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TO:
Mr. Karl Kniel

FROM:
**Tennessee Valley Authority
Chattanooga, Tennessee
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DESCRIPTION

Ltr. w/attached drawings re 5/11/76 conference call & our 2/19/76 ltr....concerning main steam and feedwater systems.

Note: Distribution as per Mr. Pike -6/17/76

PLANT NAME: **(7-P)**
Bellefonte 1 & 2

ENCLOSURE

**ACKNOWLEDGED
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6/17/76

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CONTROL NUMBER

6047

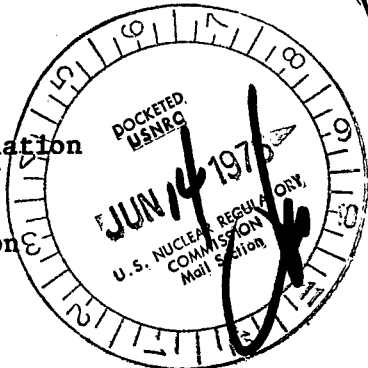


830 Power Building
TENNESSEE VALLEY AUTHORITY
CHATTANOOGA, TENNESSEE 37401

JUN 10 1976

Regulatory Docket File

Director of Nuclear Reactor Regulation
Attention: Mr. Karl Kniel, Chief
Branch No. 2-2
U.S. Nuclear Regulatory Commission
Washington, DC 20555



Dear Mr. Kniel:

In the Matter of the Application of) Docket Nos. 50-438
Tennessee Valley Authority) 50-439

During a May 11, 1976, conference call with the NRC staff, TVA presented a discussion of the proposed main steam and feedwater penetration design, related restraint concept, and an interpretation of the inservice inspection (ISI) requirements for the flued head/process piping welds at Bellefonte and Yellow Creek Nuclear Plants. The conference call was held to clarify the requirements of section 2 of the letter from Karl Kniel to James E. Watson dated February 19, 1976, as it applies to the ISI requirements for the Bellefonte and Yellow Creek main steam and feedwater flued head/process piping welds. The NRC representatives involved in the conference call were in general agreement with TVA's interpretation of the flued head/process piping ISI requirements. However, the NRC requested that TVA submit a written description of the Bellefonte main steam and feedwater piping layout, restraint concept, penetration design, and TVA's interpretation of the specific ISI requirement for NRC review. A description of pertinent portions of the proposed Bellefonte main steam feedwater design and TVA's interpretation of the subject ISI requirements are presented below.

The pertinent portions of the proposed main steam and feedwater systems with approximate dimensions, elevations, and restraint locations are shown in Figures A through D. A typical main steam or feedwater penetration detail, with the suggested "weld subject to ISI exemption" noted, is provided in Figure E.

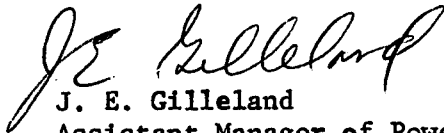
It is TVA's position that it is consistent with the intent of section 2 of the referenced letter that the subject weld be exempt from ISI if restraints, as required, are provided to mitigate the effects of a postulated break at that point. TVA plans to mitigate the effects of a break at the subject weld. The main steam and feedwater isolation valves are located on the opposite side of an anchor from this weld and would not be affected by a break at the weld. On this basis TVA requests ISI exemption for the subject weld.

Mr. Karl Kniel

JUN 10 1976

TVA would appreciate an expeditious review and ruling on this proposal since this ruling could have a significant effect on the crucial procurement of the Bellefonte main steam and feedwater penetrations. TVA also intends to apply this ruling to the ISI requirements for Yellow Creek Nuclear Plant.

