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 RECIP. NAME RECIPIENT AFFILIATION
 ZIEMANN, D. L. Operating Reactors Branch 2

SUBJECT: Responds to Item III-1, NRC question re design & const for systematic evaluation program seismic review. Response deals w/details of block walls throughout plant. Two oversized drawings encl.

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LEON D. WHITE, JR.
VICE PRESIDENT

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June 6, 1979

Director of Nuclear Reactor Regulation
Attention: Mr. Dennis L. Ziemann, Chief
Operating Reactors Branch No. 2
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Systematic Evaluation Program Seismic Review
R.E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Ziemann:

This letter supplements our earlier letters in responding to questions raised by the NRC Seismic Review Team on the design and construction of Ginna Station. Item III-1 identified in our letter of May 22, 1979 dealt with a request for information on details of the block walls throughout the plant. The attachment to this letter and the enclosed drawings respond to that request.

Very truly yours,

L.D. White, Jr.
L.D. White, Jr.

Attachment

7906120406

*Accol
5/1
seismic draws to:
FILES
I & E
J SHEA(5)*

Response for NRC Question III-1

Reinforced concrete block walls are used in the Control Building and for the freight elevator shaft inside the Containment Building. Details of the reinforcement in the block walls are presented on drawings D-105-011 and D-105-012. Reinforcement details for the elevator shaft are the same as those presented for the Battery Room walls in the Control Building. All other block walls throughout the plant have reinforcement provided in the horizontal layers as follows:

1. Horizontal bed reinforcement is Dur-O-Wal standard truss design or Hohmann & Barnard, Inc. Trus-Mesh, of width two inches less than the nominal thickness of the wall. Bed reinforcing is laid in alternate courses, spliced lapped six inches, cut and bent at corners. Over openings reinforcement is laid in the first and second bed joint and extends 24 inches on either side.
2. At junctions of partitions and walls, ties $1\frac{1}{4}$ " x $\frac{1}{4}$ " x 8" flats with two inch right angle bends at either end are inserted at 24 inch centers.
3. At steel columns, wall anchors 2" x $\frac{1}{4}$ " flats with two inch right angle bends at either end are provided at 24 inch centers. Ties are extended approximately to the center of the block wall.

Concrete masonry blocks are hollow units, conforming to ASTM C90-66T, Grade G-II and mortar conforming to ASTM C270-64T, Type N.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MEMORANDUM FOR: TERA Corp.

FROM: US NRC/TIDC/Distribution Services Branch

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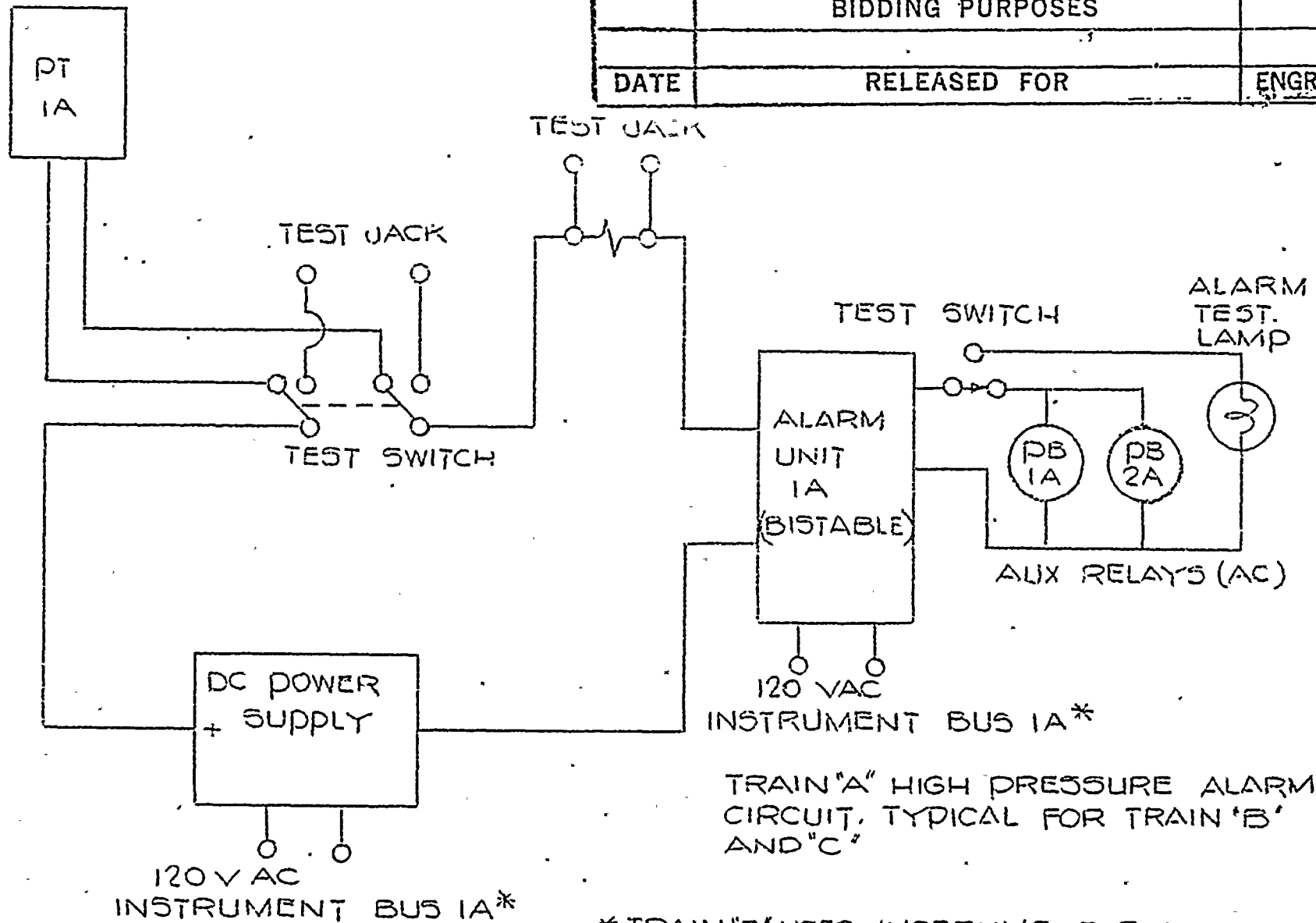
ATTACHMENT A

Sheet A-4

	CONSTRUCTION	
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PRESSURE TRANSMITTER



TRAIN "A" HIGH PRESSURE ALARM CIRCUIT, TYPICAL FOR TRAIN "B" AND "C"

