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GENERAL NOTES:

1. WIRINGS SHALL BE IN CONCEALED CONDUIT/ TRUNKING UNLESS OTHERWISE SPECIFIED.
2. THE POSITION OF ALL ELECTRONICS EQUIPMENT AS SHOWN IN THE DRAWINGS ARE APPROXIMATE ONLY. THE EXACT POSITIONS SHALL BE DETERMINED ON SITE.
3. THE SPECIALTY CONTRACTOR SHALL BE RESPONSIBLE FOR THE LABELING OF ALL EQUIPMENT THRU-OUT THE INSTALLATION.
4. THE SPECIALTY CONTRACTOR SHALL BE RESPONSIBLE TO LIAISE WITH THE LOCAL GOVERNMENT FOR ALL CLEARANCES, CABLE JOINTING, AND TESTING FOR THE INSTALLATION.
5. THE OVERALL RESISTANCE FOR THE EARTHING SYSTEM TELECOMMUNICATION & LOW VOLTAGE EQUIPMENT SHALL COMPLY WITH THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL AND ELECTRONICS CODE.
6. THE SPECIALTY CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING OF ALL CABLE/CONDUIT PENETRATION OPENINGS BETWEEN FLOOR SLAB AND WALLS ETC. WITH APPROVED FIRE RATING MATERIAL/SEALANT.
7. THE SPECIALTY CONTRACTOR SHALL FURNISH ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT FOR SATISFACTORY COMPLETION OF THE ENTIRE ELECTRONICS SYSTEM INSTALLATION AS GENERALLY DESCRIBED IN THE SPECIFICATION AND/OR SHOWN ON DRAWINGS.
8. ALL ELECTRONICS EQUIPMENT AND LOCATIONS SHOWN ARE INDICATIVE ONLY, AND THE SPECIALTY CONTRACTOR MUST CO-ORDINATE WITH THE ARCHITECT AND OR THE INTERIOR DESIGNER, AS WELL AS EQUIPMENT SUPPLIERS FOR FINALITY.

GENERAL NOTES FOR FDAS:

1. FIRE ALARM SYSTEM SHALL BE FULLY-ADDRESSABLE, AND SHALL BE NSTALLED IN ACCORDANCE WITH NFPA 70 AND NFPA 72. SYSTEM SHALL ALSO MEET ALL APPLICABLE BUILDING CODES, FIRE CODES AND THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND INSURANCE CARRIER. VERIFY REQUIREMENTS PRIOR TO CONSTRUCTION.
2. RISER DIAGRAMS ARE DIAGRAMMATIC ONLY. THE CONTRACTOR SHALL REFER TO THE LAYOUT FOR ACTUAL NO. OF DEVICES.
3. WIRING SHOWN SHALL BE FOR CONTRACTORS GUIDE SUBJECTS TO MANUFACTURER'S FINAL WIRING REQUIREMENTS.
4. PROVIDE ALL EQUIPMENT AND LABOR REQUIRED FOR A COMPLETE AND OPERATIONAL FIRE ALARM SYSTEM.
5. PROVIDE AUDIBLE AND VISIBLE NOTIFICATION APPLIANCES AS INDICATED ON THE DRAWINGS.
6. DO NOT INSTALL SMOKE DETECTORS IN A DIRECT AIR FLOW NOR CLOSER TO THAN 3 FEET FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING.
7. ANY ITEM REQUIRED IN THE SYSTEMS NOT SHOWN IN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONSIDERED TO BE PART OF THE SCOPE OF WORK.
8. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

GENERAL NOTES FOR ACCESS CONTROL:

1. THE PURPOSE OF THIS SCHEMATIC IS TO PROVIDE A GENERAL CONCEPT AND PRINCIPLE OF THE PROPOSED ACCESS CONTROL SYSTEM.
1. QUANTITY AND LOCATION OF DEVICES ARE INDICATIVE ONLY. REFER TO PLAN LAYOUT FOR FINAL QUANTITY AND LOCATION OF DEVICES.
2. WIRES TO BE USED FOR THE POWER SUPPLY ON THE RESPECTIVE MODULES SHALL BE #16 AWG THHN SOLID.
3. ACCESS CONTROL SYSTEM CONTRACTOR SHALL SUPPLY AND INSTALL ALL THE REQUIRED DEVICES ACCESSORIES INCLUDING SOFTWARE FOR THE SYSTEM TO BE FULLY OPERATIONAL.
4. USE PVC FOR CONDUIT EMBEDDED ON SLAB OR IMC FOR EXPOSED PART.
5. CONDUIT FILL

CONDUIT SIZE (mm)	20	25	32	40	50
4PR CAT6 UTP CABLE	3	6	8	13	21

GENERAL NOTES FOR TELECOMS:

1. ALL TELECOM/AUXILIARY WORKS AND INSTALLATIONS HEREIN SHALL BE DONE IN ACCORDANCE OF THE LATEST APPROVED EDITION OF PHILIPPINE ELECTRICAL CODE WITH THE RULES AND REGULATIONS OF THE NATIONAL AND LOCAL AUTHORITIES CONCERNED IN THE ENFORCEMENT OF ELECTRICAL LAWS AND ORDINANCES AND WITH THE RULES AND REGULATIONS OF THE UTILITY COMPANIES CONCERNED.
2. ALL WORKS HEREIN SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A DULY LICENSED ELECTRONICS AND COMMUNICATIONS ENGINEER.
3. ALL MATERIALS SHALL BE NEW, APPROVED FROM BOTH LOCATION AND PURPOSED INTENDED AND SHALL CONFORM TO THE INTERNATIONALLY ACCREDITED RECOGNIZED STANDARD, ON WHERE SUCH STANDARD HAS BEEN ESTABLISHED FOR PARTICULAR TYPES OF MATERIALS.
4. ALL AUXILIARY EQUIPMENT SHALL BE PROPERLY GROUNDED IN ACCORDANCE WITH THE REQUIREMENT OF THE PHILIPPINE ELECTRICAL CODE. GROUND RESISTANCE SHOULD NOT BE MORE THAN 2 OHMS. ADDITIONAL GROUND RODS SHALL BE PROVIDED IF GROUND RESISTANCE EXCEEDS 2 OHMS.
5. INSIDE DISTRIBUTION FRAMES IT SHALL HAVE SEPARATE GROUNDING BUSBARS.
6. FOR TELEPHONE COMMUNICATION SYSTEM USED 0.65MMø/8C CATEGORY 6 OR CATEGORY 5E WIRES DISTRIBUTION. TERMINAL SHALL BE QUICK-CONNECT TYPE.
7. MOUNTING HEIGHTS OF DEVICES SHALL BE AS APPROVED BY THE ARCHITECT AND/OR AS FOLLOWS (RJ-45 JACKS):
TELECOM/DATA OUTLET_____300mm above finished floor to center of
150m above working counter to center of device
8. MINIMUM SIZE FOR CONDUIT SHALL BE 15MM.DIA. STEEL CONDUIT OR 20mmø PVC MEASURED INSIDE OF THE CONDUIT ELECTRICAL TRADE SIZE. CONDUIT SHALL NOT BE BENDS NOT MORE THAN 3 TIMES, PROVIDE PULL BOX ON OR BEFORE FOUR QUARTER BENDS OF A CONDUIT IN ANY RUN. PULL BOX SHALL BE SIZE ACCORDING TO CODE REQUIREMENTS. CONTRACTOR MUST SUBMIT SHOP DRAWING FOR ENGINEER APPROVAL PRIOR TO FABRICATION.
9. CONDUIT SHALL BE SECURE AND PROTECTED BY ENTRANCE OF ANY FOREIGN OBJECT AND WATER DURING CONSTRUCTION STAGE. SPARE CONDUIT SHALL BE PROVIDED WITH PULLING WIRE. FOUR QUARTER BENDS OF A CONDUIT IN ANY RUN.
10. TELEPHONE TERMINAL CABINET (TTC) OR INTERMEDIATE DISTRIBUTION FRAME (IDF) SHALL SERVE TELEPHONE AND DATA OUTLET OR STATION WITH A MAXIMUM RANGE OF 90METERS.
11. COMMUNICATION SYSTEM WIRING, VOICE AND DATA SHALL BE SEPARATED FROM POWER WIRINGS. THIS IS TO PREVENT HUMMING AND ELECTROMAGNETIC INTERFERENCE (EMI) TO OR EXCEED THE EIA/TIA 568A CABLING STANDARD.
12. FOR OUTDOOR INSTALLATION USED CAST DEVICE BOXES AND FITTINGS.
13. UPON COMPLETION OF TELCO/AUXILIARY WORKS THE CONTRACTOR SHALL DO THE FOLLOWING DETAILED TESTING WITNESS BY THE OWNER OR BY OWNER REPRESENTATIVE.