Very truly yours,

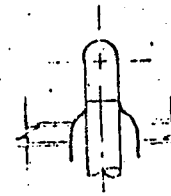


J. E. Gilleland
Assistant Manager of Power

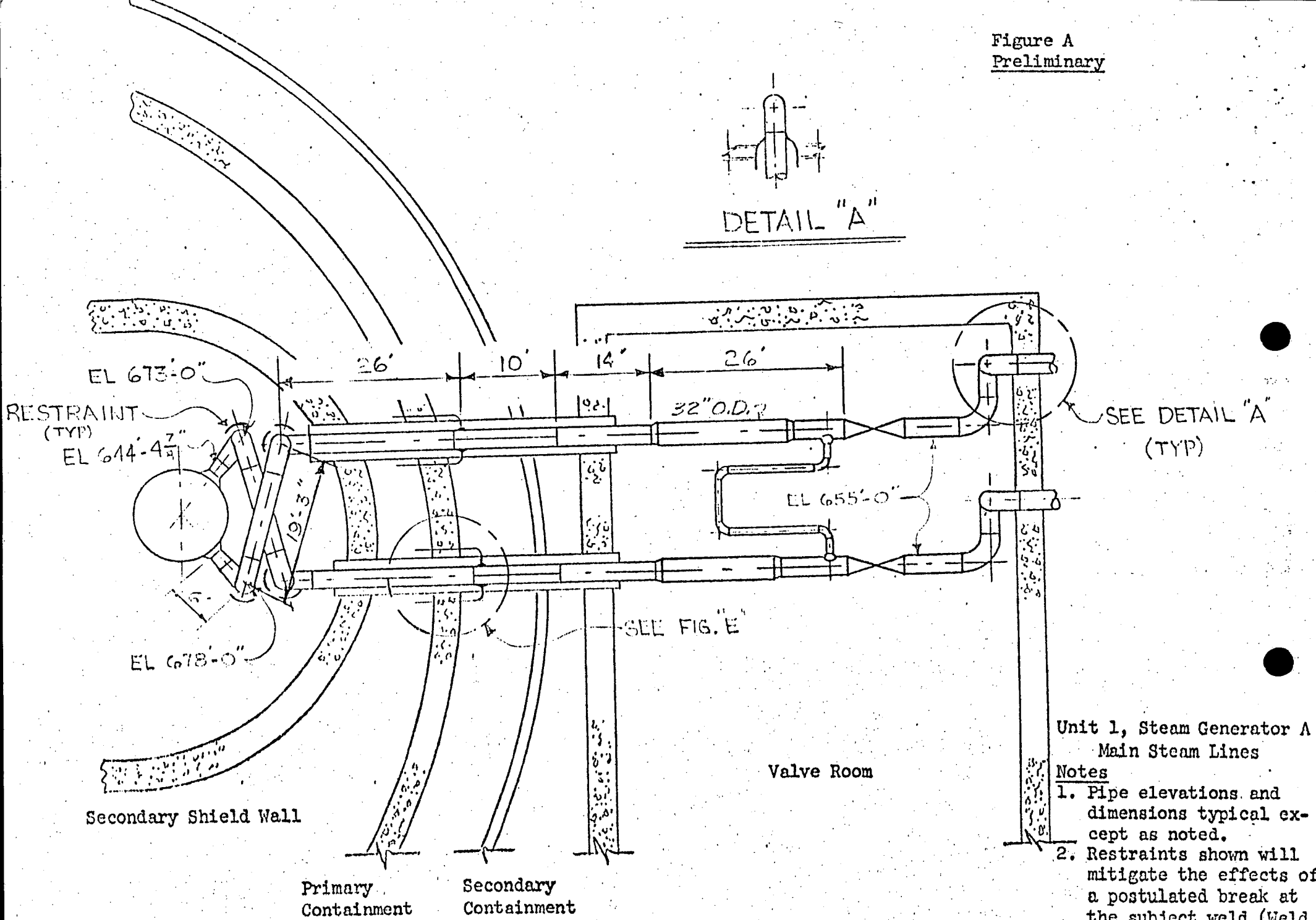
Enclosures

CC: Mr. James McFarland
Senior Project Manager
Babcock & Wilcox Company
P.O. Box 1260
Lynchburg, Virginia 24505