* TRAIN "B" USES INSTRUMENT BUS 1B
TRAIN "C" USES INSTRUMENT BUS 1C

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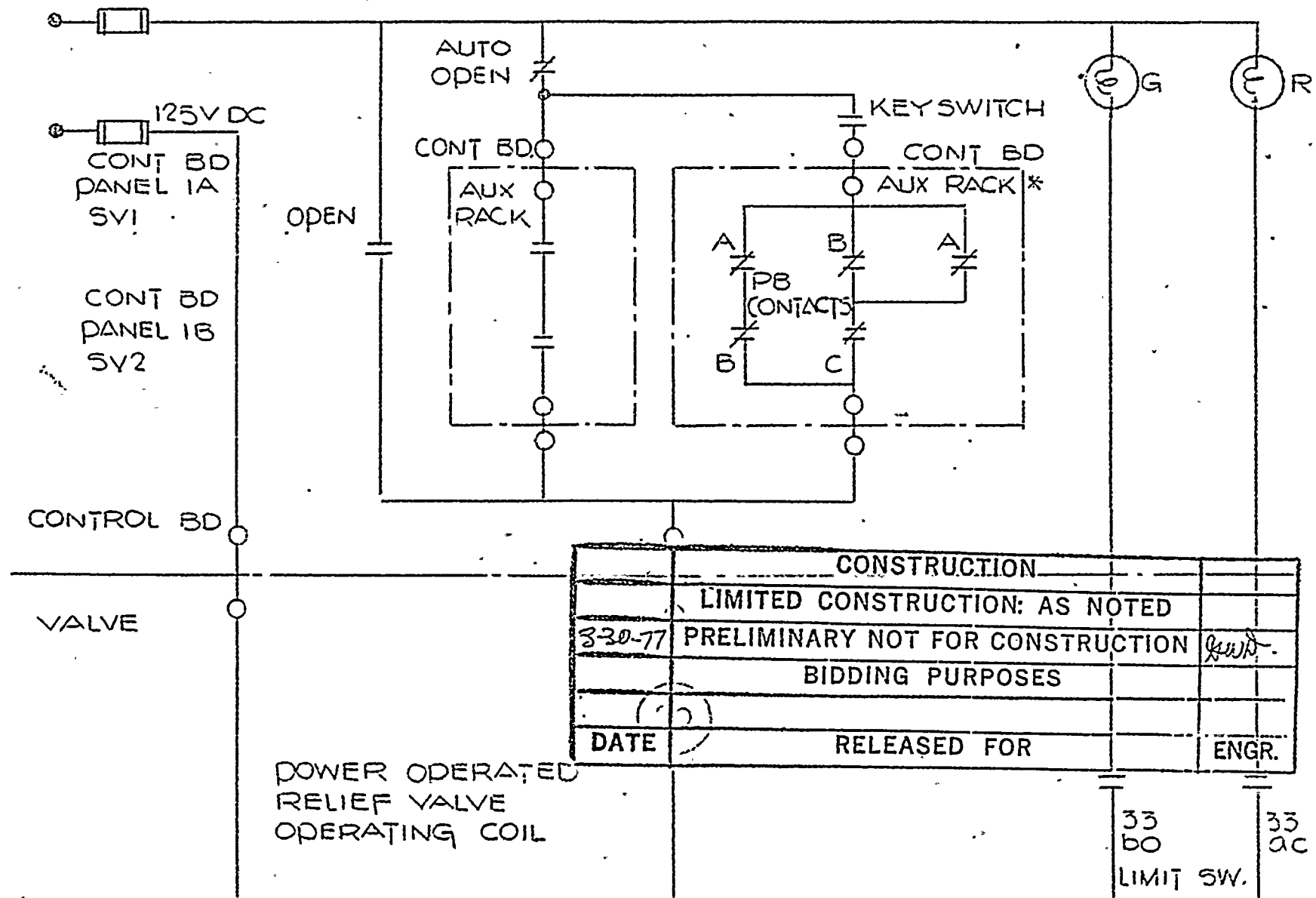
FIG-1

PRELIMINARY

EWR 11060

1005402

TYPICAL POWER OPERATED RELIEF VALVE CIRCUIT TYPICAL FOR SOLENOID VALVES SV1 AND SV2



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		33 BO LIMIT SW.	33 AC

* RELAY ACTS AS ISOLATOR TO MAINTAIN CHANNEL SEPARATION INTERNALLY. WIRING TO RELAY COILS MUST BE SEPARATED IN ACCORDANCE WITH IEEE 384

FIG-2

EWR.#1660

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PRIMARY COOLANT
ECCS FROM SIS

RCS PRESSURE PROTECTION
RHR TO RCS

FLOW PRESSURE, LEVEL, TEMPERATURE INDICATORS/CONTROLLER
CHARGING AND LETDOWN (CVC5) TO RCS

REFERENCE DRAWING

CVC5 - CHEMICAL VOLUME CONTROL SYSTEM
SHEET #1 - DWG. 694J66
CVC5 - CHEMICAL VOLUME CONTROL SYSTEM
SHEET #2 - DWG. 694J66
CVC5 - CHEMICAL VOLUME CONTROL SYSTEM
SHEET #3 - DWG. 540F960
ACS - AUXILIARY COOLANT SYSTEM - DWG.
694J67
WDS - WASTE DISPOSAL SYSTEM SHEET #1
- DWG. 694J876
WDS - WASTE DISPOSAL SYSTEM SHEET #2
- DWG. 694J877
SIS - SAFETY INJECTION SYSTEM - DWG.
694J140
SS - SAMPLING SYSTEM - DWG. 540F961

REFERENCES:

- 1) PROCESS FLOW DIAGRAM - DWG. 540F949
- 2) DEFINITION OF SYMBOLS
- E SPEC. 667176 REV. 2 AND
- E SPEC. 667164 REV. 0
- 3) INSTALLATION OF INSTRUMENTATION
- DROC. SPEC. CAP. 234367 REV. 1
- 4) MATERIAL SPEC. PIPE AND FITTINGS
- E SPEC. 456906 REV. 2 AND
- E SPEC. 461698 REV. 0

LEGEND:

- IMB - INSIDE MISSILE BARRIER AND/OR
SECONDARY SHIELDING
OMB - OUTSIDE MISSILE BARRIER AND/OR
SECONDARY SHIELDING
GA - GAS ANALYZER (WDS)

VH - VENT HEADER (WDS)

DT - DRAIN TANK
FC - FAIL CLOSED
FO - FAIL OPEN
V - LOCAL VENT
T - CONTAINMENT ISOLATION
SIGNAL
OR - REMOVAL REQUIRED
LO - LOCKED OPEN
D - LOCAL DRAIN

NOTES:

