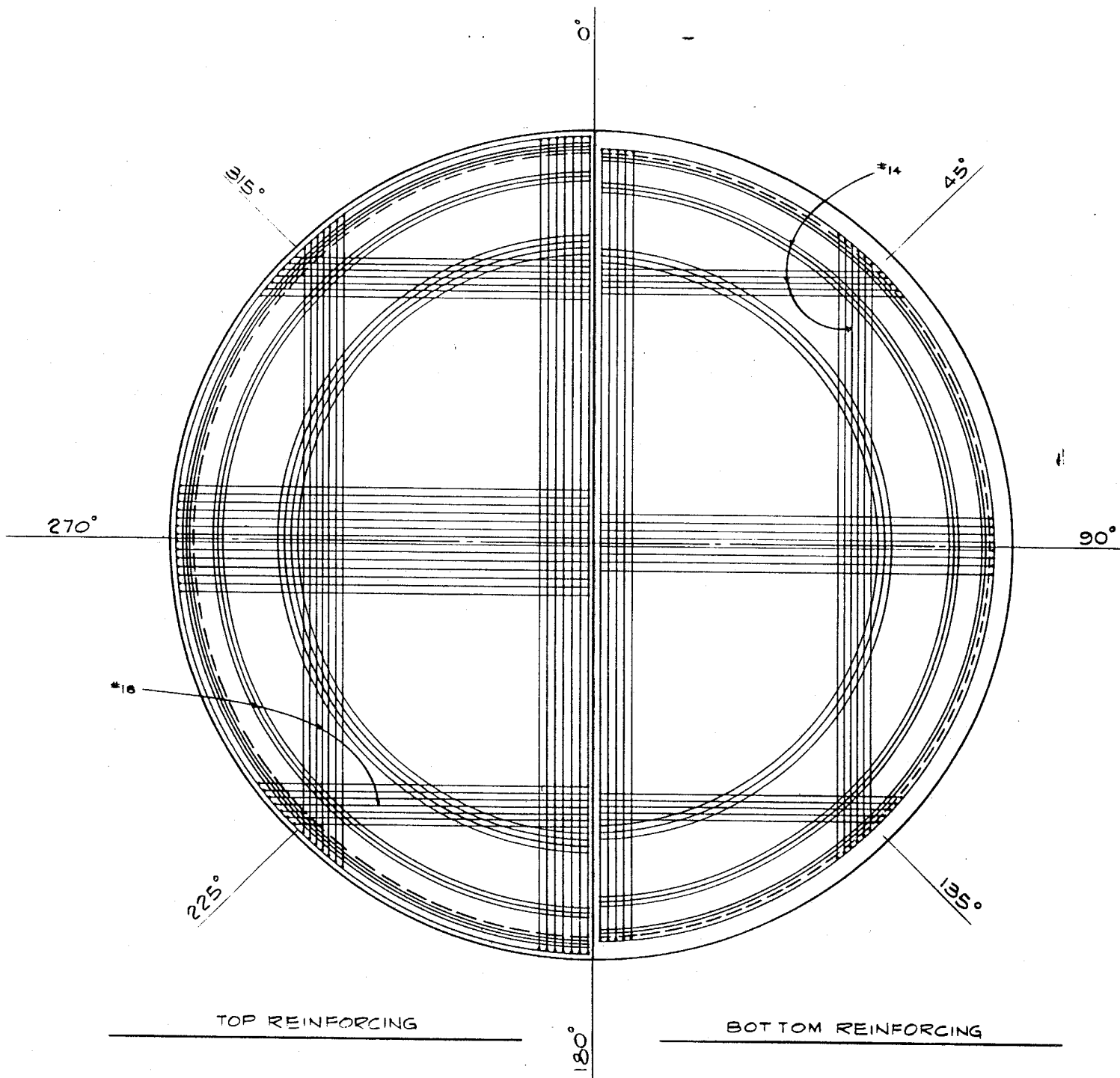


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FIGURE 3.8-3

CONTAINMENT WALL & DOME
REINFORCING DETAILS

(SHEET 1 of 2)



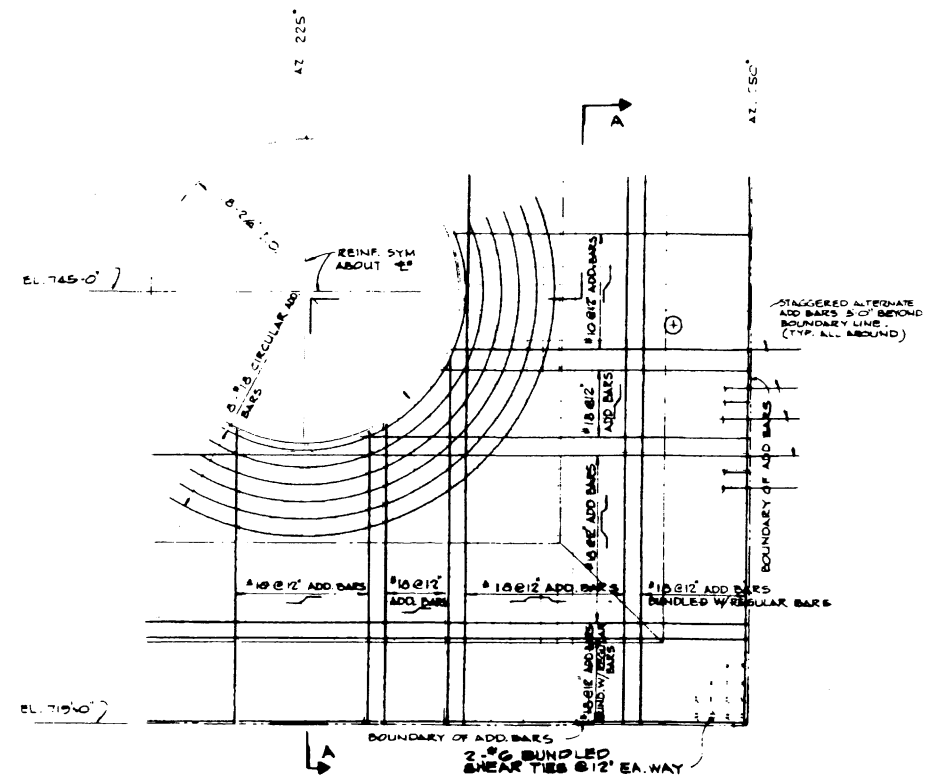
DOME PLAN

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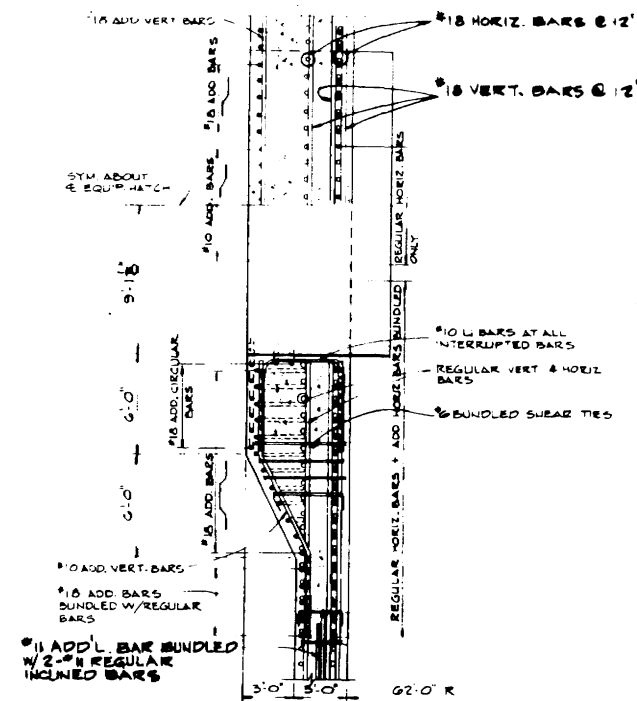
FIGURE 3.8-3

CONTAINMENT WALL & DOME
REINFORCING DETAILS

(SHEET 2 of 2)

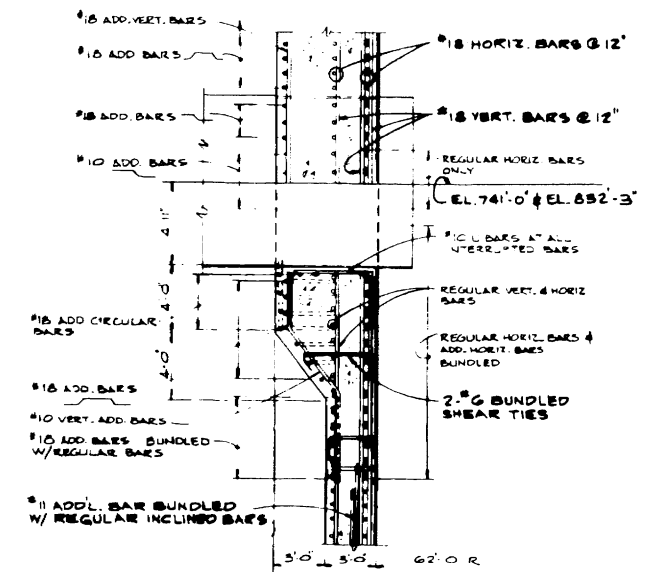
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EXTERIOR FACE REIN. AROUND EQUIPMENT HATCH
(LOOKING FROM INSIDE OUT)



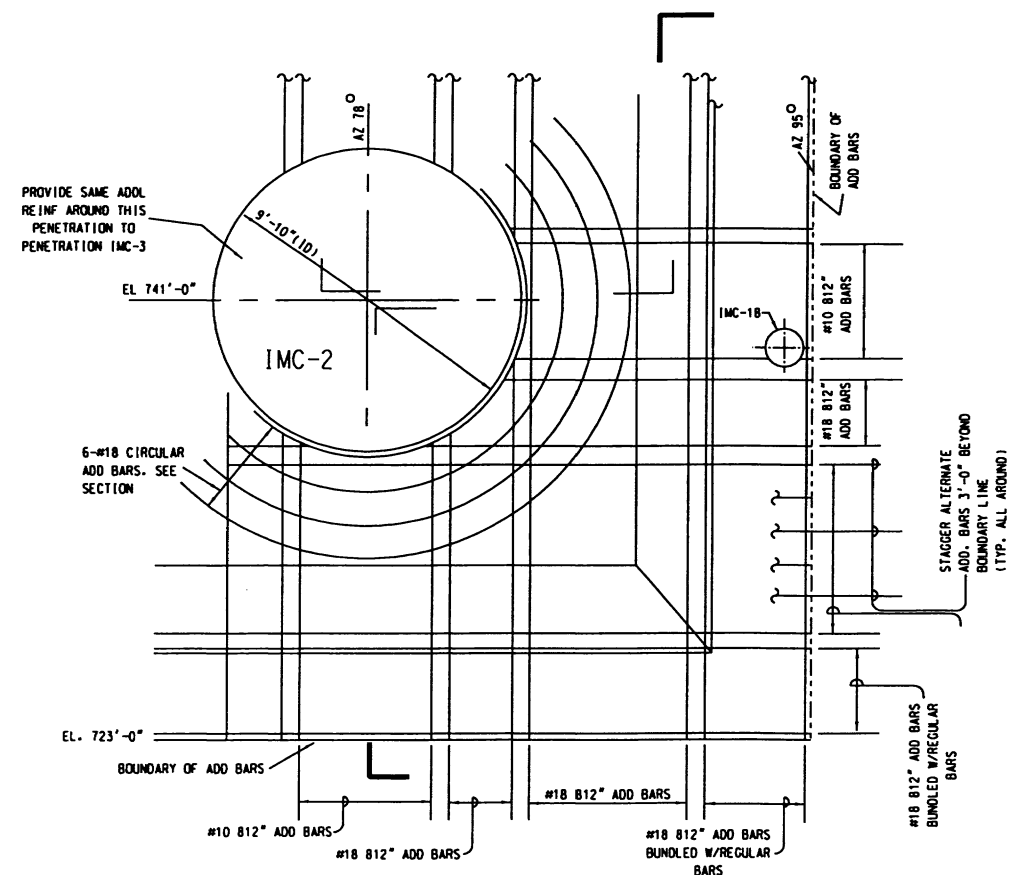
SECTION A-A

ADDITIONAL BARS ARE SHOWN IN DARK DOTS



SECTION THRU PERSONNEL LOCKS

ADDITIONAL BARS ARE SHOWN IN DARK DOTS



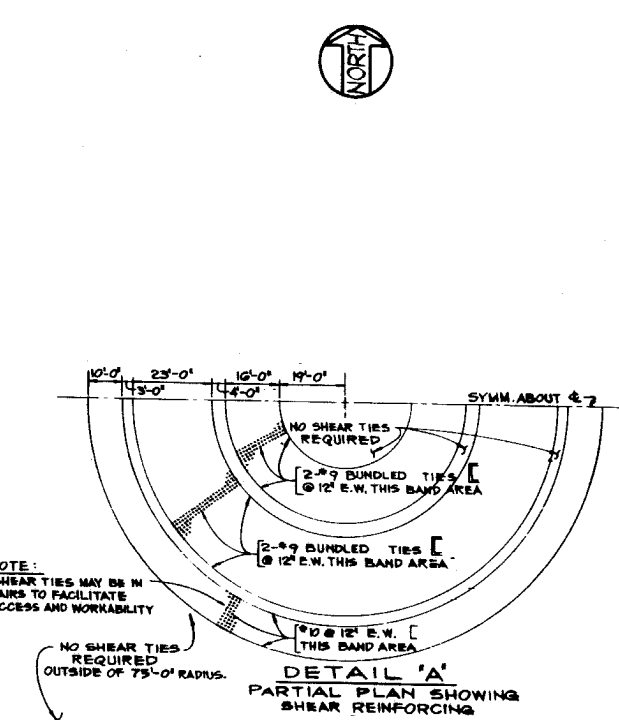
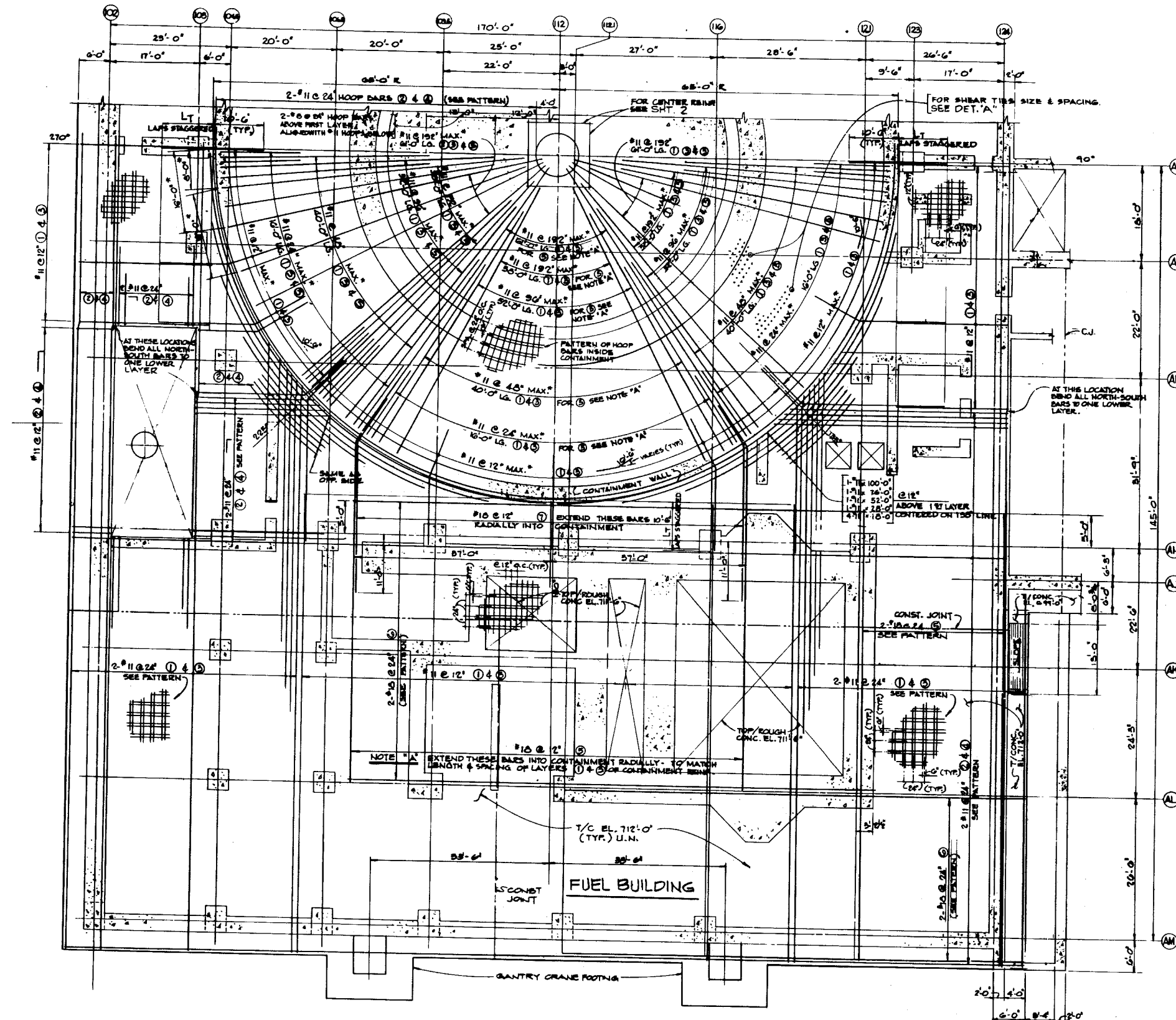
EXTERIOR FACE REINF. AROUND PERSONNEL LOCK

LOOKING FROM INSIDE OUT

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FIGURE 3.8-4

PERSONNEL AND EQUIPMENT HATCH
REINFORCING DETAILS (CONTAINMENT)



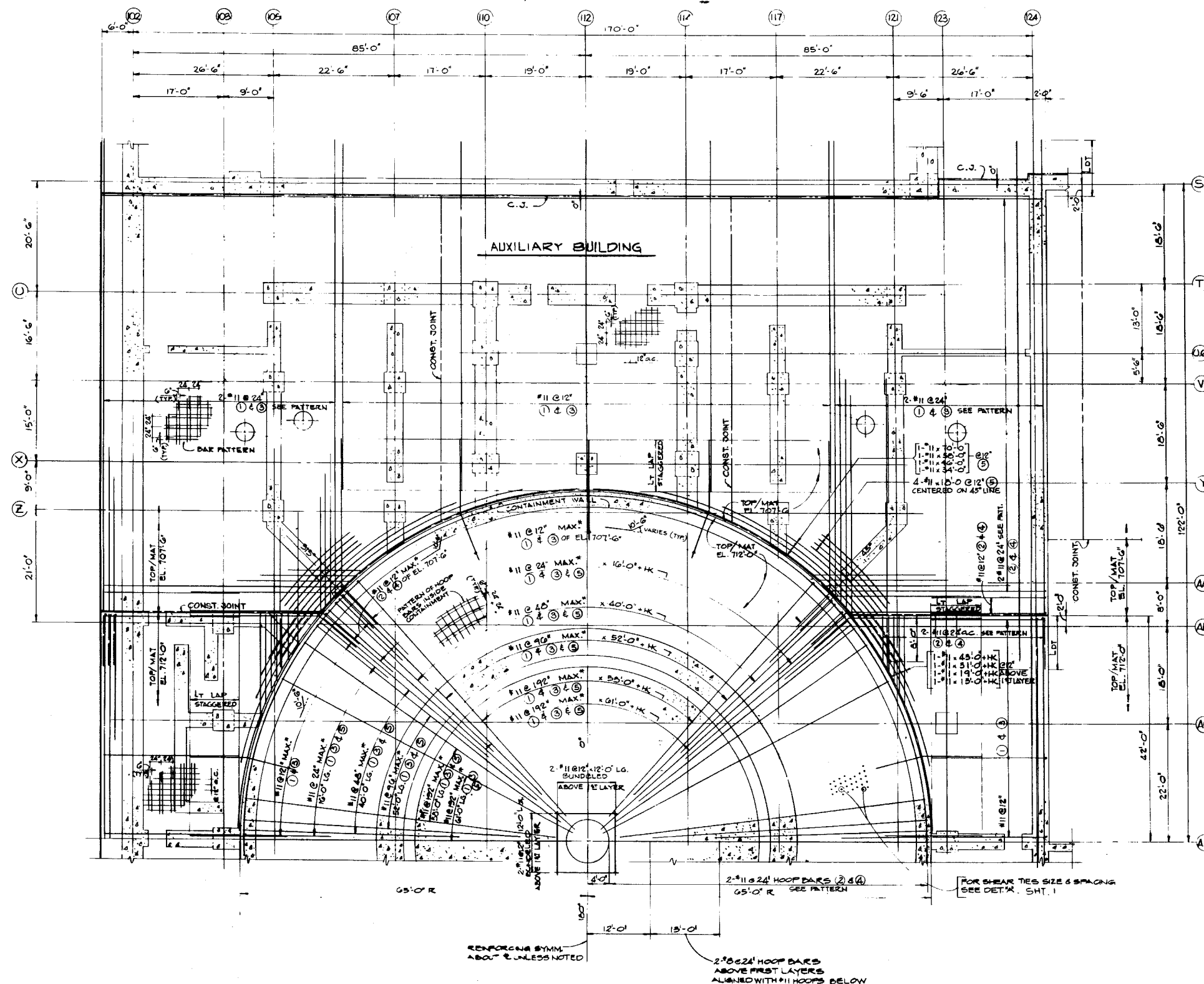
* SPACING OF RADIAL BARS SHALL BE MEASURED ALONG A CIRCLE OF 66'-2" RADIUS. THE STARTING POINT OF RADIAL BARS SHALL BE ON A CIRCLE OF 64'-8" RADIUS.

LEGEND
NUMBER IN CIRCLE THUS ⑤ REPRESENTS THE LEVEL IN WHICH THE BAR IS POSITIONED

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FIGURE 3.8-5

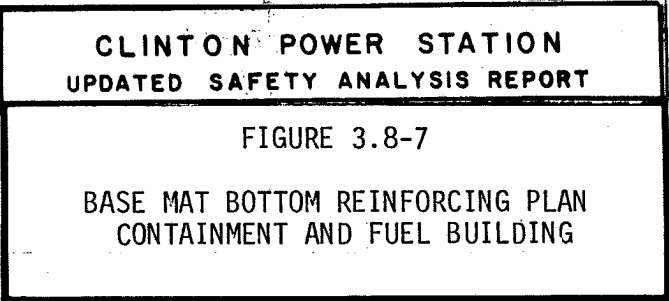
BASE MAT TOP REINFORCING PLAN
CONTAINMENT AND FUEL BUILDING



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FIGURE 3.8-6

**BASE MAT TOP REINFORCING PLAN
 CONTAINMENT AND AUXILIARY BUILDING**

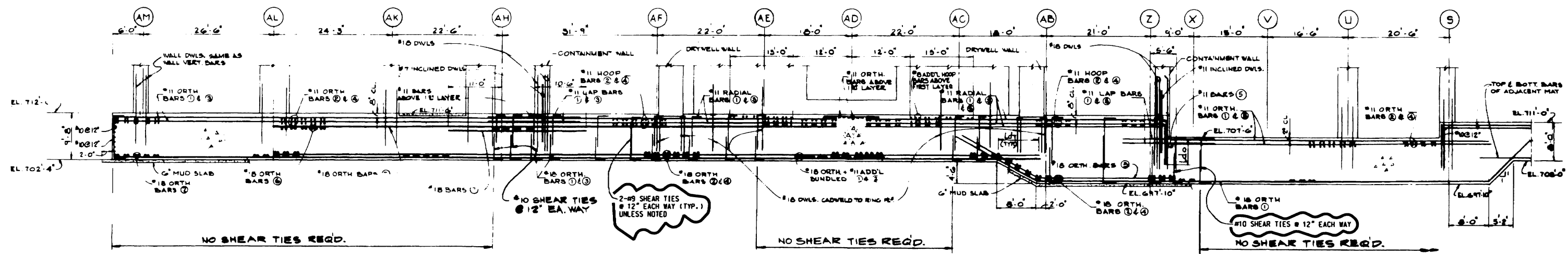


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FIGURE 3.8-7

BASE MAT BOTTOM REINFORCING PLAN
CONTAINMENT AND FUEL BUILDING

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TYPICAL SECTION THRU BASE MAT

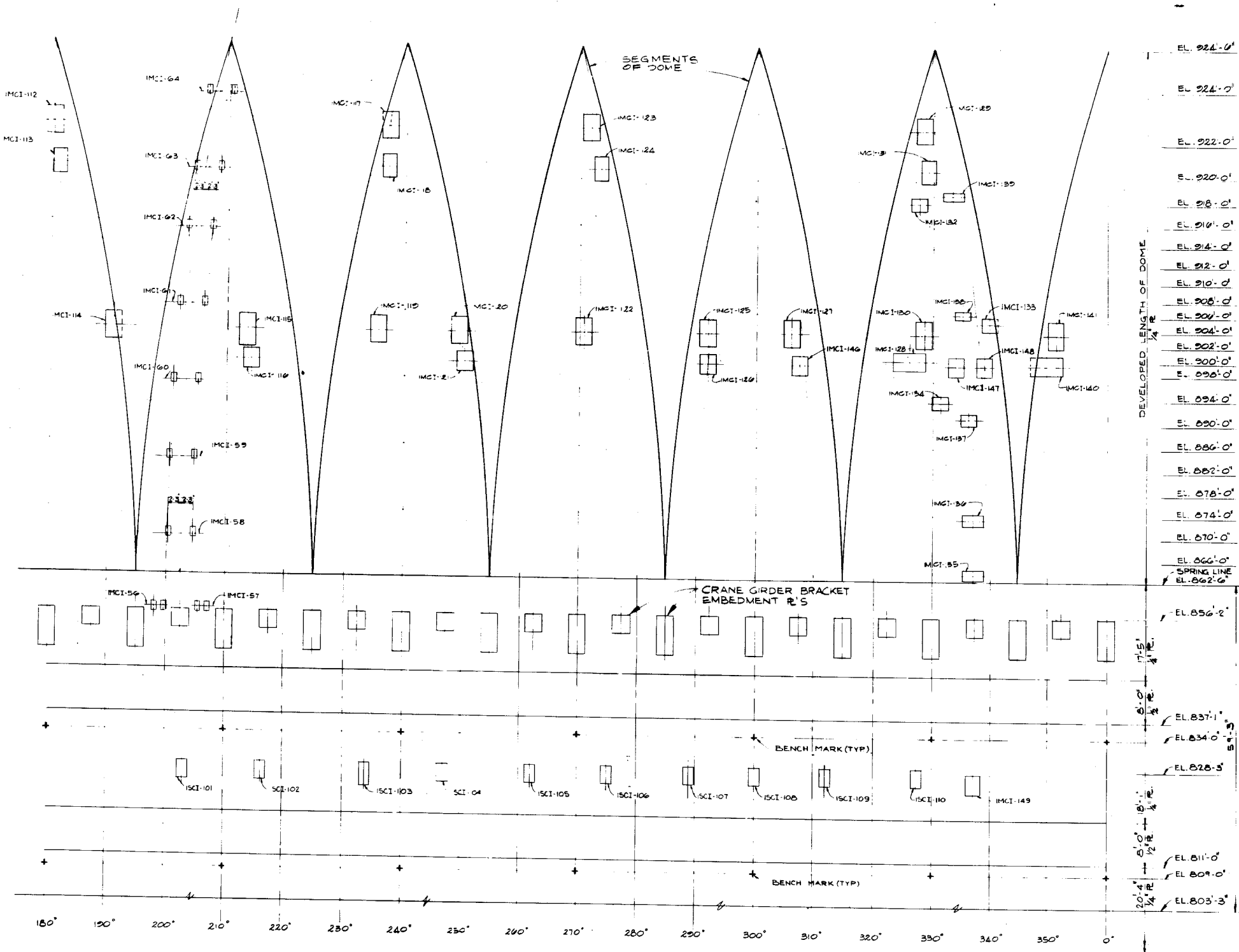
LEGEND

NUMBER IN CIRCLE THUS (3) REPRESENTS
THE LAYER IN WHICH THE BAR IS POSITIONED

CLINTON POWER STATION
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FIGURE 3.8-9

BASE MAT SECTION REINFORCING DETAIL

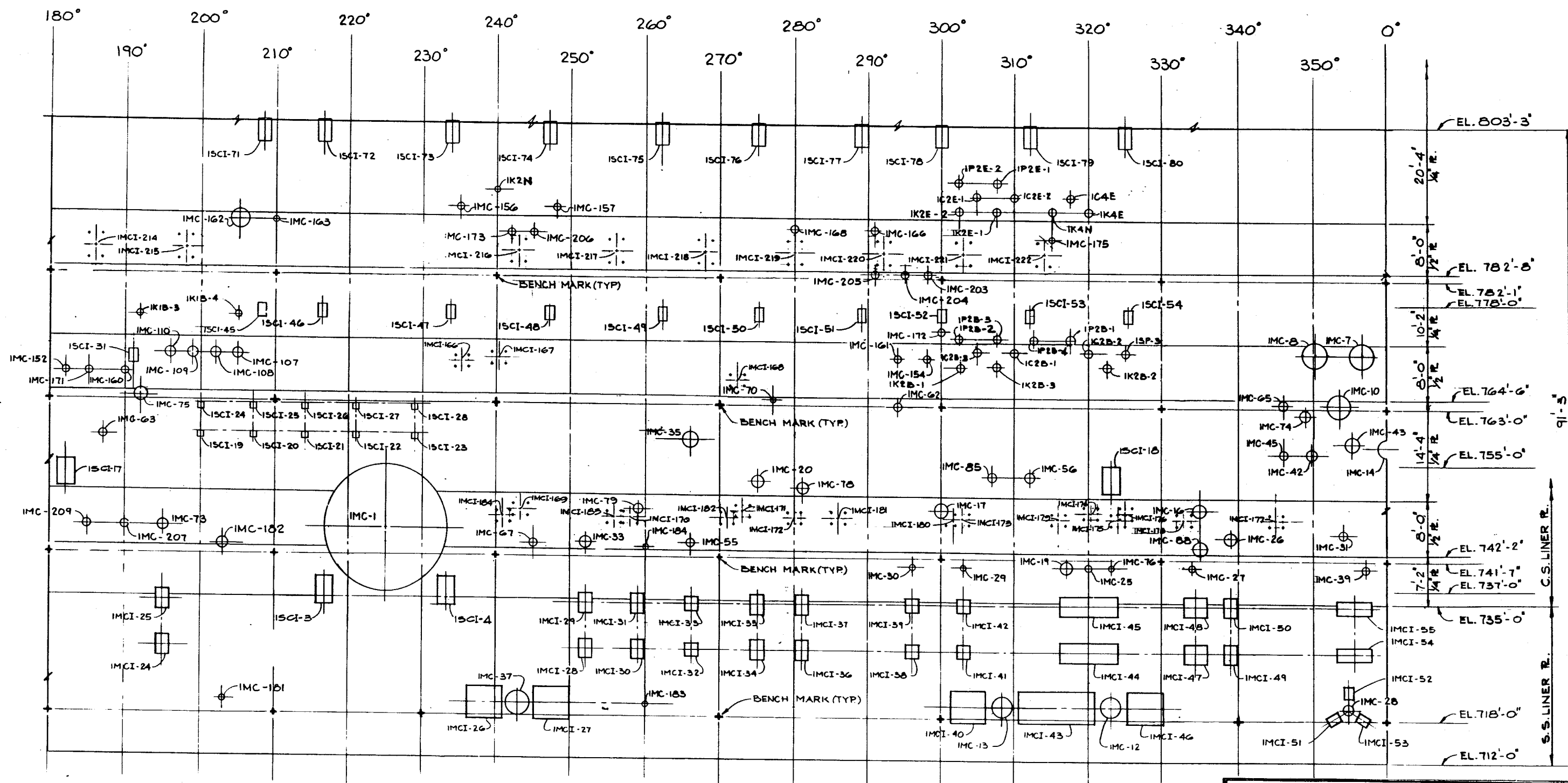


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FIGURE 3.8-10

CONTAINMENT DEVELOPED ELEVATION

(SHEET 3 of 4)



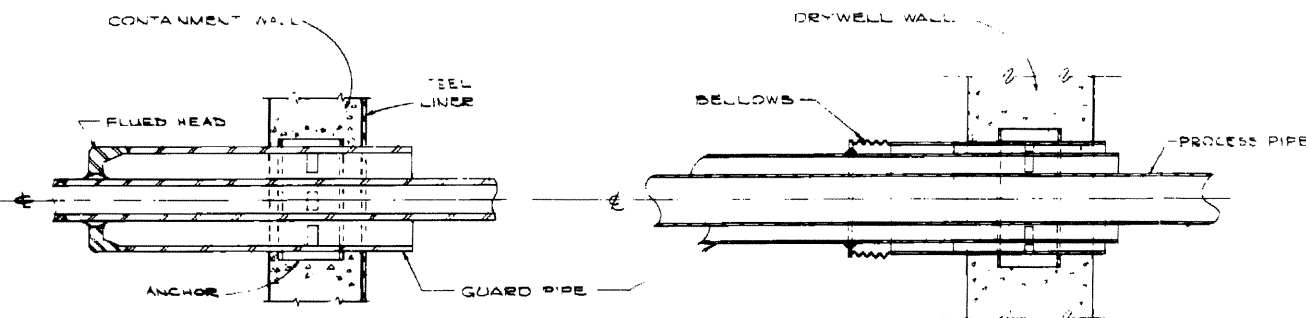
CLINTON POWER STATION
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FIGURE 3.8-10

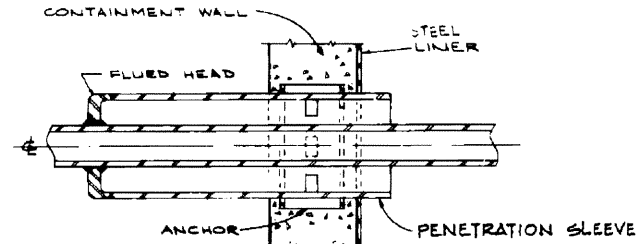
CONTAINMENT DEVELOPED ELEVATION

(SHEET 4 of 4)

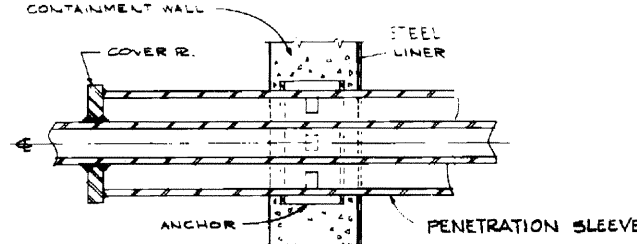
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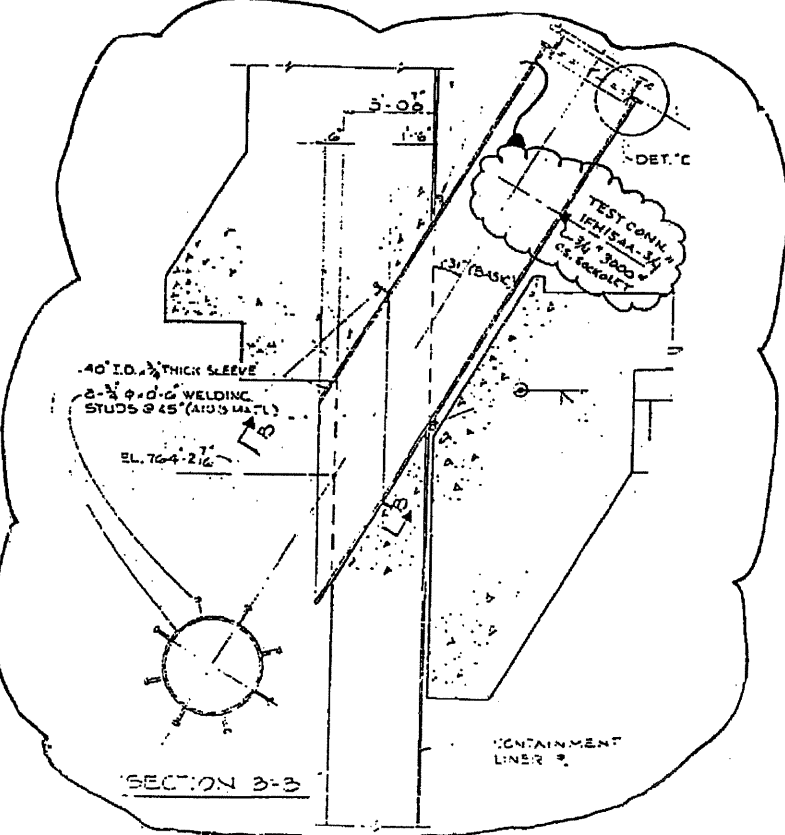
TYPE I



TYPE-2

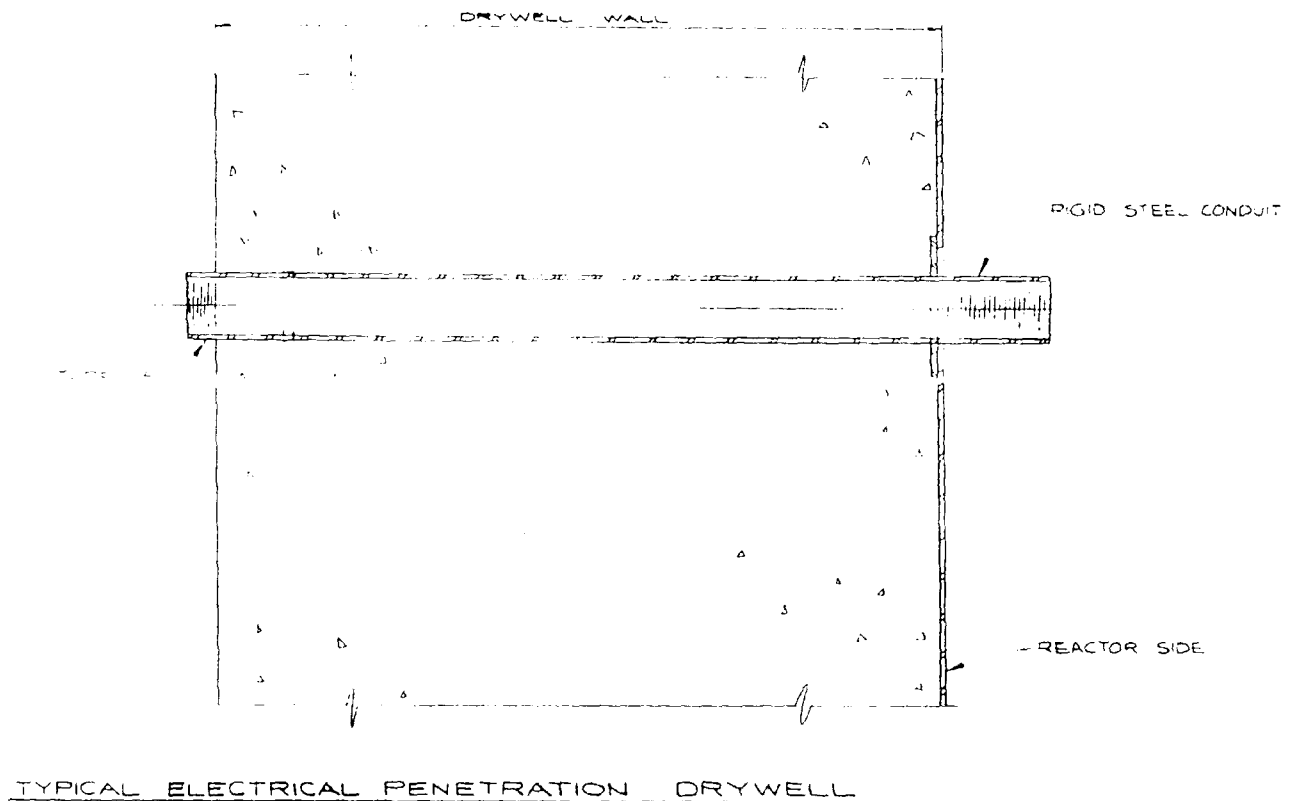


TYPE-3



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FIGURE 3.8-11
CONTAINMENT BUILDING PENETRATIONS

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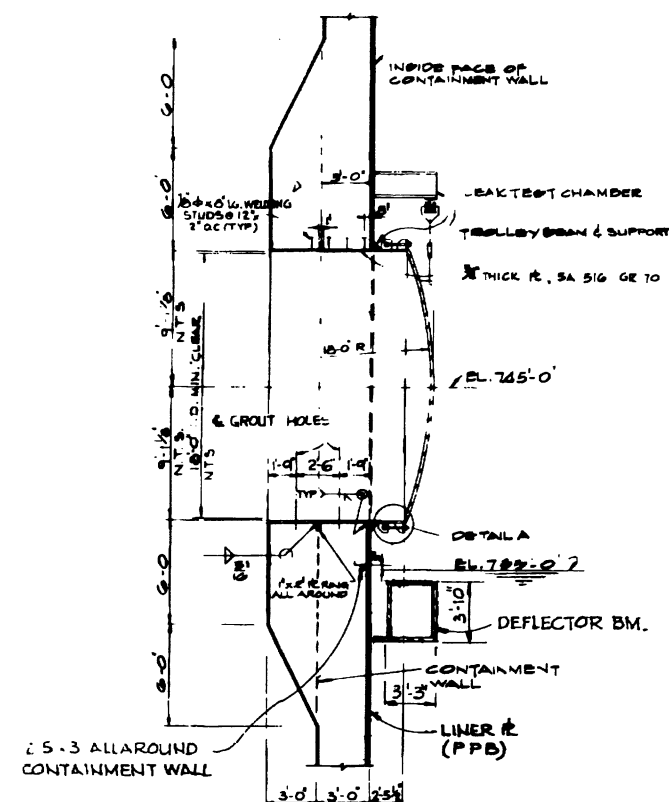
TYPICAL ELECTRICAL PENETRATION DRYWELL

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

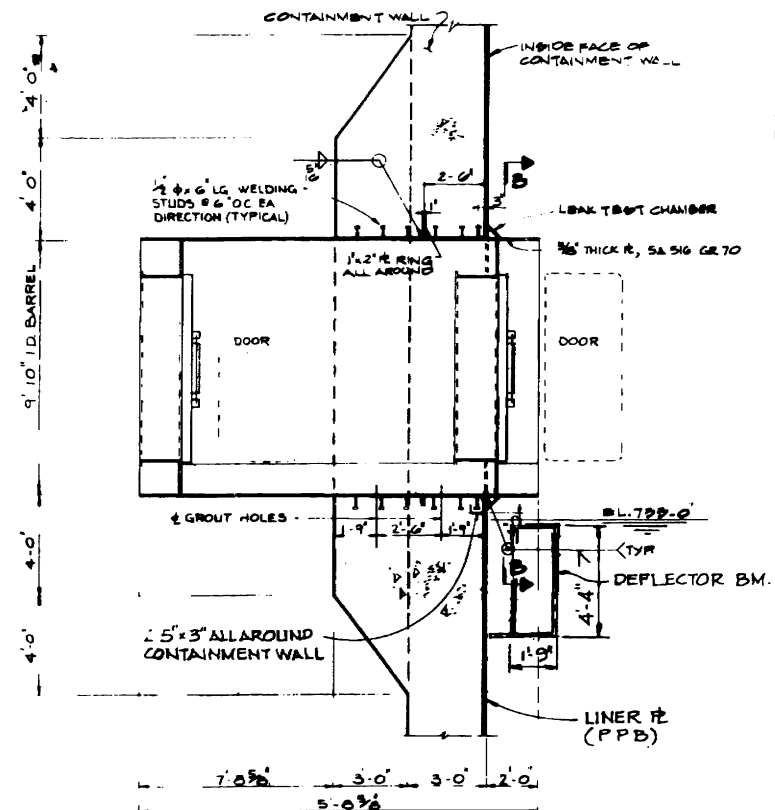
FIGURE 3.8-12

ELECTRICAL PENETRATIONS

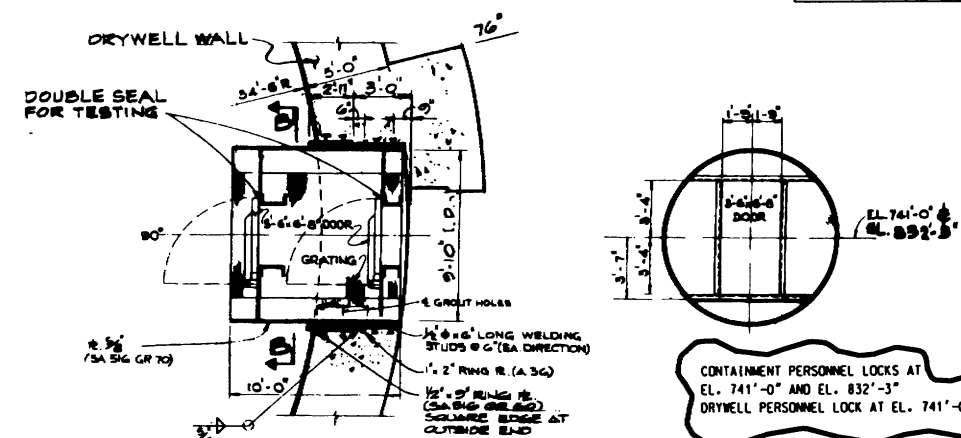
Note: Figure 3.8-12 Page 2 of 2 has
been deleted.



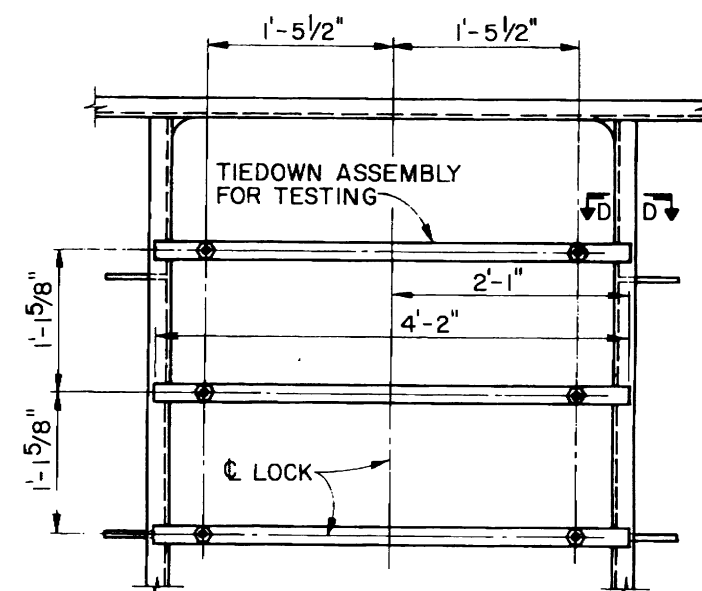
**CONTAINMENT
EQUIPMENT HATCH**



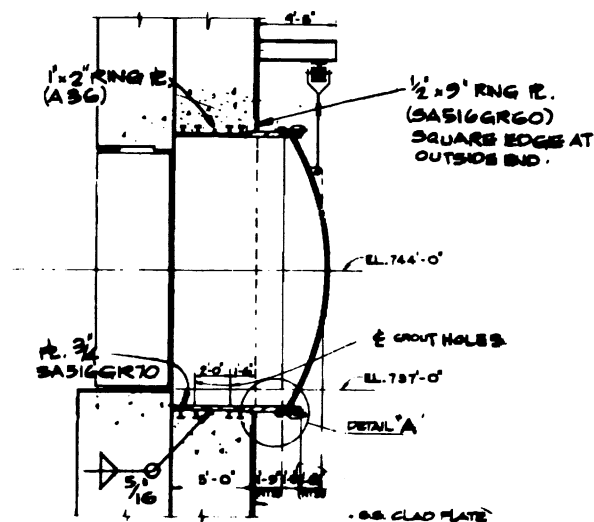
**CONTAINMENT PERSONNEL
ACCESS LOCK**



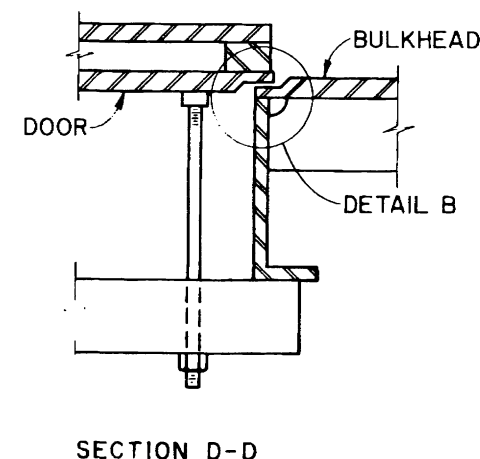
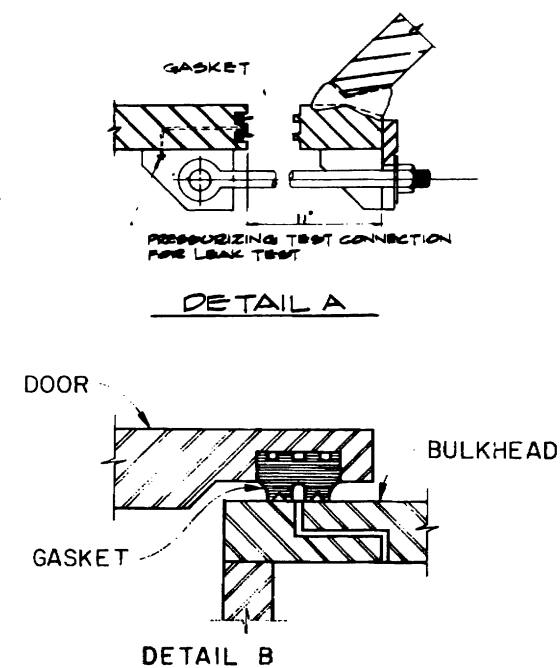
**PLAN
DRYWELL WALL PERSONNEL LOCK**



NOTE: TIEDOWNS ARE REQUIRED ON THE INTERIOR DOOR
FOR CONTAINMENT PERSONNEL AIR LOCK TESTS
GREATER THAN 2 PSIG.



DRYWELL WALL EQUIPMENT HATCH

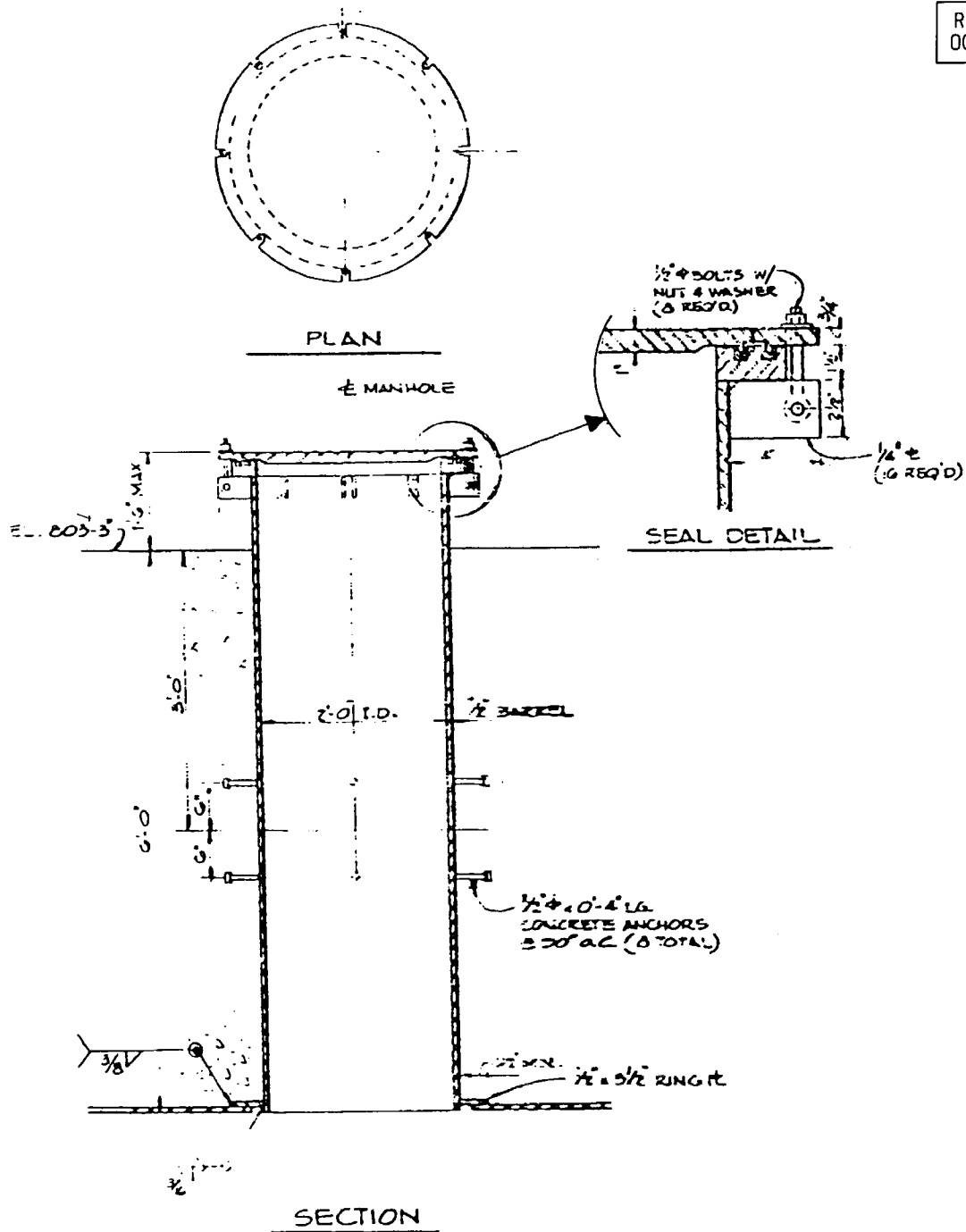


**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

**FIGURE 3.8-13
PERSONNEL AND EQUIPMENT HATCH
DETAILS**

SHEET 1 OF 2

REVISION 10
OCTOBER 2001

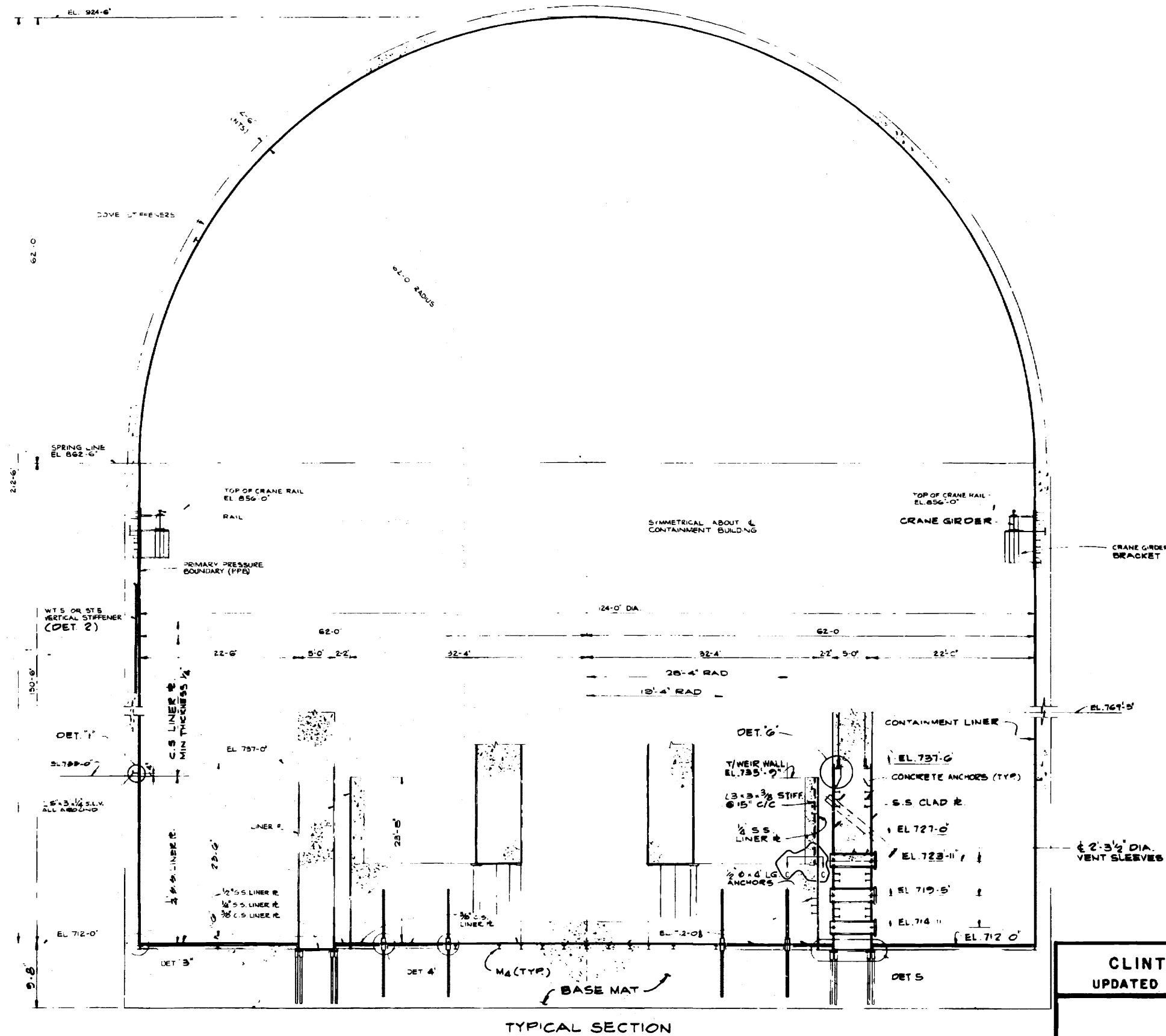


DRYWELL CEILING PERSONNEL HATCH

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

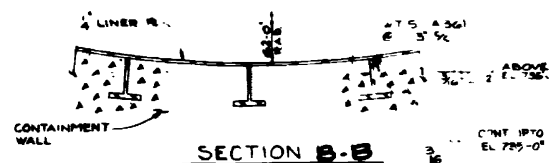
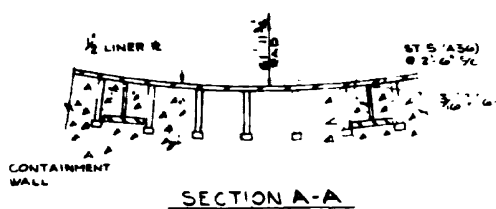
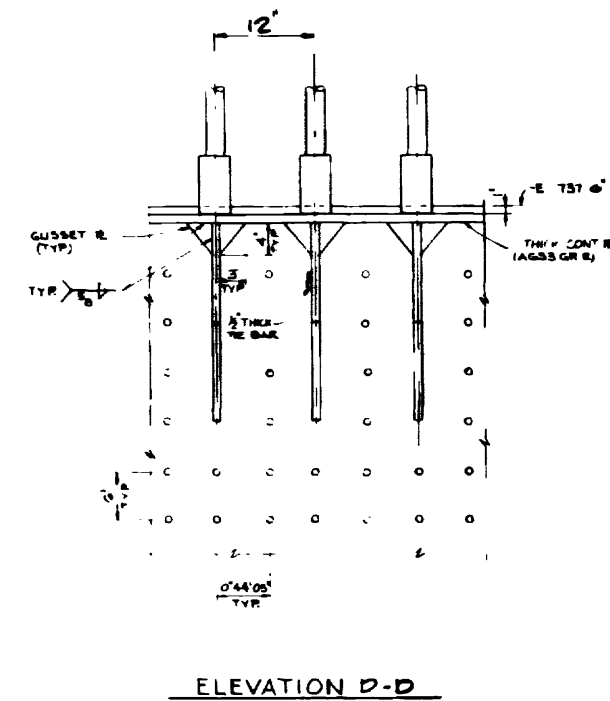
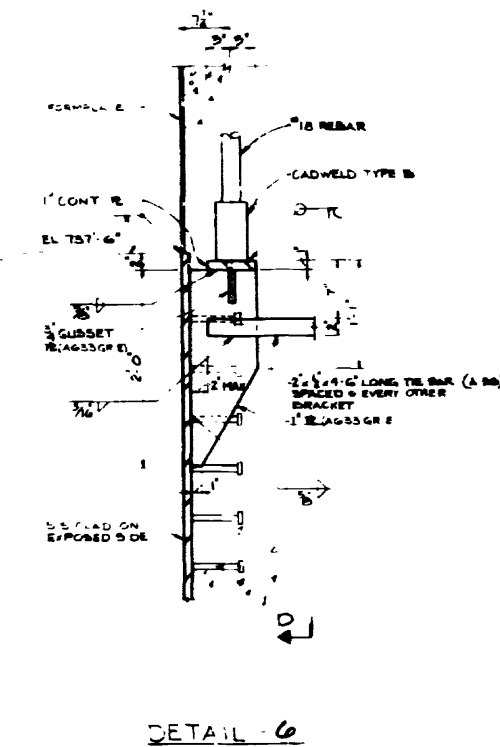
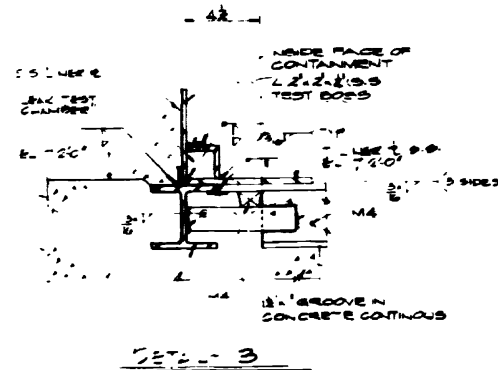
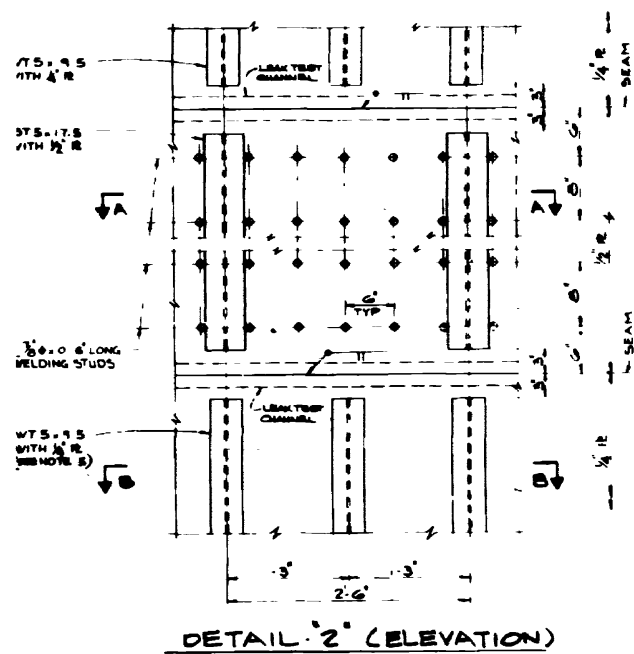
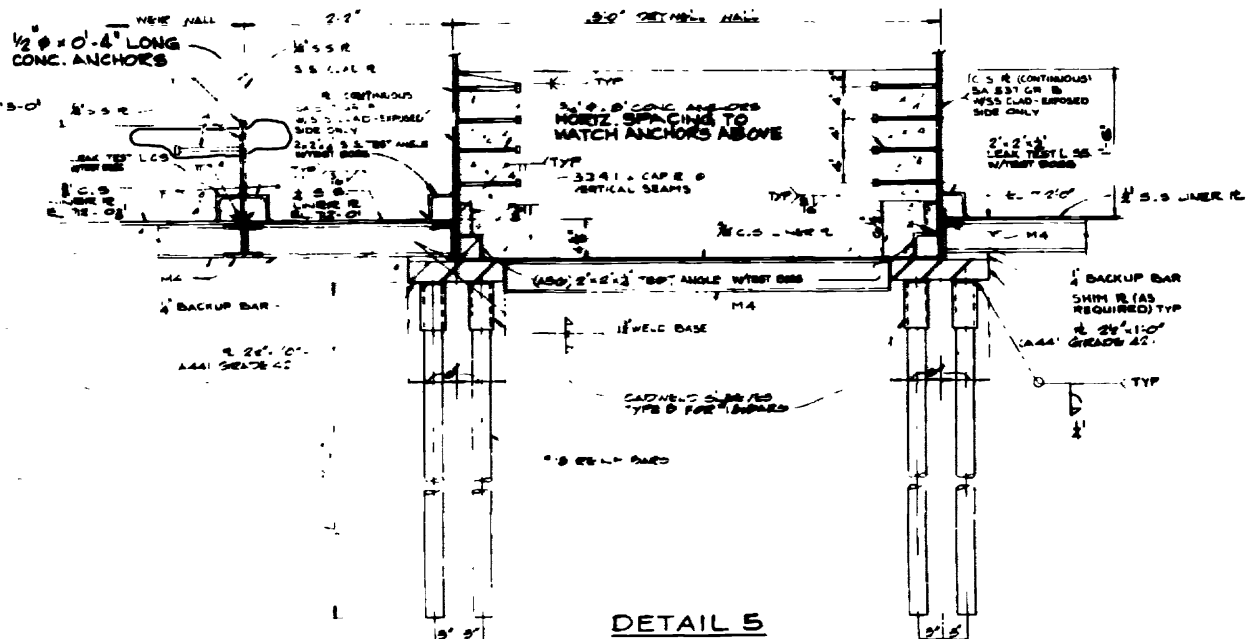
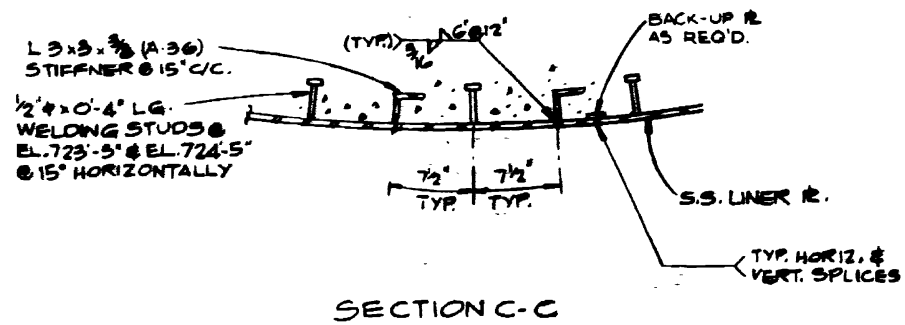
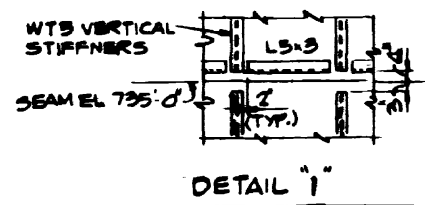
FIGURE 3.8-13

PERSONNEL AND EQUIPMENT HATCH
DETAILS
(SHEET 2 of 2)



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-14
CONTAINMENT LINER DETAILS
(SHEET 1 of 2)



CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-14

CONTAINMENT LINER DETAILS

ARTIAL FLAN VIEW

SYMMETRICAL
ABOUT ϕ
16 BARS

SECTION A-A

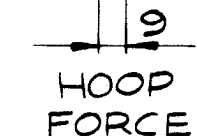
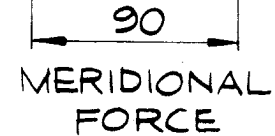
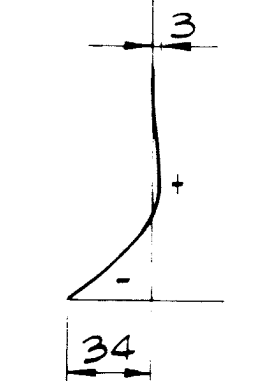
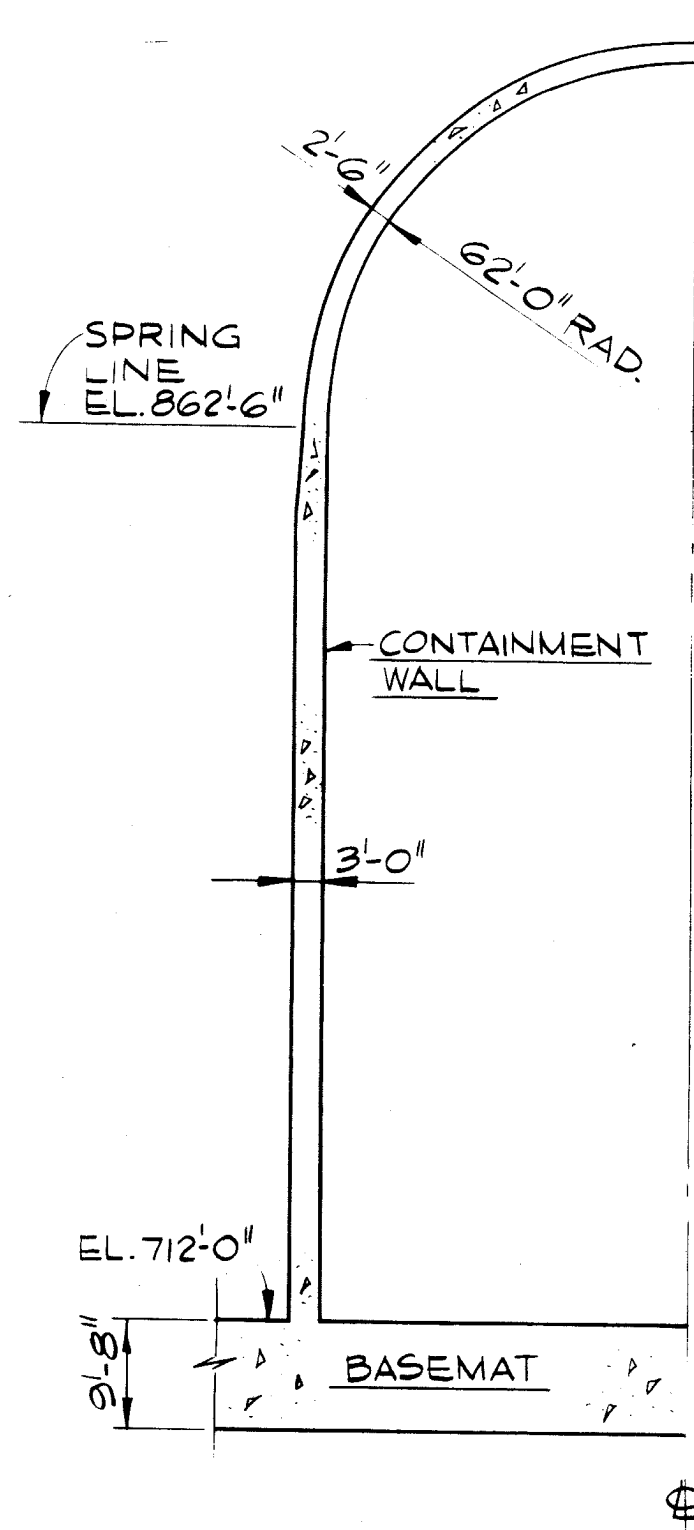
DETAIL "1"

SECTION B-B

CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT

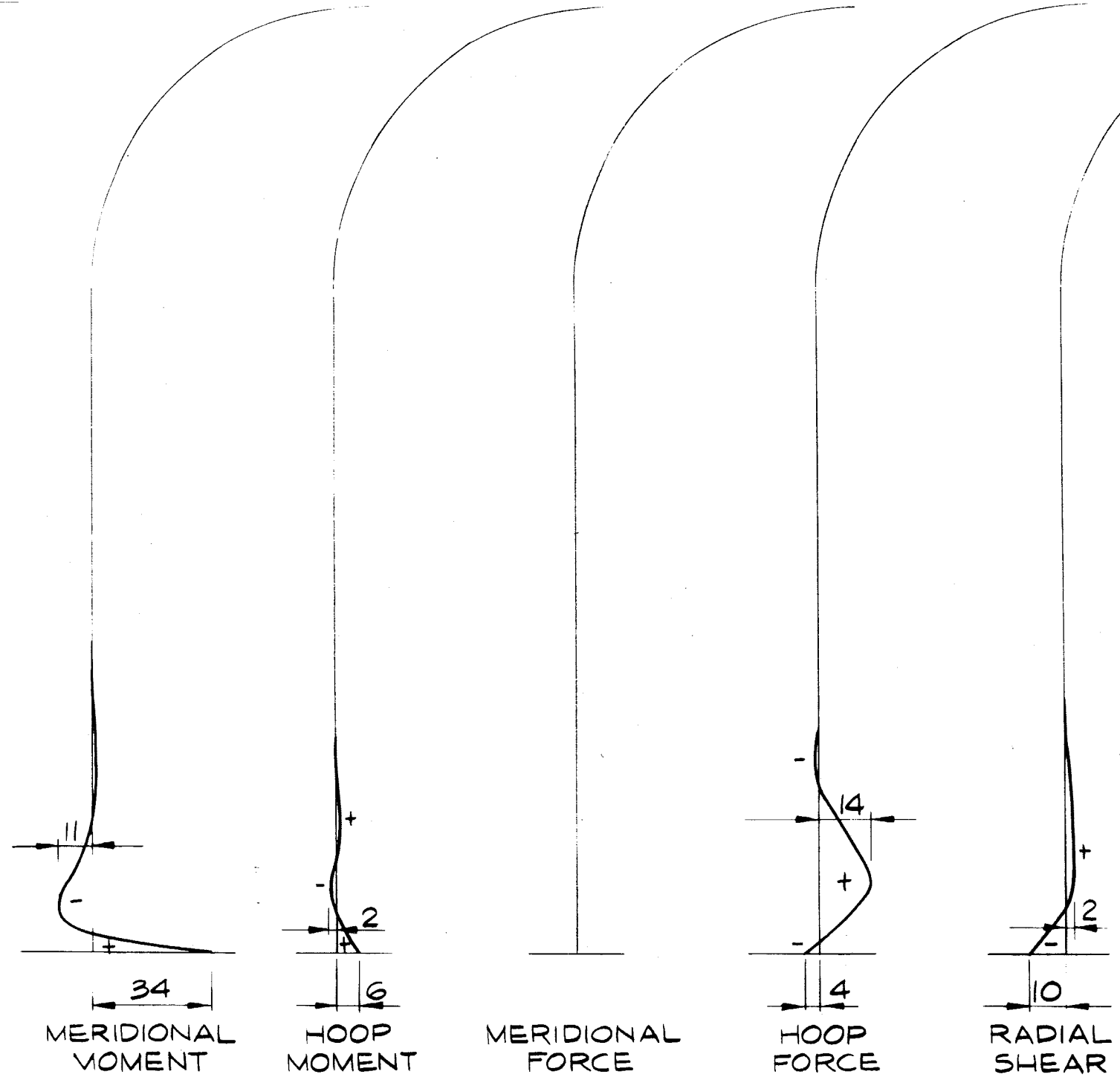
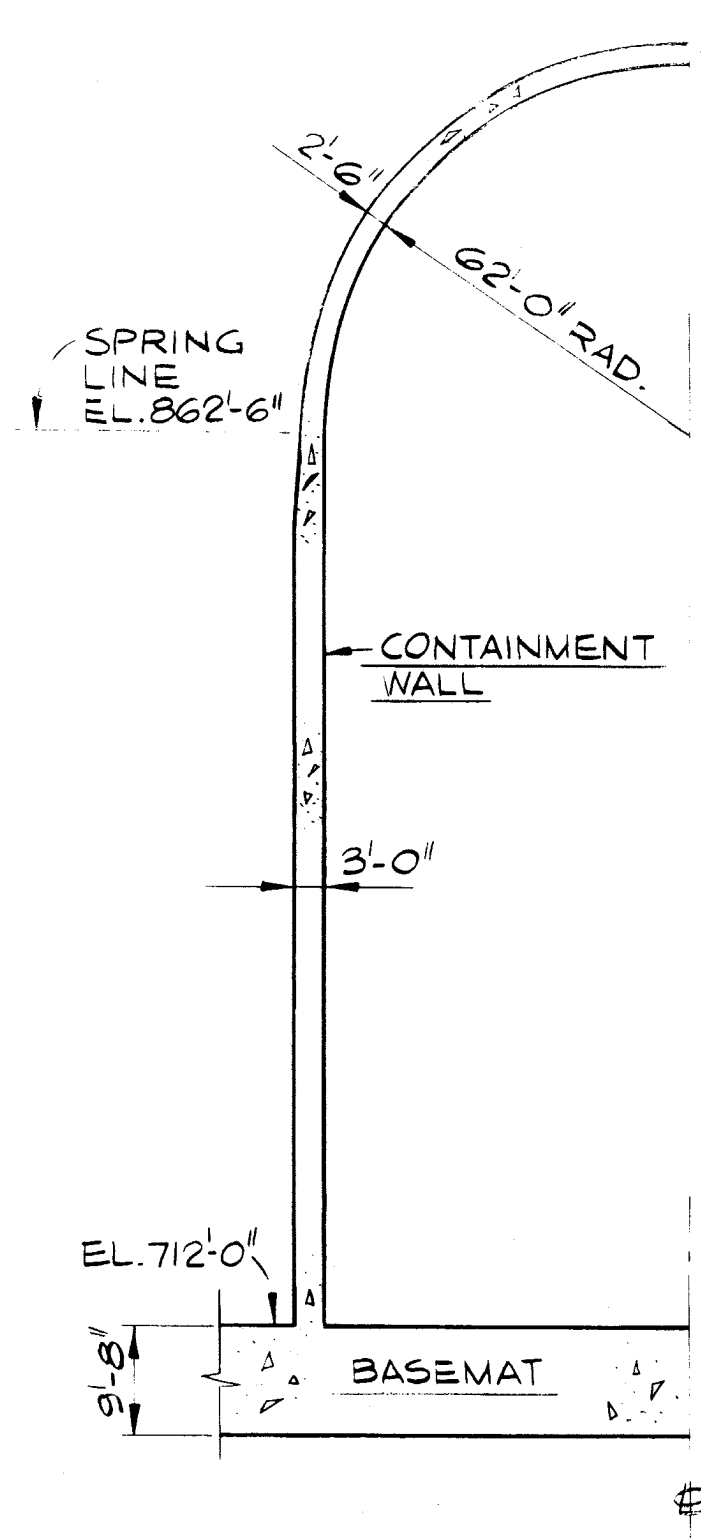
FIGURE 3.8-15

DOME LINER



- GENERAL NOTES
FOR FORCE PLOTS
1. ALL MOMENTS ARE IN FT - K/FT AND FORCES IN K/FT
 2. MOMENTS, IF POSITIVE, INDICATE TENSION ON THE INSIDE FACE.
 3. FORCES, IF POSITIVE, INDICATE TENSION

DEAD LOAD



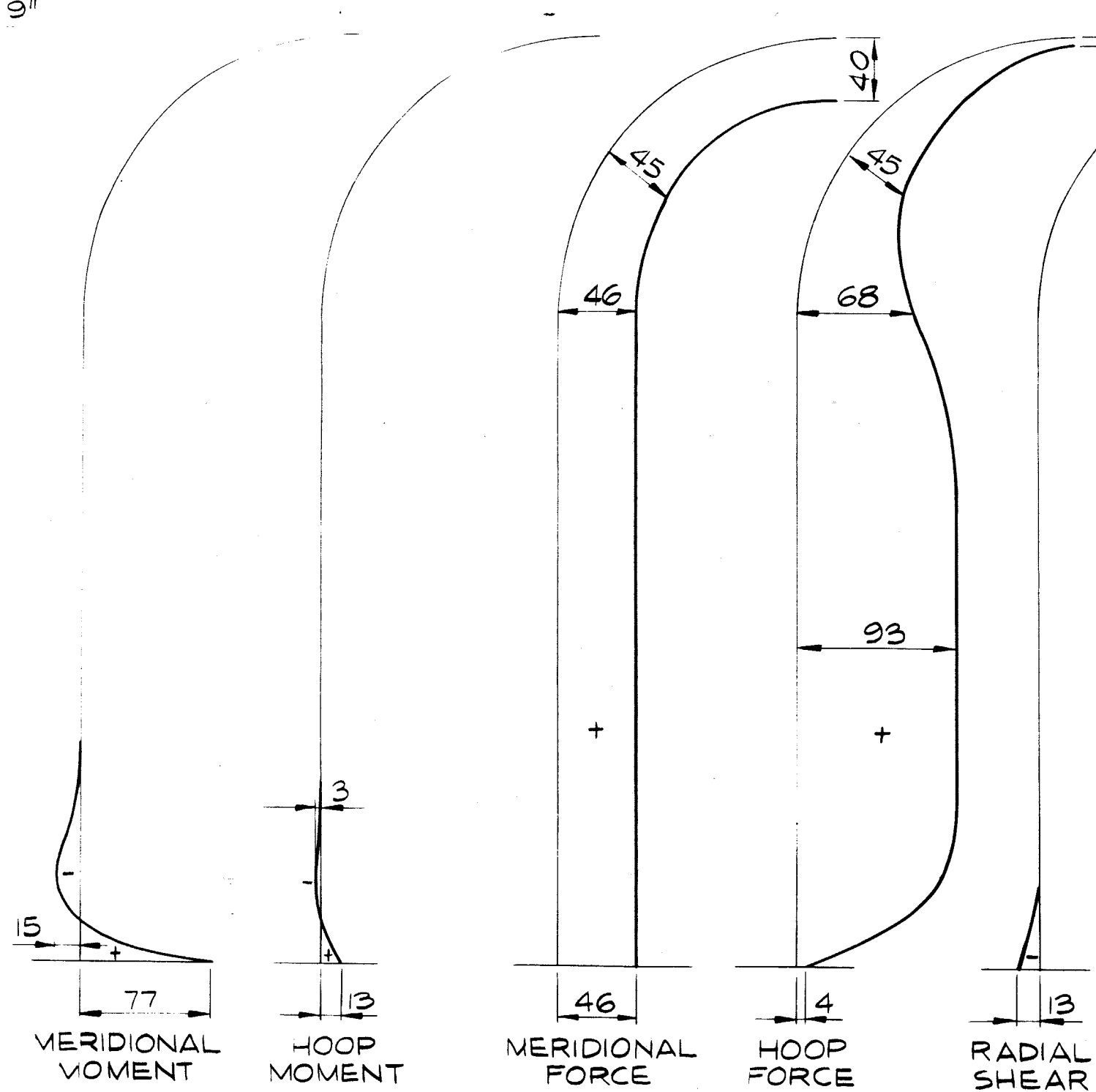
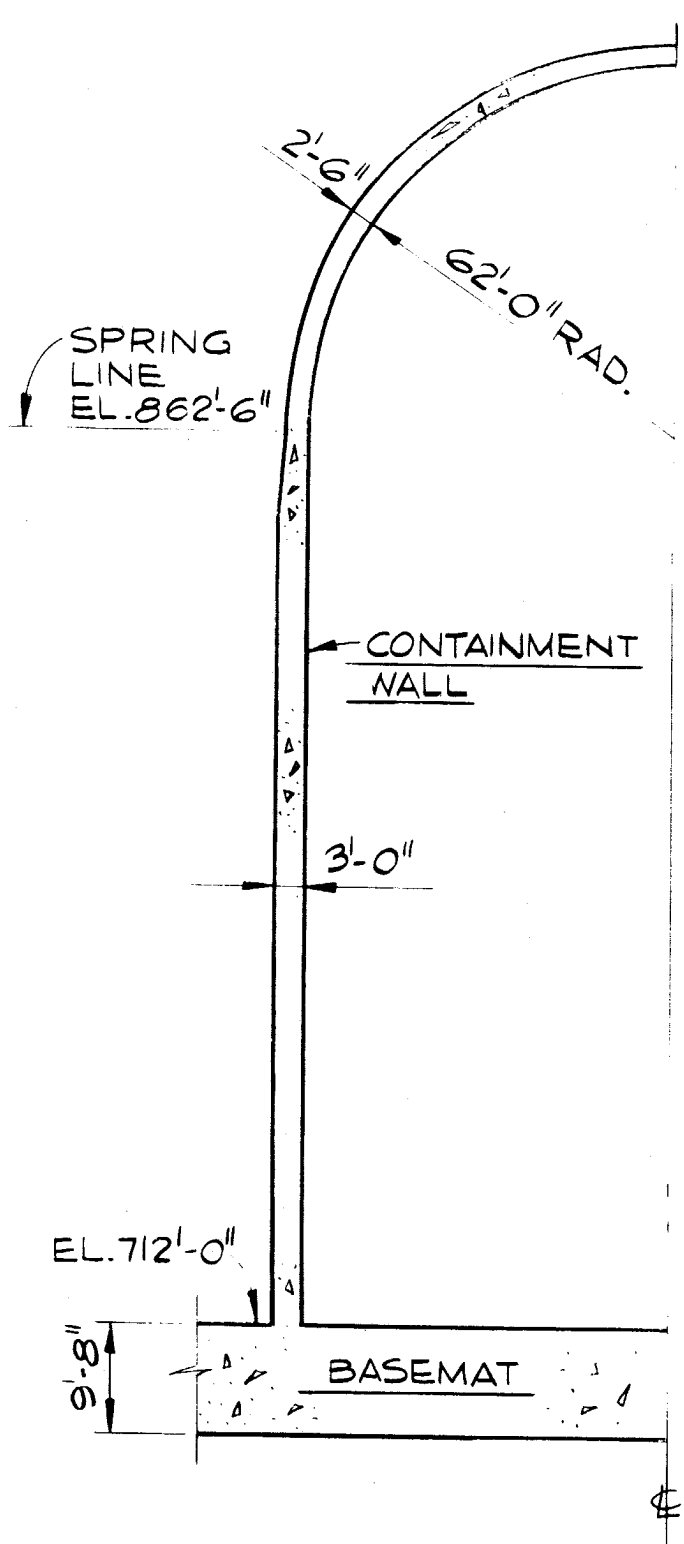
SUPPRESSION POOL WATER