A. SIGNAL ATTENUATION TEST

D. IMPEDANCE TEST

B. CONTINUITY TEST

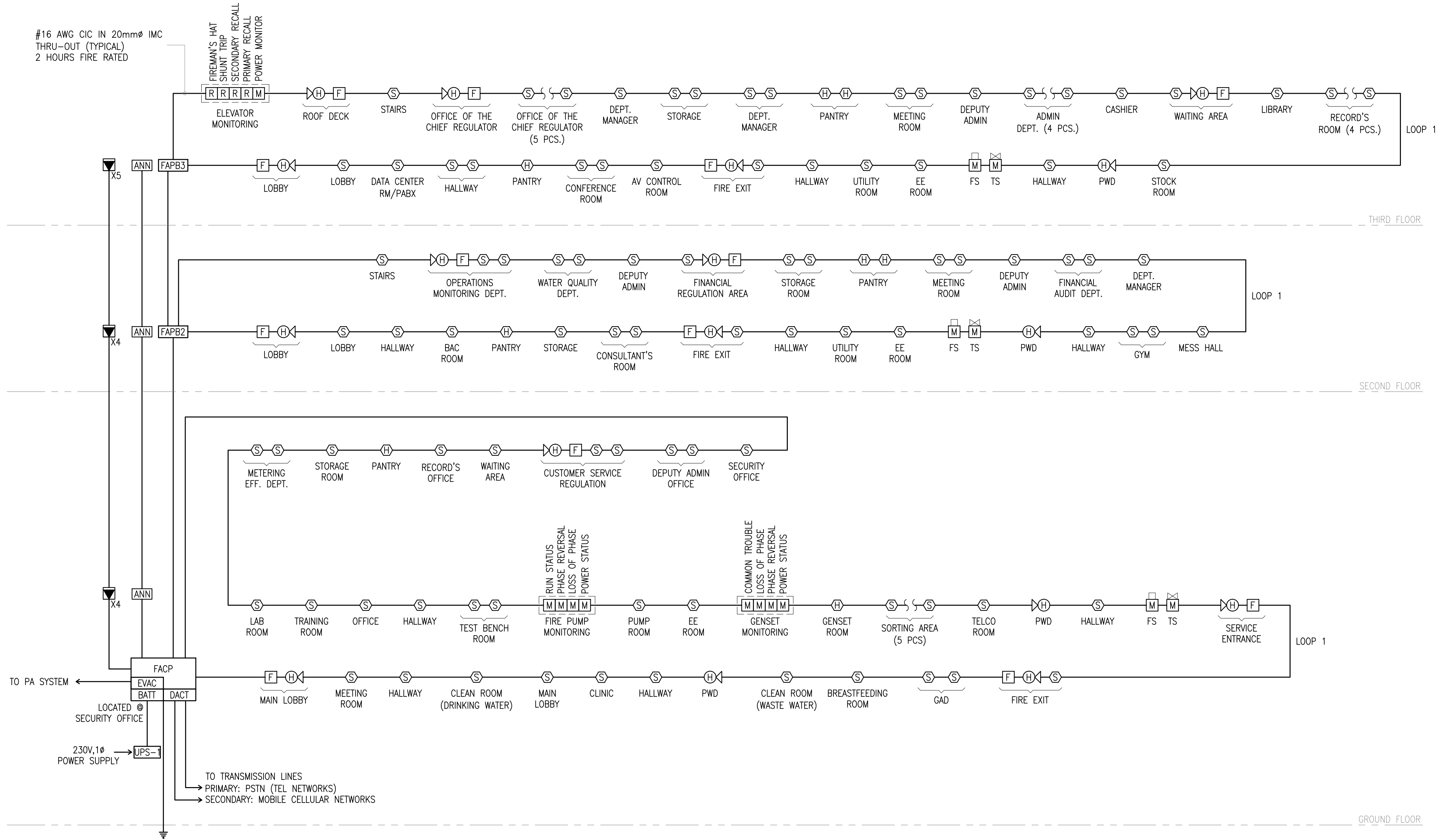
E. RESISTANCE TEST

C. NEAR-END CROSSTALK TEST

F. WIRE MAP TEST

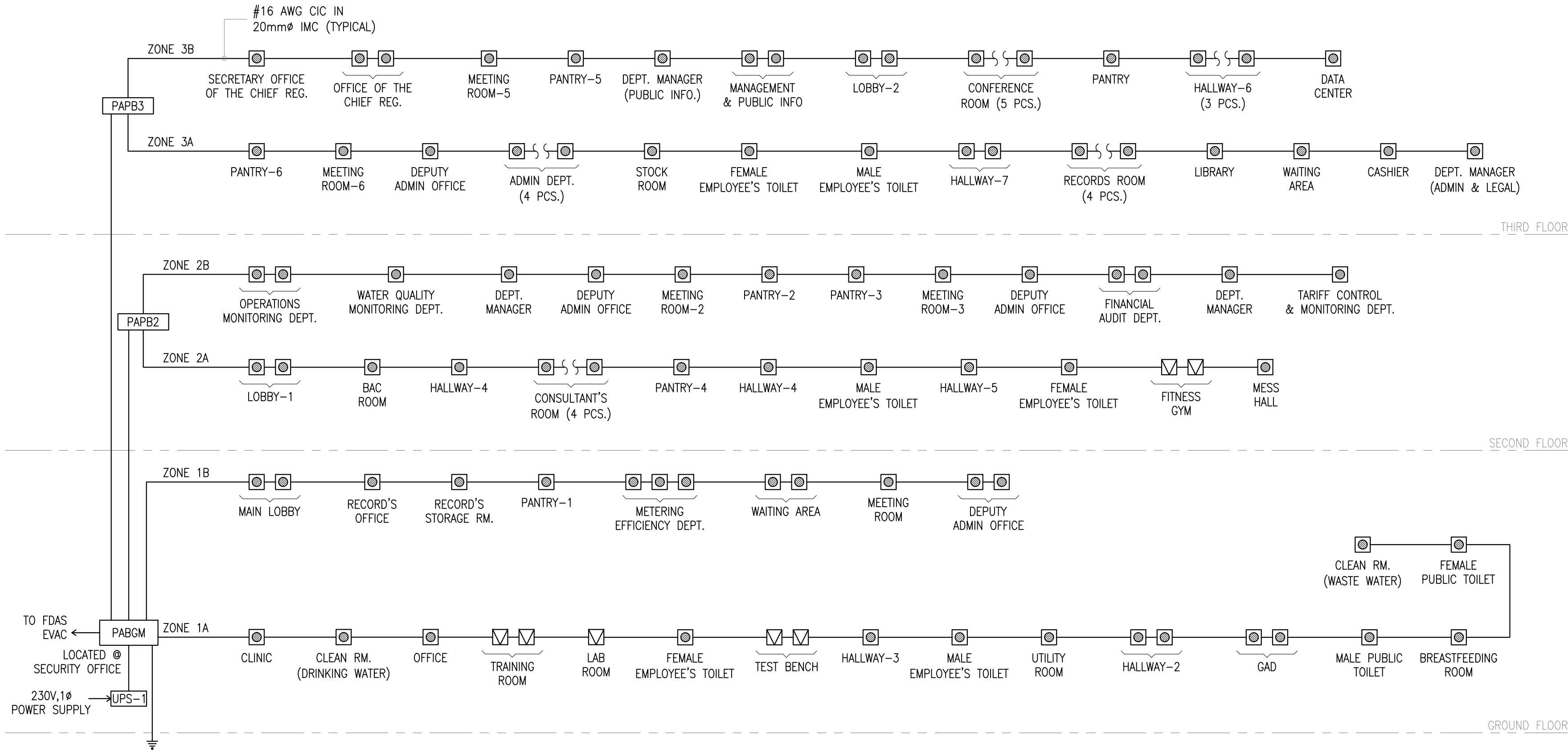
LEGENDS (FDAS):	
	ADDRESSABLE SMOKE DETECTOR
	ADDRESSABLE HEAT DETECTOR
	HORN AND STROBE LIGHT
	MANUAL CALL POINT
	FIREMAN'S TELEPHONE JACK
	FLOW SWITCH
	TAMPER SWITCH
	MONITOR MODULE
	RELAY MODULE
	FA PULLBOX
	FIRE ALARM CONTROL PANEL
	UNINTERRUPTED POWER SUPPLY
	GRAPHIC ANNUNCIATOR
	SECONDARY BATTERY SUPPLY
	EMERGENCY VOICE ALARM COMMUNICATION
	DIGITAL ALARM COMMUNICATOR TRANSMITTER
LEGENDS (PA BGM):	
	CEILING-MOUNTED LOUD SPEAKER, 6W
	WALL-MOUNTED LOUD SPEAKER
	PABGM PANEL
	PA PULLBOX
	MICROPHONE

