

A GENERAL NOTES

ALL ELECTRICAL WORKS INDICATED HEREIN SHALL BE DONE IN ACCORDANCE WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE CITY OF PARAÑAQUE BUILDING OFFICIALS AND THE REQUIREMENTS OF THE LOCAL UTILITY COMPANY, NATIONAL BUILDING CODE AND FIRE CODE OF THE PHILIPPINES.

MINIMUM SIZE OF CONDUCTORS WHEN NOT INDICATED IN THE DRAWING SHALL BE 1.5mm² (AWG#16).

REFER TO THE TABLE OF THE PHILIPPINE ELECTRICAL CODE FOR PROPER CONDUIT SIZES CONTAINING CONDUCTORS WHEN SUCH ARE NOT INDICATED IN THE DRAWINGS.

WHERE NECESSARY PULL BOXES SHALL BE PROVIDED EVEN IF NOT INDICATED IN THE DRAWING.

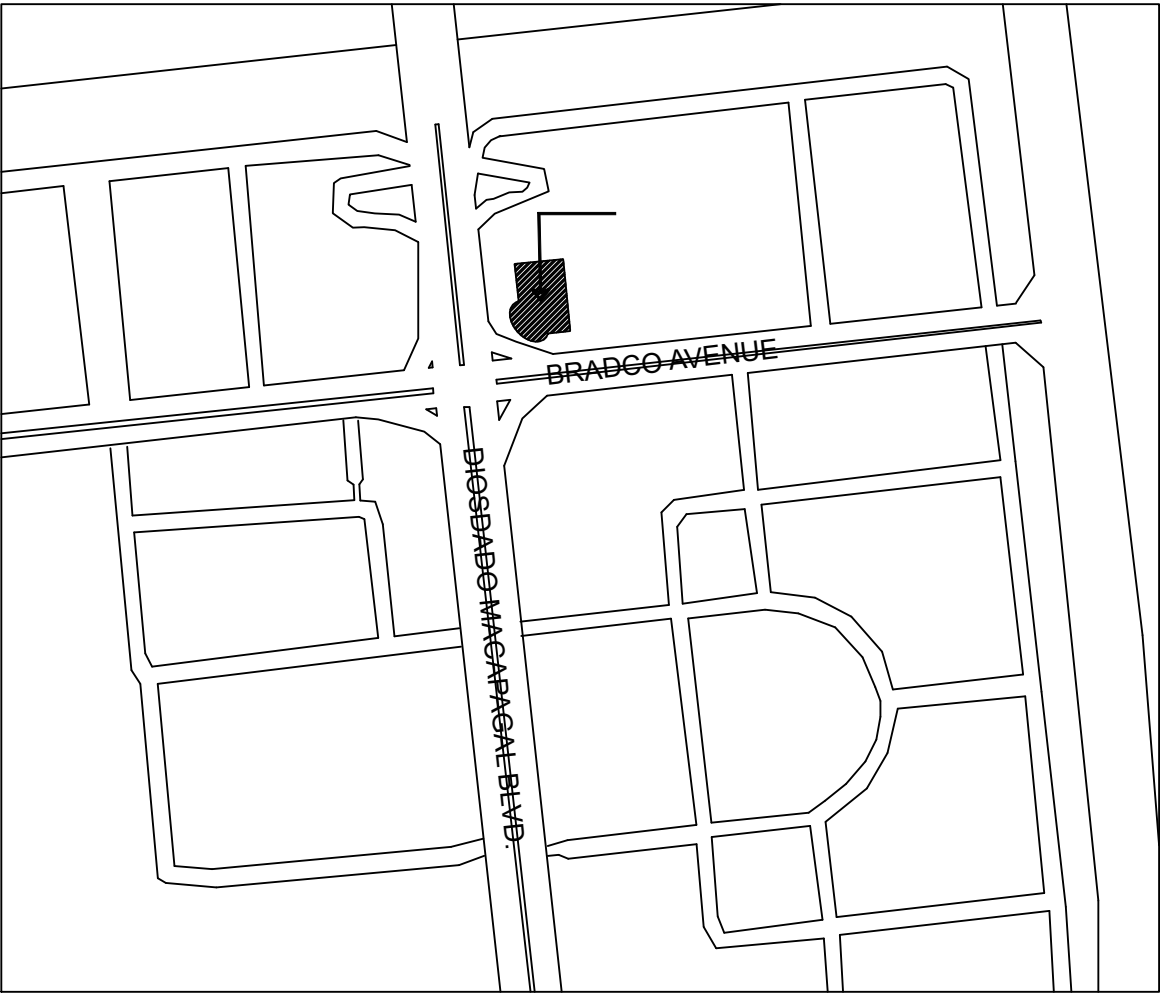
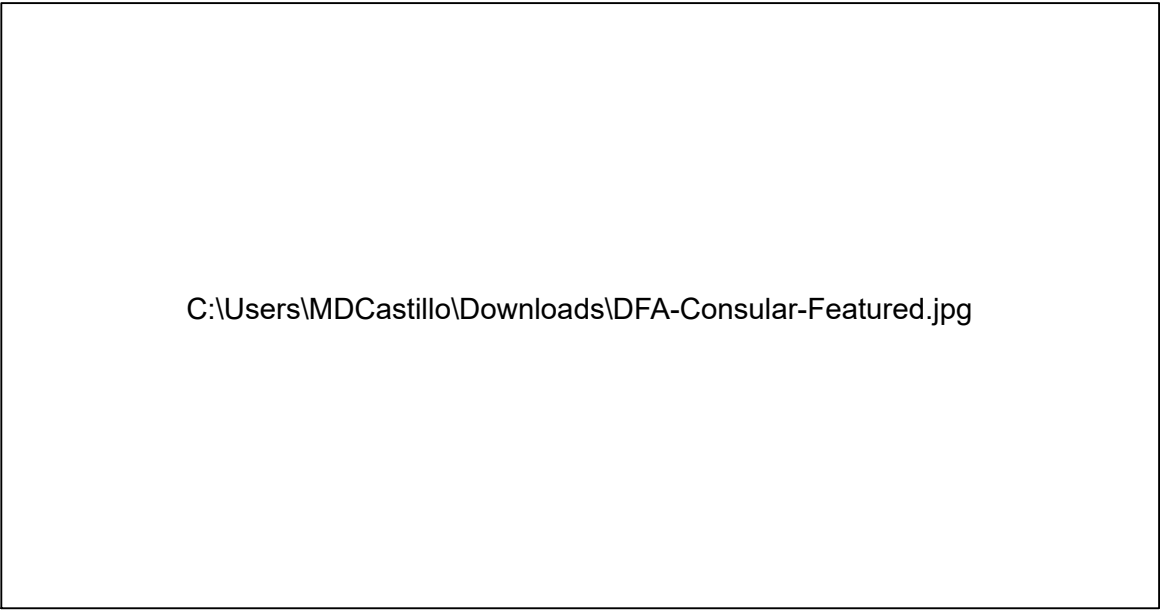
ADEQUATE AND EFFECTIVE GROUNDING SHALL BE PROVIDED.