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-17

FORCE PLOTS - CONTAINMENT WALL

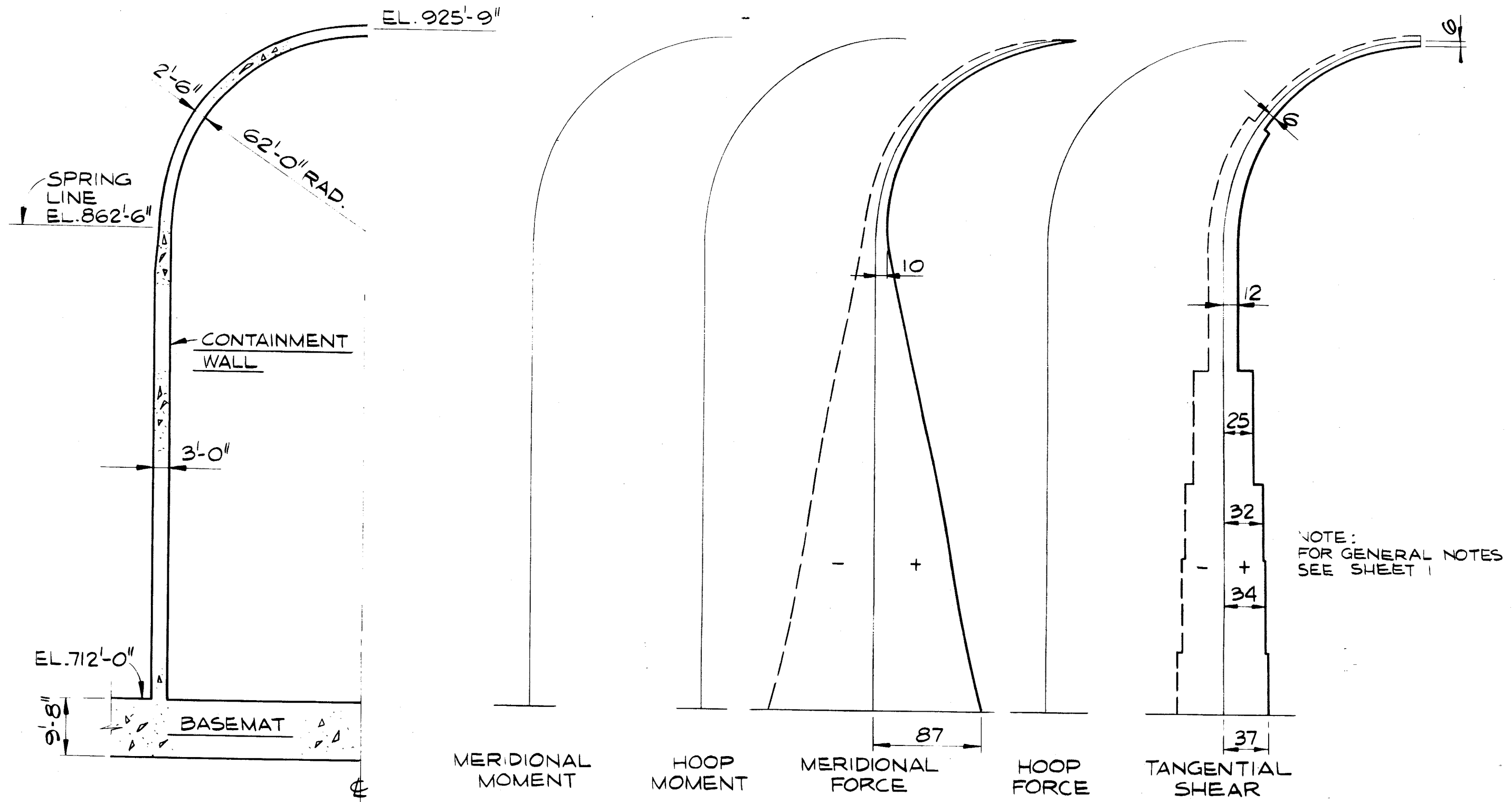
(SHEET 2 of 4)



NOTE:
FOR GENERAL NOTES
SEE SHEET

ACCIDENT PRESSURE

| |
|---|
| <p>CLINTON POWER STATION UPDATED SAFETY ANALYSIS REPORT</p> |
| <p>FIGURE 3.8-17</p> |
| <p>FORCE PLOTS - CONTAINMENT WALL</p> |
| <p>(SHEET 3 of 4)</p> |



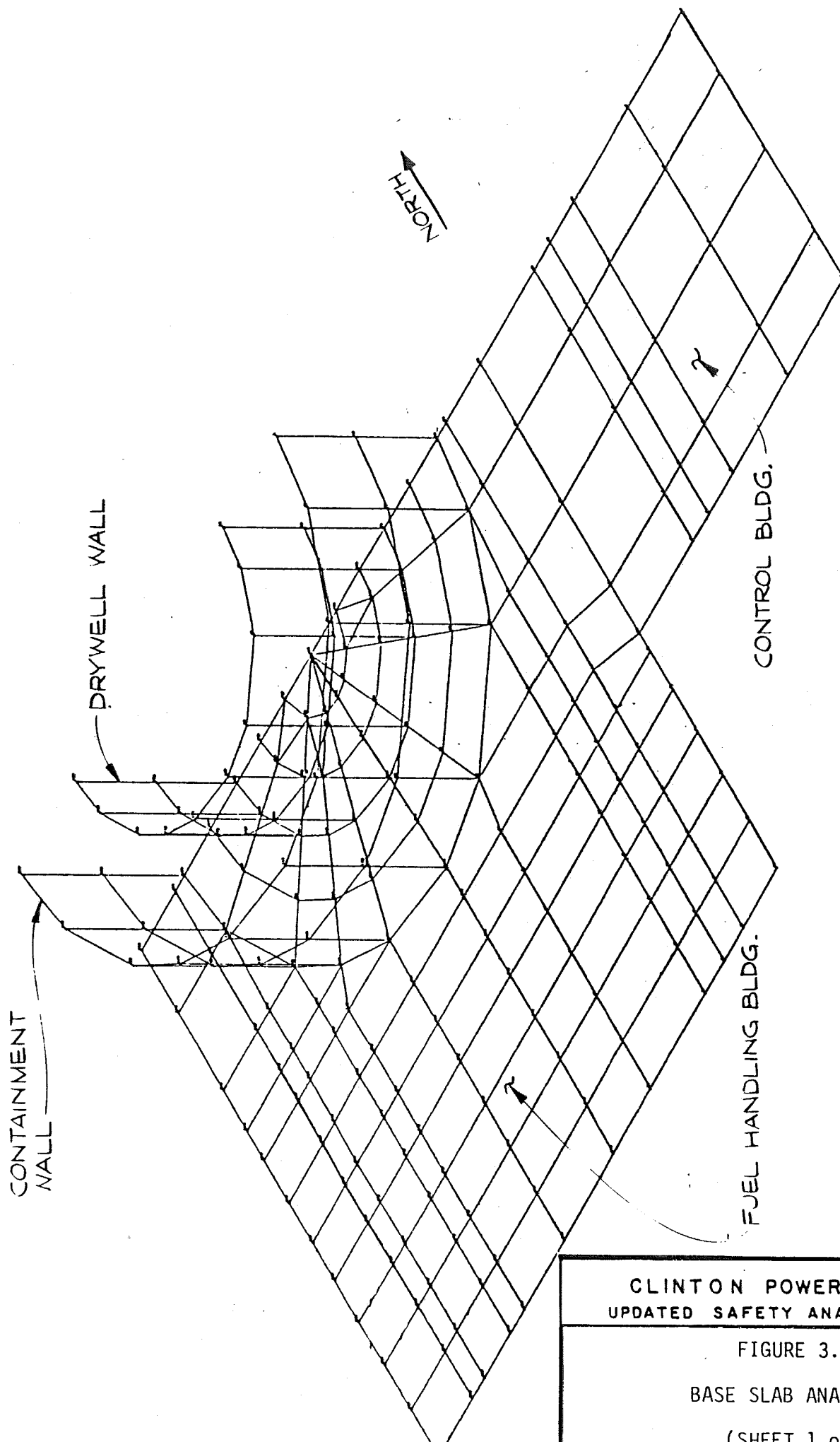
SAFE SHUTDOWN EARTHQUAKE

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-17

FORCE PLOTS - CONTAINMENT WALL

(SHEET 4 of 4)

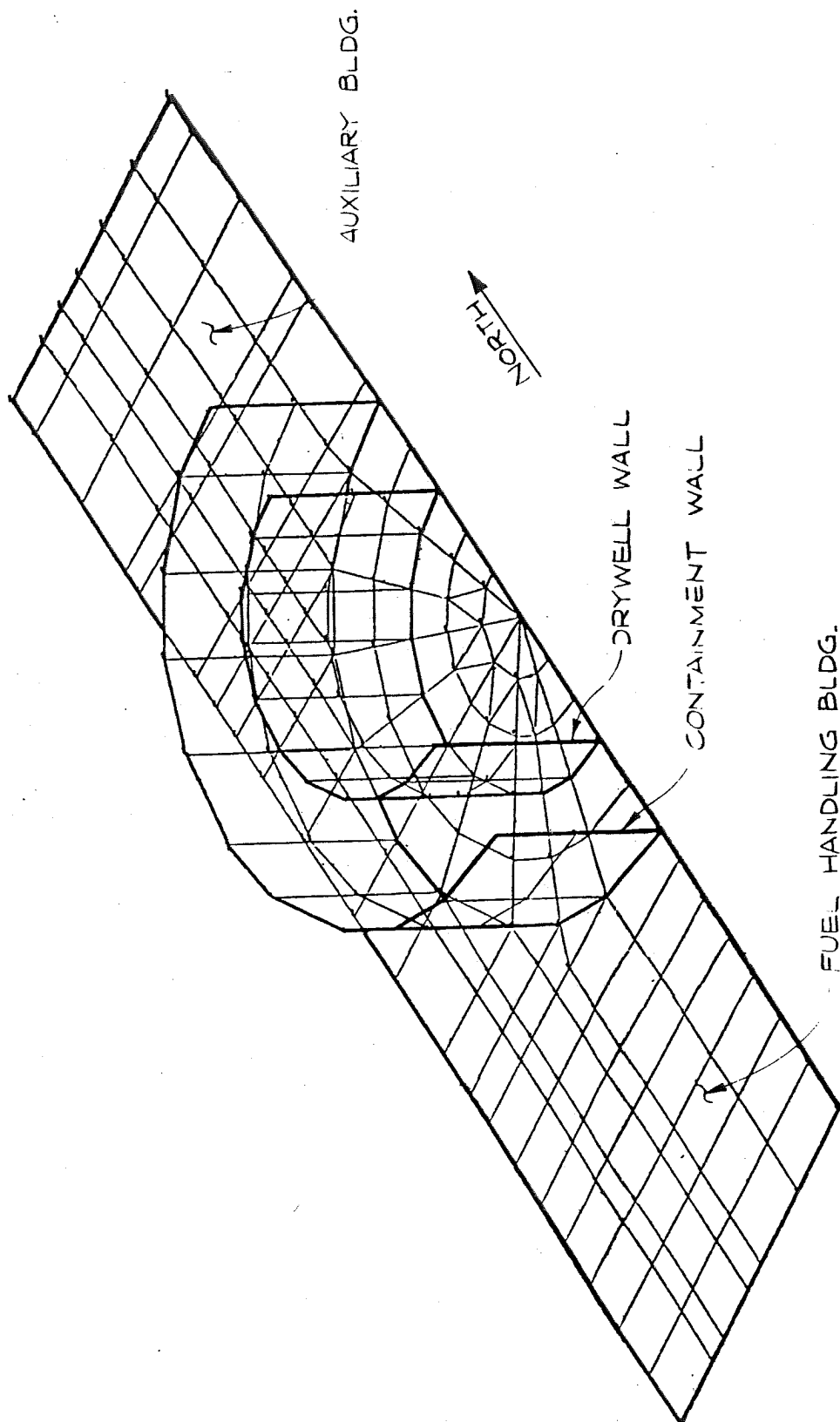


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-18

BASE SLAB ANALYTICAL

(SHEET 1 of 2)

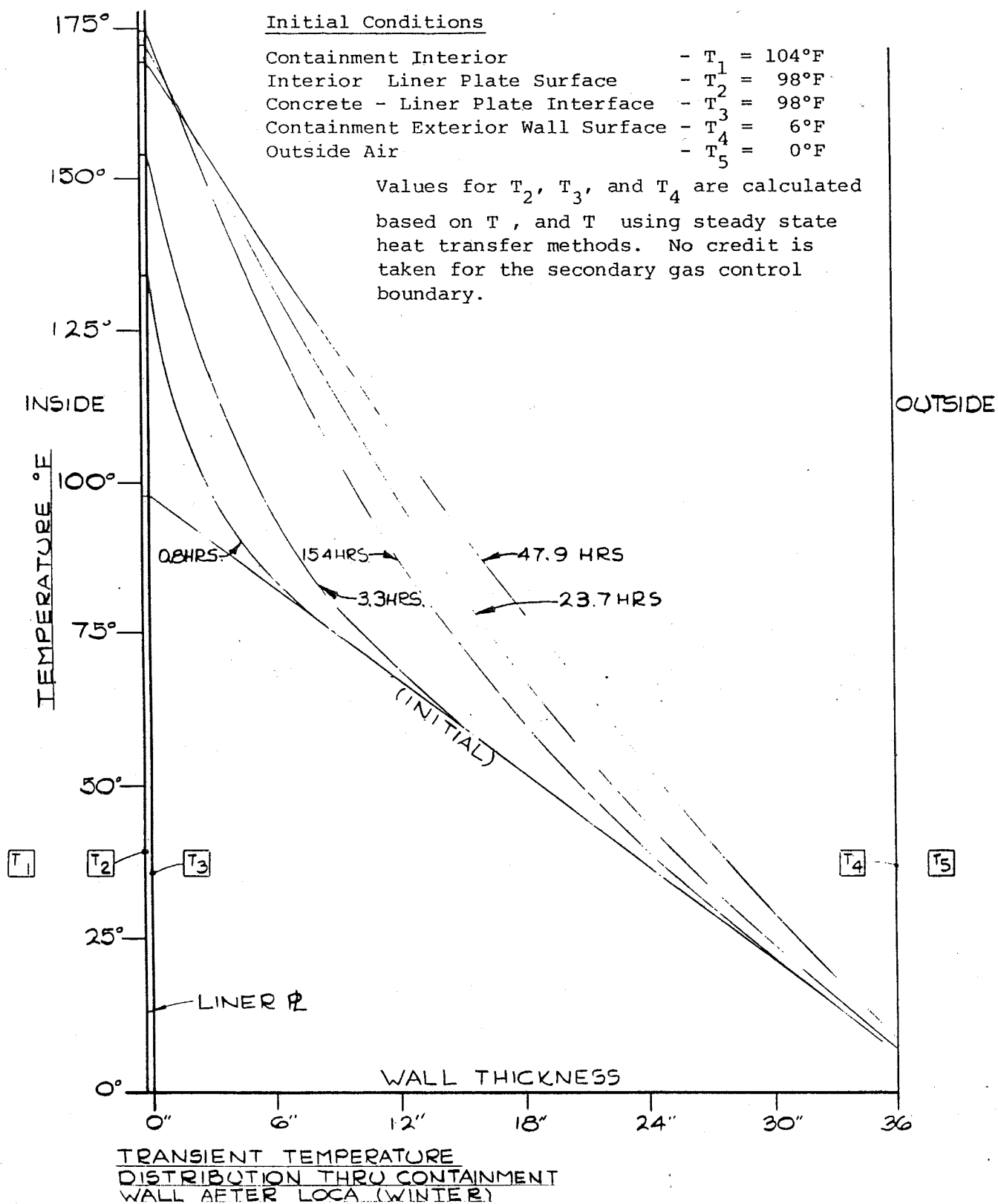


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-18

BASE SLAB ANALYTICAL

(SHEET 2 of 2)

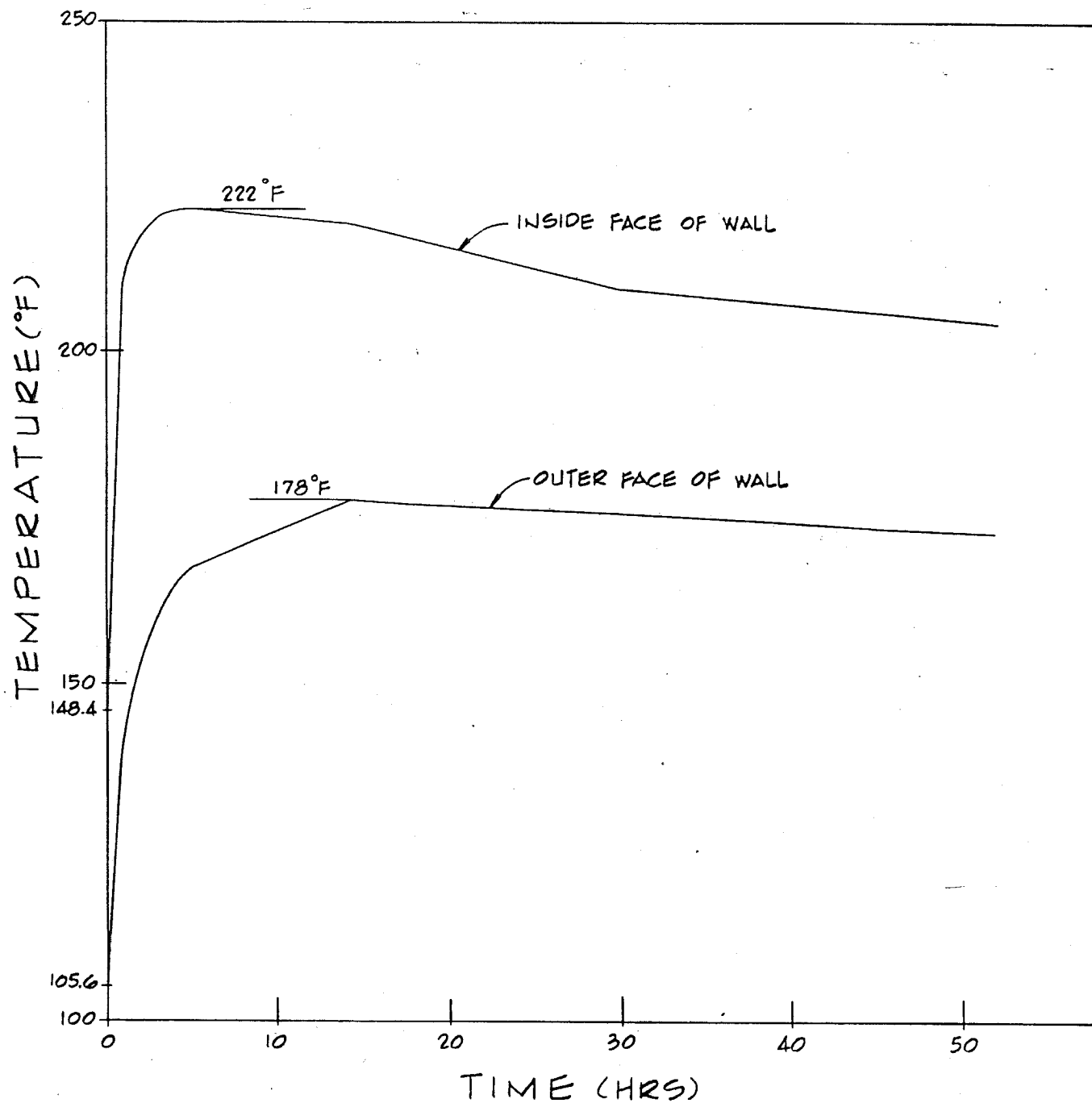


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-19

THERMAL GRADIENTS

(SHEET 1 of 3)

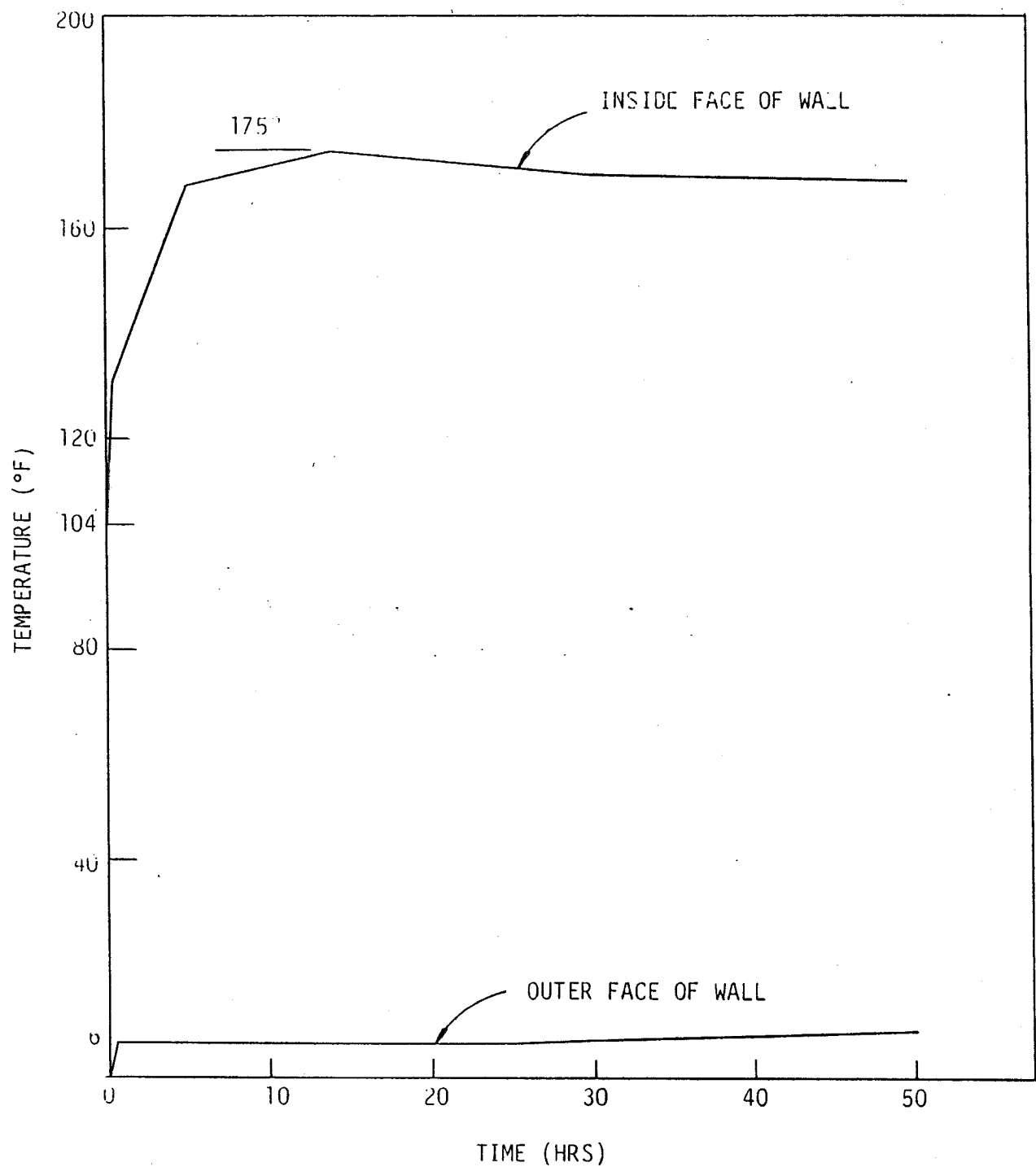


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-19

THERMAL GRADIENTS

(SHEET 2 of 3)

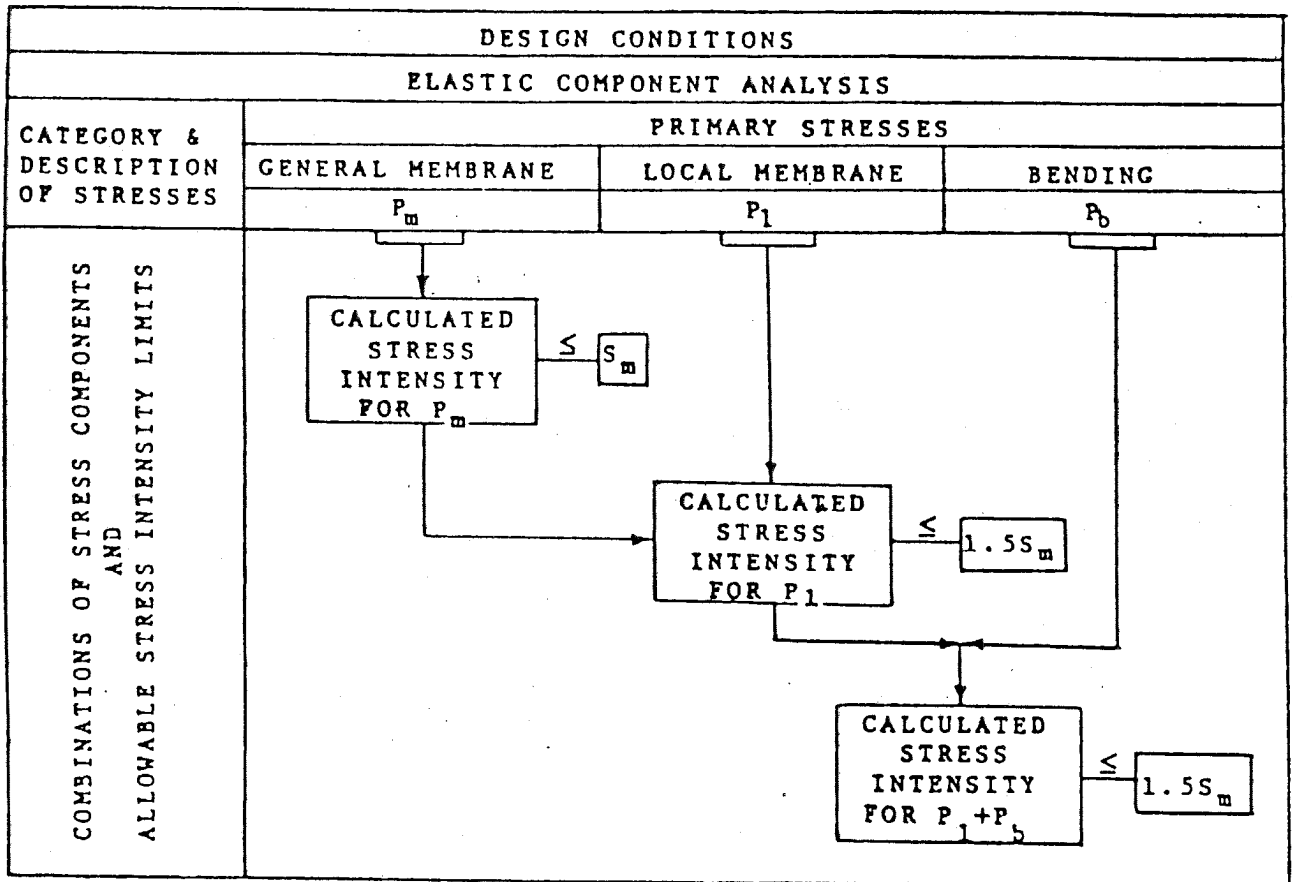


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-19

THERMAL GRADIENTS

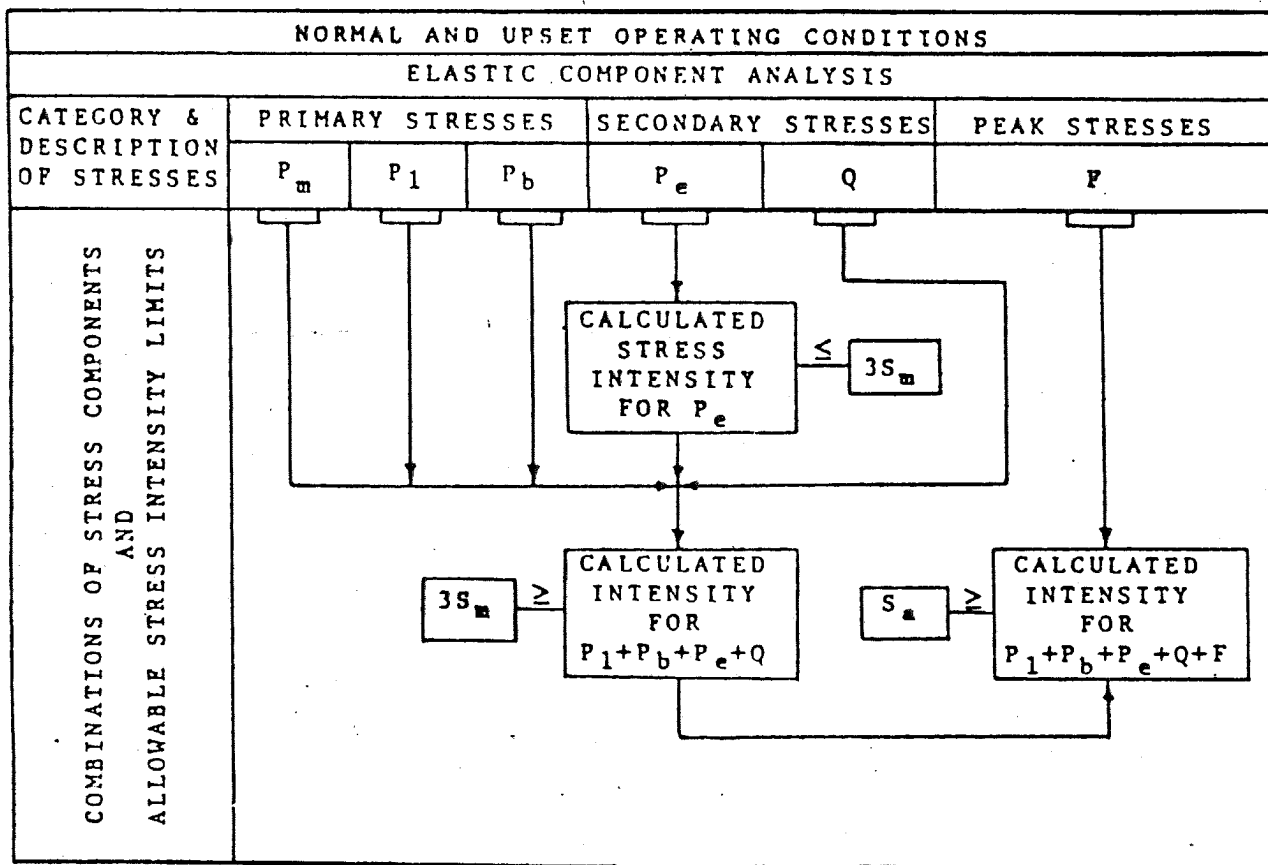
(SHEET 3 of 3)



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-20

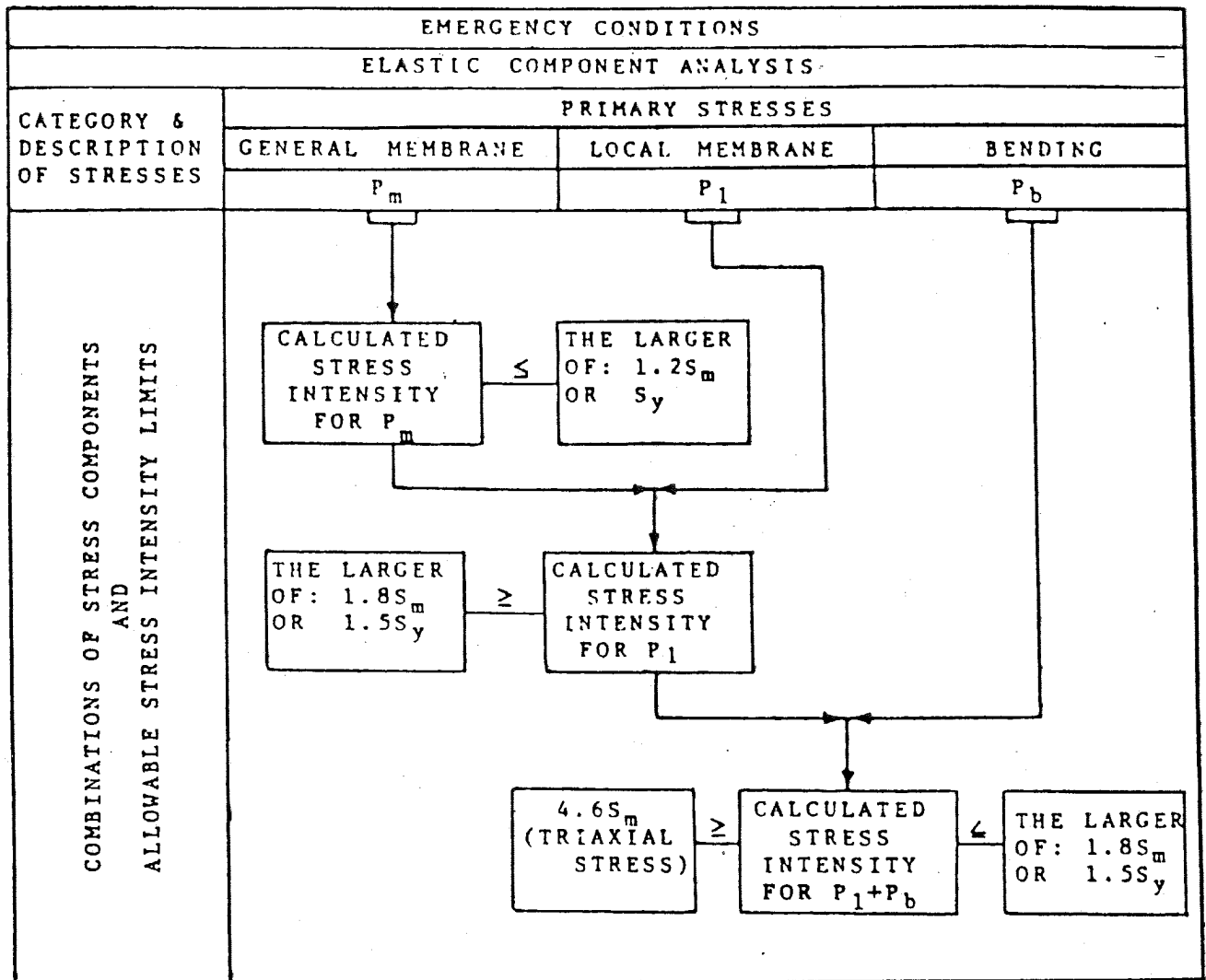
STRESS CATEGORIES AND STRESS INTENSITY
LIMITS FOR DESIGN CONDITIONS



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-21

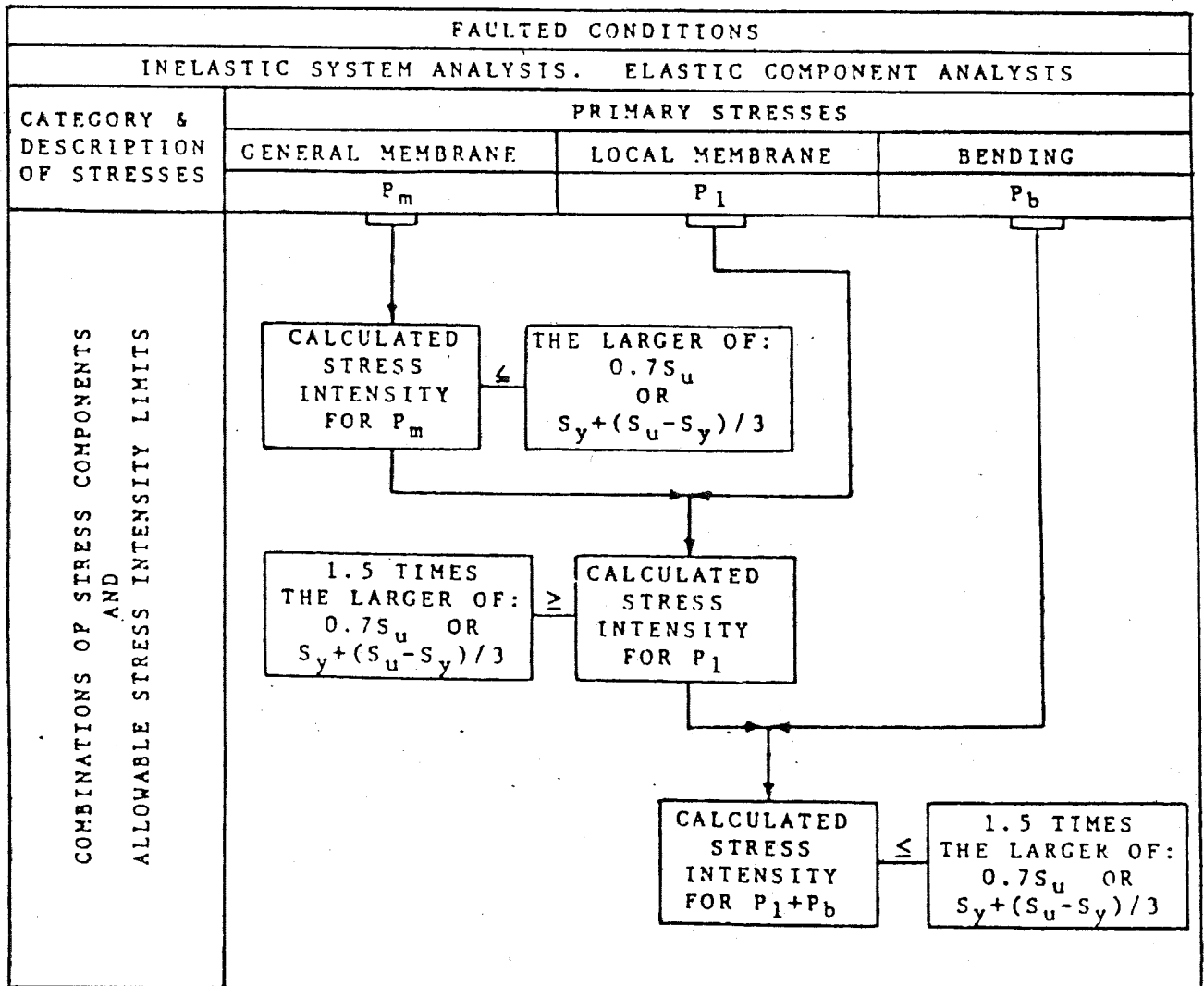
STRESS CATEGORIES AND STRESS INTENSITY
LIMITS FOR NORMAL AND UPSET CONDITIONS



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-22

STRESS CATEGORIES AND STRESS INTENSITY
LIMITS FOR EMERGENCY CONDITIONS

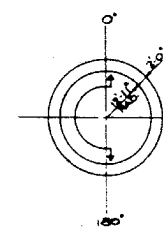
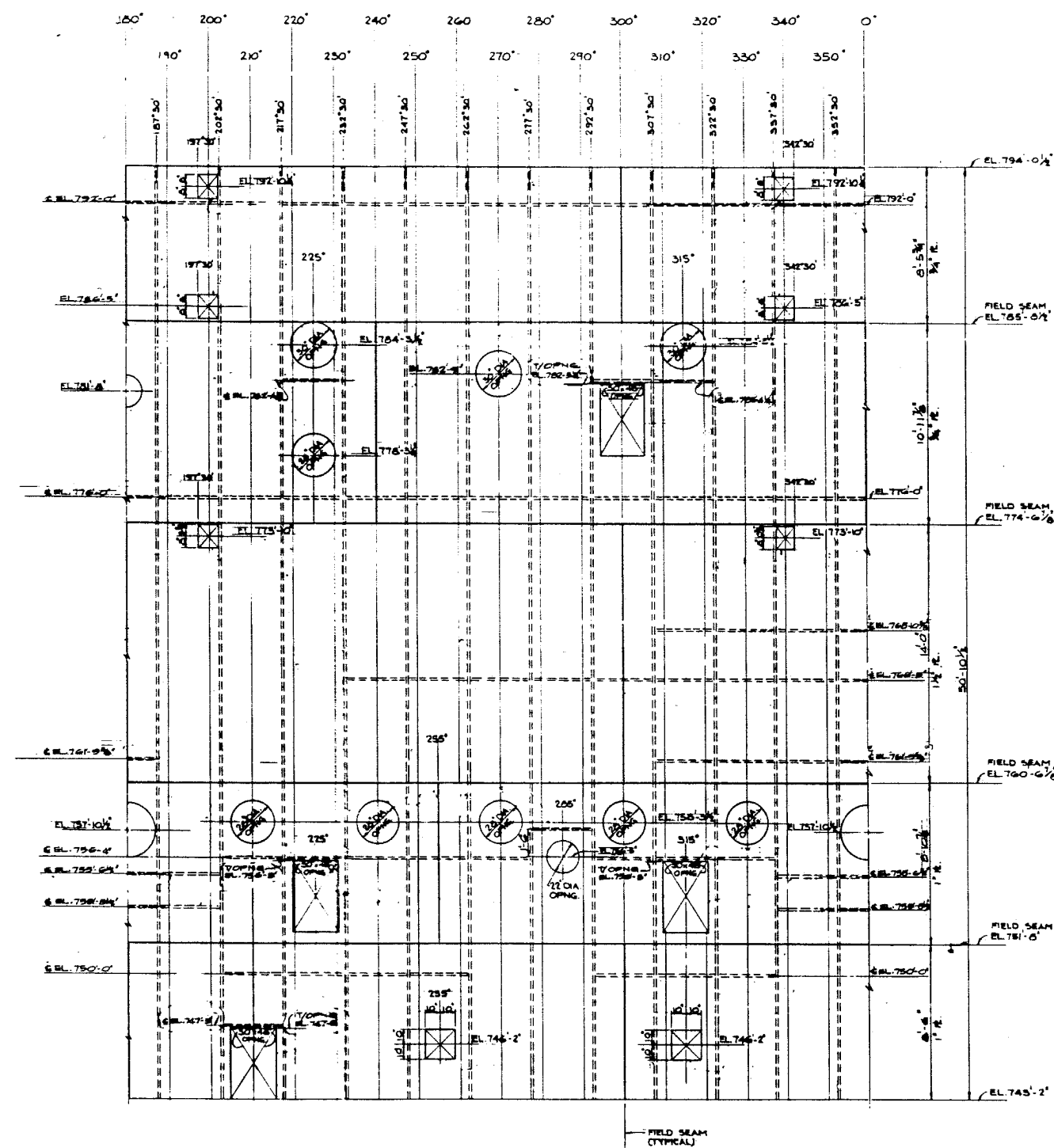


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-23

STRESS CATEGORIES AND STRESS INTENSITY
LIMITS FOR FAULTED CONDITIONS

Figure 3.8-24
Deleted

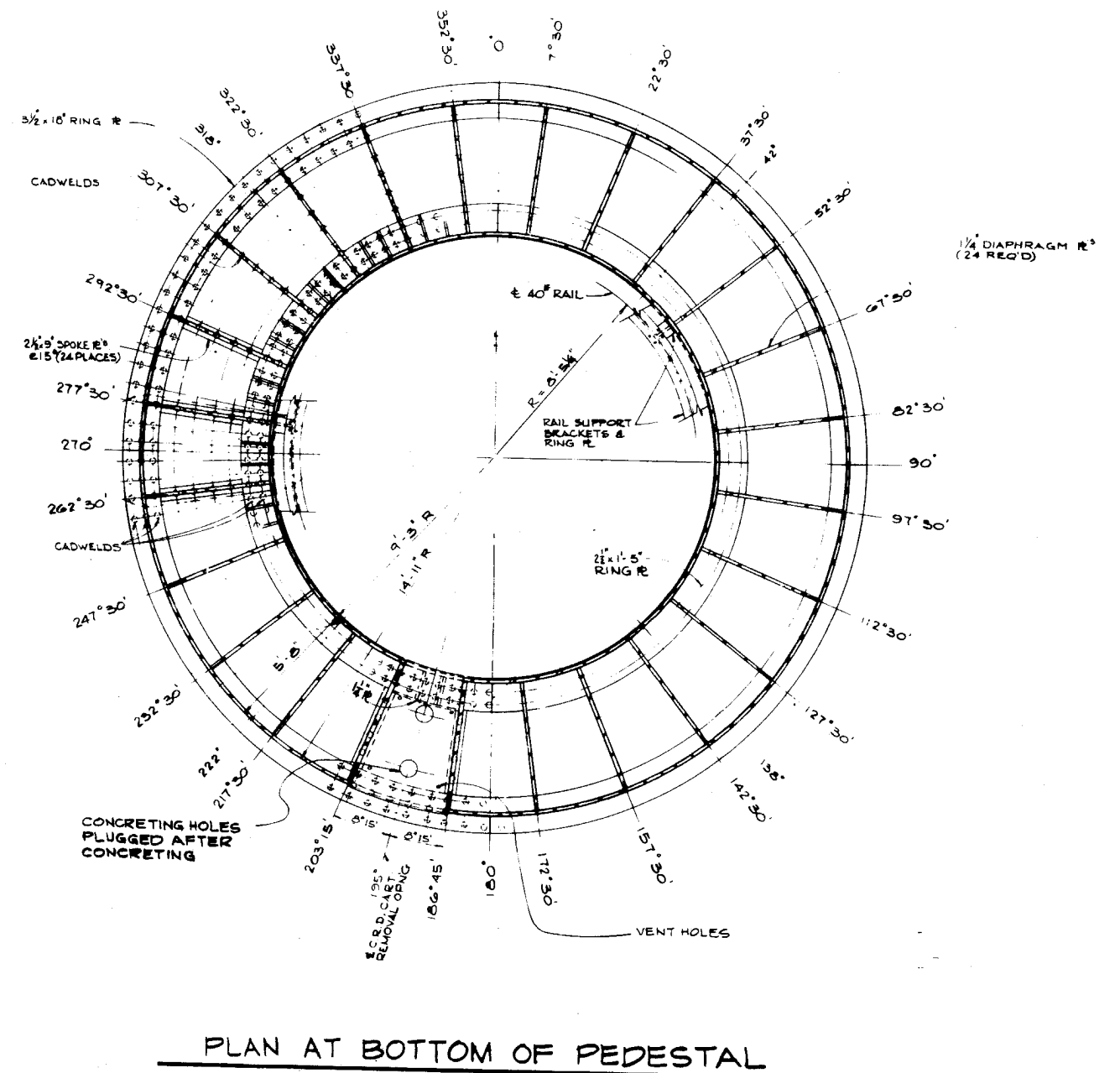
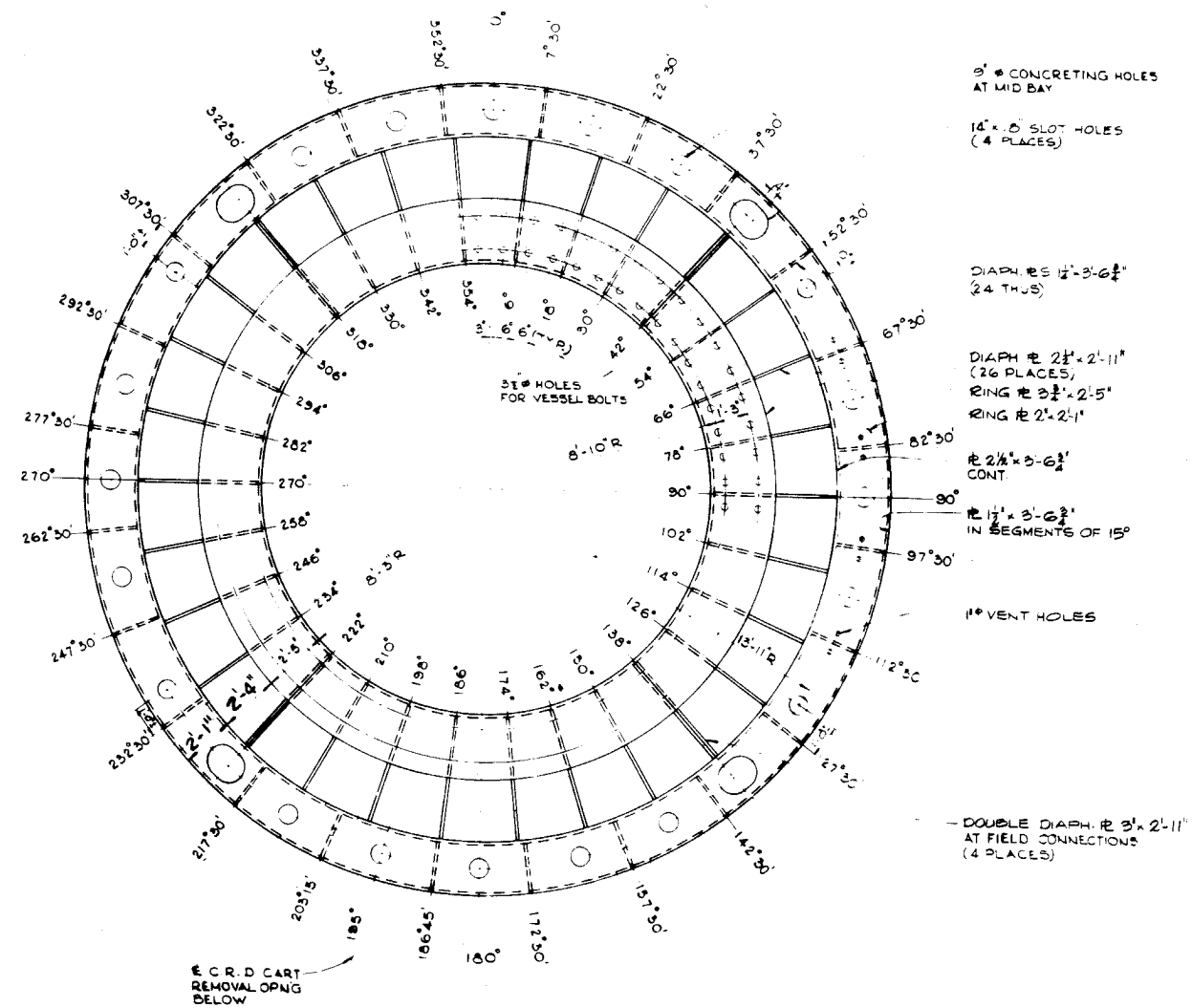


CLINTON POWER STATION
 UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-25

REACTOR SHIELD WALL

(SHEET 2 of 2)

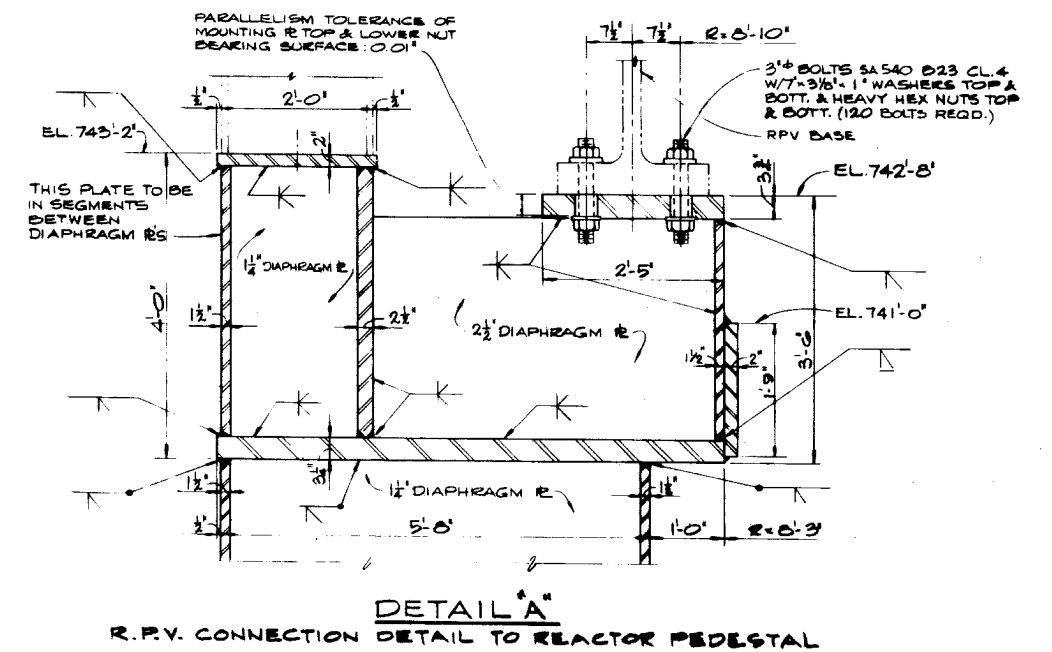
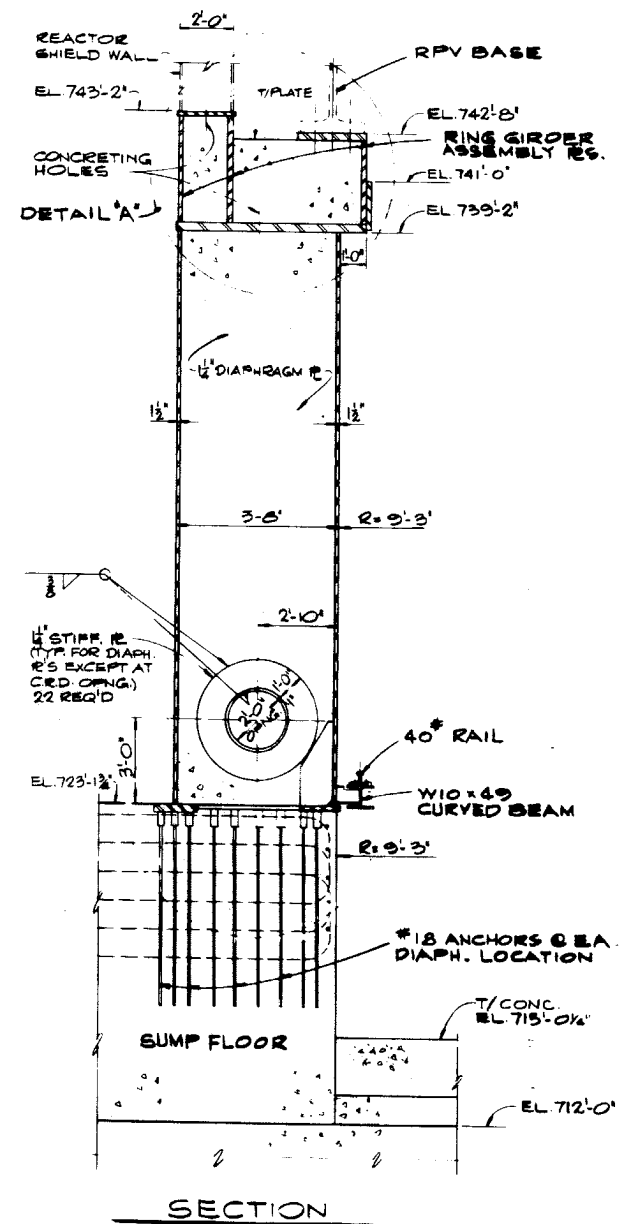


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-26

REACTOR PEDESTAL DETAILS

(SHEET 1 of 2)

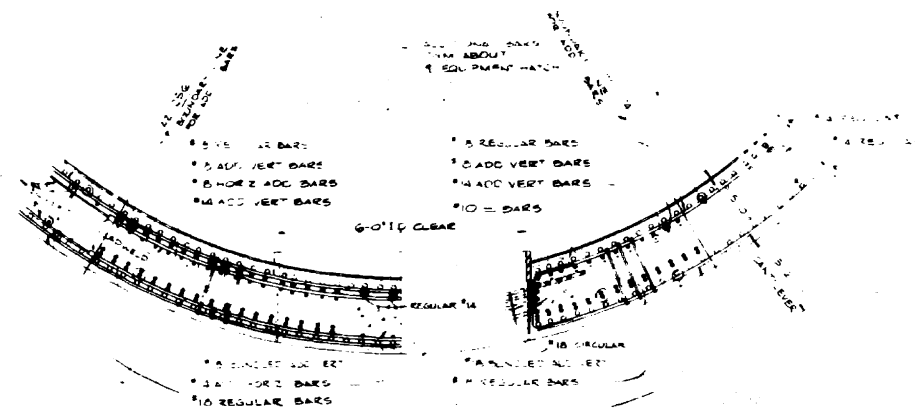


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-26

REACTOR PEDESTAL DETAILS

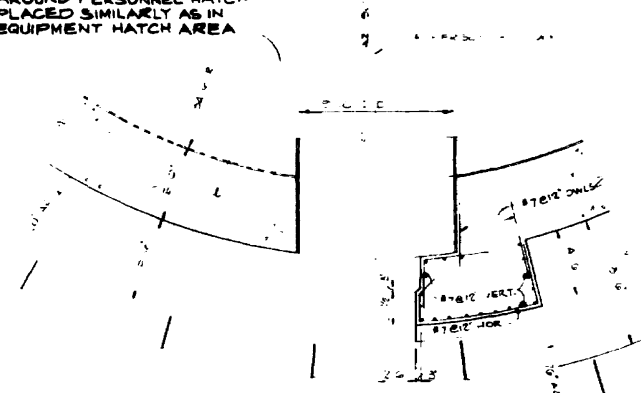
(SHEET 2 of 2)



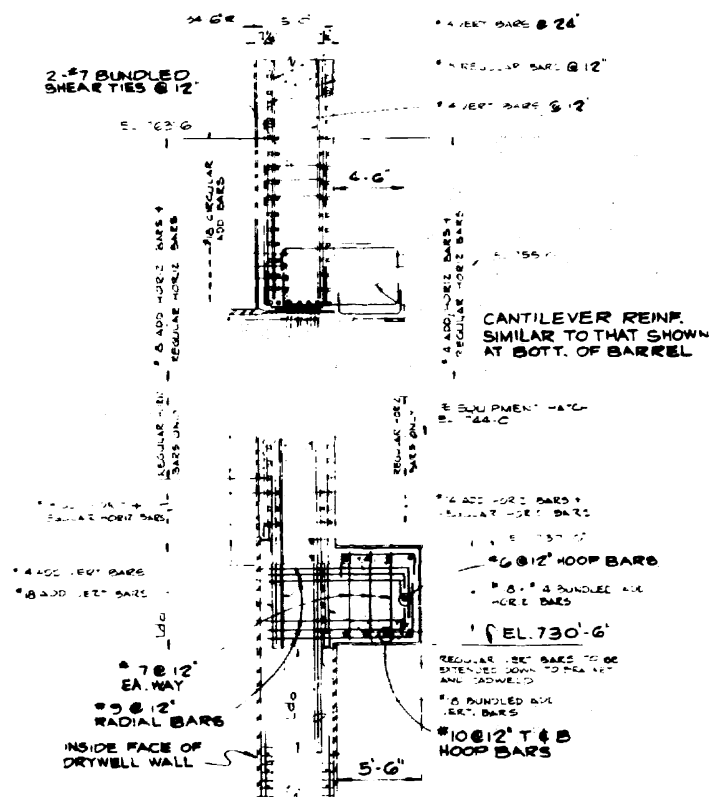
2-57 BUNDLED SHEAR TIES @
EVERY INTERSECTION
OF VERT & HOZ BARS
WITHIN THE BOUNDARY
AREA OF HATCH REIN

DRYWELL WALL EQUIPMENT HATCH HORIZ. SECTION
ADDITIONAL BARS ARE SHOWN IN DARK DOTS

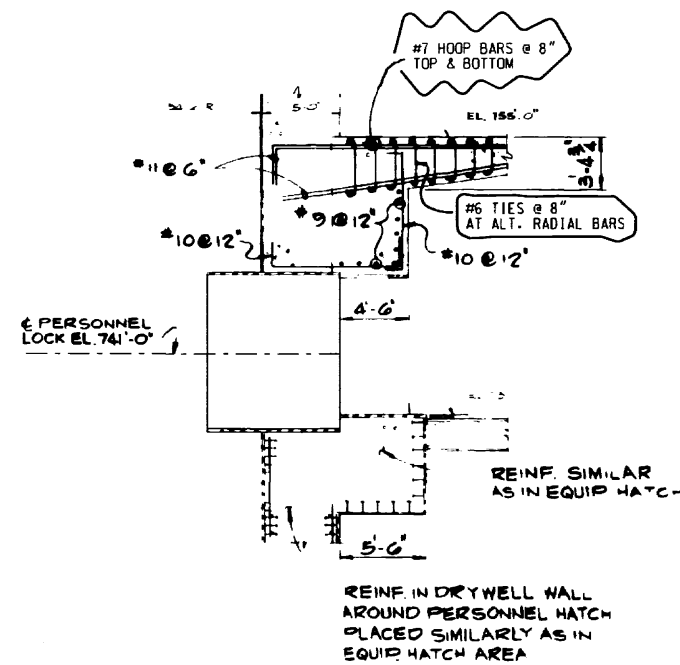
REINF. IN DRYWELL WALL
AROUND PERSONNEL HATCH
PLACED SIMILARLY AS IN
EQUIPMENT HATCH AREA



DRYWELL WALL PERSONNEL LOCK HORIZ. SECT



DRYWELL WALL EQUIPMENT HATCH VERT. SECTION
ADDITIONAL BARS ARE SHOWN IN DARK DOTS

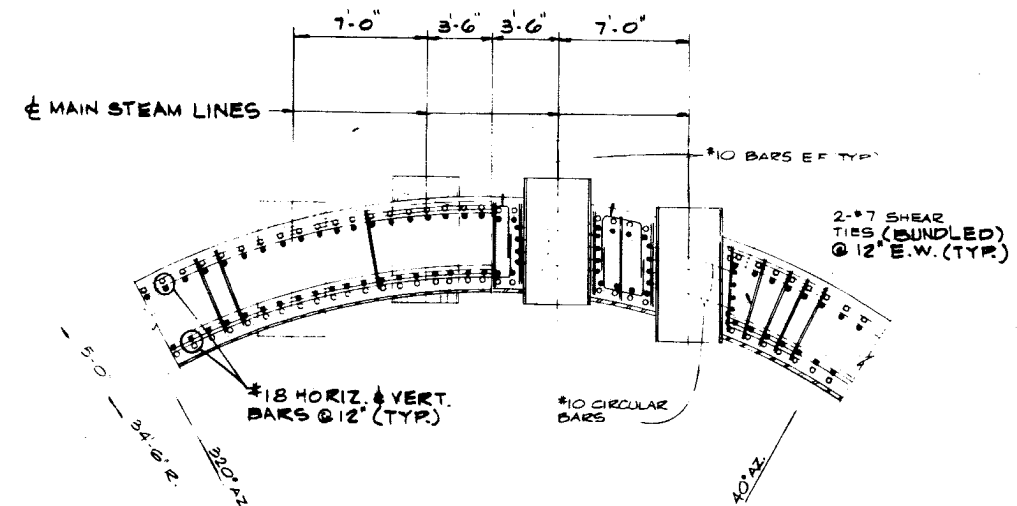


DRYWELL WALL PERSONNEL LOCK VERT. SECTION

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

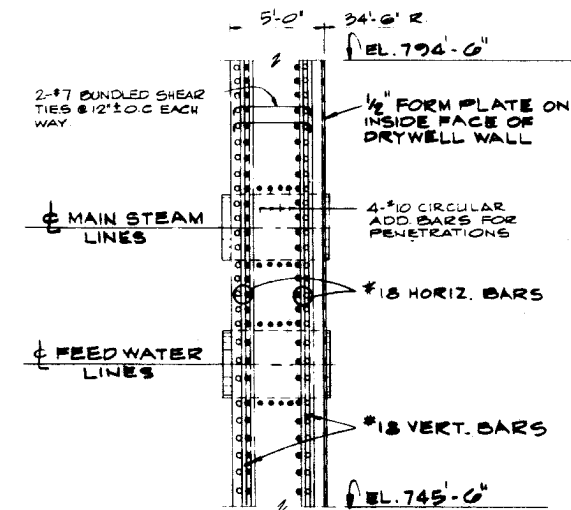
FIGURE 3.8-28

PERSONNEL & EQUIPMENT HATCHES
REINFORCING DETAILS - DRYWELL WALL



SECTIONAL PLAN

ADD. BARS ARE SHOWN IN DARK DOTS AND THEY REPLACE THE REGULAR BARS (#14 @ 12")

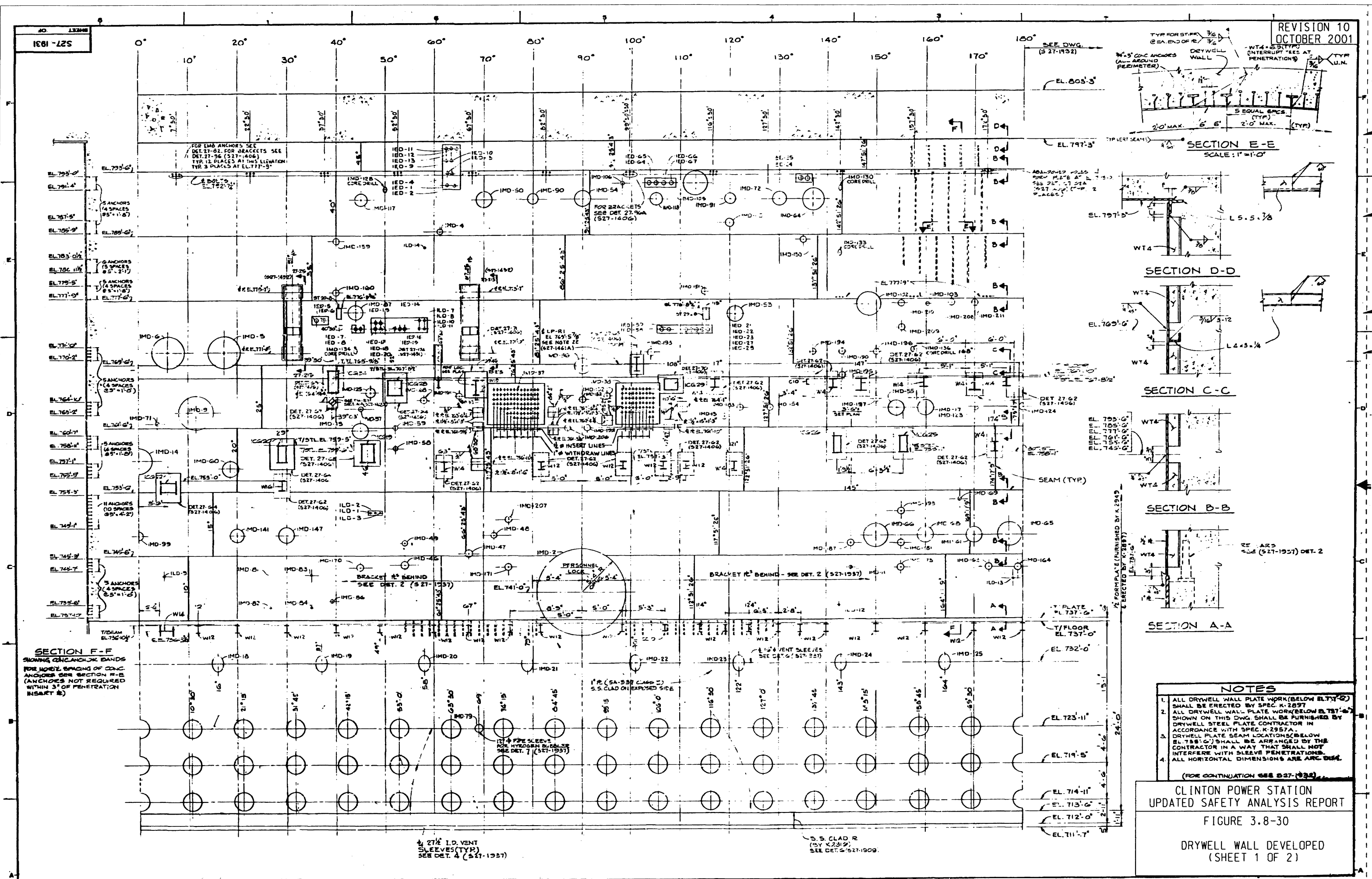


SECTIONAL ELEVATION

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-29

MAIN STEAMLINE REINFORCING -
DRYWELL WALL



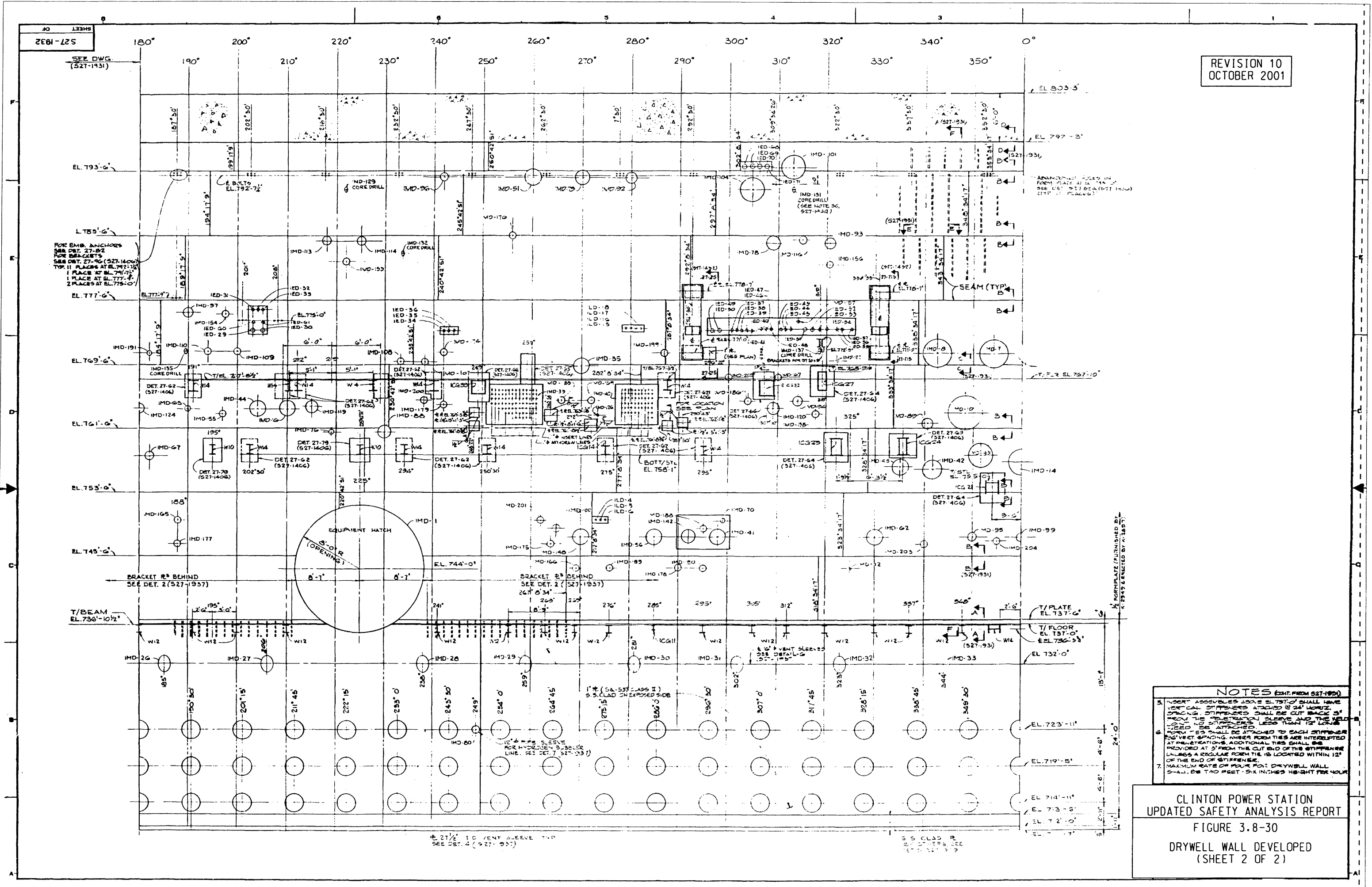
- ## NOTES
1. ALL DRYWELL WALL PLATE WORK (BELOW ELTY-2) SHALL BE ERCTED BY SPEC. K-2957
 2. ALL DRYWELL WALL PLATE WORK (BELOW ELTY-2) SHOWN ON THIS DWG. SHALL BE FURNISHED BY DRYWELL STEEL PLATE CONTRACTOR IN ACCORDANCE WITH SPEC. K-2957
 3. DRYWELL PLATE SEAM LOCATIONS (BELOW ELTY-2) SHALL BE ARRANGED BY THE CONTRACTOR TO AVOID ALL SEAM INTERFERENCE WITH SLEEVE PENETRATIONS.
 4. ALL HORIZONTAL DIMENSIONS ARE ARC DIA.

(FOR CONTINUATION USE 527-1032)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

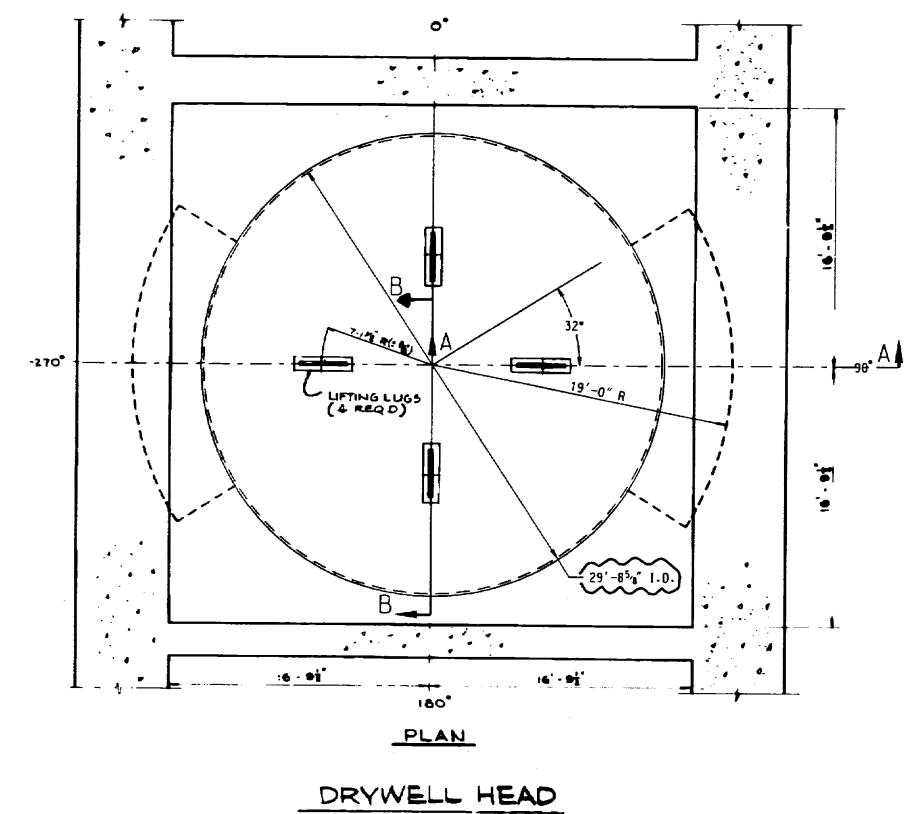
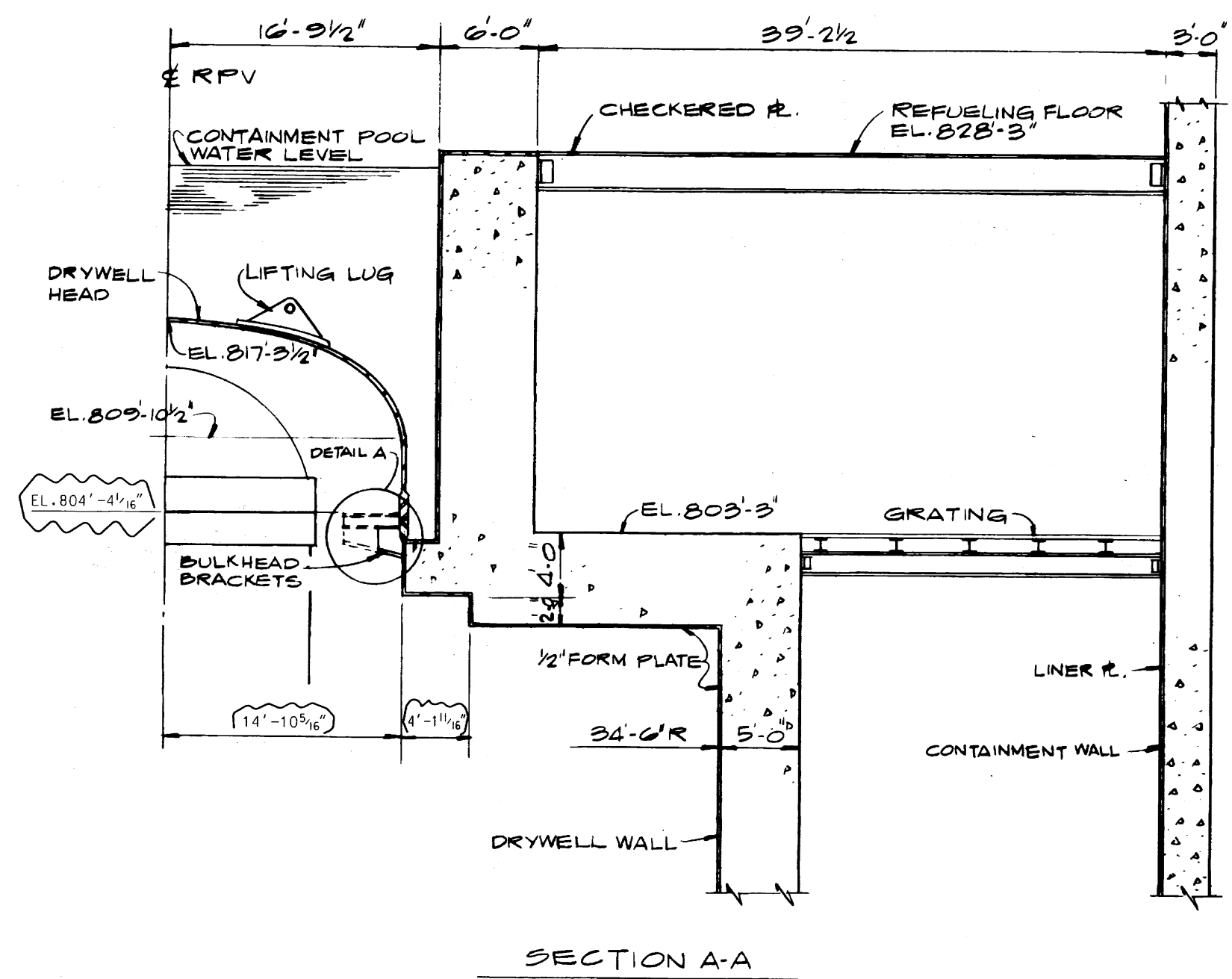
FIGURE 3.8-30

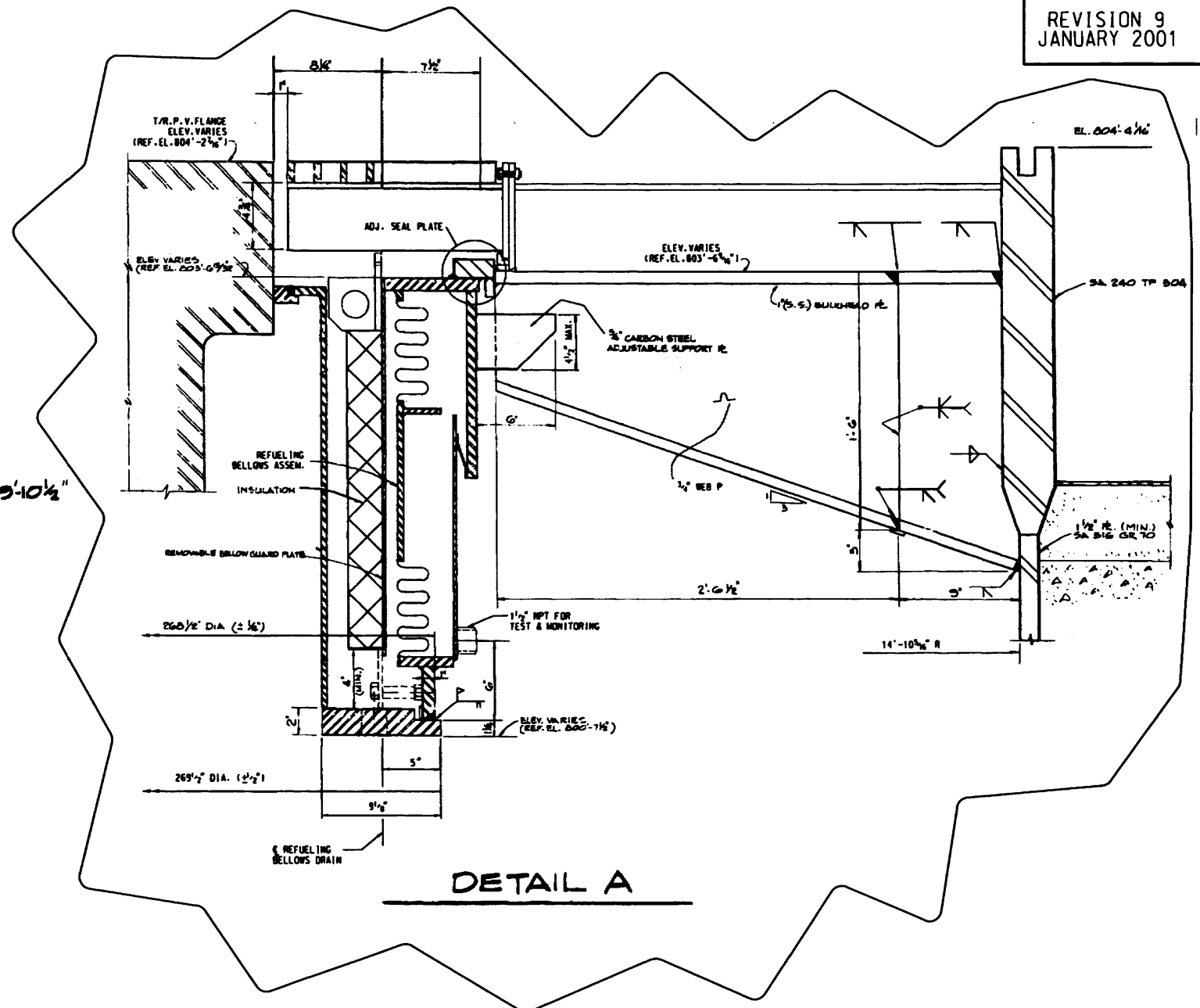
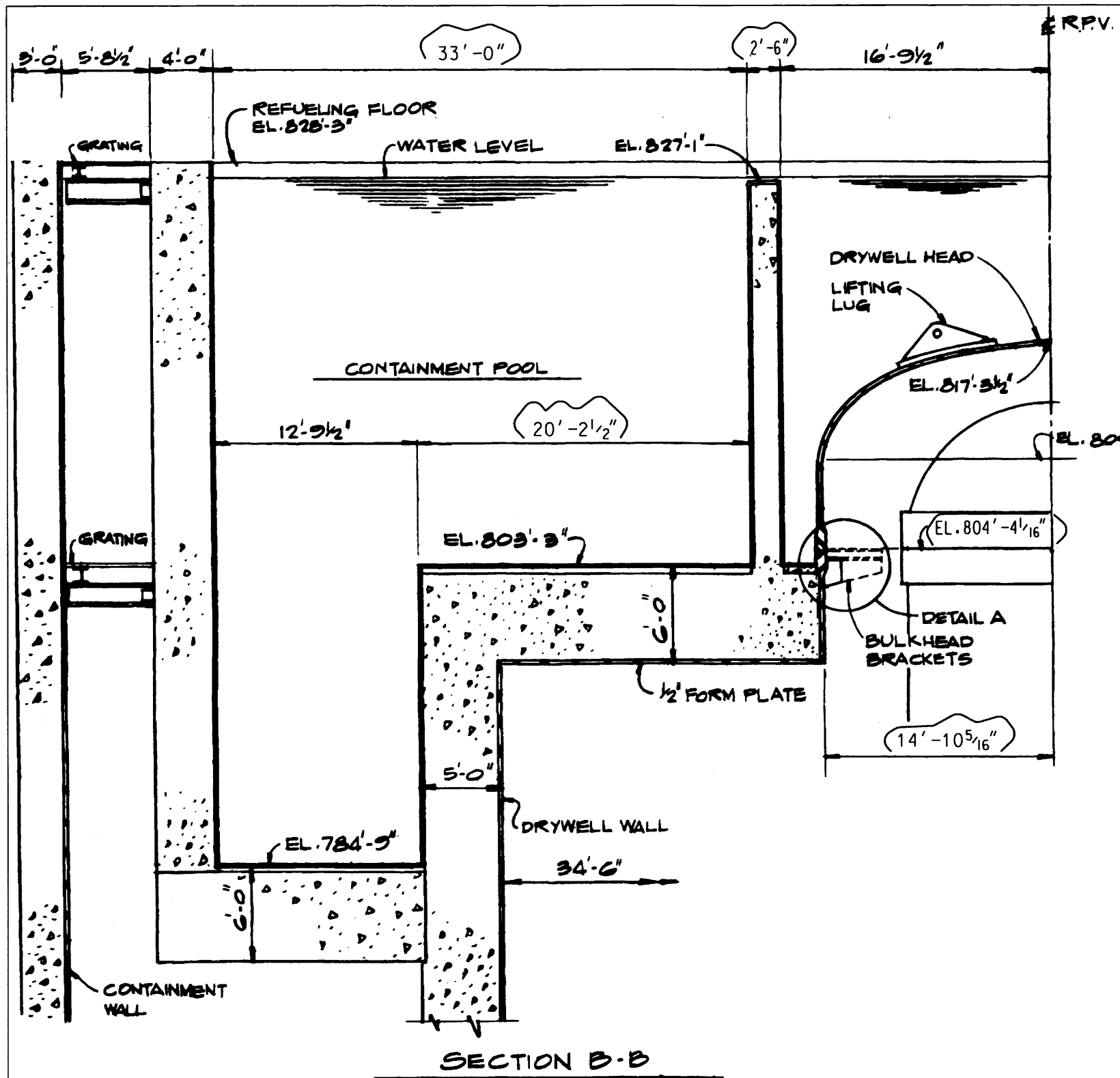
DRYWELL WALL DEVELOPED
(SHEET 1 OF 2)



- NOTES (CONT. FROM 527-1931)
- 5. INSERT ADJUSTABLES ABOVE EL. 757'-0" SHALL HAVE VERTICAL STIFFENERS ATTACHED @ 24" HORIZ. SPACING. STIFFENERS SHALL BE CUT BACK 3" FROM THE PENETRATION SLEEVES AND THE WELD JOINTS SHALL BE ATTACHED.
 - 6. PENETRATION SLEEVES SHALL BE ATTACHED TO EACH STIFFENER @ 24" VERT. SPACING. WHERE PENETRATION SLEEVES ARE INTERRUPTED AT PENETRATIONS, ADDITIONAL TIES SHALL BE PROVIDED AT 3" FROM THE CUT END OF THE STIFFENER UNLESS A REGULAR FORM TIE IS LOCATED WITHIN 12" OF THE END OF STIFFENER.
 - 7. MAXIMUM RATE OF POUR FOR DRYWELL WALL SHALL BE TWO FEET SIX INCHES HEIGHT PER HOUR.

