JAMES A. FITZPATRICK NUCLEAR POWER PLANT
POWER AUTHORITY OF THE STATE OF NEW YORK
P.O. No. 514-1A
REACTOR WELL SEAL
GE
P.O. No.
WRITER FEB 02 1970 W.J.M.
WRITER FEB 26 1970 L.B.M.
WRITER MAR 4 - 1970
WRITER MAR 5 - 1970
WRITER MAR 7 - 1970
STATUS
APPROVED AS REVISED
APPROVED
Date 4/13/70 BY GE
(HMZ)

GENERAL ELECTRIC | 729E729 | CONT ON SHEET | SH NO.

UNLESS OTHERWISE SPECIFIED USE THE FOLLOWING:

APPLIED PRACTICES	SURFACES	FINISHES IN INCHES: DECIMALS	FRACTIONS	ANGLES
	✓	±	±	±

TITLE ARRANGEMENT — REACTOR WELL SEAL
FIRST MADE FOR GENERAL LAYOUT DRAWINGS

FITZPATRICK NUCLEAR PLANT
MPL 1-8
PO 205-

FCF 216X864B(STANDARD PLANT 218T560)1-8
FCF 236X350B A71-2020

NOTES:

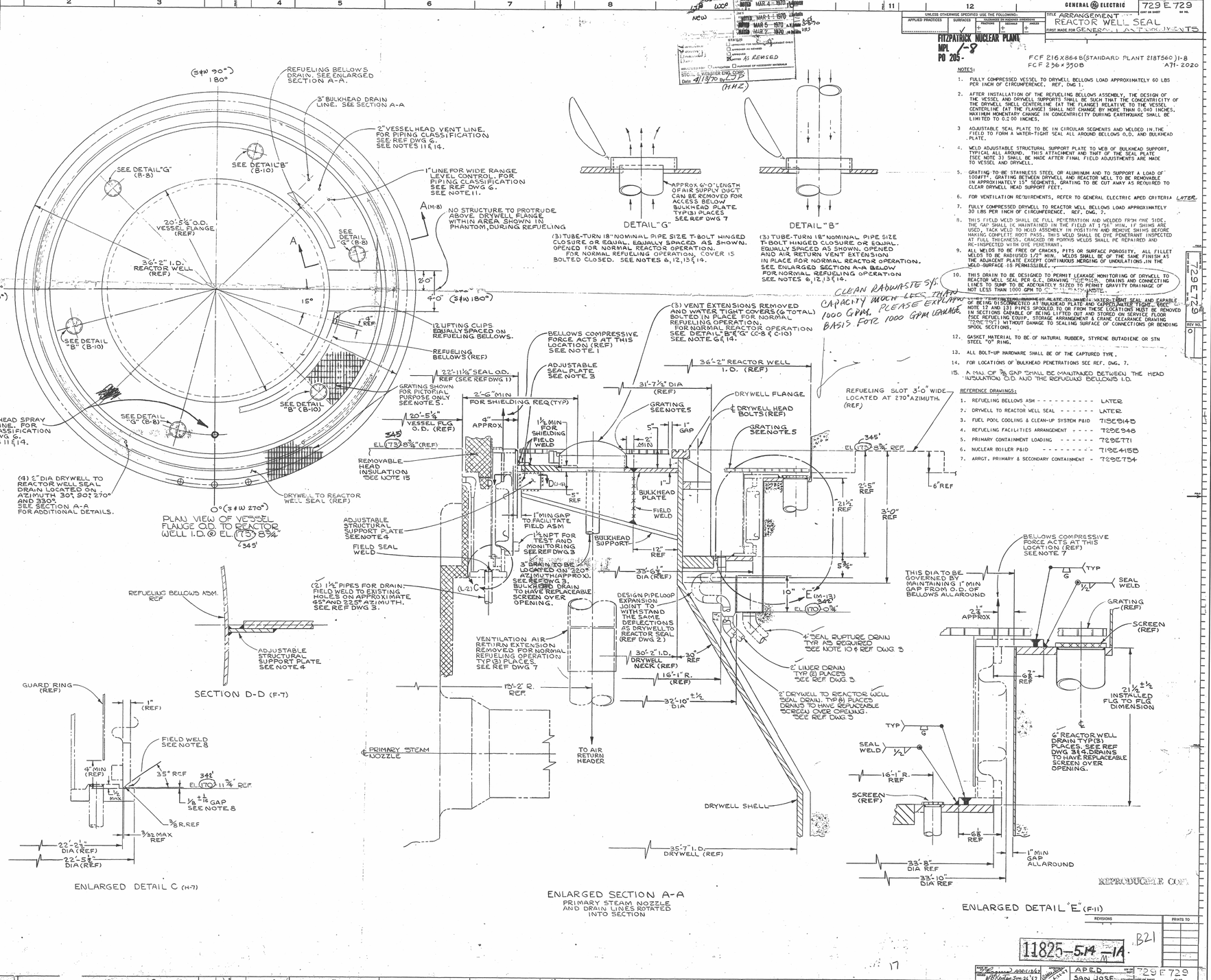
1. FULLY COMPRESSED VESSEL TO DRYWELL BELLOWS LOAD APPROXIMATELY 60 LBS PER INCH OF CIRCUMFERENCE. REF. DWG 1.
2. AFTER INSTALLATION OF THE REFUELING BELLOWS ASSEMBLY, THE DESIGN OF THE VESSEL AND DRYWELL SUPPORTS SHALL BE SUCH THAT THE CONCENTRICITY OF THE DRYWELL SHELL CENTERLINE (AT THE FLANGE) RELATIVE TO THE VESSEL CENTERLINE (AT THE FLANGE) SHALL NOT CHANGE BY MORE THAN 0.040 INCHES, MAXIMUM MOMENTARY CHANGE IN CONCENTRICITY DURING EARTHQUAKE SHALL BE LIMITED TO 0.200 INCHES.
3. ADJUSTABLE SEAL PLATE TO BE IN CIRCULAR SEGMENTS AND WELDED IN THE FIELD TO FORM A WATER-TIGHT SEAL ALL AROUND BELLOWS O.D. AND BULKHEAD PLATE.
4. WELD ADJUSTABLE STRUCTURAL SUPPORT PLATE TO WEB OF BULKHEAD SUPPORT, TYPICAL ALL AROUND. THIS ATTACHMENT AND THAT OF THE SEAL PLATE (SEE NOTE 3) SHALL BE MADE AFTER FINAL FIELD ADJUSTMENTS ARE MADE TO VESSEL AND DRYWELL.
5. GRATING TO BE STAINLESS STEEL OR ALUMINUM AND TO SUPPORT A LOAD OF 100#/FT². GRATING BETWEEN DRYWELL AND REACTOR WELL TO BE REMOVABLE IN APPROXIMATELY 15° SEGMENTS. GRATING TO BE CUT AWAY AS REQUIRED TO CLEAR DRYWELL HEAD SUPPORT FEET.
6. FOR VENTILATION REQUIREMENTS, REFER TO GENERAL ELECTRIC APED CRITERIA LATER.
7. FULLY COMPRESSED DRYWELL TO REACTOR WELL BELLOWS LOAD APPROXIMATELY 30 LBS PER INCH OF CIRCUMFERENCE. REF. DWG. 7.