- 1) 29" INSIDE DIAMETER
- 2) 31" INSIDE DIAMETER

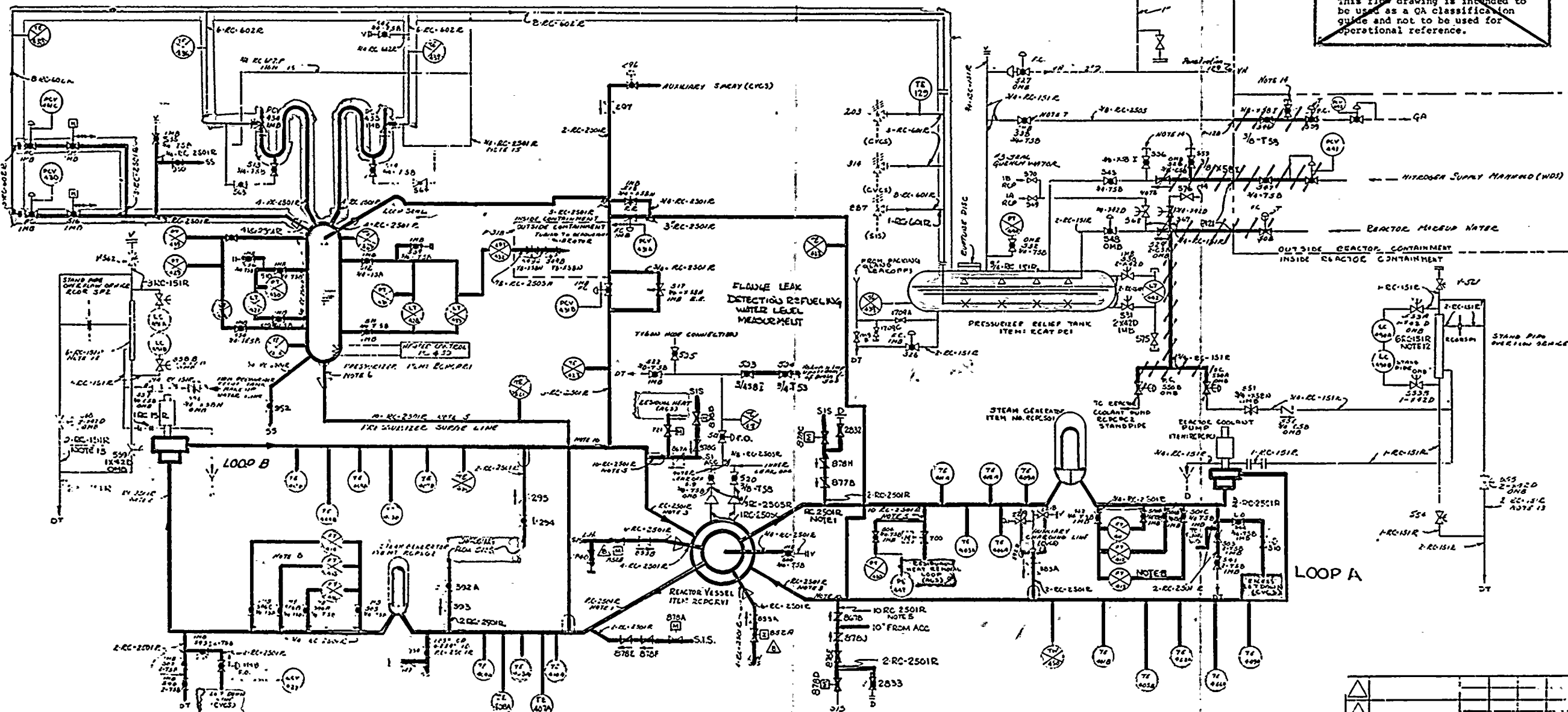
3) 27.5 INSIDE DIAMETER

- 4) ALL GLOBE VALVE INSTALLED WITH FLOW UNDER
THE SEAT EXCEPT NO. 548
- 5) SCHEDULE 140 PIPE
- 6) 14" SCHEDULE 140 NOZZLE
- 7) 3/4" PIPE X 3/8" TUBE INSERT
- 8) ELBOW FLOW METER
- 9) ALL ITEM NUMBERS INCLUDE
PREFIX RA
- 10) SPRAY LINE SCOOP
- 11) FIRST VALVE IN PIPING CONNECTED
TO REACTOR COOLANT PIPING IS LOCATED
ABOVE REACTOR VESSEL NOZZLE CENTER
LINE EXCEPT NO. 501, 502, 503, 505,
506, 507, 543, 544 AND 700
- 12) AND PIPE IS 6 IN. SCHEDULE 10S
PIPE BOTH ENDS CAPPED

- 13) PIPE SHOULD BE SLOPED DOWN HILL
THROUGHOUT THE RUN TO DRAIN TANK
- 14) ISOLATION VALVE TEST CONNECTION
CONNECTIONS OF VALVE TEST
SWITCH LOCK SW. UNLOCK 2500
PSI TUBING BETWEEN VALVE UNION
SHUT OFF VALVE FOR 3/4" SHUT OFF VALVES
AND 3/4" TO 3/8" SW REDUCER.
- 15) LINE SHOULD BE SELF DRAINING

USNRC QUALITY GROUP A IS RED
USNRC QUALITY GROUP B IS BLUE
USNRC QUALITY GROUP C IS GREEN
QA INSTRUMENTATION IS YELLOW

NOTE:
This flow drawing is intended to
be used as a QA classification
guide and not to be used for
operational reference.