LEGENDS (DAS):	
	DOOR CONTACT WITH ALARM SOUNDER
	DOOR LOCK
	PUSH BUTTON
	CARD READER
	BREAK GLASS (EMERGENCY EXIT)
	DOOR ACCESS SYSTEM
LEGENDS (CCTV):	
	DOME-TYPE FIX CAMERA (PoE)
	BULLET-TYPE FIX CAMERA (PoE)
	NETWORK VIDEO RECORDER
	CCTV WORKSTATION
LEGENDS (VOICE/DATA):	
	VOICE OUTLET
	DATA OUTLET
	VOICE/DATA OUTLET
	DATA OUTLET FOR CCTV
	MAIN DISTRIBUTION FRAME
	MAIN TELEPHONE TERMINAL CABINET
	INTERMEDIATE DISTRIBUTION FRAME
	TELEPHONE DISTRIBUTION CABINET
	PRIVATE AUTOMATIC BRANCH EXCHANGE
xt	TELECOM CIRCUIT, X-DENOTES # OF 4 PAIR CAT6 UTP CABLE

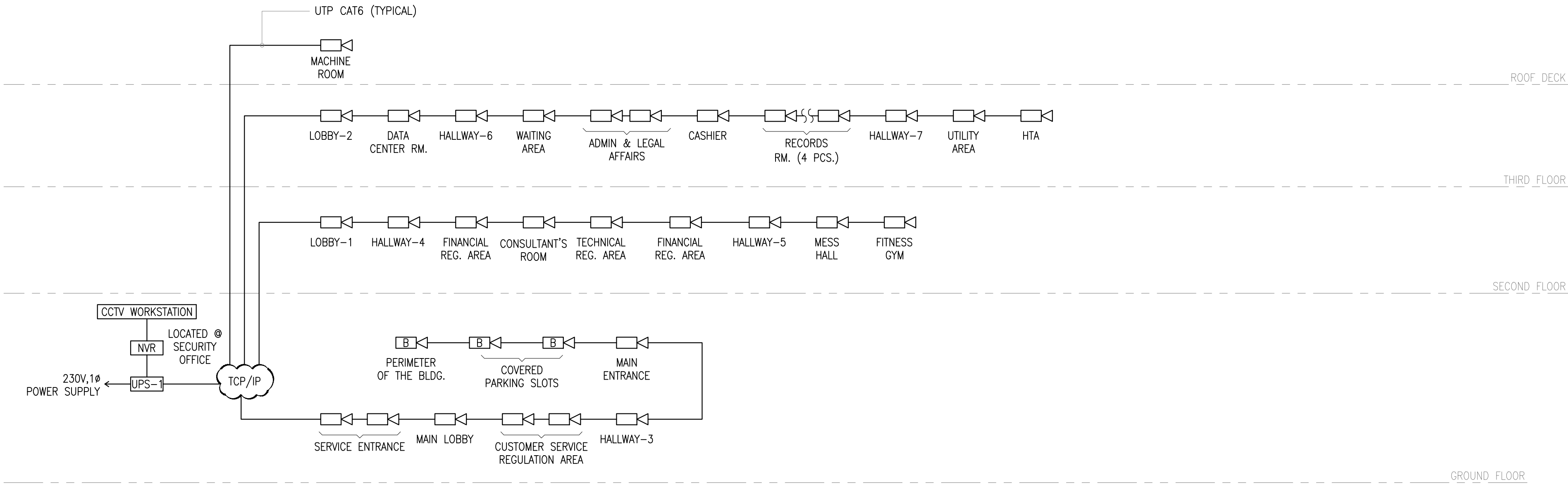


I FDAS RISER DIAGRAM
EA-0201 SCALE NTS

ELEVATOR MONITORING		GENSET MONITORING		FIRE PUMP MONITORING	
M	POWER STATUS	M	COMMON TROUBLE	M	RUN STATUS
R	PRIMARY RECALL	M	LOSS OF PHASE	M	PHASE REVERSAL
R	SECONDARY RECALL	M	LOW FUEL	M	LOSS OF PHASE
R	SHUNT TRIP	M	RUN STATUS	M	POWER STATUS
R	FIREMAN'S HAT				



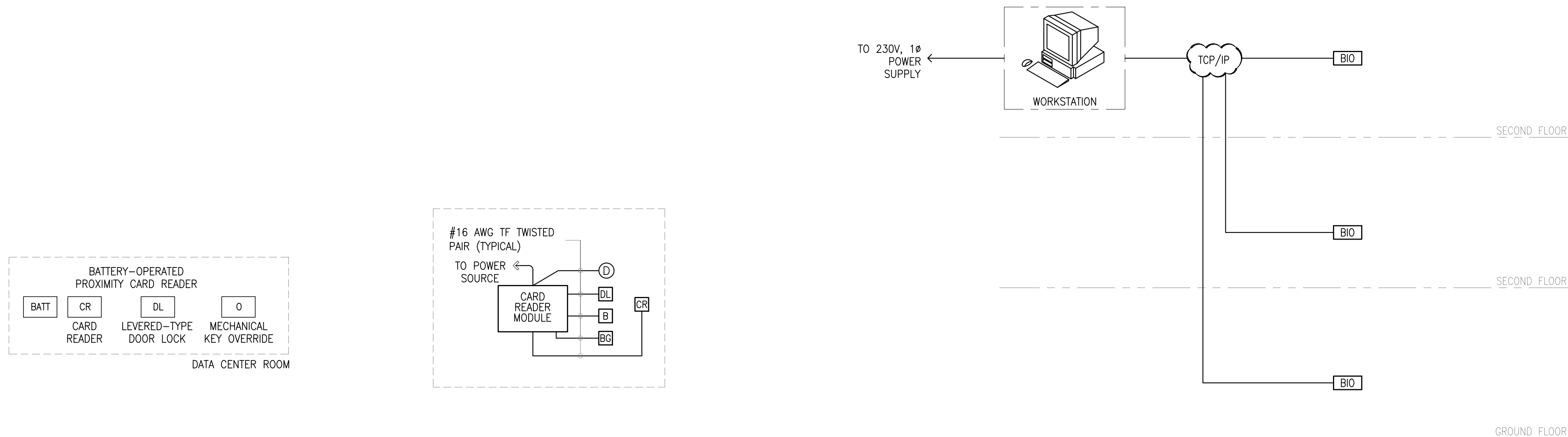
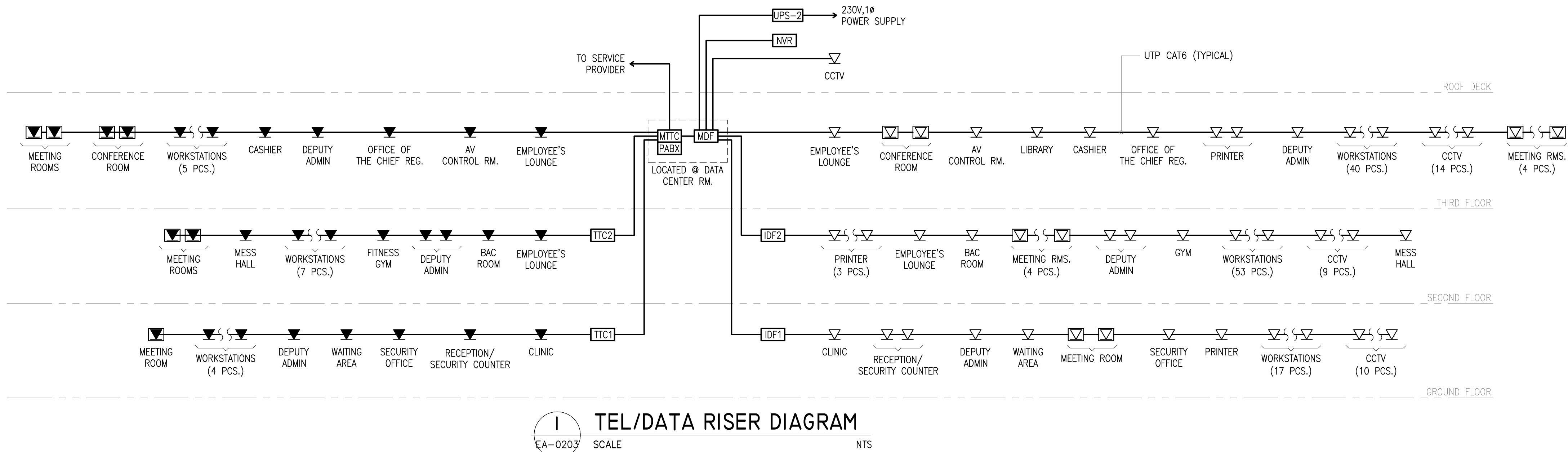
1 PABGM RISER DIAGRAM
EA-0202 SCALE NTS