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT
FIGURE 3.8-30
DRYWELL WALL DEVELOPED
(SHEET 2 OF 2)



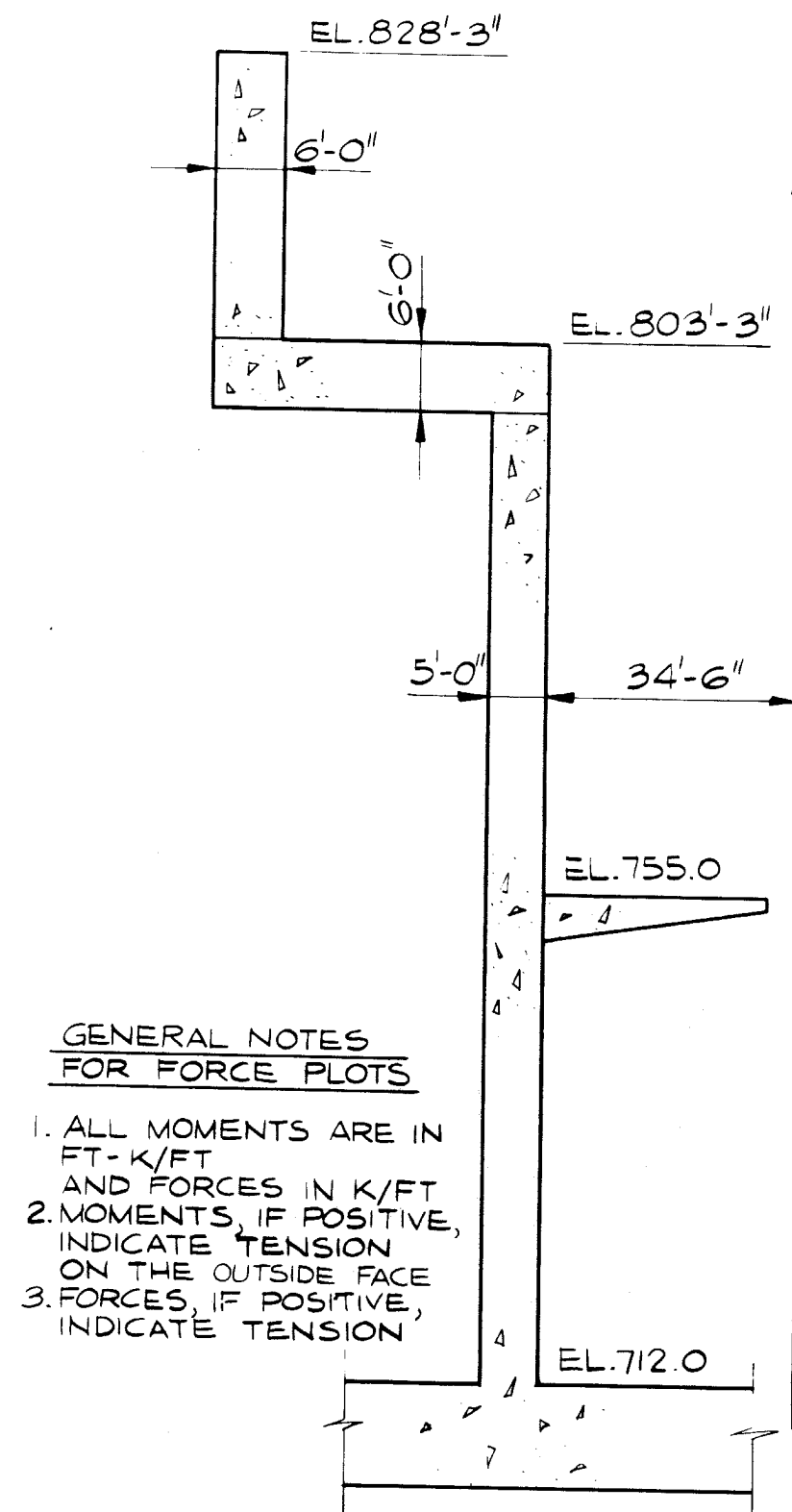


CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-31

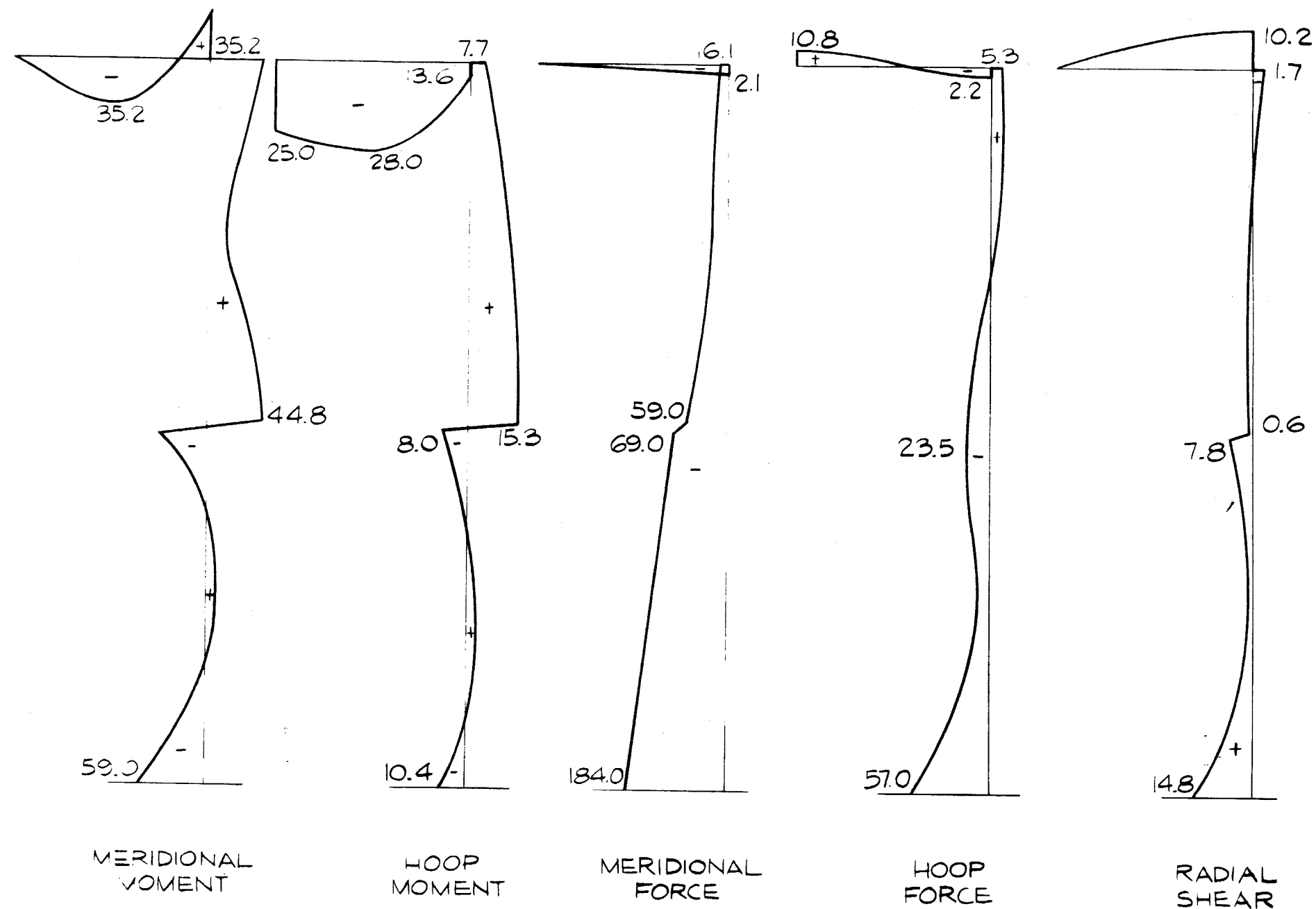
DETAILS OF THE DRYWELL HEAD AND
CONTAINMENT POOL COMPLEX

(SHEET 2 OF 2)



GENERAL NOTES
FOR FORCE PLOTS

1. ALL MOMENTS ARE IN
FT-K/FT
AND FORCES IN K/FT
2. MOMENTS, IF POSITIVE,
INDICATE TENSION
ON THE OUTSIDE FACE
3. FORCES, IF POSITIVE,
INDICATE TENSION



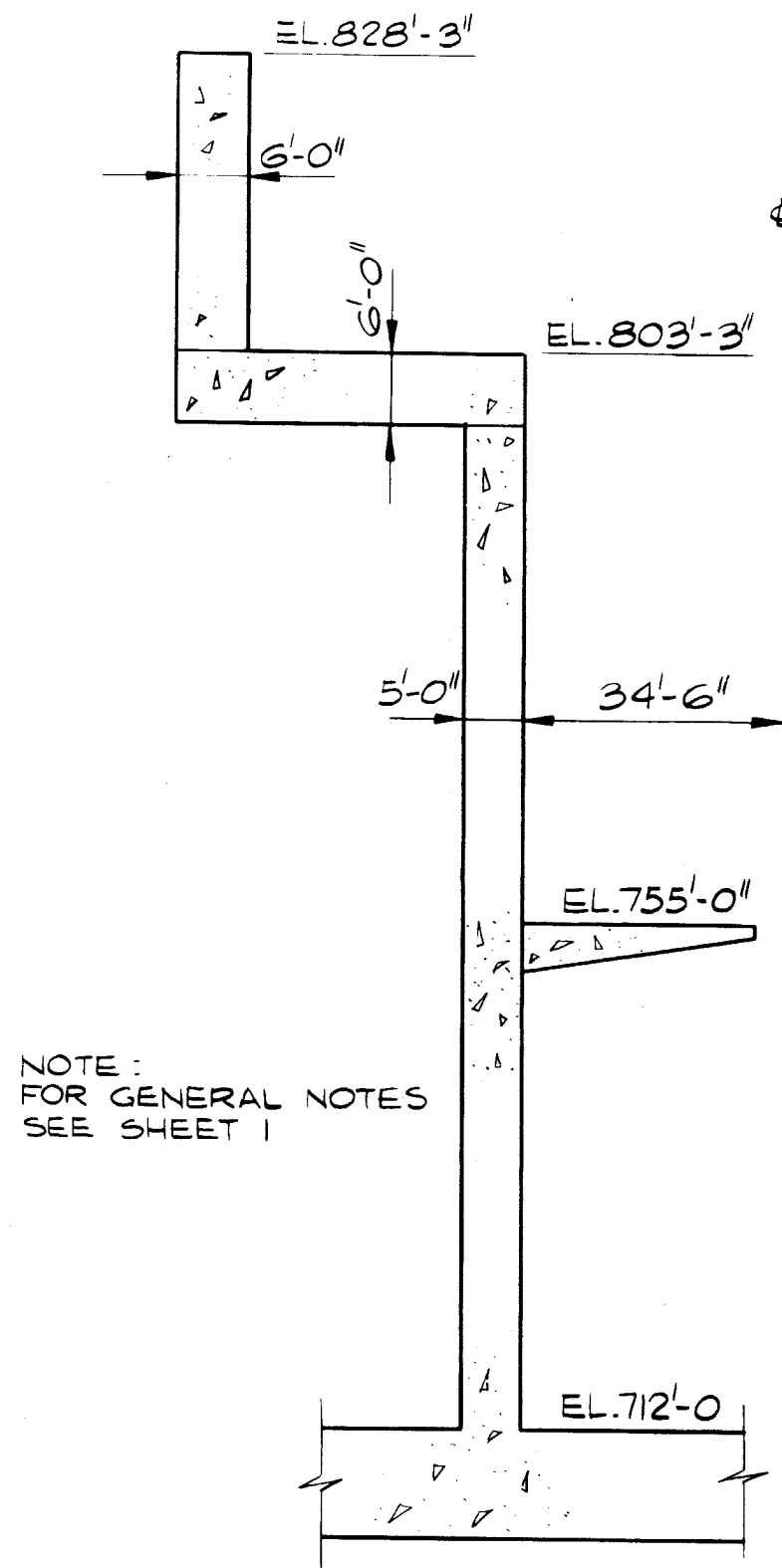
DEAD LOAD (D)
AZIMUTH 90°

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-33

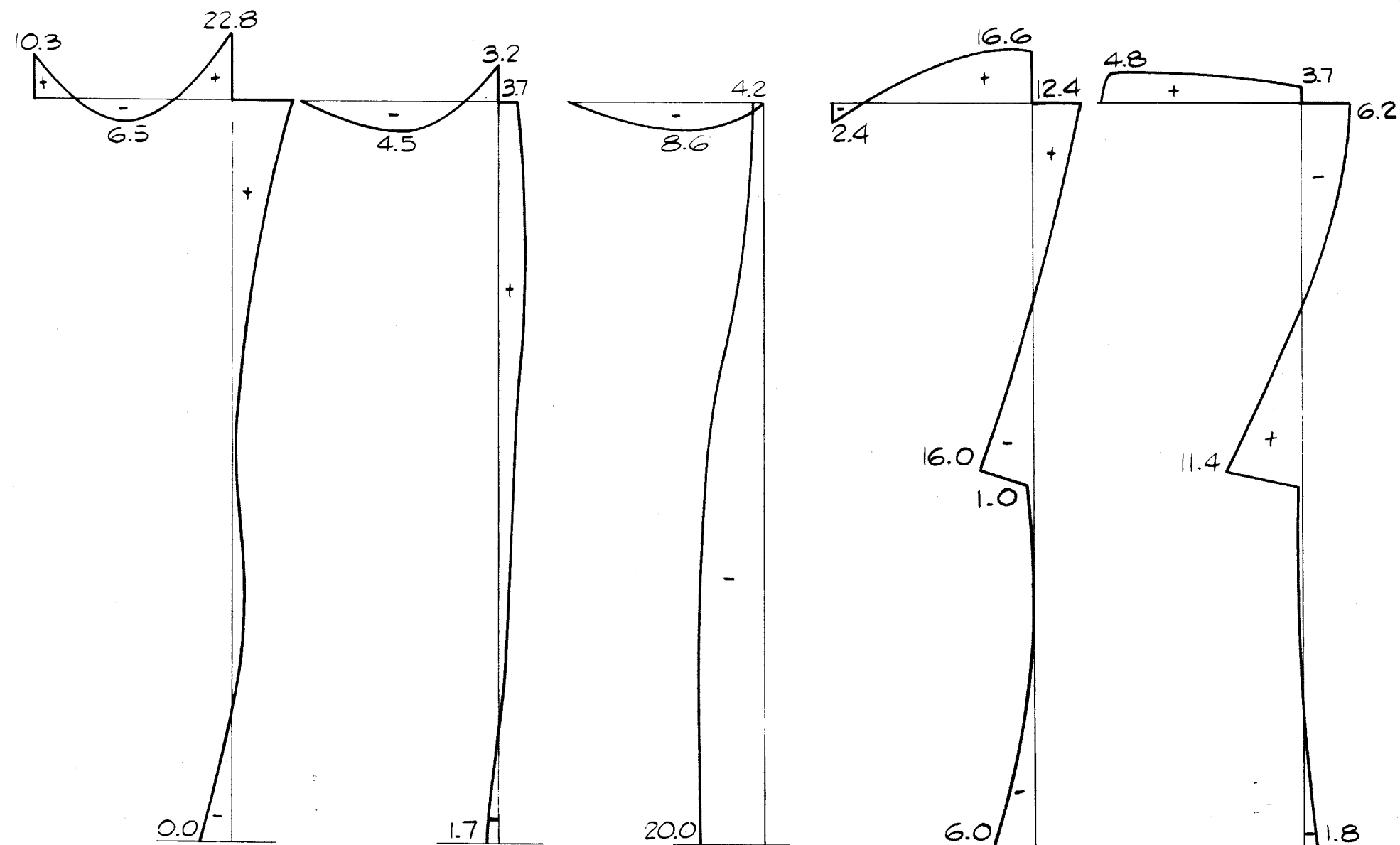
FORCE & MOMENT PLOTS - DRYWELL

(SHEET 1 of 4)



NOTE:
FOR GENERAL NOTES
SEE SHEET 1

CONTAINMENT



VERIDIONAL
MOMENT

HOOP
MOMENT

MERIDIONAL
FORCE

HOOP
FORCE

RADIAL
SHEAR

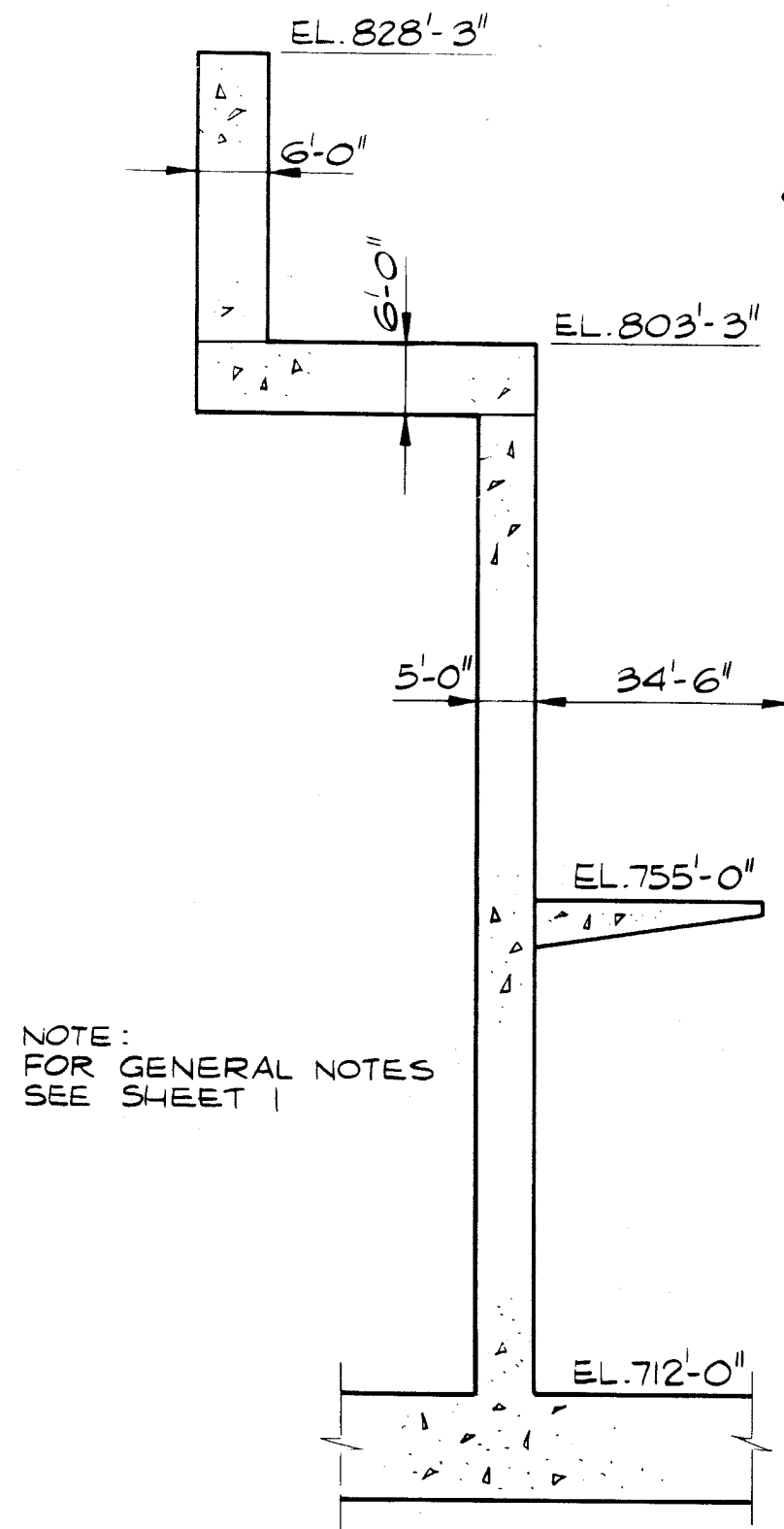
POOL WATER LOADING (H)
AZIMUTH 90°

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-33

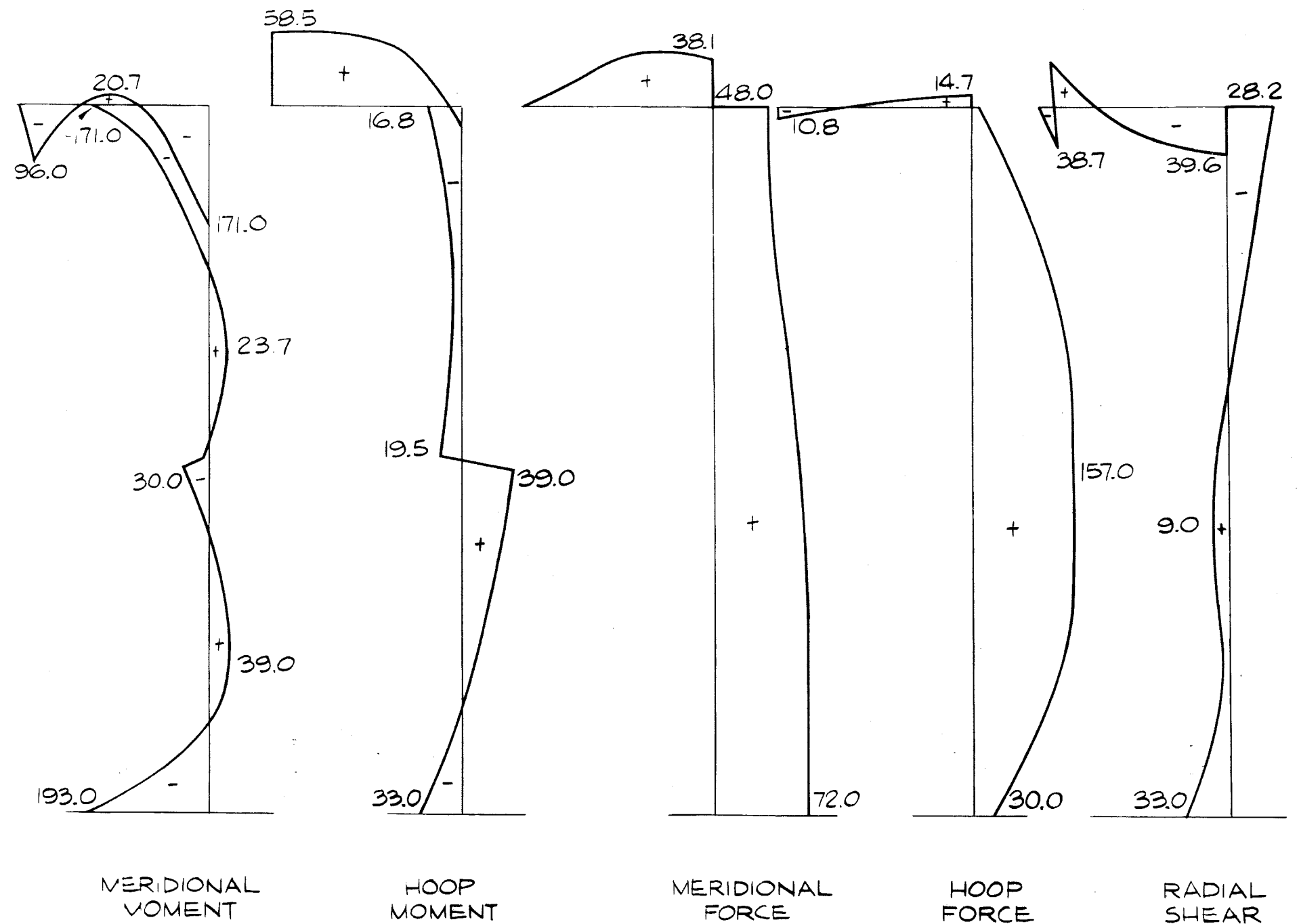
FORCE & MOMENT PLOTS - DRYWELL

(SHEET 2 of 4)



NOTE:
FOR GENERAL NOTES
SEE SHEET 1

CONTAINMENT



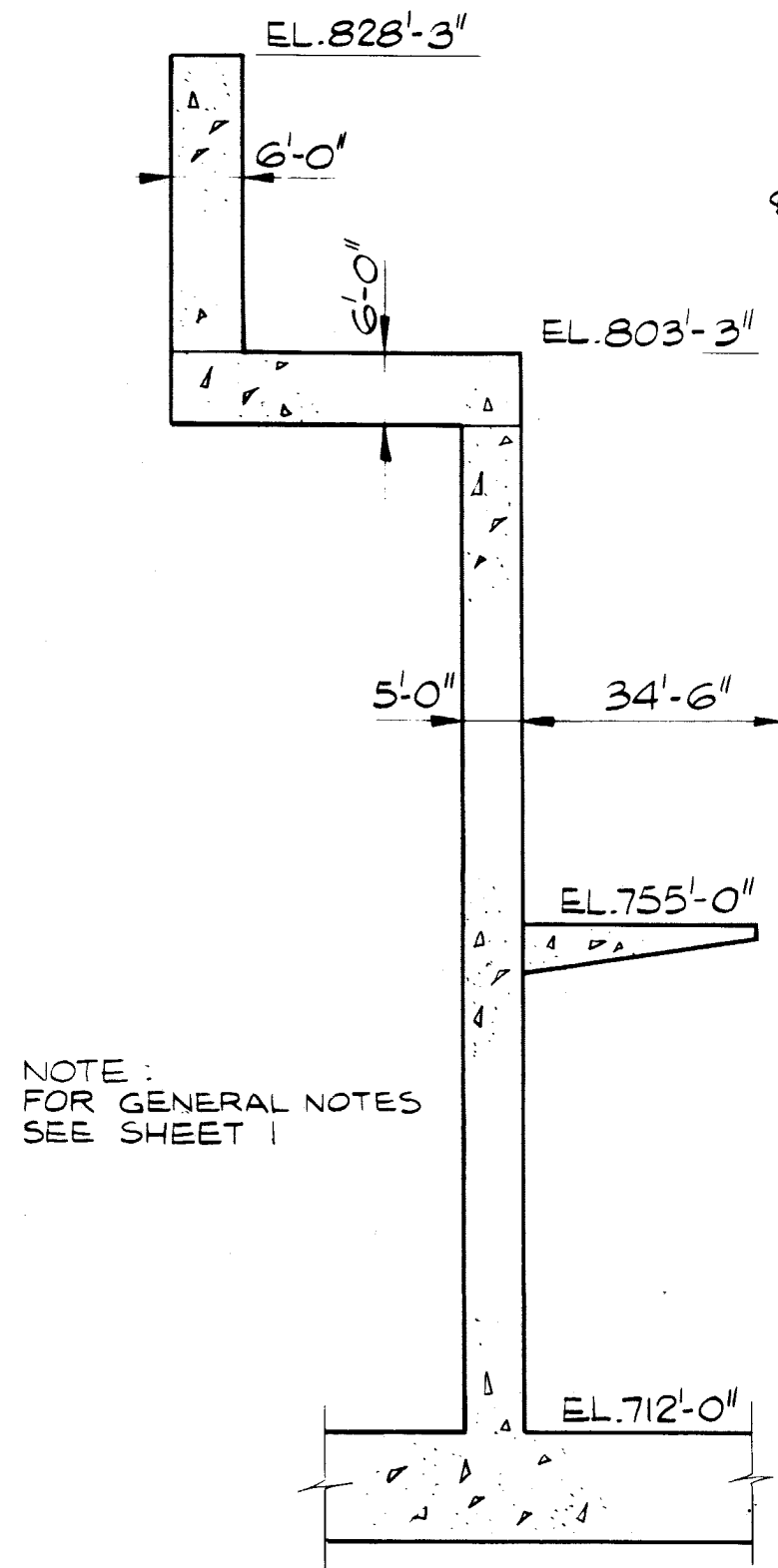
ACCIDENT PRESSURE (P_a) LOADING
AZIMUTH 90°

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

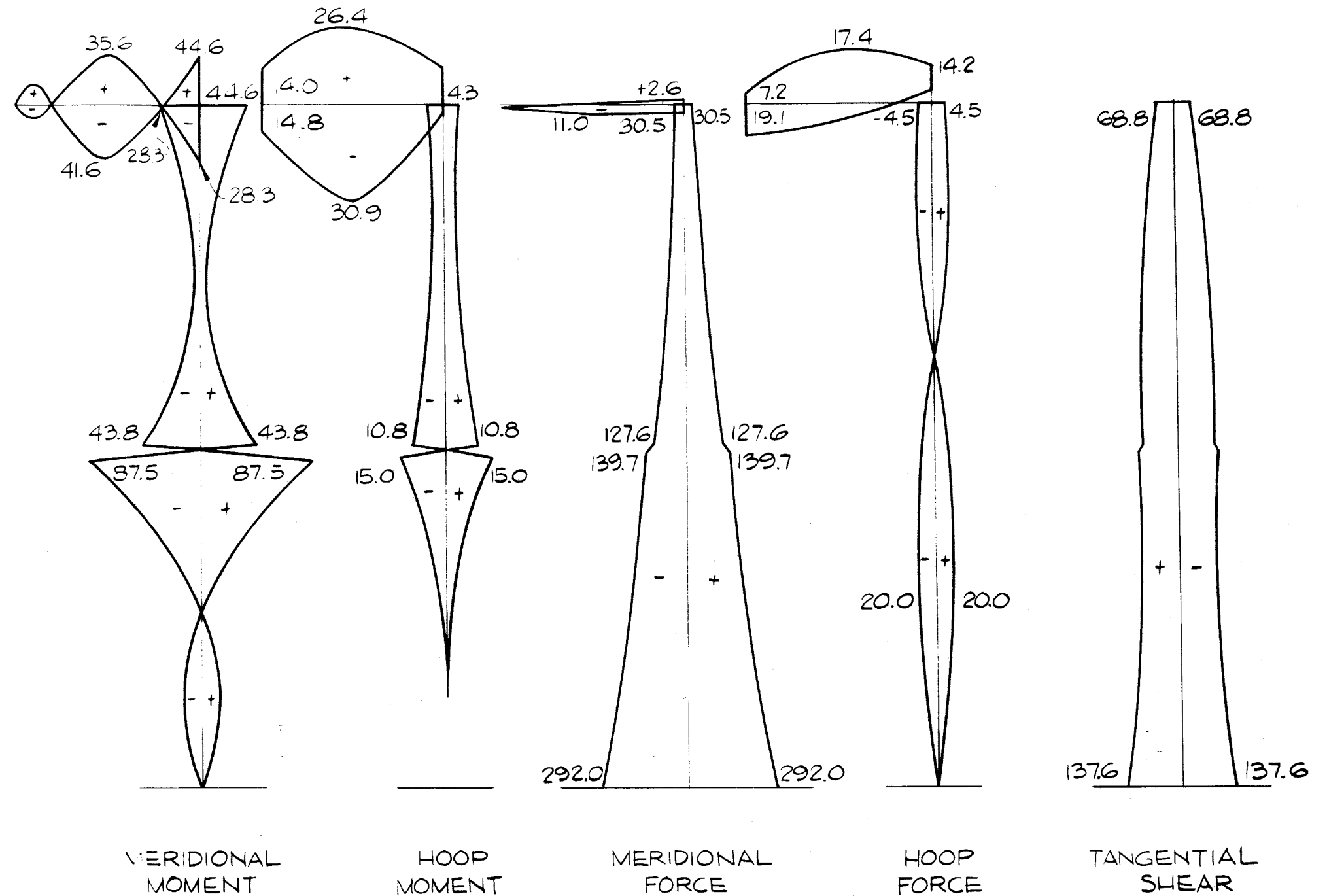
FIGURE 3.8-33

FORCE & MOMENT PLOTS - DRYWELL

(SHEET 3 of 4)



CONTAINMENT



SAFE SHUTDOWN EARTHQUAKE LOADING (E')

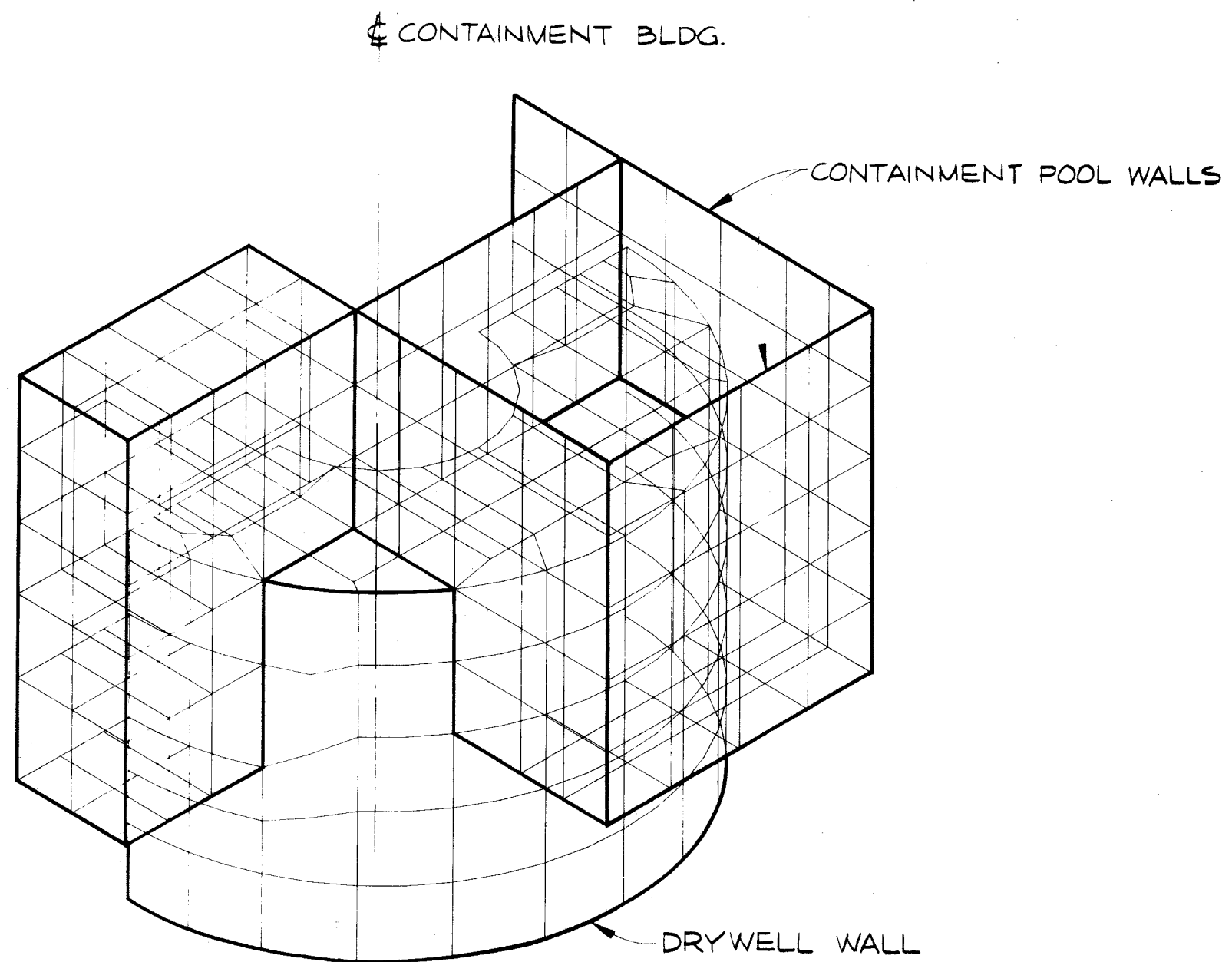
AZIMUTH 90°

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-33

FORCE & MOMENT PLOTS - DRYWELL

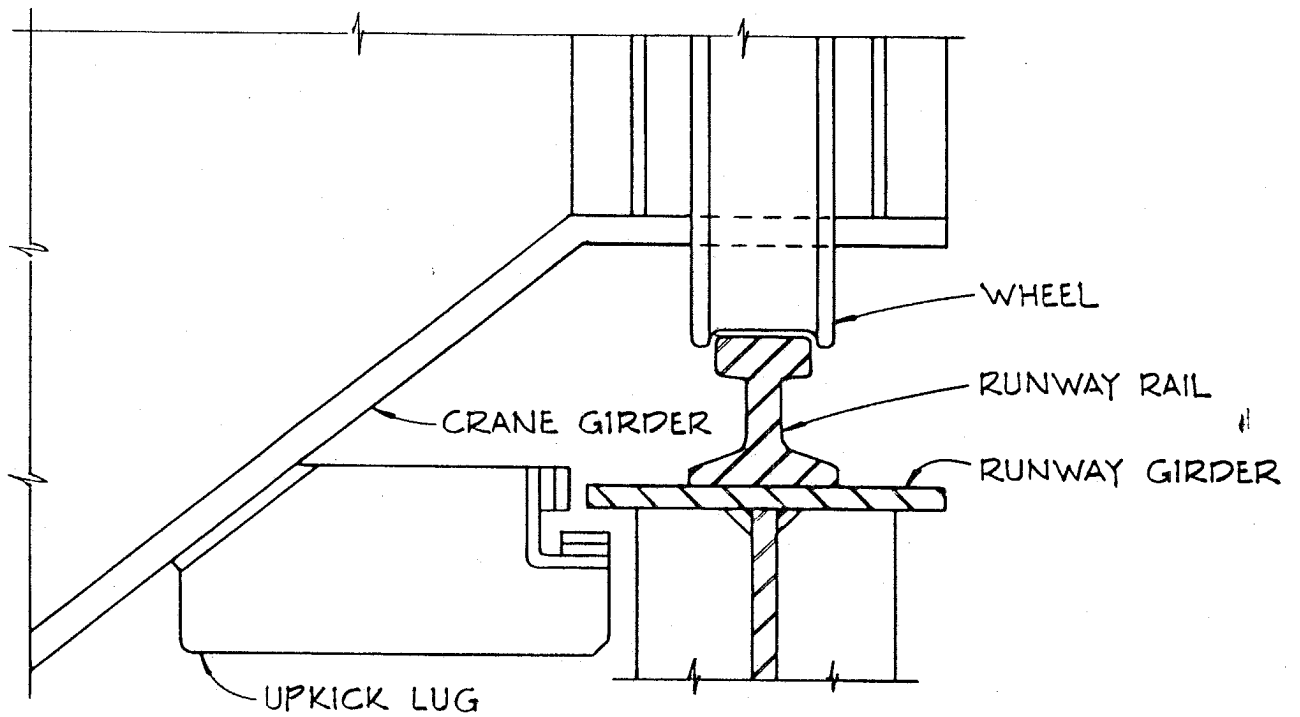
(SHEET 4 of 4)



CLINTON POWER STATION
 UPDATED SAFETY ANALYSIS REPORT

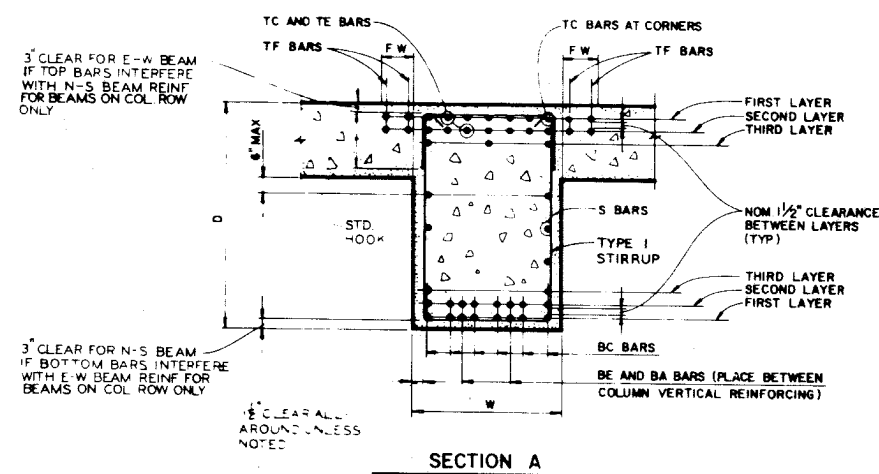
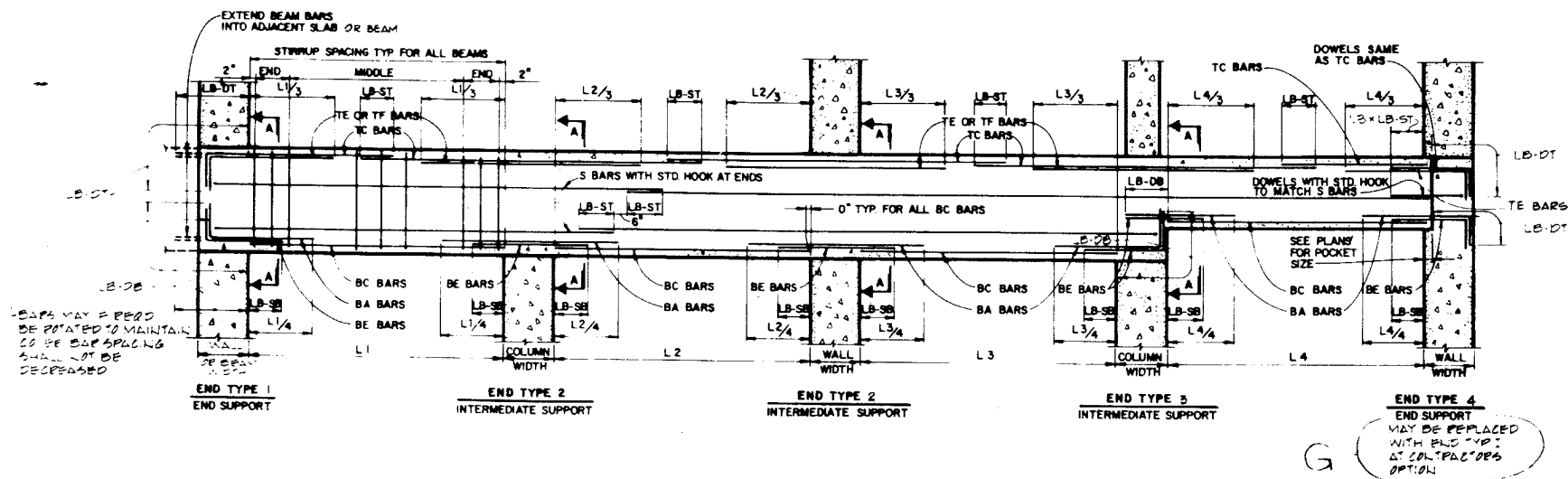
FIGURE 3.8-34

ANALYTICAL MODEL OF UPPER PORTION OF
 DRYWELL STRUCTURE



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

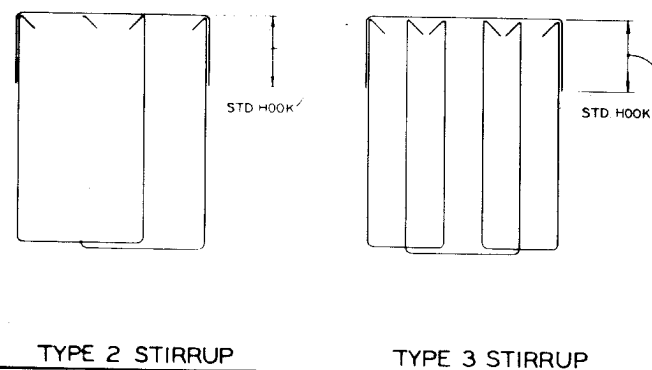
FIGURE 3.8-35
CRANE SEISMIC FEATURES

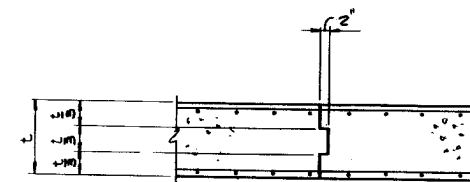
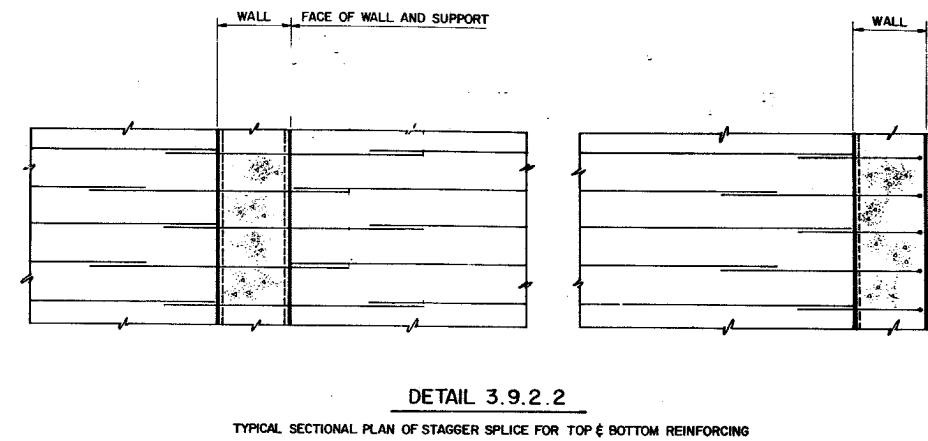
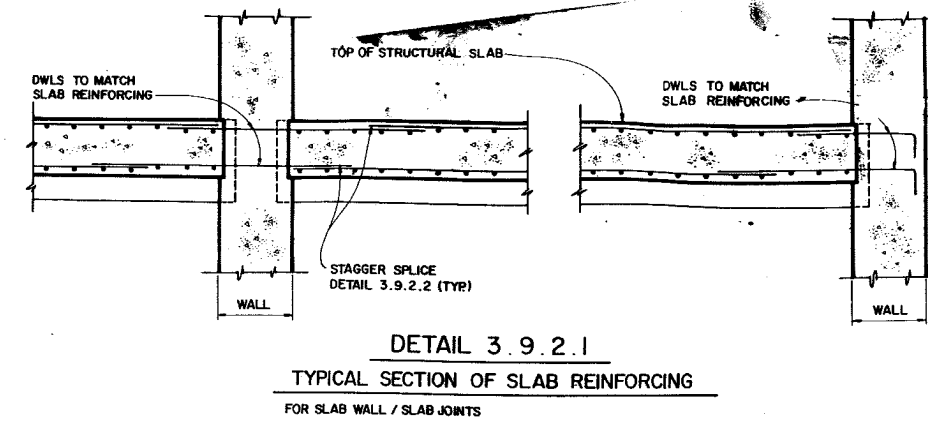
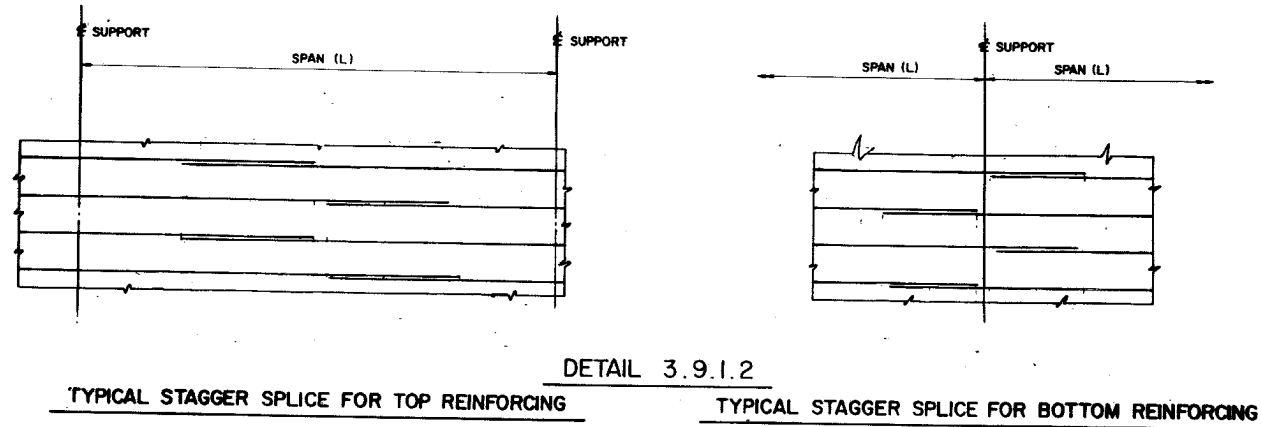
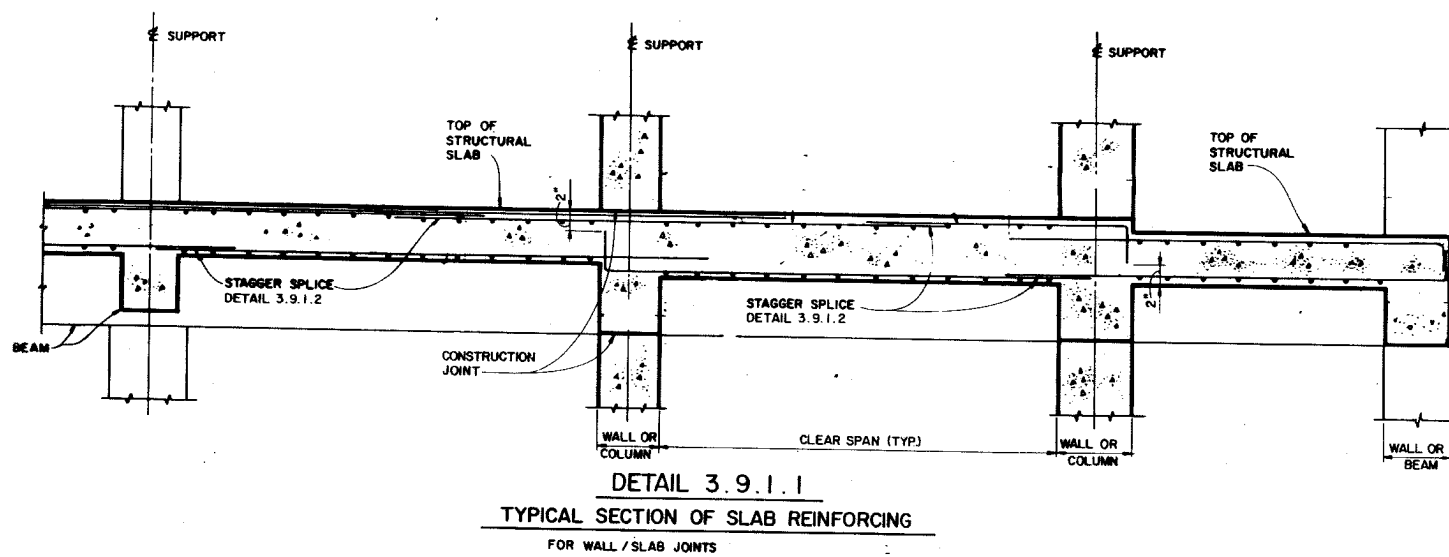


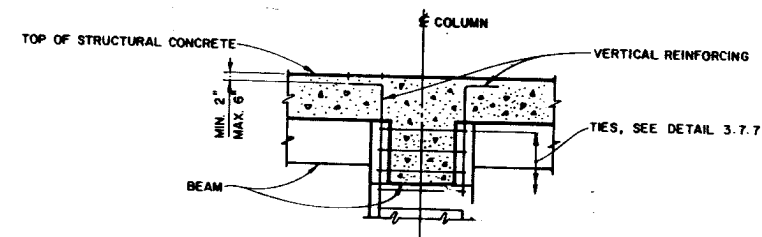
| BAR SIZE | TOP BARS | | BOTTOM BARS | | STD. HOOK | STIRRUPS |
|----------|--------------|-------------------|--------------|-------------------|-----------|----------|
| | SPLICE LB-ST | DEVELOPMENT LB-DT | SPLICE LB-SB | DEVELOPMENT LB-DB | | |
| #4 | | | | | 8" | |
| #5 | | | | | 10" | |
| #6 | 27" | 21" | 19" | 15" | 12" | |
| #7 | 36" | 28" | 26" | 20" | 14" | |
| #8 | 47" | 36" | 34" | 26" | 16" | |
| #9 | 59" | 46" | 43" | 33" | 19" | |
| #10 | 75" | 58" | 54" | 42" | 22" | |
| #11 | 92" | 71" | 66" | 51" | 24" | |

THIS SCHEDULE IS BASED ON 3000 PSI CONCRETE, 60,000 PSI REINFORCING BARS, AND BARS SPACED @ LEAST 6" ON CENTER LATERALLY.

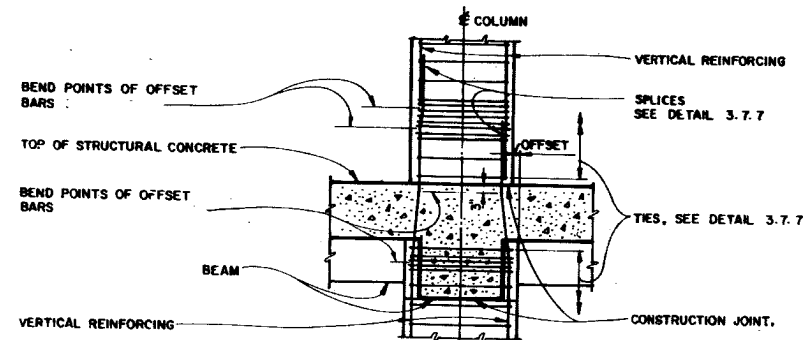
DETAIL 3.8.2
SPLICE AND DEVELOPMENT LENGTH SCHEDULE
FOR CONCRETE BEAM REINFORCEMENT



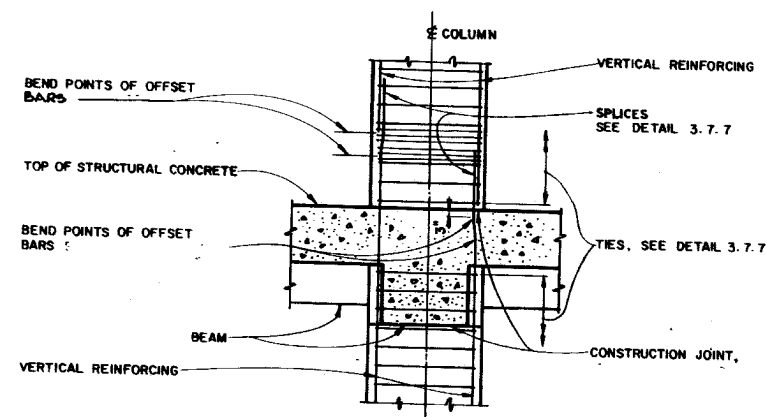




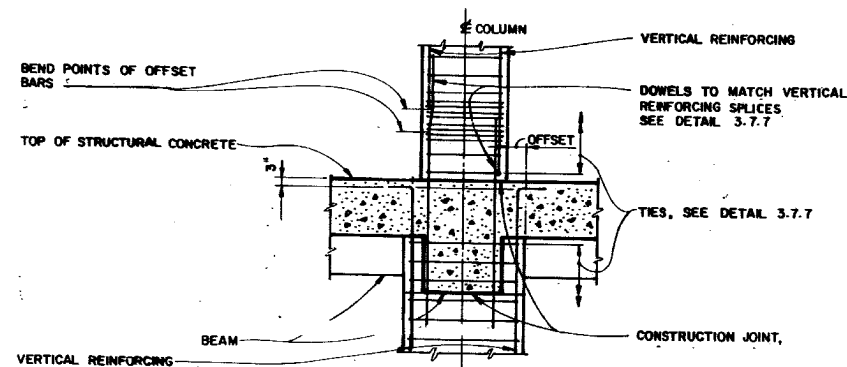
DETAIL 3.7.1
COLUMN TERMINATION AT TOP



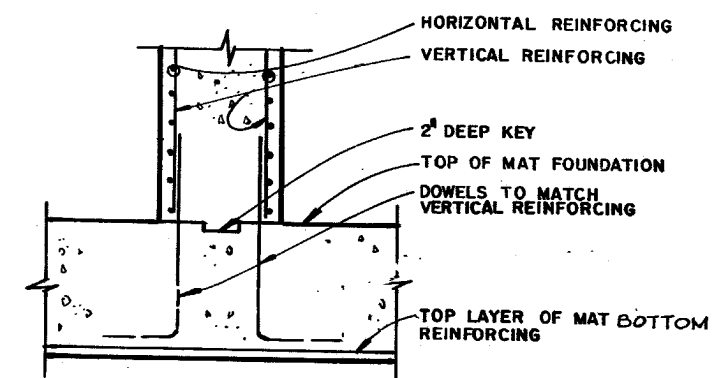
DETAIL 3.7.4
COLUMN AT INTERMEDIATE FLOOR WITH 3" OR LESS OFFSET
(DETAILS 3.7.5 AND 3.7.6 MAYBE USED AS ALTERNATE)



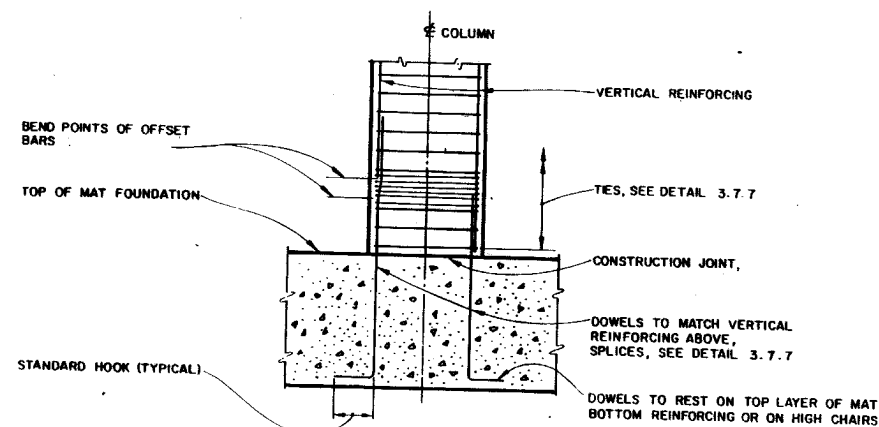
DETAIL 3.7.2
COLUMN AT INTERMEDIATE FLOOR WITHOUT OFFSET



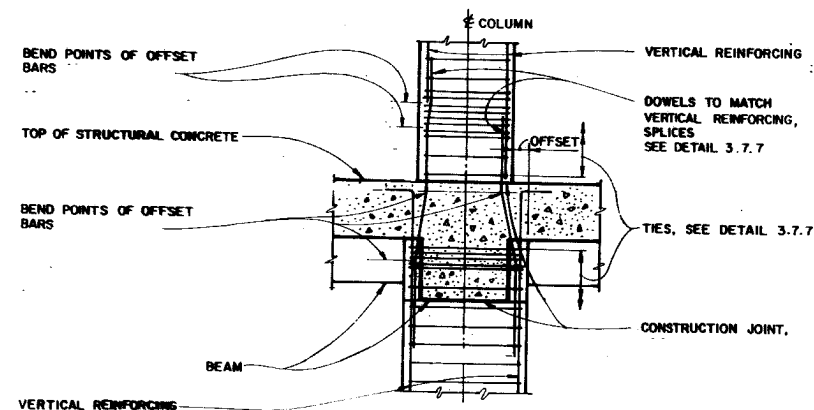
DETAIL 3.7.5
COLUMN AT INTERMEDIATE FLOOR WITH MORE THAN 3" OFFSET
(DETAILS 3.7.6 MAYBE USED AS ALTERNATE)



WALL AT MAT FOUNDATION



DETAIL 3.7.3
COLUMN TERMINATION AT BASE

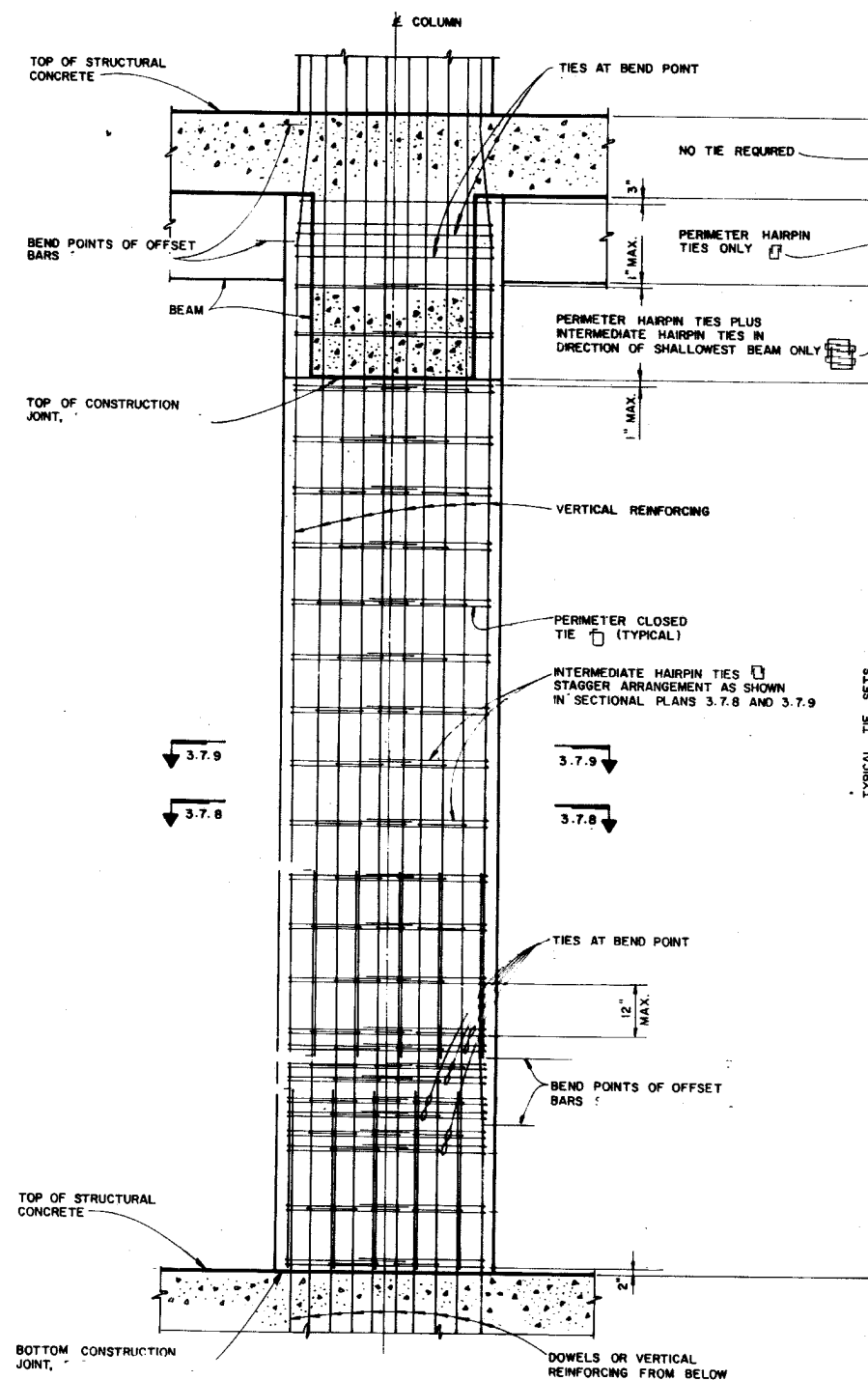


DETAIL 3.7.6
COLUMN AT INTERMEDIATE FLOOR WITH OFFSET
(ALTERNATE TO DETAILS 3.7.4 AND 3.7.5)

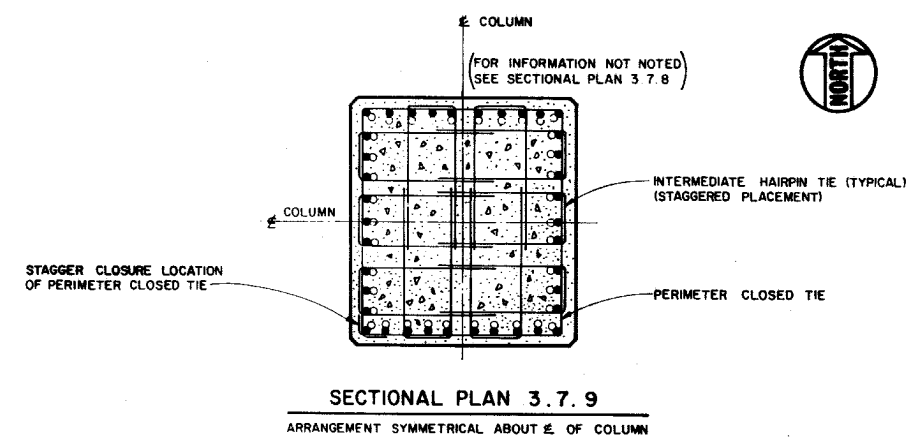
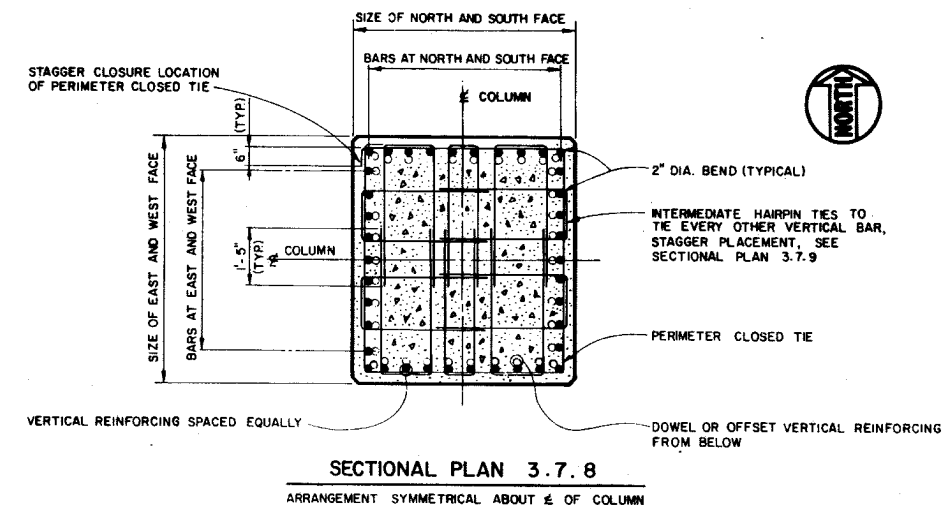
TYPICAL SPLICE DETAILS OF VERTICAL REINFORCING

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-37
TYPICAL REINFORCING DETAILS
(SHEET 2 of 4)



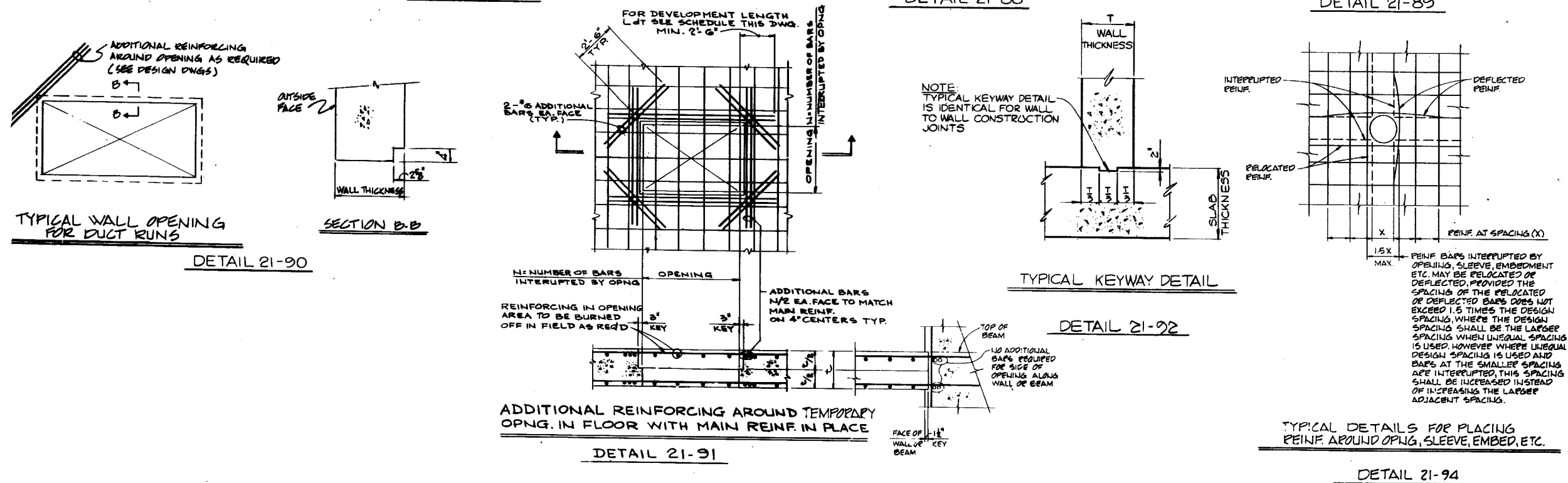
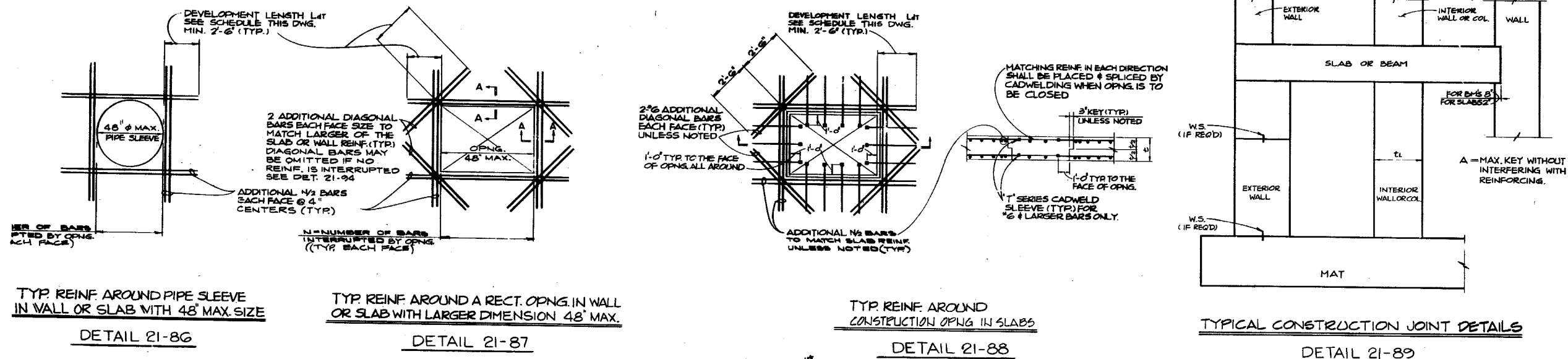
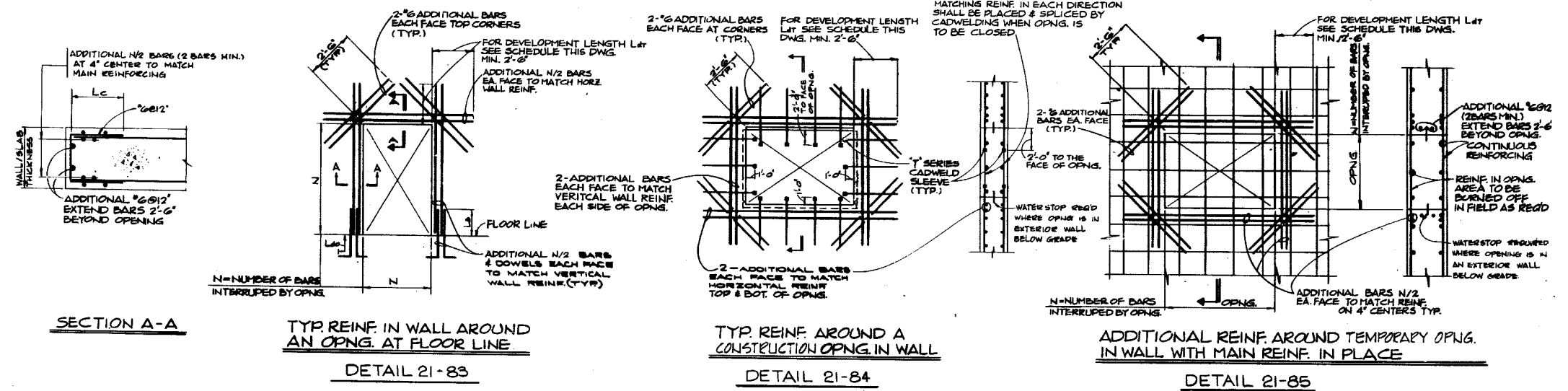
DETAIL 3.7.7
TYPICAL COLUMN ELEVATION

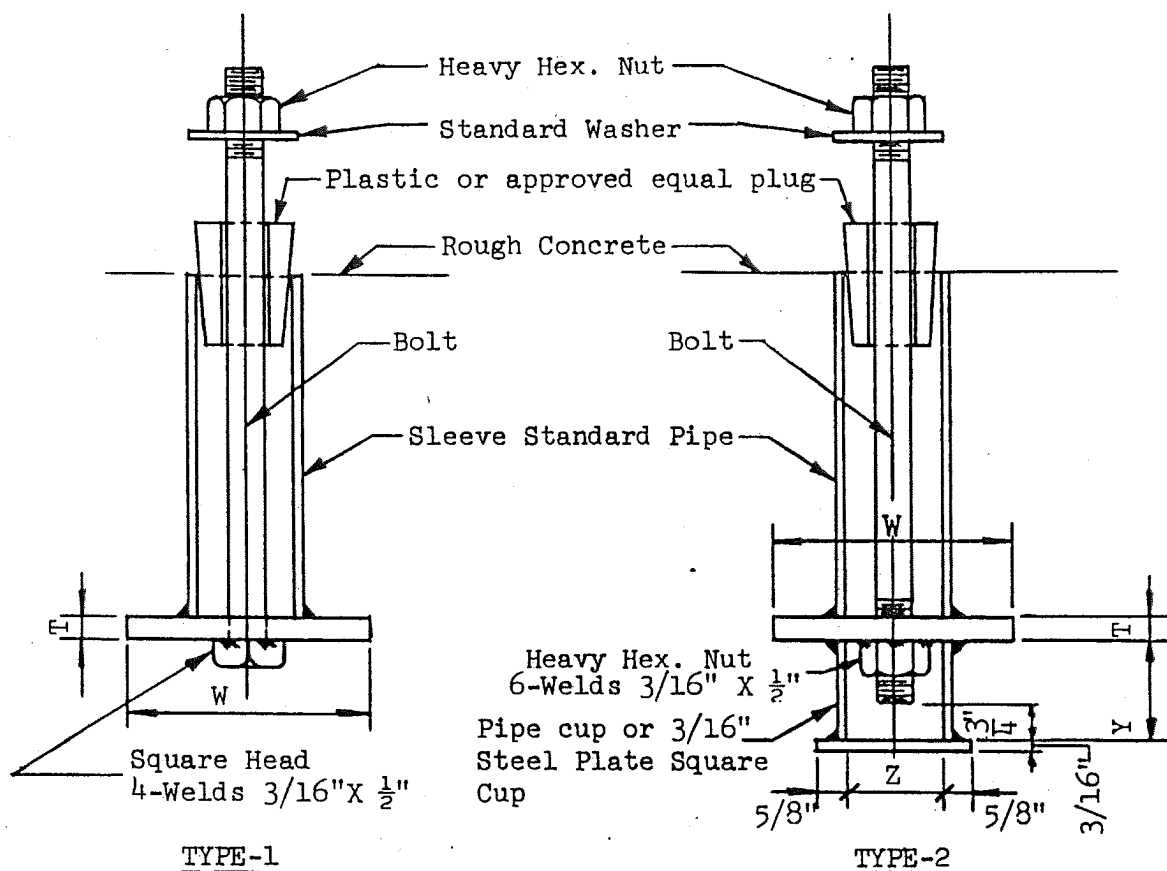


ARRANGEMENT OF VERTICAL REINFORCING AND TYPICAL TIE SETS

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-37
TYPICAL REINFORCING DETAILS
(SHEET 3 of 4)





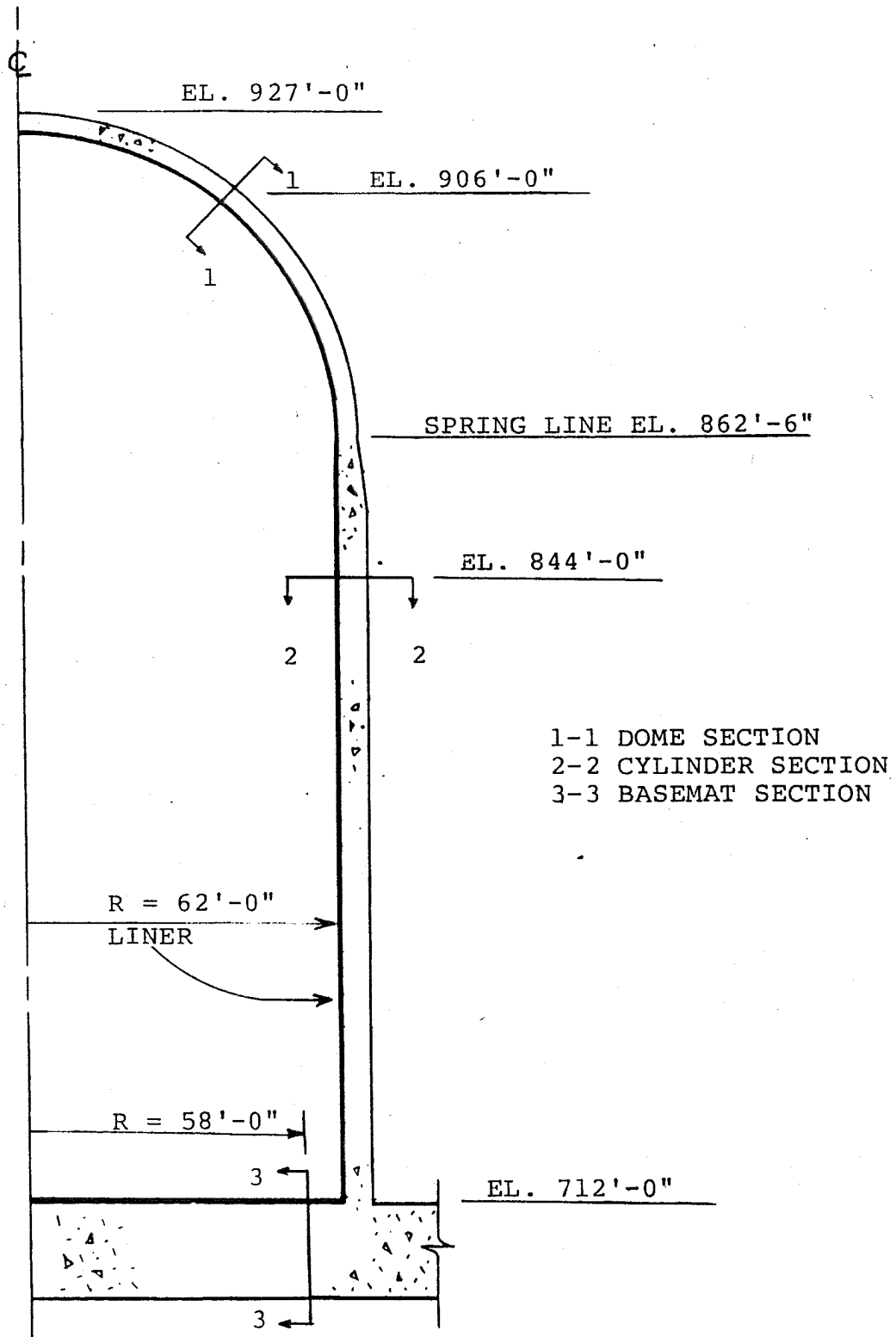
| TYPE 1 AND 2 BOLTS | | | | | | | | | | | | |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| BOLT DIAM. | 5/8" | 3/4" | 7/8" | 1" | 1 1/4" | 1 1/2" | 1 3/4" | 2" | 2 1/4" | 2 1/2" | 2 3/4" | 3" |
| SLEEVE | 1 1/2" | 2" | 2" | 2 1/2" | 3" | 3" | 3 1/2" | 3 1/2" | 4" | 5" | 5" | 5" |
| SQUARE PLATE WASHER | T | 3/8" | 3/8" | 1/2" | 1/2" | 5/8" | 3/4" | 3/4" | 3/4" | 7/8" | 7/8" | 1" |
| | W | 3 1/2" | 4" | 5" | 5" | 6" | 6" | 8" | 8" | 9" | 10" | 11" |
| CUP | Z | 1 1/2" | 2" | 2" | 2 1/2" | 3" | 3" | 3 1/2" | 4" | 5" | 5" | 5" |
| | Y | 2" | 2 1/2" | 2 1/2" | 2 1/2" | 3" | 3" | 3 1/2" | 3 1/2" | 4" | 4" | 4 1/2" |

Note: The plastic plug will be removed and the pipe sleeve filled with grout after the equipment has been set in place.