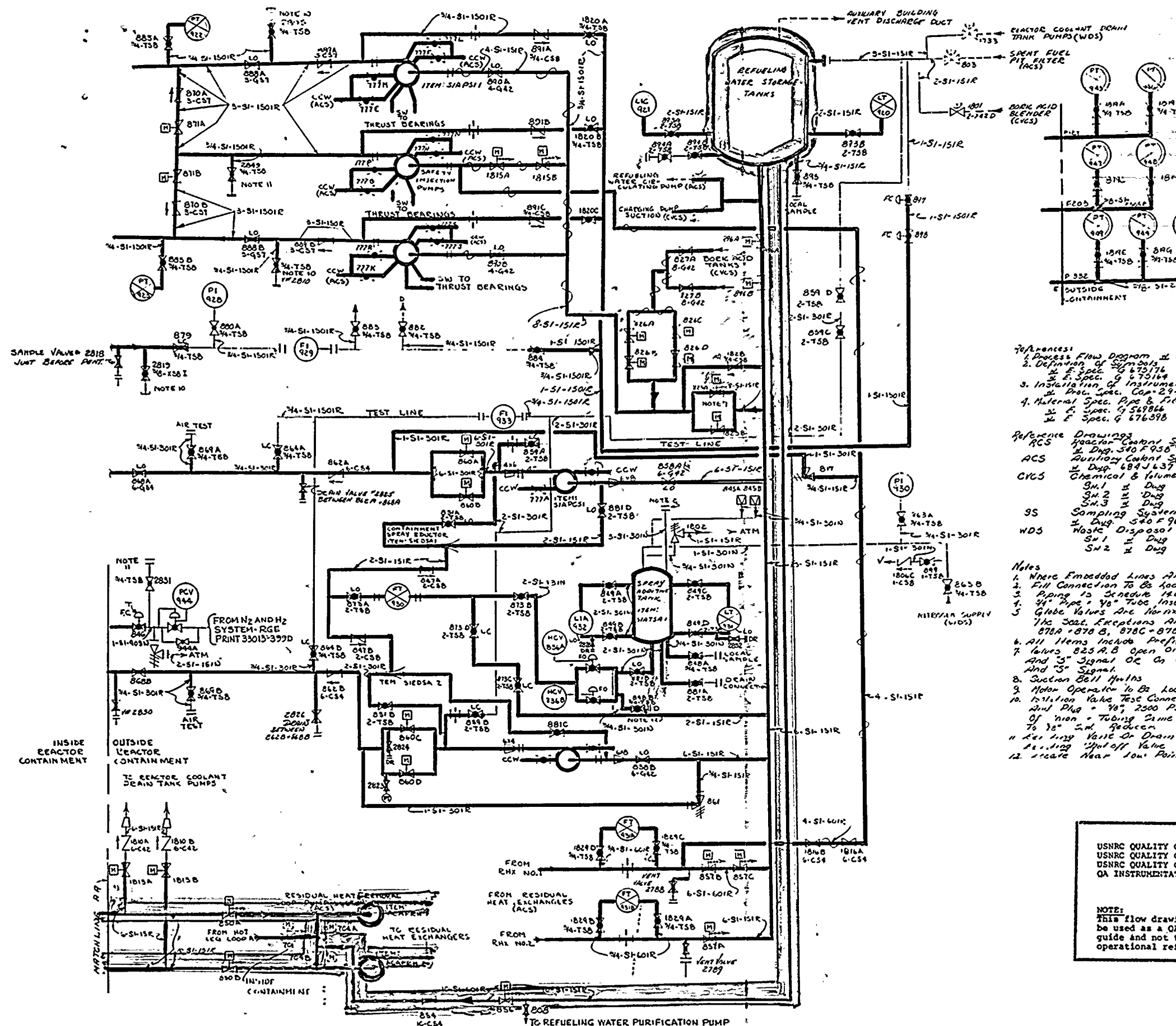


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ROCKETER GAS & ELECTRIC CORP. ROBERT EMMETT CHINA NUCLEAR POWER STATION UNIT NO. 1 REACTOR COOLANT SYSTEM ENGINEERING FLOW DIAGRAM	SCALE 1" = 12"	JOB NO. NO. 32013-414B
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- PRIMARY FLOW TO RHRS FROM RCS
- ALTERNATE FLOW TO RHRS FROM RCS
- SIS/CONTAINMENT SPRAY (NOT USED DURING NORMAL START UP AND SHUT DOWN)
- ALTERNATE SUPPLY TO RHRS FROM RWST
- COMPONENT COOLING WATER

- References:
- Process Flow Diagram & Dwg. 684J941
 - Definition of Symbols & E. Spec. 675176 Rev. 2 And 675164 0
 - Installation & Instrumentation Drawings, Cap. 294367 Rev. 1
 - Material Spec. Pipe & Fittings & E. Spec. 675866 Rev. 2 And 675867 Rev. 0

- Reference Drawings:
- RCS Reactor Coolant System & Dwg. 540 F 958
 - ACS Auxiliary Cooling System & Dwg. 684J637
 - CVCS Chemical & Volume Control System & Dwg. 684J616 & Dwg. 684J824 & Dwg. 540 F 960
 - GS Sampling System & Dwg. 540 F 961
 - WDS Waste Disposal System & Dwg. 684J876 & Dwg. 684J877

Notes

- Where Embedded Lines Are Schedule 803
- Fill Connection To Be Located At Operating Floor Level
- Piping To Schedule 140
- 1/4" Pipe - 1/8" Tube Insert
- Globe Valves Are Normally Installed With Flow Under The Seat. Exceptions Are Valves: 834A - 834B, 835A - 835B, 874A - 874B, 878A - 878B, 878C - 878D
- All Items Include Prefix RG
- Valves 825A, B Open On Coincidence Of Low Level In Boric Acid Tanks And "S" Signal Or On Coincidence Of Failure To Open 826A - B, Or 826 C-D And "S" Signal
- Suction Bell Flanges
- Motor Operator To Be Located Above Water Level
- Isolation Valve Test Connection Consists Of Shut Off Valve, Swagelok S.W. Union And Plug - 1/8" 2500 PSI Tubing Between Valve And Union. Material Of Non - Tubing Same As Shut Off Valve For 1/4" Shut Off Valves, Add 1/4" To 1/2" S.W. Reducer
- Relief Valve Or Drain To Be Used As Isolation Valve Test Conn.
- Relief Valve Shut Off Valve Listed On Dwg. 8-326-028
- Locate Near Low Point Upstream Of M.C.'s

USNRC QUALITY GROUP A IS RED
USNRC QUALITY GROUP B IS BLUE
USNRC QUALITY GROUP C IS GREEN
QA INSTRUMENTATION IS YELLOW

NOTE:
This flow drawing is intended to be used as a QA classification guide and not to be used for operational reference.

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ROCHESTER GAS & ELECTRIC CORP. ROCHESTER, NEW YORK	ROBERT EMMETT GINNA NUCLEAR POWER STATION UNIT NO. 1
SAFETY INJECTION SYSTEM ENGINEERING FLOW DIAGRAM	
SCALE 1/4" = 1 FT. PT. PER INCH	JOB NO. NO. 33013-425-A



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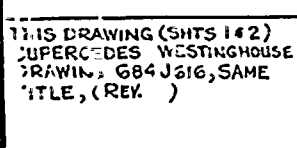
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ROCHESTER GAS & ELECTRIC CORP.
ROCHESTER, NEW YORK

ROBERT EMMETT GINNA
UNIT NO. CHEMICALS & TOWNE CONTROL SYSTEM
ENG FLOW DIAG

NO 33012 422

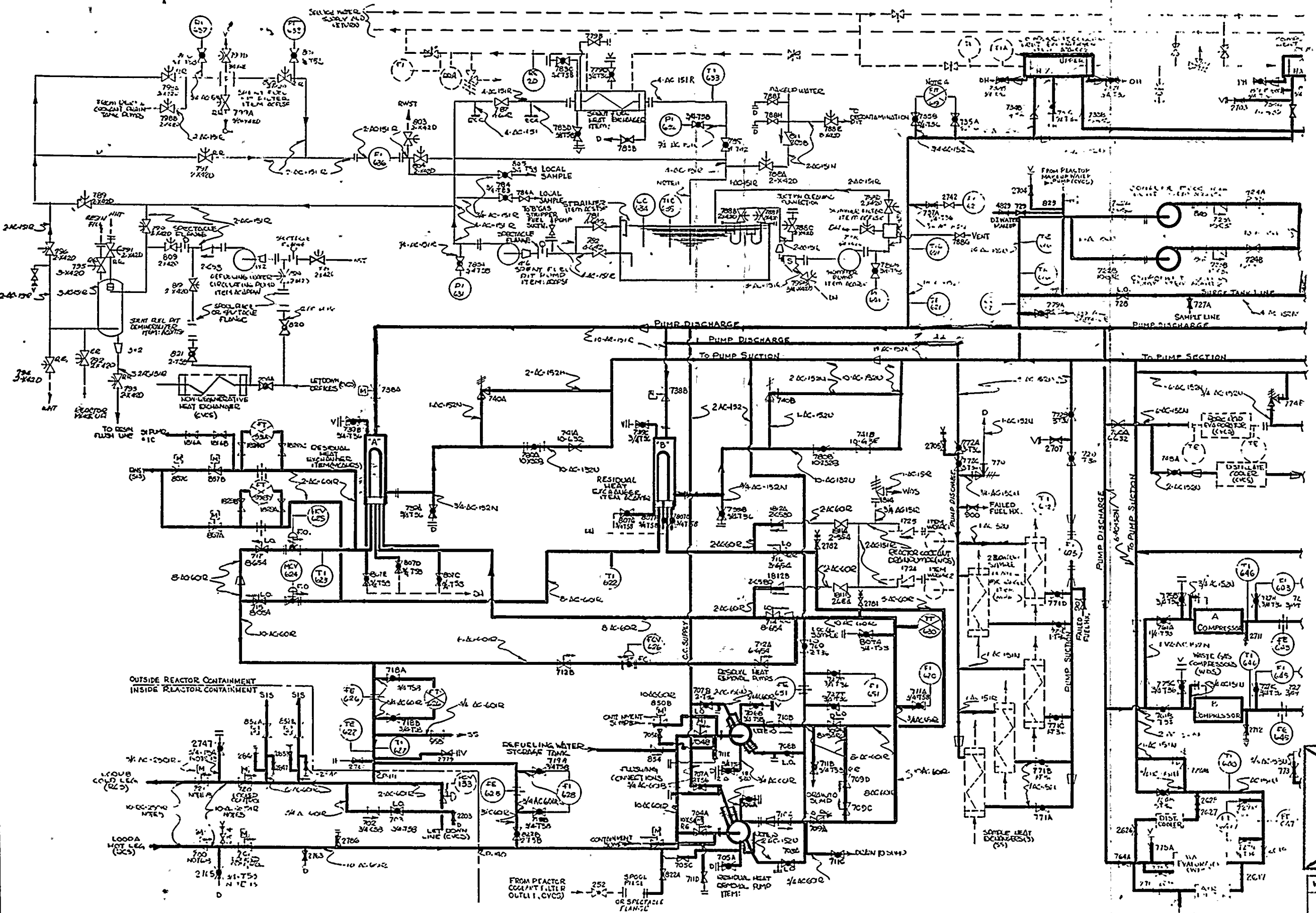
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	FOLDER NO.	
3	SCALE  INCHES = 1 FT FT. PER INCH	JOB NO. NO. 23013-426A