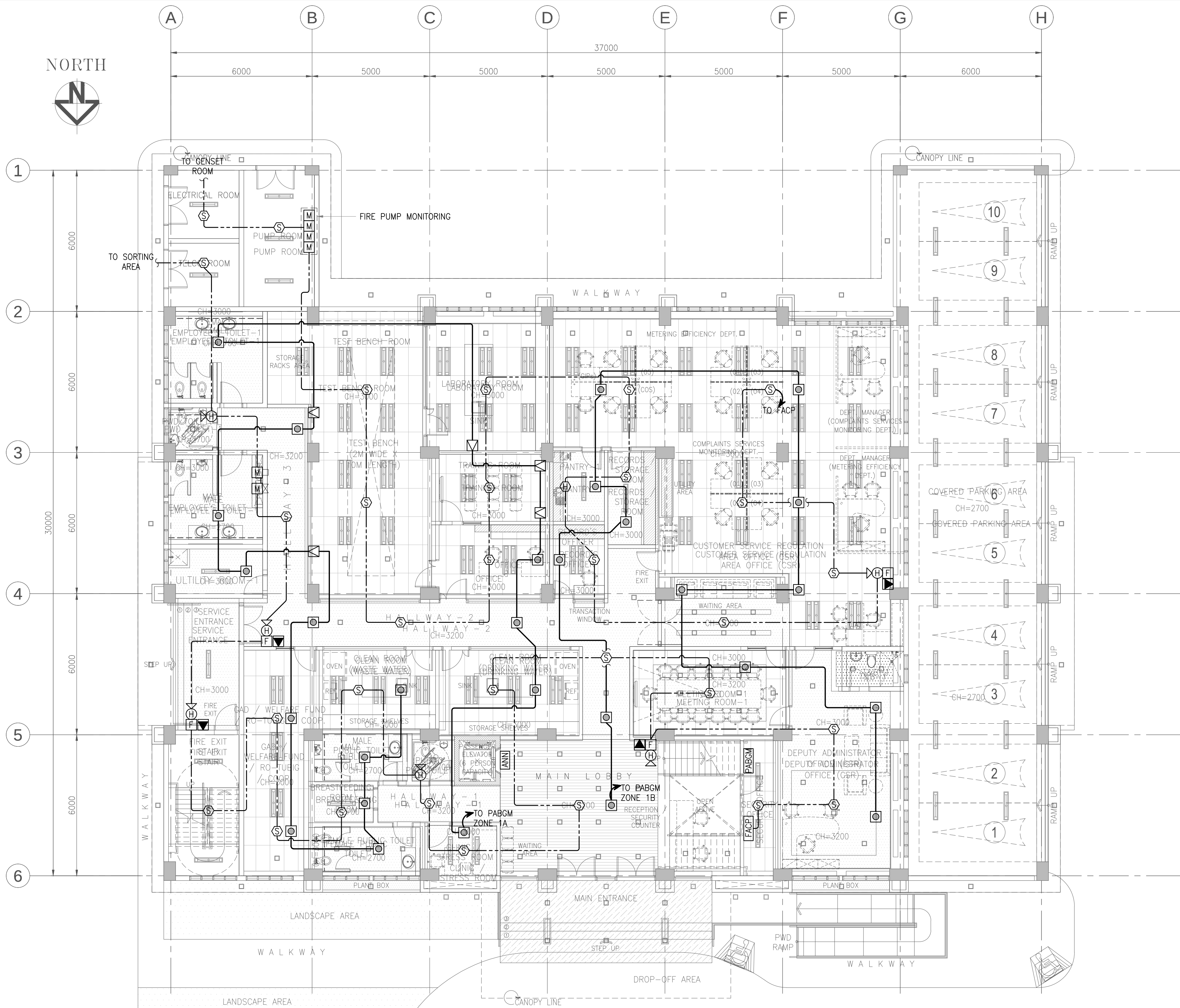


2 CCTV RISER DIAGRAM
EA-0202 SCALE NTS

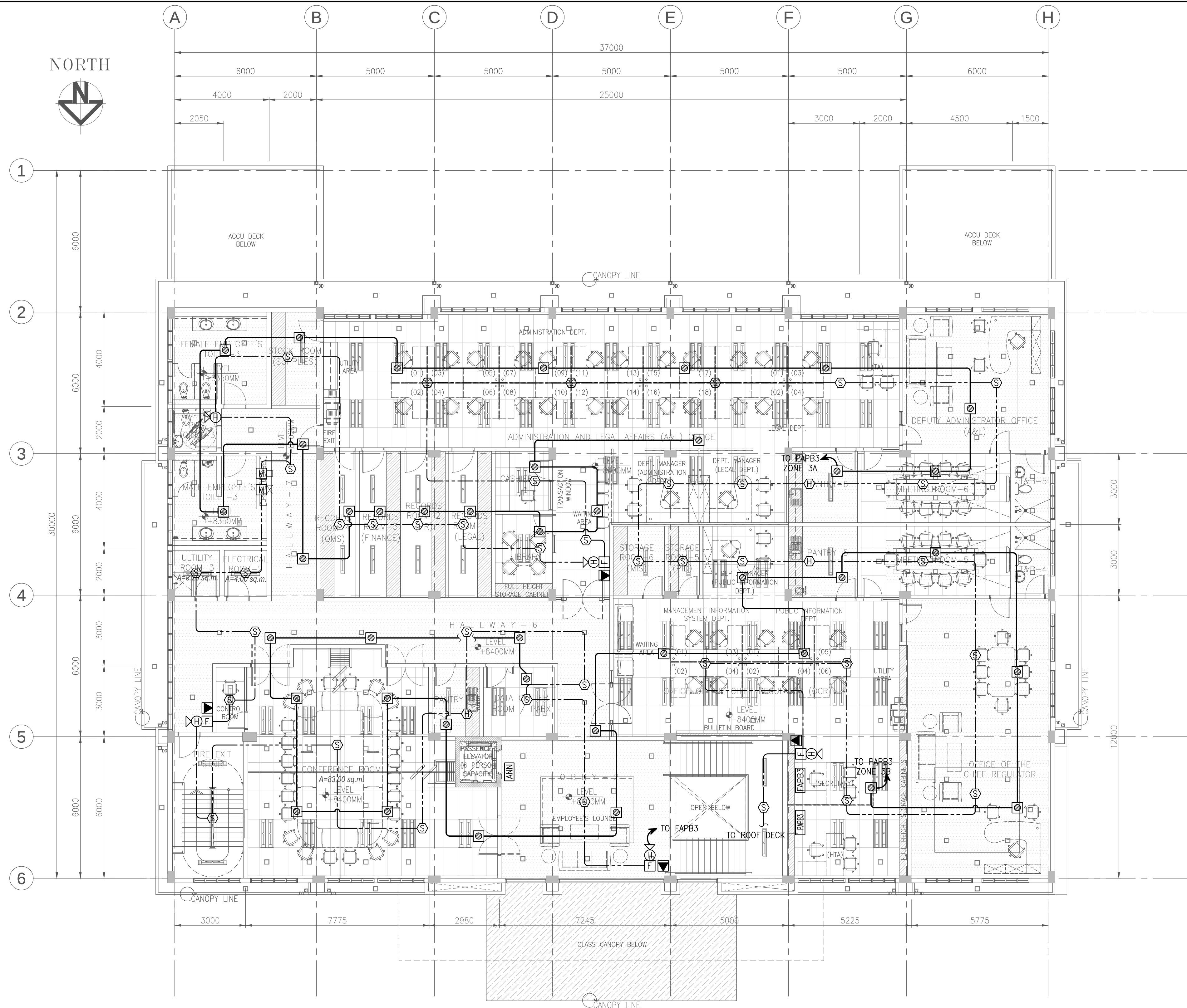
NOTE:
1. 'x't - x DENOTES NP. OF 4PR CAT6 UTP CABLE