Figure A
Preliminary



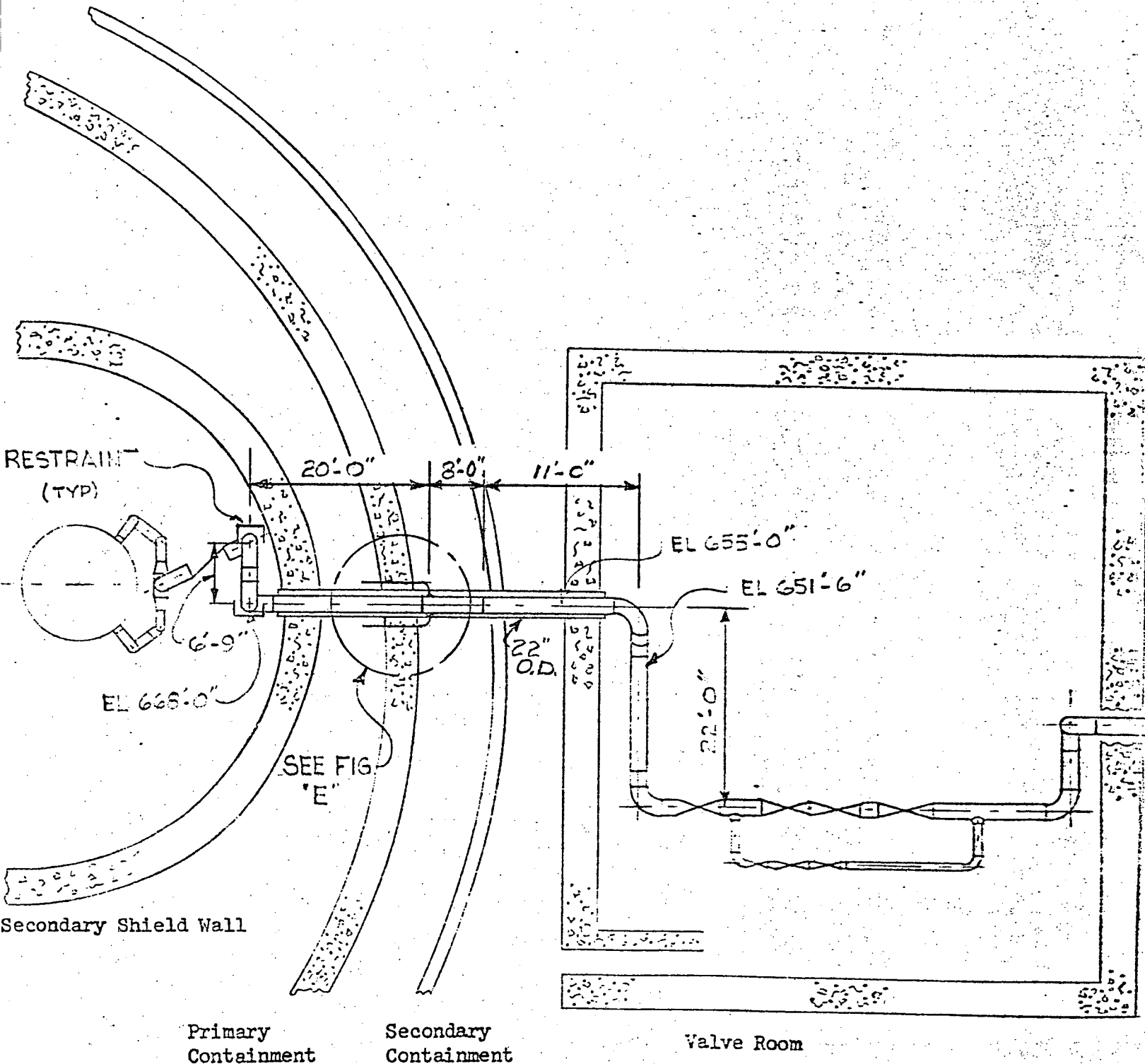
DETAIL "A"



Unit 1, Steam Generator A
Main Steam Lines

Notes

1. Pipe elevations and dimensions typical except as noted.
2. Restraints shown will mitigate the effects of a postulated break at the subject weld (Weld See figure E).
3. Dimensions are approximate.