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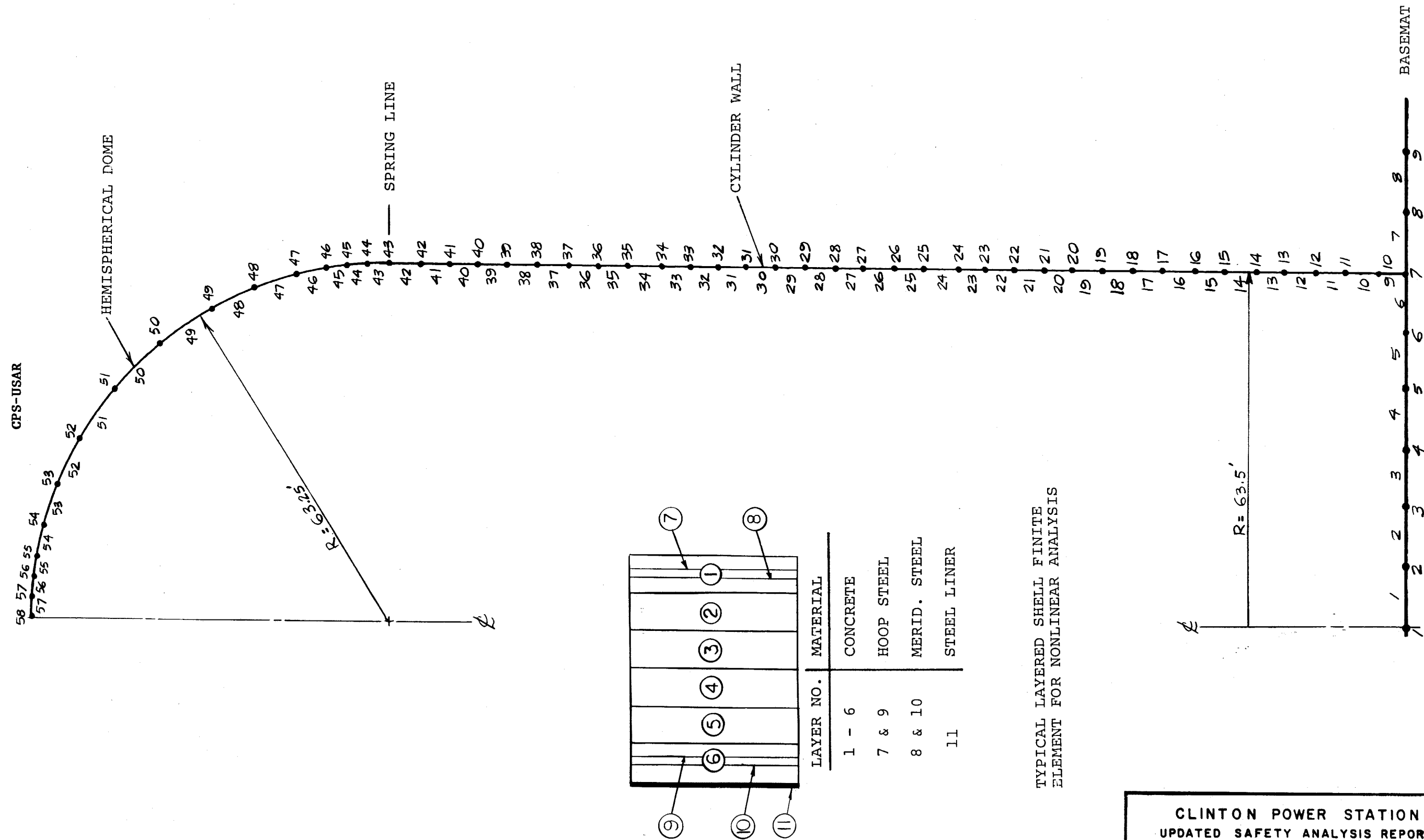
FIGURE 3.8-38

TYPICAL ANCHOR BOLT DETAILS FOR
SEISMIC CATEGORY I EQUIPMENT



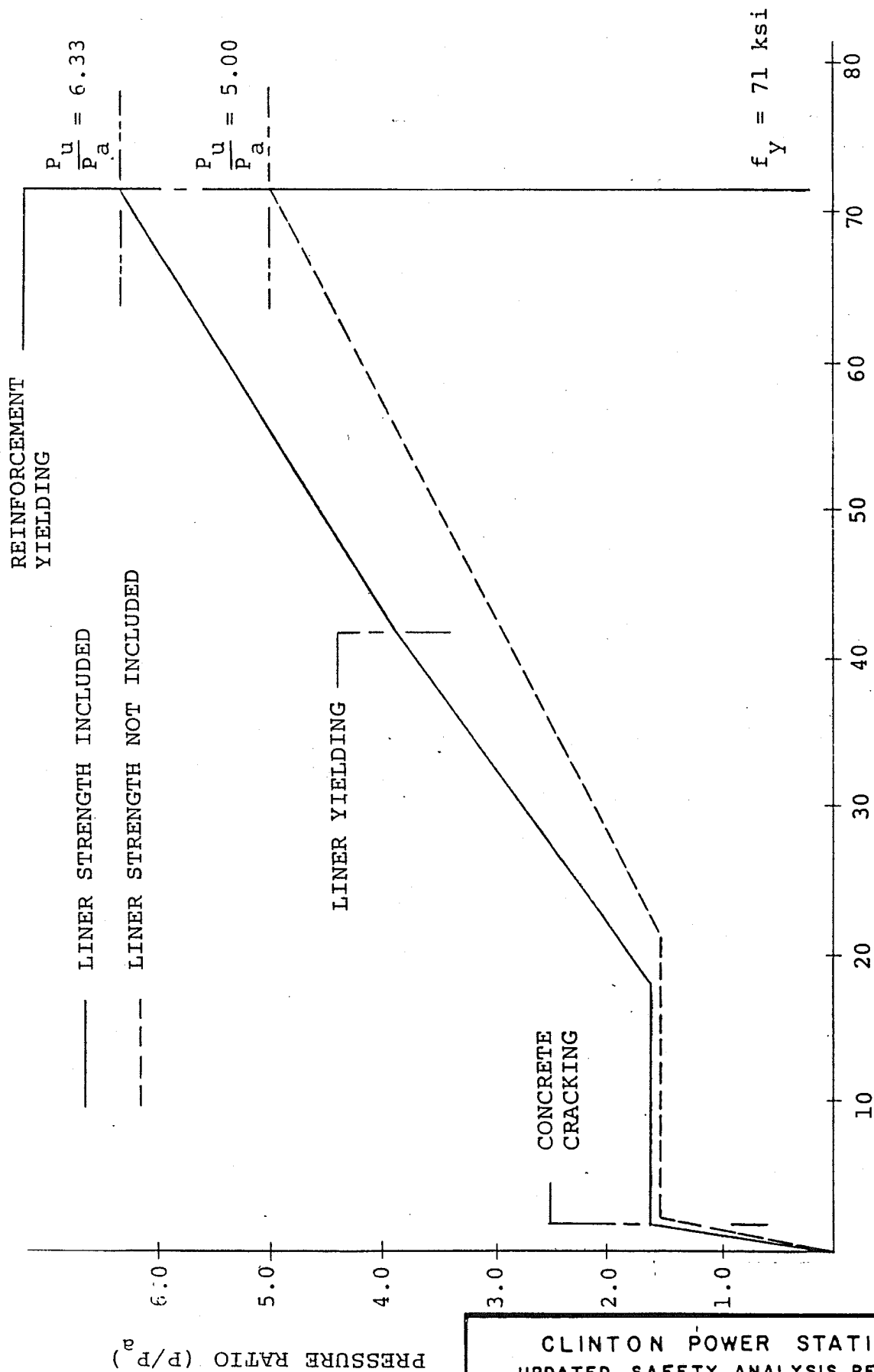
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

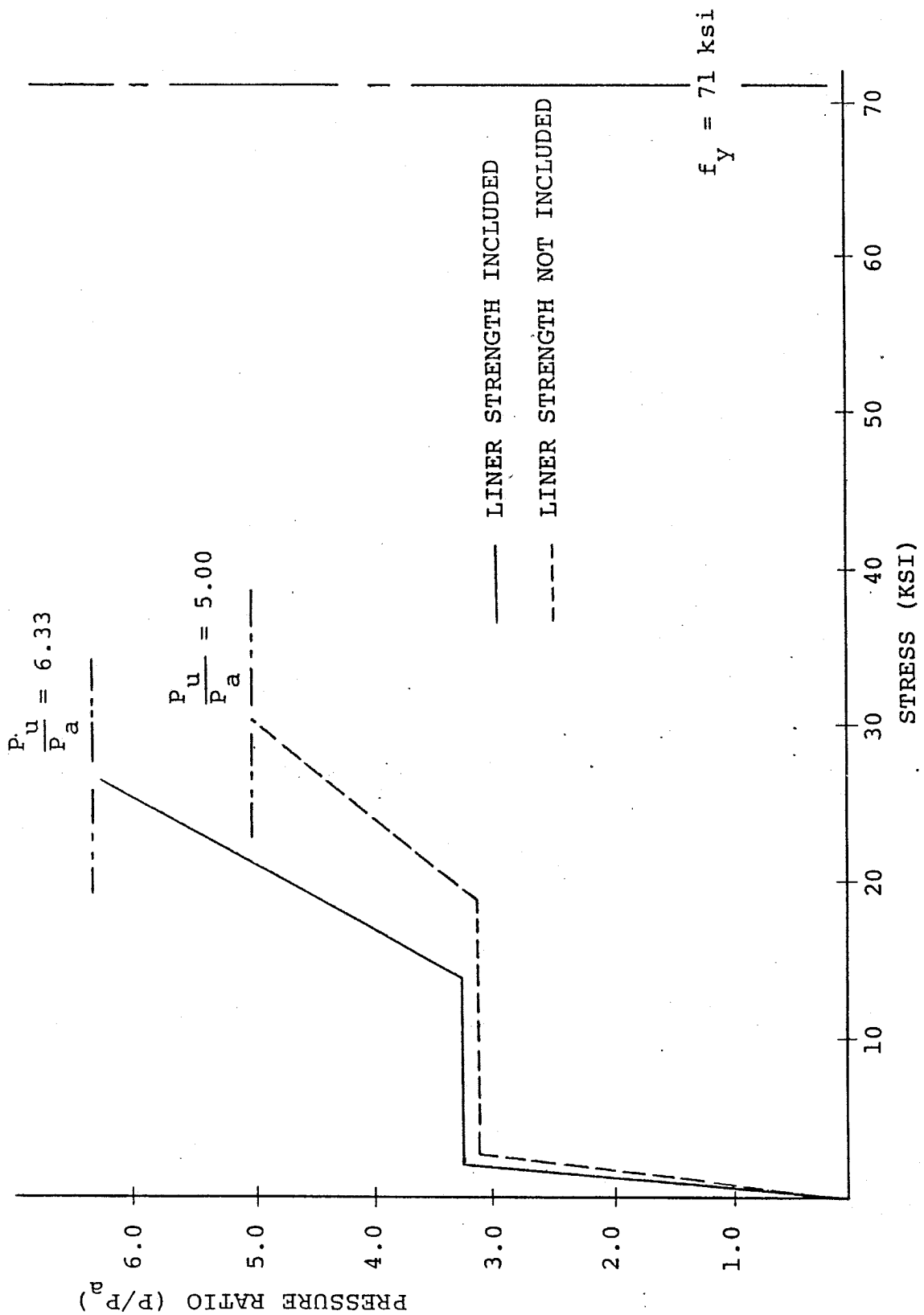
FIGURE 3.8-39
CRITICAL SECTIONS
IN CONTAINMENT STRUCTURE



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

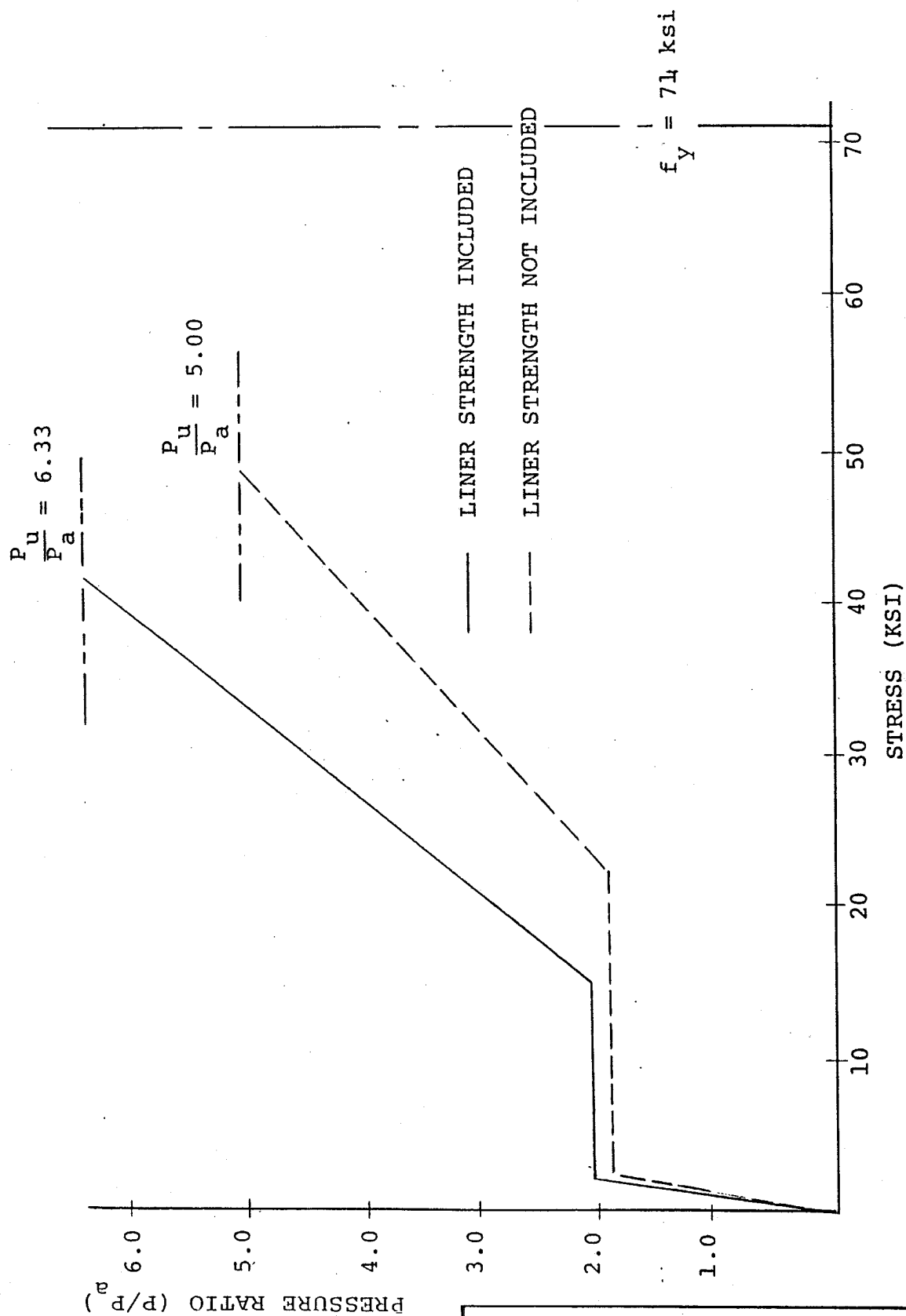
FIGURE 3.8-40
AXISYMMETRIC MODEL
OF CONTAINMENT





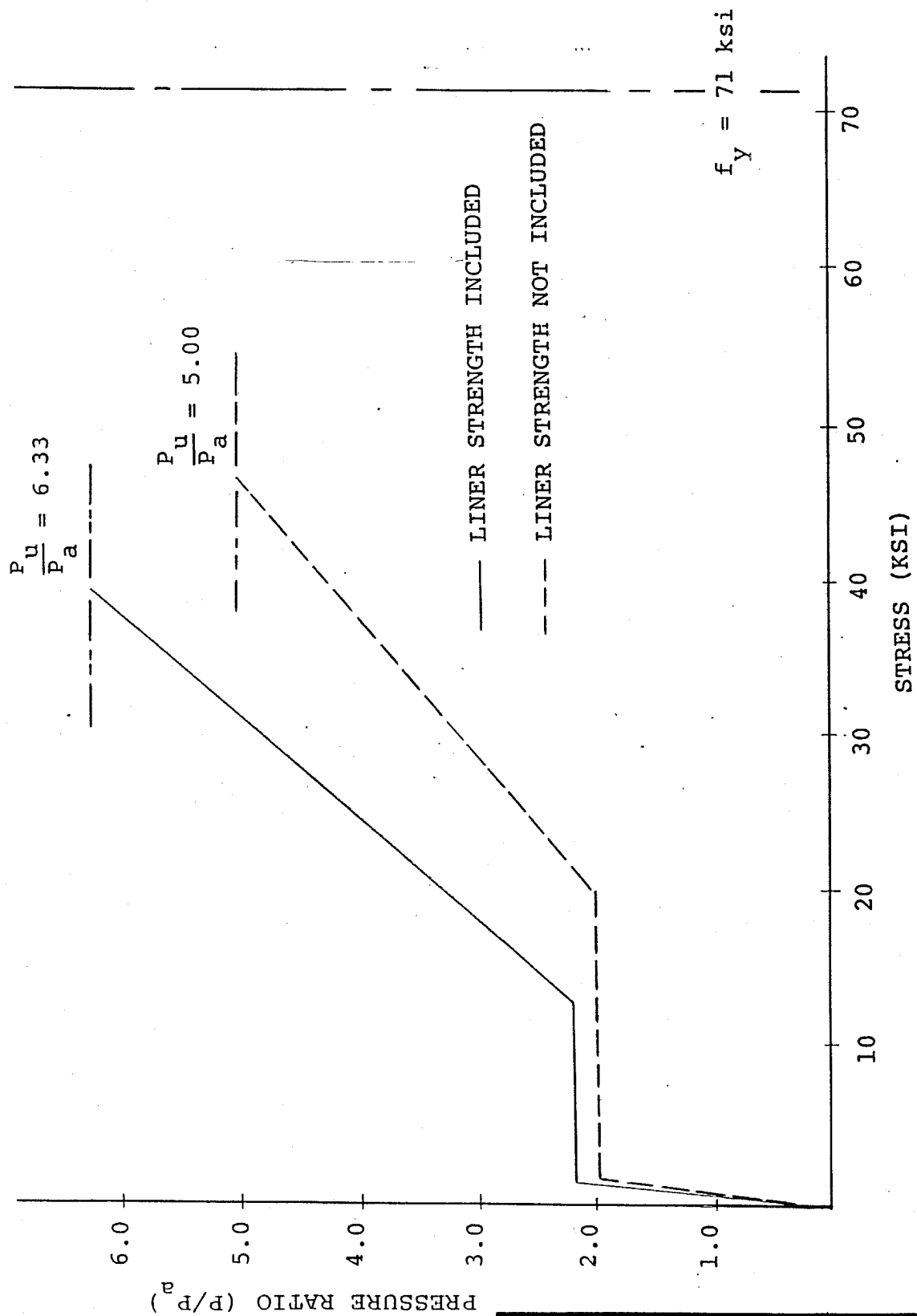
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-42
PRESSURE RATIO VS.
MERIDIONAL STEEL STRESS
IN CONTAINMENT CYLINDER
(EL. 844 FT.)



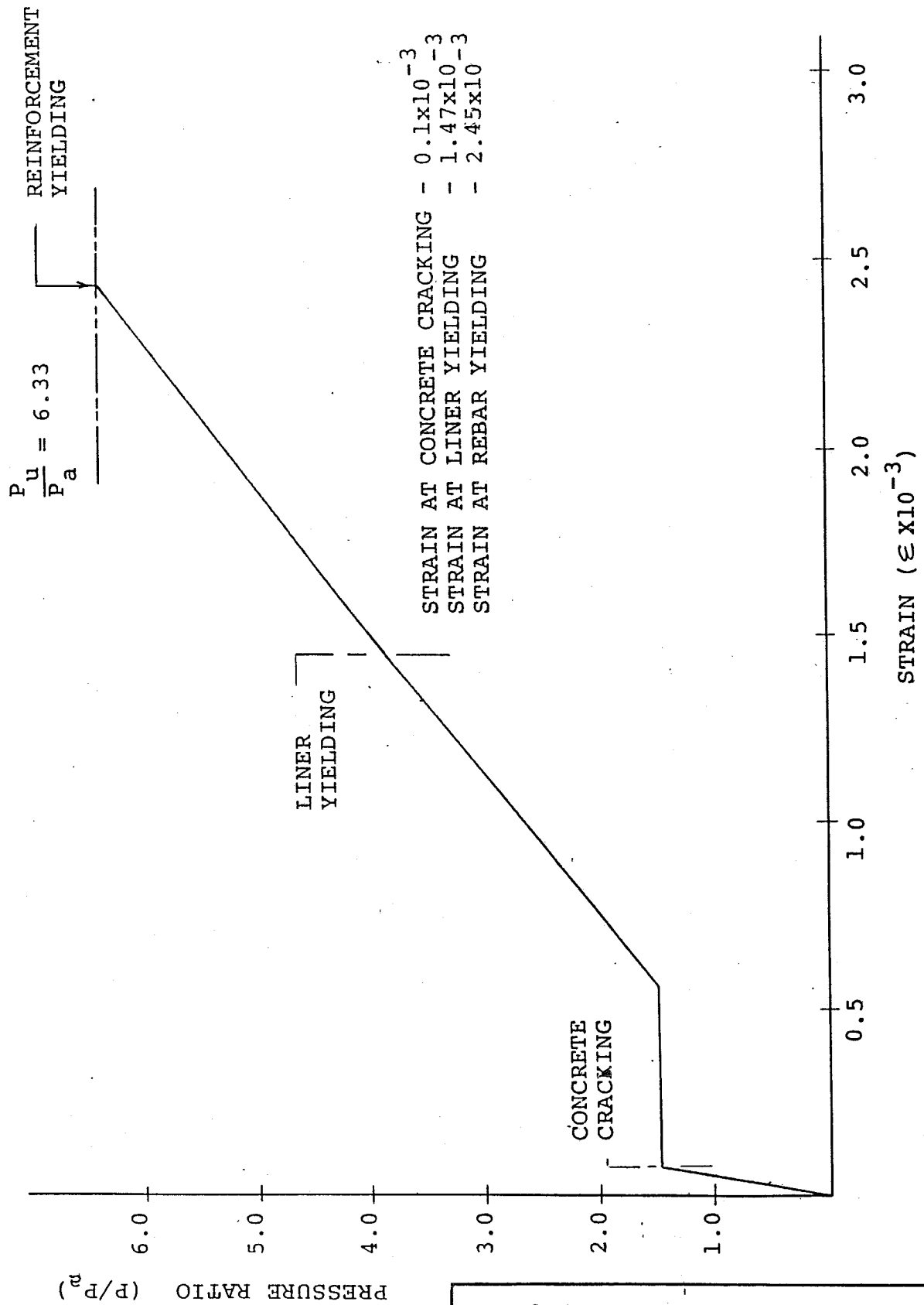
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-43
PRESSURE RATIO VS.
HOOP STEEL STRESS
IN CONTAINMENT DOME
(EL. 906 FT.)



CLINTON POWER STATION
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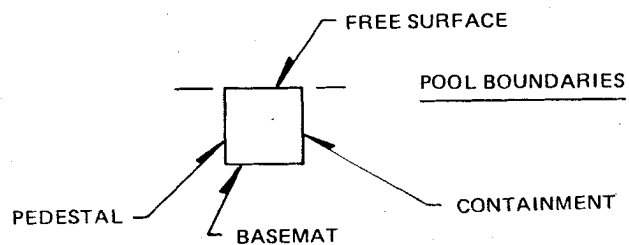
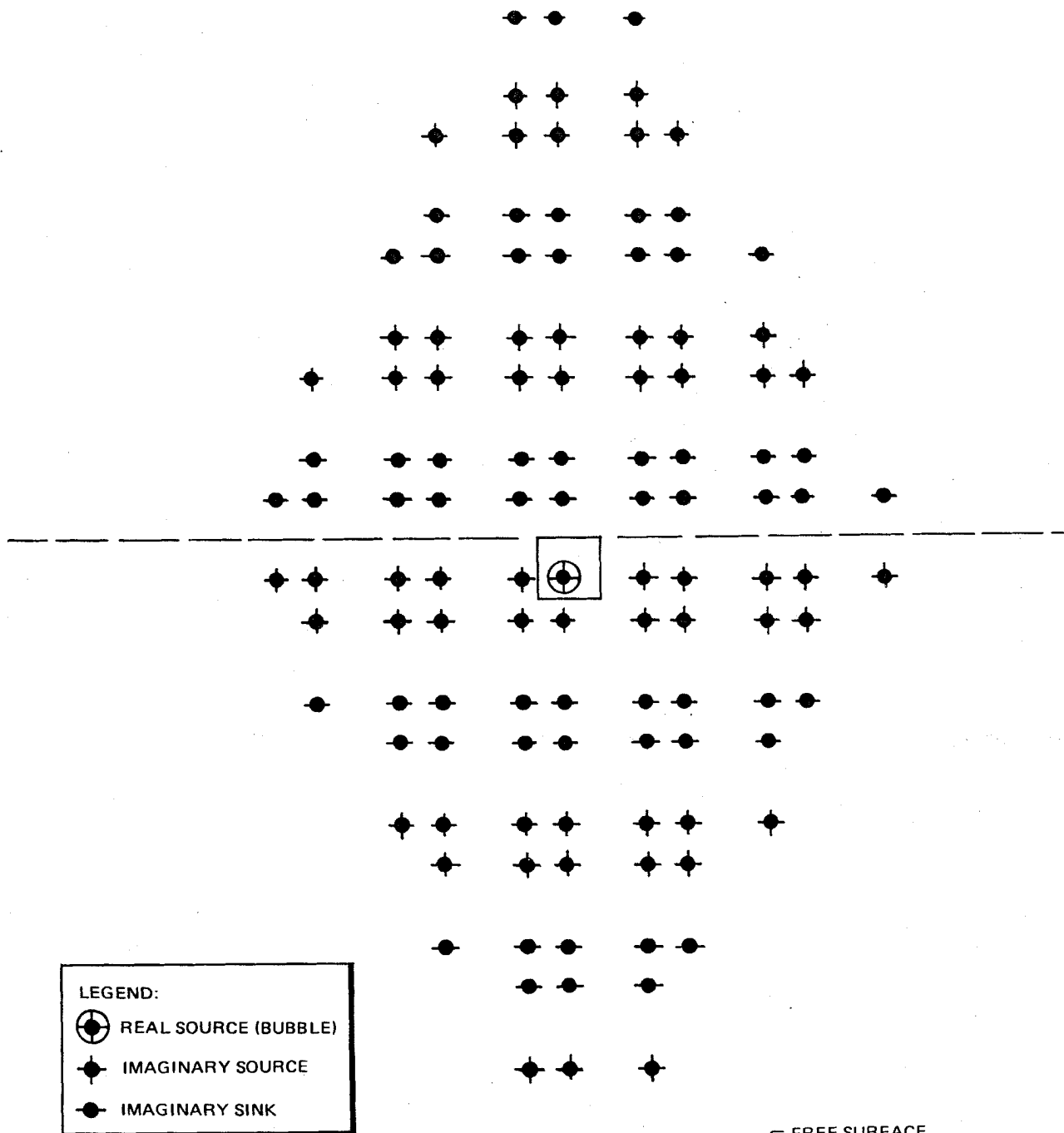
FIGURE 3.8-44
PRESSURE RATIO VS.
MERIDIONAL STEEL STRESS
IN CONTAINMENT DOME
(EL. 906 FT.)



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE 3.8-45

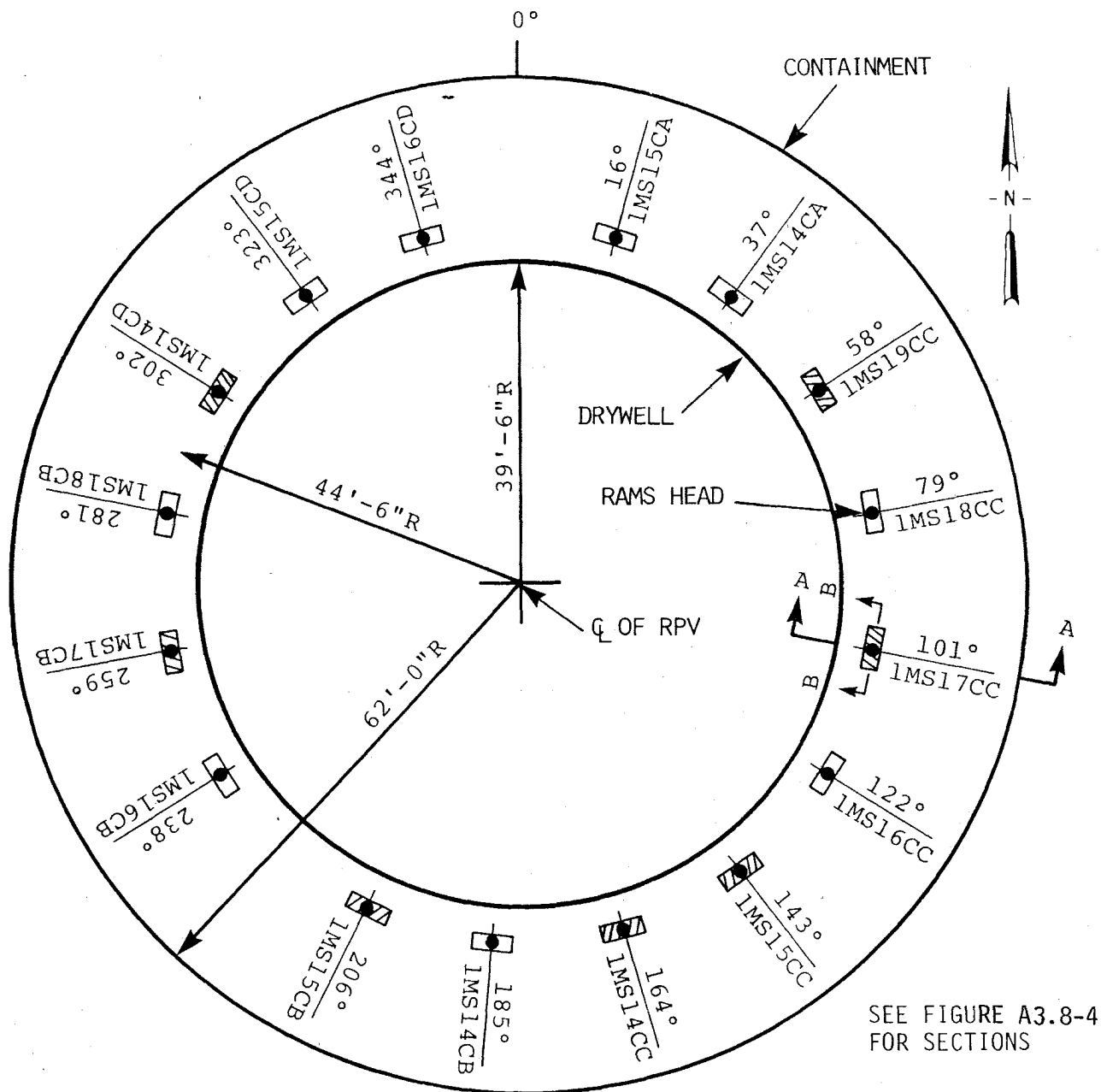
PRESSURE RATIO VS.
MAXIMUM MEMBRANE HOOP
SECTION STRAIN IN LINER



**CLINTON POWER STATION
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FIGURE A3.8-1

ARRAY OF IMAGINARY SOURCES AND SINKS
FOR METHOD OF IMAGES MODEL OF
SUPPRESSION POOL



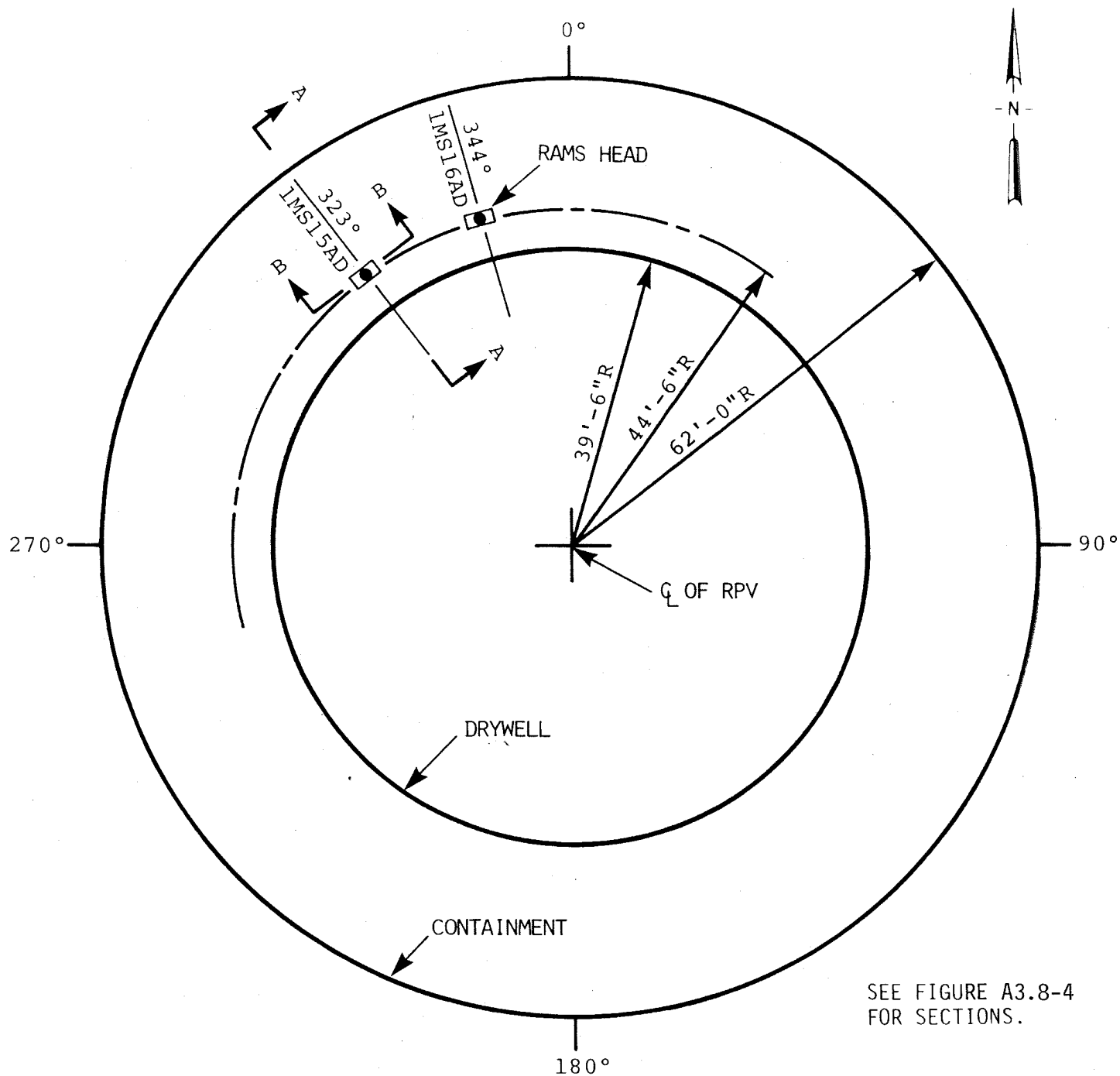
NOTES:

1. NOT TO SCALE.
2. CROSS HATCHED VENTS ARE ATTACHED TO ADS VALVES.
3. RAMS HEADS ARE ORIENTED CIRCUMFERENTIALLY.

**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.8-2

PLAN OF CLINTON SUPPRESSION POOL
SHOWING THE VENTS ACTIVE IN THE
SYMMETRIC LOADING CASE



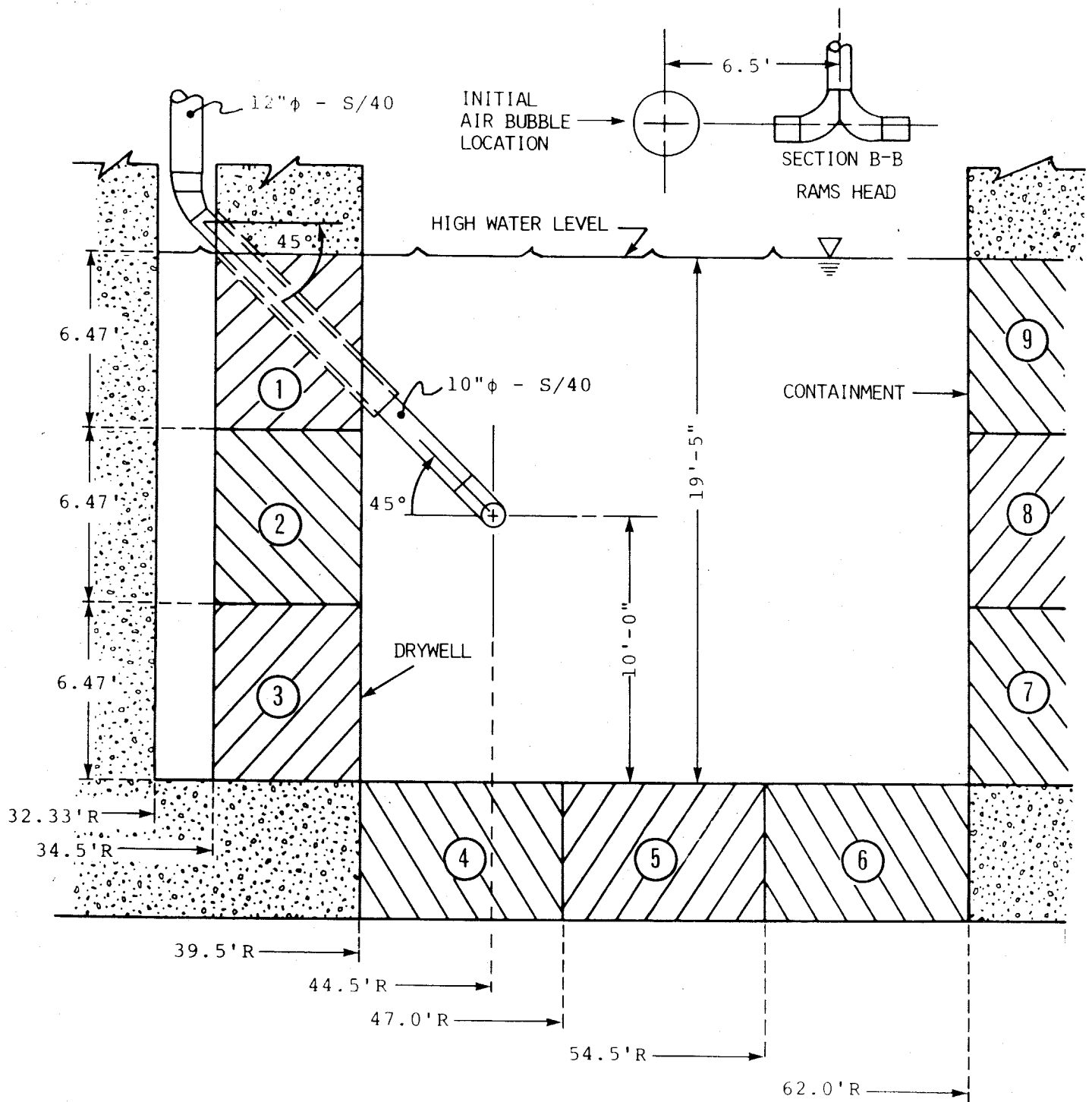
NOTES:

1. NOT TO SCALE.
2. RAMS HEADS ARE ORIENTED CIRCUMFERENTIALLY.

**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.8-3

PLAN OF CLINTON SUPPRESSION POOL
SHOWING THE VENTS ACTIVE IN THE
ASYMMETRIC LOADING CASE



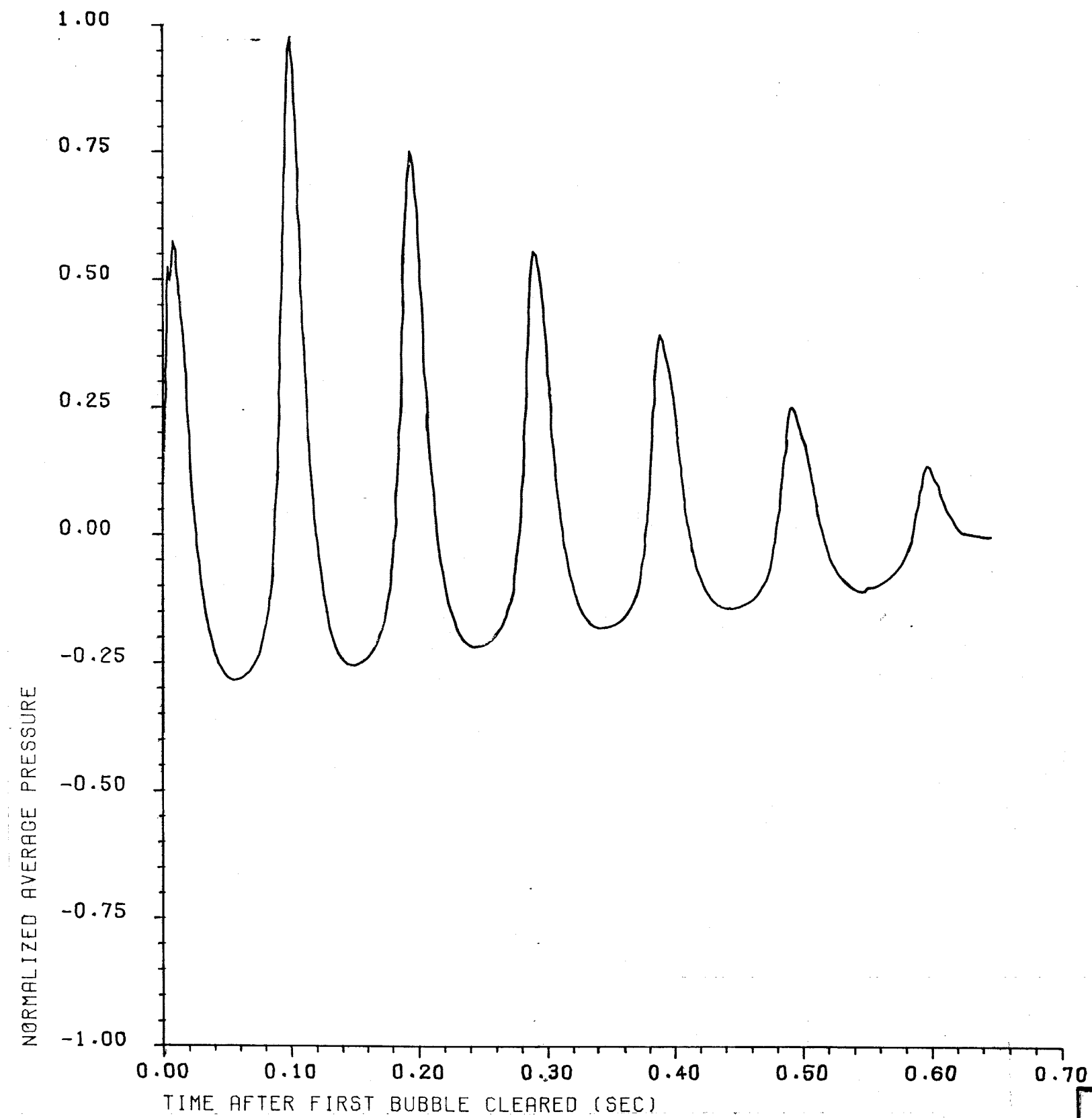
○ - ZONES FOR PRESSURE LOADING ON POOL BOUNDARY.

SECTION A-A

**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.8-4

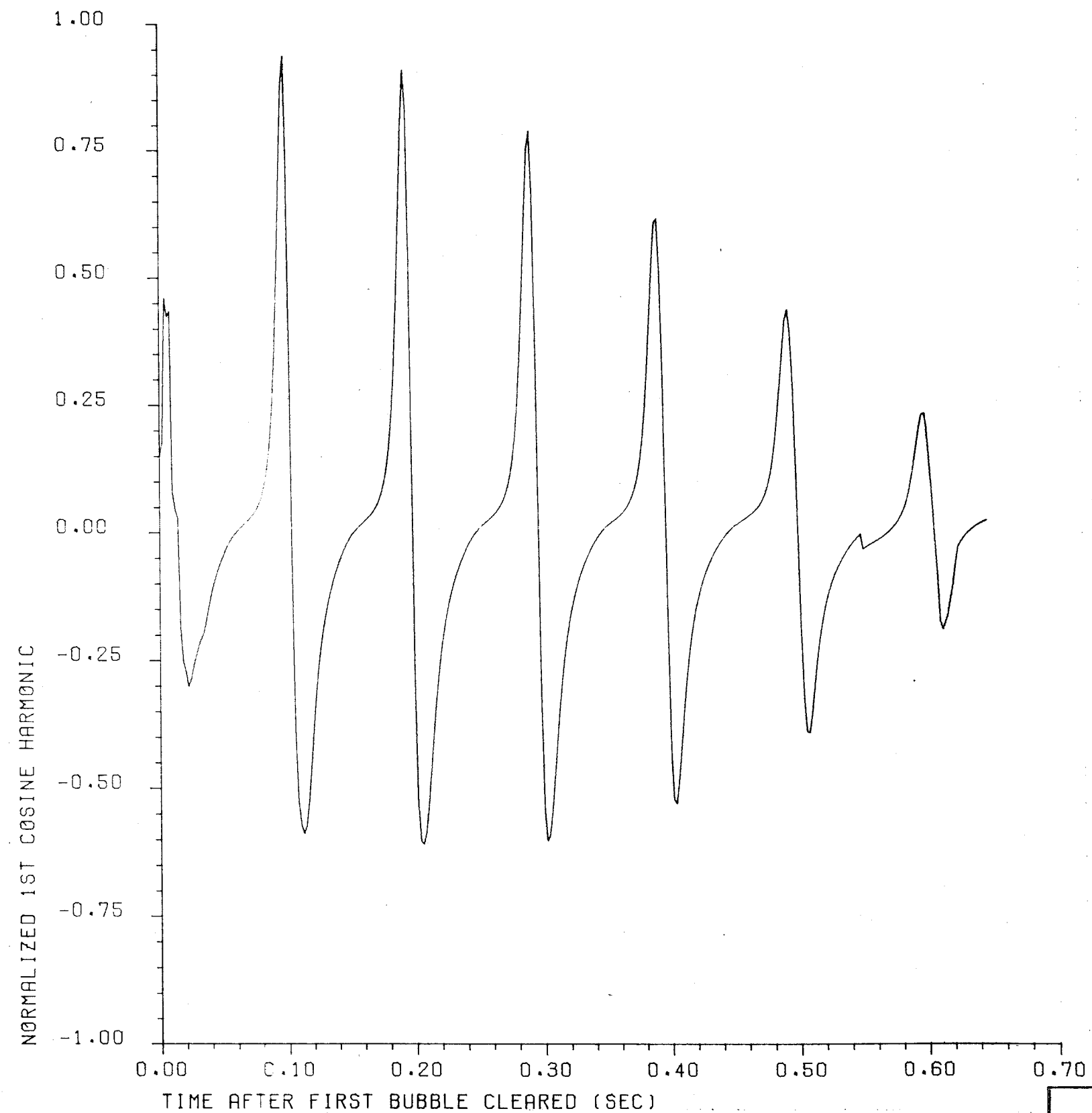
CROSS SECTION OF SUPPRESSION POOL



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UPDATED SAFETY ANALYSIS REPORT

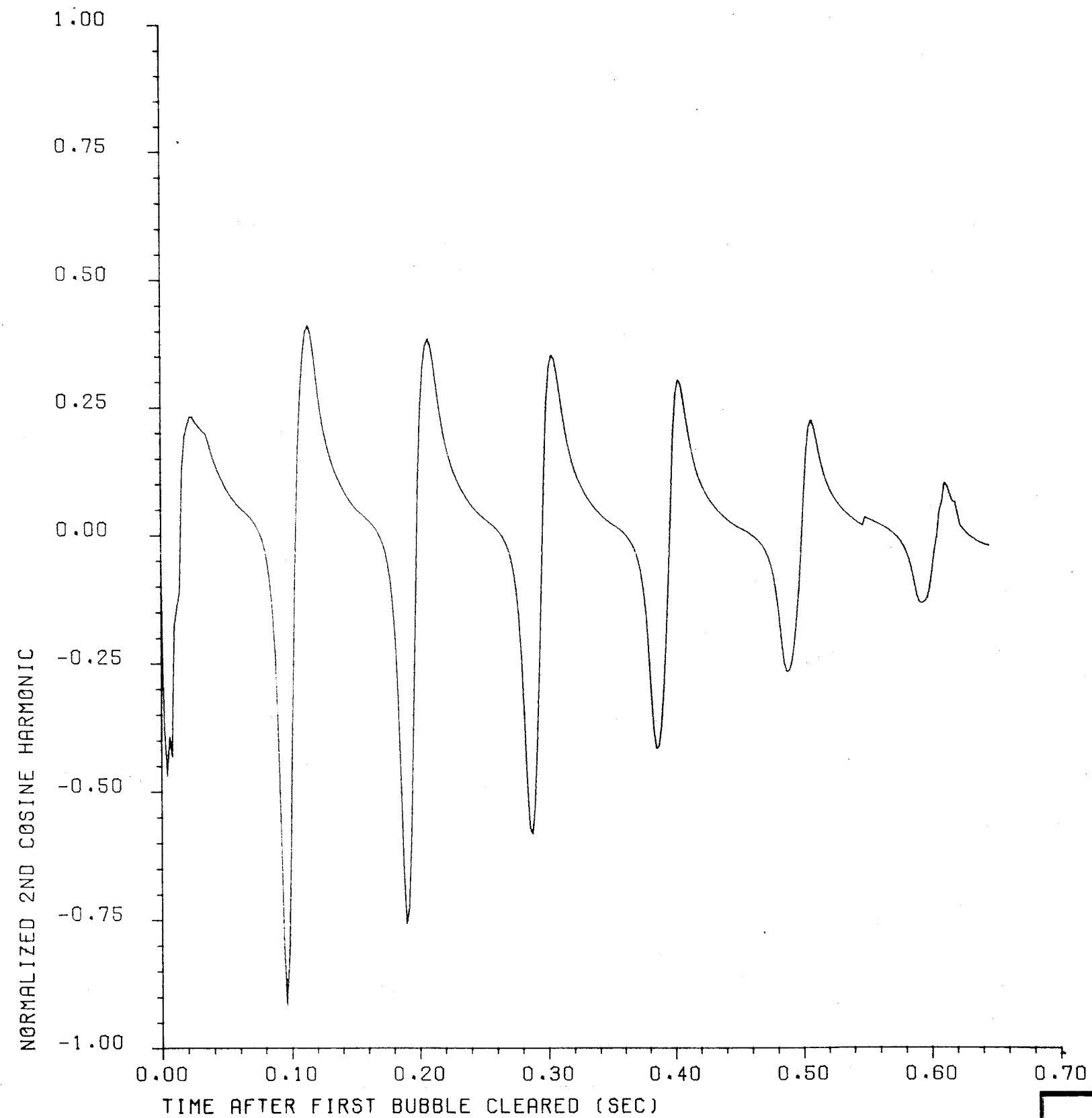
FIGURE A3.8-5

SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED AVERAGE PRESSURE



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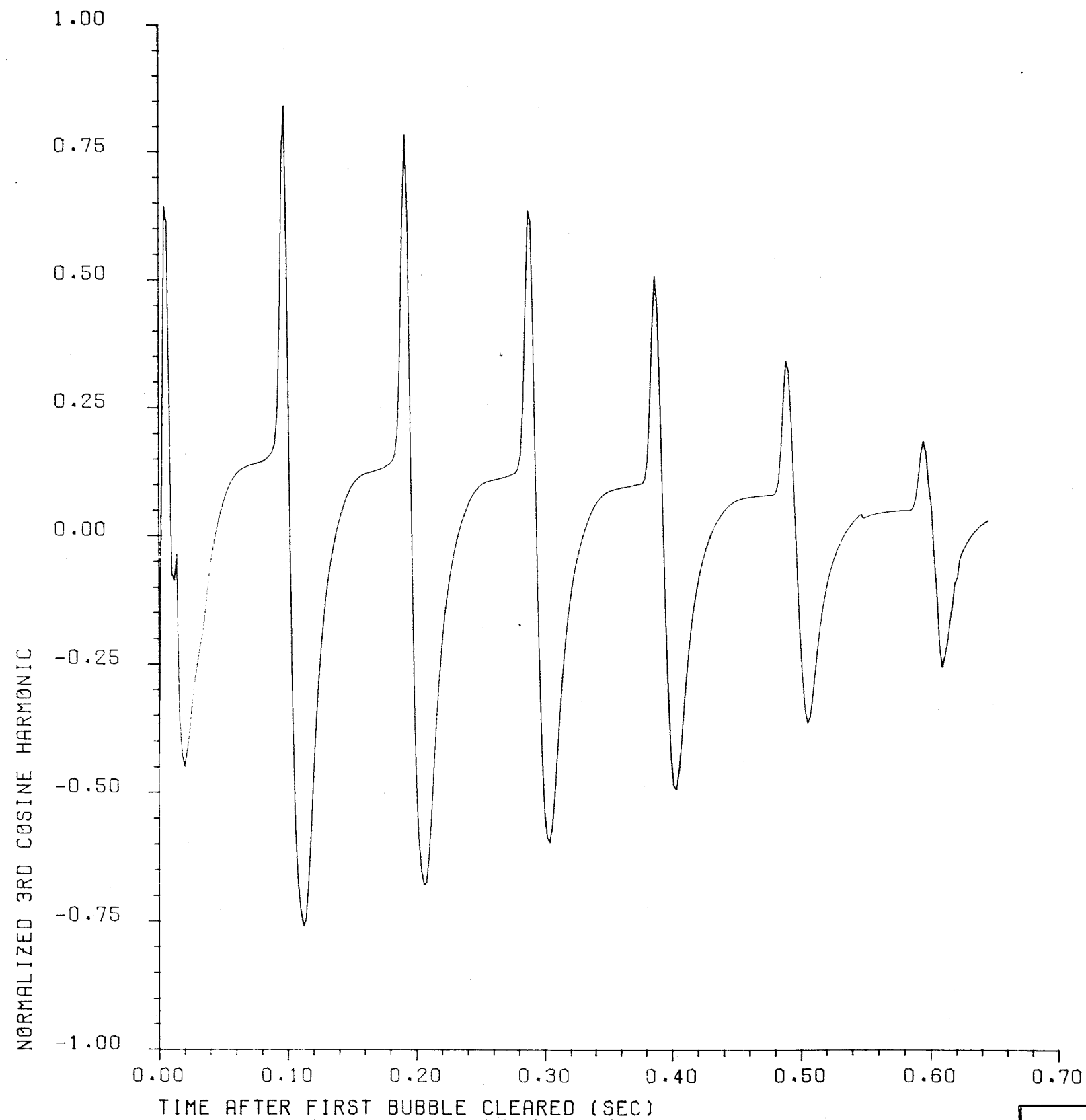
FIGURE A3.8-6
SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 1st COSINE HARMONIC



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UPDATED SAFETY ANALYSIS REPORT

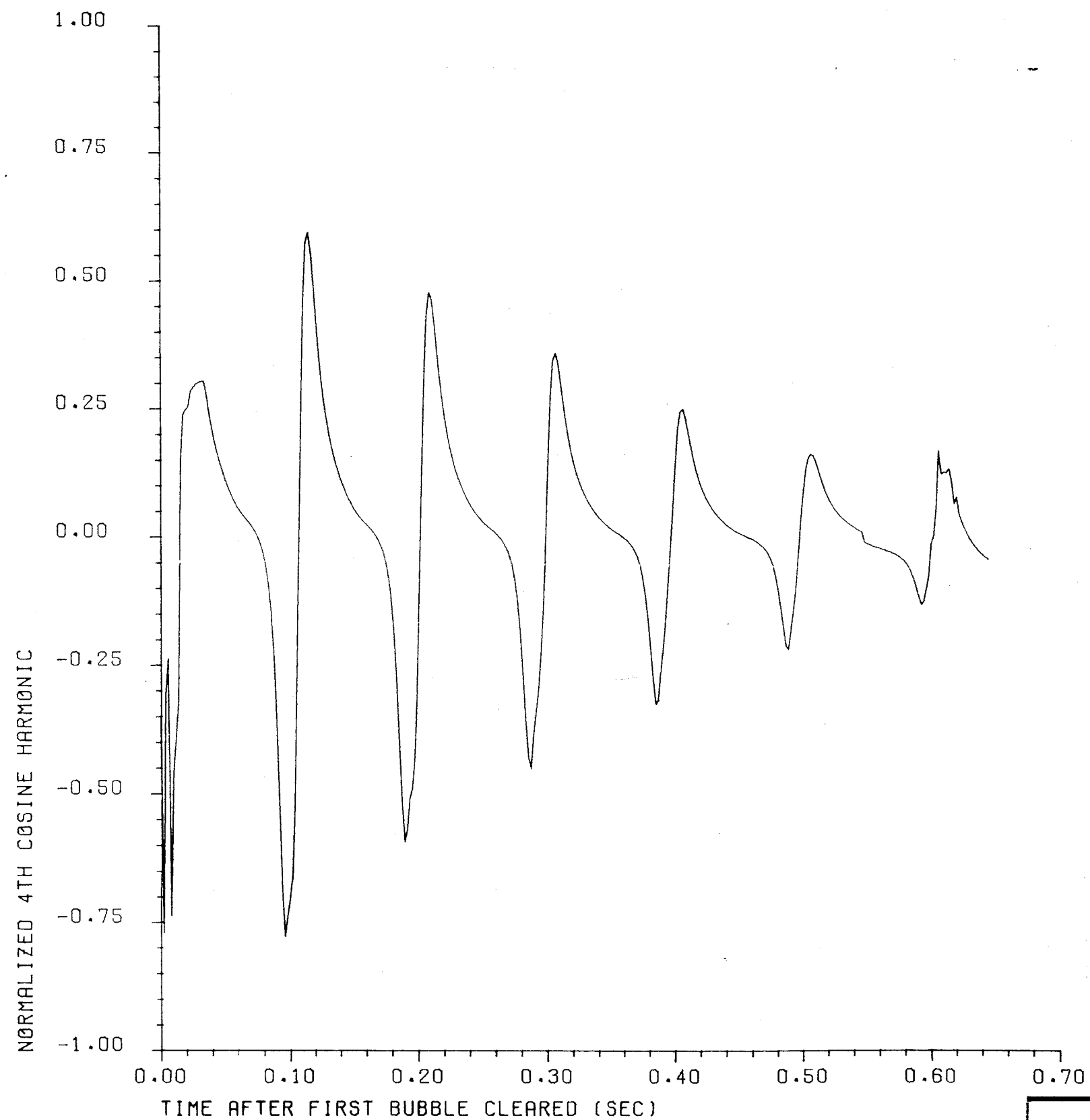
FIGURE A3.8-7

SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 2nd COSINE HARMONIC



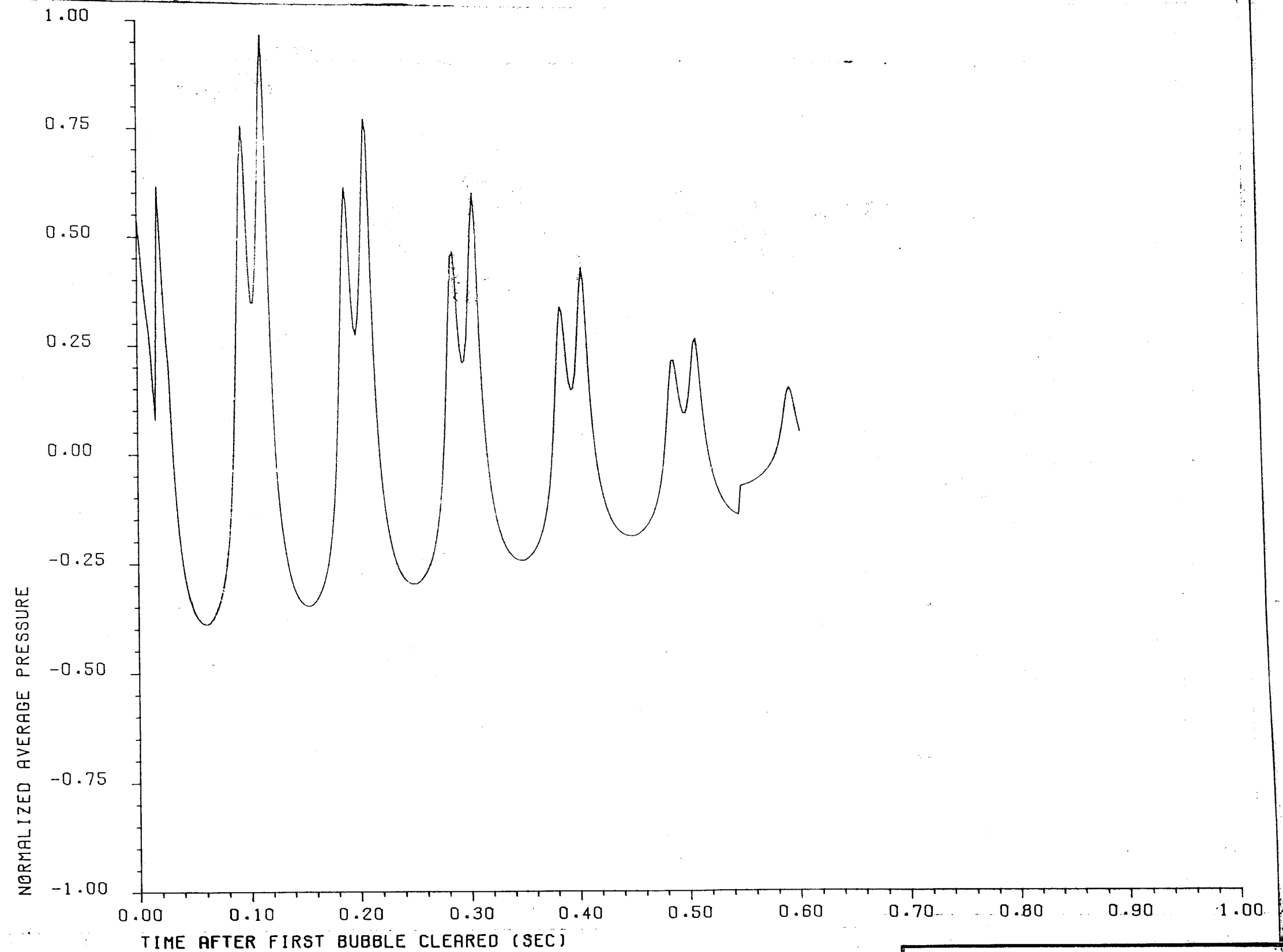
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-8
SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 3rd COSINE HARMONIC



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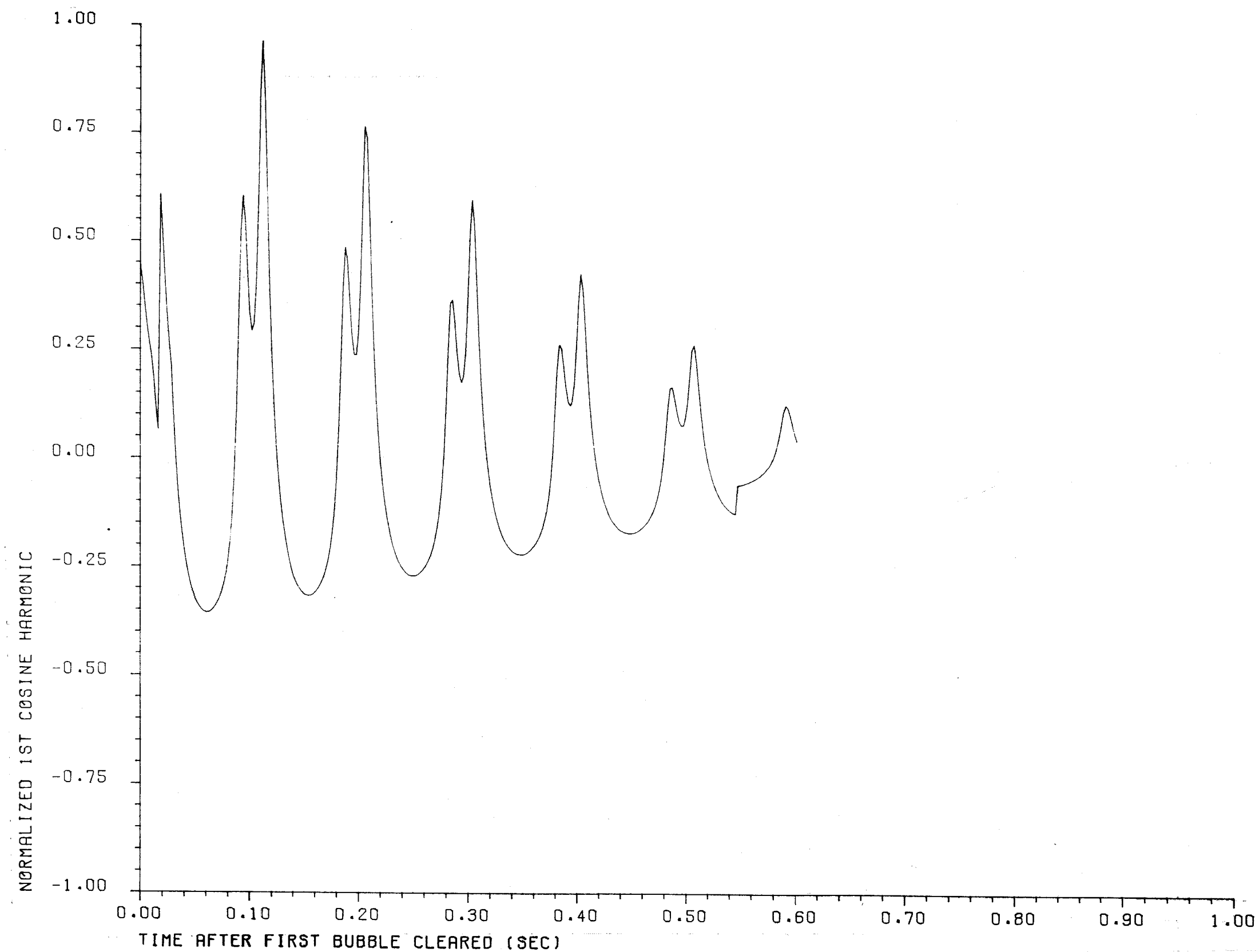
FIGURE A3.8-9
SYMMETRIC WALL LOADING
ZONE 4
NORMALIZED 4th COSINE HARMONIC



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UPDATED SAFETY ANALYSIS REPORT

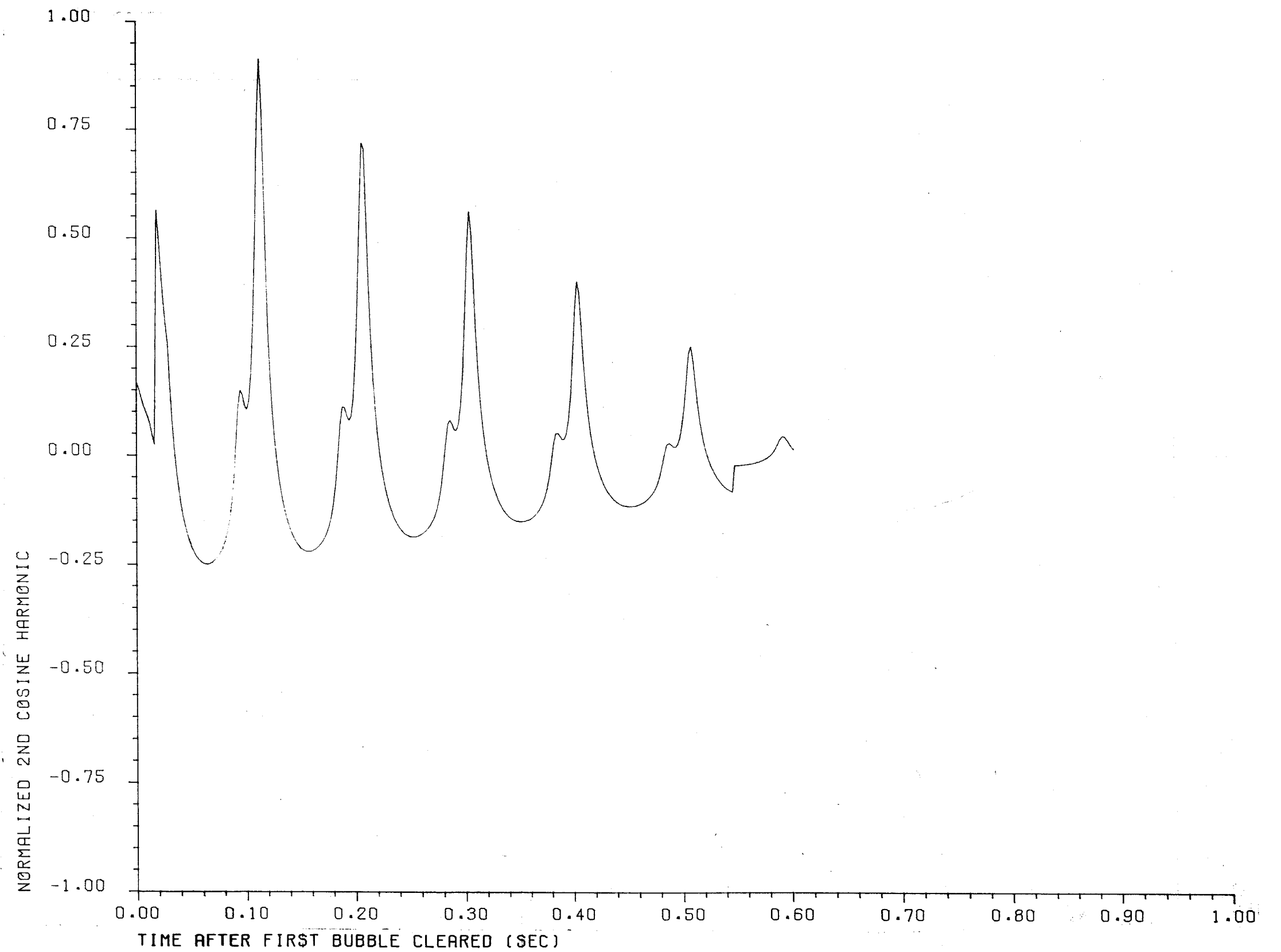
FIGURE A3.8-10

ASYMMETRIC DISCHARGE WALL LOADING
ZONE 4
NORMALIZED AVERAGE PRESSURE



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

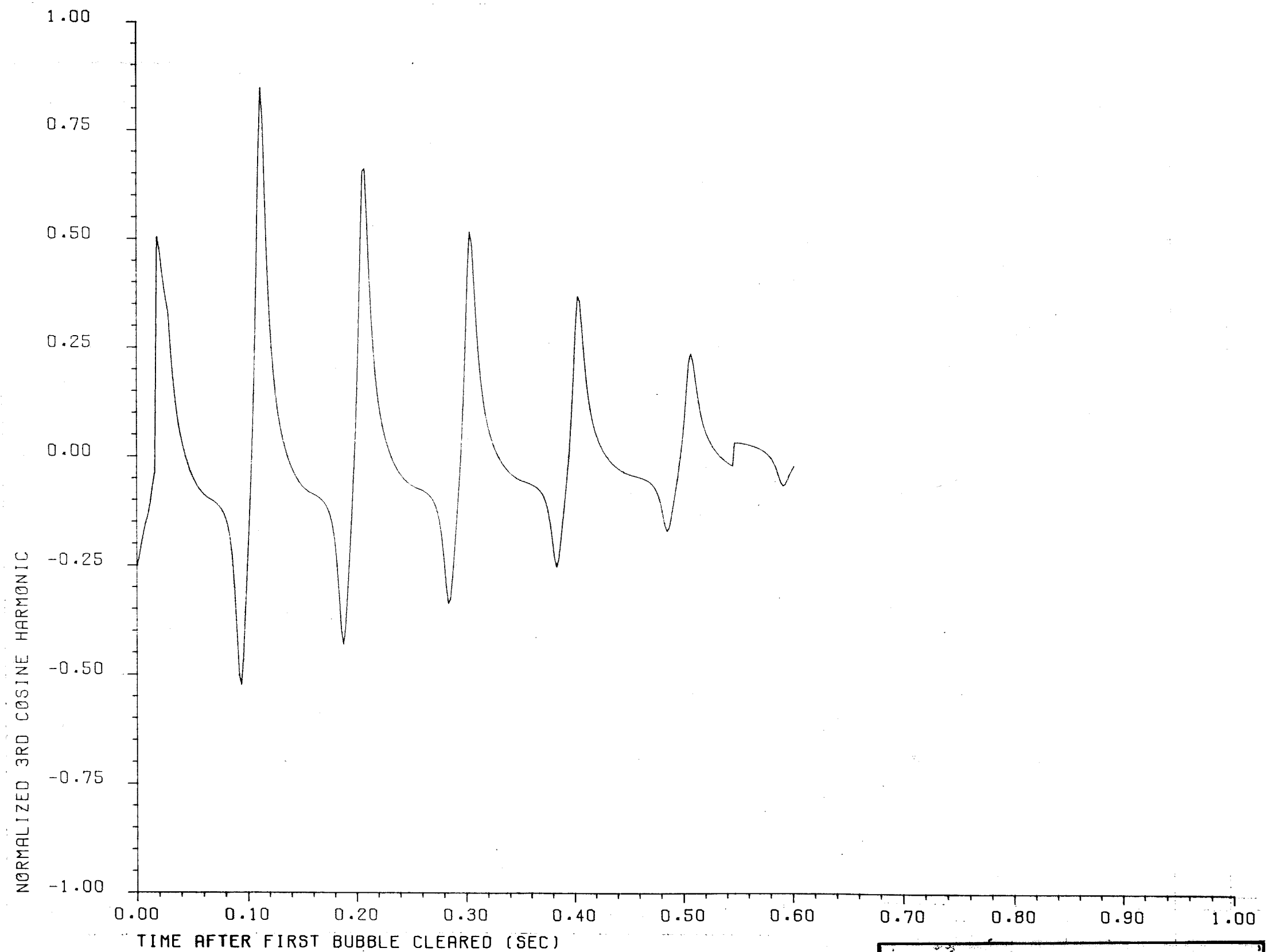
FIGURE A3.8-11
ASYMMETRIC DISCHARGE WALL LOADING
ZONE 4
NORMALIZED 1st COSINE HARMONIC



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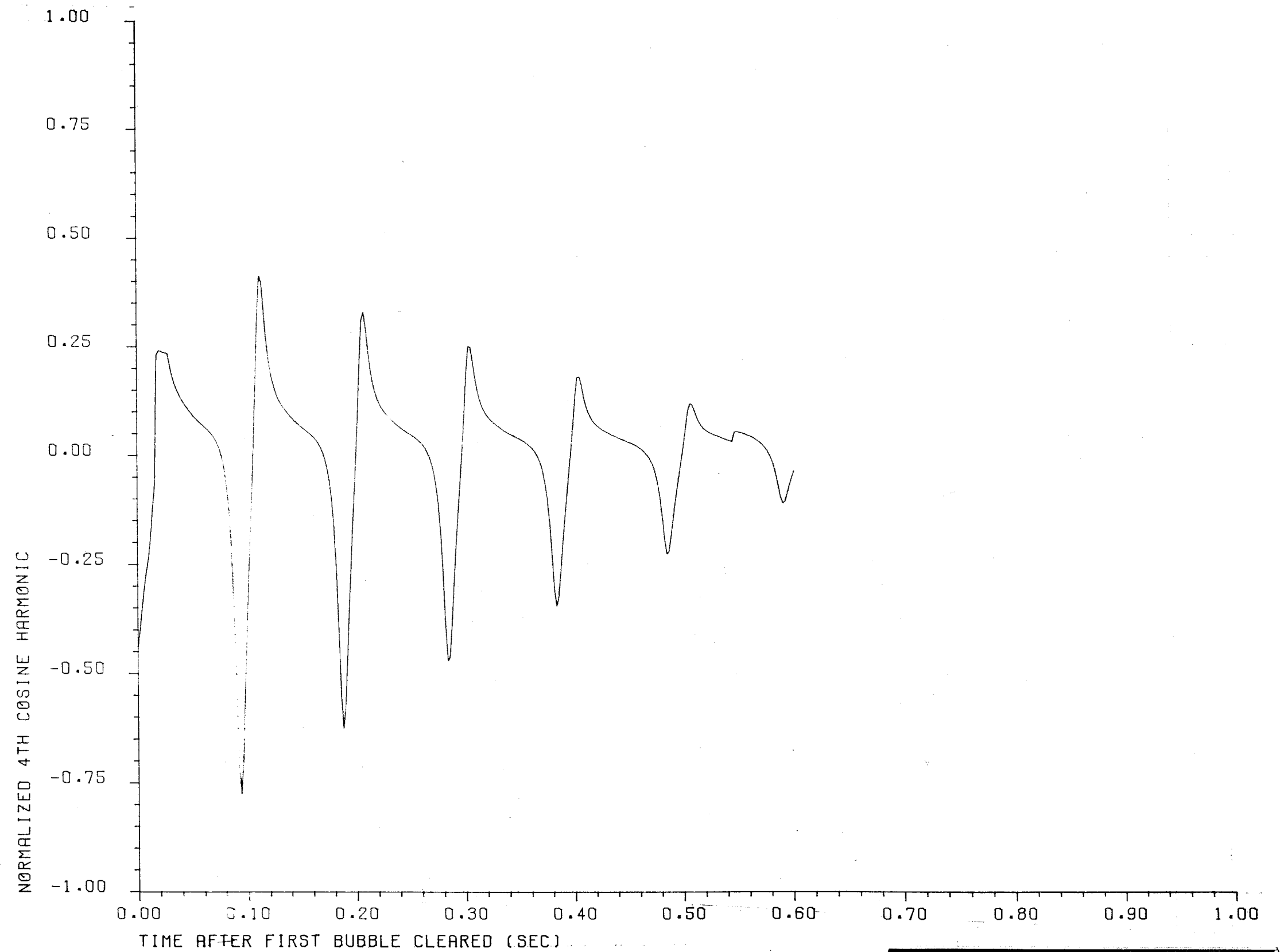
FIGURE A3.8-12