CONDUIT SIZE (mm)	20	25	32	40	50
4PR CAT6 UTP CABLE	3	6	8	13	21





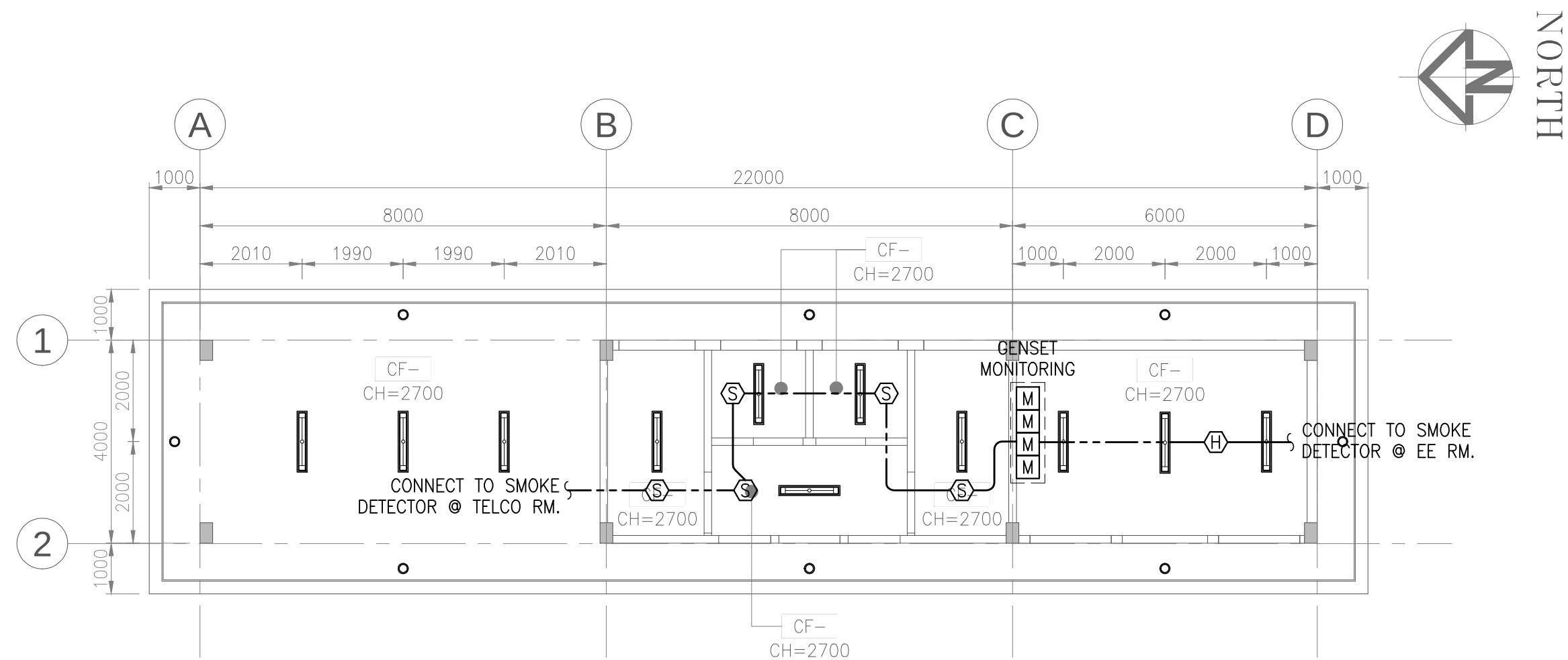
I GROUND FLOOR FDAS & PA/BGM LAYOUT
EA-0301 SCALE 1:100M



I THIRD FLOOR FDAS & PA/BGM LAYOUT
EA-0303 SCALE 1:100M

CERTIFIED BY RONALD B. NAVARRO PROFESSIONAL ELECTRONICS ENGINEER	REG. NO.: 1020	OWNER METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM REGULATORY OFFICE	PROJECT TITLE/LOCATION 3-STOREY OFFICE BUILDING WITH ROOF DECK	CLIENT PROJECT PROPONENT MELCHOR S. CORDOVA ALTERNATE END-USER FOR RO BUILDING	APPROVED BY: PATRICK LESTER N. TY CHIEF REGULATOR, MWSS RO	SHEET CONTENTS THIRD FLOOR FDAS & PA/BGM LAYOUT	R.A. 9266 SEC. 33 DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.	CADD	DATE	NO.	REVISIONS		CHK	DATE	PAPER SIZE	SHEET NO.
	TIN NO. : 303-246-245							AVL	JUL 2018						20X30	EA-0303
	PTR NO. : 6614942							DESIGNED	DATE						SCALE	PROJECT NO.
	DATE : JANUARY 04, 2018							RRVP	JUL 2018						AS SHOWN	SO-G-17-036
PLACE : MAKATI CITY		MWSS COMPOUND, KATIPUNAN AVENUE, MATANDANG BALARA, QUEZON CITY	MWSS COMPOUND, KATIPUNAN AVENUE, MATANDANG BALARA, QUEZON CITY					APPROVED	DATE							
								RBN	JUL 2018							