ALL AUXILIARY WORKS HEREIN SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRONICS ENGINEER IN-CHARGE.

B LEGENDS & SYMBOLS

NOT TO SCALE

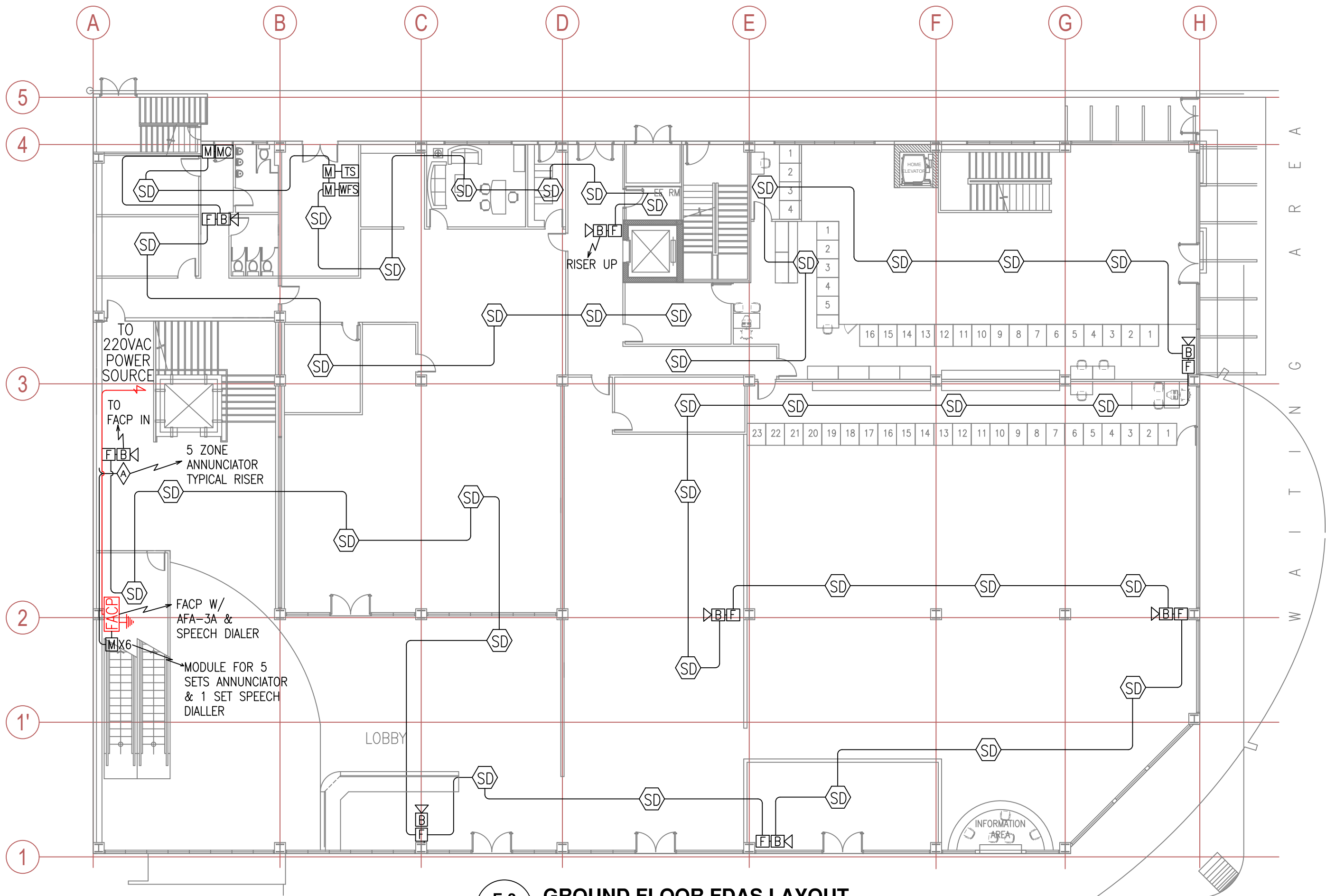
	COOPER CF-1200VDS FIRE ALARM CONTROL PANEL		COOPER ULMCOM-S / ULMCIM-C CONTROL MODULE / SINGLE INPUT MODULE
	COOPER CAP-320 + CAB-300 ADDRESSABLE OPTICAL SMOKE DETECTOR W/ MOUNTING BASE		FIRE ALARM ANNUNCIATOR LED-TYPE, STAINLESS
	COOPER CAH-330 + CAB-300 ADDRESSABLE MULTI-MODE HEAT DETECTOR W/ MOUNTING BASE		TAMPER SWITCH
	COOPER CBG-370S + MBGBEZ ADDRESSABLE FLUSH MOUNTED CALLPOINT W/ MOUNTING BEZEL		WATER FLOW SWITCH
	COOPER CASB-383 LOOP-POWERED ADDRESSABLE SOUNDER W/ STROBE LIGHT		MAGNETIC DOOR CONTACT



