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ZIMMERMAN,S.R. Carolina Power & Light Co.
RECIP.NAME. RECIPIENT AFFILIATION
DENTON,H.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Submits addl info re fire doors in response to SER Open Item 8 on fire protection.Two drawings withheld.

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Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
United States Nuclear Regulatory Commission
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT
UNIT NO. 1 - DOCKET NO. 50-400
FIRE PROTECTION DOORS

Dear Mr. Denton:

Carolina Power & Light Company hereby submits additional information concerning fire doors at the Shearon Harris Nuclear Power Plant (SHNPP). The attached information is submitted in response to Safety Evaluation Report (SER) Open Item Number 8 concerning Fire Protection.

If you have any further questions or require additional information, please contact me.

Yours very truly,

for S. R. Zimmerman
Manager
Nuclear Licensing Section

JHE/pgp (830JHE)

Attachments

cc: Mr. B. C. Buckley (NRC)
Mr. G. F. Maxwell (NRC-SHNPP)
Mr. J. P. O'Reilly (NRC-RII)
Mr. Travis Payne (KUDZU)
Mr. Daniel F. Read (CHANGE/ELP)
Chapel Hill Public Library
Wake County Public Library
Mr. Wells Eddleman
Mr. John D. Runkle
Dr. Richard D. Wilson
Mr. G. O. Bright (ASLB)
Dr. J. H. Carpenter (ASLB)
Mr. J. L. Kelley (ASLB)
Mr. R. Eberly (NRC-CMEB)

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ATTACHMENT

Shearon Harris Nuclear Power Plant
SER Open Item 8
Fire Protection - Additional Information

Carolina Power & Light Company will provide doors with a 1 1/2 or 3 hour rating having been tested by a nationally recognized testing laboratory except in those areas where design requirements specify the use of special doors. These special doors are listed in the attached table. These doors have specialty functions such as tornado/missile shield required for non-fire protection plant design requirements. As such, these doors have not been documented by the manufacturers as concerns hourly fire rating.

Details of specific door designs are also attached. In conjunction with the designs, the attached table outlines specific door locations and provides plant features and conditions which mitigate the need for tested or listed doors. It is our position that the door details and the attached table combine to justify the doors as adequate to maintain the integrity of the fire barriers in which they are installed and do not have an adverse effect on the ability to safely shutdown the plant in the event of a fire.

(837NLU/ccc)