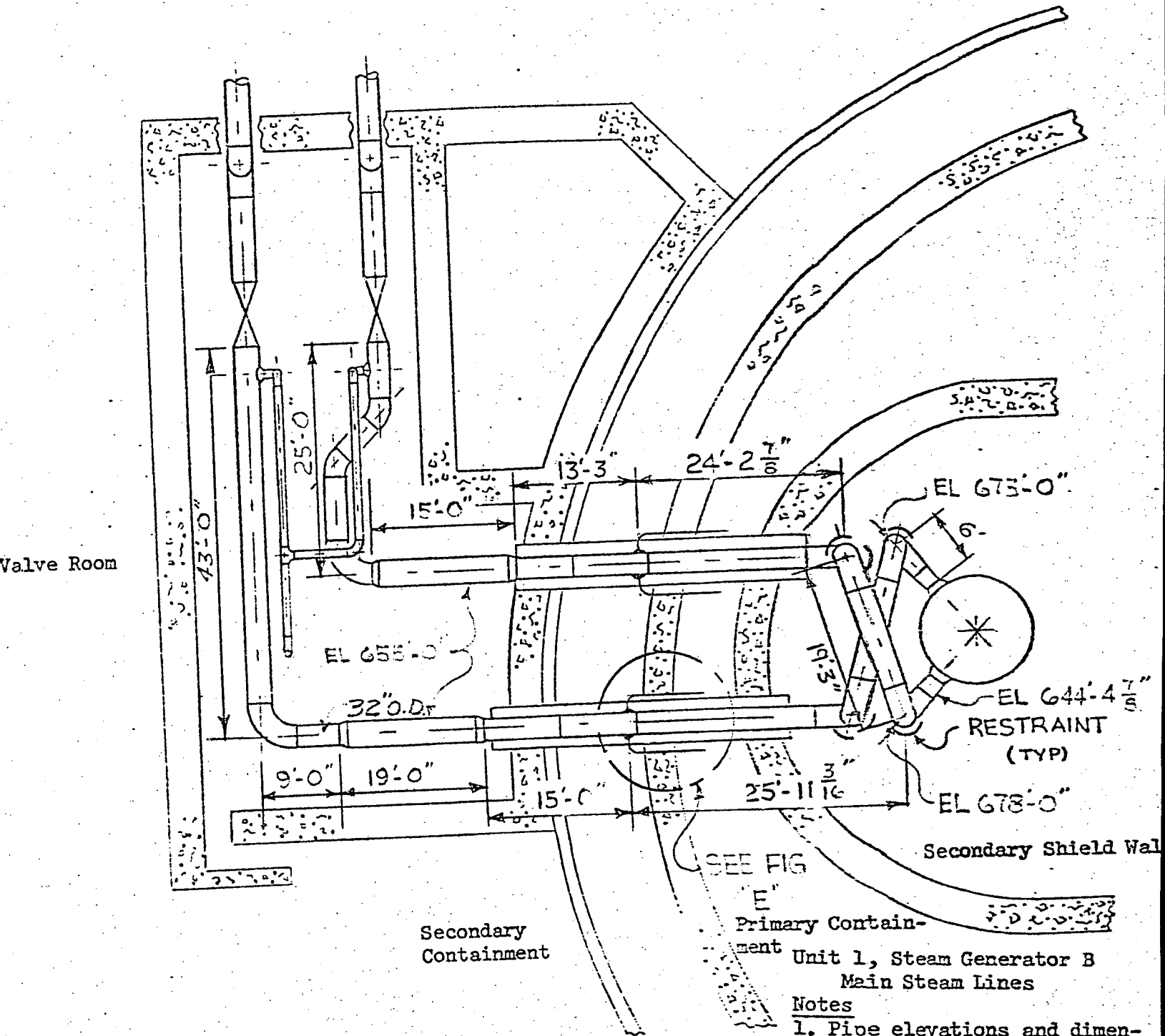


Unit 1, Steam Generator A
Feedwater Line

Notes

1. Pipe elevations and dimensions typical except as noted.
2. Restraints shown will mitigate the effects of a postulated break at the subject weld (Weld - See figure E).
3. Dimensions are approximate.

Figure C
Preliminary



Valve Room

EL 655'-0"

32" O.D.