C VICINITY MAP

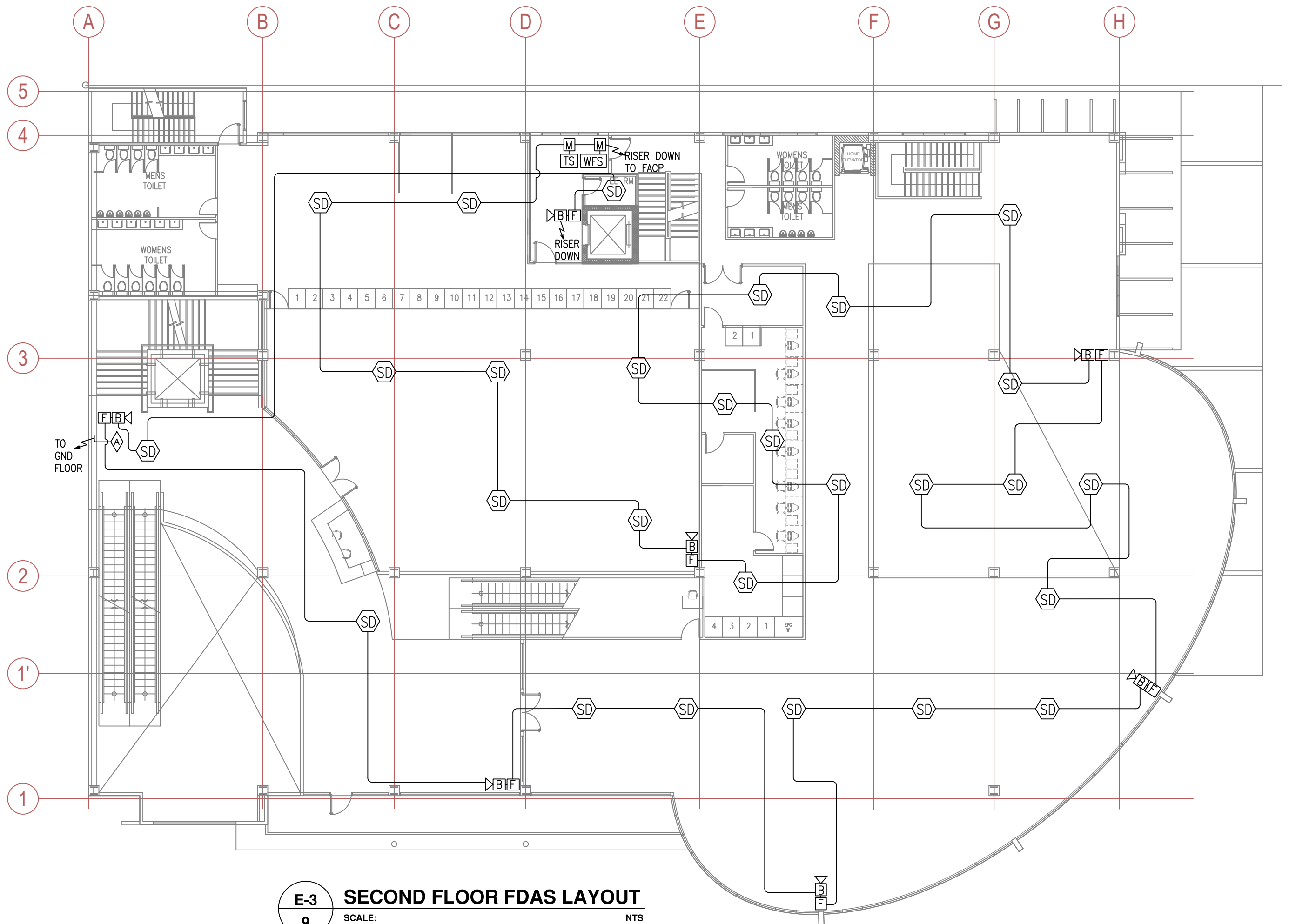
NOT TO SCALE

CONTRACTOR:	ENGINEER:	OWNER:	PROJECT TITLE:	DESIGN:	DATE:	REVIEWED BY:	APPROVED BY:	SHEET CONTENT:	SHEET NO.
 ELECTRICAL • INDUSTRIAL • ELECTRONICS • COMMUNICATIONS 810 Aurora Boulevard Corner Yale Street, Cubao, Quezon City P.O. Box 3531 Manila Tel: (063) 02 912-8881 Tel./Fax : (063) 02 438-1701	JOEYDEL P. SARMIENTO, PECE REG. NO. 0001438 TIN. NO. 429-707-369-000 PTR. NO. 6761164 ISSUE: JAN. 5, 2023 PTR ISSUED AT : SAN CARLOS CITY, PANGASINAN	REPUBLIC OF THE PHILIPPINES OFFICE OF CONSULAR AFFAIRS BRADCO AVENUE CORNER MACAPAGAL BOULEVARD, ASEANA BUSINESS PARK, PARAÑAQUE CITY	REHABILITATION OF OCA ASEANA'S FIRE DETECTION & ALARM SYSTEM	DRAWN BY: M. CASTILLO	1/26/23	OAMSS - EMD NAME & SIGNATURE DATE :	DEPARTMENT OF FOREIGN AFFAIRS KAGAWARAN NG UGNAYANG PANLABAS	A. GENERAL NOTES B. LEGENDS & SYMBOLS C. VICINITY MAP ISSUANCE : AS-BUILT DRAWING	E-1 9
				CHECKED BY: R. MULA	1/26/23		BUREAU OF FIRE PROTECTION		
				APPROVED BY:			NAME OF OWNER / AUTHORIZED SIGNATORY		
							DATE :		