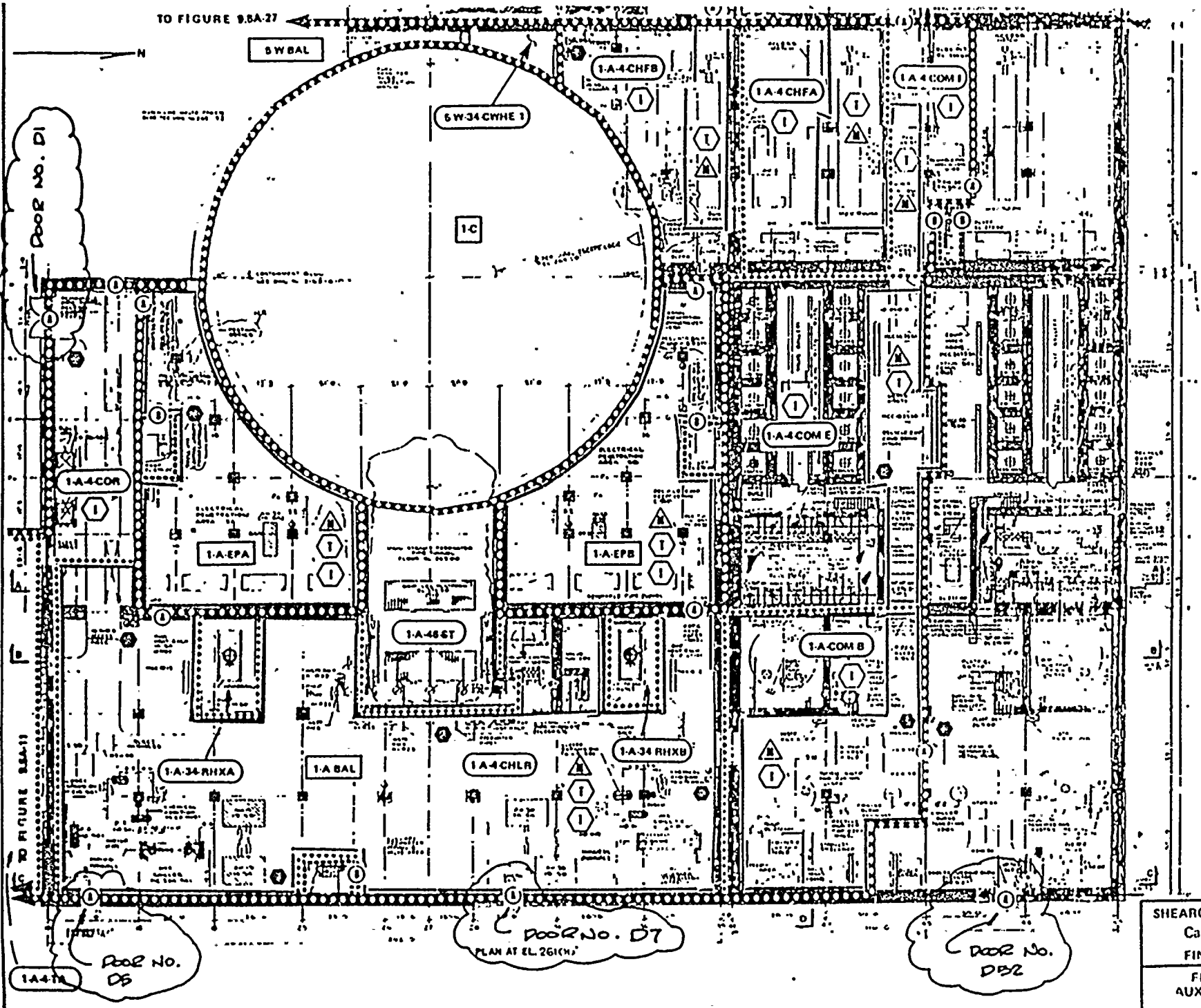
DESIGN INFORMATION FOR FIRE DOOR DEVIATION

DOOR NO.	FSAR FIGURE	SSA SK.	INT./EXT. DOOR	FIRE ZONE(S)	AUTOMATIC PROTECTION	COMBUSTIBLE LOADING	SSA EQUIPMENT WITHIN 20 FEET OF DOOR
D1	9.5A-8	668S12	Ext.	1-A-4-COR	I	141,445 BTU/sq ft	None
				Yard	None	No major loading within 50'	None
D5	9.5A-8	668S13	Ext.	1-A-4-CHLR	M, T, & I	155,296 BTU/sq ft	Chilled Water Pump P-4 (SA) HVAC Chiller WC-2 (SA) Condensate Water Circ. Pump (SA)
	9.5A-35	None		Turbine Bldg. El. 261	W & T	Steam generator feed pumps 78,478 BTU/sq ft	SB Redundant Sys. more than 20' separation None
D7	9.5A-8	668S13	Ext.	1-A-4-CHLR	M, T, & I	155,296 BTU/sq ft	AOV 3CX-W21SA-1 AOV 3AF-F5-SB-1 AOV 3AF-F6-SB-1 AOV 3AF-F4-SB-1
	9.5A-35	None		Turbine Bldg. El. 261	W & T	Steam generator feed pump 78,478 BTU/sq ft	AOV 3CX-W28SB-1 AOV 3AF-F3-SA-1 AH-20 (SA) Local Cooling AH-20 (SB) Local Cooling None
D52	9.5A-8	668S15	Ext.	U2 fire zone	None	None	None
	None	None		Turbine Bldg. El. 261	None	No major loading within 60'	None
D133	9.5A-15	None	Ext.	5-F-3-CHG	None	Negligible	None
	None	None		Yard	None	No major loading within 50'	None
D232	9.5A-9	668S17	Ext.	1-A-5-HV3	None	Negligible	El. 286 Junction Box B1629-SB (3-hr. protected) El. 261 Same as Door No. D5
	9.5A-36	None		Turbine Bldg. El. 286	P & T	Condenser vacuum pump & mezzanine floor 28,097 BTU/sq ft	None
D250	9.5A-9	668S17	Ext.	1-A-SWGRB	I	106,792 BTU/sq ft	None
	9.5A-36	None		Turbine Bldg. El. 286	P & T	Mezzanine floor 28,097 BTU/sq ft	None

DOOR NO.	FSAR FIG.	SSA SK	INT./EXT. DOOR	FIRE ZONE(S)	AUTOMATIC PROTECTION	COMBUSTIBLE LOADING	SSA EQUIPMENT WITHIN 20 FEET OF DOOR
D284	9.5A-9	None	EXT.	12-A-5-CHF	P, T &I	82,241 BTU/sq. ft.	None
	9.5A-9	None		Outside	None	None	None
D385	9.5A-11	668S05	EXT.	1-A-4-TA	None	Negligible	None
	9.5A-11	None		Outside	None	None	None
D449	9.5A-10	668S20	EXT.	12-A-6-RT-1	I	Negligible	Main termination Cabs. (SB) 7.5 KVA UPS Rect. IDP-1B Cables to SA MTC's NOTE: Remote shutdown is available from outside the Control Room Complex
	9.5A-10	None		Outside	None	None	None
D450	9.5A-10	668S20	EXT.	12-A-6-RCC-1	I	Negligible	Air Handler AH-93 (SA) SV 3CX-W34SA-1
	9.5A-10	None		Outside	None	None	None
D463	9.5A-10	668S20	EXT.	12-A-6-CR1	I	Negligible	None
	9.5A-36	None		Turbine Bldg.	P & T	28,097 BTU/sq. ft.	None
D473	9.5A-10	668521	EXT.	12-A-6-HV-7	I	19,255 BTU/sq. ft.	AH-15 (1B-SB) MCC 1836-SB MOV 3C2-B26SB-1 MOV 3C2-B8SB-1 AOV 3CX-W24SB-1 MOV 3C2-B2SB-1 RM-1C2-3504A-SA E-10 (1A-SA) E-10 (1B-SB)
	9.5A-10	None		Outside	None	None	None
D800 D801 D802	9.5A-27	None	EXT.	5-W-34-DRM	I	13,129 BTU/sq. ft.	None
	9.5A-27	None		Yard	None	None	None
D892	9.5A-15	None	EXT.	5-F-4-BAL	None	Negligible	None
	9.5A-15	None		Outside	None	None	None
D134	9.5A-15	None	EXT.	5-F-3-SC	None	Negligible	None
	9.5A-15	None		Yard	None	None	None

DOOR NO.	FSAR FIG.	SSA SK	INT./EXT. DOOR	FIRE ZONE(S)	AUTOMATIC PROTECTION	COMBUSTIBLE LOADING	SSA EQUIPMENT WITHIN 20 FEET OF DOOR
D3092*	9.5A-14	None	INT.	5-F-2-FPC	M,T	1161 BTU/sq. ft	None
	9.5A-14	None		Hot Machine Shop	None	None	None
D3312*	9.5A-14	None	INT.	5-F-2-DEC	I	Negligible	None
	9.5A-14	None		Contaminated Tool Storage	None	None	None

* NOTE: These doors were previously tagged D092 and D312.