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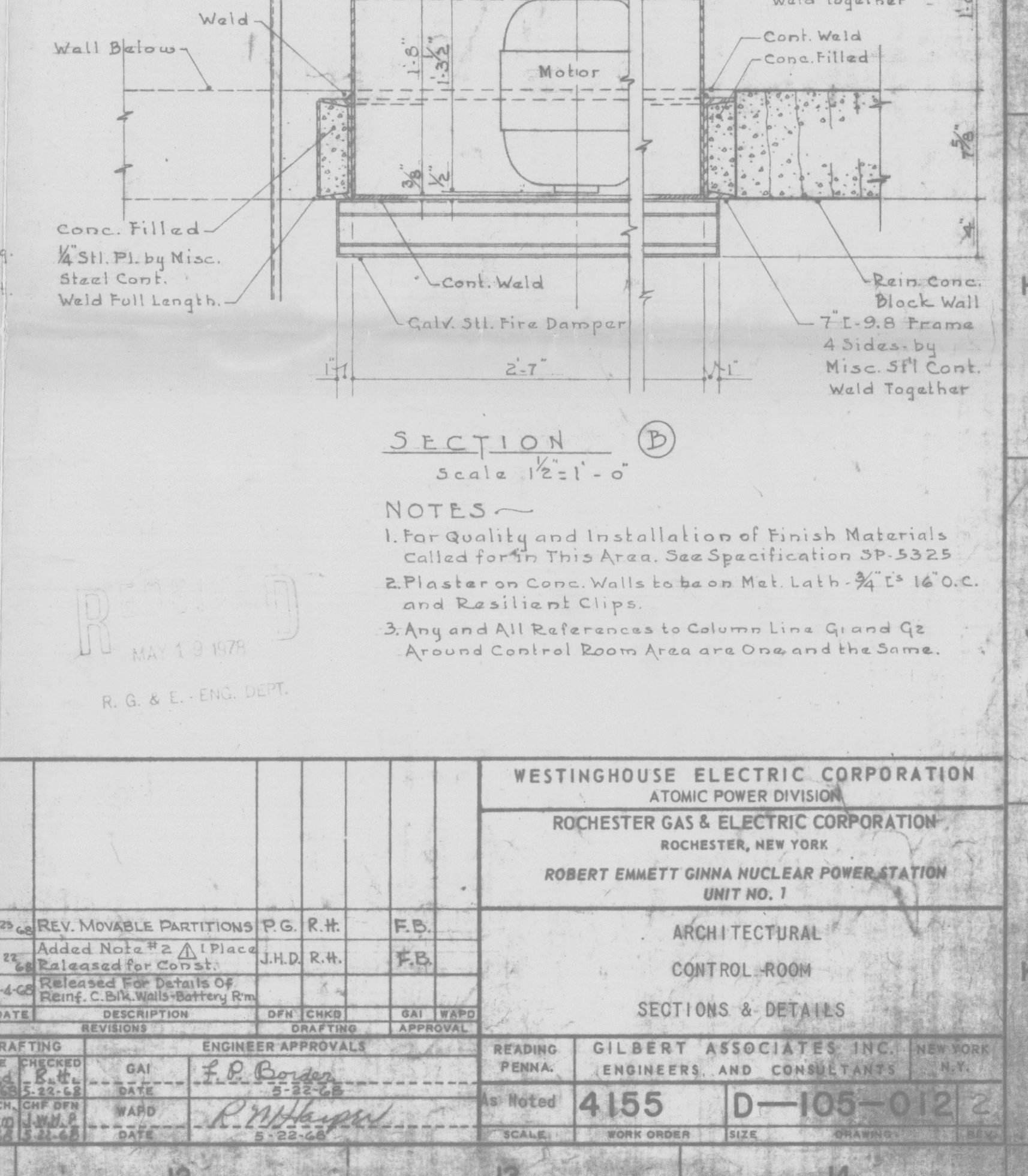
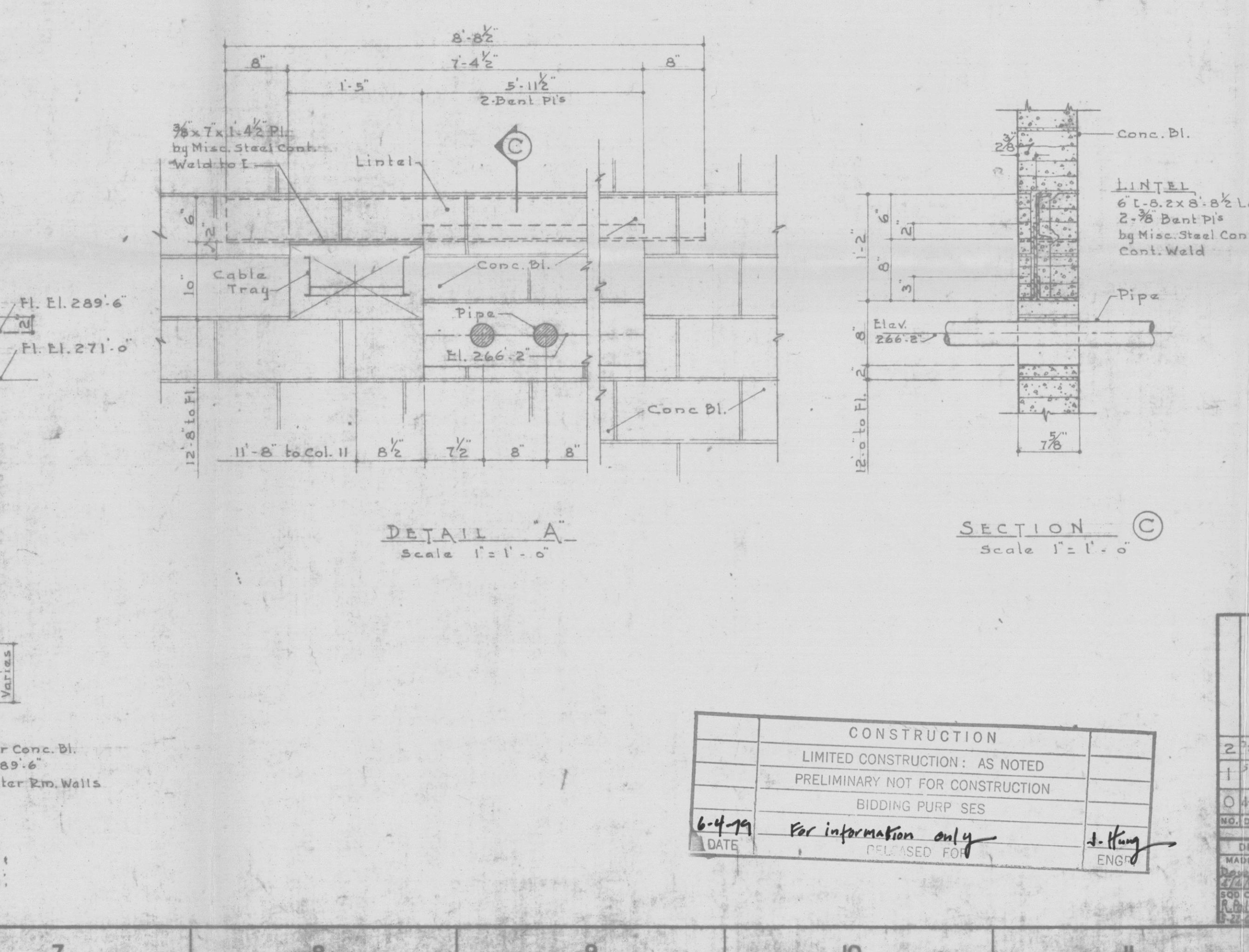
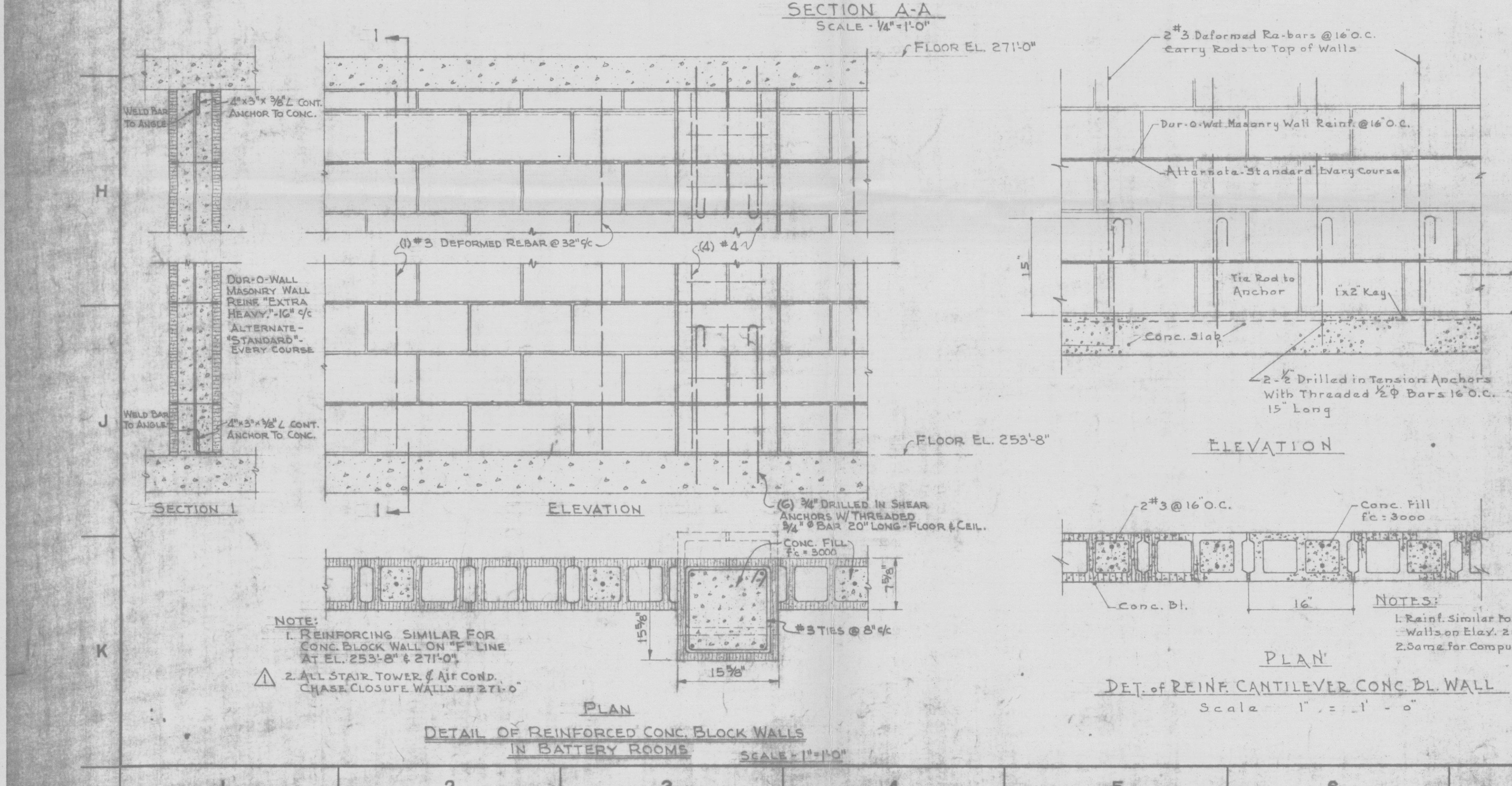