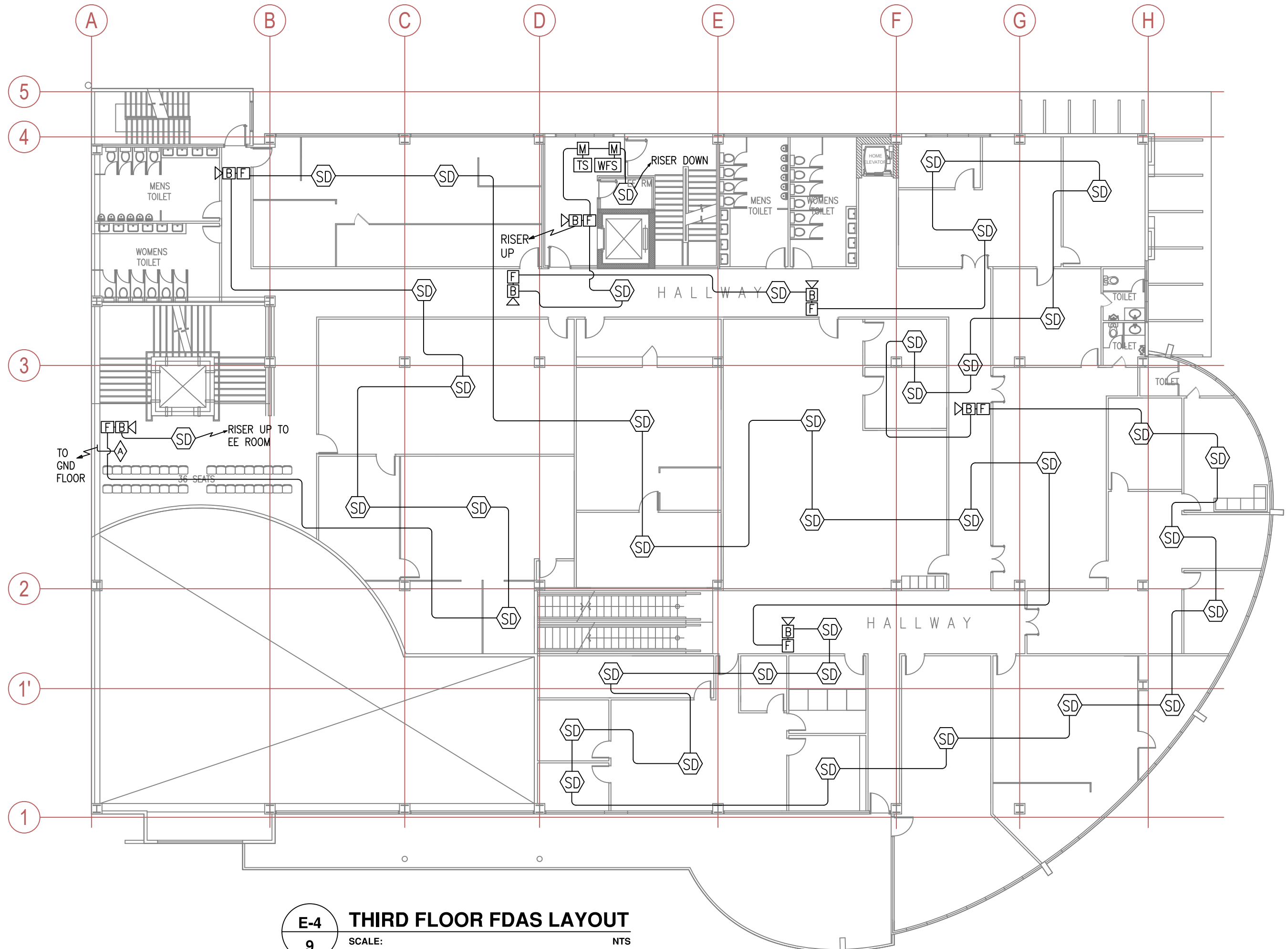
E-2
9
GROUND FLOOR FDAS LAYOUT
SCALE: NTS

CONTRACTOR:	ENGINEER:	OWNER:	PROJECT TITLE:	DESIGN:	DATE :	REVIEWED BY:	APPROVED BY:			SHEET CONTENT:	SHEET NO.
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	CHECKED BY:			1/26/23	BUREAU OF FIRE PROTECTION NAME OF OWNER / AUTHORIZED SIGNATORY DATE :						
	APPROVED BY:										