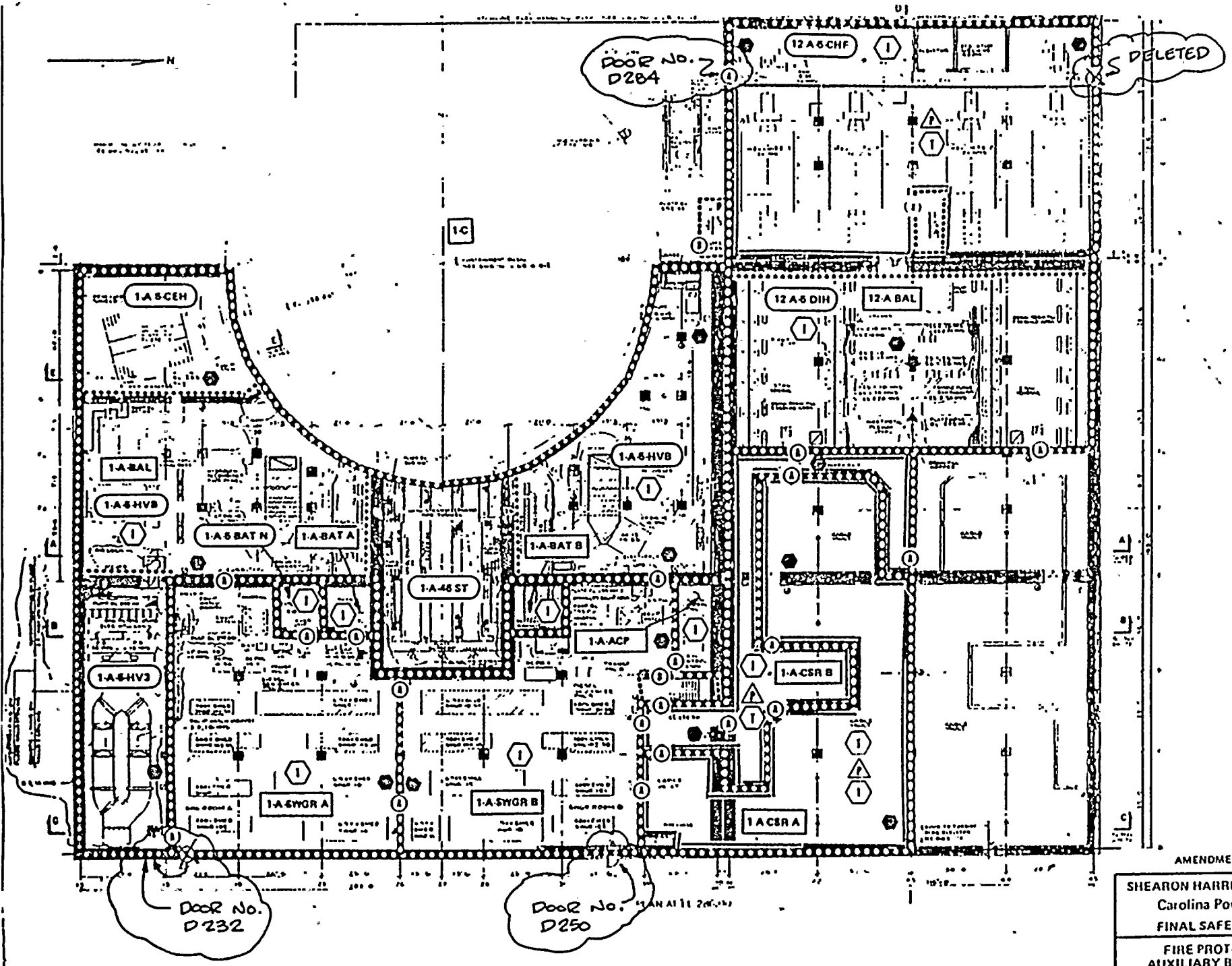


AMENDMENT NO. 15

SHEARON HARRIS NUCLEAR POWER PLANT
Carolina Power & Light Company
FINAL SAFETY ANALYSIS REPORT

FIRE PROTECTION REACTOR AUXILIARY BLDG PLAN EL 261.00'