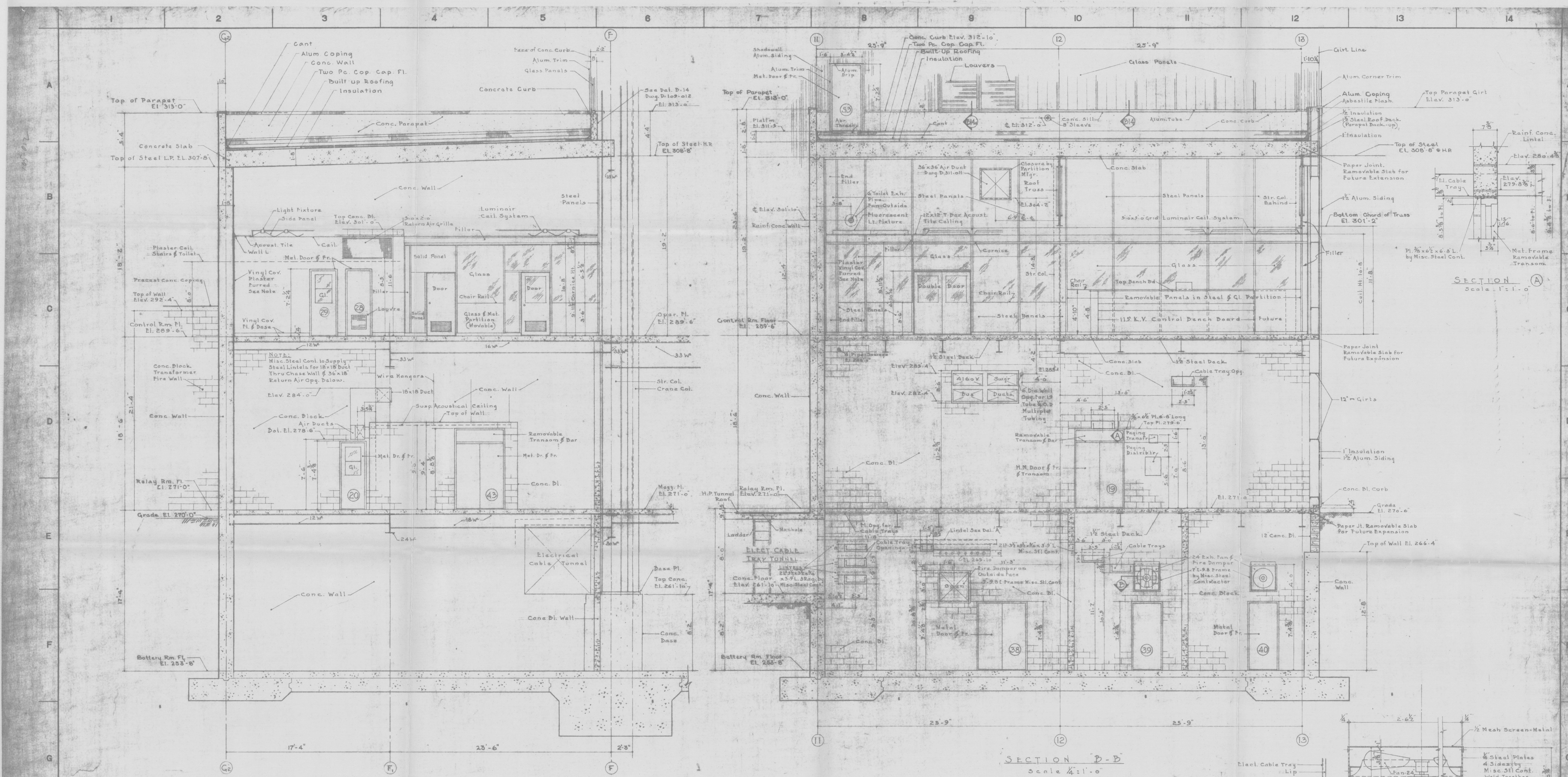
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- RCS INLET/
 OUTLET TO RHR'S
 - RHR NOR-
 MAL FLOW
 - COMPONENT
 COOLING
 - FLOW/TEMP
 CONTROLLERS