ASYMMETRIC DISCHARGE WALL LOADING
ZONE 4
NORMALIZED 2nd COSINE HARMONIC



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UPDATED SAFETY ANALYSIS REPORT

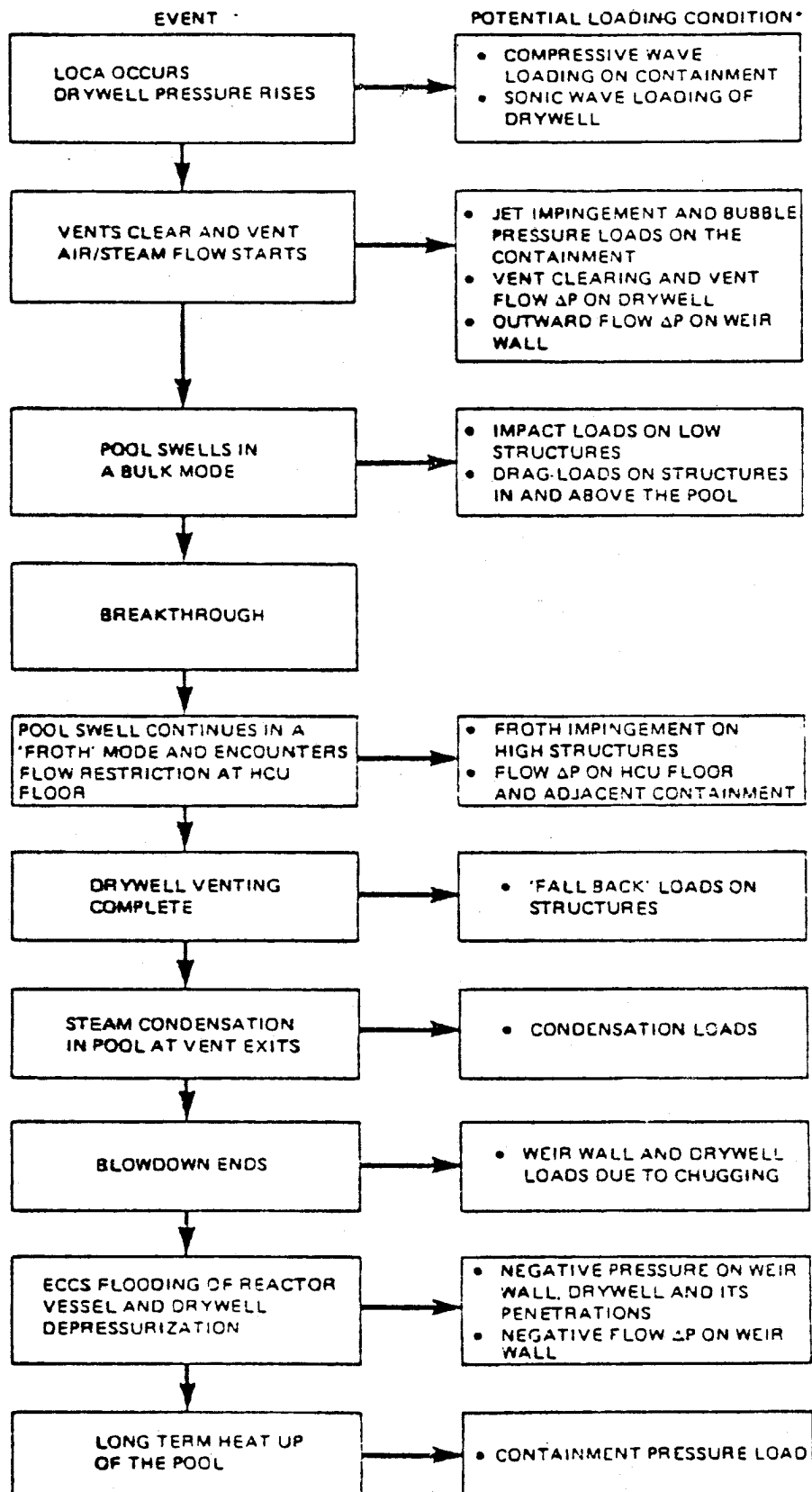
FIGURE A3.8-13
ASYMMETRIC DISCHARGE WALL LOADING
ZONE 4
NORMALIZED 3rd COSINE HARMONIC



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-14

ASYMMETRIC DISCHARGE WALL LOADING
ZONE 4
NORMALIZED 4th COSINE HARMONIC

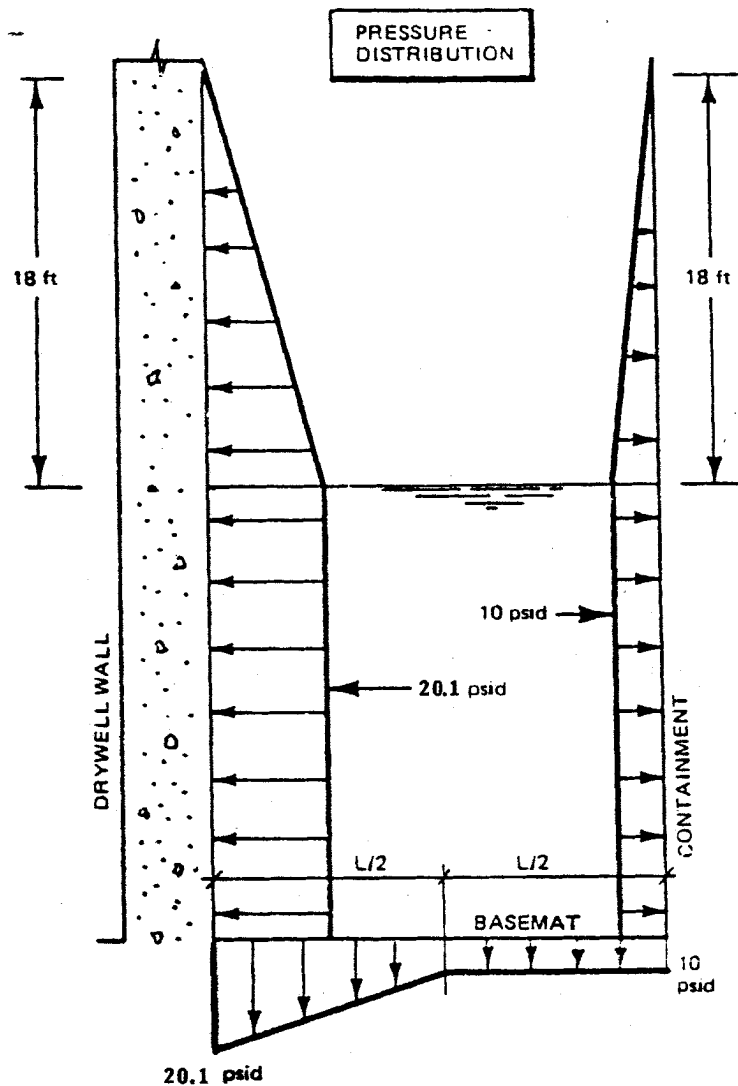


*ALL POTENTIAL LOCA DYNAMIC LOADS ARE IDENTIFIED, BUT ALL ARE NOT SIGNIFICANT (SEE TEXT FOR DETAILS)

**CLINTON POWER STATION
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FIGURE A3.8-15

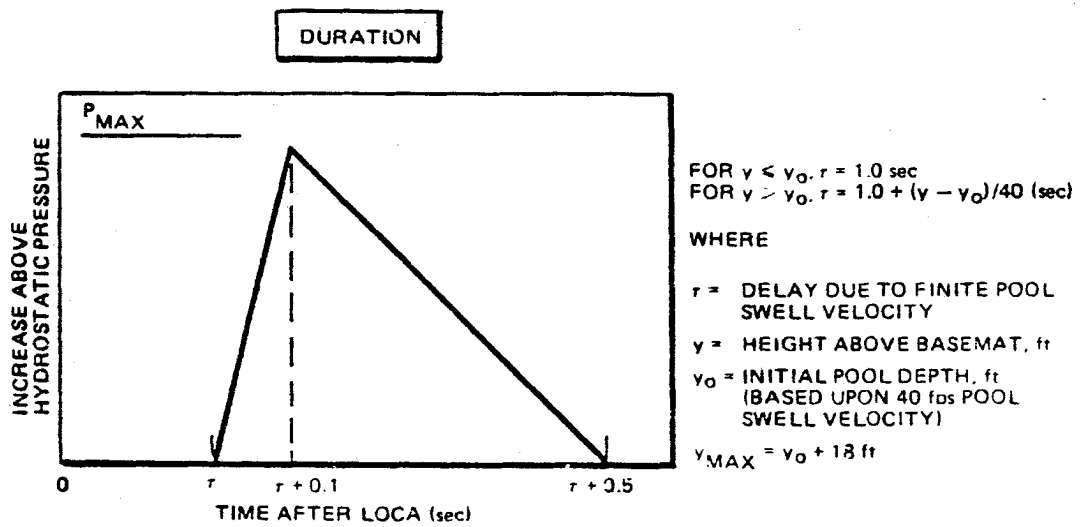
LOSS-OF-COOLANT
ACCIDENT CHRONOLOGY (DBA)



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.8-16

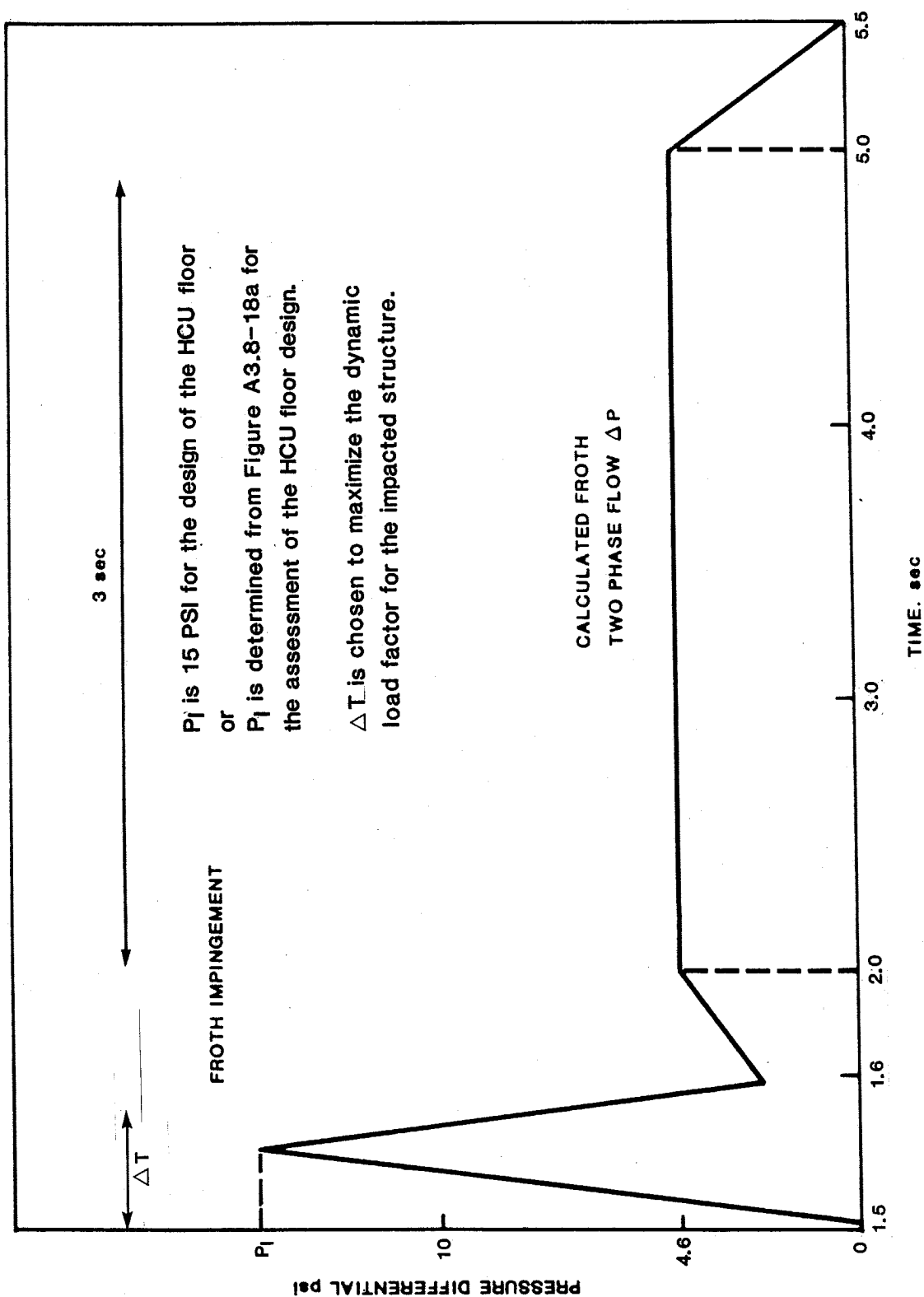
PRESSURE DISTRIBUTION ON SUPPRESSION
POOL WETTED SURFACE



**CLINTON POWER STATION
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FIGURE A3.8-17

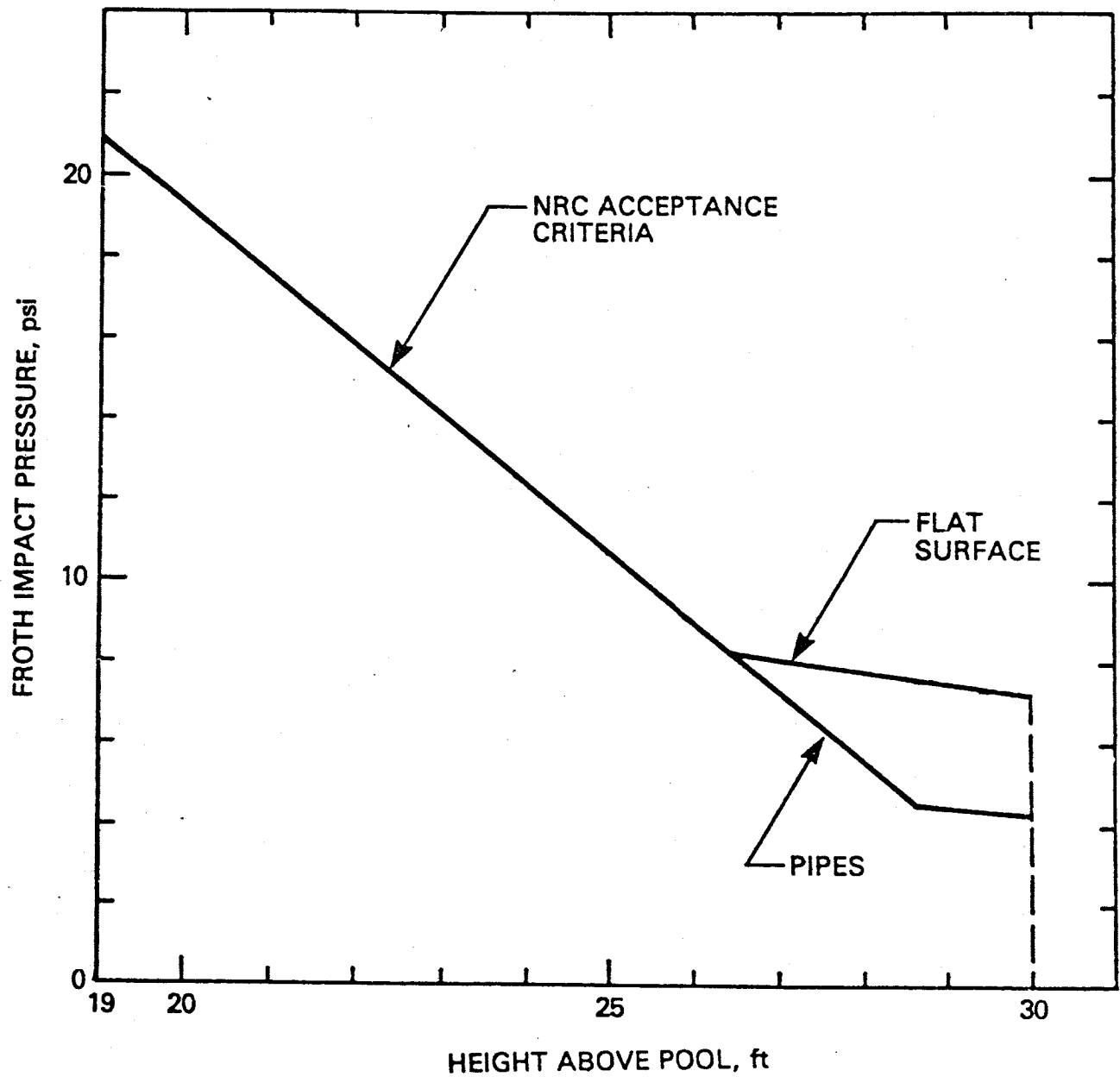
DYNAMIC LOADS ASSOCIATED WITH INITIAL
 BUBBLE FORMATION IN THE POOL



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UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-18

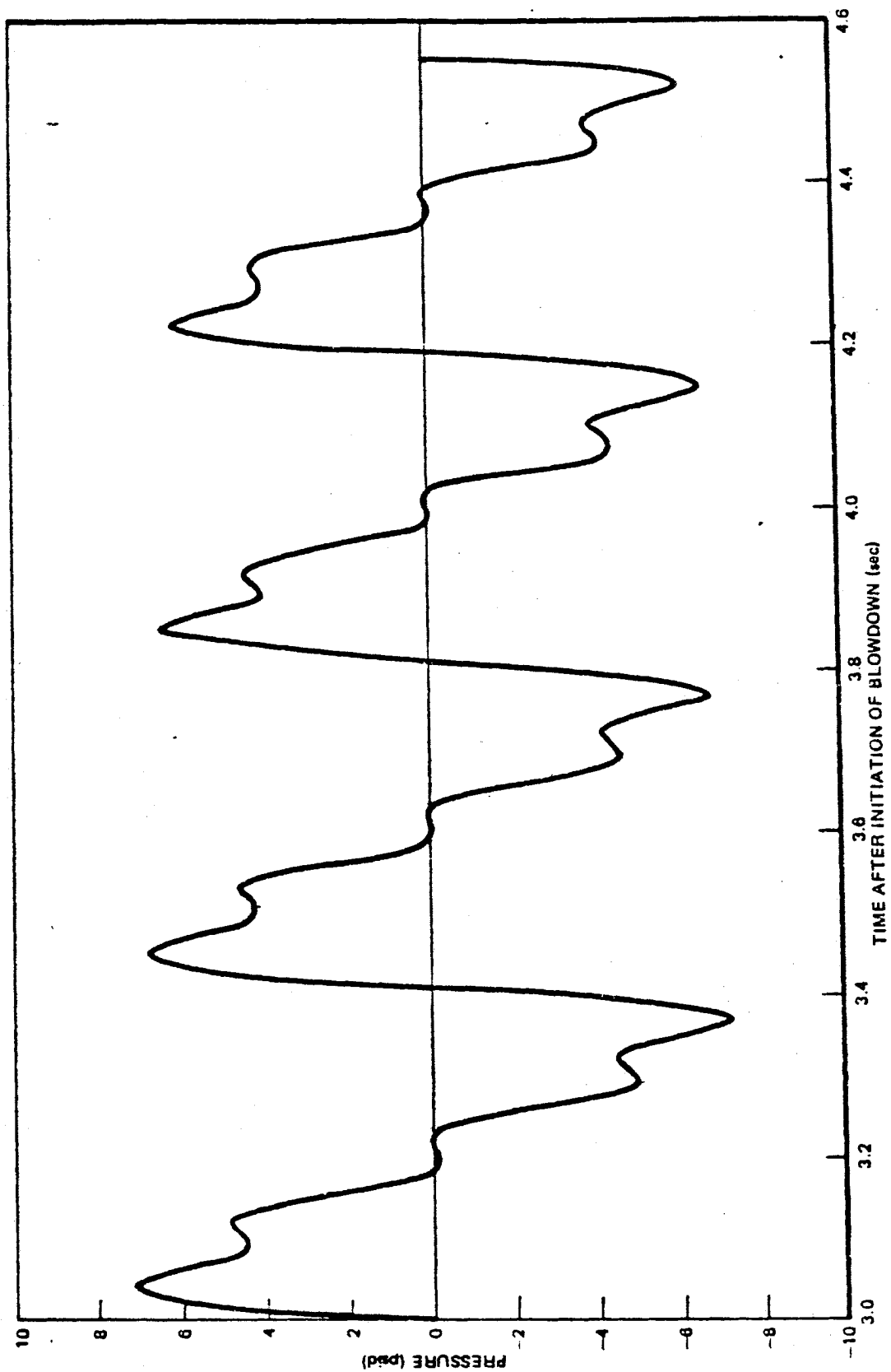
LOADS AT HCU FLOOR ELEVATION DUE TO POOL SWELL FROTH IMPACT AND TWO PHASE FLOW



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FIGURE A3.8-18a

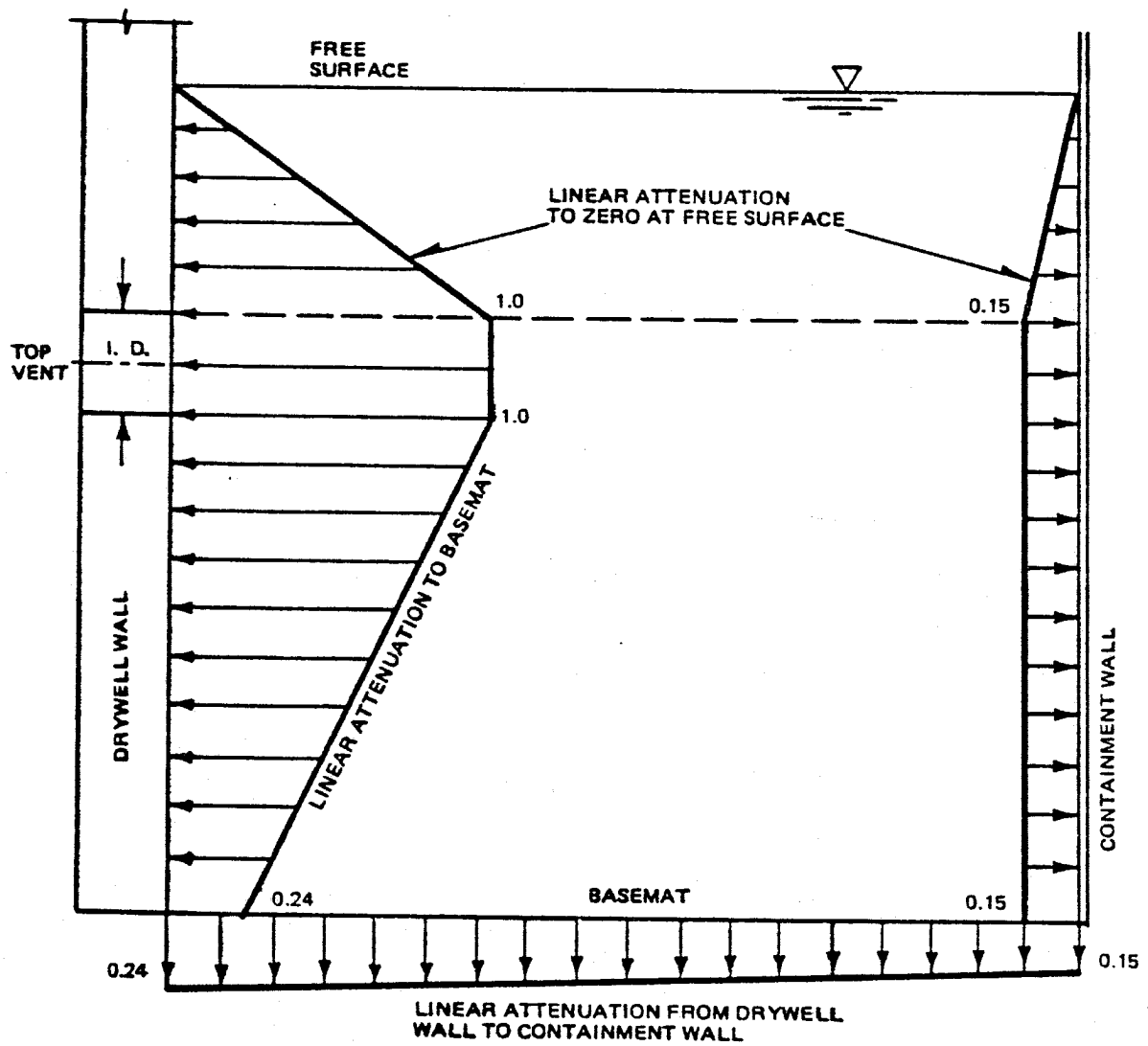
NRC ACCEPTANCE CRITERIA FOR FROTH
IMPACT: PEAK AMPLITUDE OF PRESSURE PULSE



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.8-19

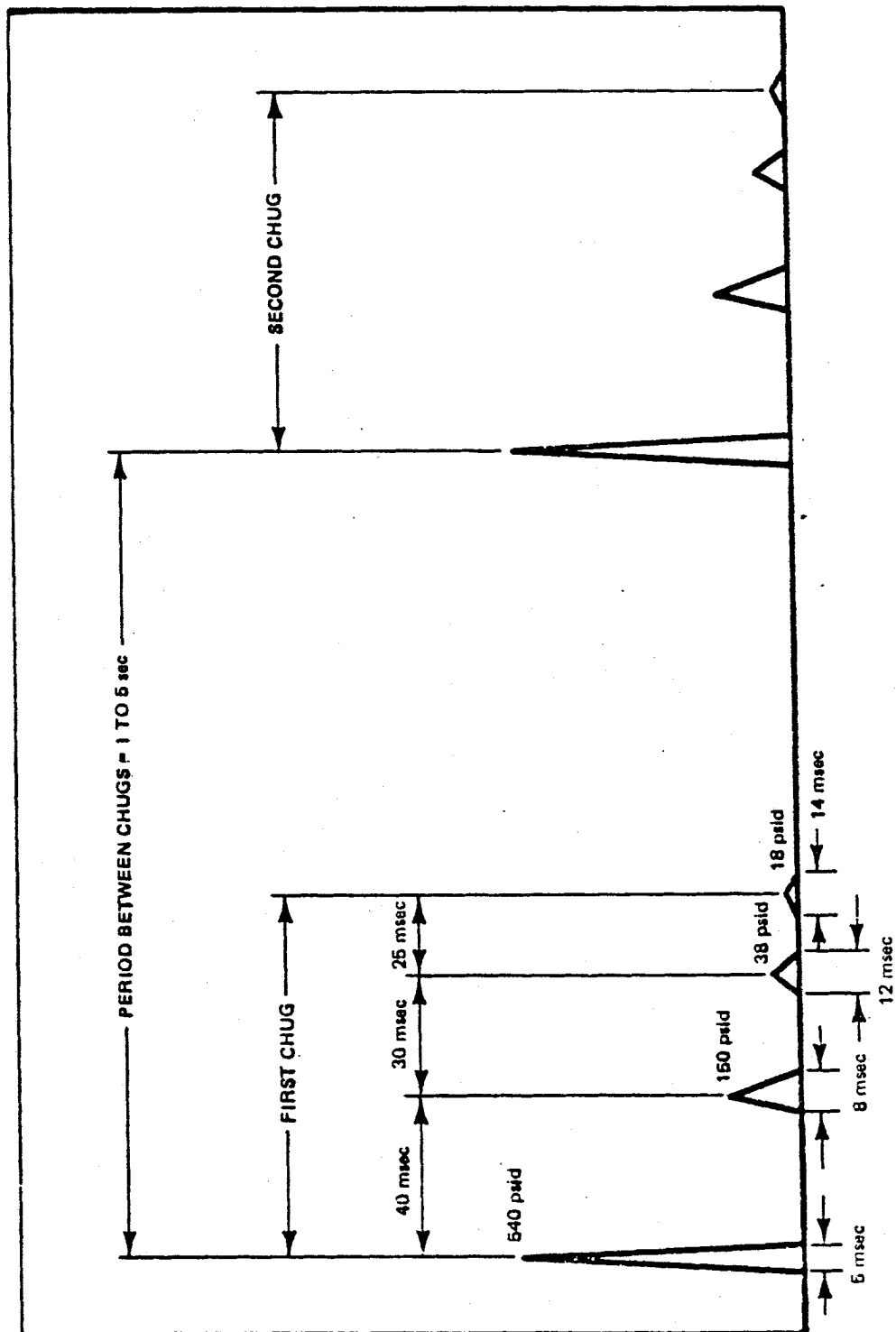
CONDENSATION OSCILLATION FORCING
FUNCTION ON THE DRYWELL WALL O.D.
ADJACENT THE TOP VENT



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-20

CONDENSATION OSCILLATION LOAD SPATIAL
DISTRIBUTION ON THE DRYWELL WALL,
CONTAINMENT WALL AND BASE MAT

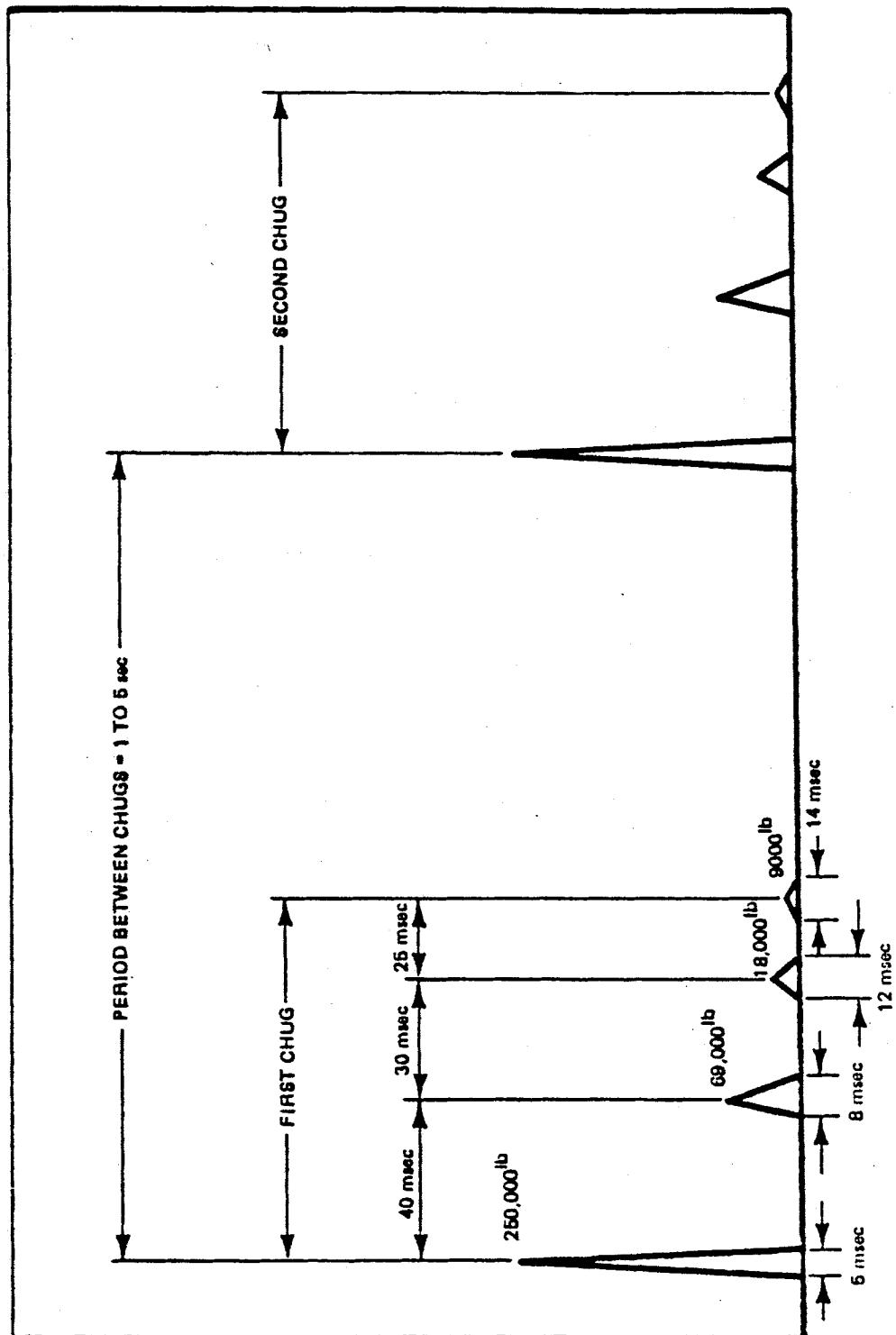


AMPLITUDE (psid)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-21

PEAK PRESSURE PULSE TRAIN IN TOP
VENT DURING CHUGGING

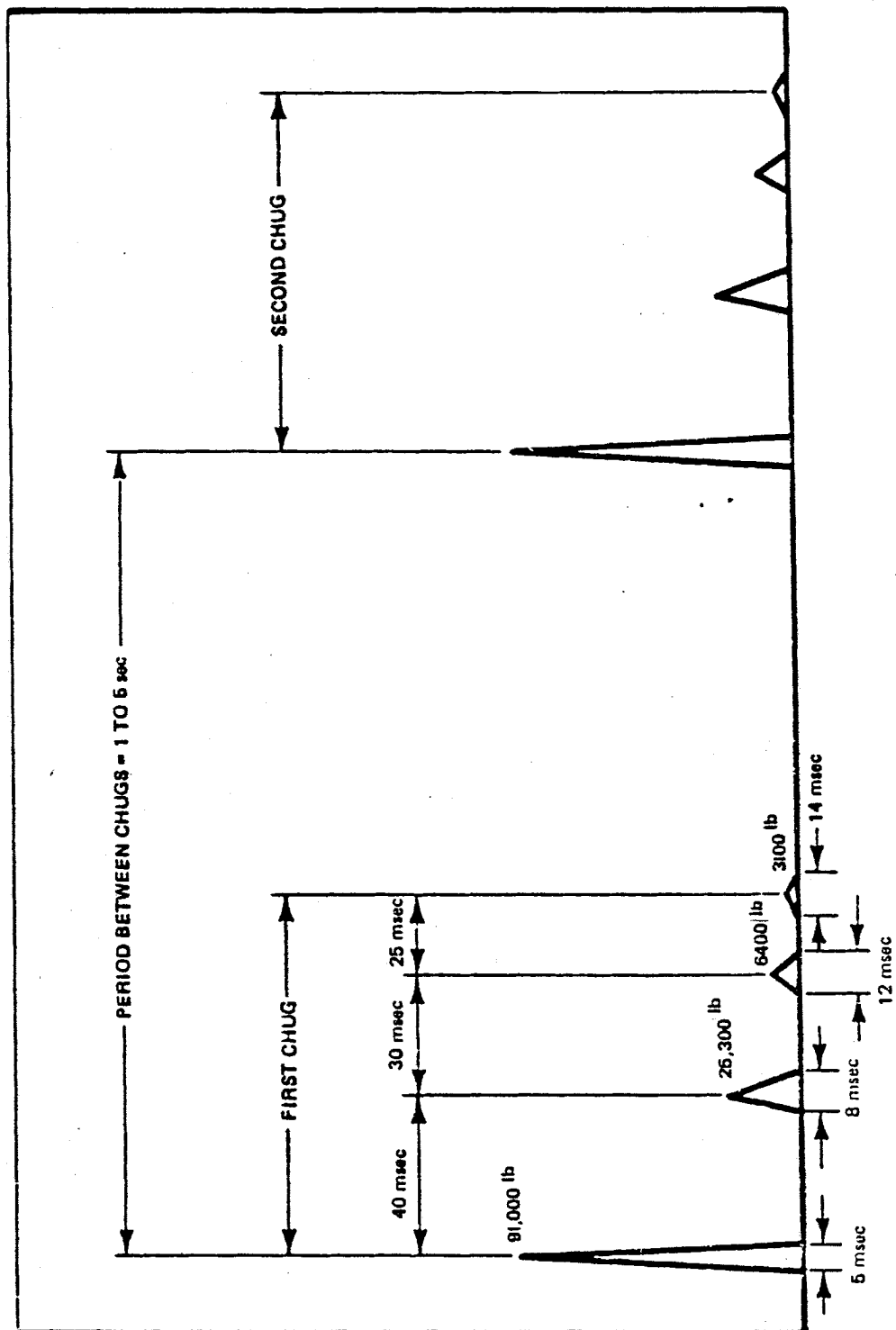


AMPLITUDE (lb)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-22

PEAK FORCE PULSE TRAIN IN TOP
VENT DURING CHUGGING

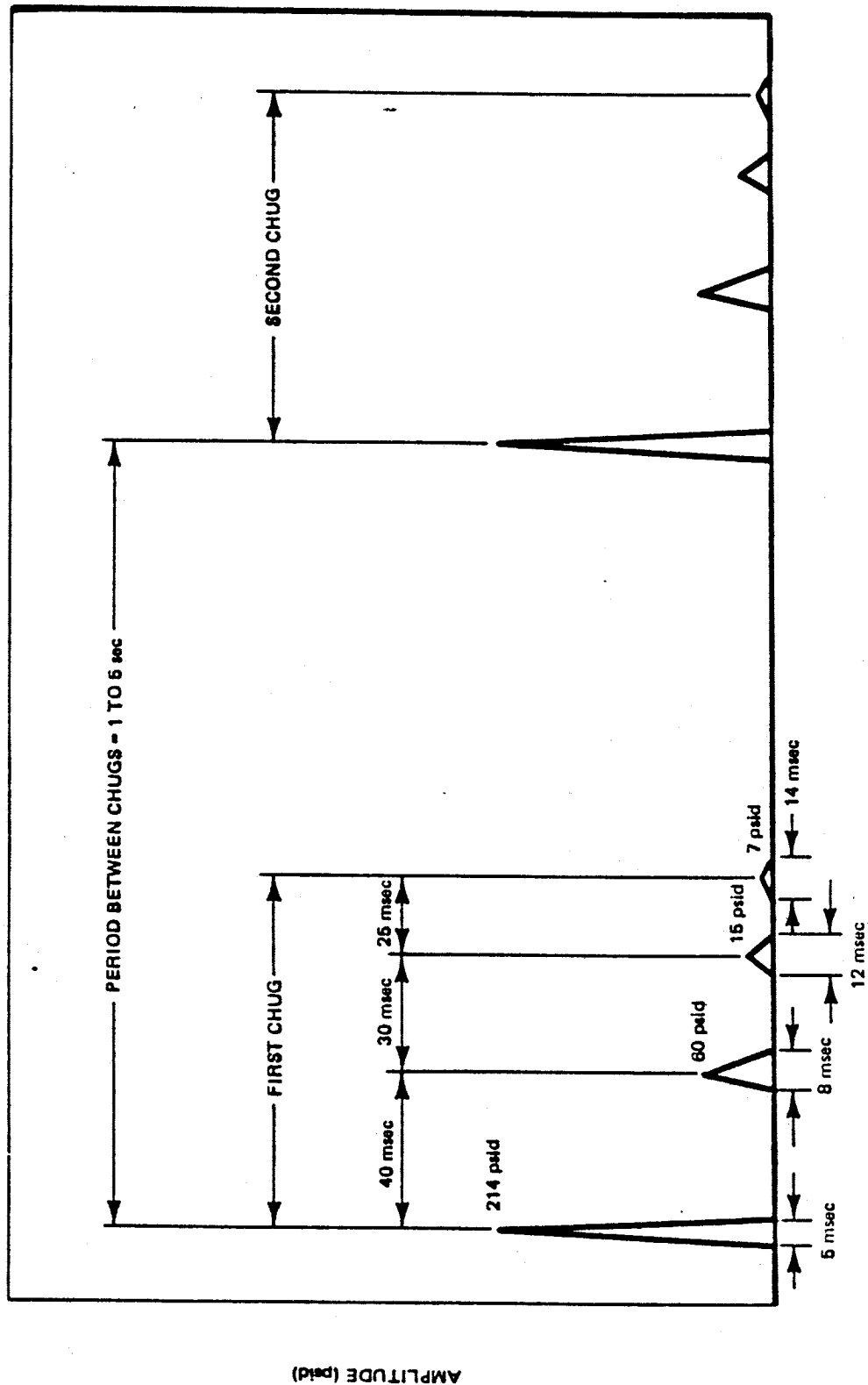


AMPLITUDE (lb)

CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-23

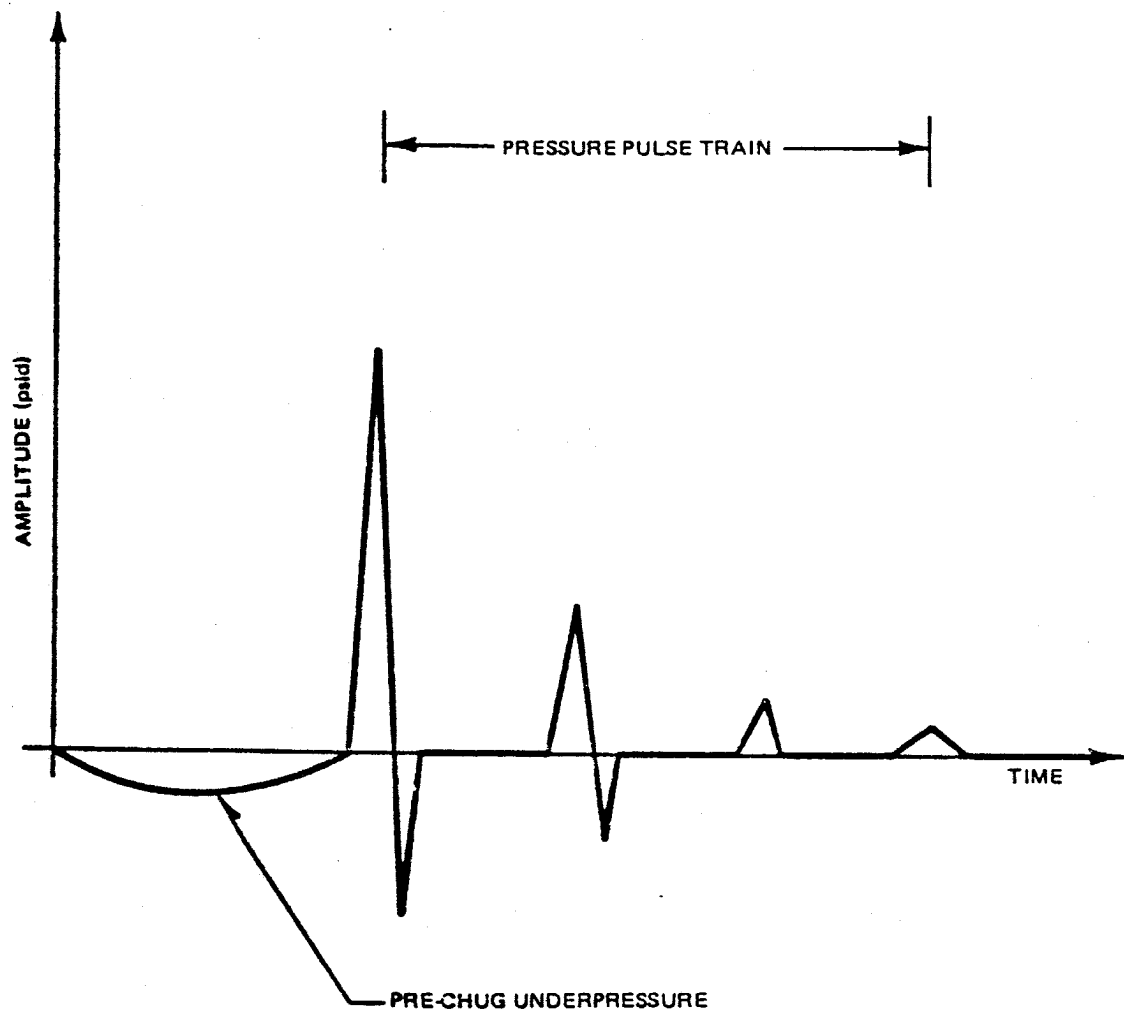
AVERAGE FORCE PULSE TRAIN IN TOP
VENT DURING CHUGGING



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-24

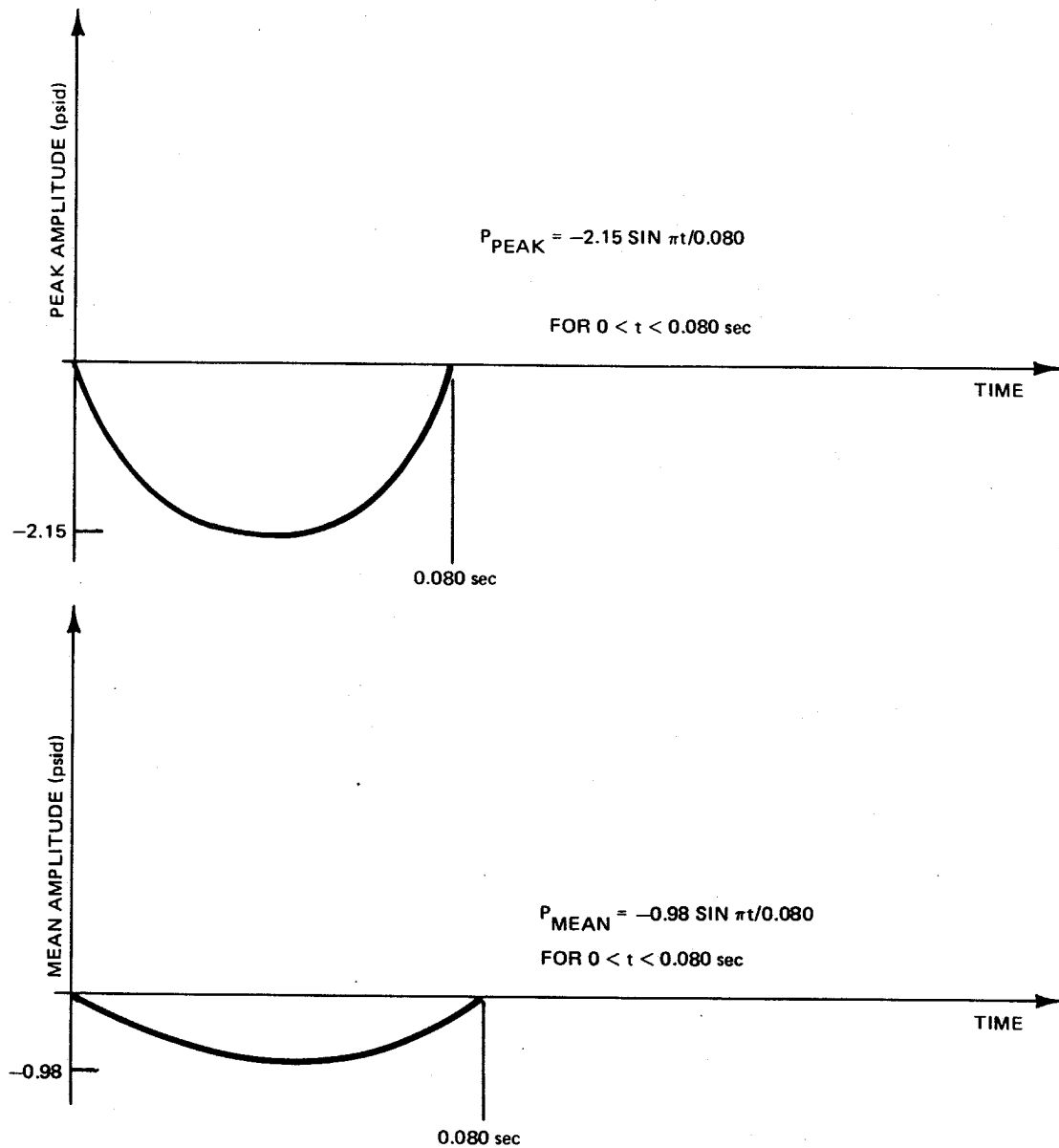
AVERAGE PRESSURE PULSE TRAIN IN TOP
VENT DURING CHUGGING



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-25

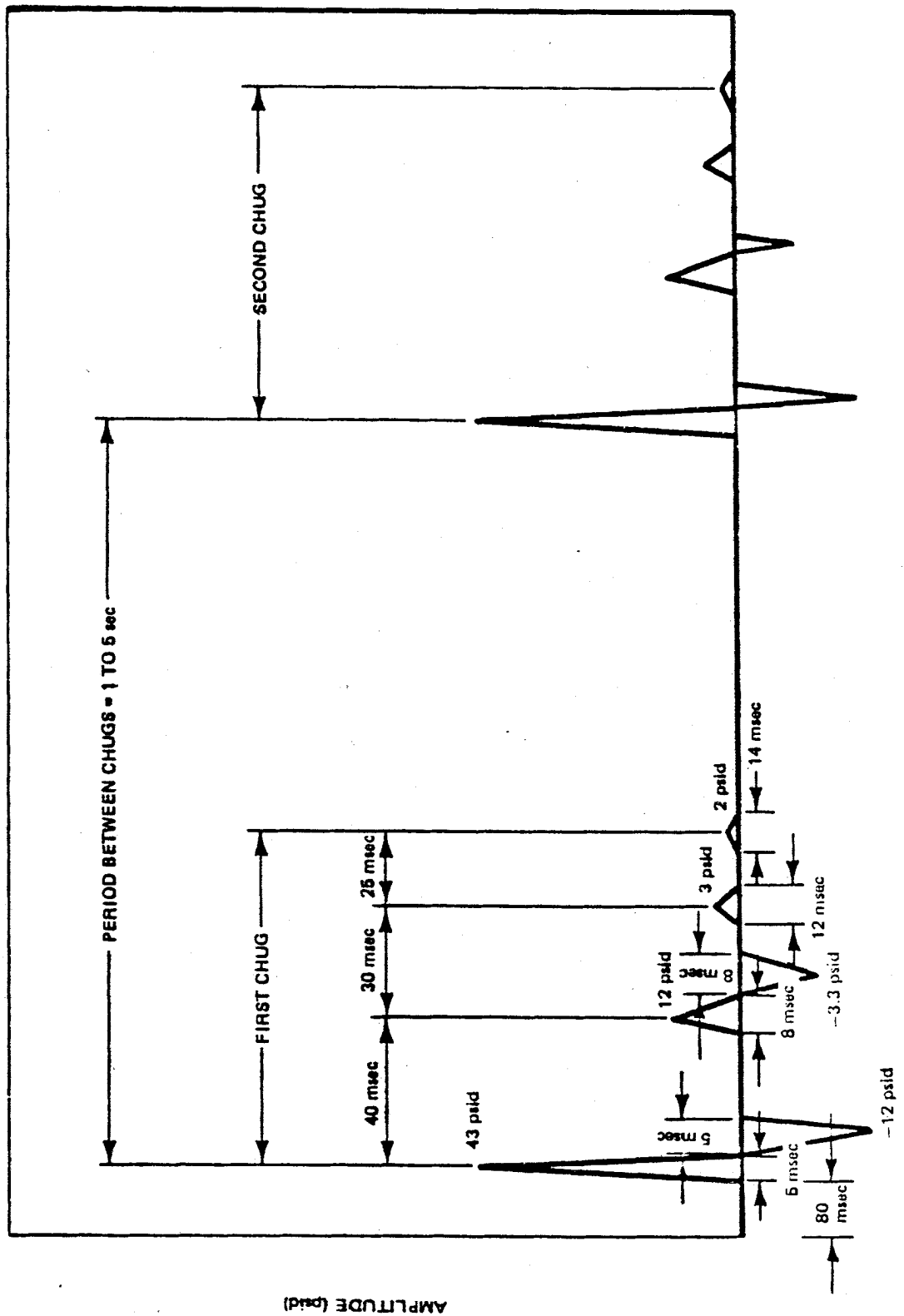
TYPICAL PRESSURE TIME-HISTORY FOR
WEIR ANNULUS DURING CHUGGING



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.8-26

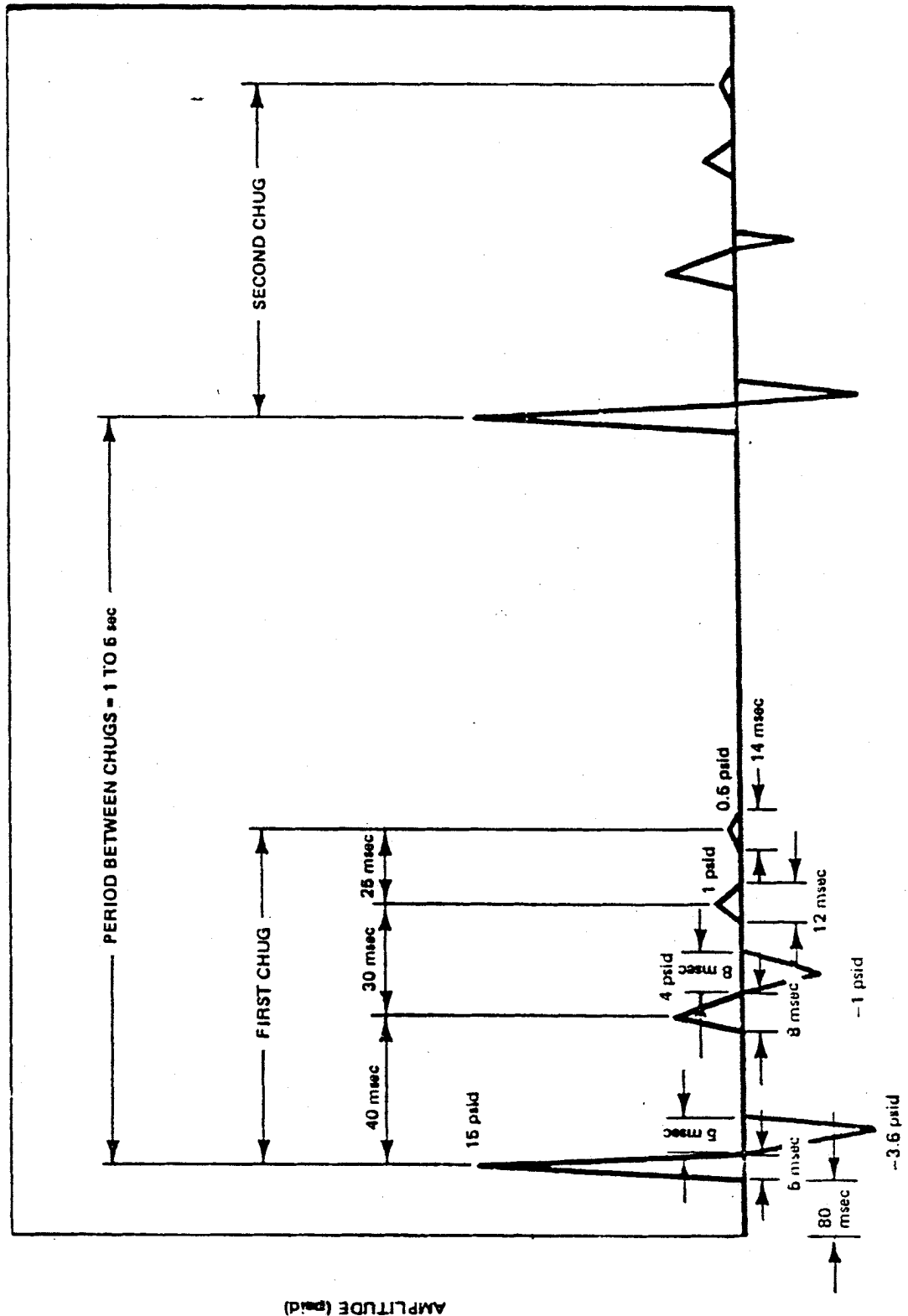
UNDERPRESSURE DISTRIBUTION ON THE WEIR
WALL AND DRYWELL I.D. WALL
DURING CHUGGING



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-27

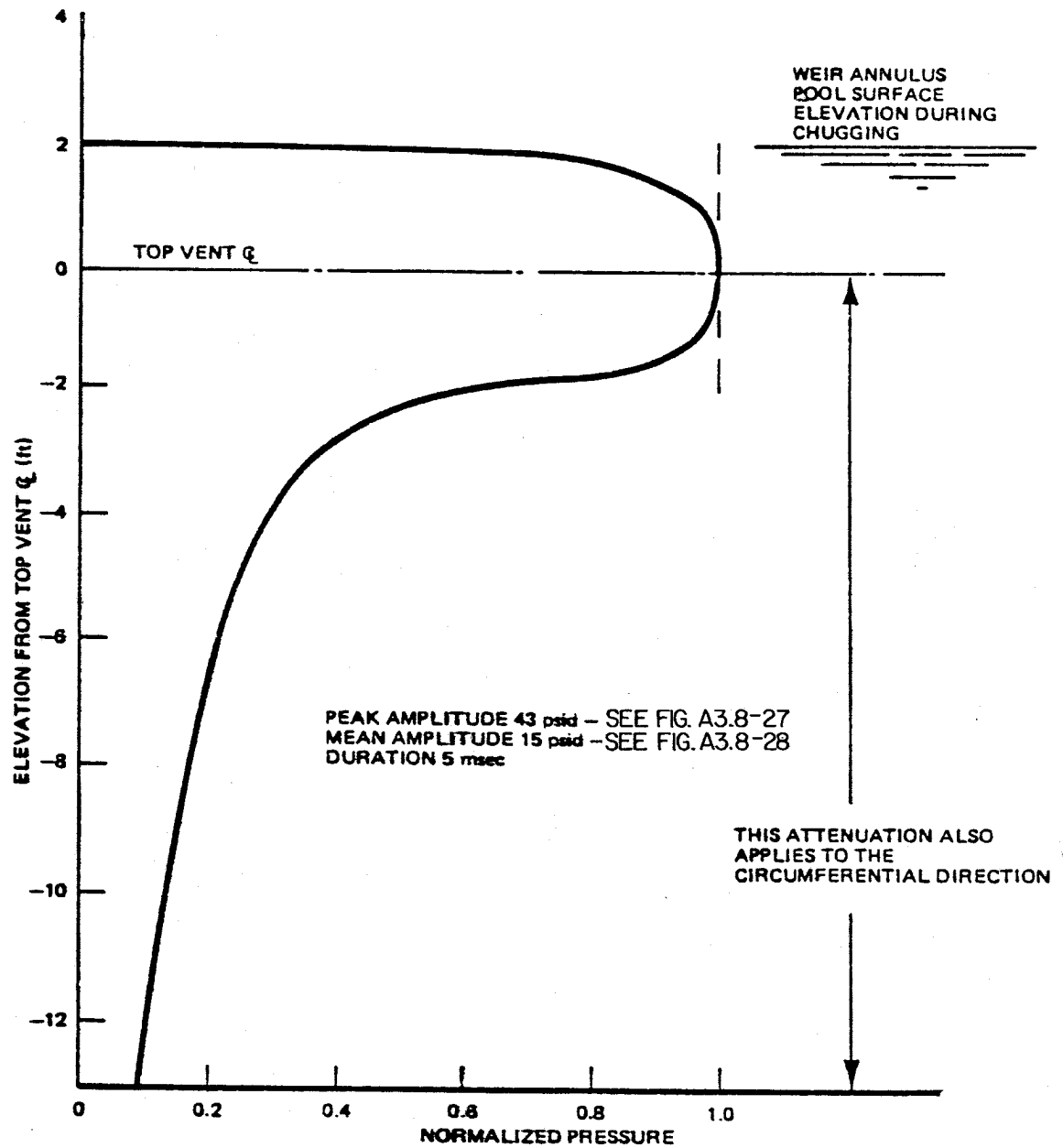
PEAK PRESSURE PULSE TRAIN ON THE
WEIR WALL AND DRYWELL I.D.
WALL DURING CHUGGING



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FIGURE A3.8-28

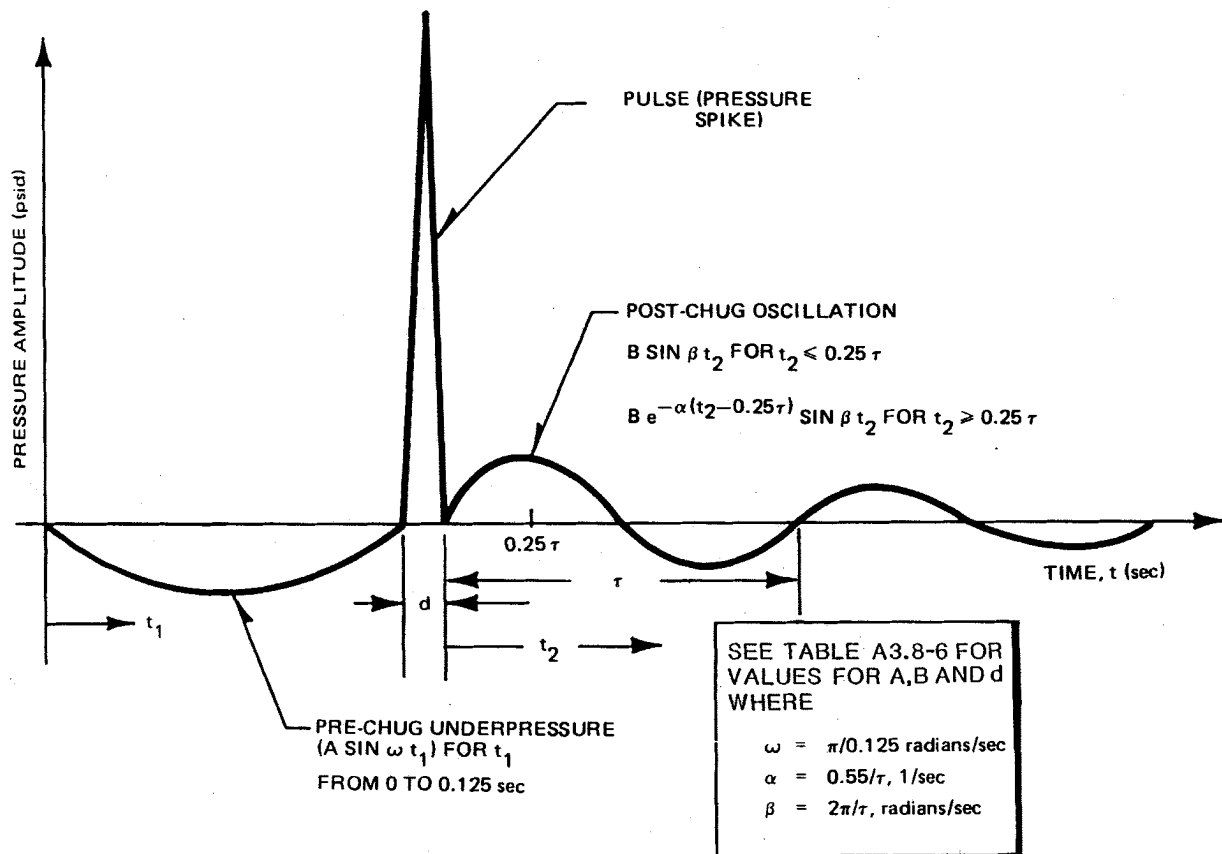
MEAN PRESSURE PULSE TRAIN ON THE WEIR
WALL AND DRYWELL I.D. WALL
DURING CHUGGING



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FIGURE A3.8-29

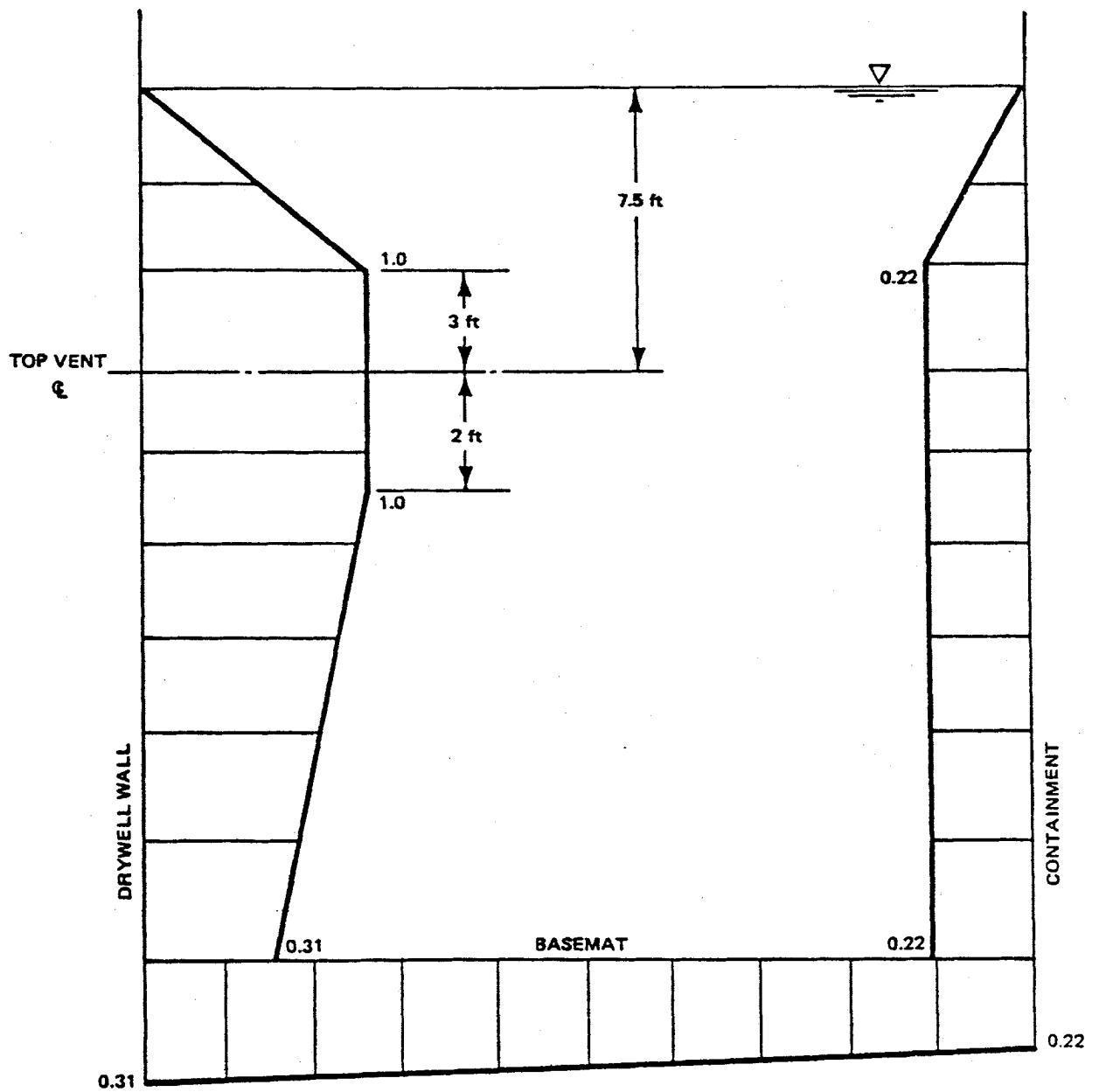
NORMALIZED WEIR ANNULUS PRESSURE
PULSE ATTENUATION



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FIGURE A3.8-30

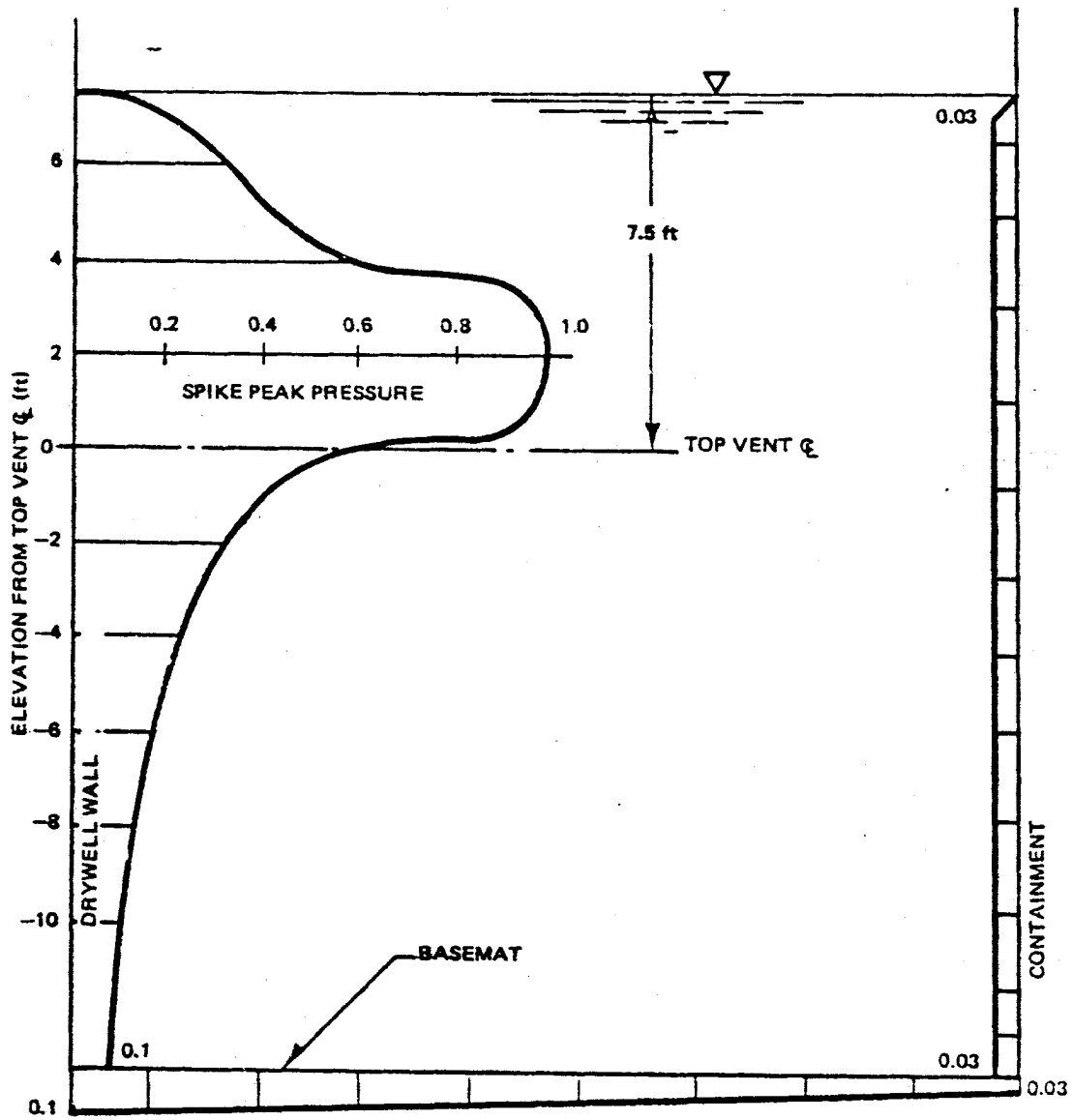
TYPICAL PRESSURE TIME-HISTORY ON
 THE POOL BOUNDARY DURING CHUGGING



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UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-31

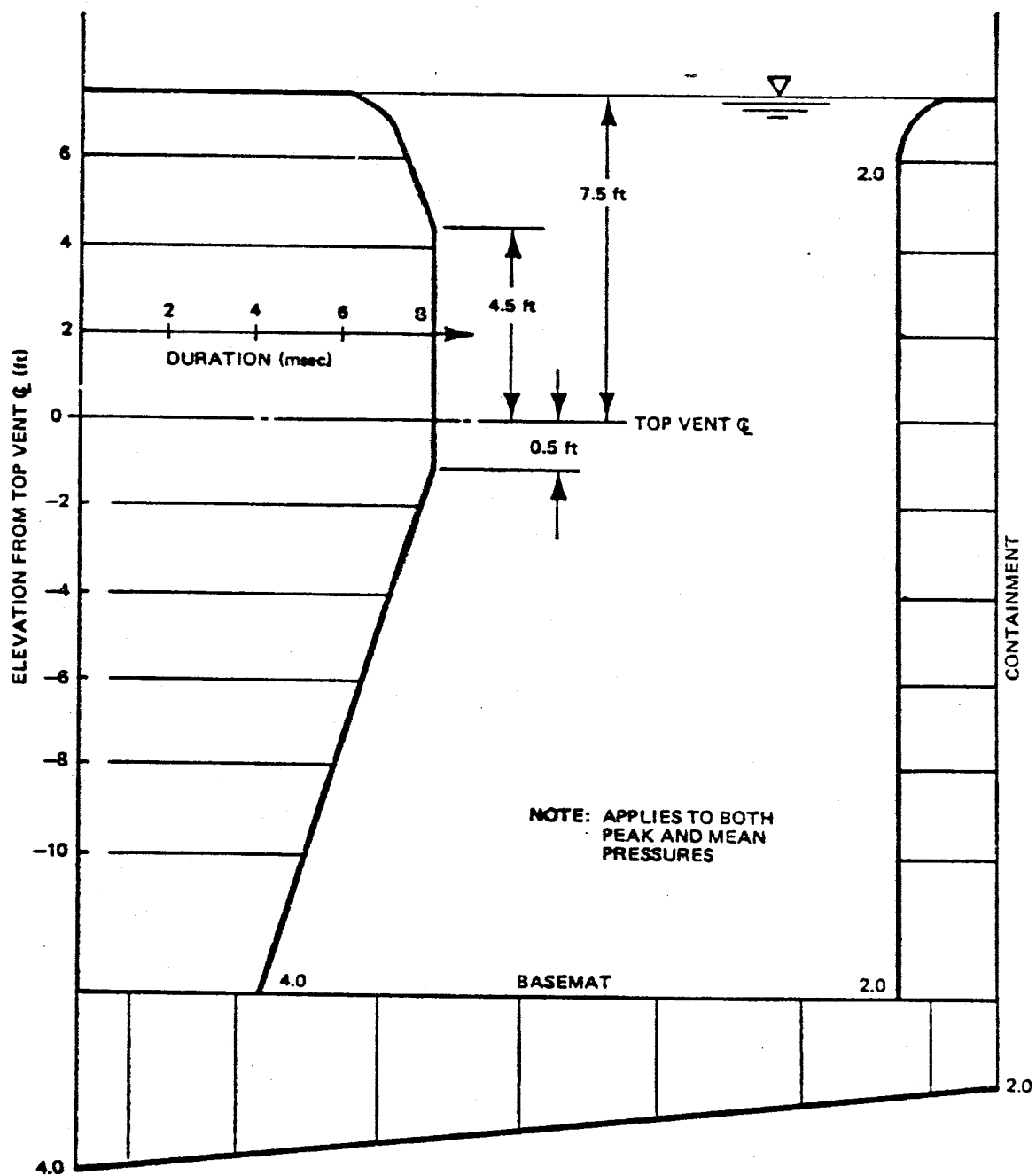
SUPPRESSION POOL CHUGGING NORMALIZED
PEAK UNDERPRESSURE ATTENUATION



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FIGURE A3.8-32

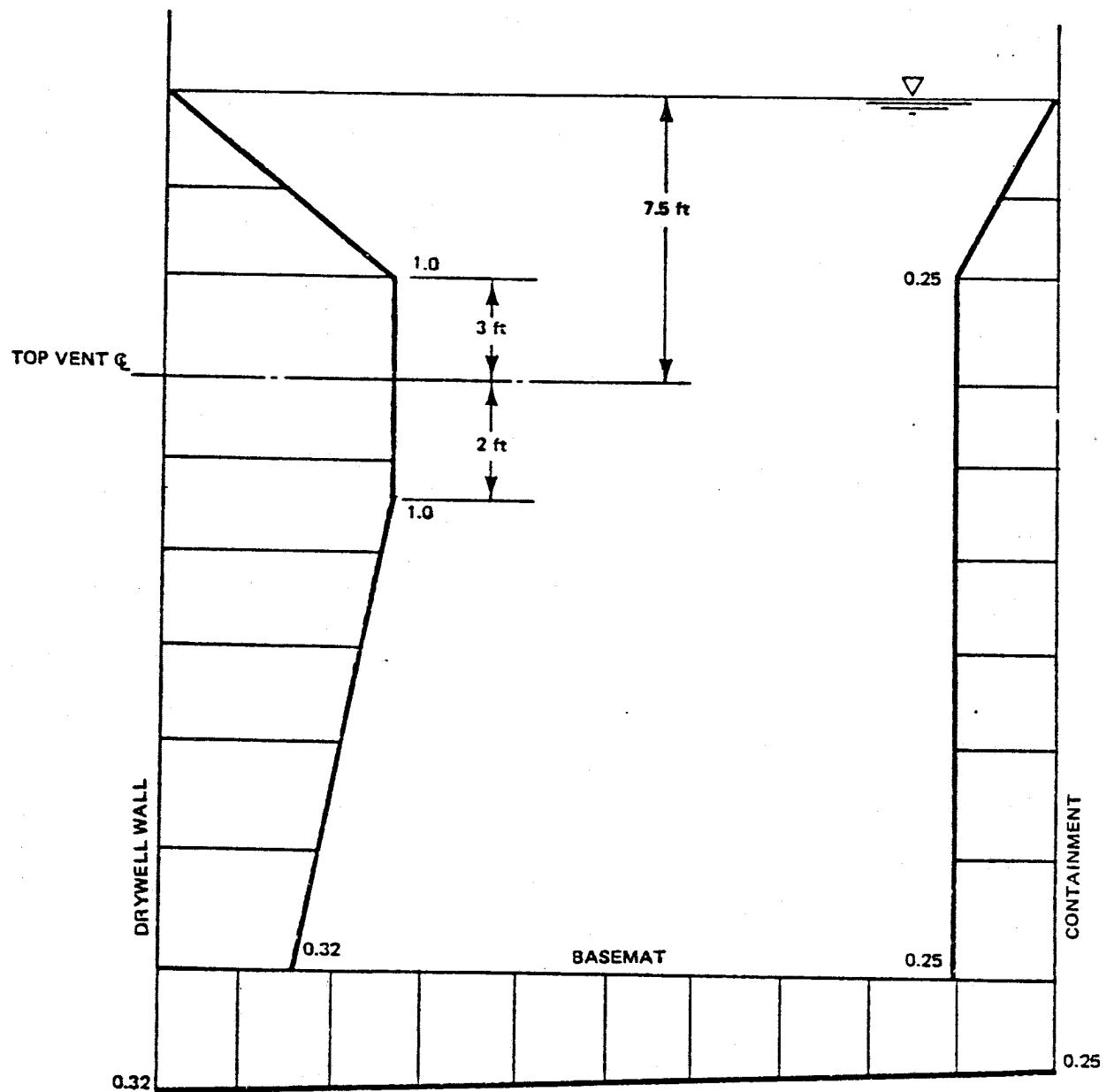
SUPPRESSION POOL CHUGGING
NORMALIZED SPIKE ATTENUATION



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FIGURE A3.8-33

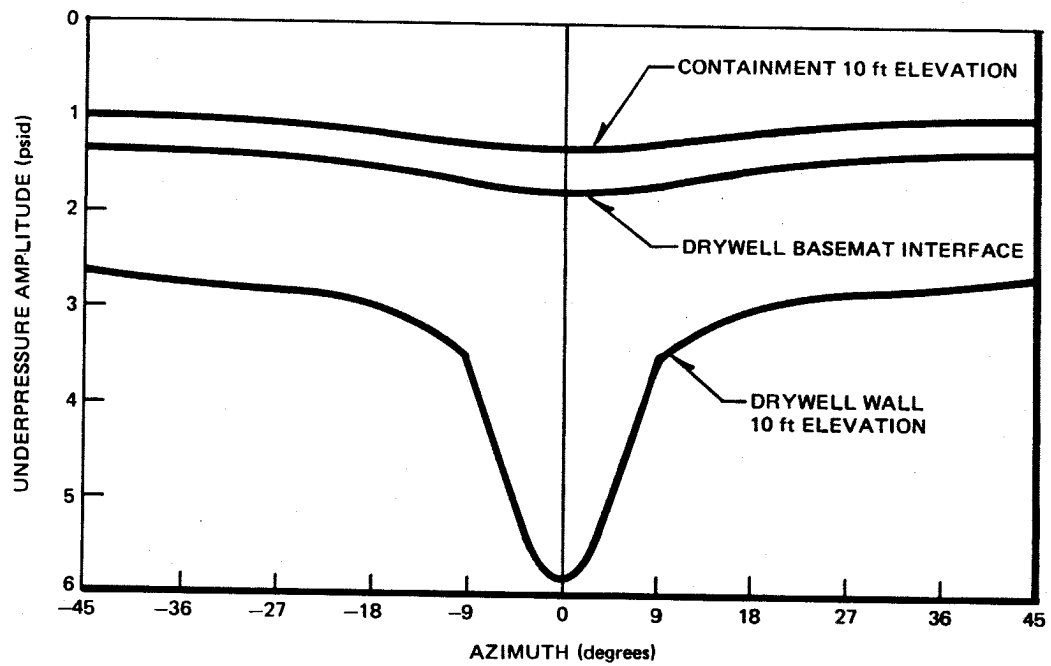
SUPPRESSION POOL CHUGGING SPIKE
DURATION "d" AS A FUNCTION OF LOCATION
IN THE POOL