FIGURE 9.5A 8



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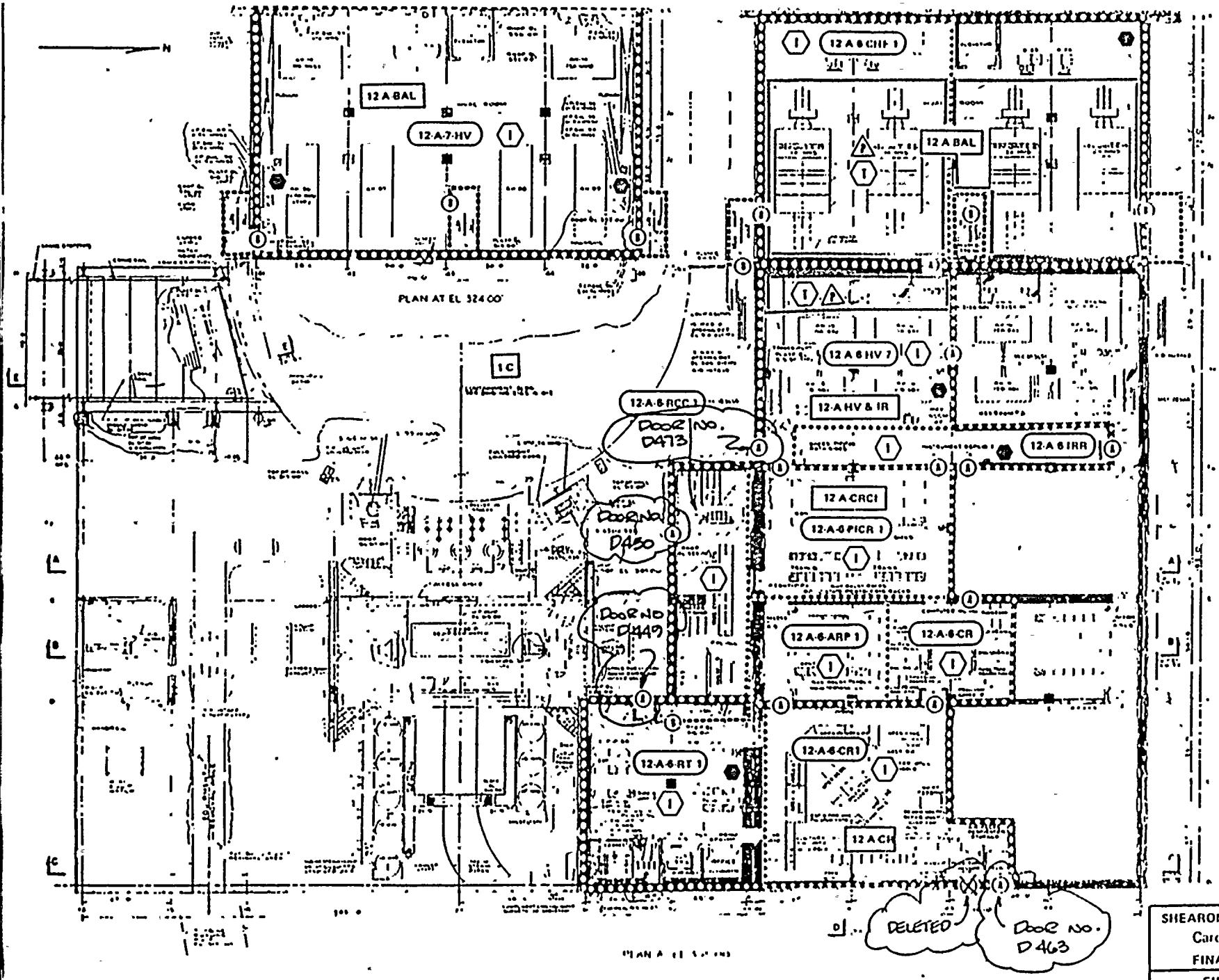
FIRE PROTECTION REACTOR AUXILIARY BLDG – PLAN EL 286.00'

FIGURE 9.5A-9



NOTE

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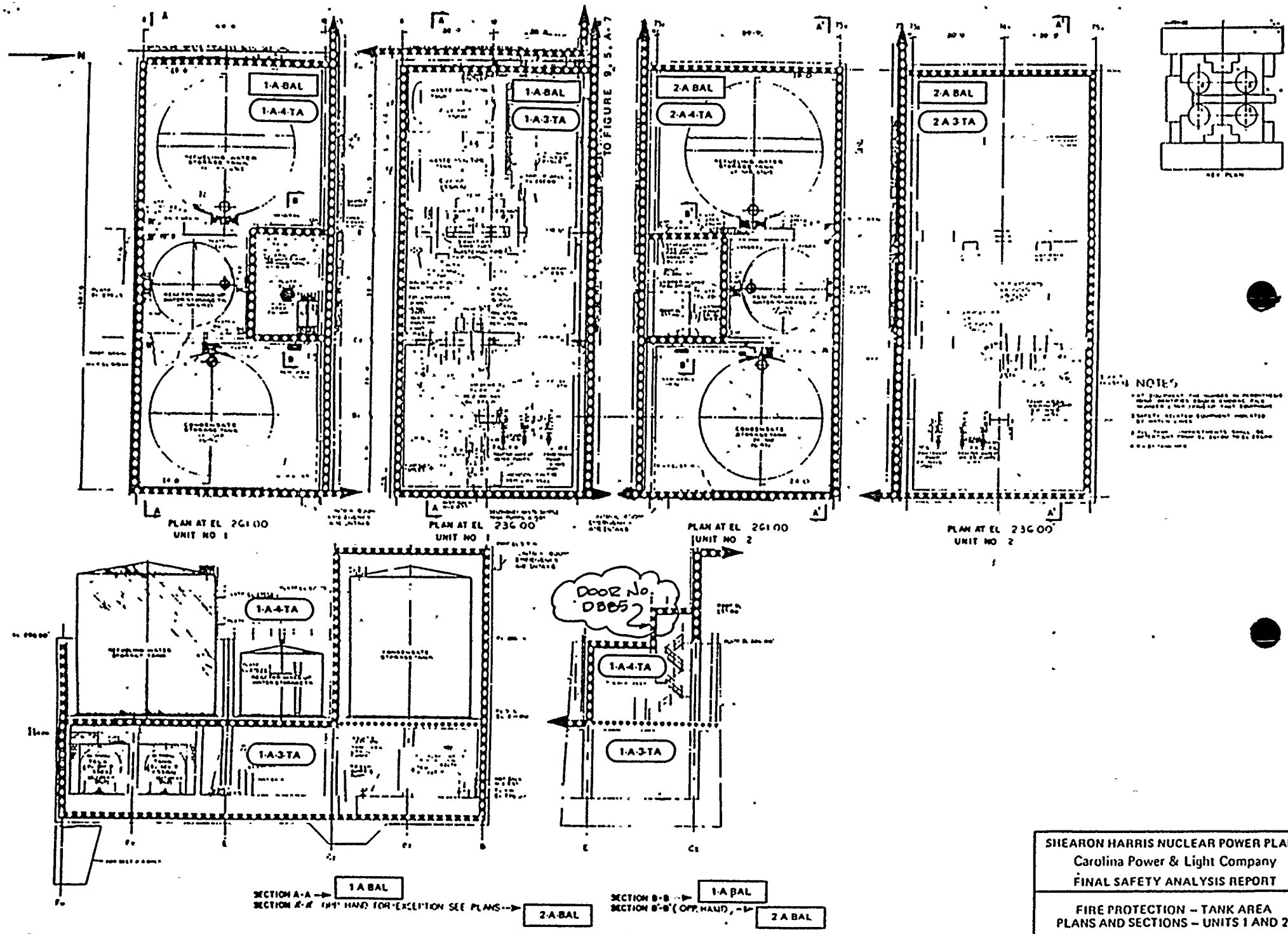
FINAL SAFETY ANALYSIS REPORT