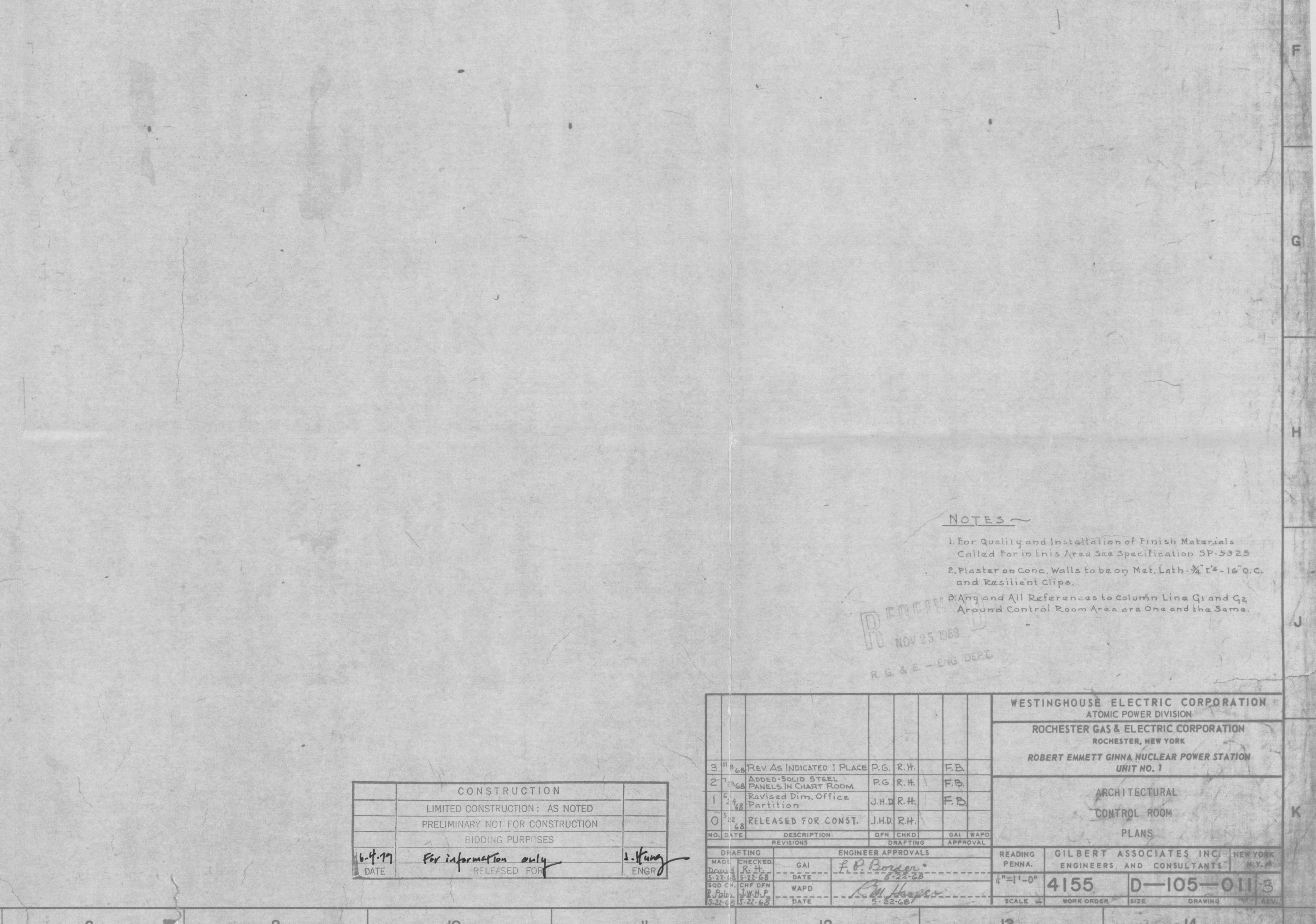
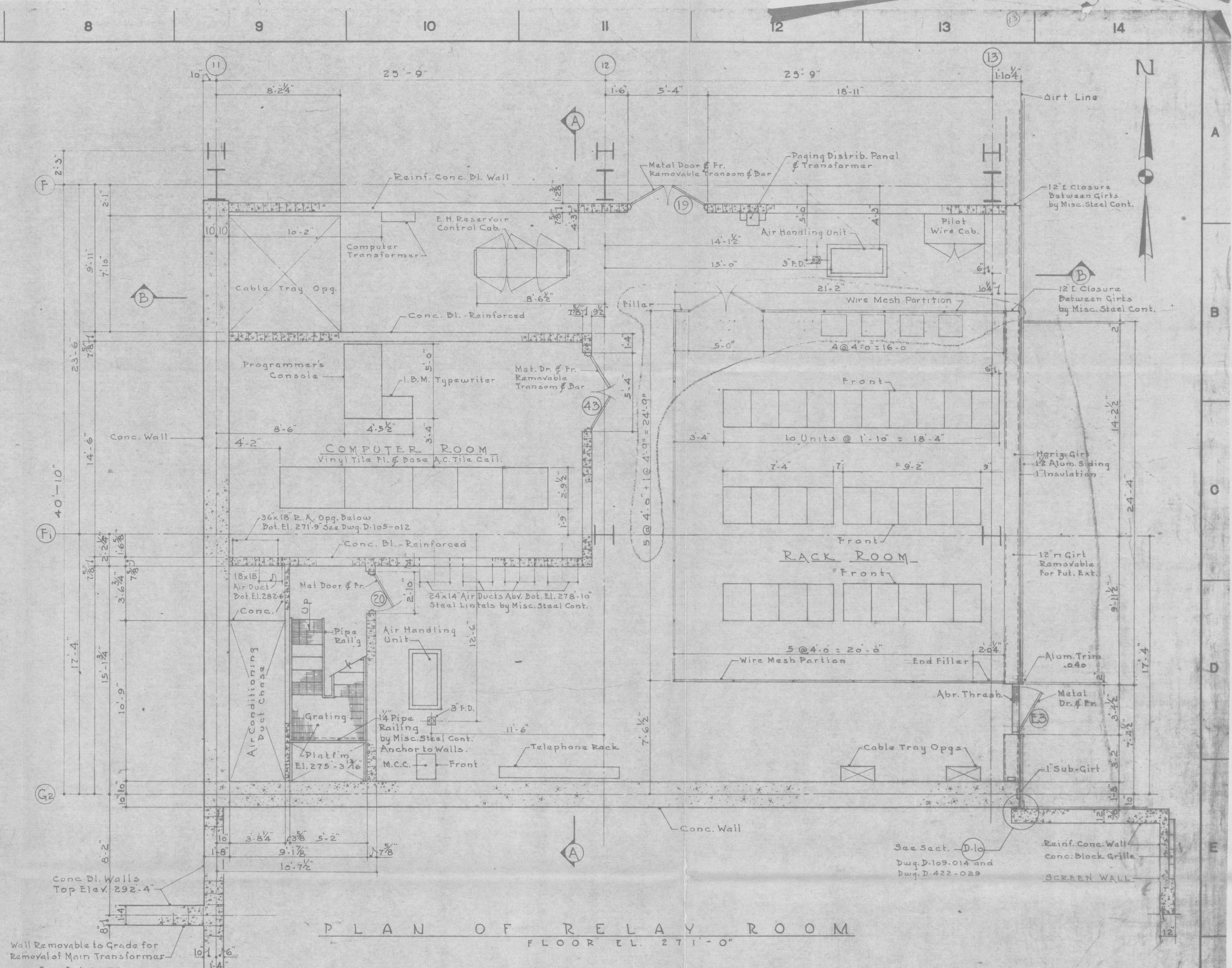
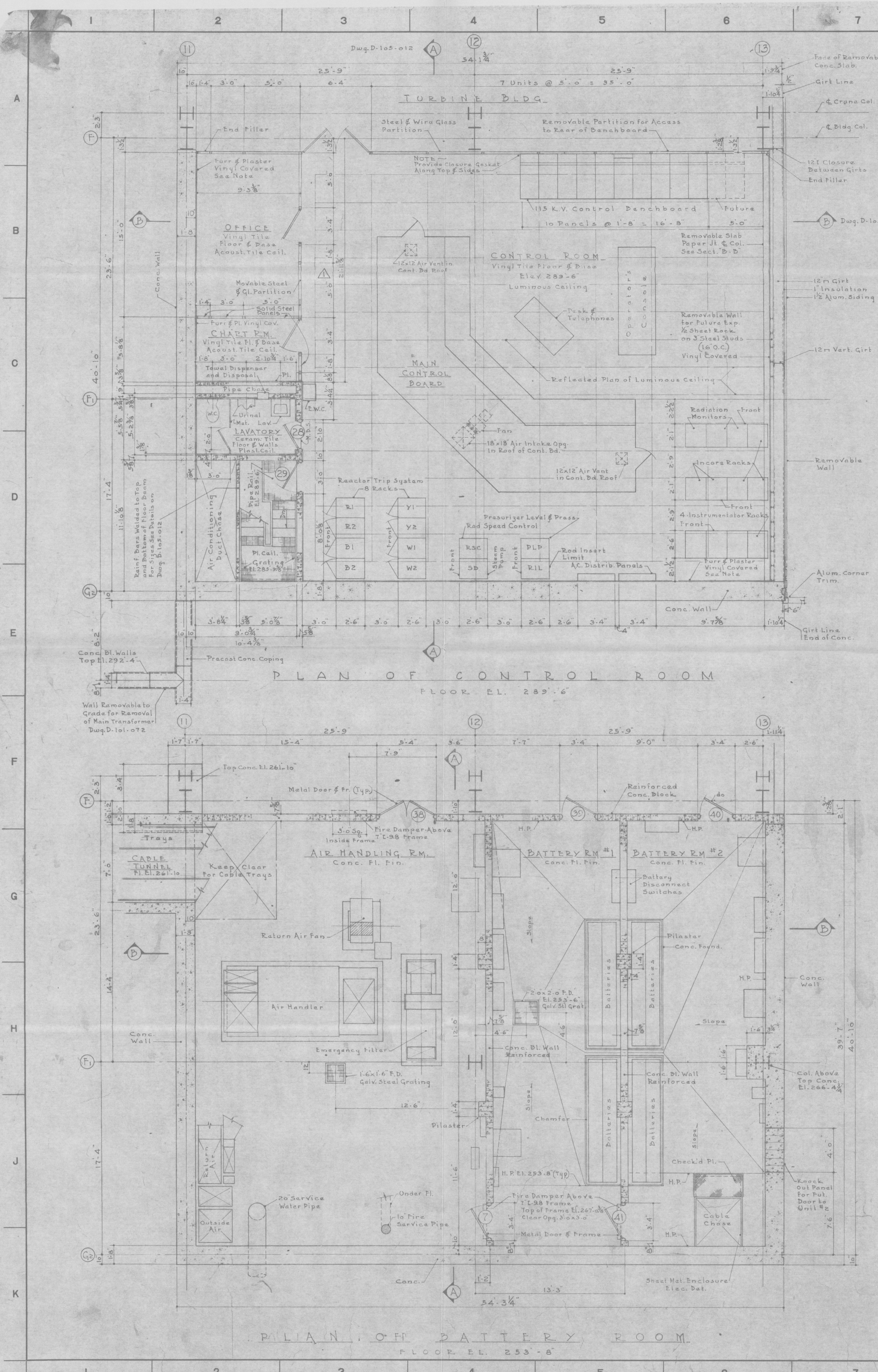


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7906120406 E



NOTES
1. For Quality and Installation of Finish Materials Called For in this Area See Specification SP-3325
2. Plaster on Conc. Walls to be on Met. Lath 3/4" x 16" o.c. and Resilient Clips.
3. All Dimensions are to Column Line G and G₂ Around Control Room Area are One and the Same.

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