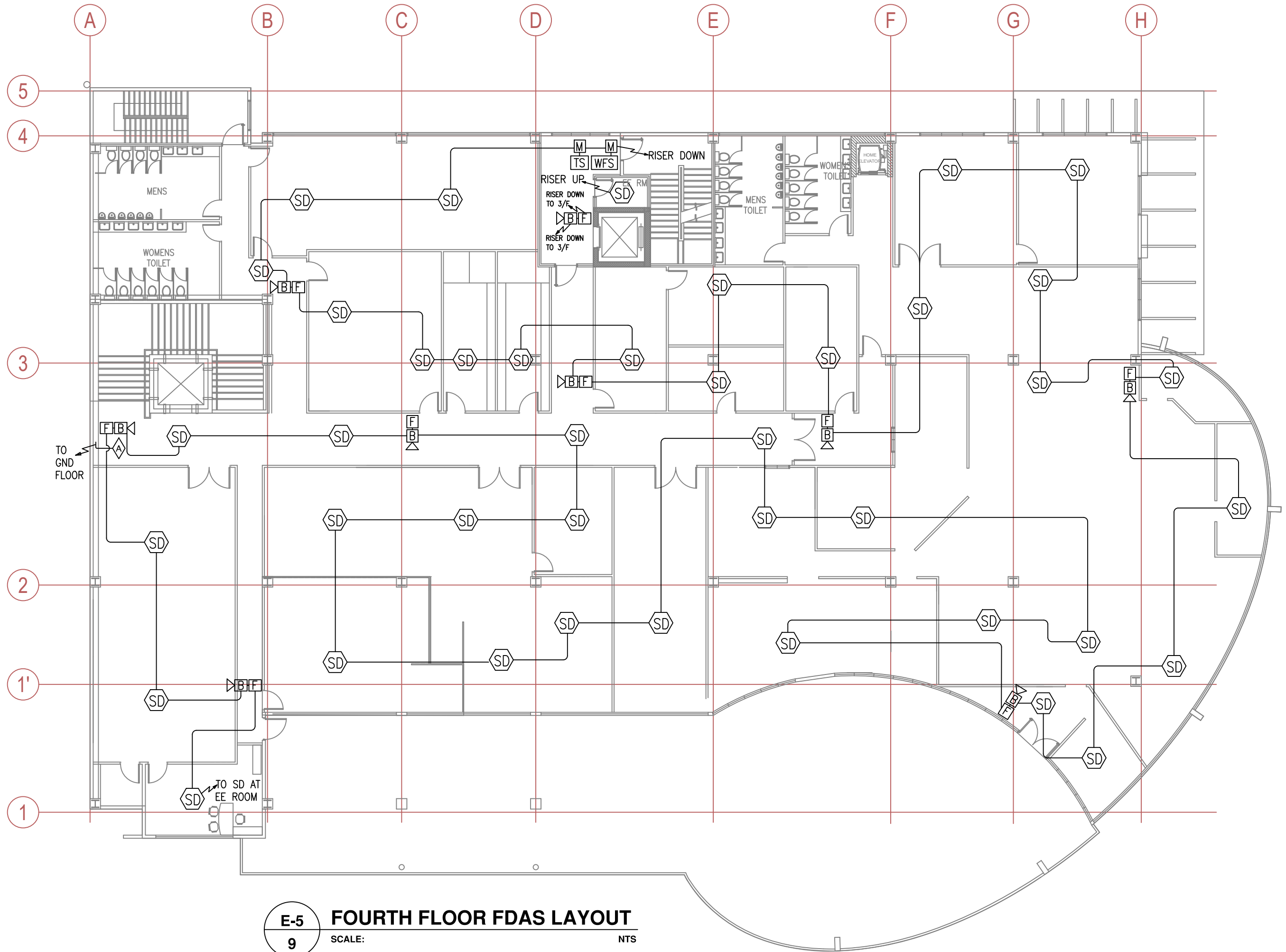
E-3
9 **SECOND FLOOR FDAS LAYOUT**
SCALE: _____ NTS

CONTRACTOR:		ENGINEER:		OWNER:		PROJECT TITLE:		DESIGN:		DATE :		REVIEWED BY:		APPROVED BY:		SHEET CONTENT:		SHEET NO.			
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								CHECKED BY:		1/26/23											
								APPROVED BY:													
								DATE :													
								NAME & SIGNATURE		NAME OF OWNER / AUTHORIZED SIGNATORY											



E-4
9
THIRD FLOOR FDAS LAYOUT
SCALE: _____ NTS

CONTRACTOR:	ENGINEER:	OWNER:	PROJECT TITLE:	DESIGN:	DATE :	REVIEWED BY:	APPROVED BY:			SHEET CONTENT:	SHEET NO.				
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	REG. NO. 0001438			TIN. NO. 429-707-369-000	CHECKED BY:		1/26/23								
	PTR. NO. 6761164			ISSUE: JAN. 5, 2023	APPROVED BY:										
	PTR ISSUED AT : SAN CARLOS CITY, PANGASINAN			NAME & SIGNATURE			NAME OF OWNER / AUTHORIZED SIGNATORY			NAME OF OWNER / AUTHORIZED SIGNATORY					
				DATE :			DATE :			DATE :					
ISSUANCE : AS-BUILT DRAWING															