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FIGURE A3.8-34

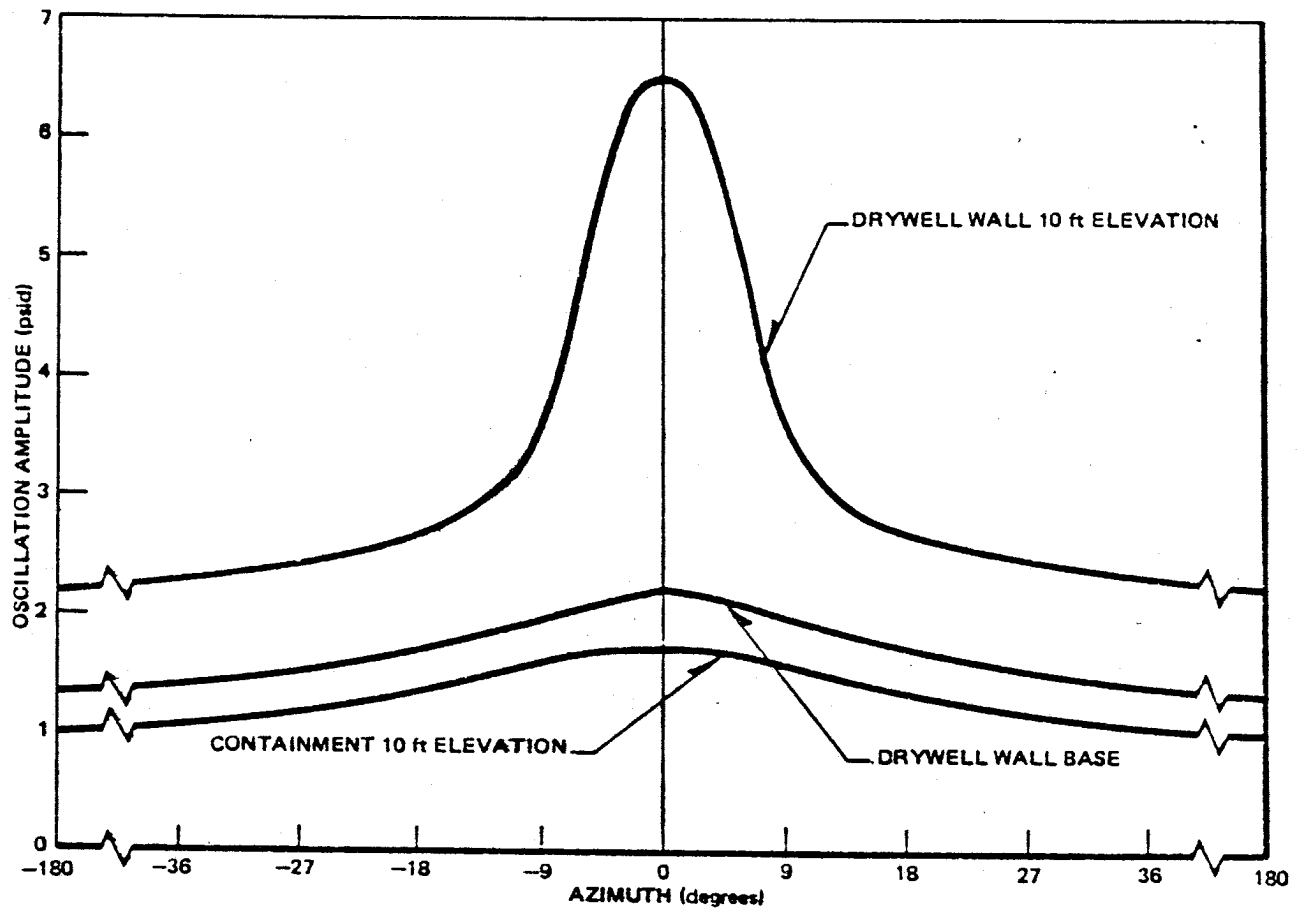
SUPPRESSION POOL CHUGGING NORMALIZED
PEAK POST CHUG OSCILLATIONS



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FIGURE A3.8-35

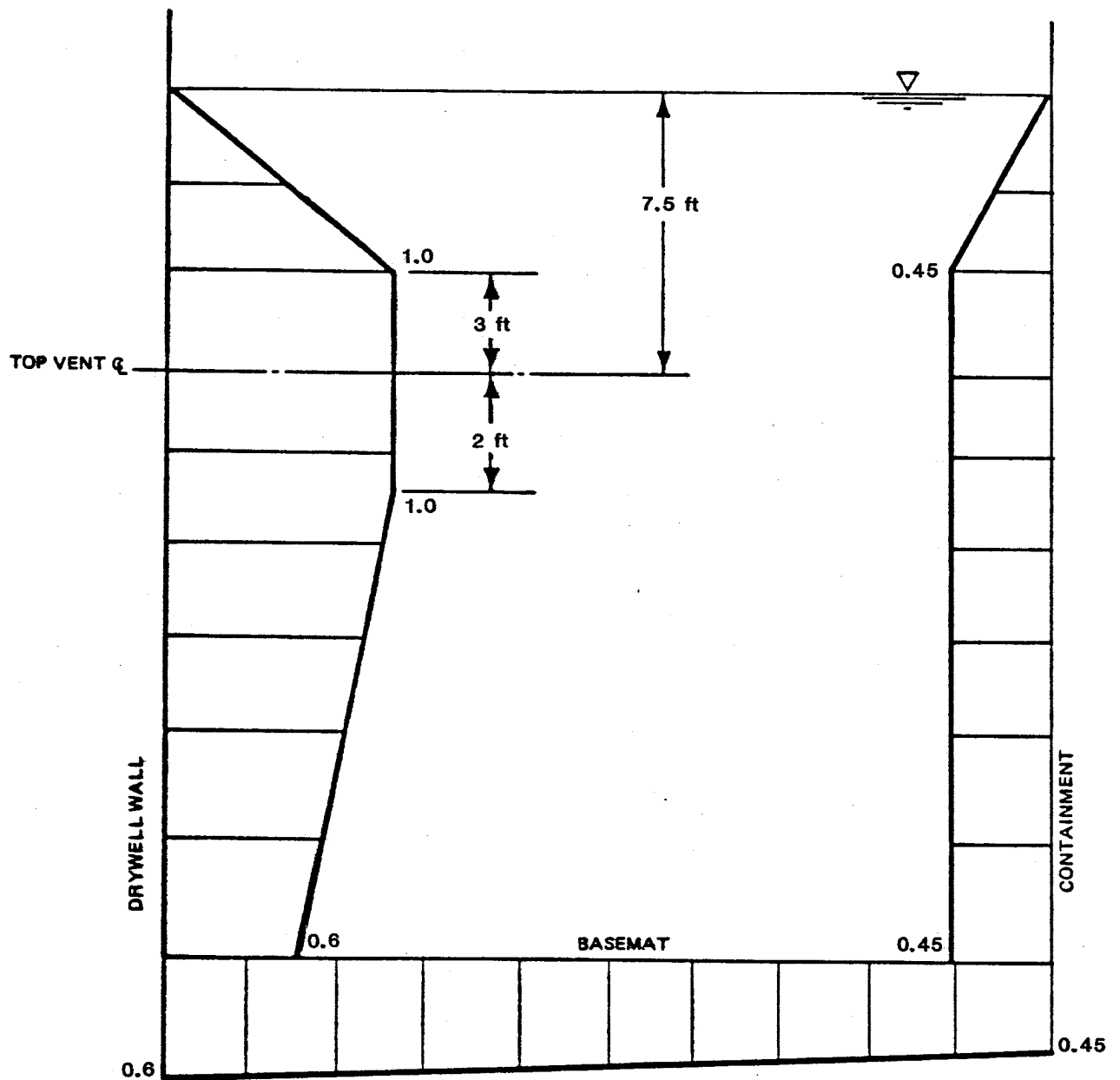
CIRCUMFERENTIAL UNDERPRESSURE
AMPLITUDE ATTENUATION



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FIGURE A3.8-36

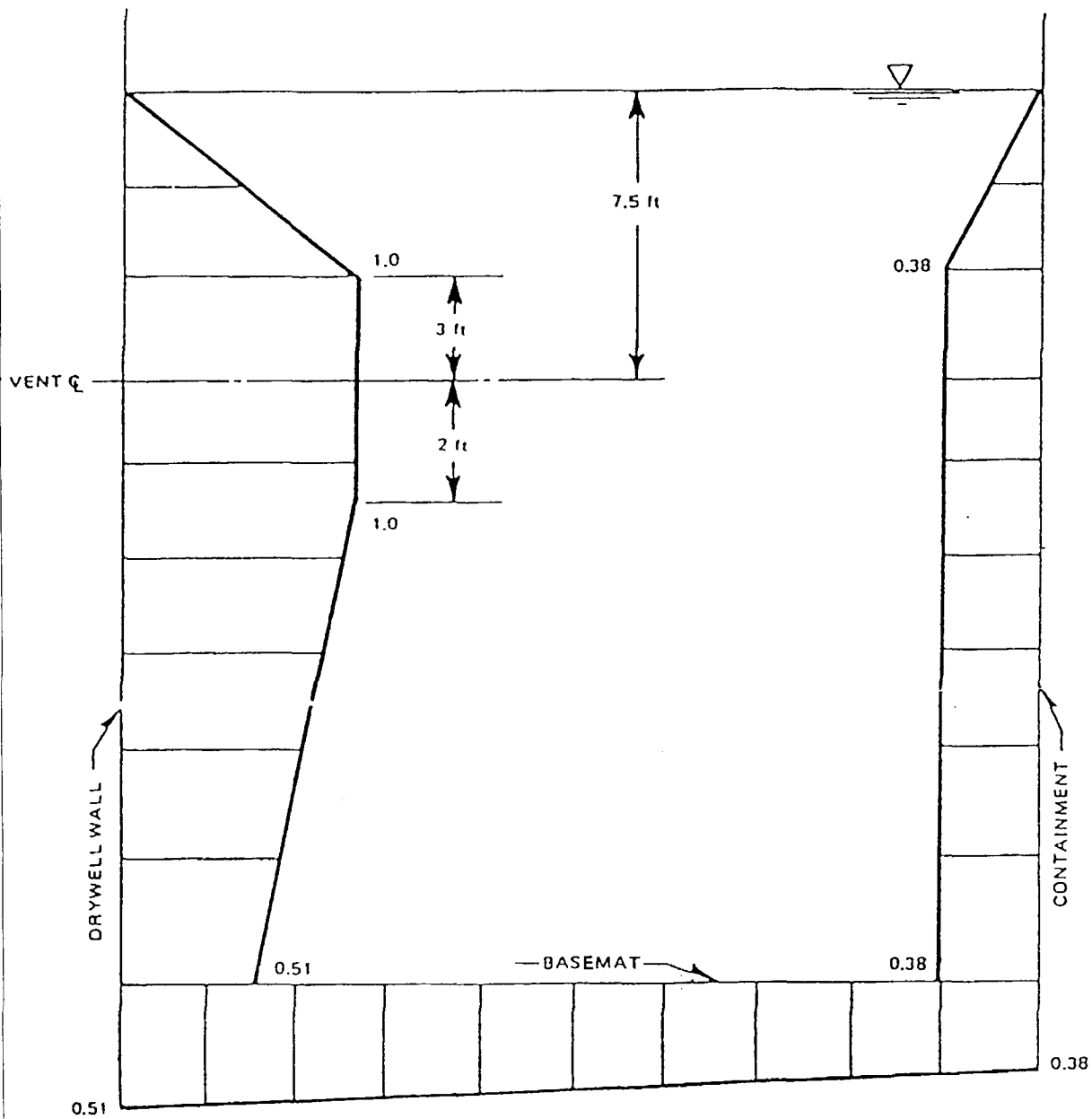
CIRCUMFERENTIAL POST CHUG OSCILLATION
AMPLITUDE ATTENUATION



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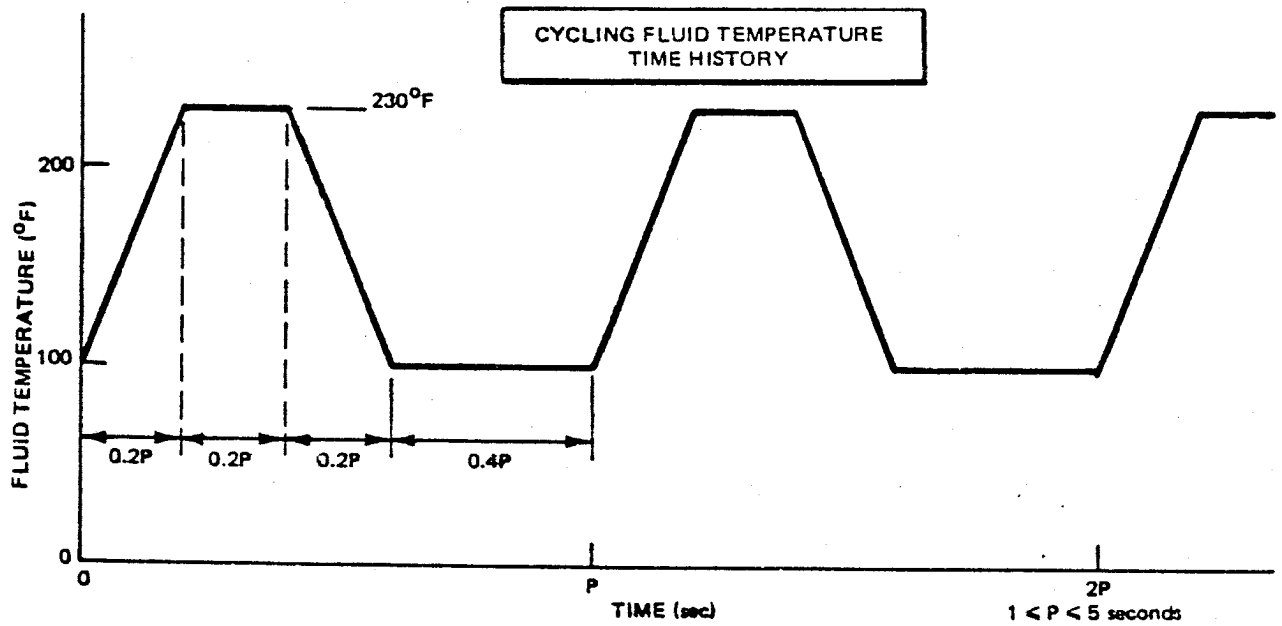
FIGURE A3.8-37

SUPPRESSION POOL CHUGGING
NORMALIZED POST CHUG
OSCILLATIONS ATTENUATION



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UPDATED SAFETY ANALYSIS REPORT

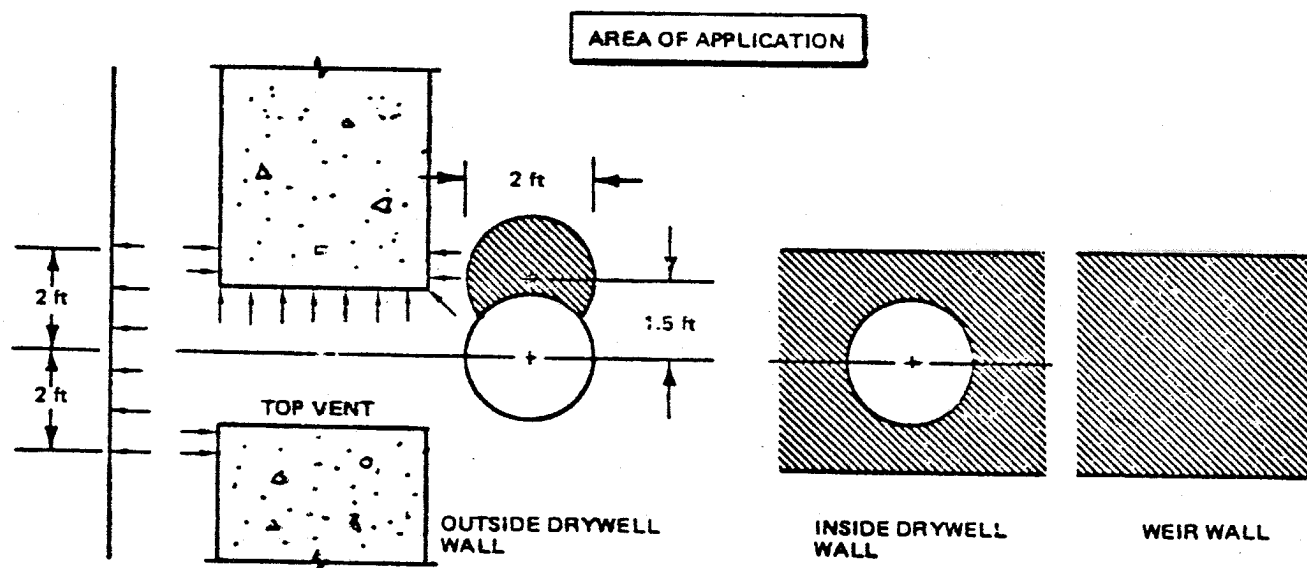
FIGURE A3.8-37A
SUPPRESSION POOL CHUGGING
NORMALIZED POST MEAN
UNDERPRESSURE ATTENUATION



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FIGURE A3.8-38

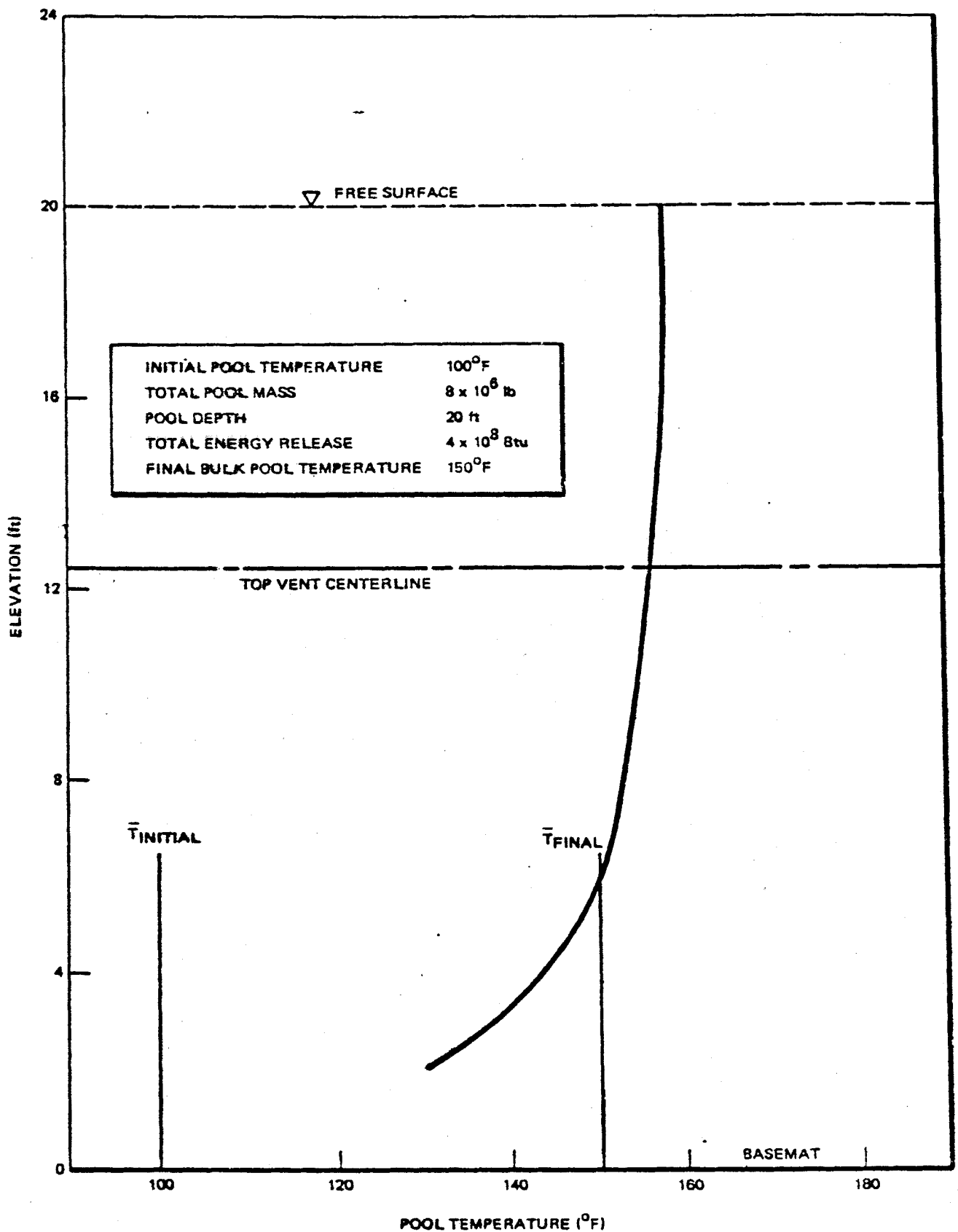
DRYWELL TOP VENT CYCLIC TEMPERATURE
PROFILE AND AREA OF APPLICATION
DURING CHUGGING



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FIGURE A3.8-39

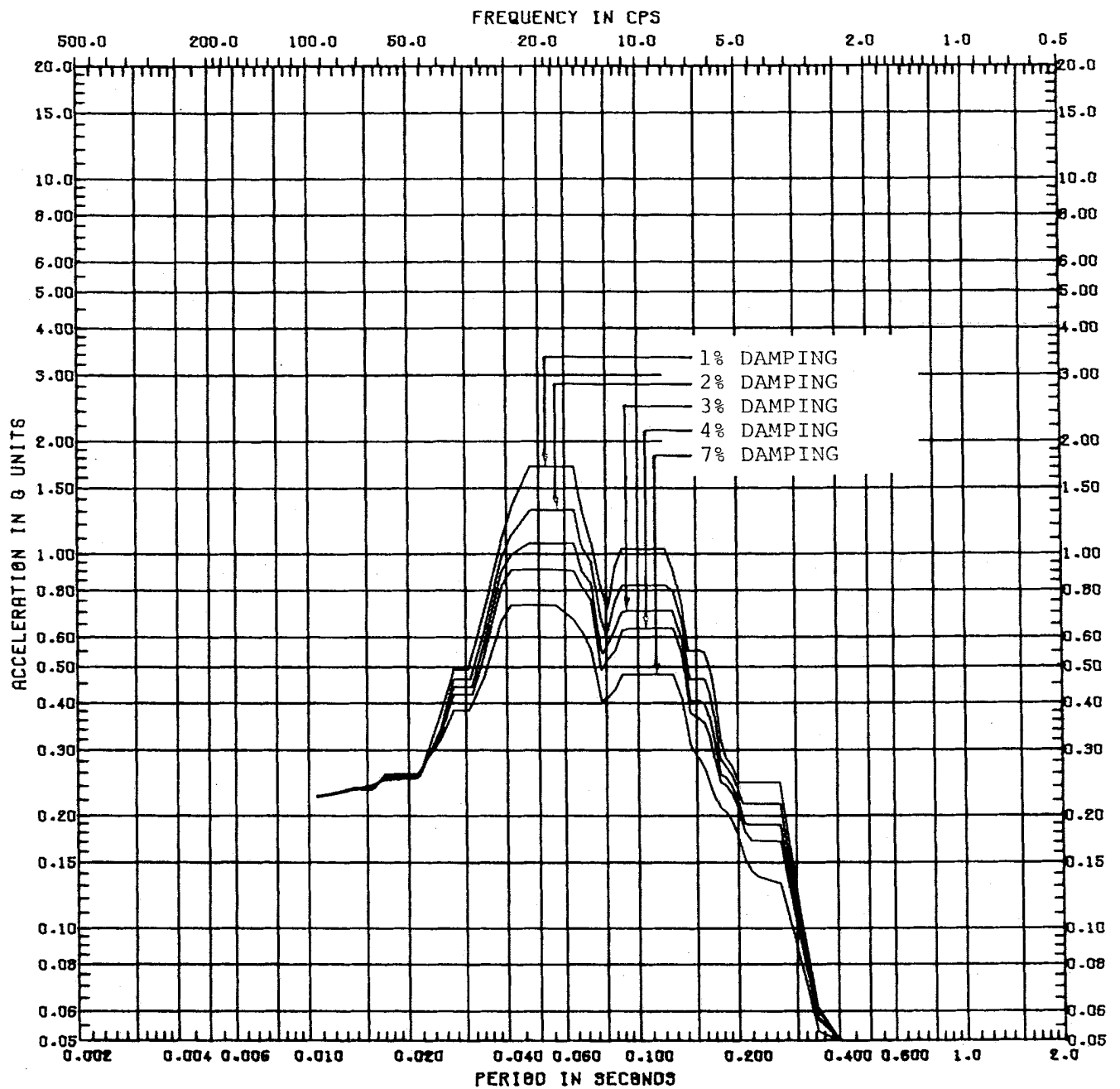
DRYWELL TOP VENT CYCLIC TEMPERATURE
PROFILE DURING CHUGGING



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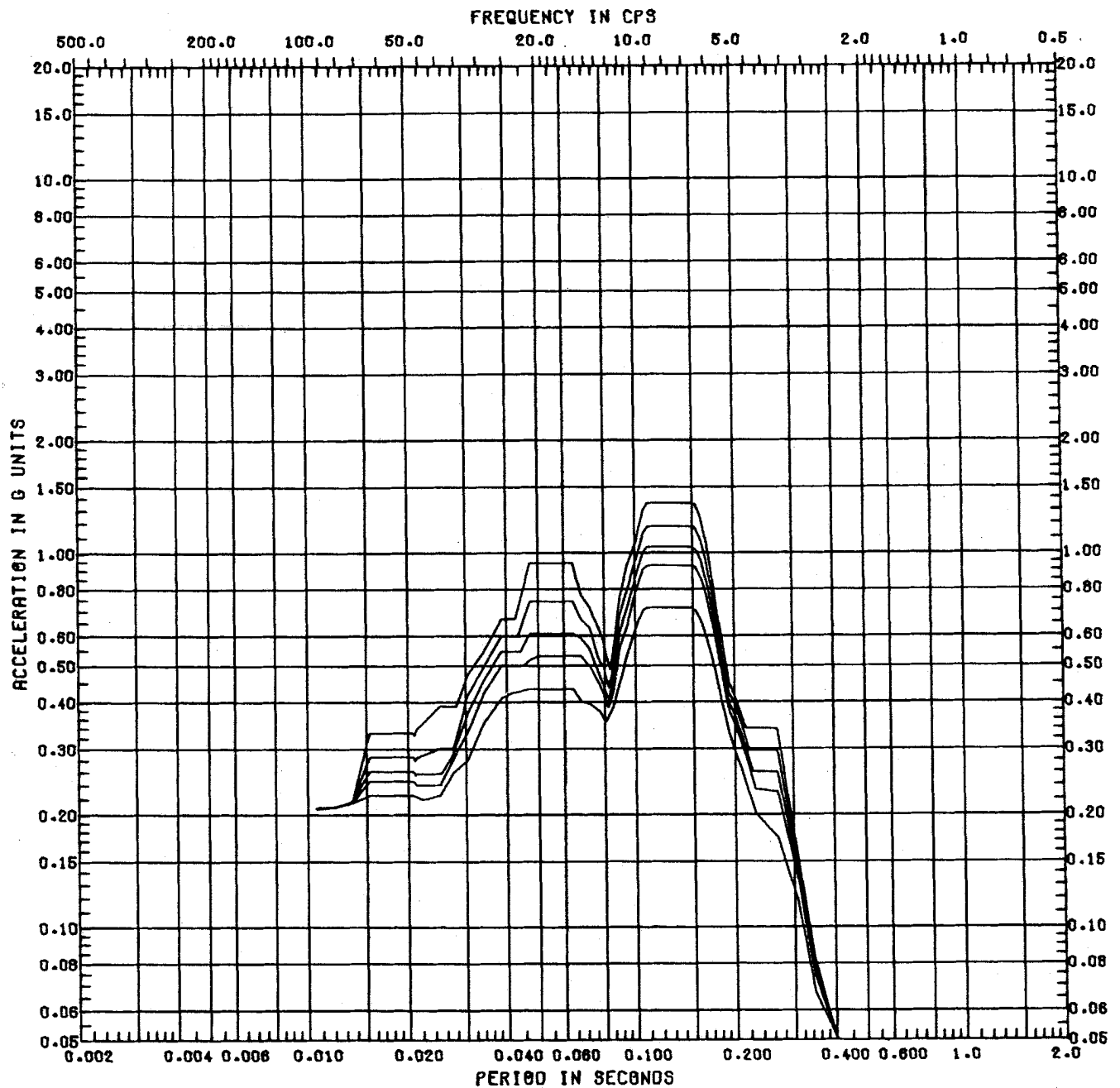
FIGURE A3.8-40

SUPPRESSION POOL TEMPERATURE
 PROFILE FOR LARGE BREAKS



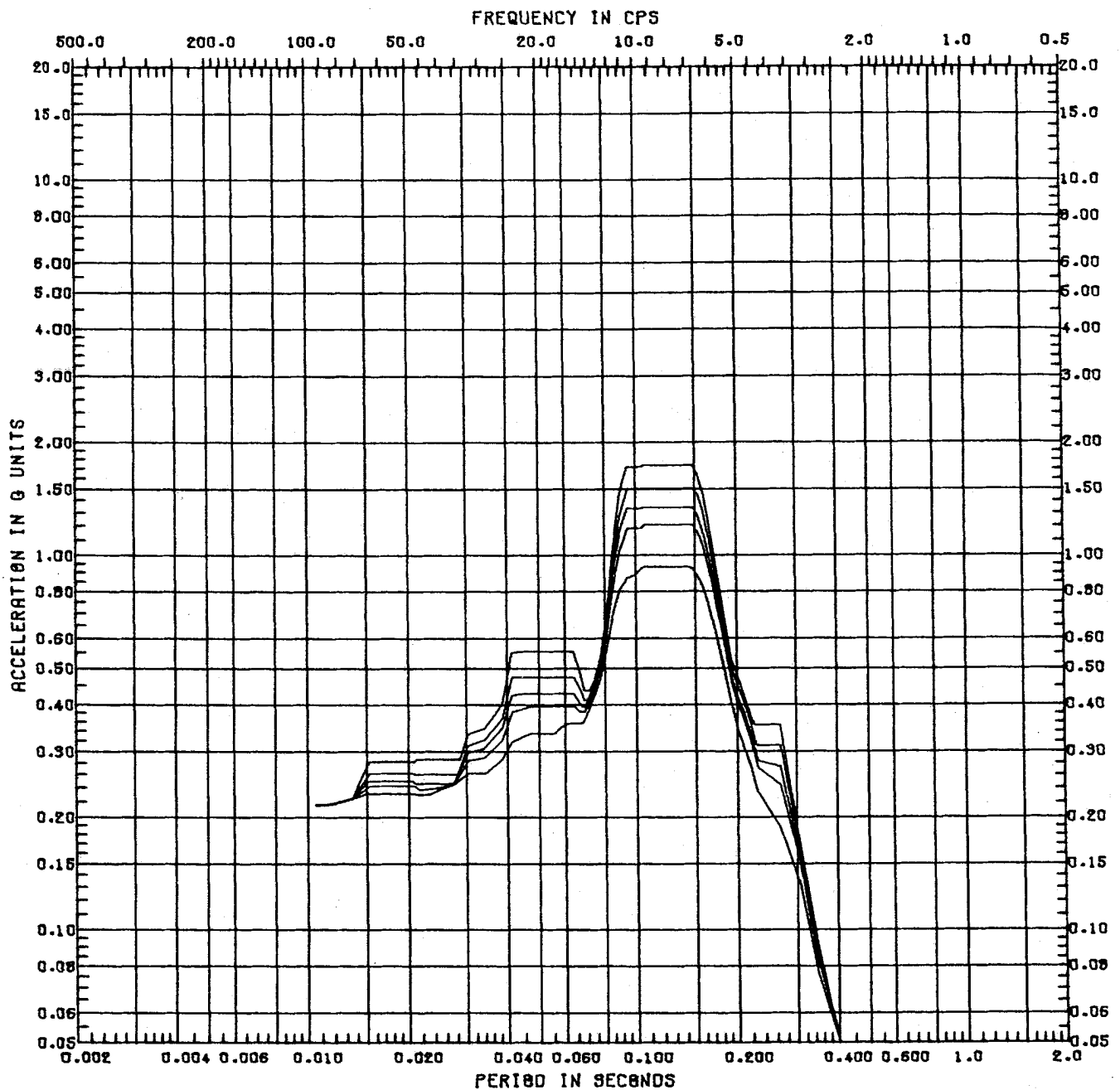
CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

FIGURE A3.8-41
SRV QUENCHER ALL VALVE
VERTICAL RESPONSE SPECTRA
FOR CONTAINMENT WALL,
ELEVATION 712'-0"



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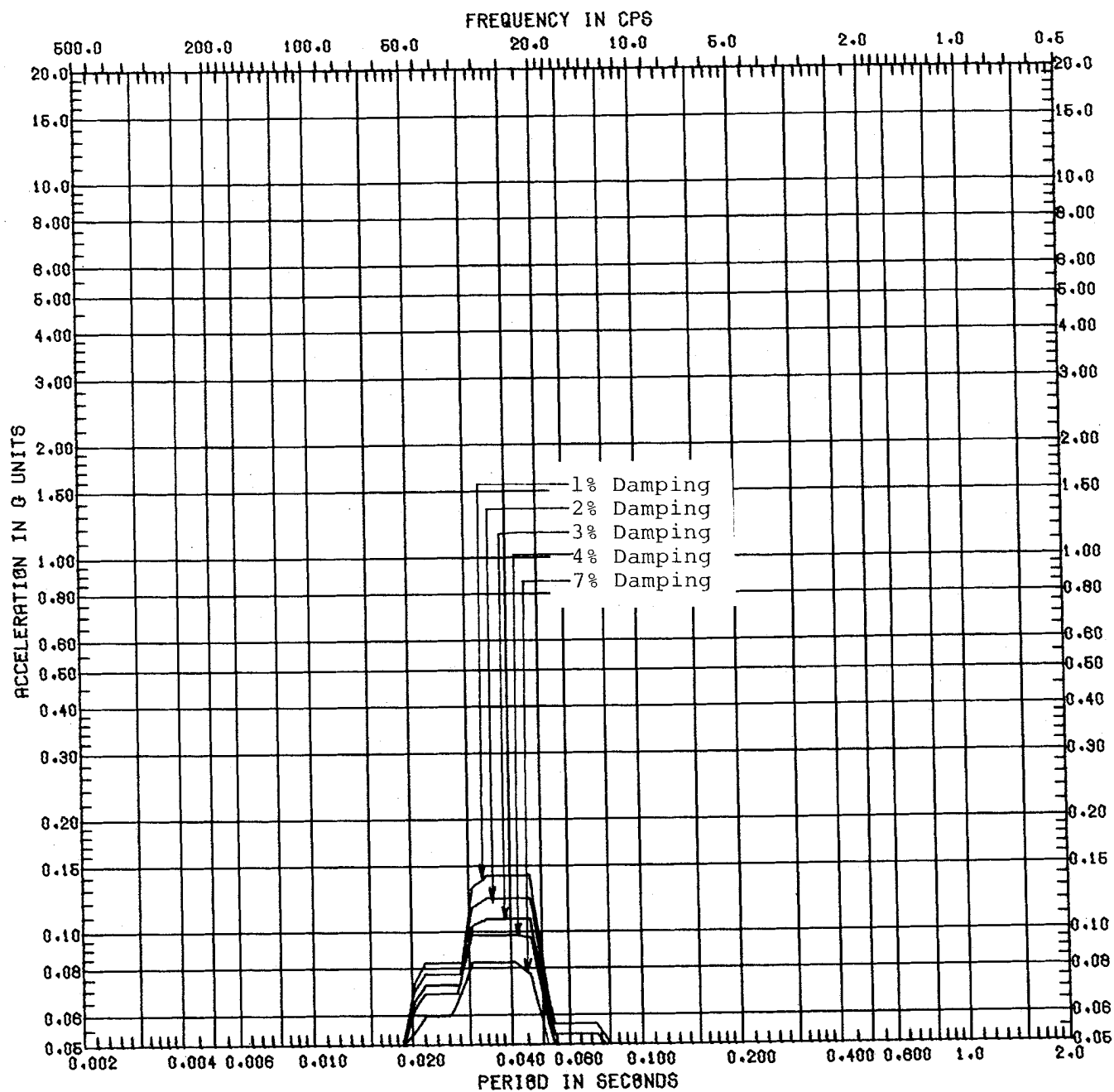
FIGURE A3.8-42
SRV QUENCHER ALL VALVE
VERTICAL RESPONSE SPECTRA
FOR DRYWELL WALL,
ELEVATION 712'-0"



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FIGURE A3.8-43

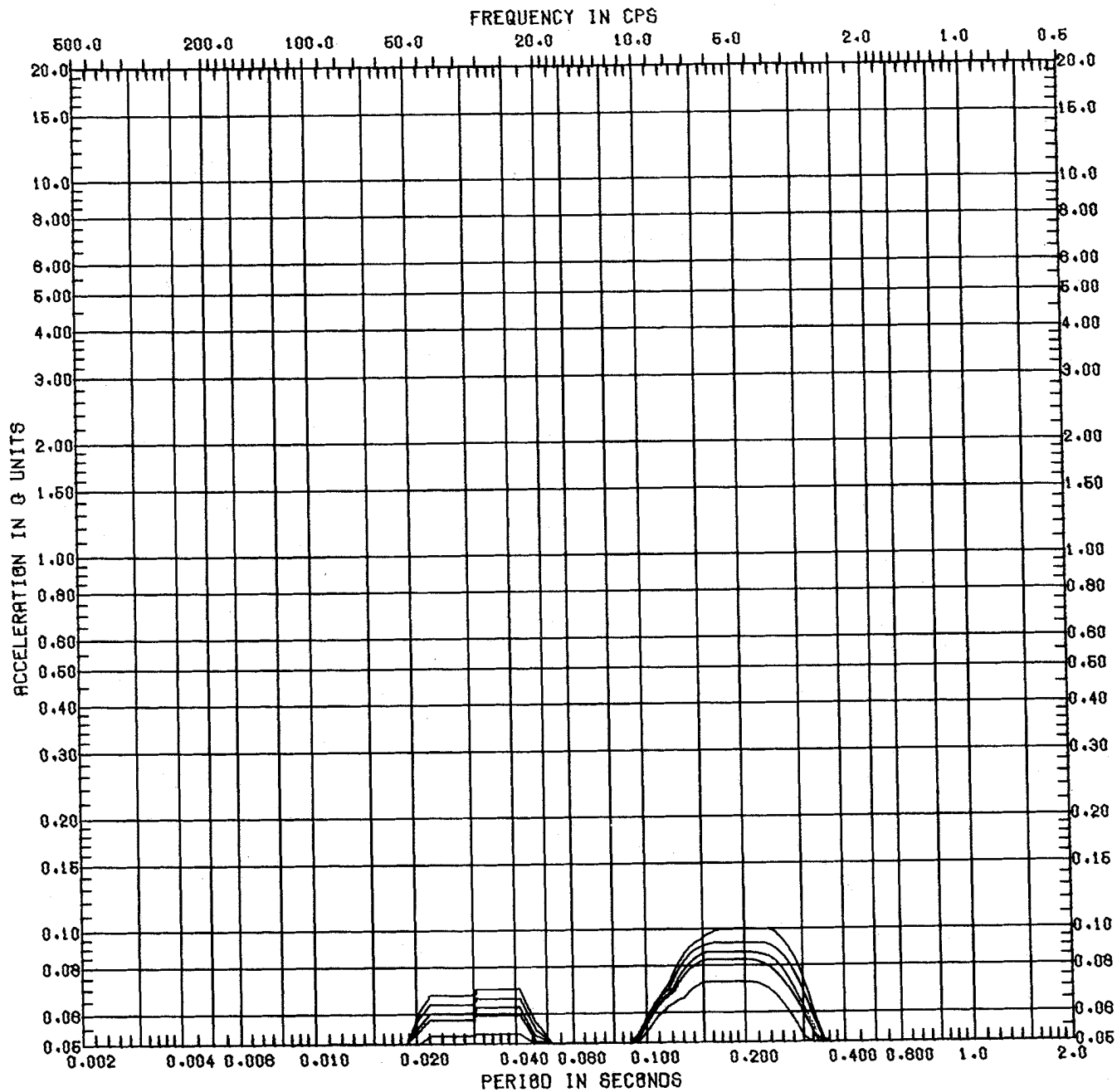
SRV QUENCHER ALL VALVE
VERTICAL RESPONSE SPECTRA
FOR PEDESTAL, ELEVATION 724'-1 3/4"



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FIGURE A3.8-44

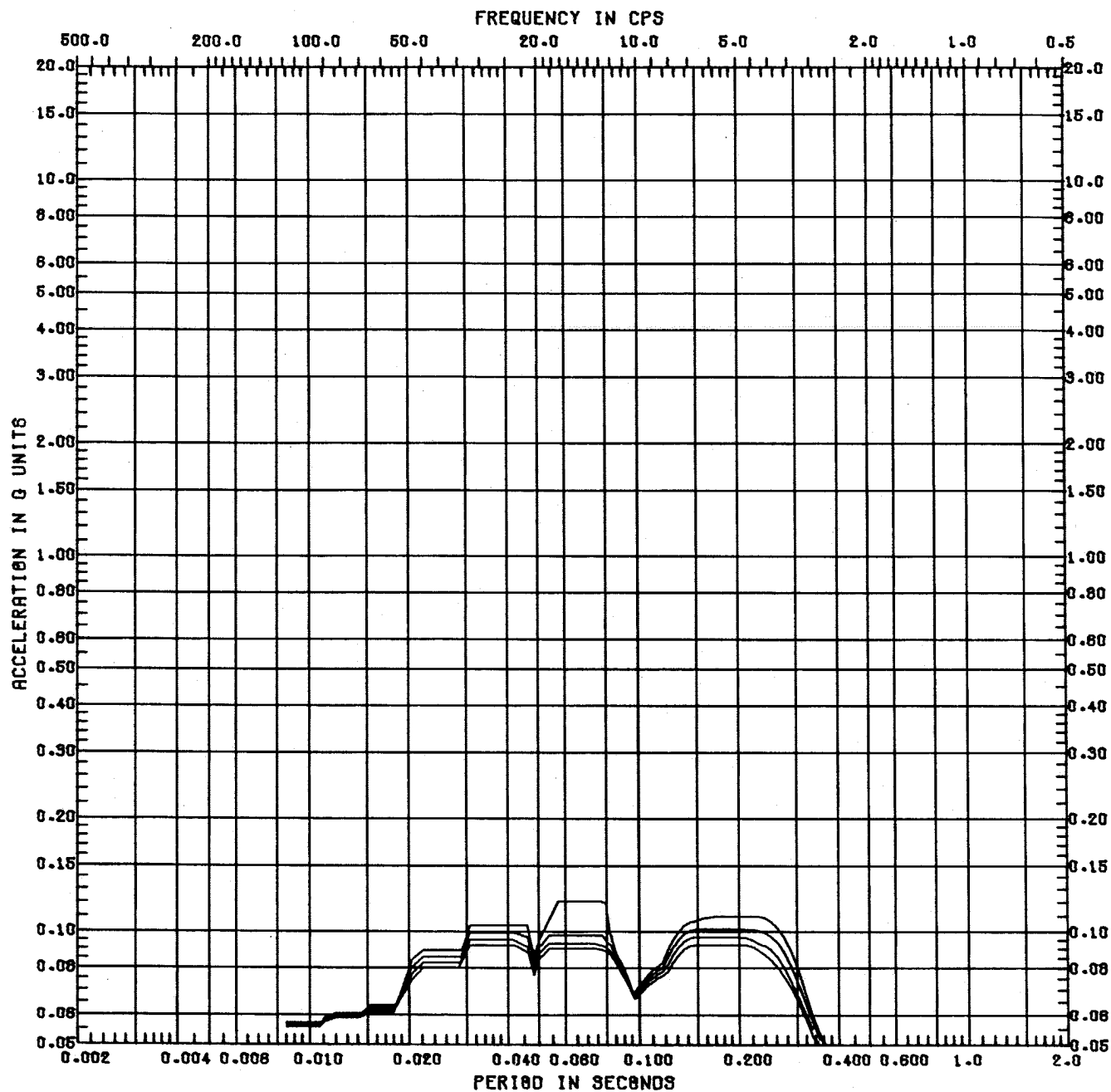
LOCA BUBBLE HORIZONTAL RESPONSE SPECTRA
FOR CONTAINMENT WALL
ELEVATION 712'-0"



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FIGURE A3.8-45

LOCA BUBBLE VERTICAL RESPONSE SPECTRA
FOR DRYWELL WALL
ELEVATION 712'-0"

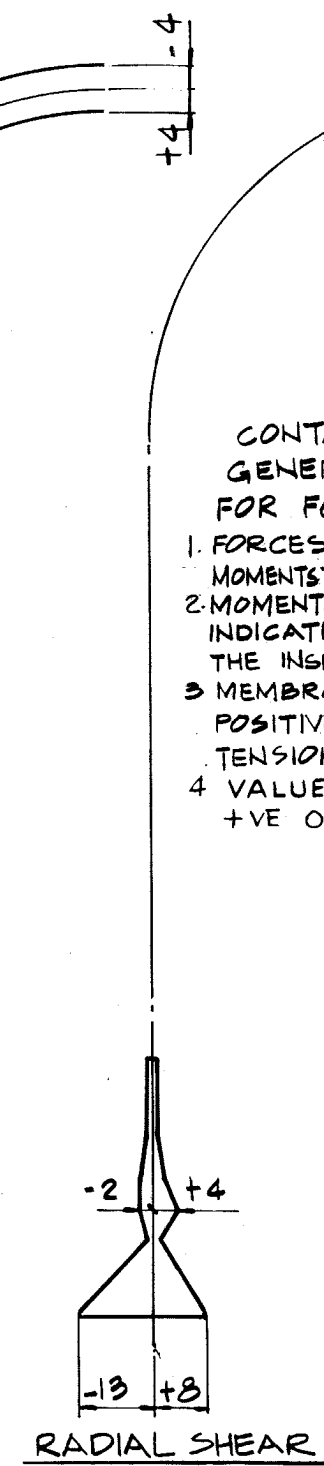
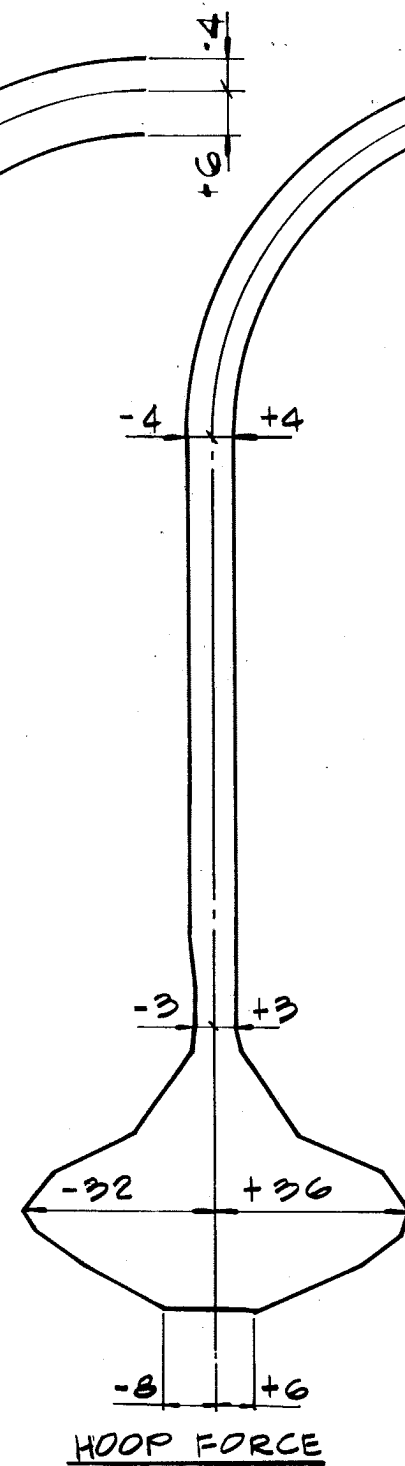
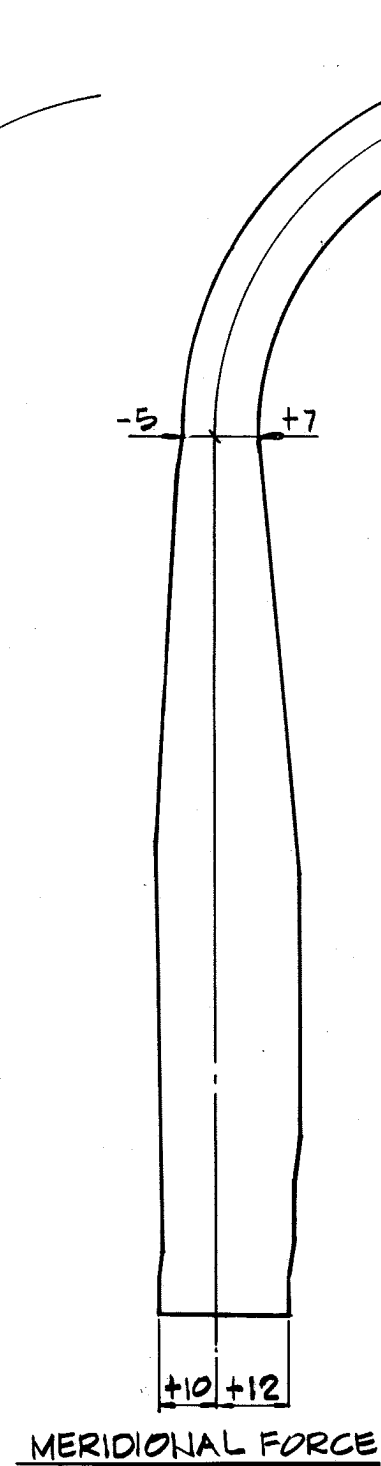
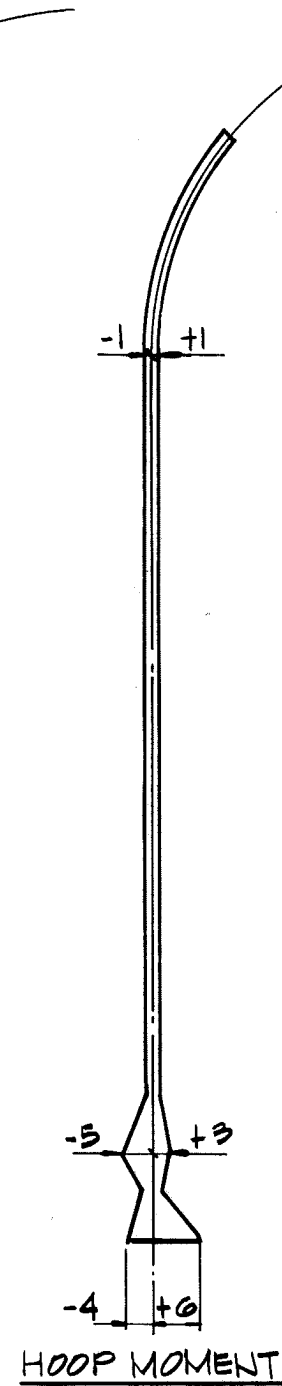
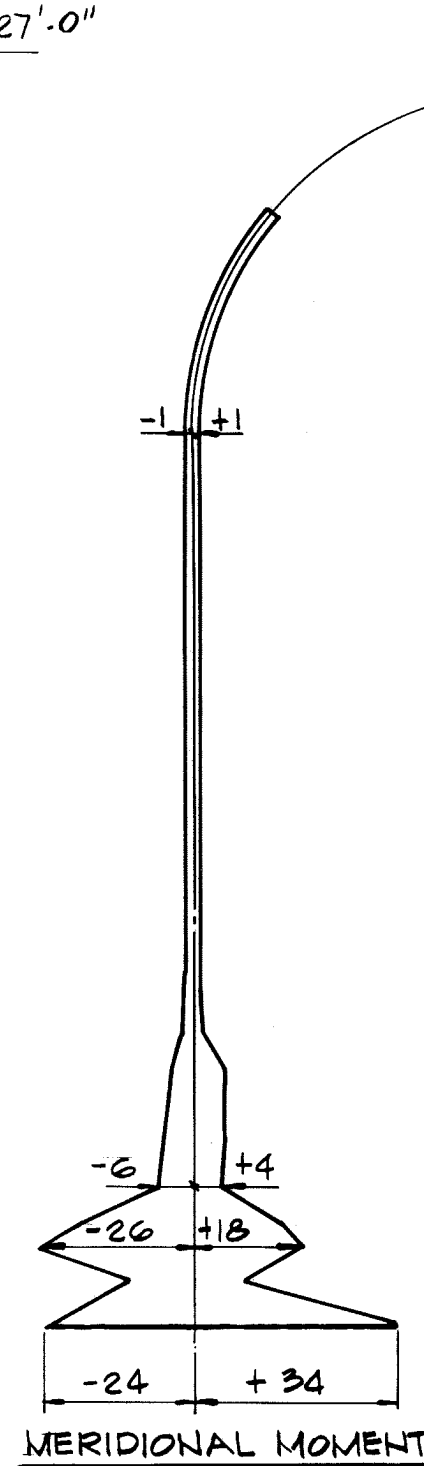
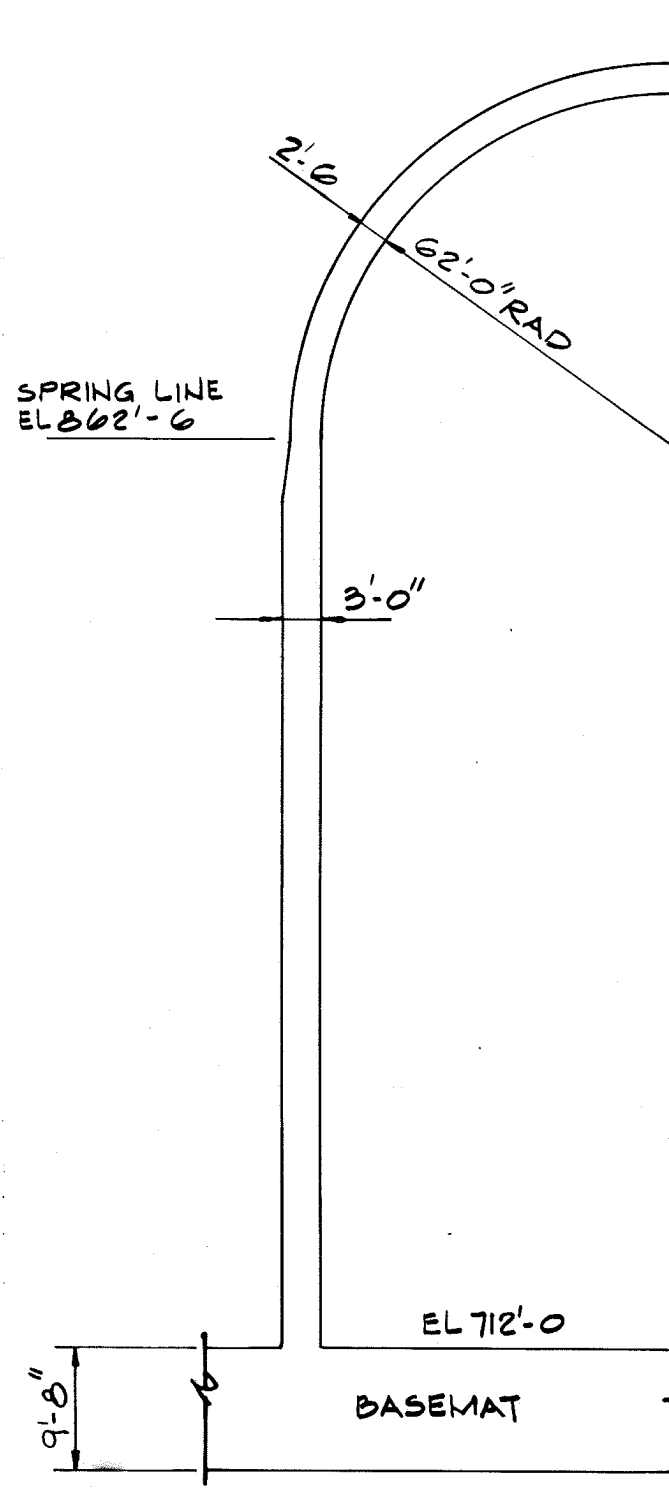


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FIGURE A3.8-46

LOCA BUBBLE VERTICAL RESPONSE SPECTRA
FOR RPV, ELEVATION 753'-3 3/8"

FIGURE A3.8-47
HAS BEEN DELETED



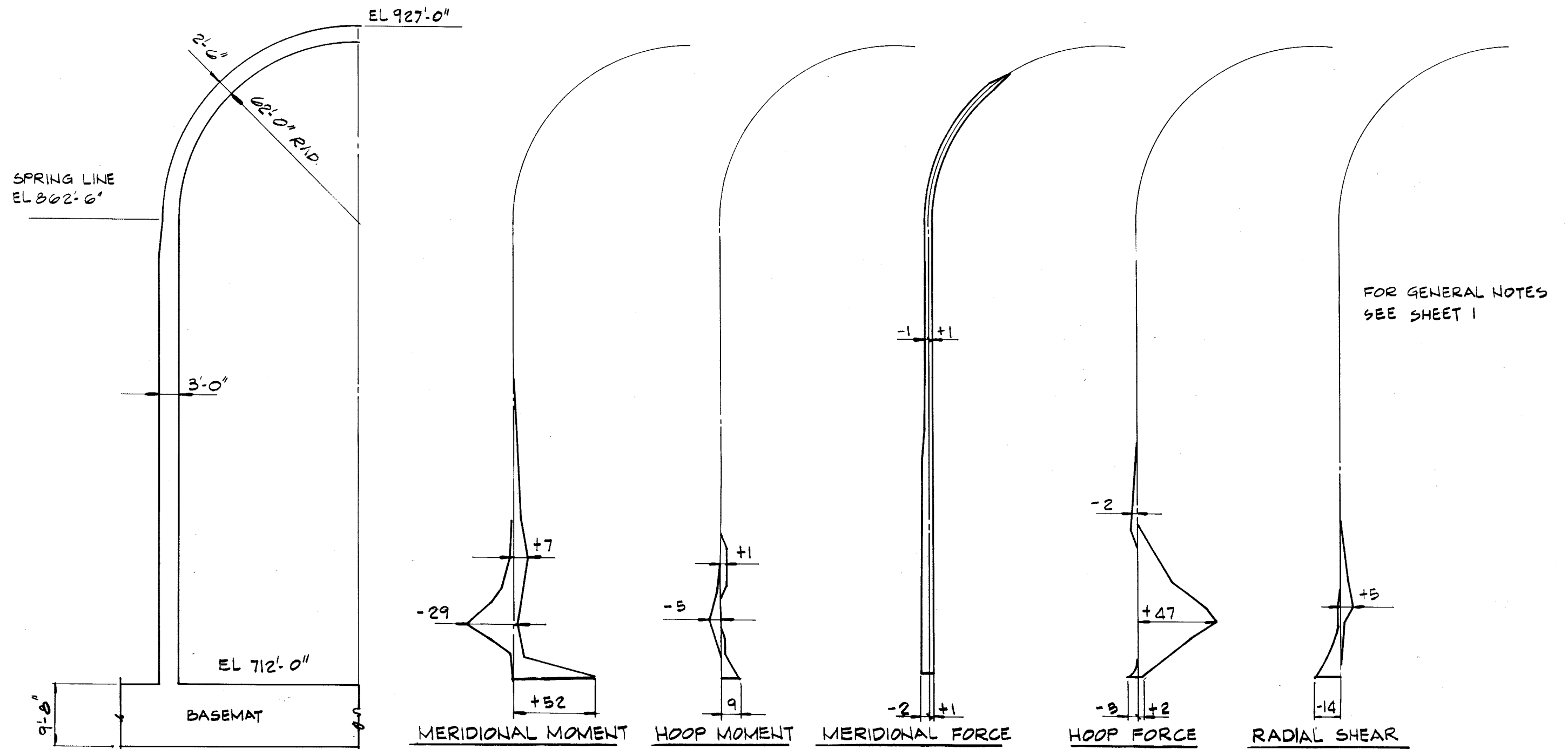
**CONTAINMENT
GENERAL NOTES
FOR FORCE PLOTS**

1. FORCES: KIP/ FOOT
2. MOMENTS: FOOT-KIPS/ FOOT
3. MEMBRANE FORCES, IF POSITIVE, INDICATE TENSION ON THE INSIDE FACE
4. VALUES ARE MAX. +VE OR -VE

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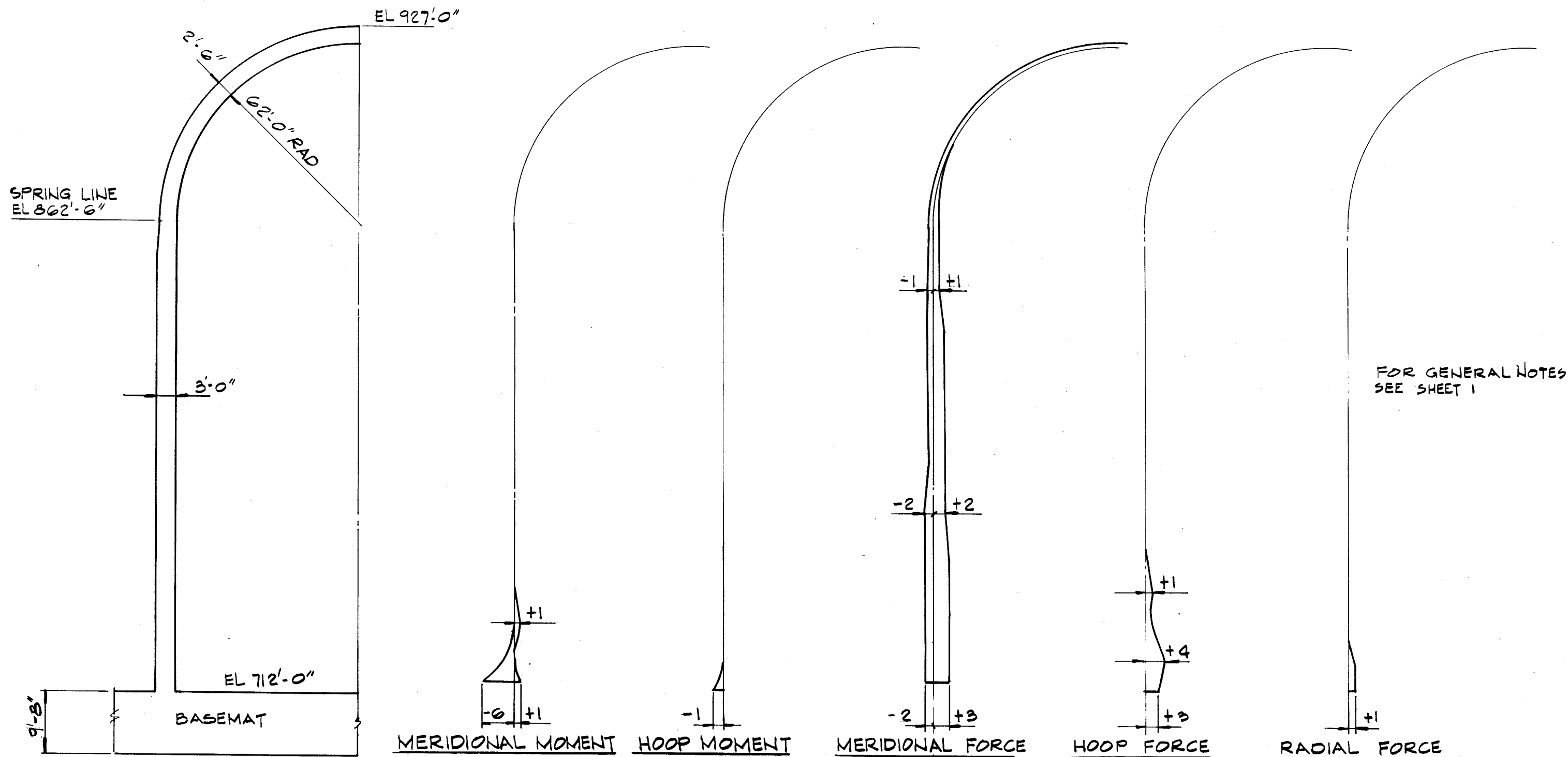
FIGURE B3.8-1

FORCE PLOTS CONTAINMENT
WALL SRV - ALL VALVE



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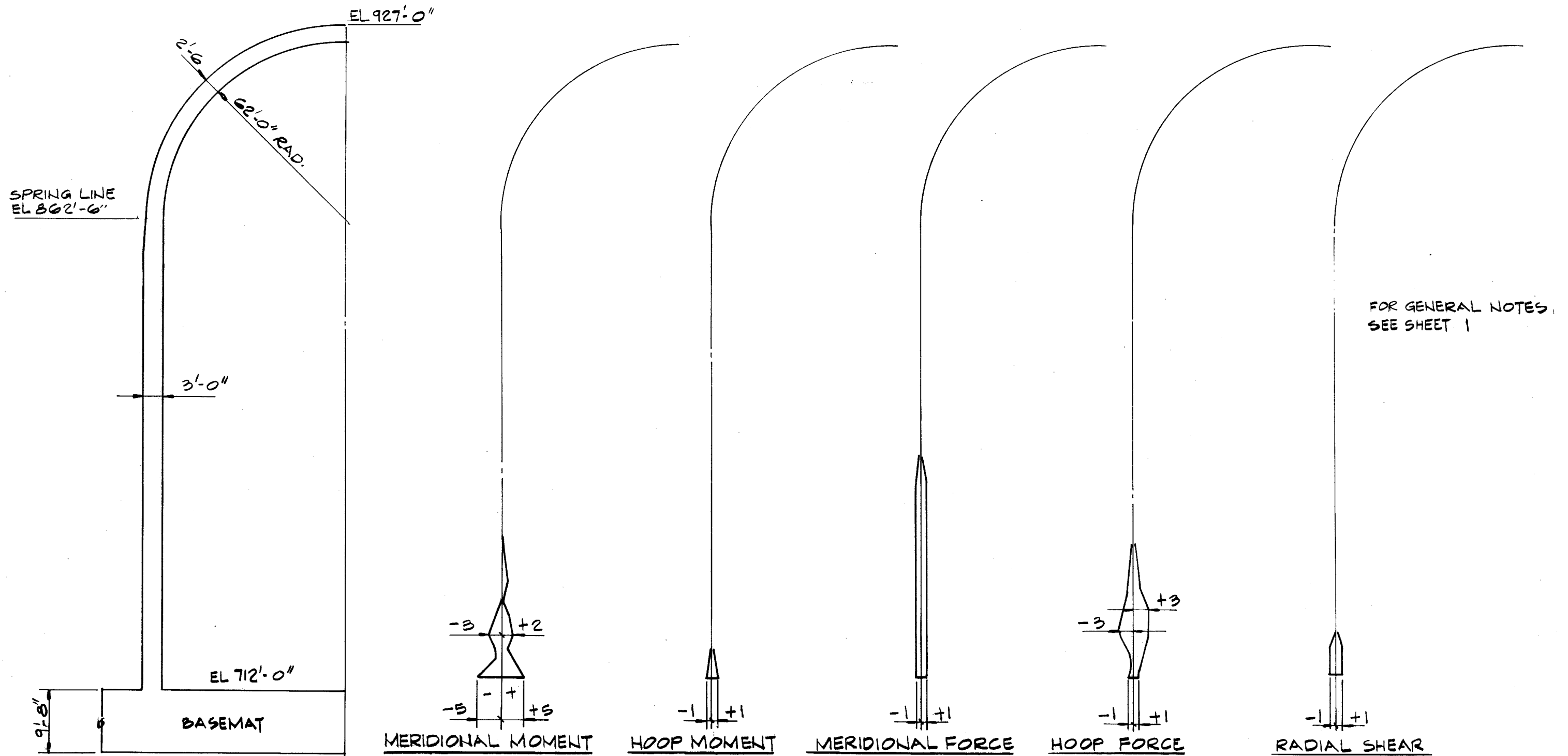
FIGURE B3.8-2
FORCE PLOTS CONTAINMENT
WALL - LOCA BUBBLE



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FIGURE B3.8-3

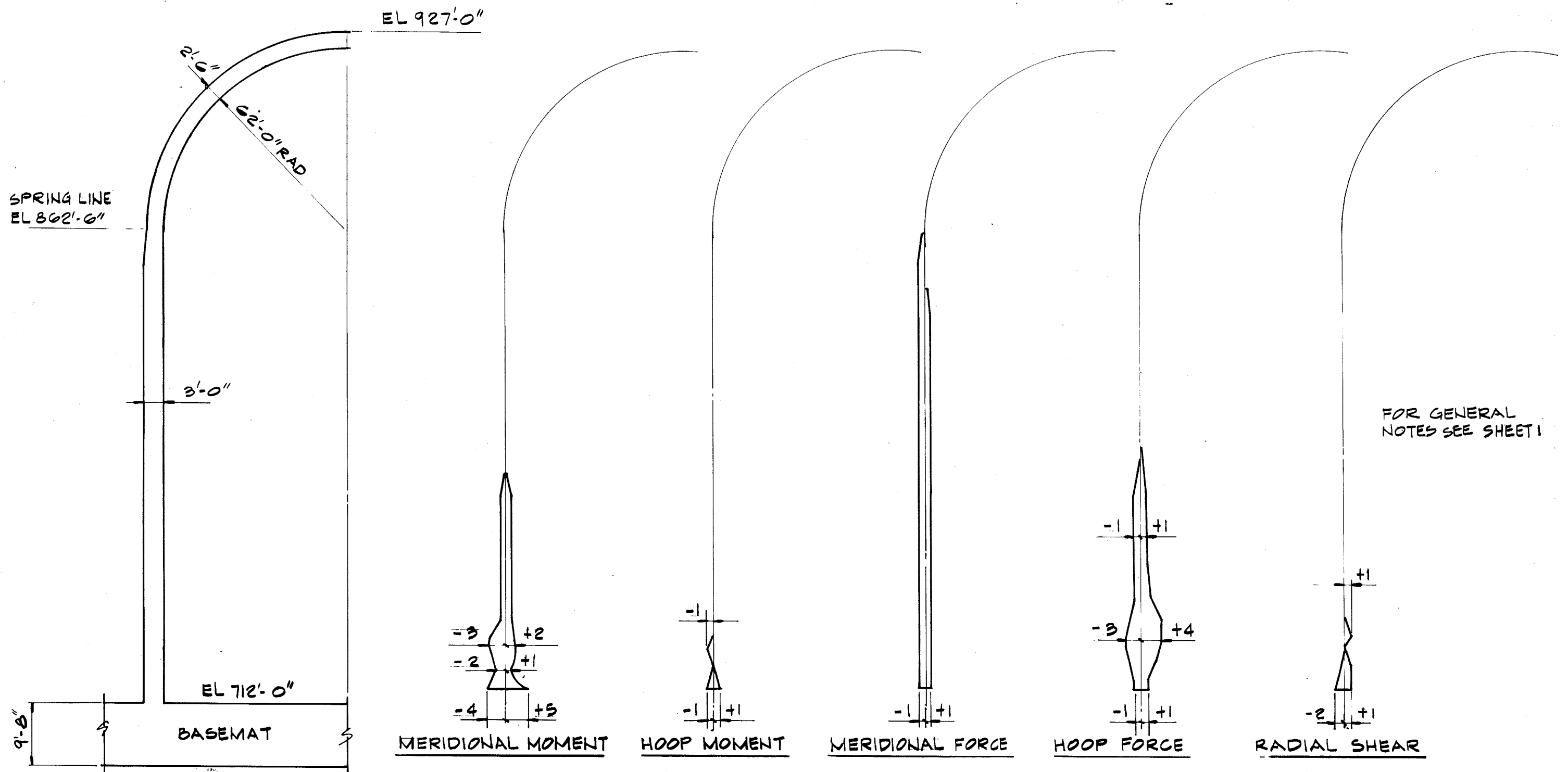
FORCE PLOTS CONTAINMENT
WALL - LOCA - FROTH IMPINGEMENT



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FIGURE B3.8-4

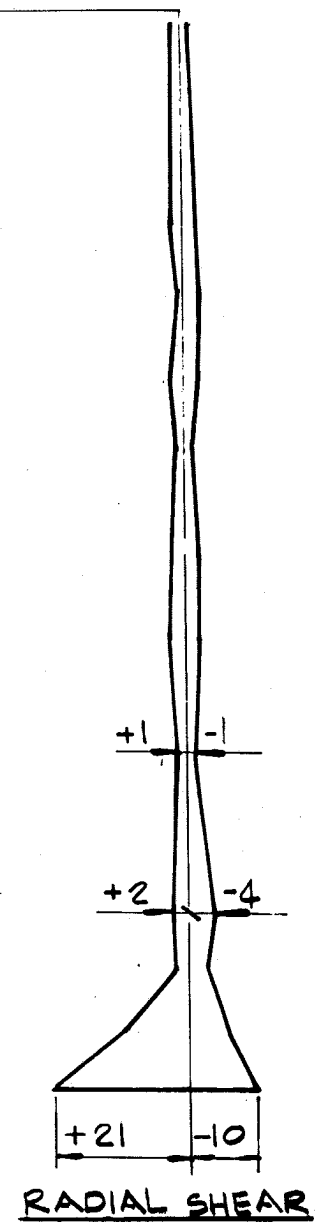
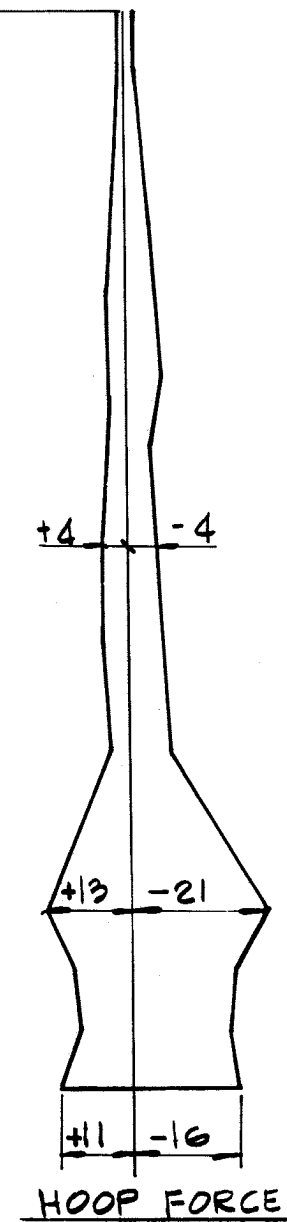
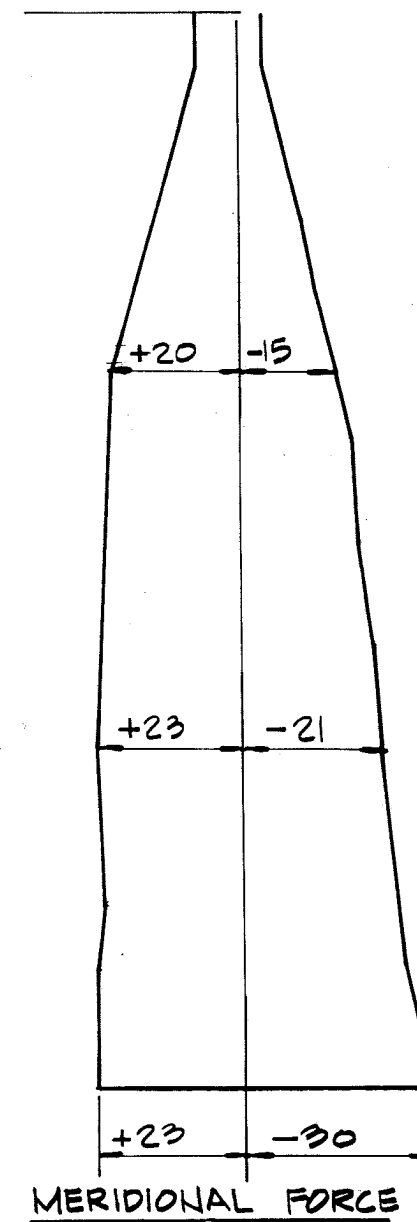
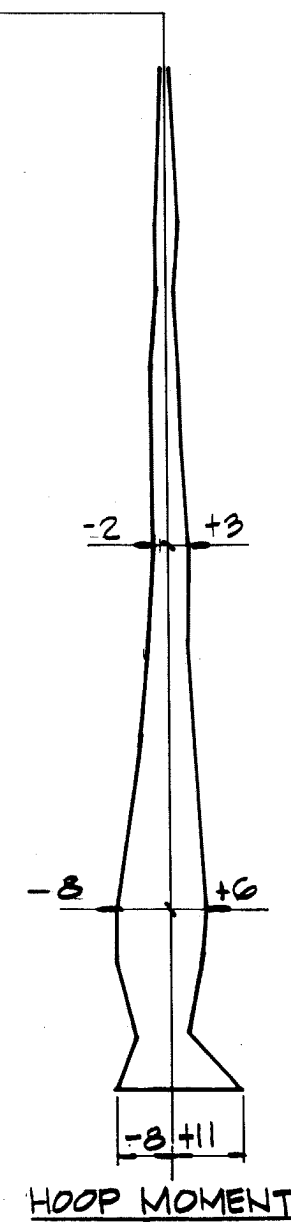
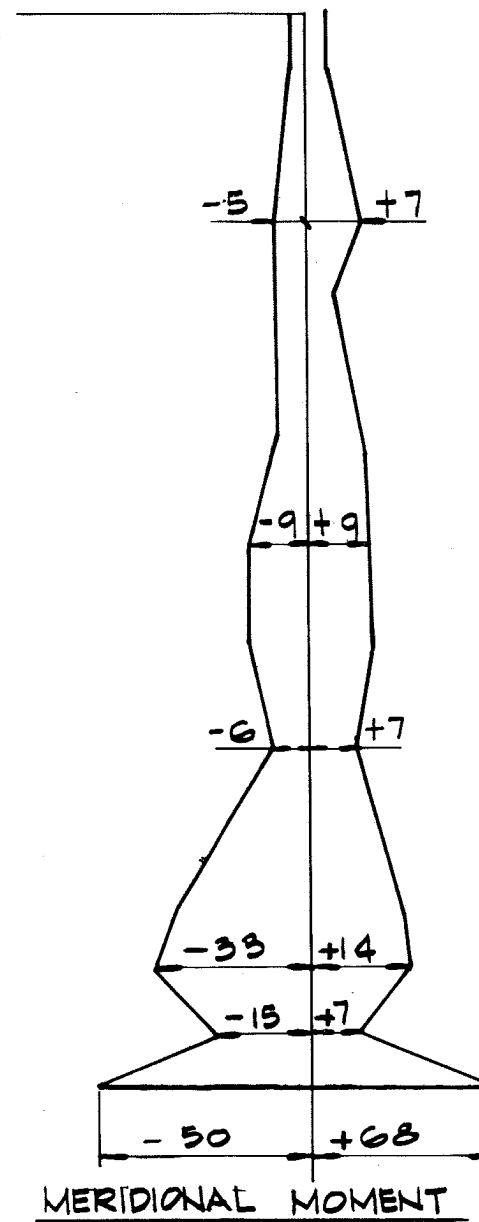
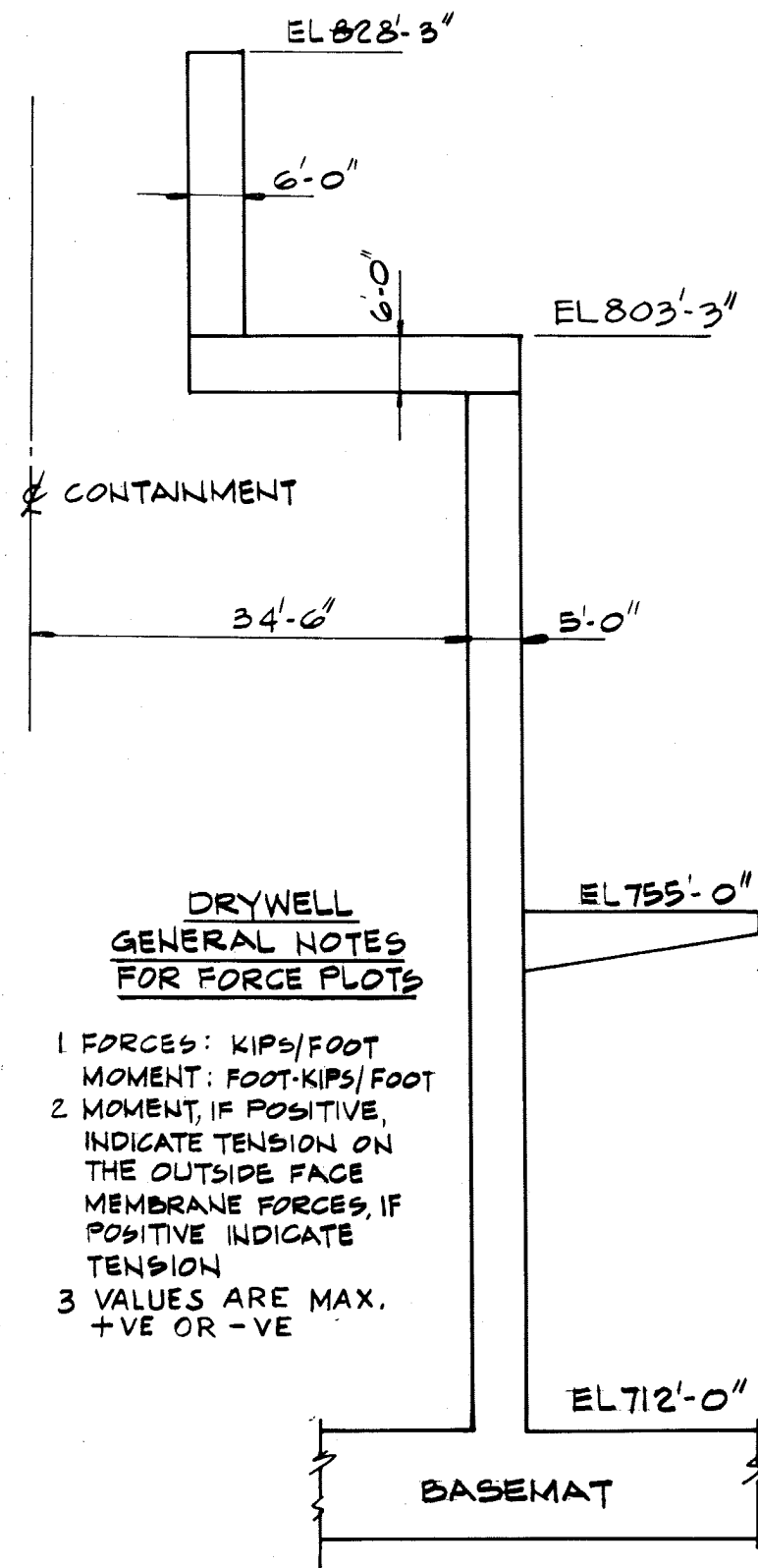
FORCE PLOTS CONTAINMENT WALL -
LOCA - CONDENSATION OSCILLATION



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UPDATED SAFETY ANALYSIS REPORT