EL 673'-0"

EL 644'-4 ⁷/₈"
RESTRAINT
(TYP)

EL 678'-0"

Secondary Shield Wall

Secondary
Containment

SEE FIG
E

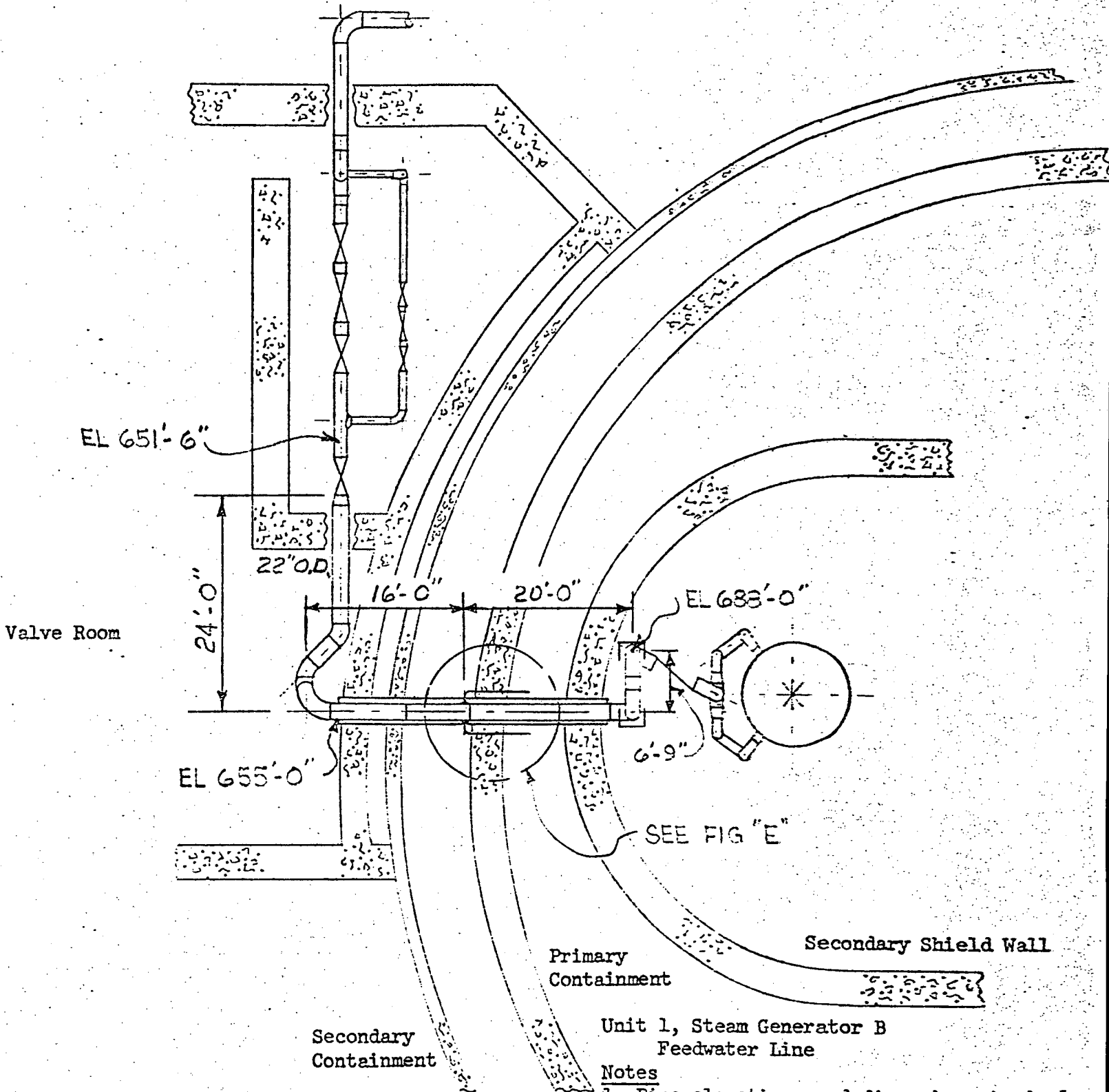
Primary Contain-
ment

Unit 1, Steam Generator B
Main Steam Lines

Notes

1. Pipe elevations and dimensions typical except as noted.
2. Restraints shown will mitigate the effects of a postulated break at the subject weld (Weld - See figure E).
3. Dimensions are approximate.