FIRE PROTECTION - REACTOR AUXILIARY BLDG - PLAN EL 305.00'

FIGURE 9.5A-10



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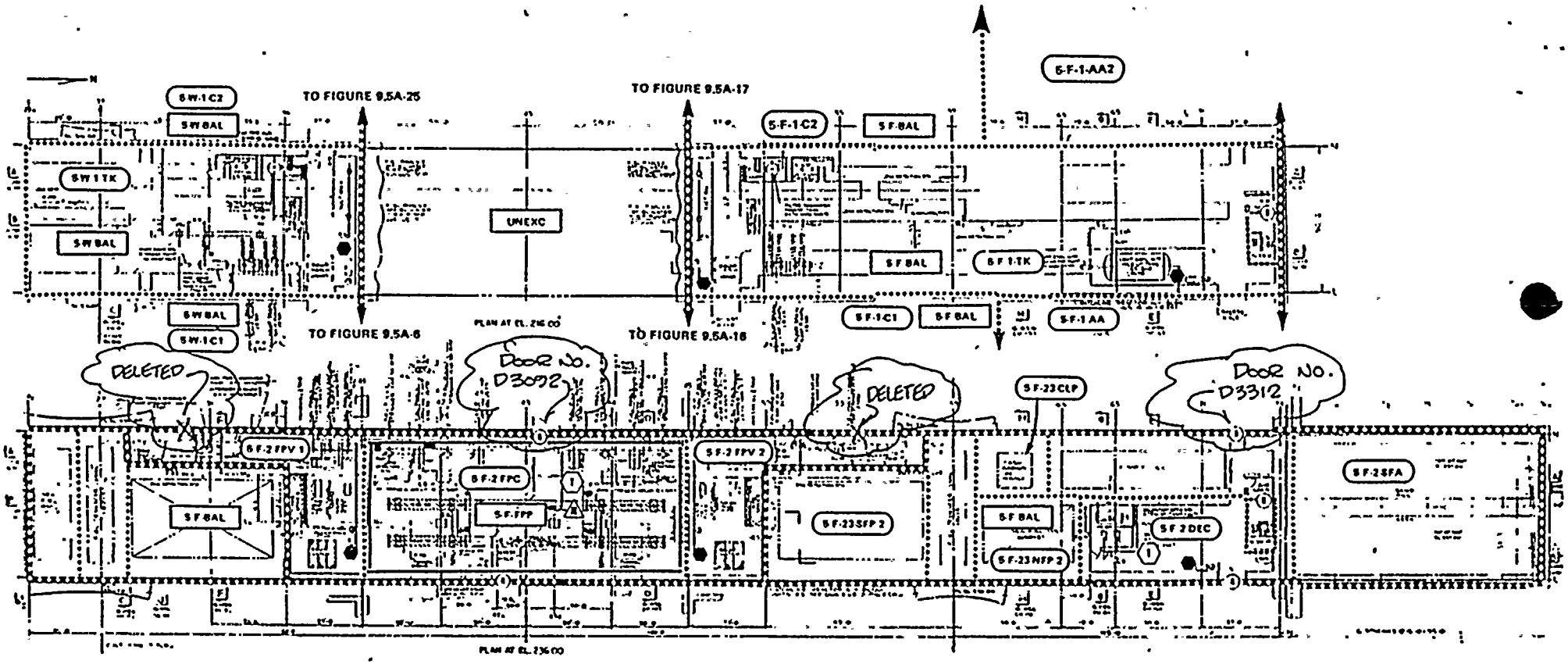
FIRE PROTECTION – TANK AREA
PLANS AND SECTIONS – UNITS 1 AND 2