8. THIS FIELD WELD SHALL BE FULL PENETRATION AND WELDED FROM ONE SIDE. THE GAP SHALL BE MAINTAINED IN THE FIELD AT 1/16" MIN. IF SHIMS ARE USED, TACK WELD TO HOLD ASSEMBLY IN POSITION AND REMOVE SHIMS BEFORE MAKING COMPLETE ROOT PASS. THIS WELD SHALL BE DYE PENETRANT INSPECTED AT FULL THICKNESS. CRACKED OR PORMUS WELDS SHALL BE REPAIRED AND RE-INSPECTED WITH DYE PENETRANT.
9. ALL WELDS TO BE FREE OF CRACKS, PITS OR SURFACE POROSITY. ALL FILLET WELDS TO BE RADIUSED 1/2" MIN. WELDS SHALL BE OF THE SAME FINISH AS THE ADJACENT PLATE EXCEPT CONTINUOUS HERDING OF UNDULATIONS IN THE WELD SURFACE IS PERMISSIBLE.
10. THIS DRAIN TO BE DESIGNED TO PERMIT LEAKAGE MONITORING OF DRYWELL TO REACTOR WELL SEAL PER G.E. DRAWING 729E815. DRAINS AND CONNECTING LINES TO SUMP TO BE ADEQUATELY SIZED TO PERMIT GRAVITY DRAINAGE OF NOT LESS THAN 1000 GPM TO [illegible] WASTE.
11. [illegible] PENETRATION BETWEEN VESSEL AND SHIELD WATER-TIGHT SEAL AND CAPABLE OF BEING DISCONNECTED AT BULKHEAD PLATE AND CAPPED WATER TIGHT. (SEE NOTE 12 AND 13) PIPES SPOOLED TO OR FROM THESE LOCATIONS MUST BE REMOVED IN SECTIONS CAPABLE OF BEING LIFTED OUT AND STORED ON SERVICE FLOOR (SEE REFUELING EQUIP. STORAGE ARRANGEMENT & CRANE CLEARANCE DRAWING 729E771) WITHOUT DAMAGE TO SEALING SURFACE OF CONNECTIONS OR BENDING SPOOL SECTIONS.
12. GASKET MATERIAL TO BE OF NATURAL RUBBER, STYRENE BUTADIENE OR STN STEEL "O" RING.
13. ALL BOLT-UP HARDWARE SHALL BE OF THE CAPTURED TYPE.
14. FOR LOCATIONS OF BULKHEAD PENETRATIONS SEE REF. DWG. 7.
15. A MIN. OF 3/8 GAP SHALL BE MAINTAINED BETWEEN THE HEAD INSULATION O.D. AND THE REFUELING BELLOWS I.D.

CLEAN RADWASTE S/S CAPACITY MUCH LESS THAN 1000 GPM. PLEASE EXPLAIN BASIS FOR 1000 GPM LEAKAGE.

REFERENCE DRAWINGS:

1.	REFUELING BELLOWS ASM	LATER
2.	DRYWELL TO REACTOR WELL SEAL	LATER
3.	FUEL POOL COOLING & CLEAN-UP SYSTEM P&ID	729E948
4.	REFUELING FACILITIES ARRANGEMENT	729E948
5.	PRIMARY CONTAINMENT LOADING	729E771
6.	NUCLEAR BOILER P&ID	729E4155
7.	ARRGT. PRIMARY & SECONDARY CONTAINMENT	729E734

REV NO. 0



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