FIGURE B3.8-5

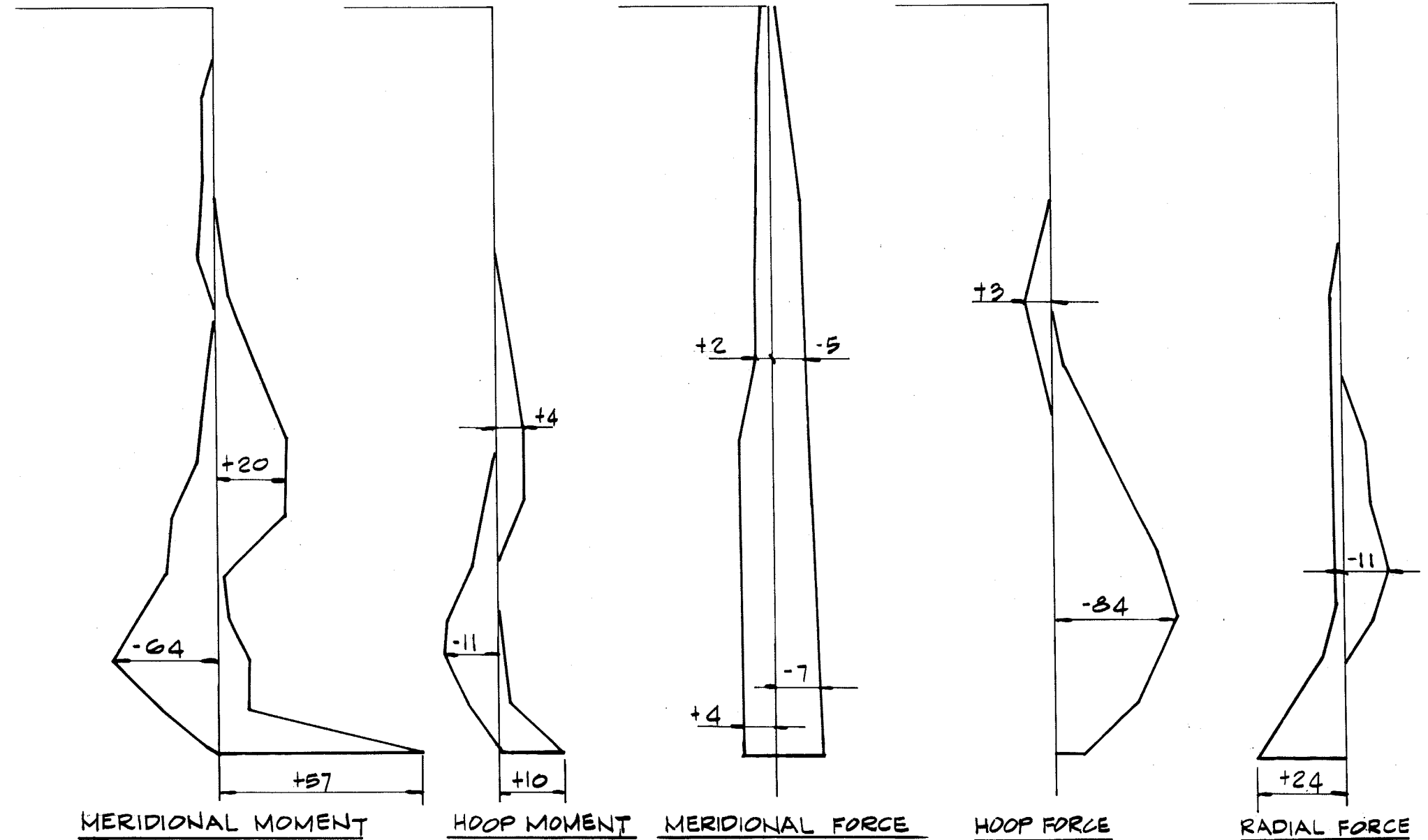
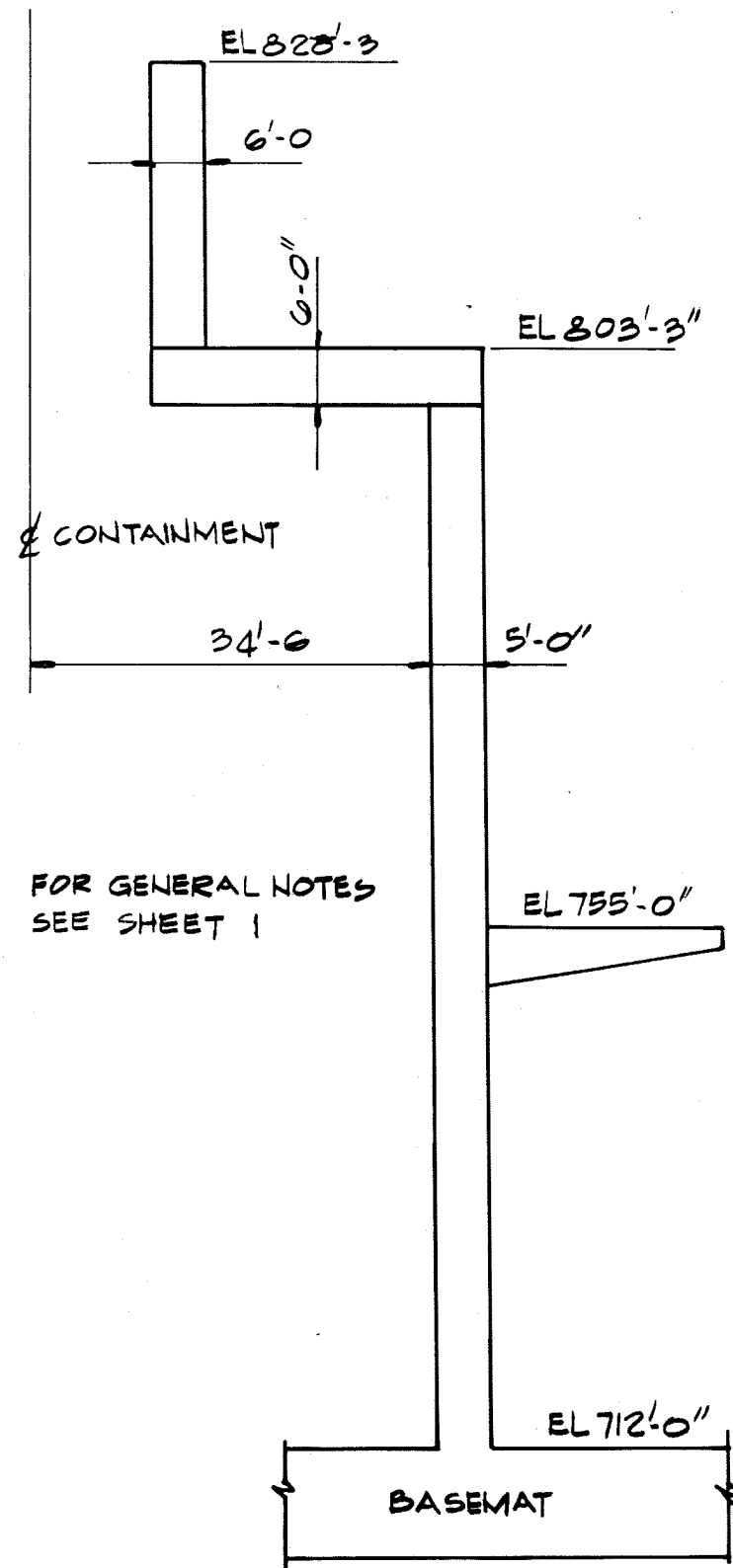
FORCE PLOTS CONTAINMENT
WALL - LOCA CHUGGING



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FIGURE B3.8-6

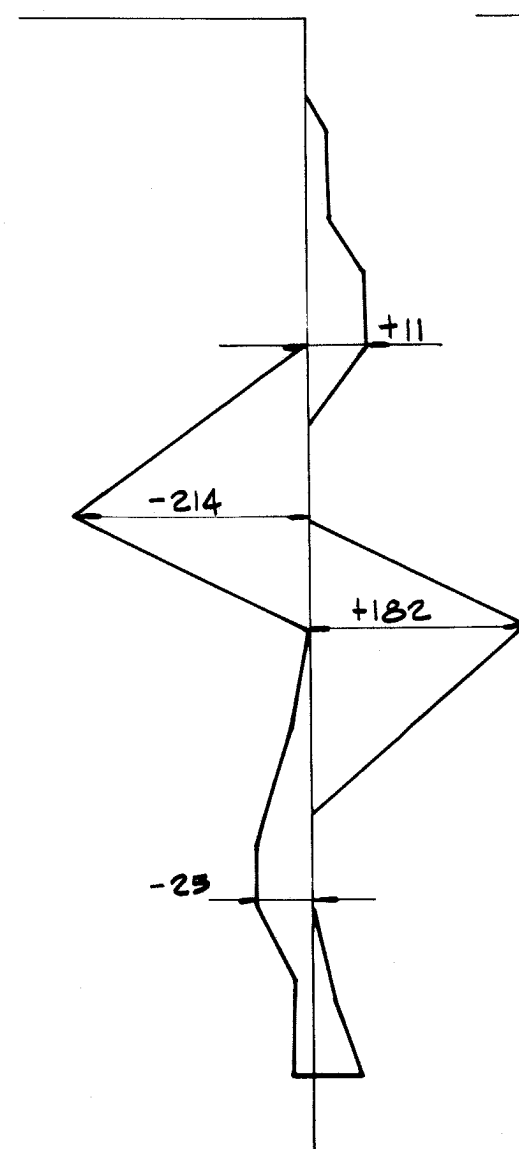
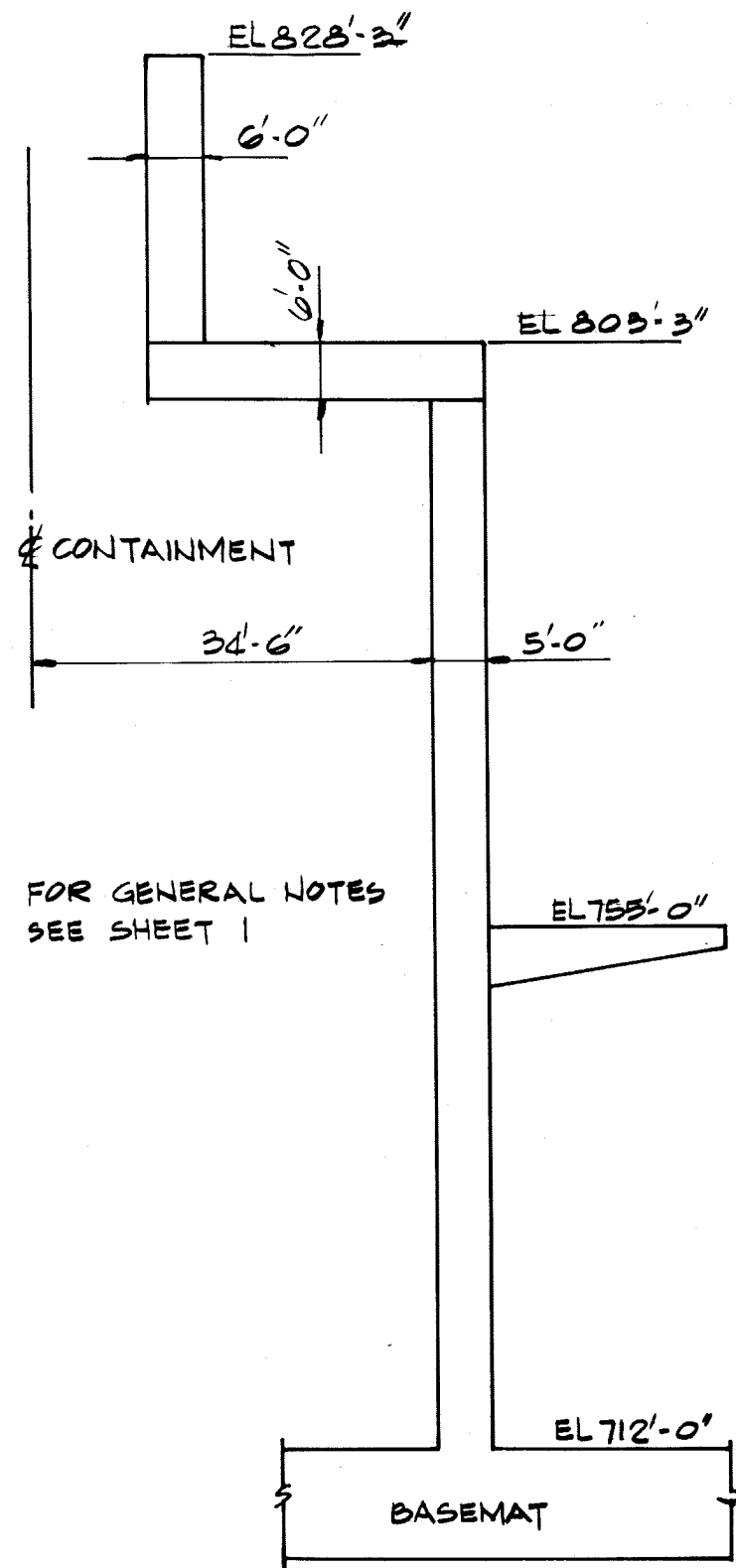
FORCE PLOTS DRYWELL SRV -
ALL VALVE



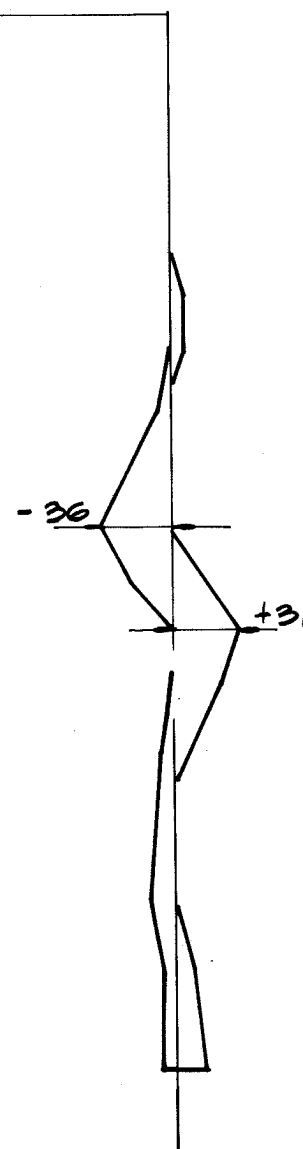
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FIGURE B3.8-7

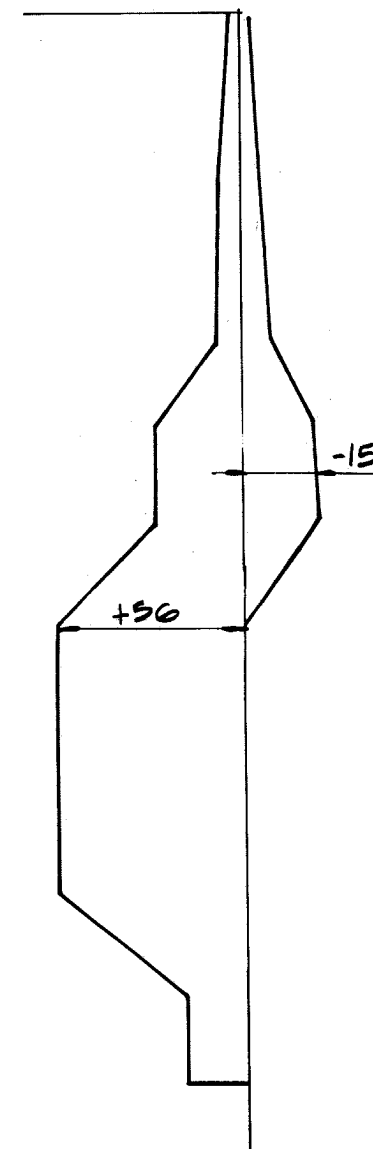
FORCE PLOTS DRYWELL LOCA BUBBLE



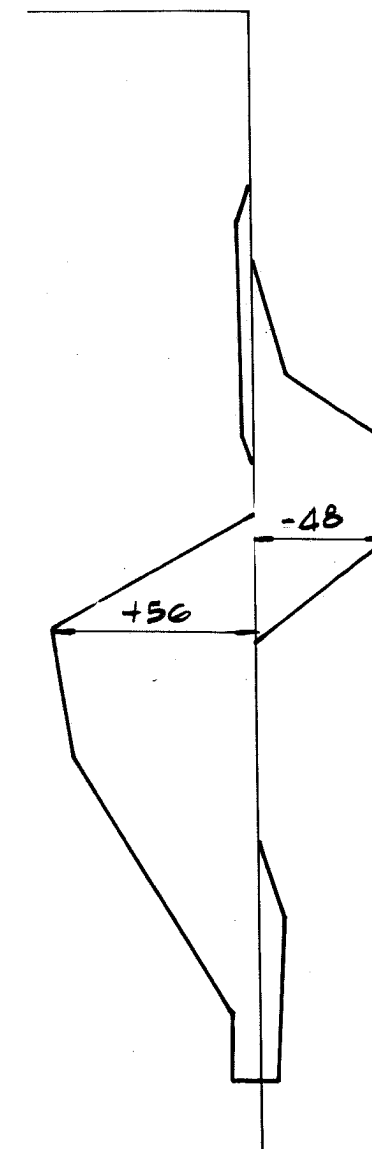
MERIDIONAL MOMENT



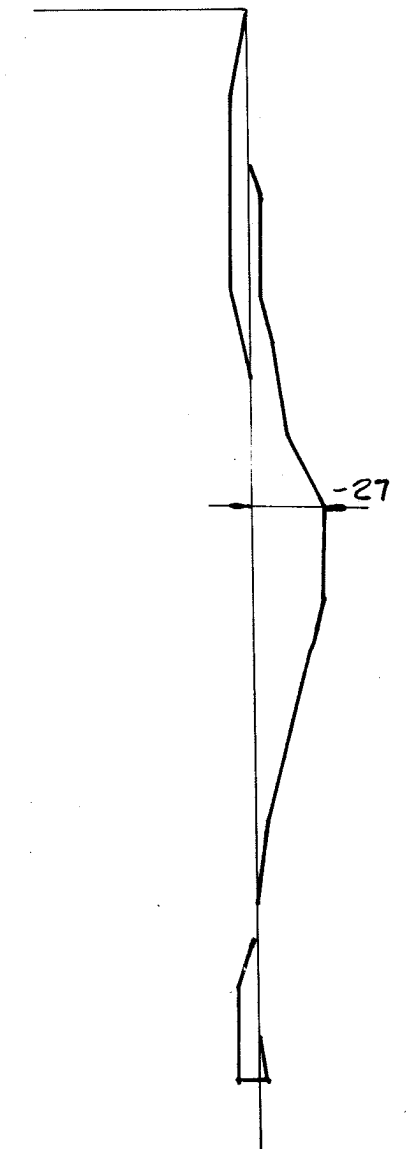
HOOP MOMENT



MERIDIONAL FORCE



HOOP FORCE

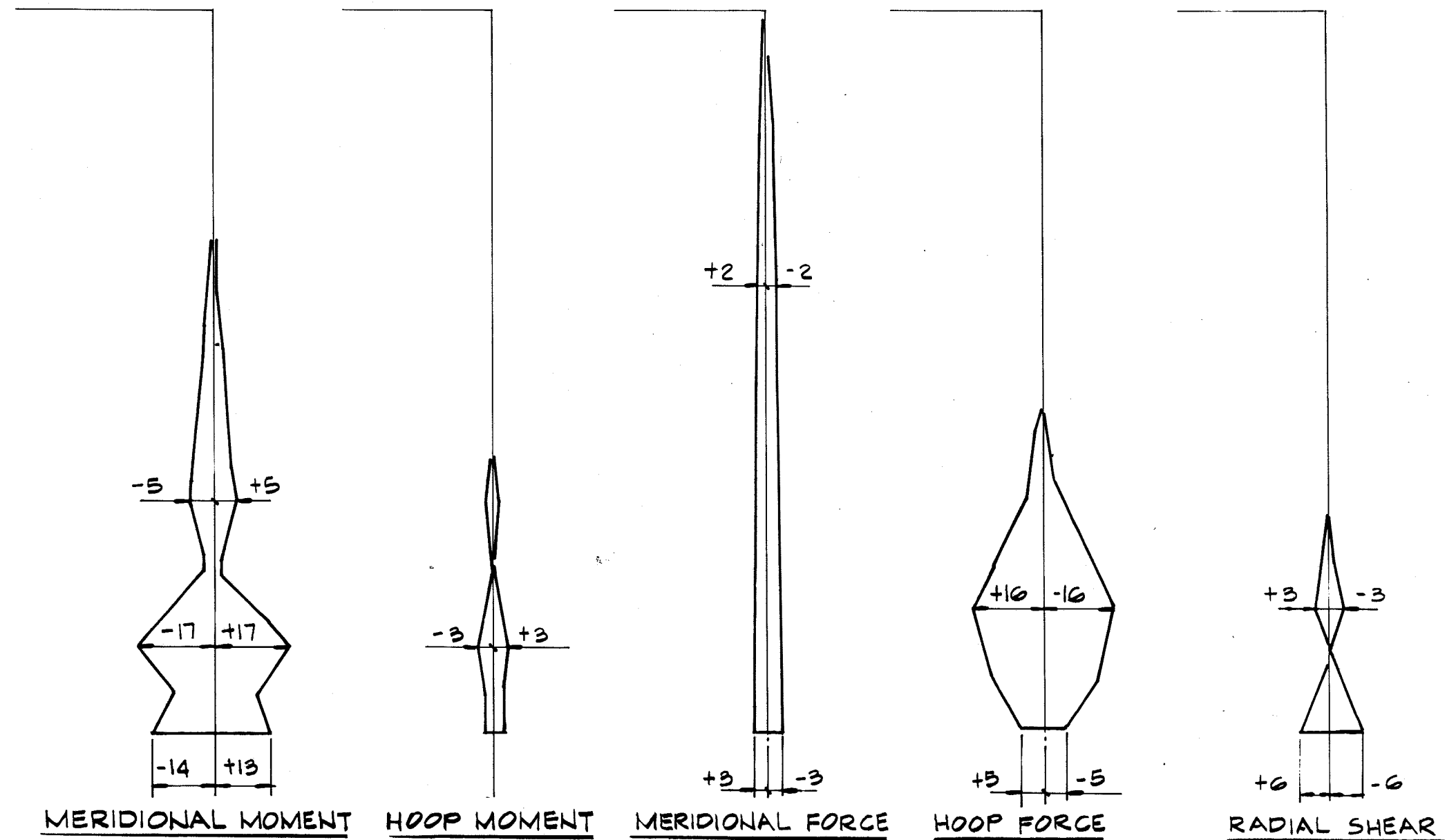
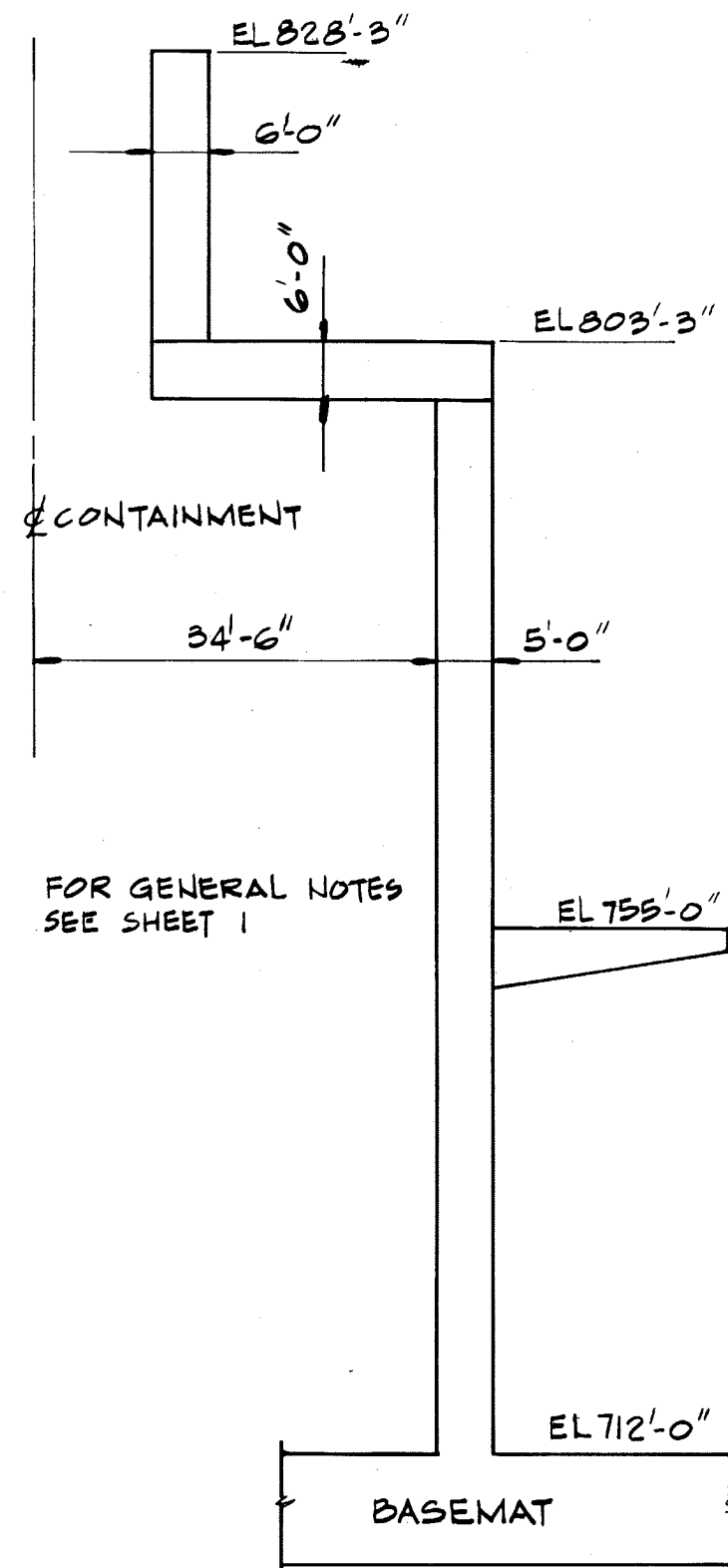


RADIAL SHEAR

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FIGURE B3.8-8

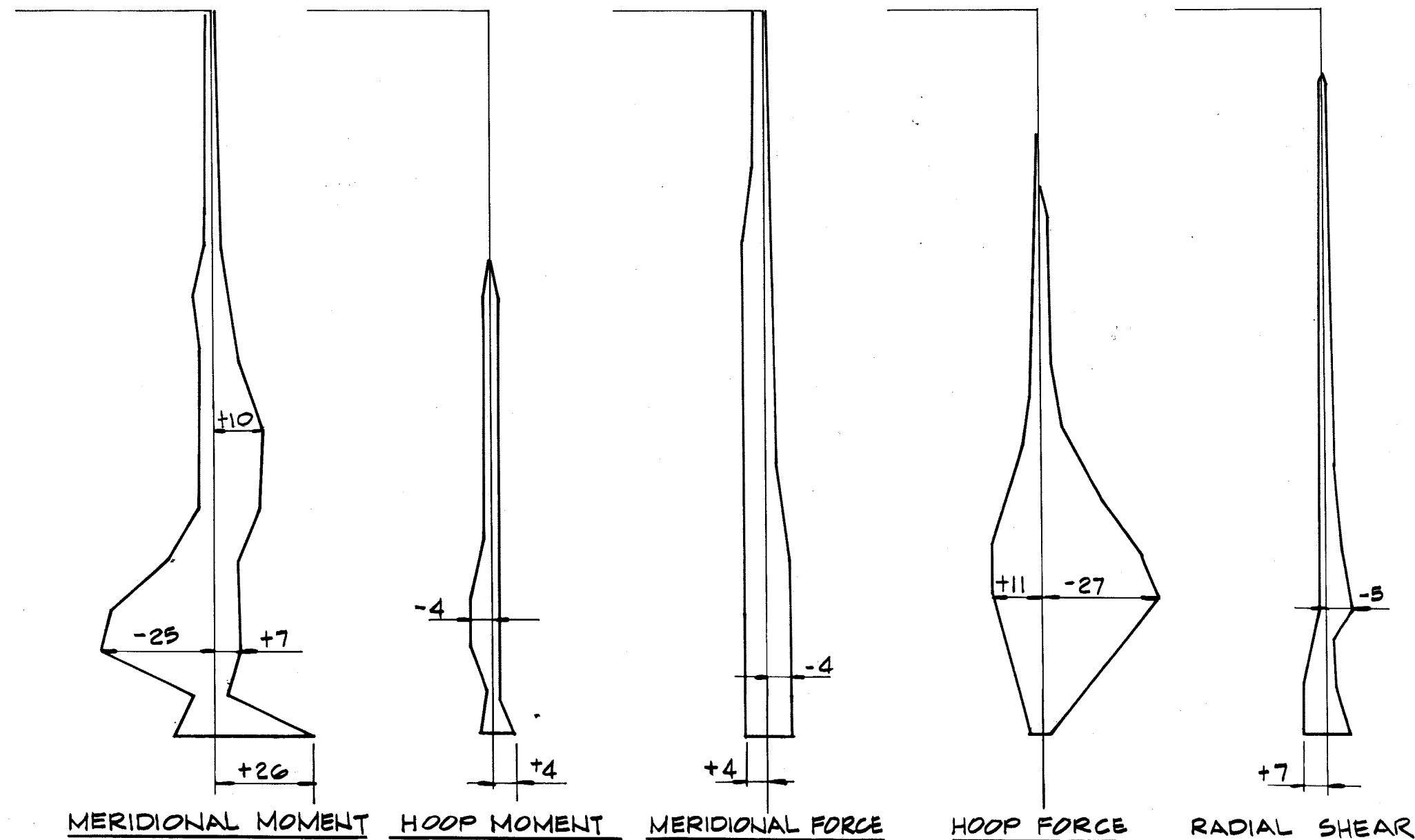
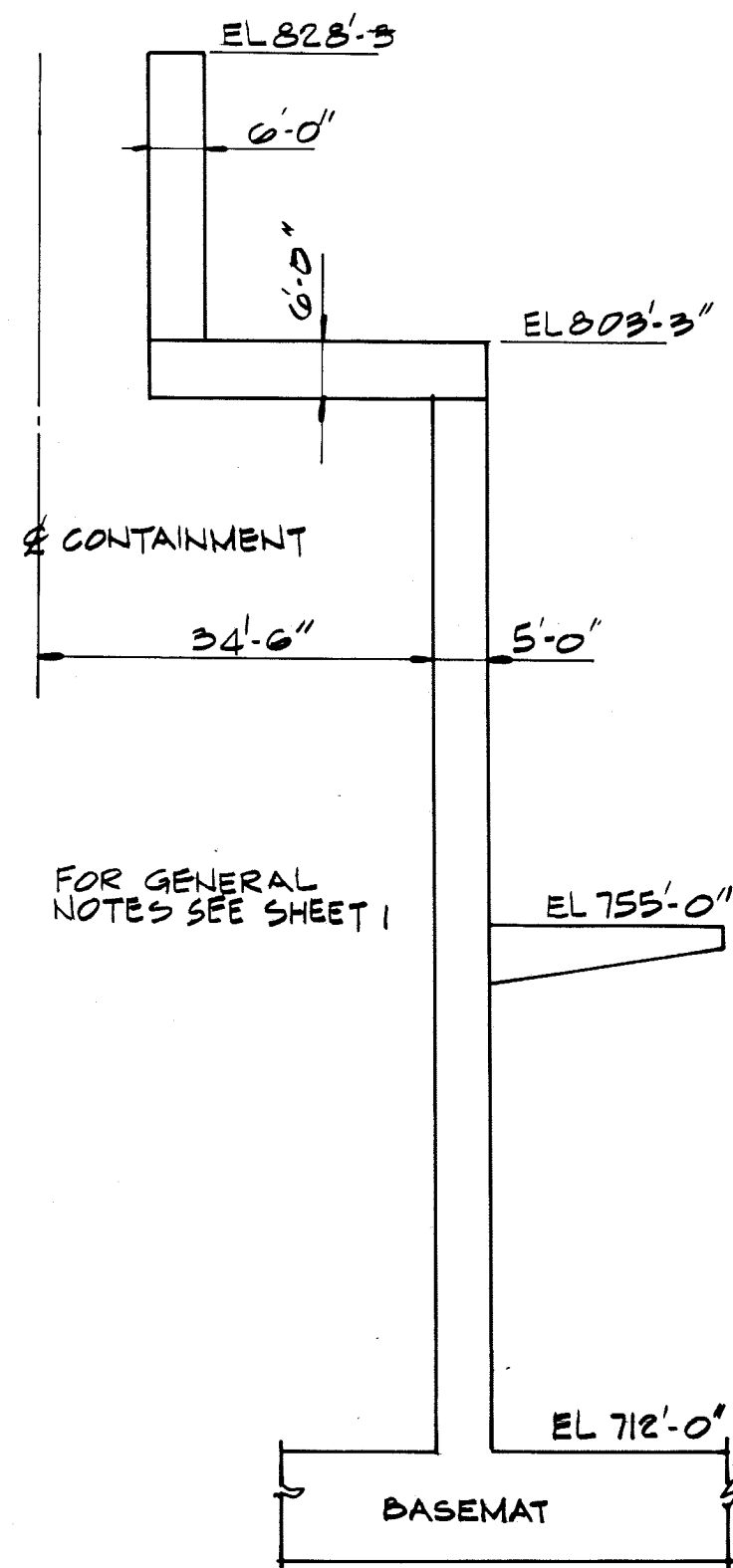
FORCE PLOTS DRYWELL LOCA -
FROTH IMPINGEMENT



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UPDATED SAFETY ANALYSIS REPORT

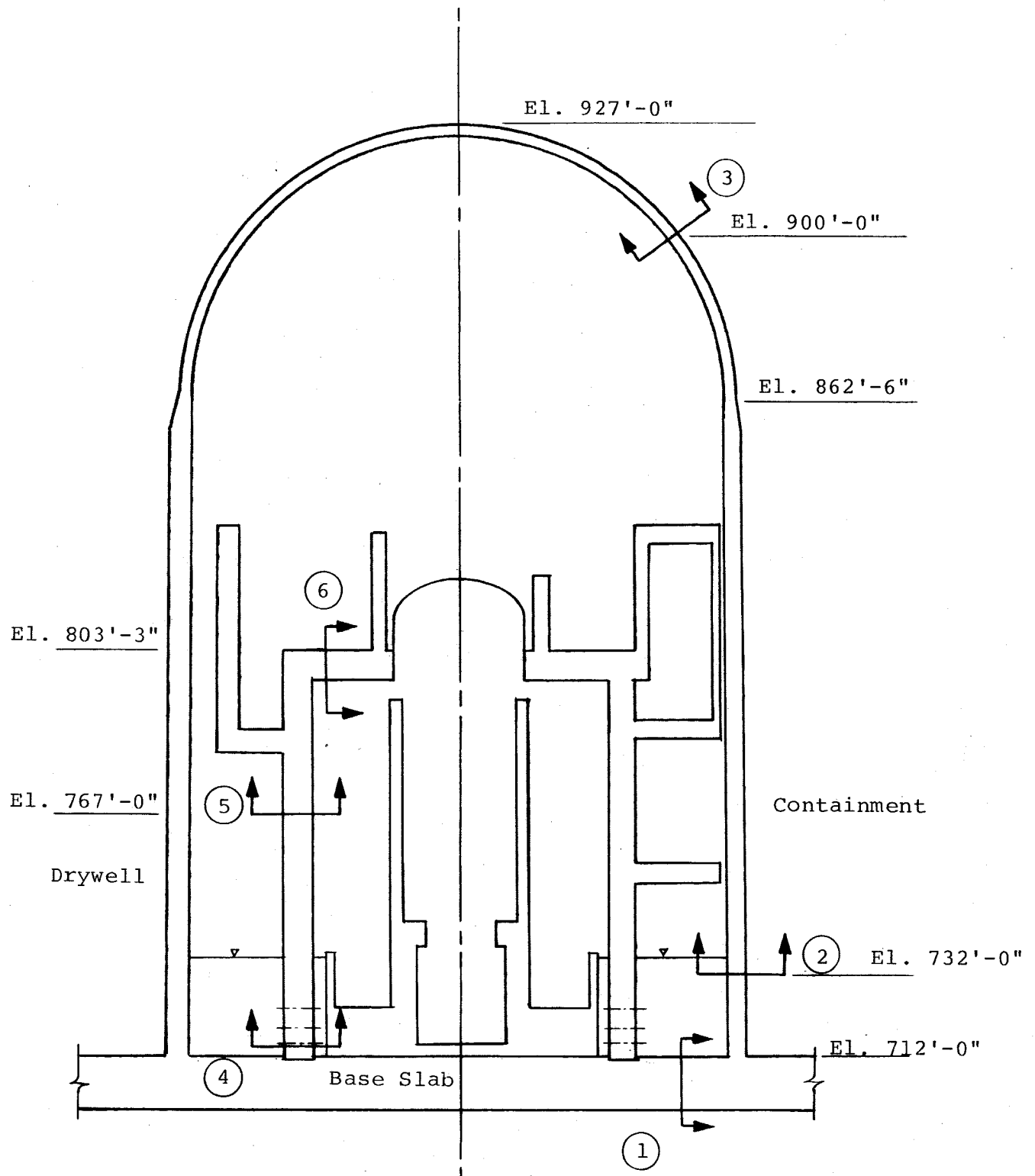
FIGURE B3.8-9

FORCE PLOTS DRYWELL LOCA -
CONDENSATION OSCILLATION



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FIGURE B3.8-10
FORCE PLOTS DRYWELL LOCA -
CHUGGING



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FIGURE B3.8-11

LOCATION OF DESIGN
ASSESSMENT SECTIONS

FIGURES 3.9-1 THROUGH 3.9-5
HAVE BEEN DELETED

CPS-USAR

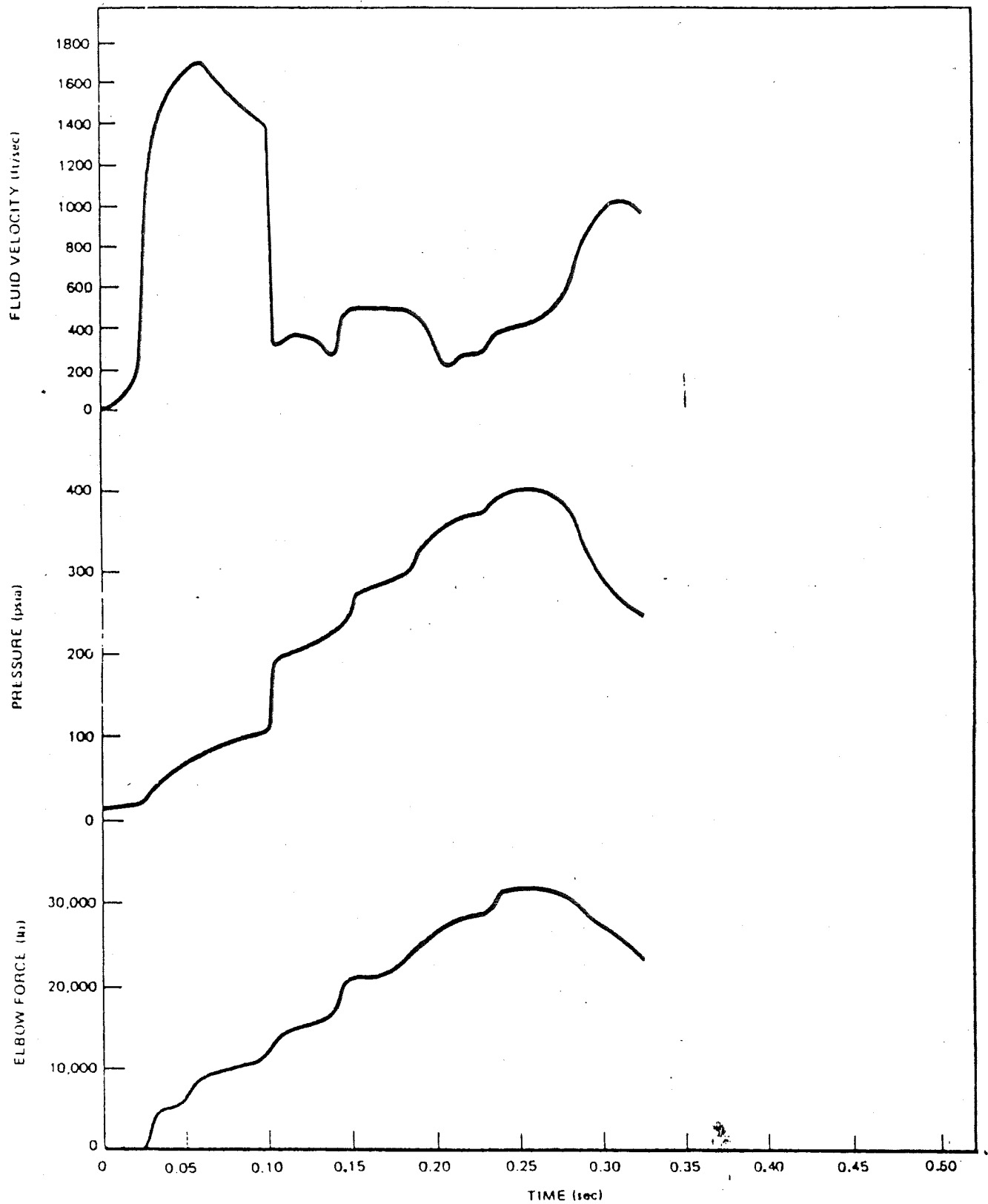


Figure 3.9-6. Typical Relief Valve Transient

CPS-USAR

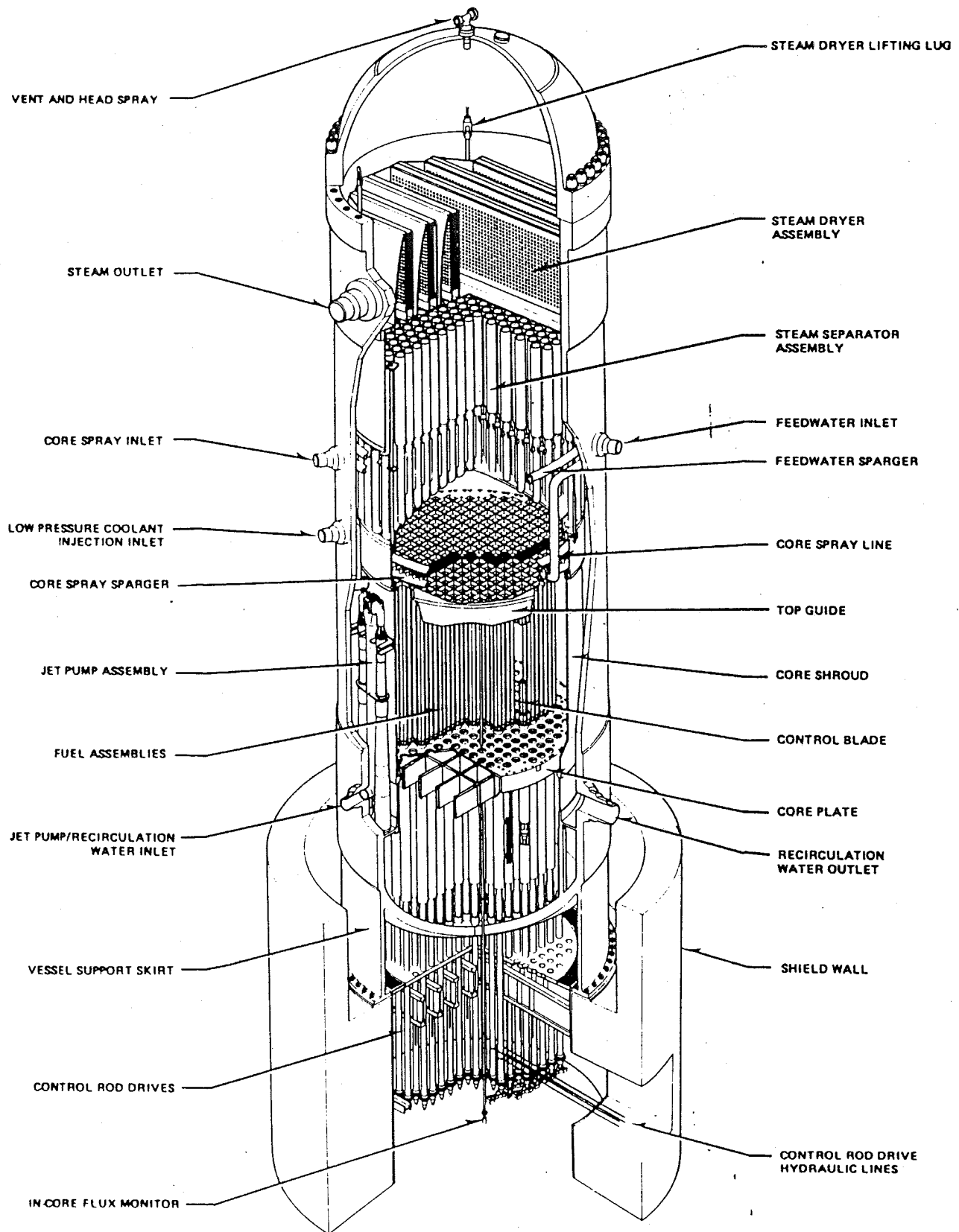


Figure 3.9-7. Reactor Vessel Cutaway

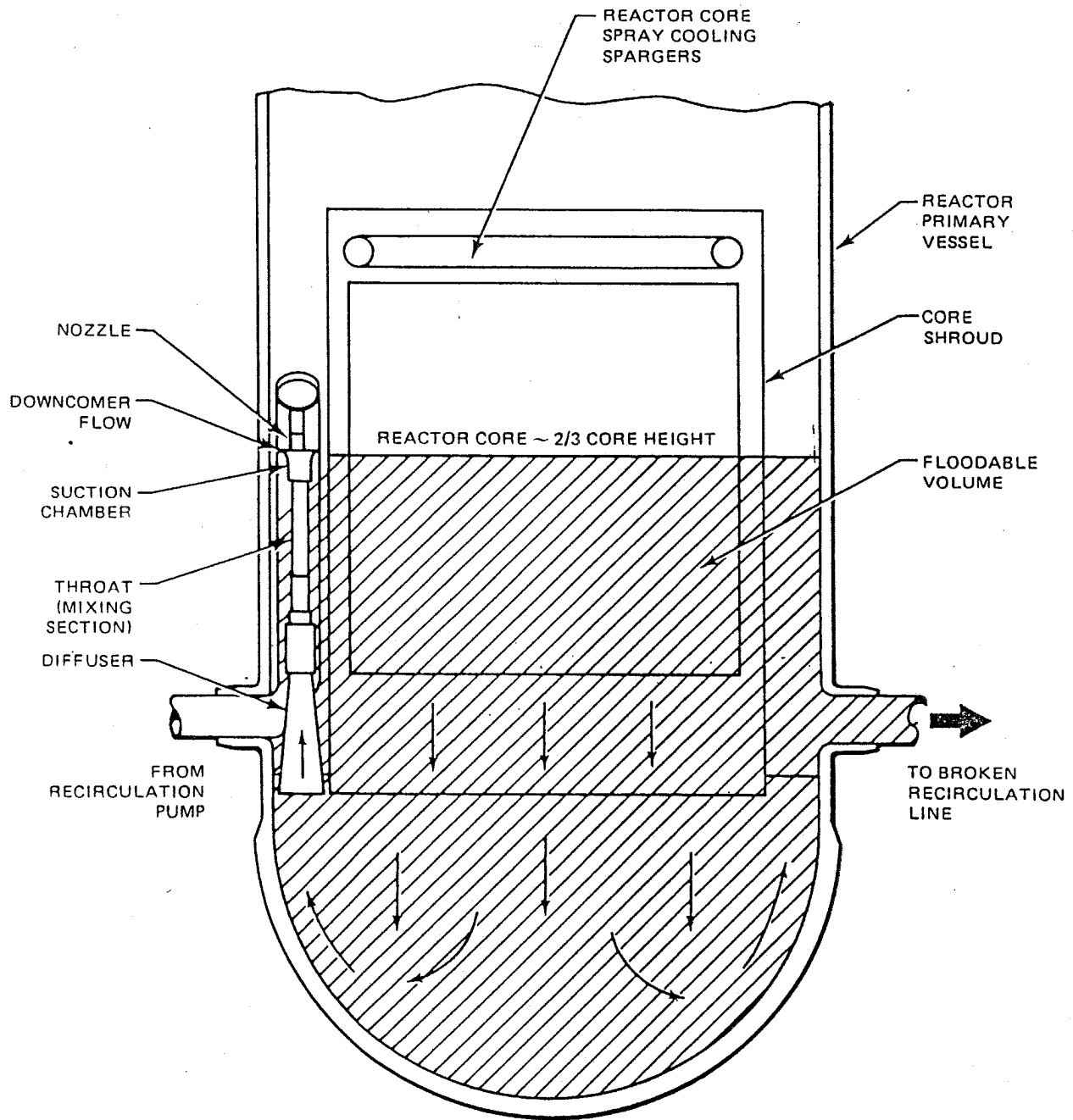


Figure 3.9-8 REACTOR INTERNALS FLOW PATHS

CPS-USAR

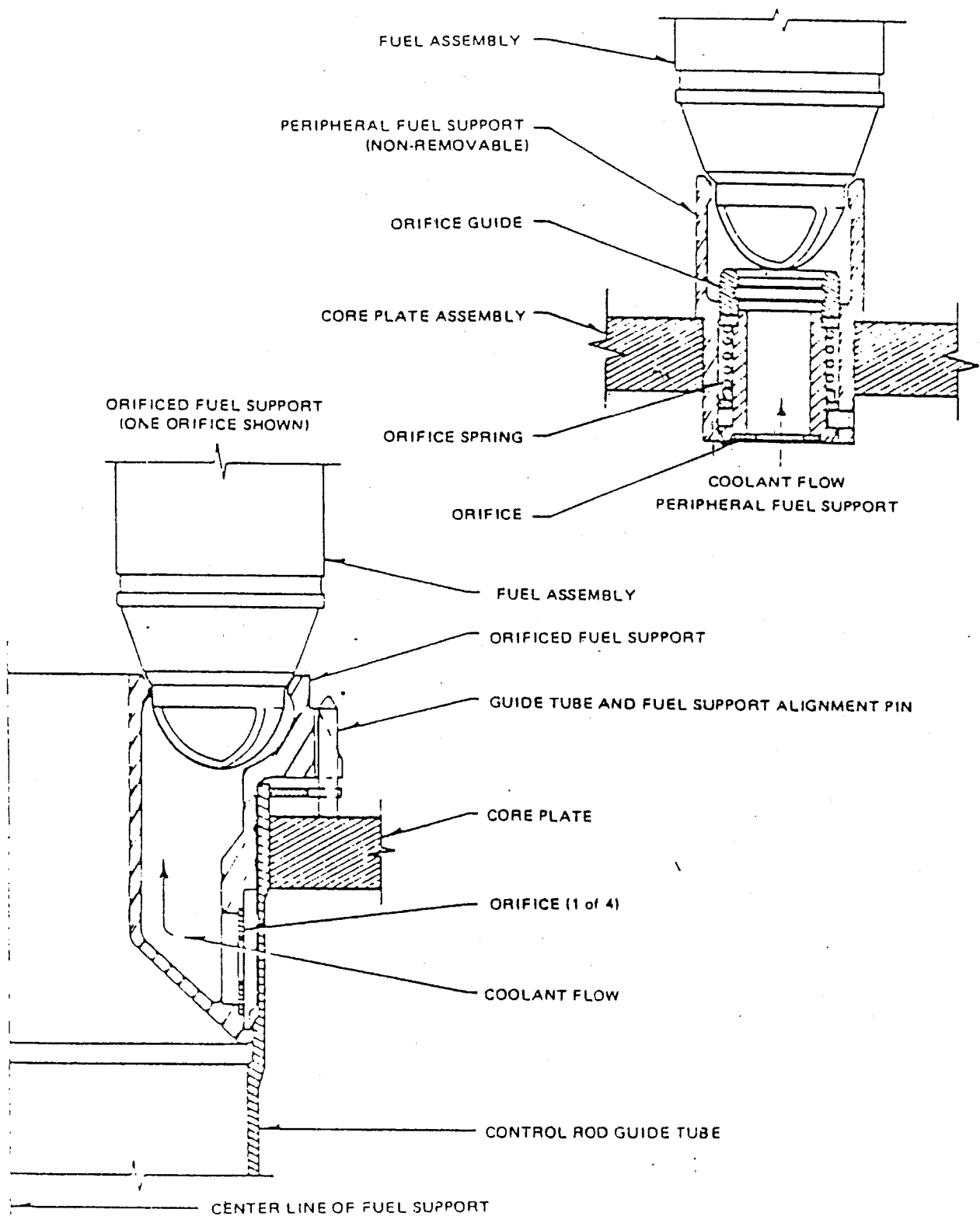


Figure 3.9-9. Fuel Support Pieces

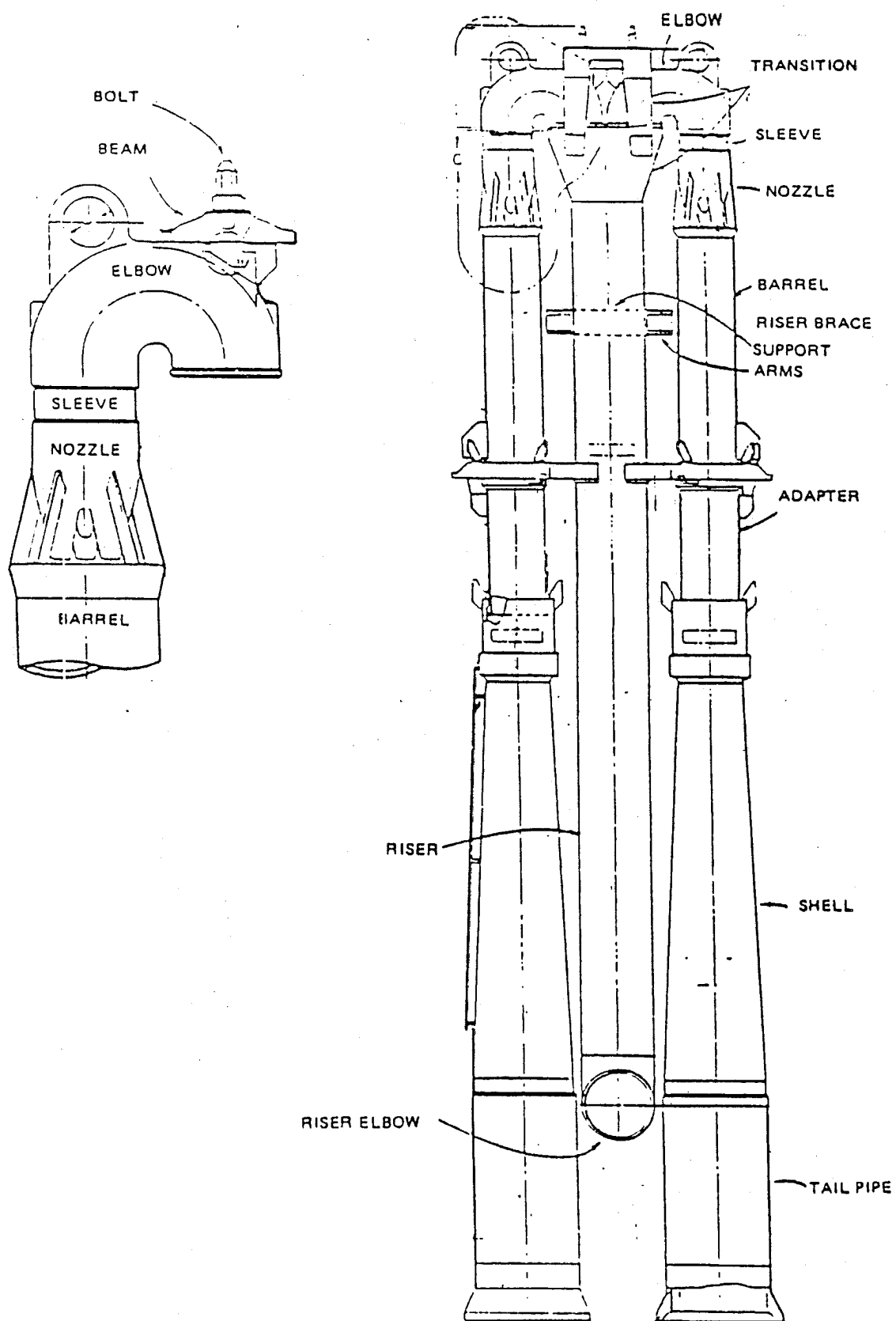


Figure 3.9-10. Jet Pump

CPS-USAR

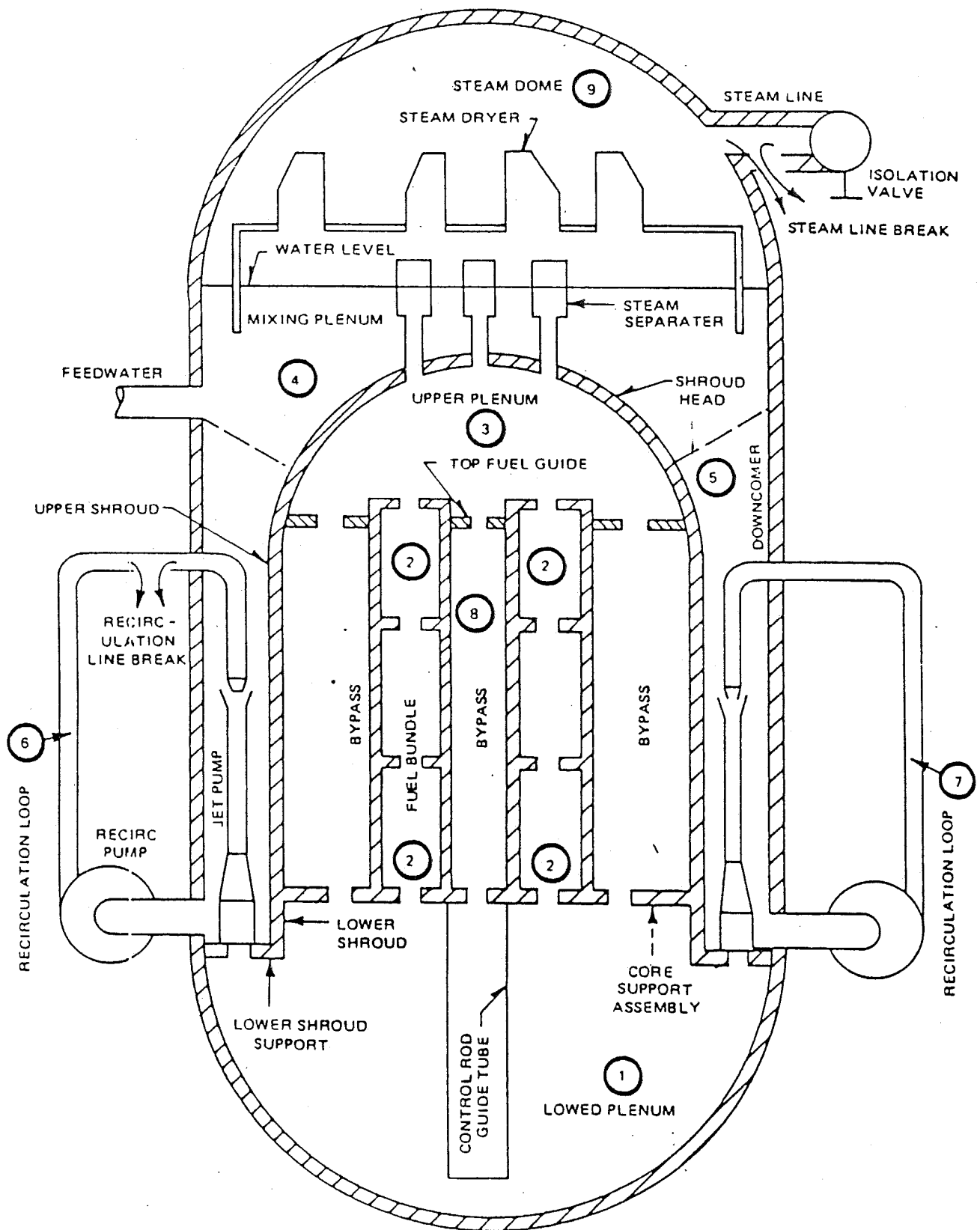
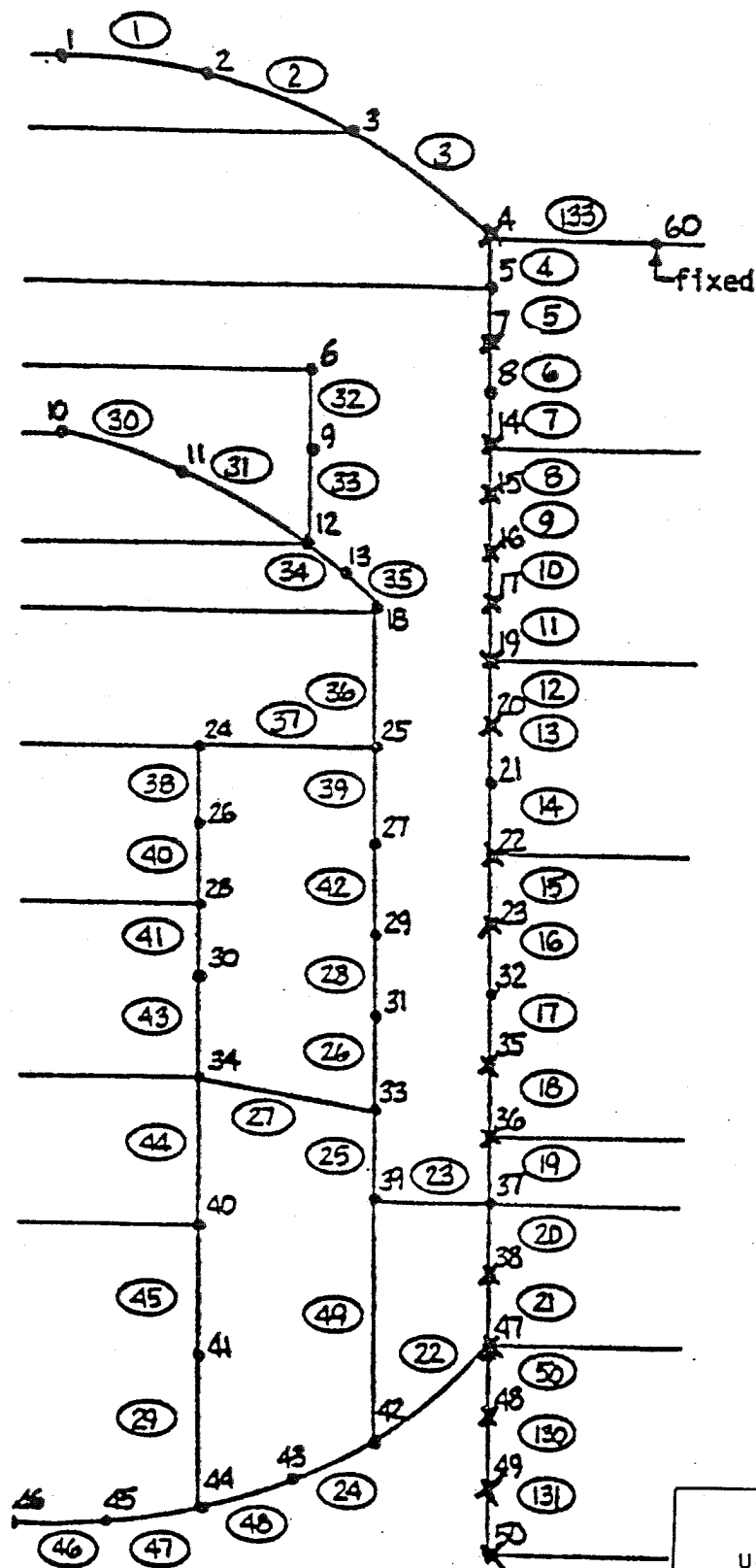


Figure 3.9-11. Pressure Nodes Used for Depressurization Analysis

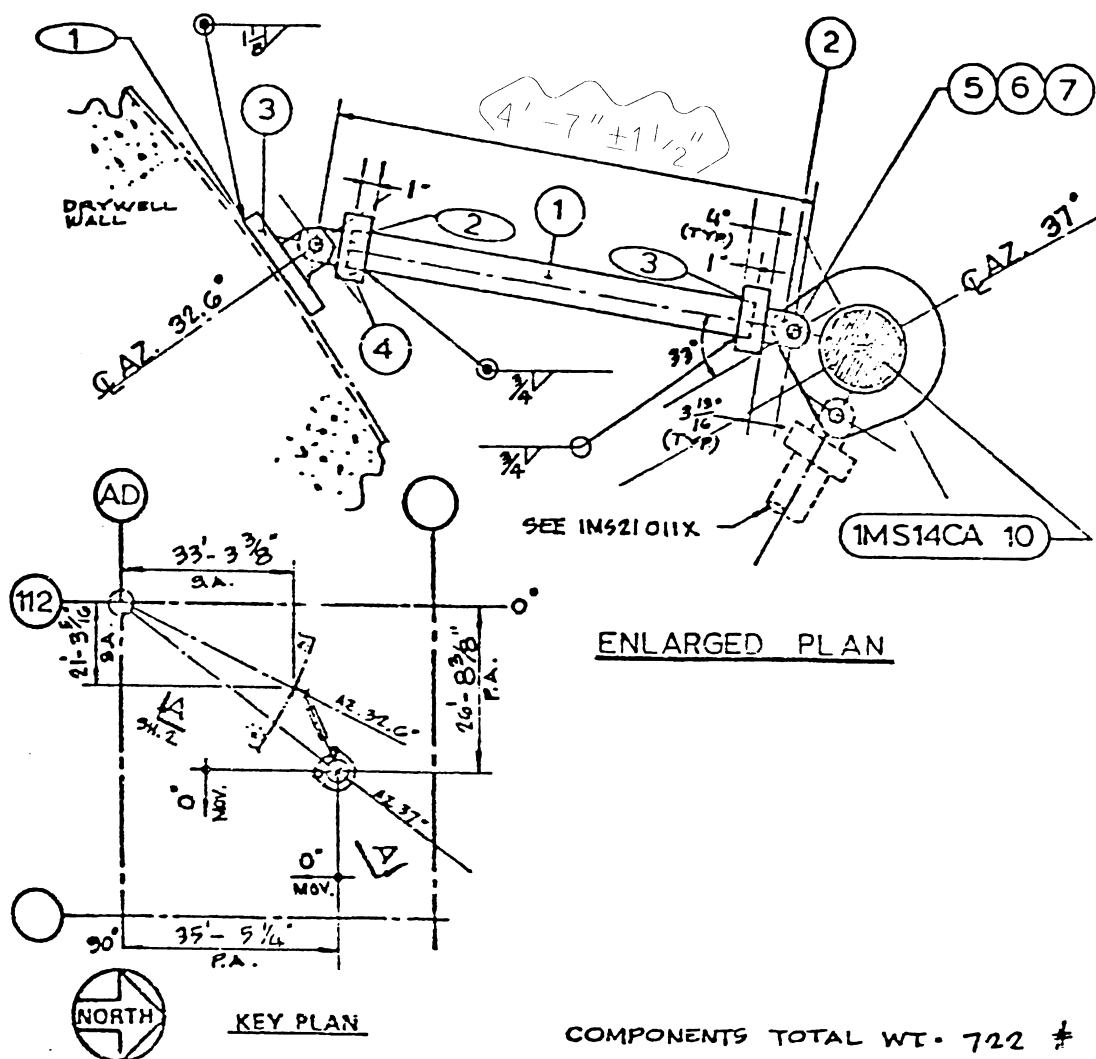


| LEGEND | |
|--------|---------------|
| | SHELL ELEMENT |
| | MASS POINT |

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FIGURE 3.9-12

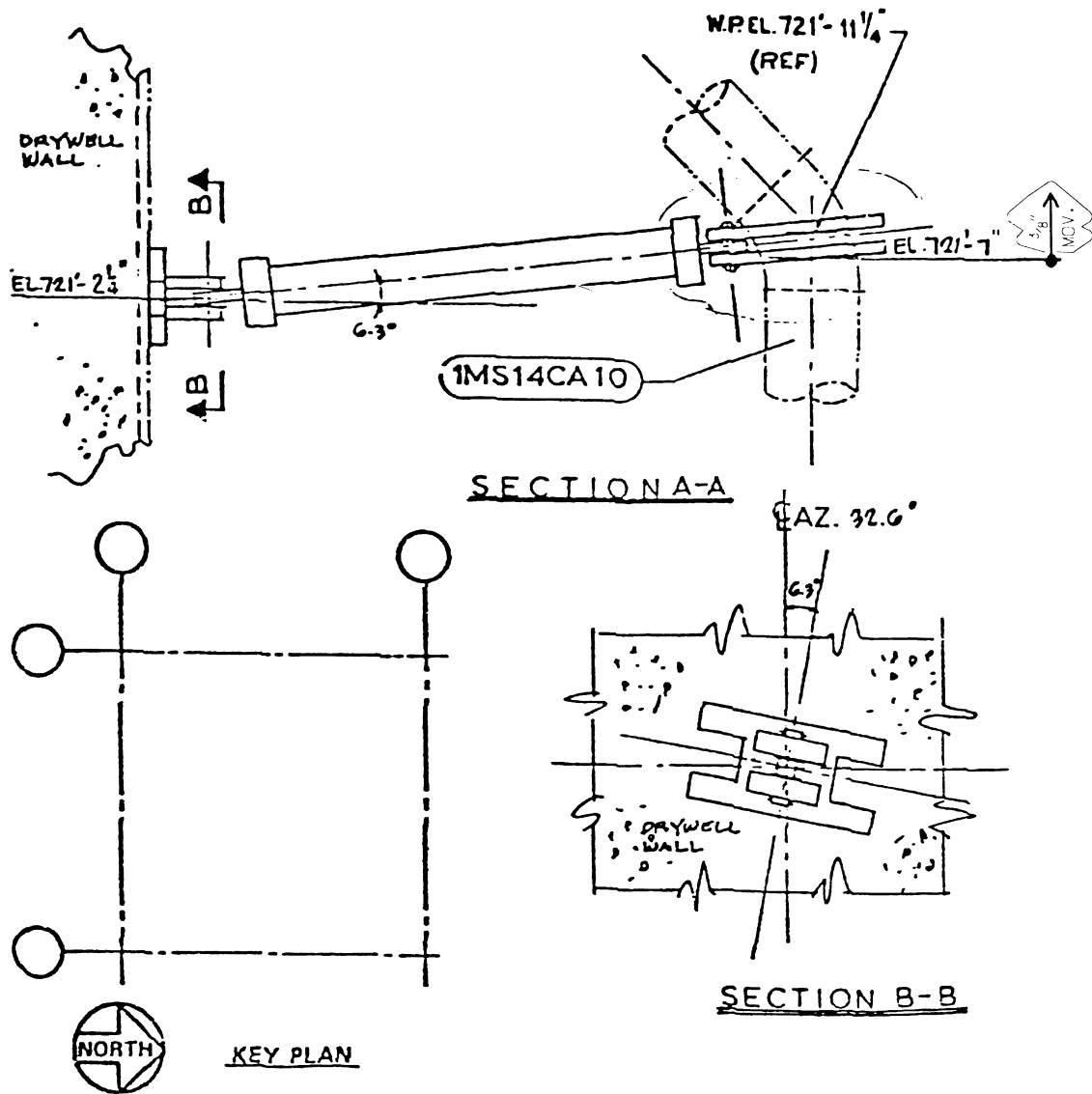
Q & R MEB (DSER) 67B
REACTOR PRESSURE VESSELS AND
INTERNALS HORIZONTAL SHELL MATH
MODEL



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Figure 3.9-13
(Q & R 210.01)

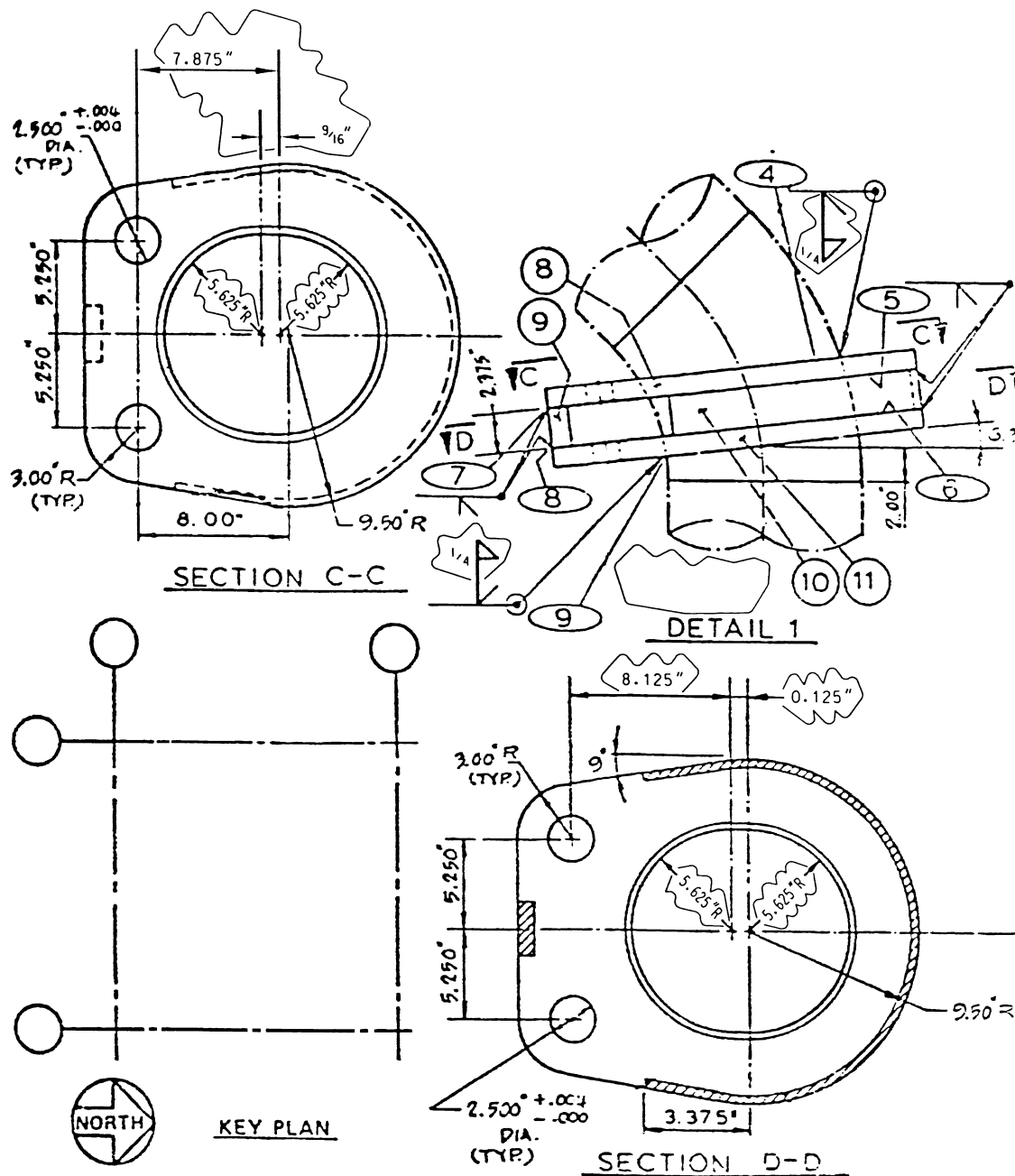
SRV DISCHARGE LINE SUPPORT
WELDED ATTACHMENT DETAIL
SHEET 1 OF 4



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Figure 3.9-13
(Q & R 210.01)

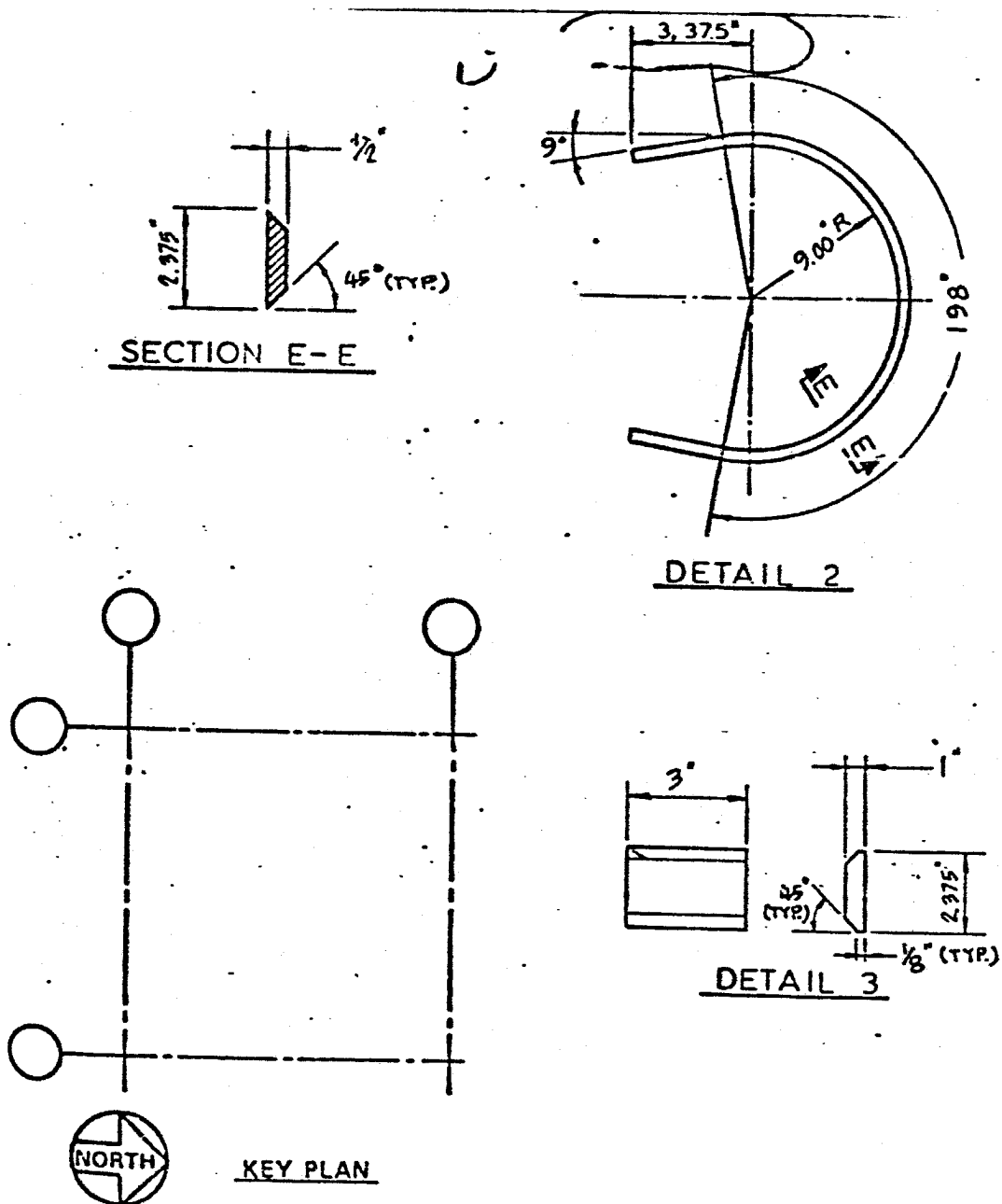
SRV DISCHARGE LINE SUPPORT
WELDED ATTACHMENT DETAIL
SHEET 2 OF 4



CLINTON POWER STATION
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Figure 3.9-13
(Q & R 210.01)
SRV DISCHARGE LINE SUPPORT
WELDED ATTACHMENT DETAIL

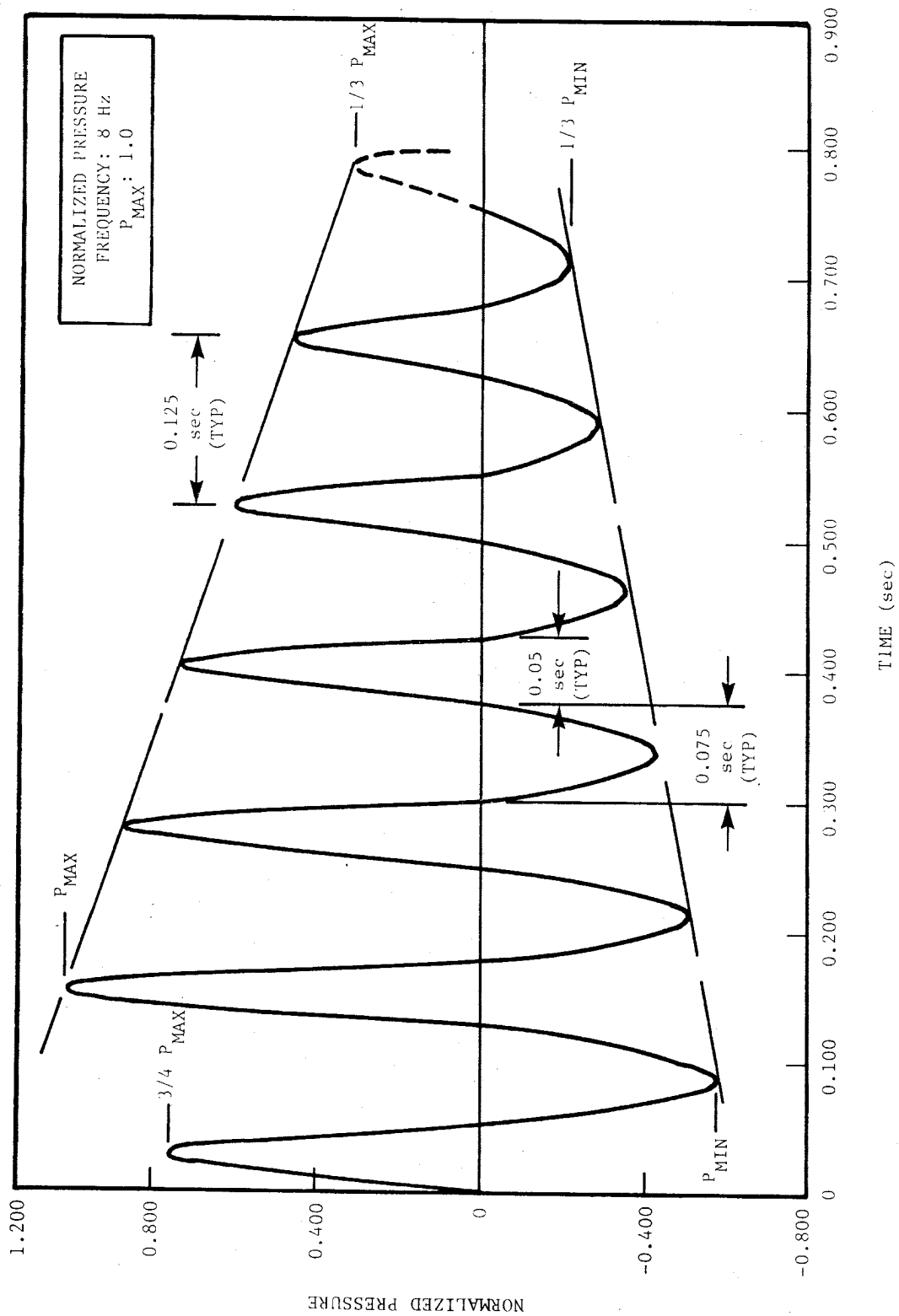
SHEET 3 OF 4



CLINTON POWER STATION
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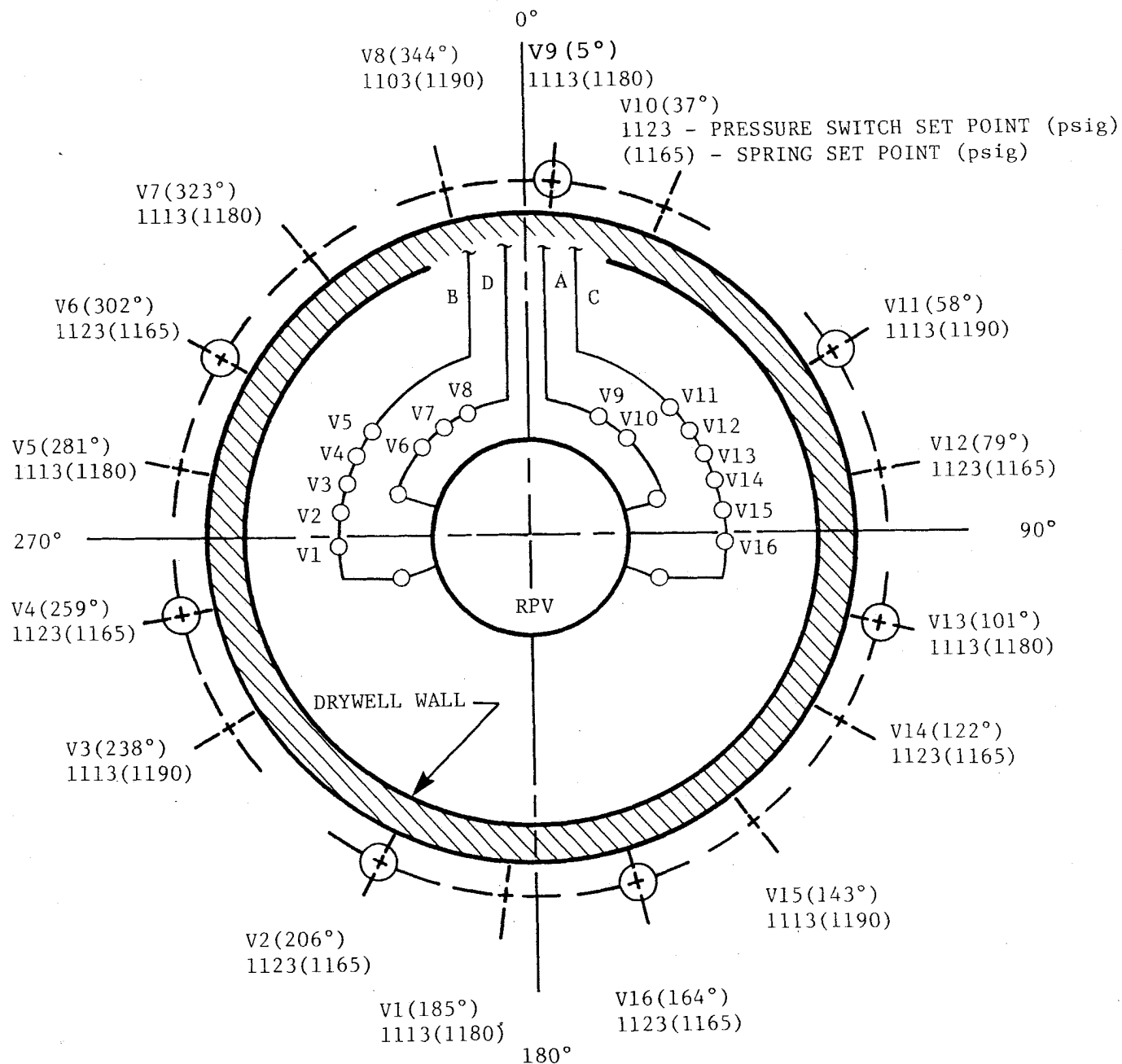
Figure 3.9-13
(Q & R 210.01)