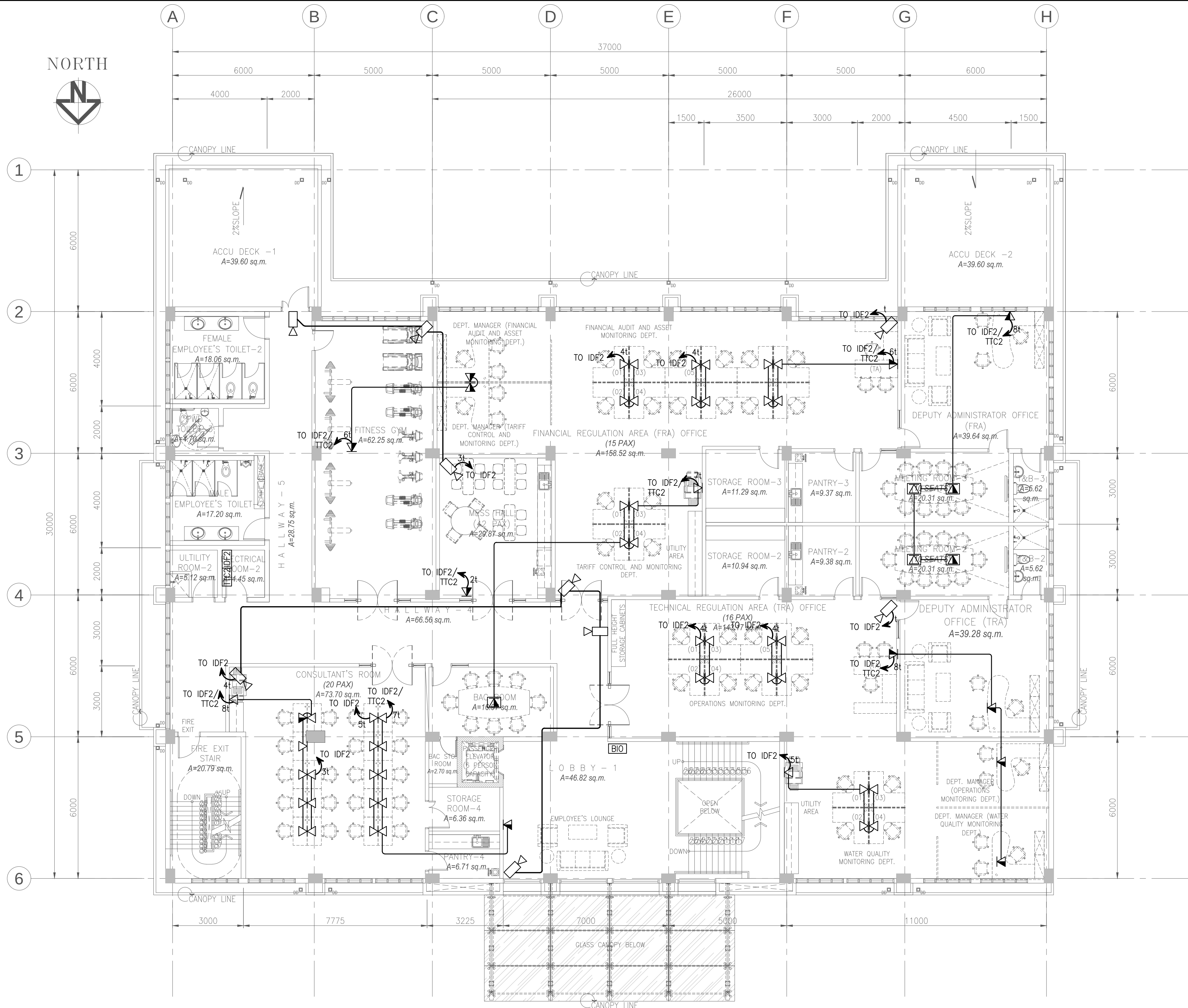


I
EA-0305

AUXILIARY BUILDING FDAS LAYOUT

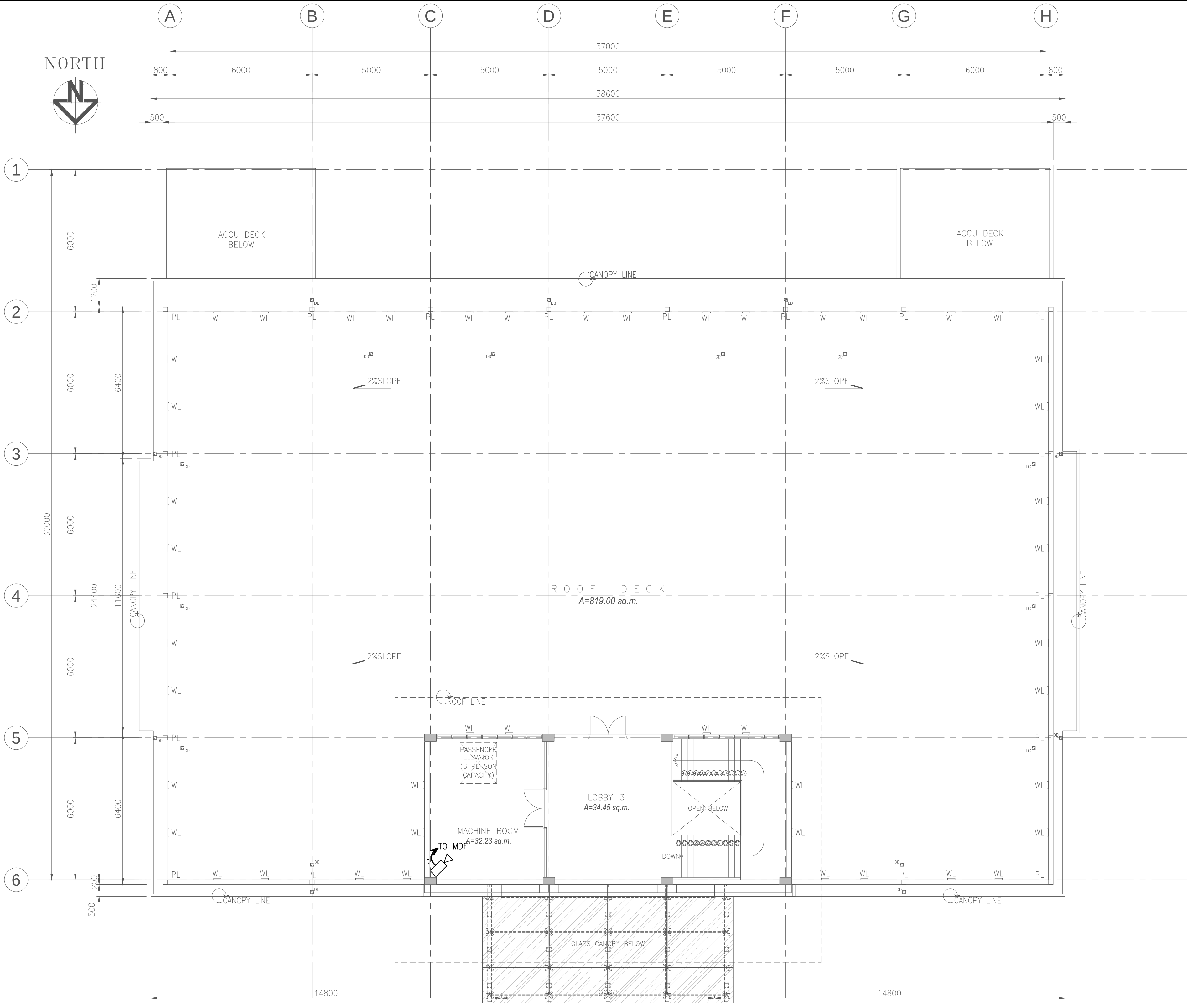
SCALE 1:100M

CERTIFIED BY		OWNER	PROJECT TITLE/LOCATION	CLIENT		SHEET CONTENTS	R.A. 9266 SEC. 33	CADD	DATE	NO.	REVISIONS	CHK	DATE	PAPER SIZE	SHEET NO.	
RONALD B. NAVARRO	REG. NO.: 1020	METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM REGULATORY OFFICE	3-STOREY OFFICE BUILDING WITH ROOF DECK	PROJECT PROPONENT	APPROVED BY:	AUXILIARY BUILDING FDAS LAYOUT	DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.	AVL	JUL 2018					20X30	EA-0305	
	TIN NO. : 303-246-245							DESIGNED	DATE							
	PTR NO. : 6614942							RRVP	JUL 2018							
	DATE : JANUARY 04, 2018	MWSS COMPOUND, KATIPUNAN AVENUE, MATANDANG BALARA, QUEZON CITY	MWSS COMPOUND, KATIPUNAN AVENUE, MATANDANG BALARA, QUEZON CITY	MELCHOR S. CORDOVA ALTERNATE END-USER FOR RO BUILDING	PATRICK LESTER N. TY CHIEF REGULATOR, MWSS RO			APPROVED	DATE					SCALE	PROJECT NO.	
PLACE : MAKATI CITY	RBN							JUL 2018						AS SHOWN	SO-G-17-036	