Figure D
Preliminary

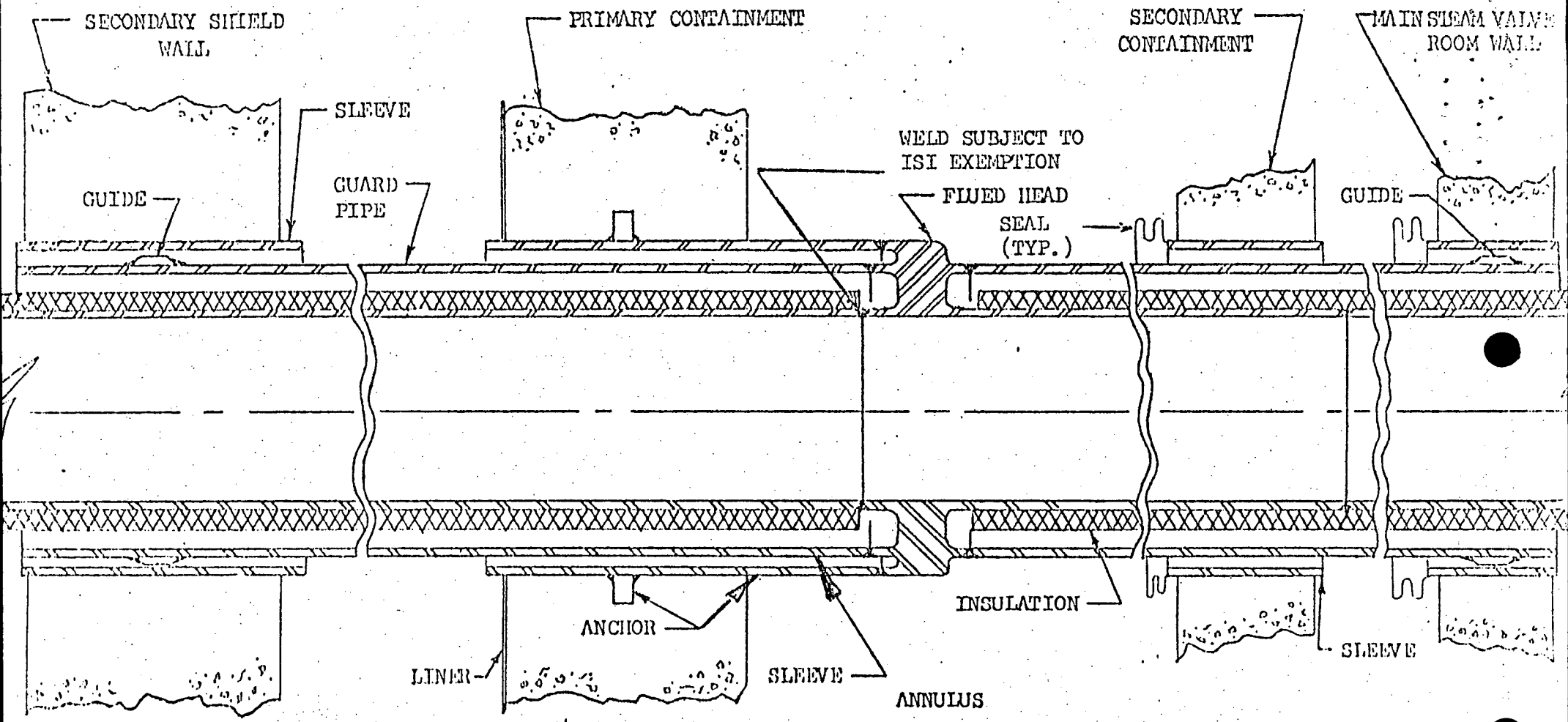


Unit 1, Steam Generator B
Feedwater Line

Notes

1. Pipe elevations and dimensions typical except as noted.
2. Restraints shown will mitigate the effect of a postulated break at the subject weld (Weld - See figure E).
3. Dimensions are approximate.

FIGURE E



TYPICAL PENETRATION WITH GUARD PIPE, BELLEVILLE NUCLEAR PLANT

MAIN STEAM AND FEEDWATER LINES