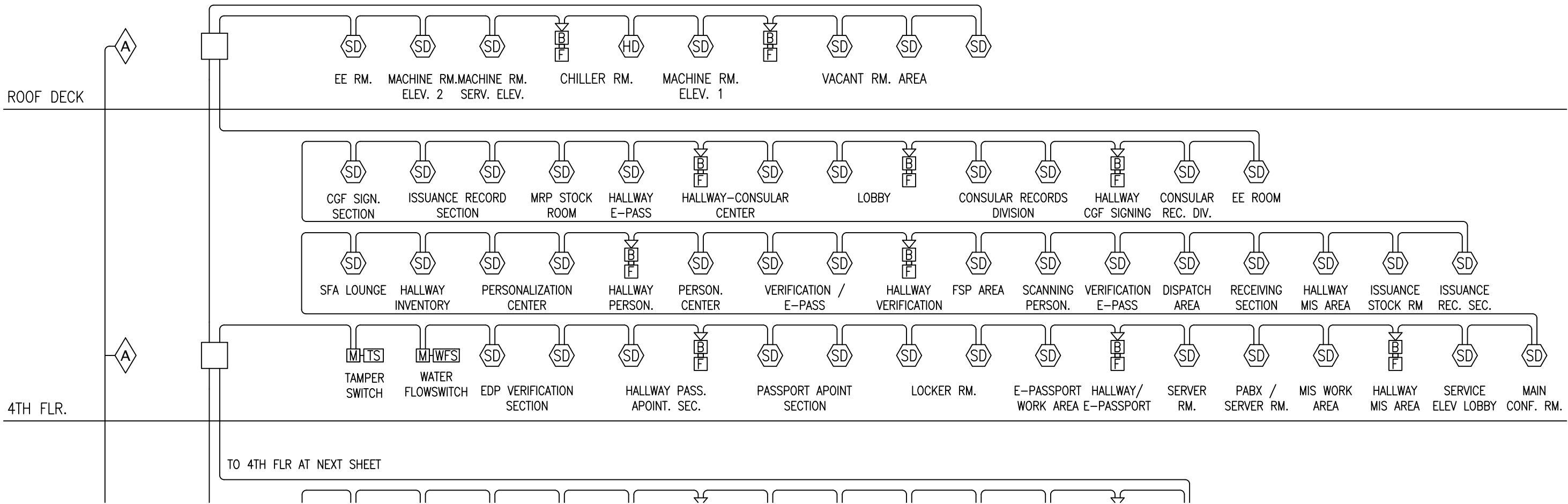


E-5
9
FOURTH FLOOR FDAS LAYOUT
SCALE: NTS

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	CHECKED BY: R. MULA			1/26/23						
	APPROVED BY:									
				DATE :		DATE :		DATE :	ISSUANCE : AS-BUILT DRAWING	

LEGENDS:

-  COOPER (CF-1200VDS) 2-LOOPS ANALOGUE FIRE ALARM CONTROL PANEL
-  COOPER (CAP-320) ADDRESSABLE OPTICAL SMOKE DETECTOR W/ (CAB-300) MOUNTING BASE
-  COOPER (CAH-330) ADDRESSABLE MULTI-MODE HEAT DETECTOR W/ (CAB-300) MOUNTING BASE
-  COOPER (CBG-370) ADDRESSABLE FLUSH MOUNTED CALLPOINT W/ BEZEL & COVER
-  COOPER (CASB-383) LOOP-POWERED ADDRESSABLE SOUNDER W/ BEACON
-  COOPER (MCIM-C / MCOM-S) INPUT / CONTROL MODULE
-  TAMPER SWITCH
-  WATER FLOW SWITCH
-  MAGNETIC DOOR CONTACT
-  FIRE ALARM ANNUNCIATOR, LED-TYPE



E-8

9

4TH FLOOR TO ROOF DECK
FDAS SINGLE LINE RISER DIAGRAM

SCALE: NTS

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				CHECKED BY: R. MULA	1/26/23					
				APPROVED BY:		NAME & SIGNATURE	NAME OF OWNER / AUTHORIZED SIGNATORY	NAME OF OWNER / AUTHORIZED SIGNATORY	ISSUANCE : AS-BUILT DRAWING	
						DATE :	DATE :	DATE :		

FDAS PANEL DETAILS

	LOOP 1		LOOP 2		