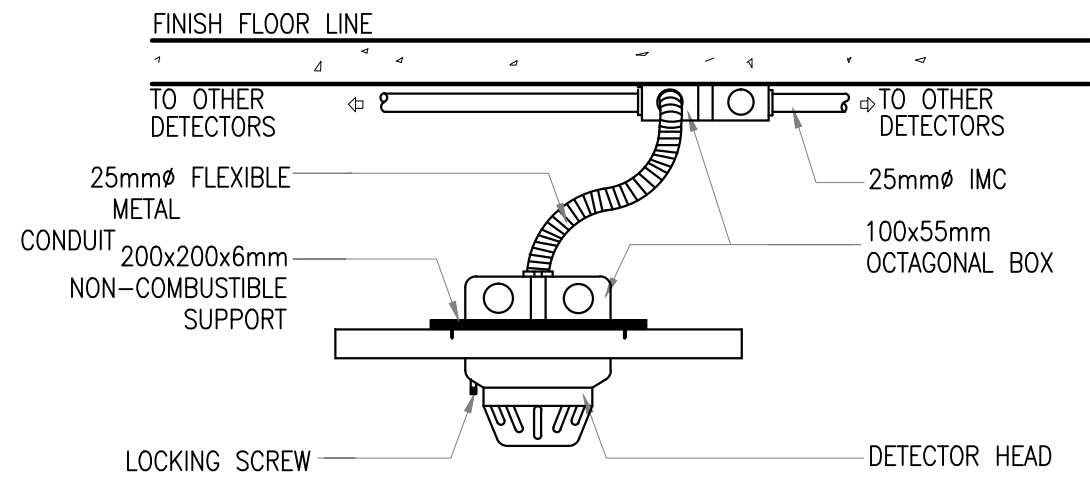


I SECOND FLOOR TEL/DATA & CCTV LAYOUT
EA-0502 SCALE 1:100M

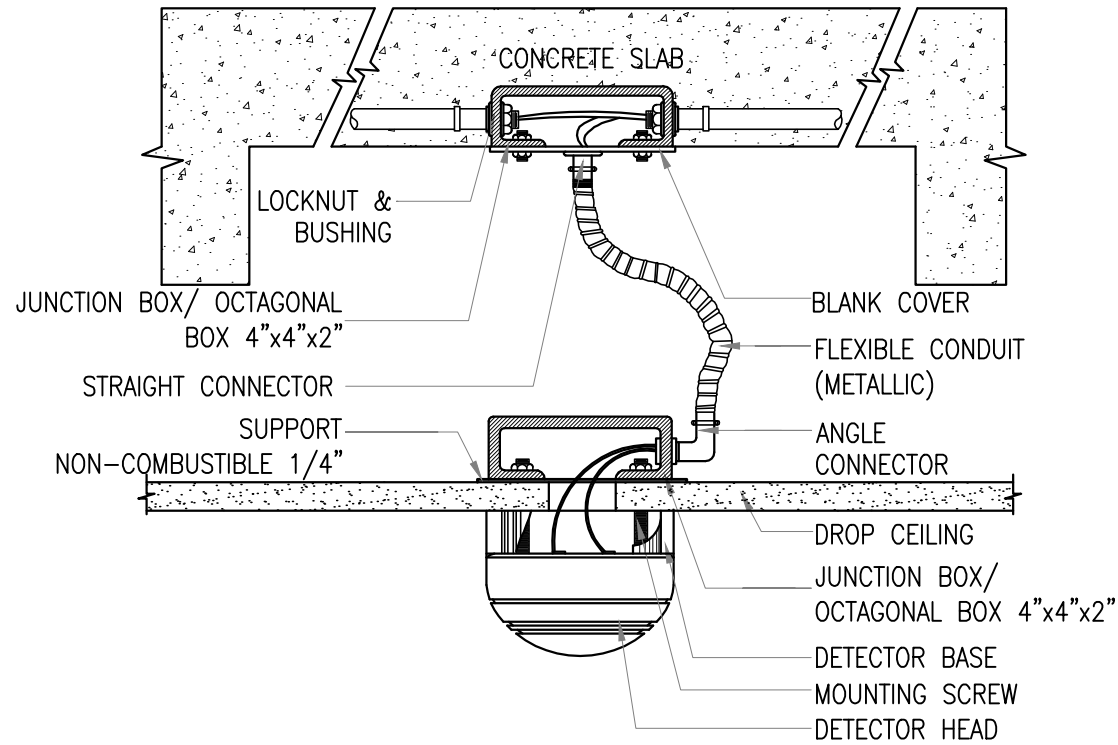
CERTIFIED BY		OWNER	PROJECT TITLE/LOCATION	CLIENT		SHEET CONTENTS	R.A. 9266 SEC. 33										PAPER SIZE	SHEET NO.				
RONALD B. NAVARRO	REG. NO.: 1020	METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM REGULATORY OFFICE	3-STOREY OFFICE BUILDING WITH ROOF DECK	PROJECT PROPONENT	APPROVED BY:	SECOND FLOOR TEL/DATA & CCTV LAYOUT	DRAWINGS AND SPECIFICATIONS AND CONTRACT DOCUMENTS DULY SIGNED, STAMPED OR SEALED AS INSTRUMENTS FOR SERVICE ARE THE INTELLECTUAL PROPERTY AND DOCUMENTS OF ARCHITECT, WHETHER THE OBJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT. IT SHALL BE UNLAWFUL FOR ANY PERSON TO DUPLICATE OR TO MAKE COPIES OF SAID DOCUMENTS FOR USE IN THE REPETITION OF AND FOR OTHER PROJECTS OR BUILDINGS, WHETHER EXECUTED PARTLY OR IN WHOLE, WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT OR AUTHOR OF SAID DOCUMENTS.										CADD	DATE	NO.	REVISIONS	CHK	DATE
	TIN NO.: 303-246-245						AVL	JUL 2018														
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	DATE : JANUARY 04, 2018	RRVP	JUL 2018																			
PROFESSIONAL ELECTRONICS ENGINEER	PLACE : MAKATI CITY	MWSS COMPOUND, KATIPUNAN AVENUE, MATANGANG BALARA, QUEZON CITY	MWSS COMPOUND, KATIPUNAN AVENUE, MATANGANG BALARA, QUEZON CITY	MELCHOR S. CORDOVA ALTERNATE END-USER FOR RO BUILDING	PATRICK LESTER N. TY CHIEF REGULATOR, MWSS RO		APPROVED	DATE														
							RBN	JUL 2018														
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																		SCALE	PROJECT NO.			
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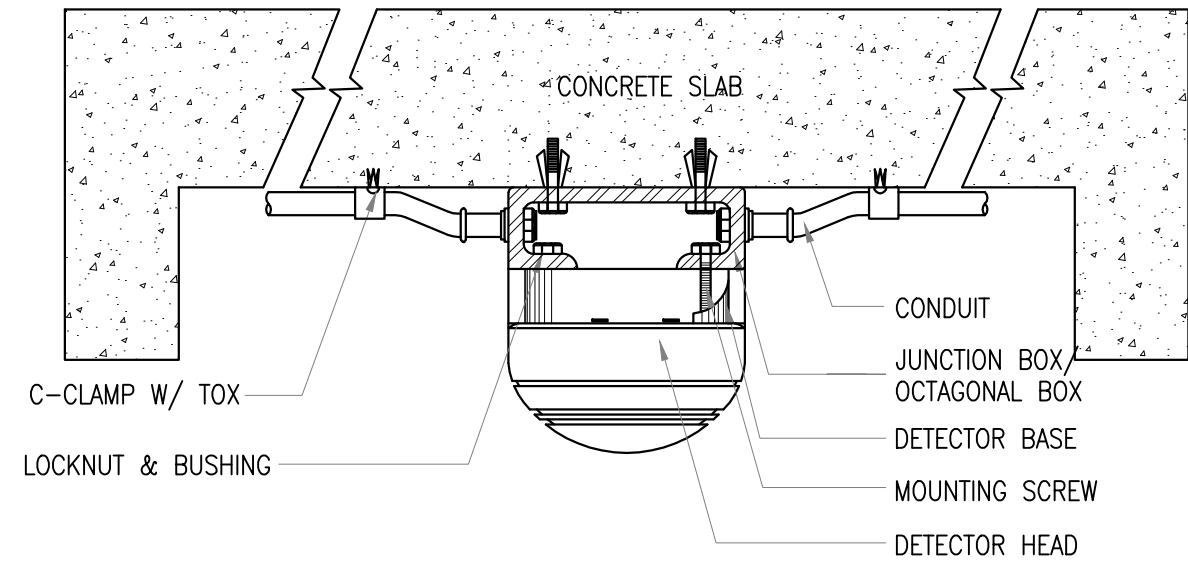
I ROOF DECK CCTV LAYOUT
EA-0504 SCALE 1:100M