FIGURE 9.5A-11

REF DWG: CAR 2165-G-033 (REV 6, OPEN)



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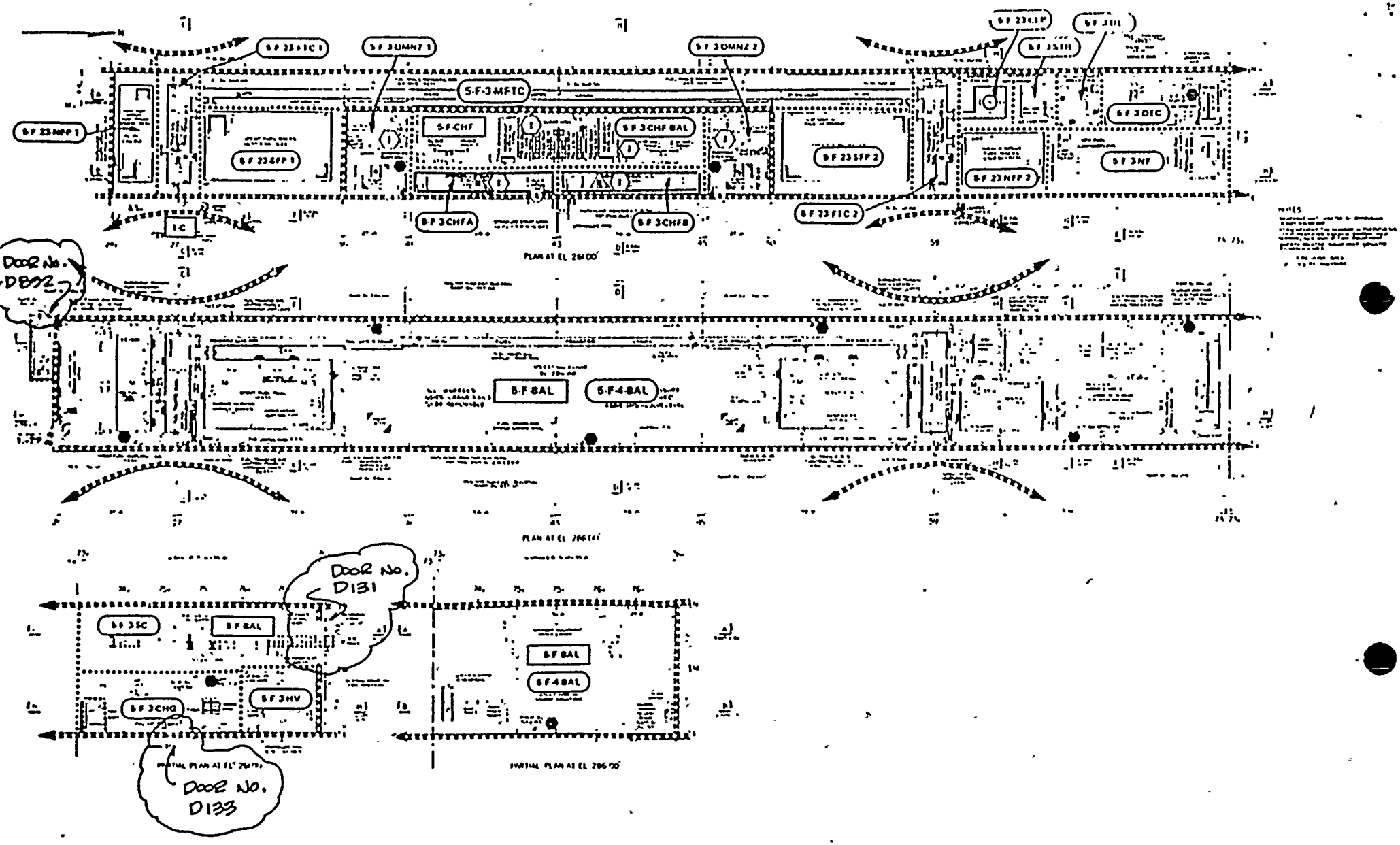
FIRE PROTECTION—FUEL HANDLING BUILDING—PLANS—SHEET 1