SRV DISCHARGE LINE SUPPORT
WELDED ATTACHMENT DETAIL
SHEET 4 OF 4



CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT

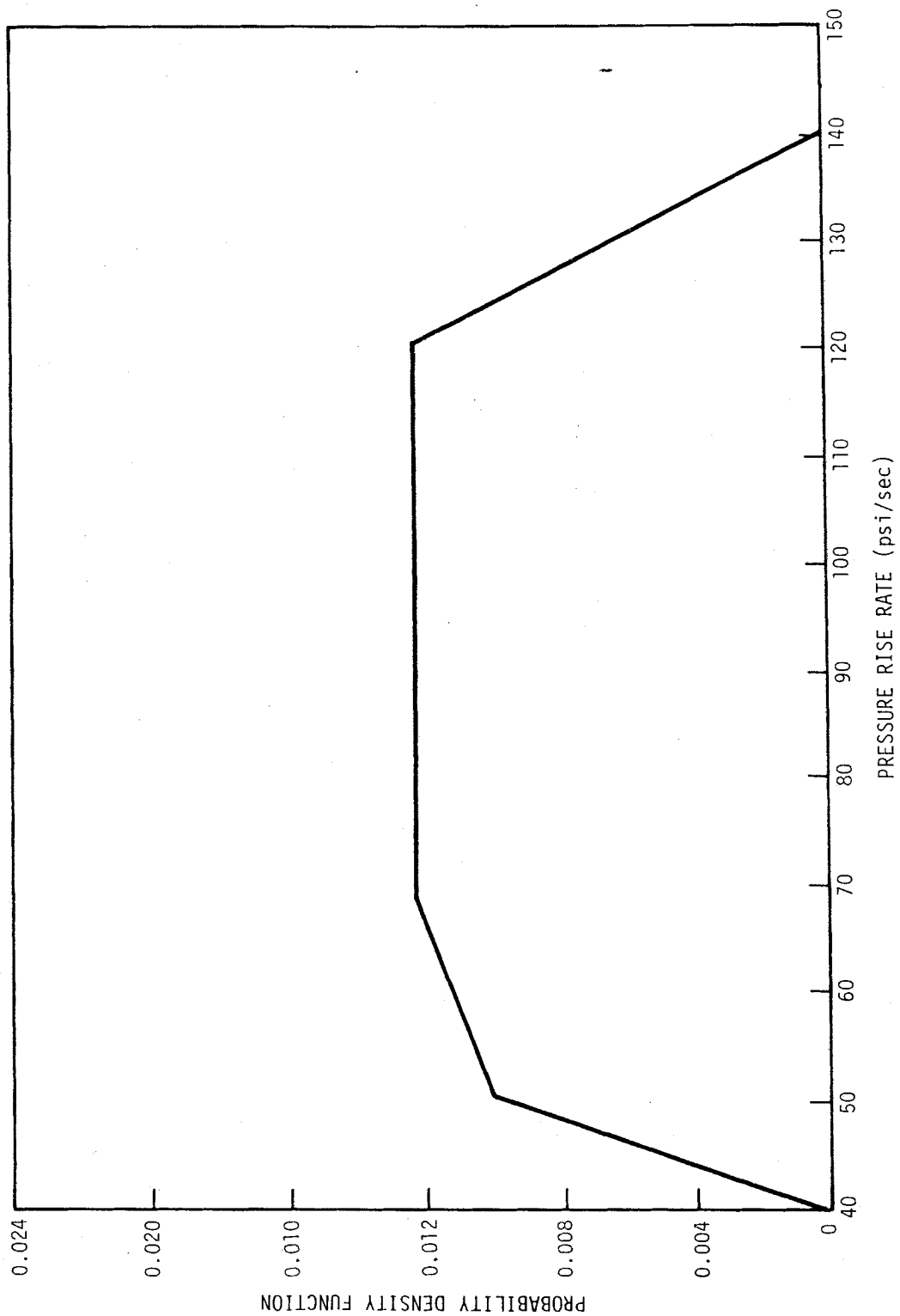
FIGURE A3.9-1
QUENCHER BUBBLE PRESSURE TIME HISTORY



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.9-2

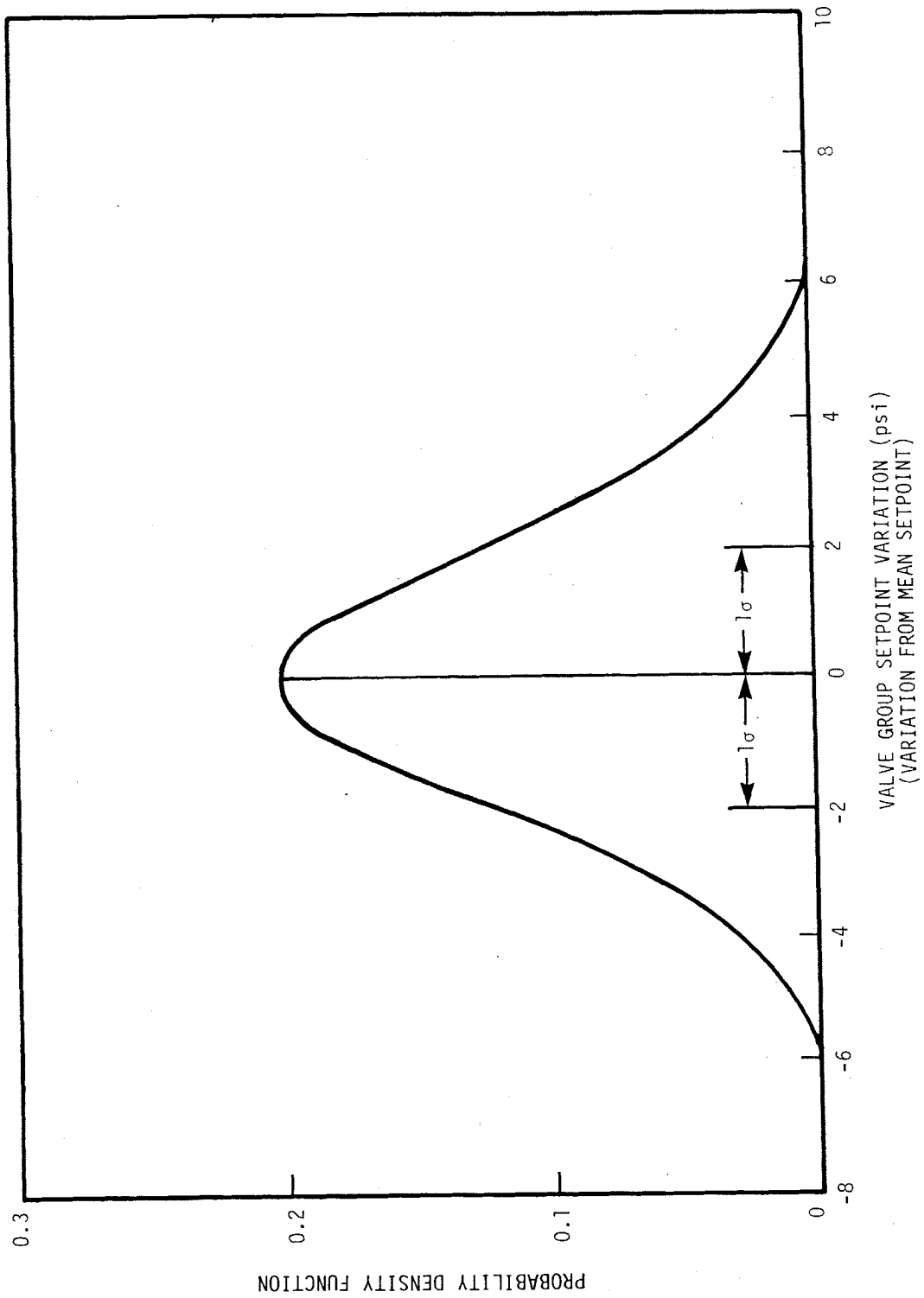
**S/R VALVE DISCHARGE LOCATIONS FOR
218-624 PLANT**



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FIGURE A3.9-3

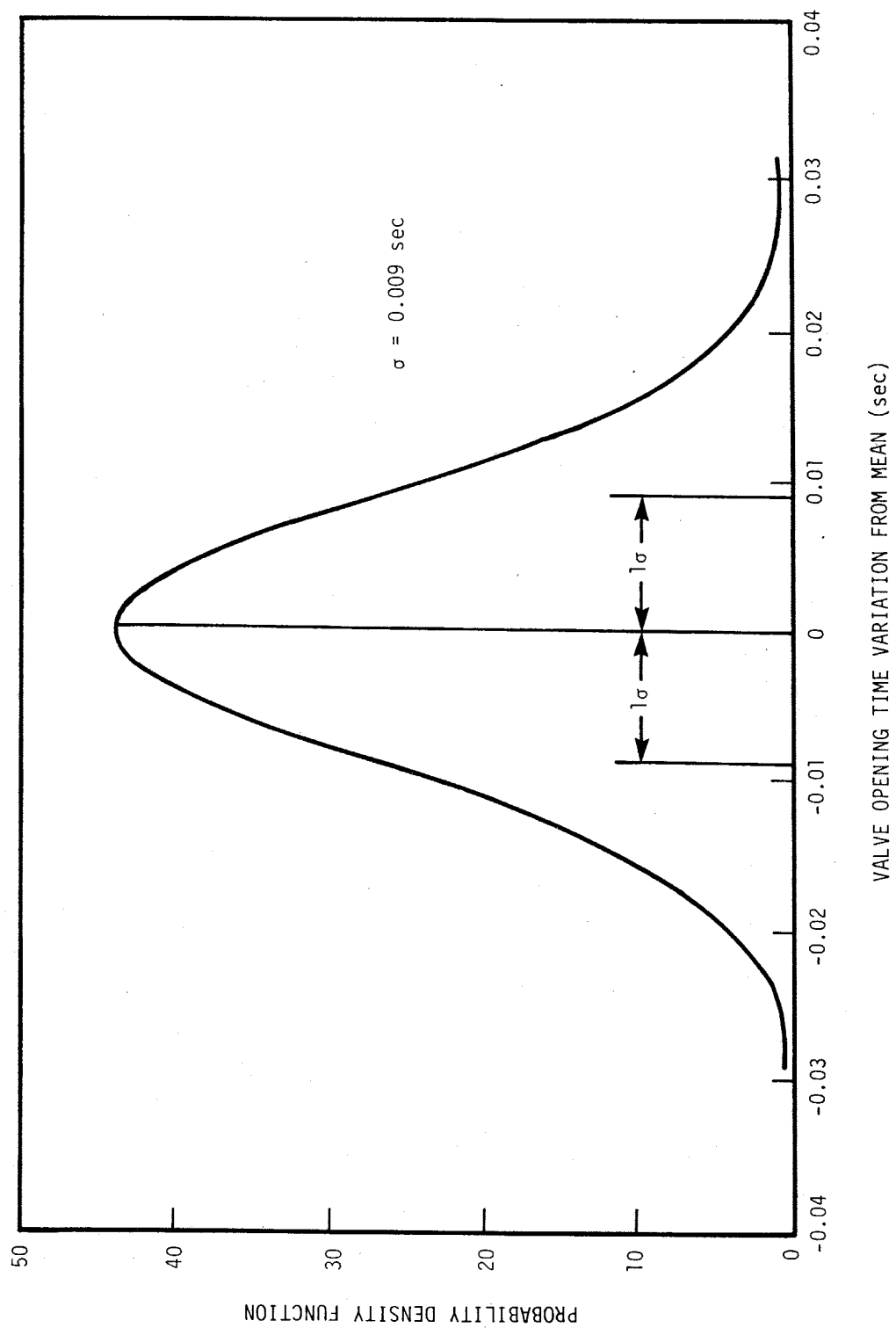
**PROBABILITY DENSITY FUNCTION VS.
PRESSURE RISE RATE**



**CLINTON POWER STATION
UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.9-4

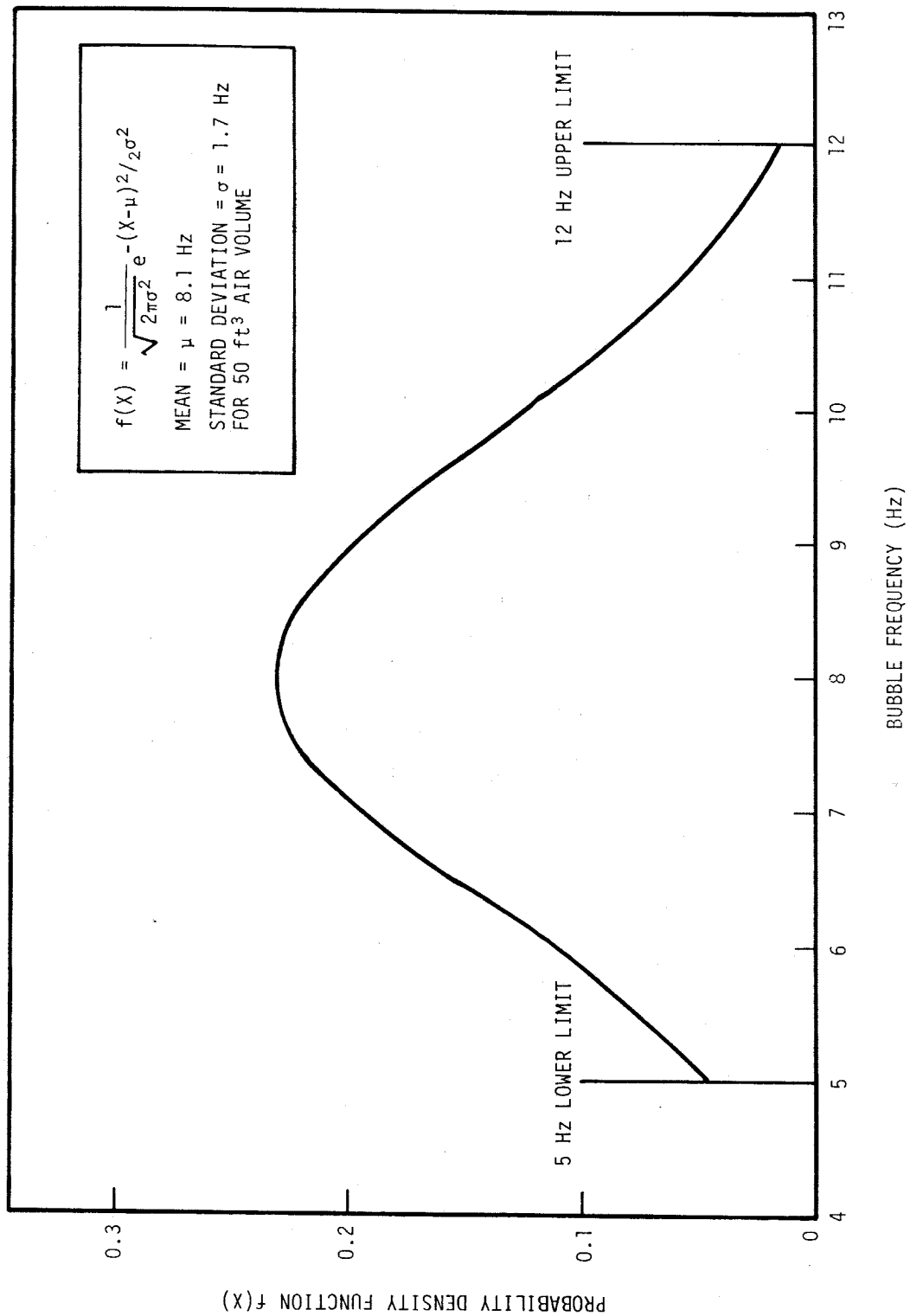
PROBABILITY DENSITY FUNCTION VS.
VALVE GROUP SETPOINT VARIATION



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UPDATED SAFETY ANALYSIS REPORT**

FIGURE A3.9-5

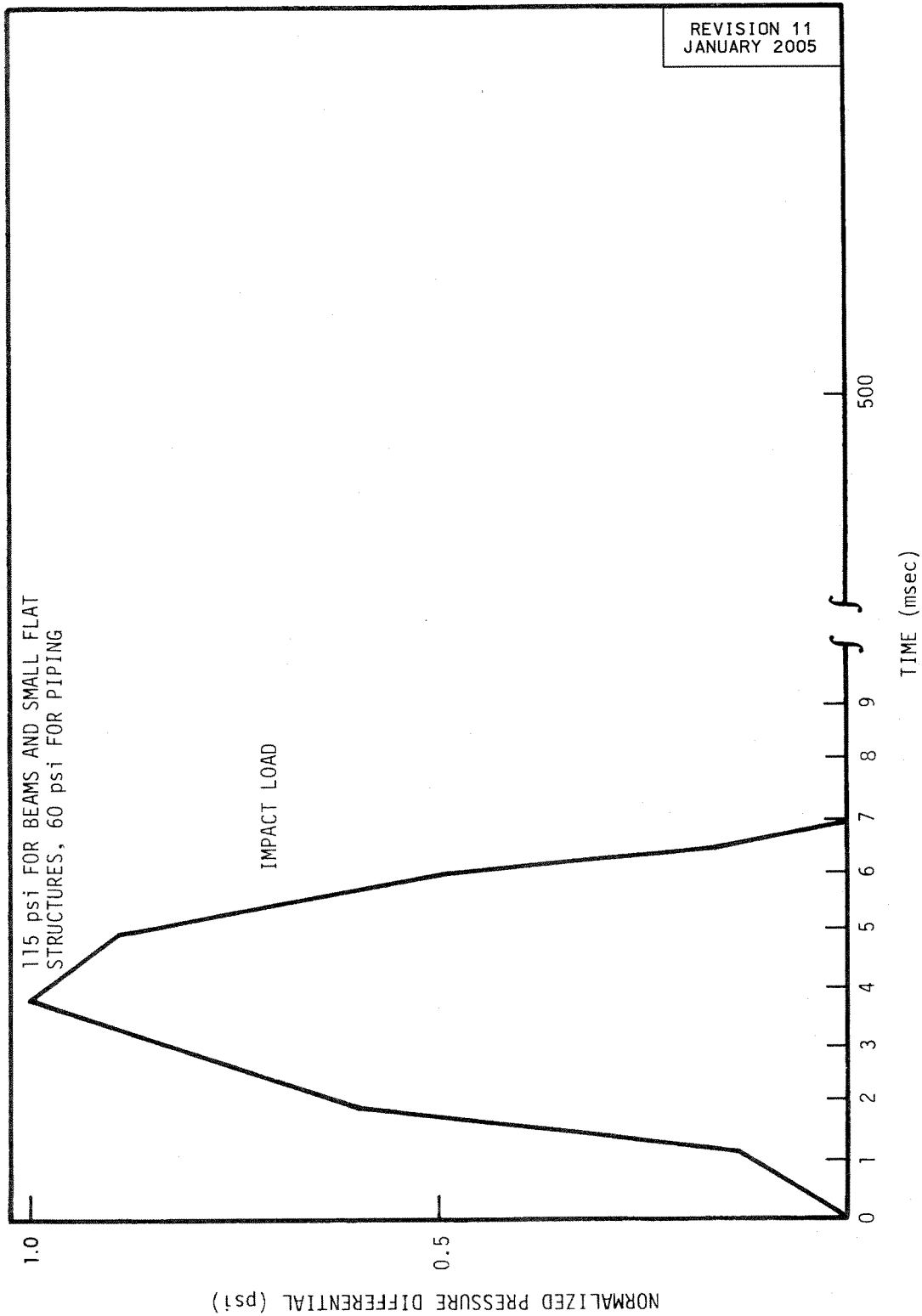
PROBABILITY DENSITY FUNCTION VS.
VALVE OPENING TIME VARIATION
(DIKKERS VALVES)



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FIGURE A3.9-6
 PROBABILITY DENSITY FUNCTION VS.
 BUBBLE FREQUENCY

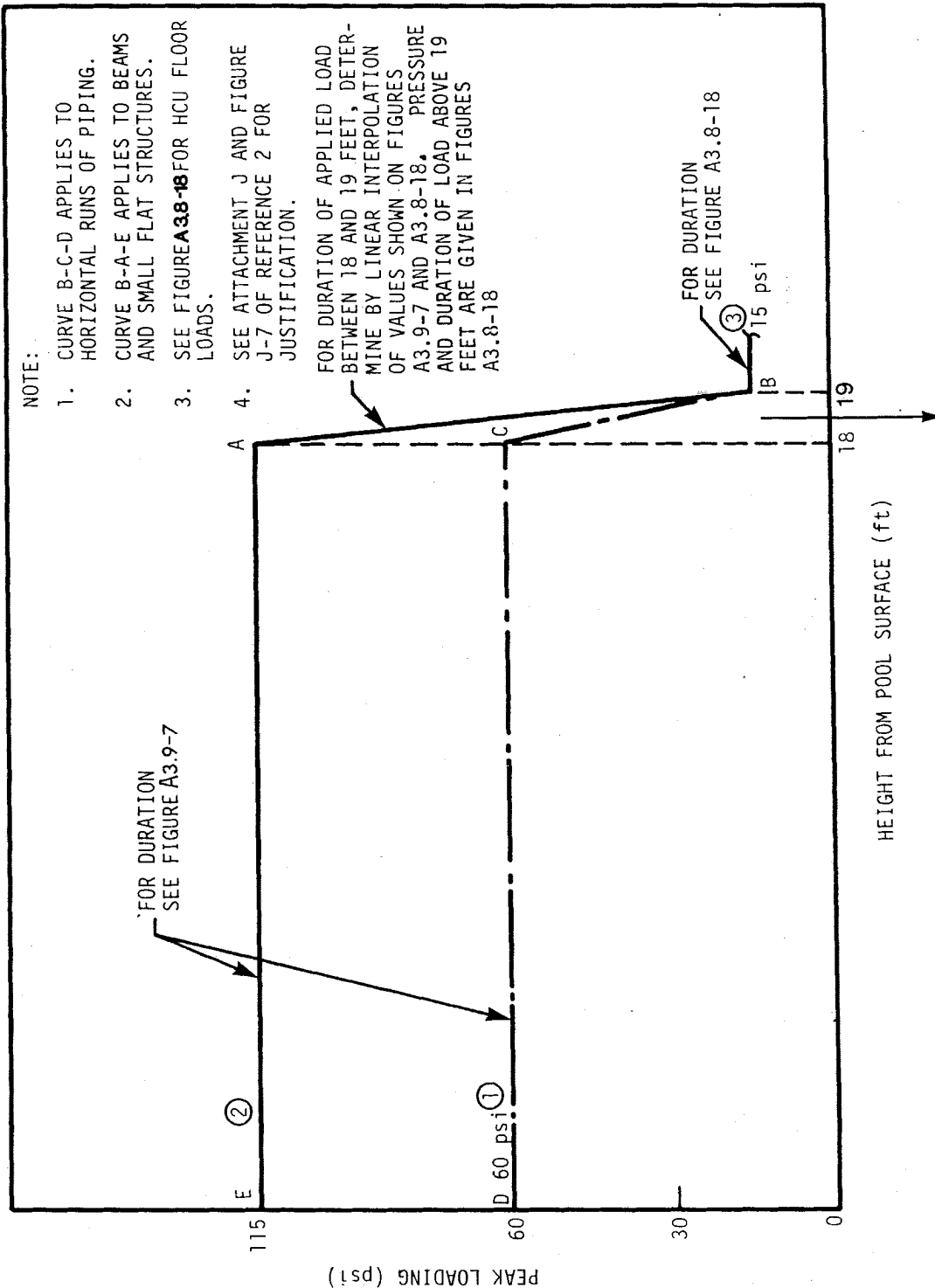
REVISION 11
JANUARY 2005



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FIGURE A3.9-7

PROFILE OF IMPACT LOADS ON SMALL
STRUCTURES WITHIN 19.5 FT OF THE
POOL SURFACE



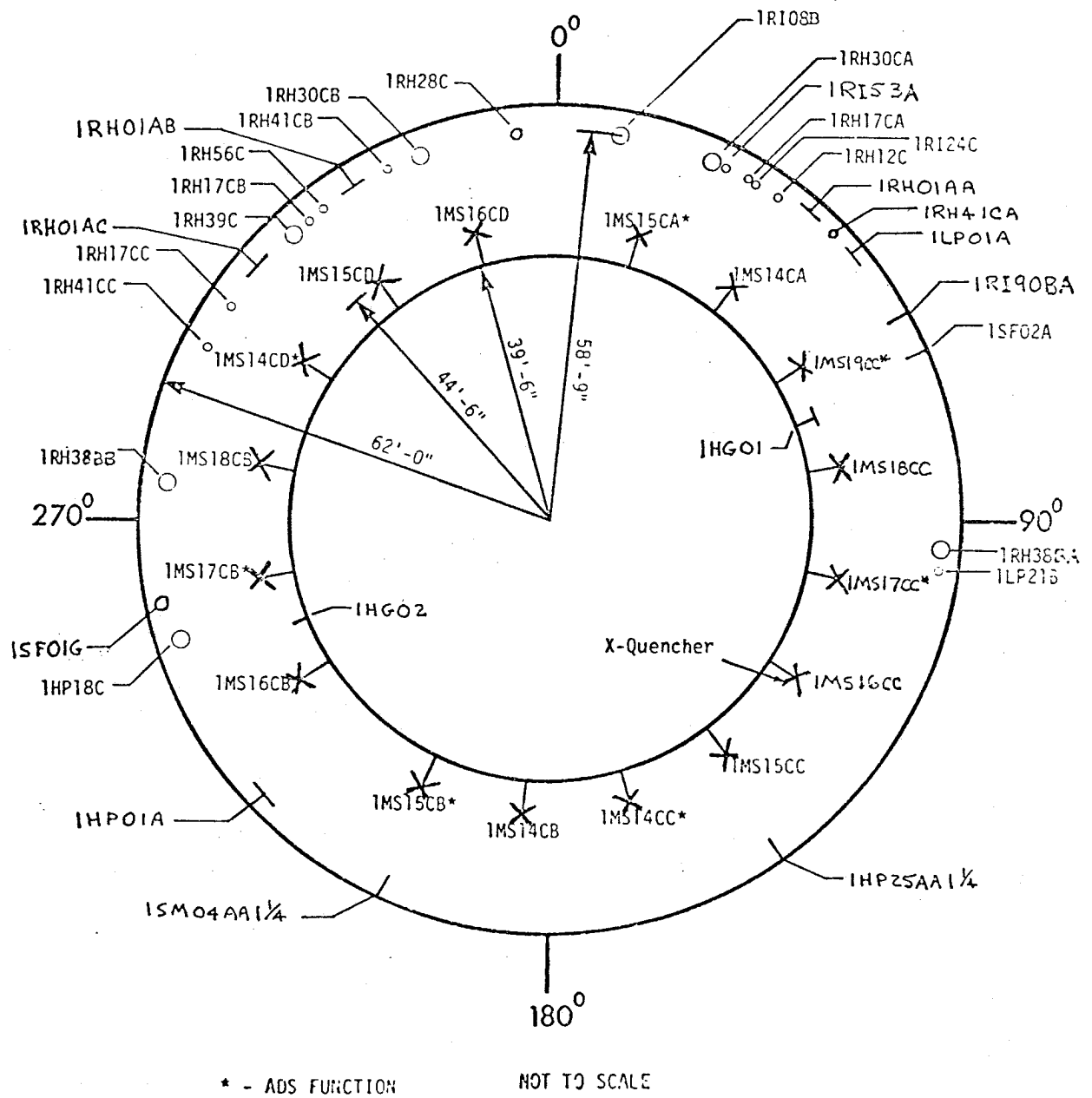
NOTE

ONLY DRAG LOADS ARE APPLIED ABOVE THE HCU FLOOR FROM VELOCITY DETERMINED BY DECELERATION WITH ELEVATION. NO FROTH IMPACT OR DRAG LOAD ABOVE 30 ft.

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FIGURE A3.9-8

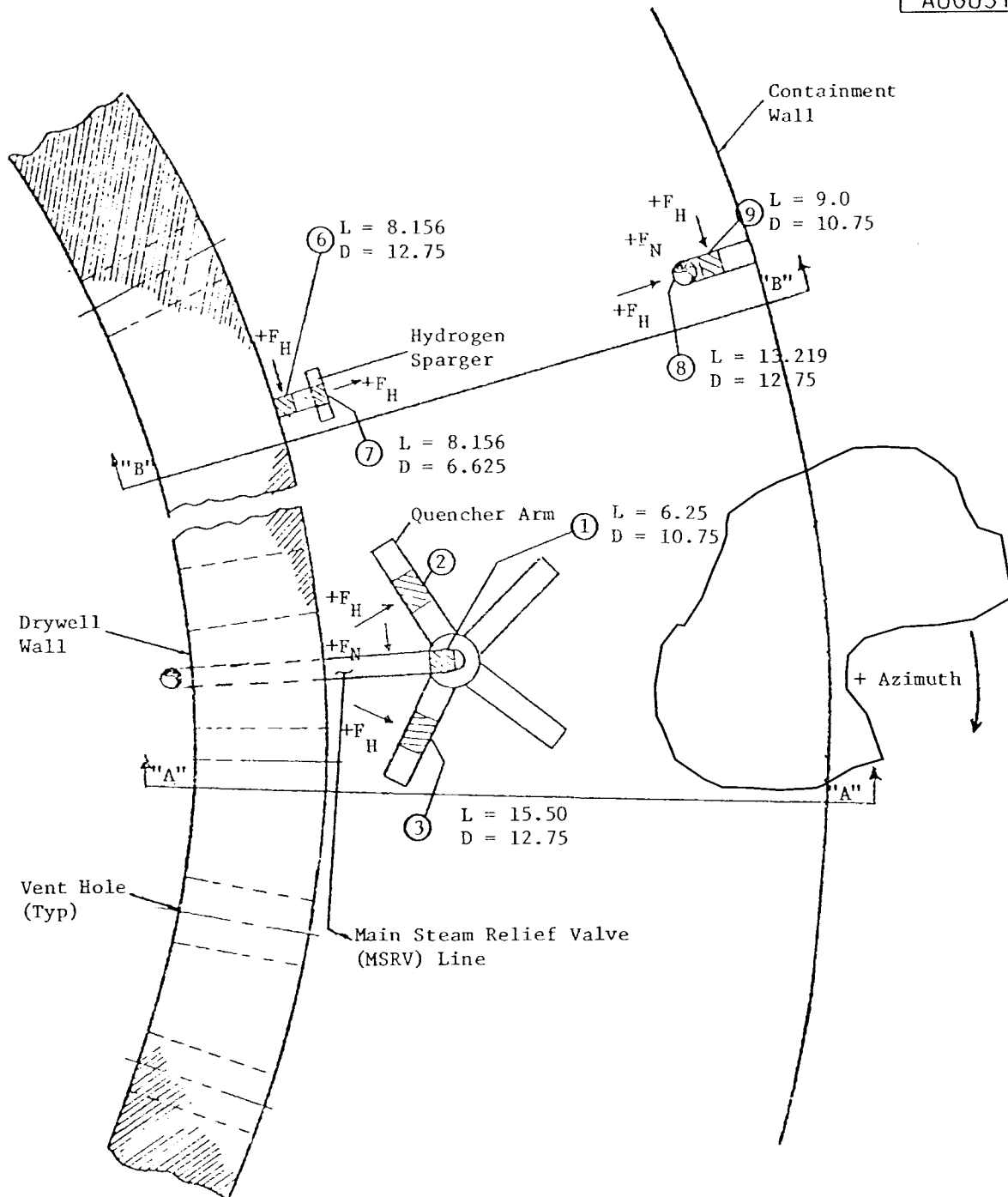
SUMMARY OF POOL SWELL LOADING SPECIFICATIONS FOR SMALL STRUCTURES IN THE CONTAINMENT ANNULUS (NOT APPLICABLE TO THE STEAM TUNNEL OR EXPANSIVE HCU FLOORS)



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FIGURE A3.9-9

PLAN OF SUPPRESSION POOL
SHOWING RELATIVE LOCATIONS OF SRV LINES,
QUENCHERS, AND MAJOR SUBMERGED PIPING



SYMBOL

- - Node Number
- +F_H - Positive Horizontal Direction
- +F_N - Positive Normal Direction
- L - Node Length ~ Inches
- D - Node Diameter ~ Inches

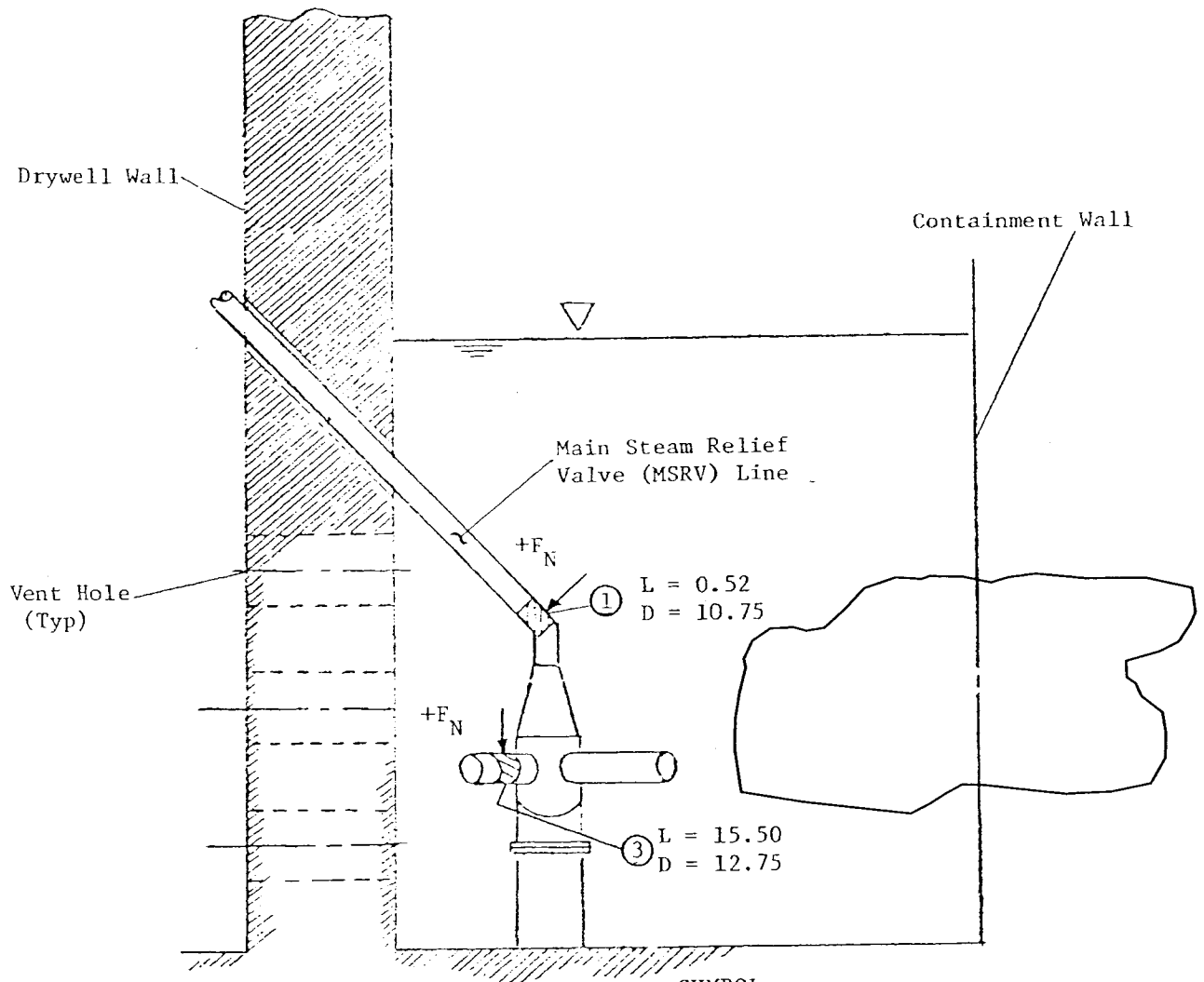
- Notes:
1. Not to scale
 2. Not actual azimuthal locations of submerged structures

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FIGURE A3.9-10

SCHEMATIC OF SUPPRESSION POOL

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NOTE: Not to Scale

SYMBOL

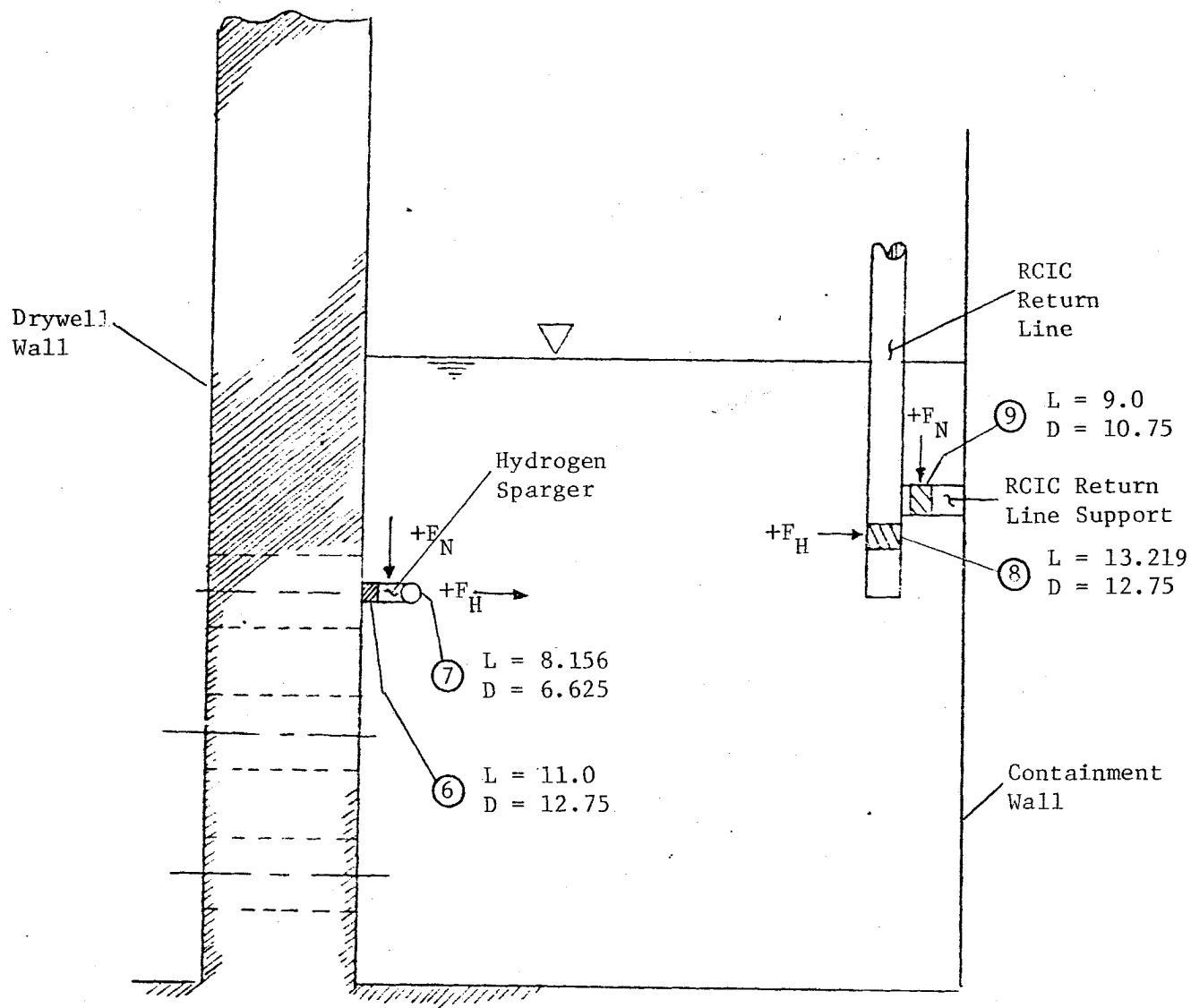
- - Node Numbers
- L - Node Length ~ Inches
- D - Node Diameter ~ Inches
- $+F_N$ - Positive Normal Direction
- $+F_H$ - Positive Horizontal Direction

Figure A3.9-11: Schematic of Suppression Pool - Section "A" - "A"

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FIGURE A3.9-11

SCHEMATIC OF SUPPRESSION POOL
SECTION A-A



NOTE: Not to Scale

SYMBOL

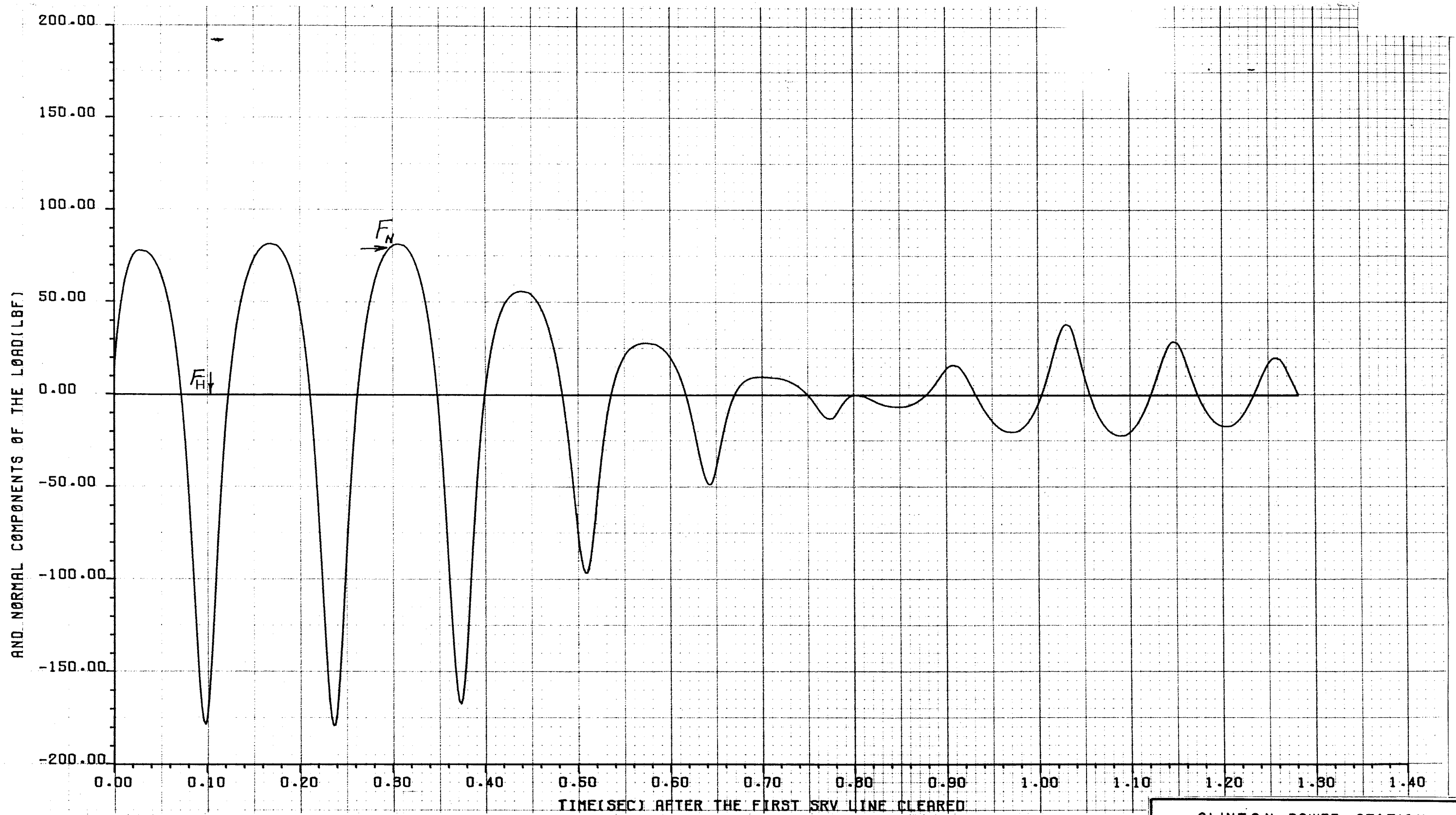
- - Node Number
- L - Node Length ~ Inches
- D - Diameter ~ Inches
- $+F_H$ - Positive Horizontal Direction
- $+F_N$ - Positive Normal Direction

Figure A3.9-12: Schematic of Suppression Pool - Section "B" - "B"

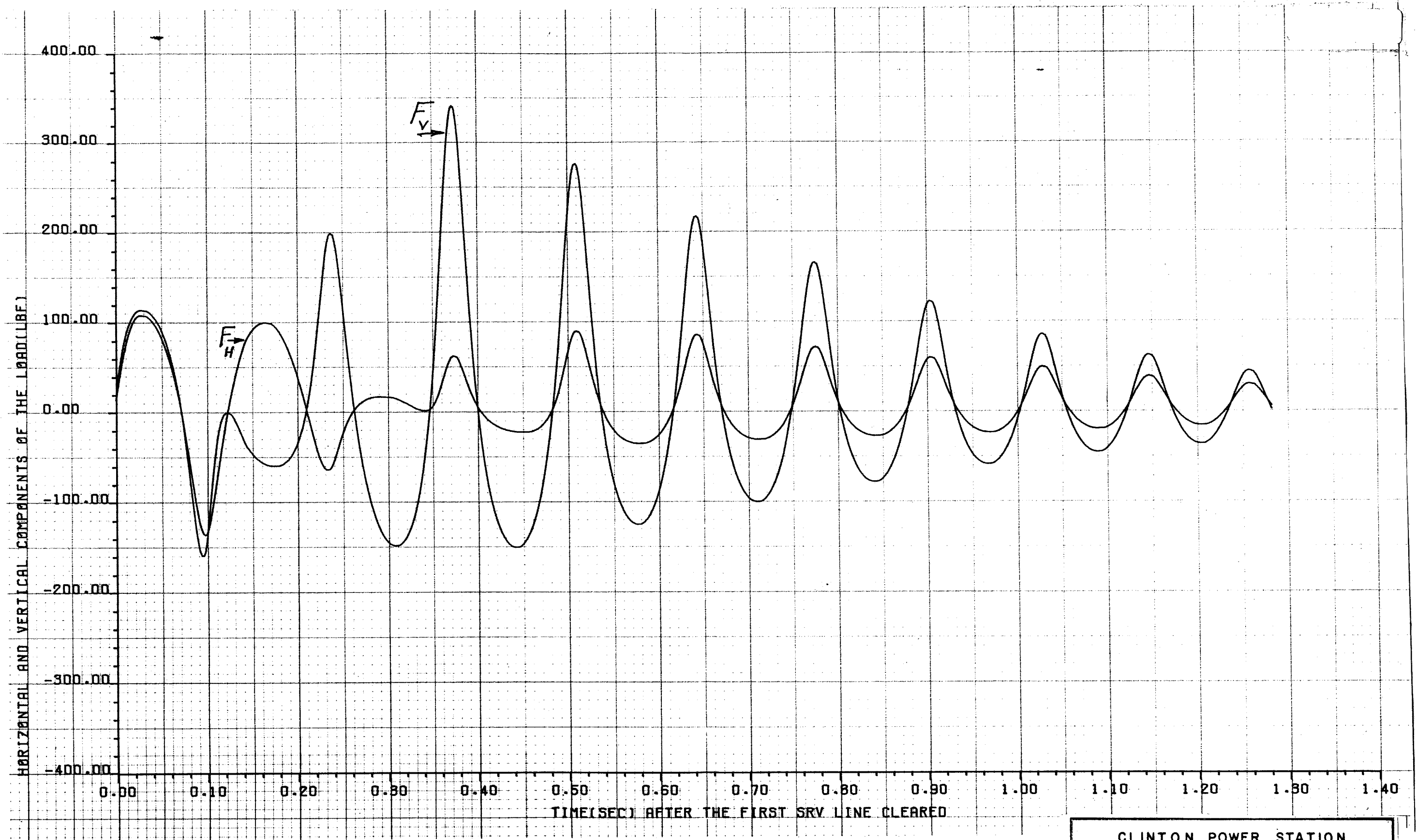
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FIGURE A3.9-12

SCHEMATIC OF SUPPRESSION POOL
SECTION B-B



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 FIGURE A3.9-13
 SVSP SRV LOAD ON SRVDL2
 NODE 1 (MIDPOINT)

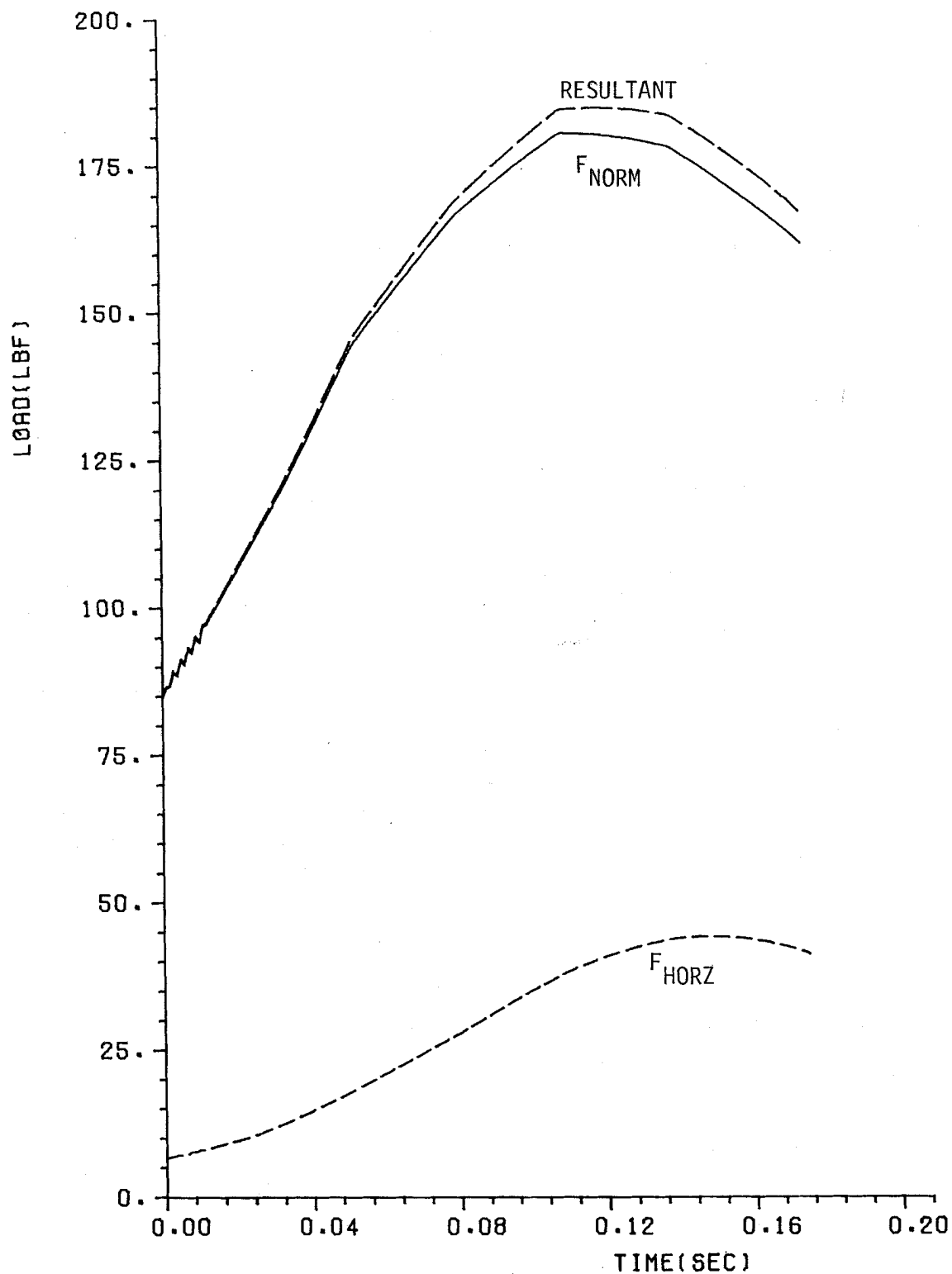


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FIGURE A3.9-14

SVSP SRV LOAD ON QUENCHER ARM 2
NODE 2 (MIDPOINT)

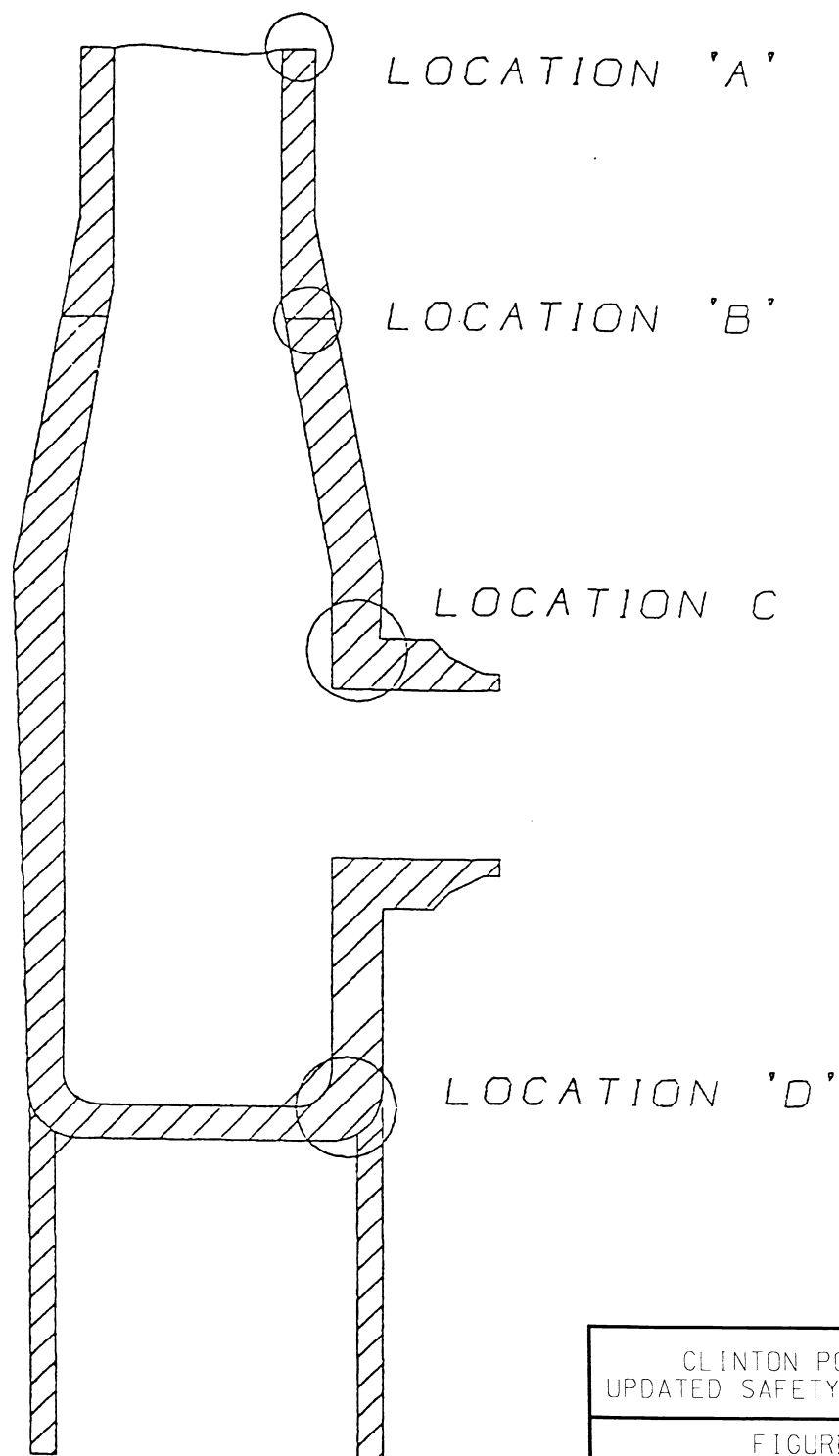
FIGURES A3.9-15 THROUGH A3.9-22
HAVE BEEN DELETED



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FIGURE A3.9-23

TYPICAL LOAD TIME HISTORY FOR SECTION 2,
LOCA CHARGING AIR BUBBLE



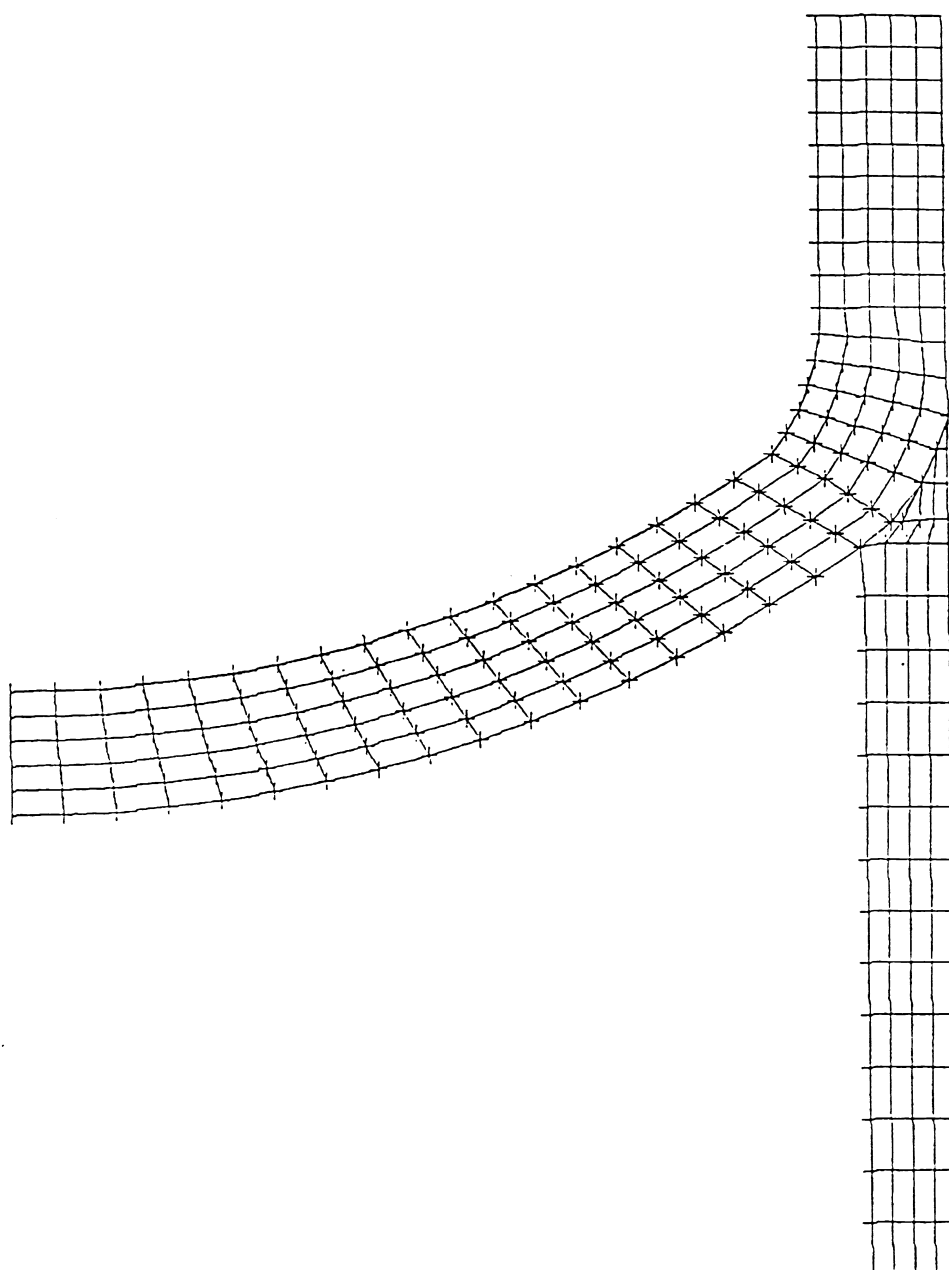
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FIGURE B3.9-1

CLINTON X-QUENCHER
CRITICAL LOCATIONS

Q&R 210.02

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JANUARY 2001



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FIGURE B3.9-2
FINITE ELEMENT MODEL OF LOCATION "D"
Q&R 210.02

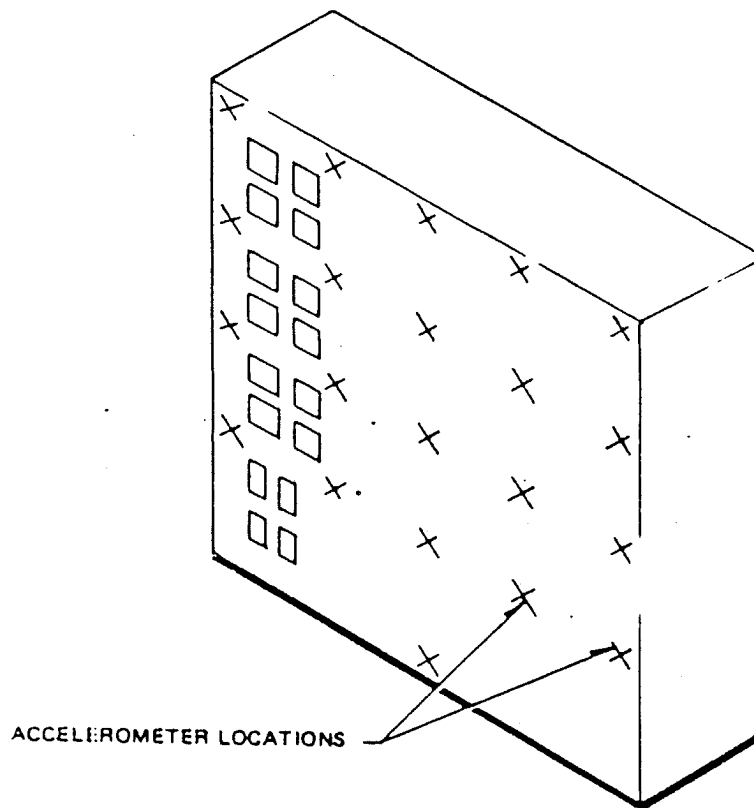


Figure 3.10-1. Typical Vertical Board (Benchboard Would be the Same with a Bench Section Protruding Out About Half-way Down)

CPS-USAR

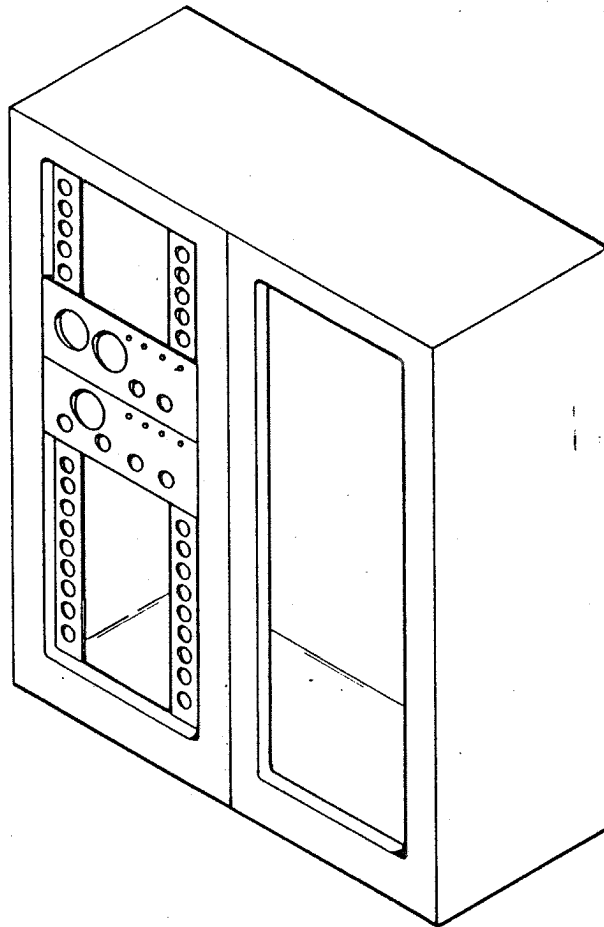


Figure 3.10-2. Instrument Rack (Cabinet would Contain Pages or Other Special Instruments instead of Simple Drawer Type Instruments)

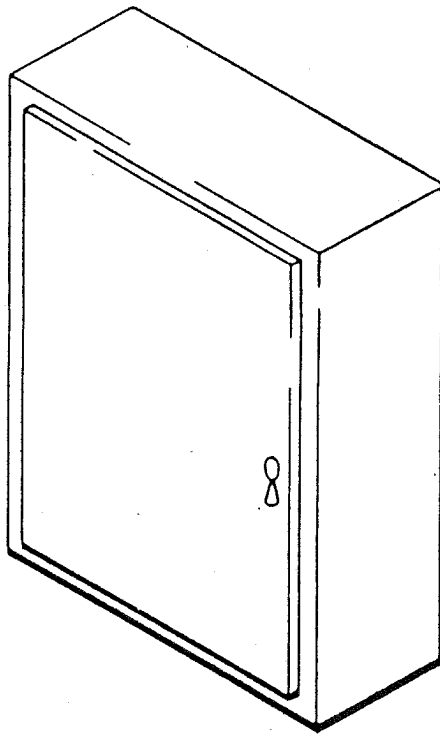


Figure 3.10-3. NEMA Type-12 Enclosure (Instruments Mounted Inside on Internal Membrane Mounted on Standoffs Attached to Back)

CPS-USAR

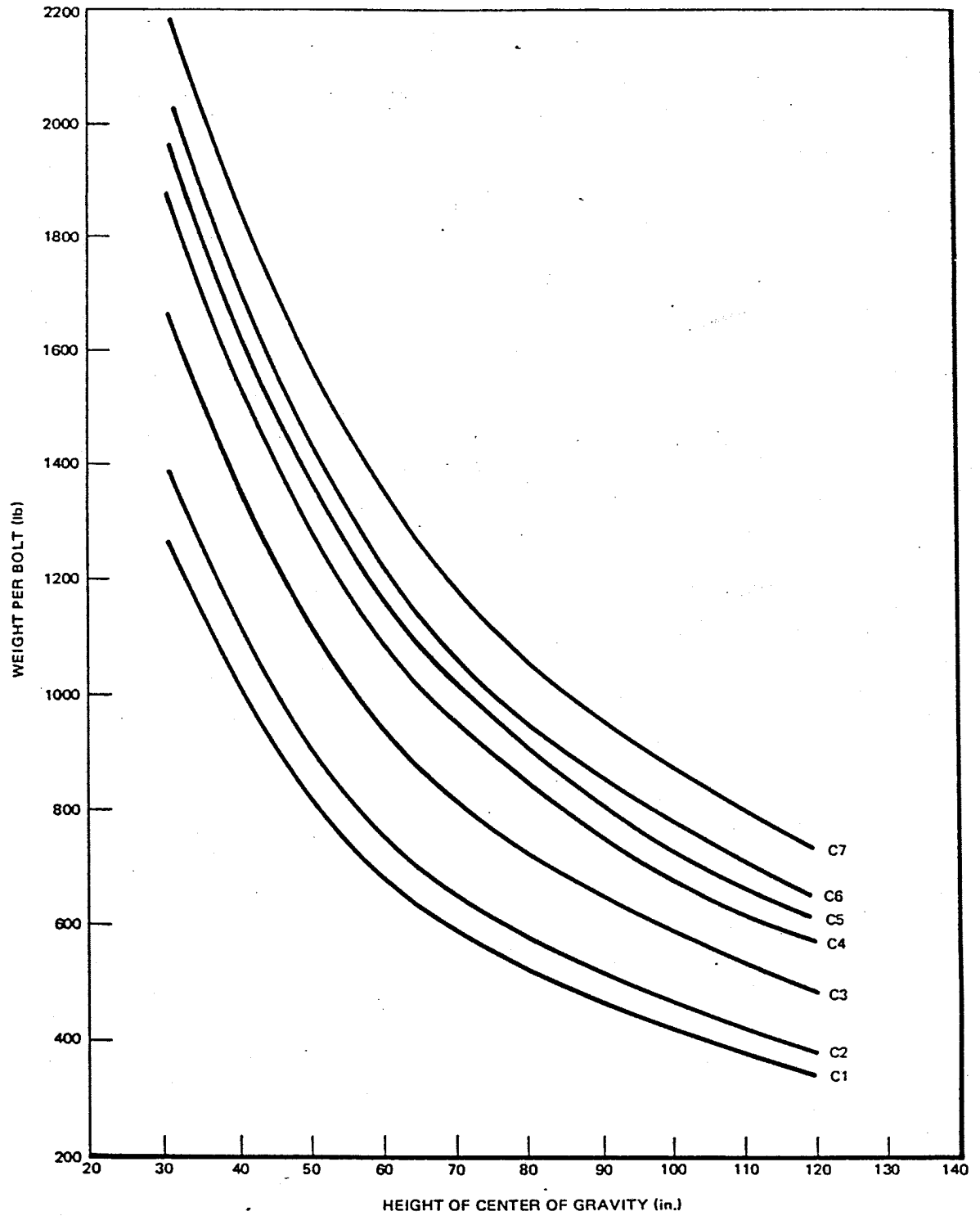


Figure A3.10-1 Maximum Safe Weight per Bolt for Standard Enclosure as a Function of the Height of the Center of Gravity

CPS-USAR

WEIGHT = 2500 lb
PANEL NO. = 730E811

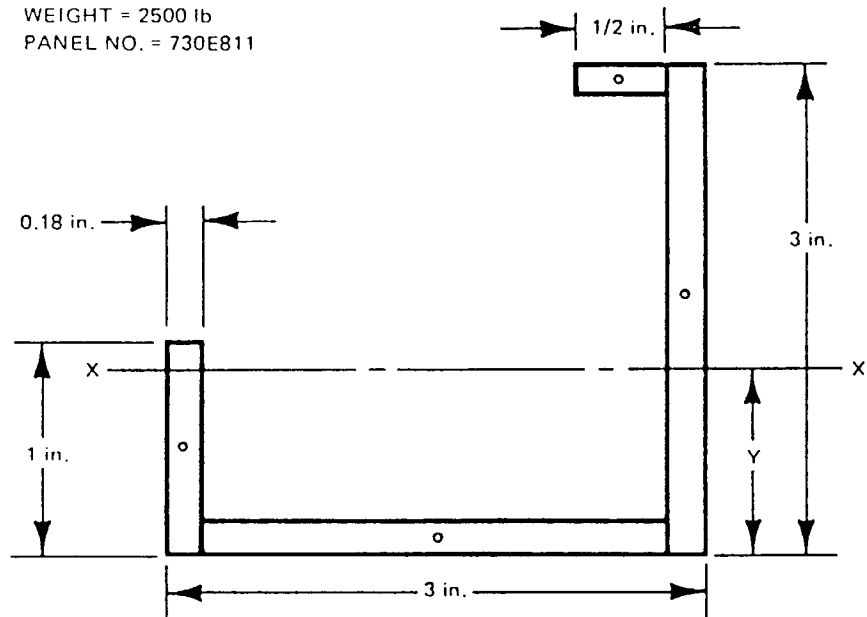


Figure B3.10-1. Corner Post

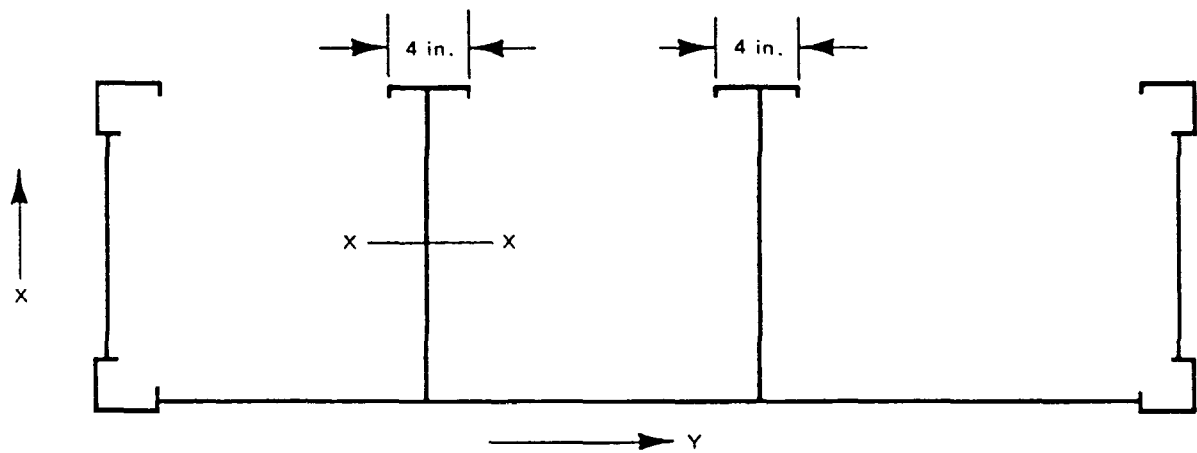


Figure B3.10-2. Plan View of Panel

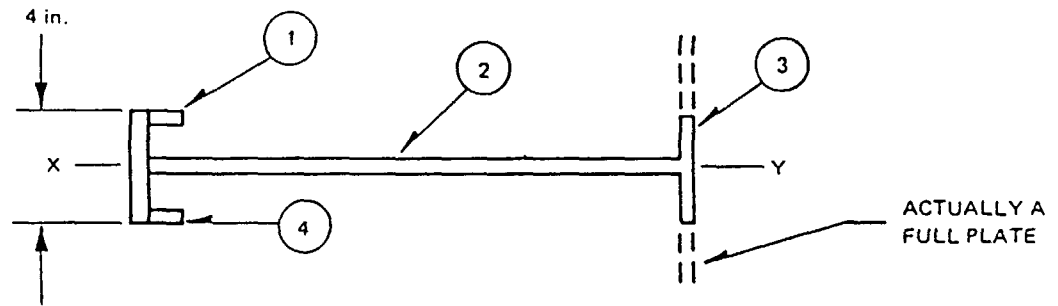


Figure B3.10-3. Barrier With Two End Plates

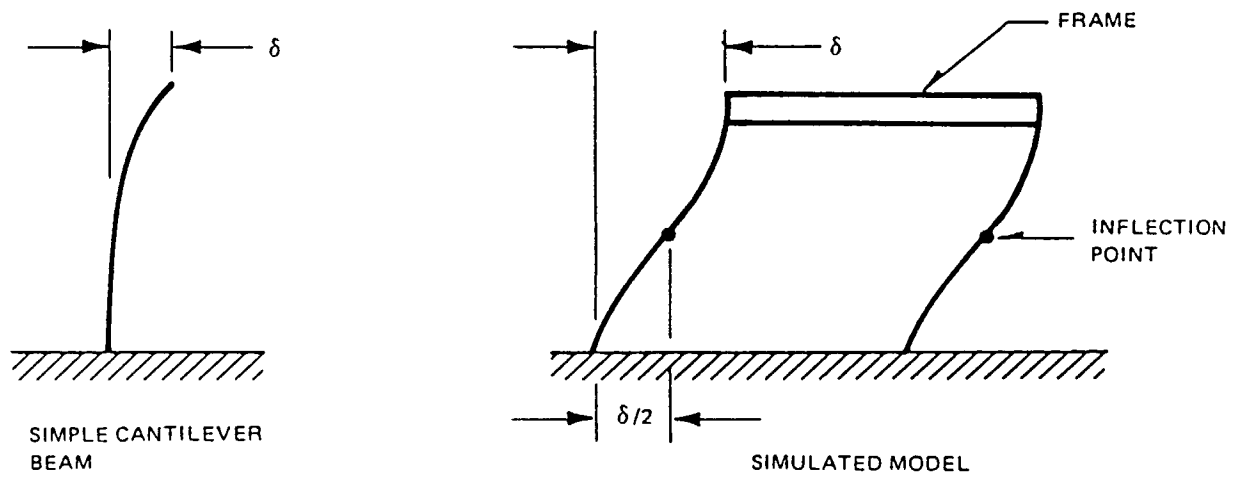
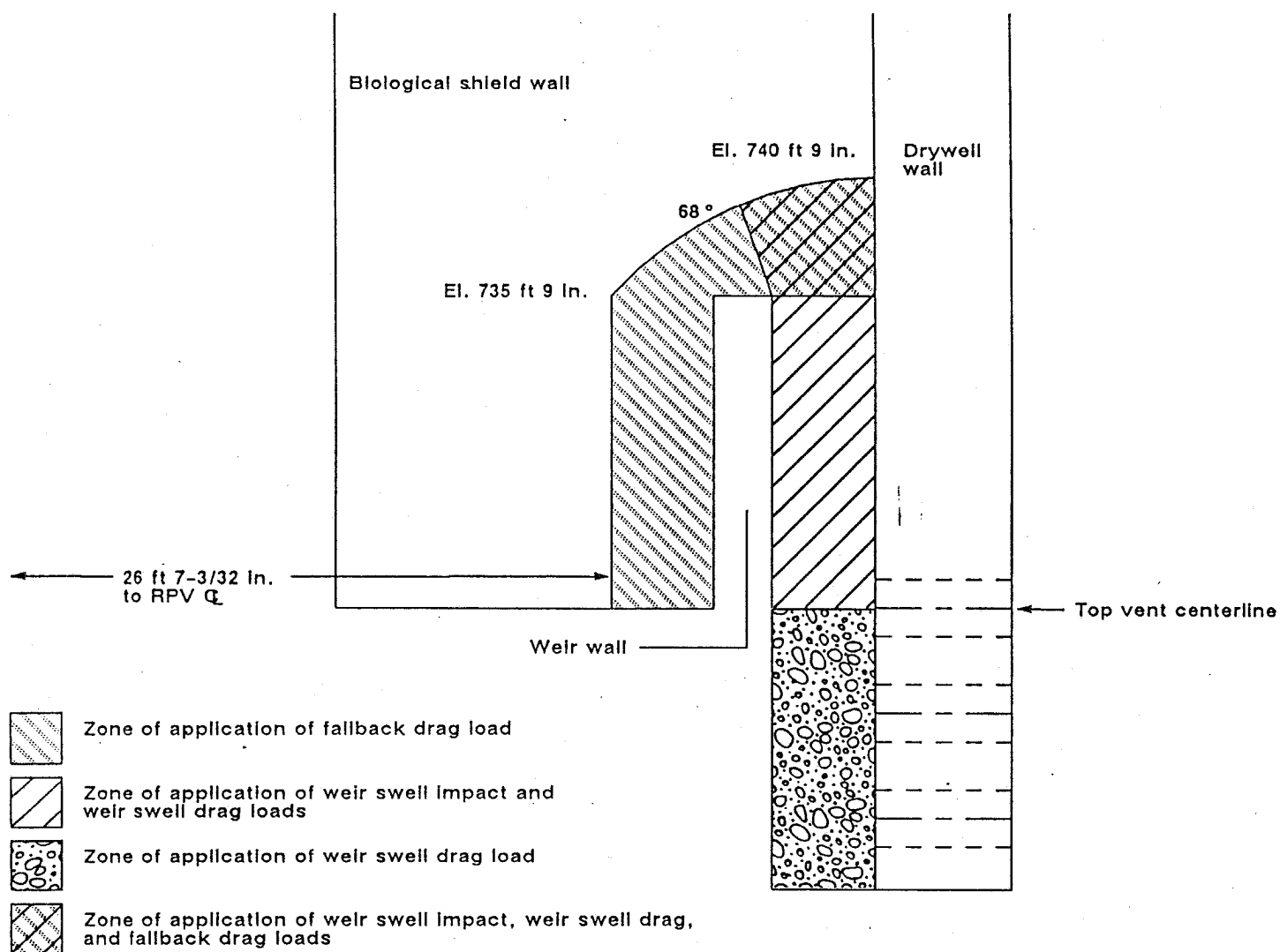


Figure B3.10-4. Panel Deflections

Figures 3.11-1 through 3.11-15
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FIGURE 3.11-16

WEIR SWELL IMPACT,
DRAG AND FALLBACK DRAG ZONES

Figures 3.11-17 through 3.11-40
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