DEVICES	GROUND FLR.	2ND FLR.	3RD FLR.	4TH FLR.	5TH FLR.
Smoke Detector	37	27	39	39	4
Heat Detector					1
Sounder / Beacon	8	7	8	8	2
Manual Callpoint	8	7	8	8	2
Monitor Module	3	1	1	1	
Control Module	6				
Annunciator Display	1	1	1	1	1

FIRE ALARM BACK-UP BATTERY CALCULATION

Supplied / Fitted Battery : 7Ah
Panel Current Quiescent : 0.08A
Loops Current Quiescent : 0.063A
Total Current Quiescent : 0.143A
Panel Current Alarm : 0.3A
Loops Current Alarm : 0.476A
Total Current Alarm : 0.776A

Battery Requirement Formula :

$B = C(IQTQ) + 1.75(IATA)$

Where :

- B = Battery Capacity Required (Ah)
- IQ = Current Quiescent (Amps)
- TQ = Standby time in hours for the system after mains failure (24 Hours)
- IA = Current Alarm (Amps)
- TA = Maximum time in hours required for the system in full alarm condition (30 Min)
- C = Battery Capacity (1.25)

$$B = 1.25 (0.143A \times 24 \text{ hours}) + 1.75 (0.776A \times 0.5 \text{ hour})$$
$$= 1.25 (3.432Ah) + 1.75 (0.388Ah)$$
$$= 4.29Ah + 0.679Ah$$
$$\text{Battery Required} = 4.969Ah$$

E-9.A

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FDAS PANEL DETAILS

SCALE:NTS

E-9.B

9

FDAS BACK-UP BATTERY CALCULATION

SCALE:NTS