FIGURE 9.5A-14



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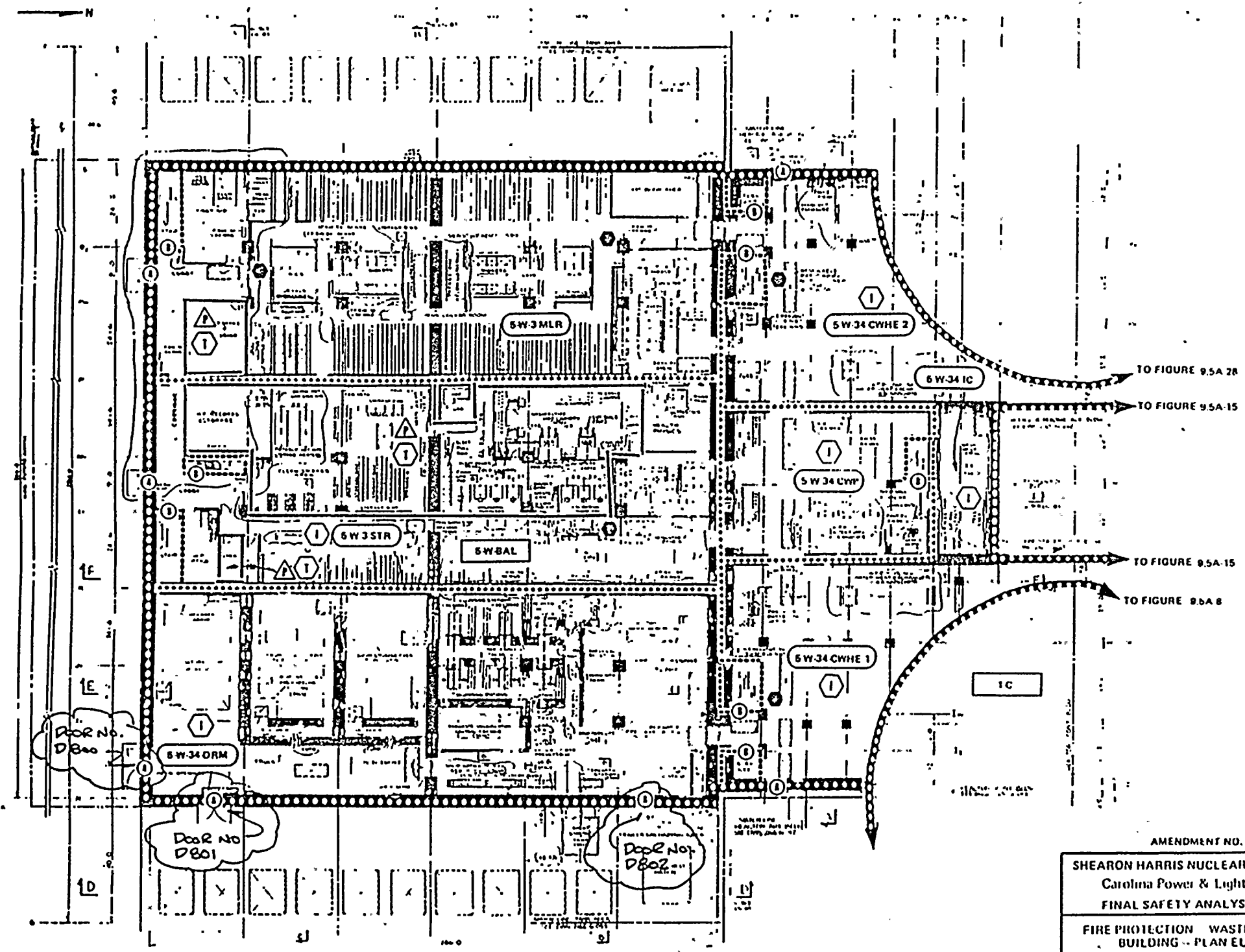
FIRE PROTECTION FUEL HANDLING BUILDING PLANS SHEET 2

FIGURE 9.5A-15



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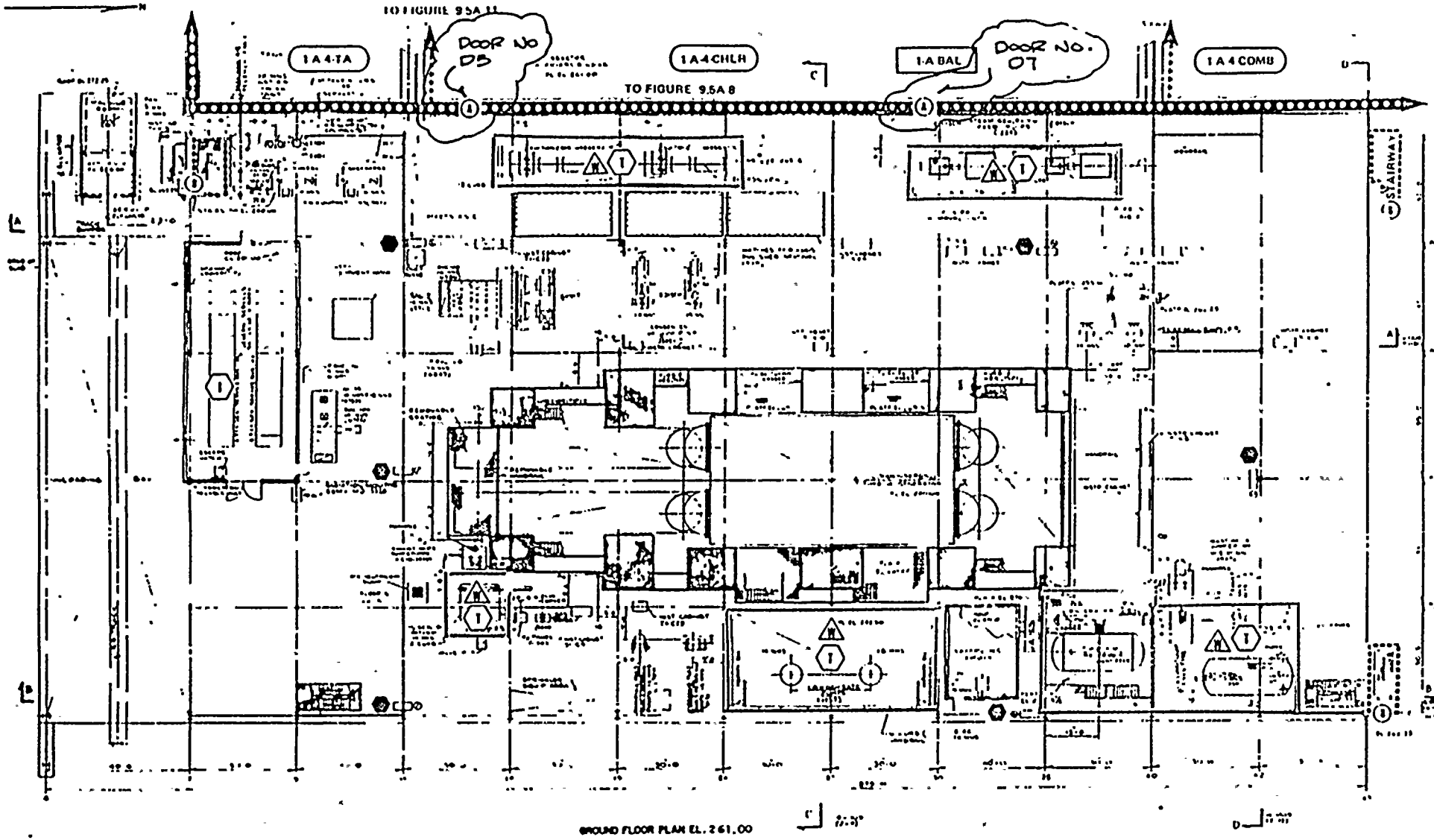
FIRE PROTECTION WASTE PROCESSING BUILDING -- PLAN EL. 261.00'

FIGURE 9.5A-27



NOTES

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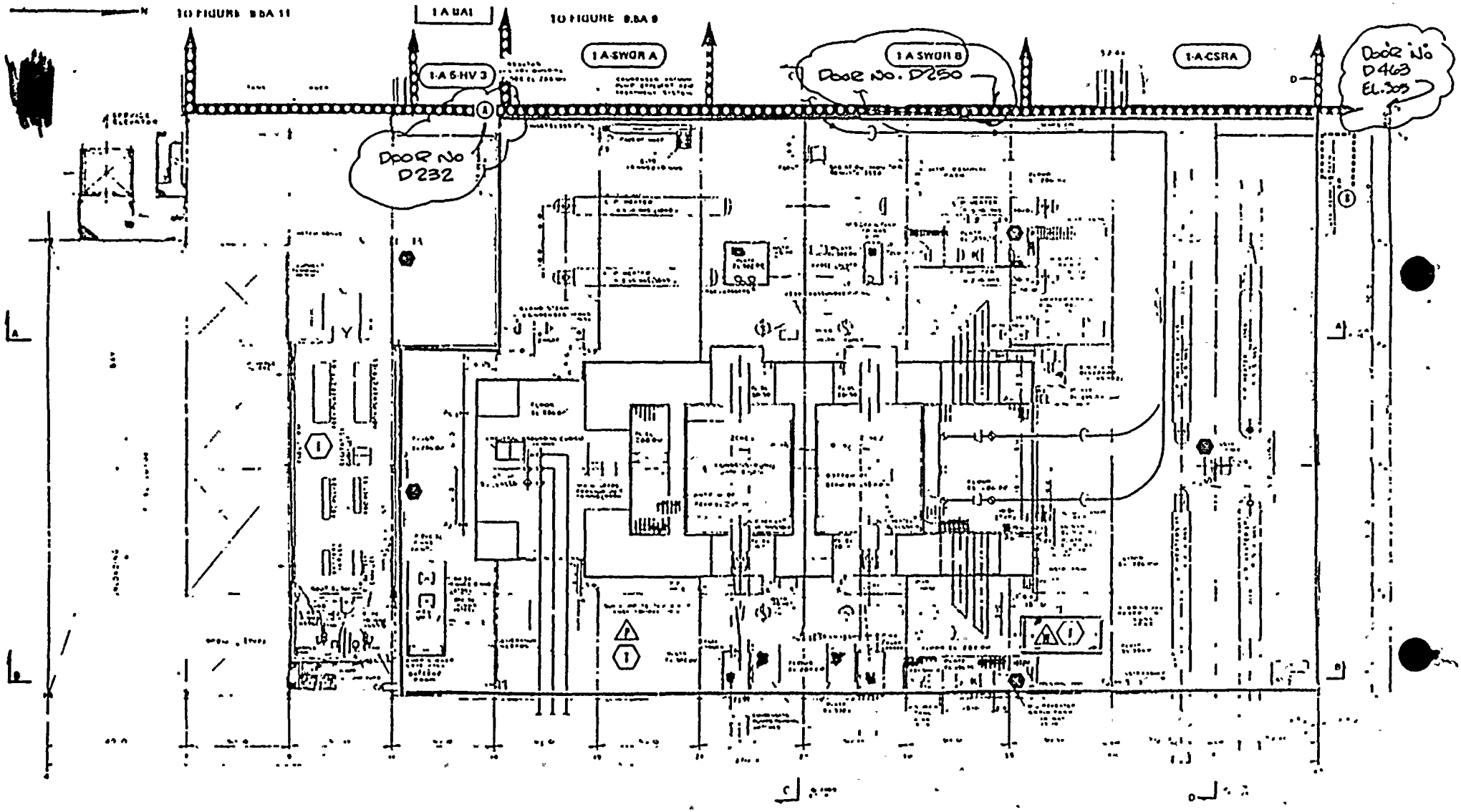
FIRE PROTECTION TURBINE BUILDING
GROUND FLOOR PLAN

FIGURE 9.5A-35



MEZZANINE FLOOR PLAN EL 286.00'

AMENDMENT NO 15

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FIRE PROTECTION - TURBINE BUILDING MEZZANINE FLOOR PLAN

FIGURE 9.5A-36