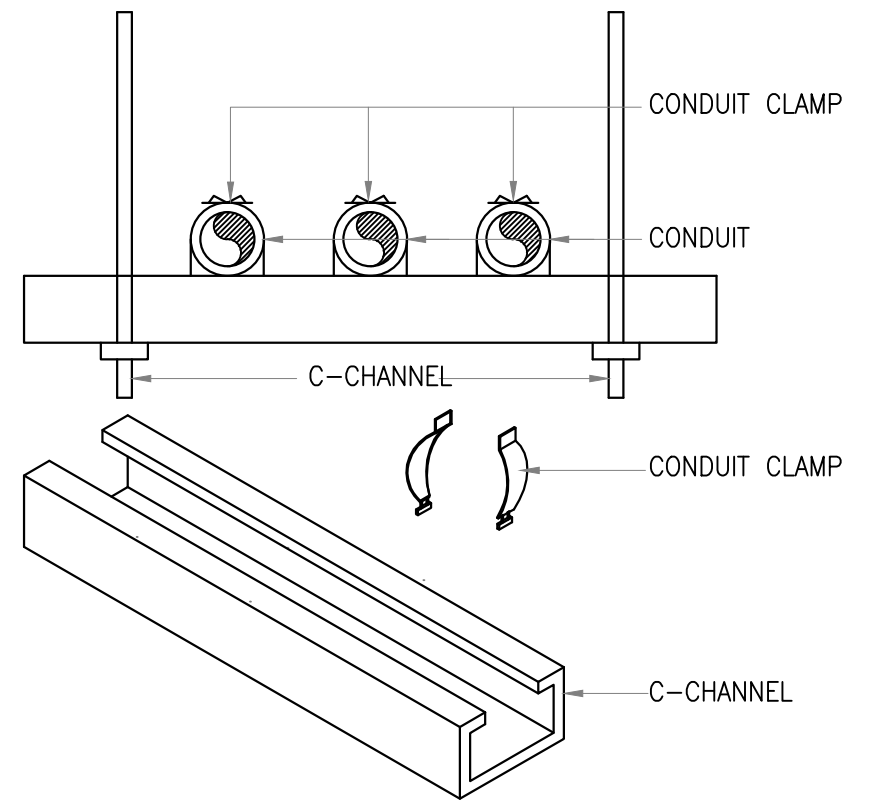
1 (FLUSH-MOUNTED) DETECTOR MOUNTING DETAIL
EA-1001 SCALE NTS



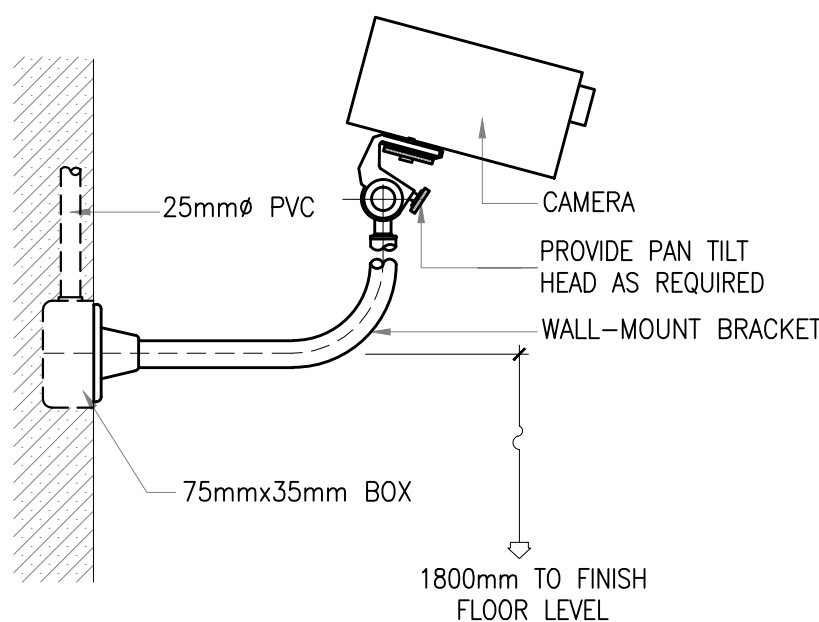
2 SMOKE/HEAT DETECTOR MOUNTING DETAIL ON DROP CEILING WITH CONDUITS EMBEDDED
EA-1001 SCALE NTS



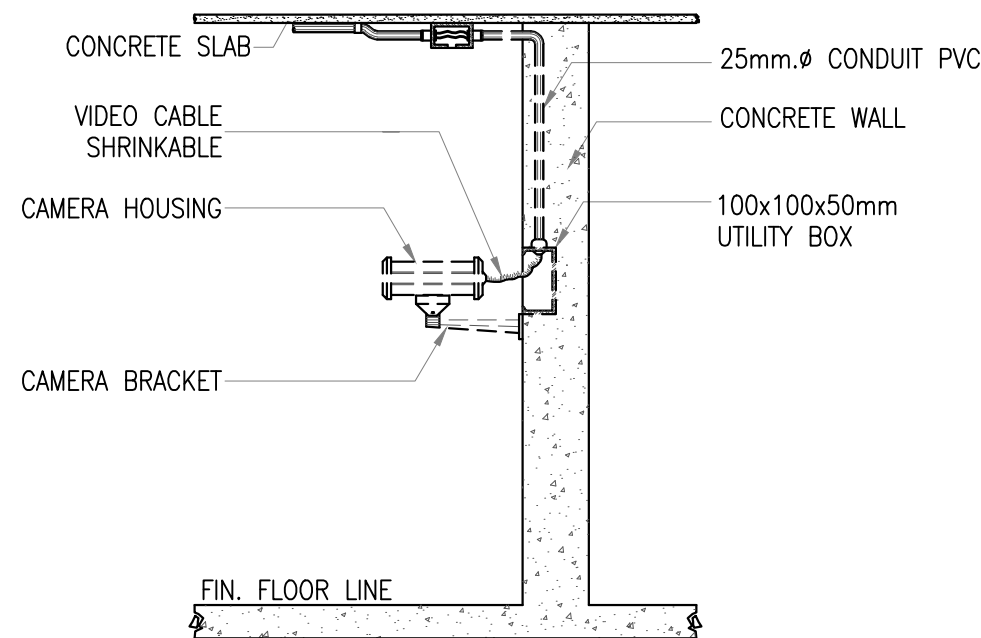
3 SMOKE/HEAT DETECTOR MOUNTING DETAIL WITH CONDUITS EXPOSED
EA-1001 SCALE NTS



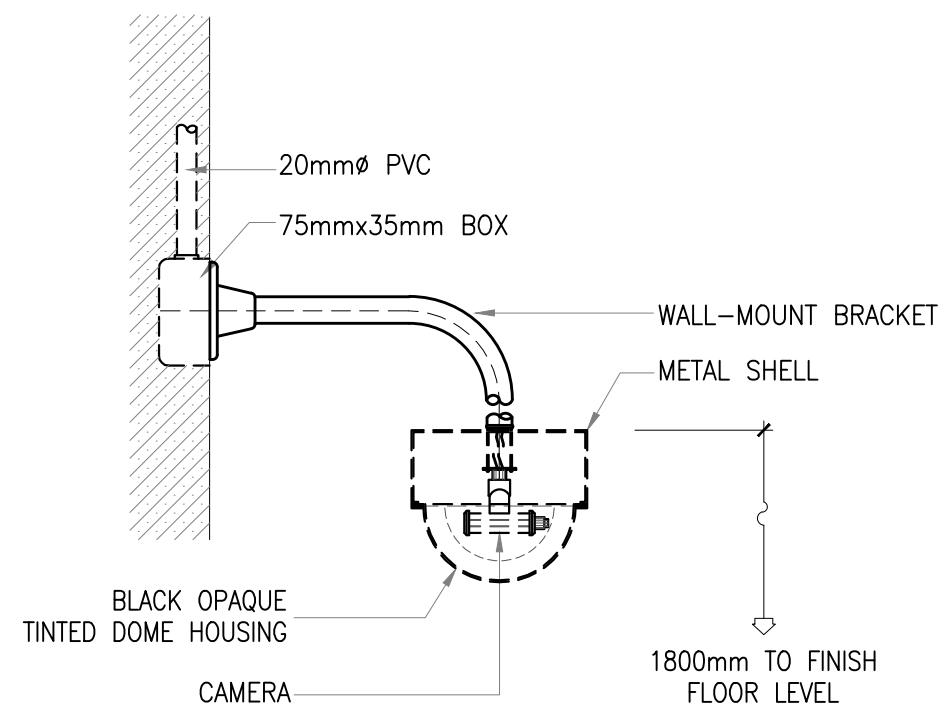
4 TYPICAL CONDUIT SUPPORT DETAIL
EA-1001 SCALE NTS



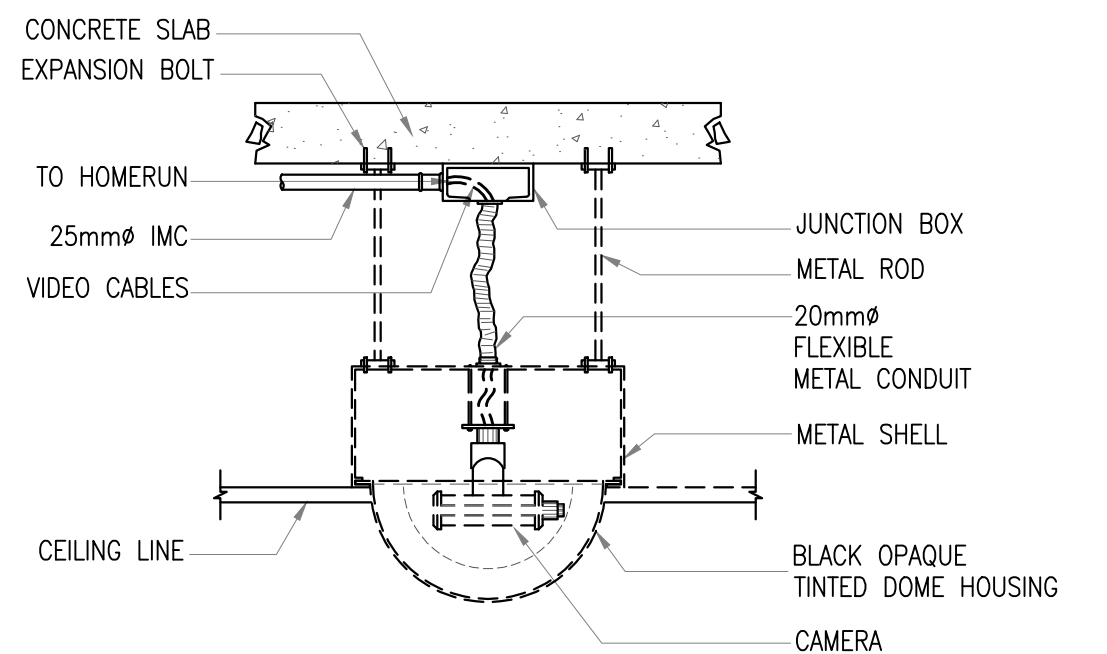
5 (WALL MOUNTED) CCTV MOUNTING DETAIL
EA-1001 SCALE NTS



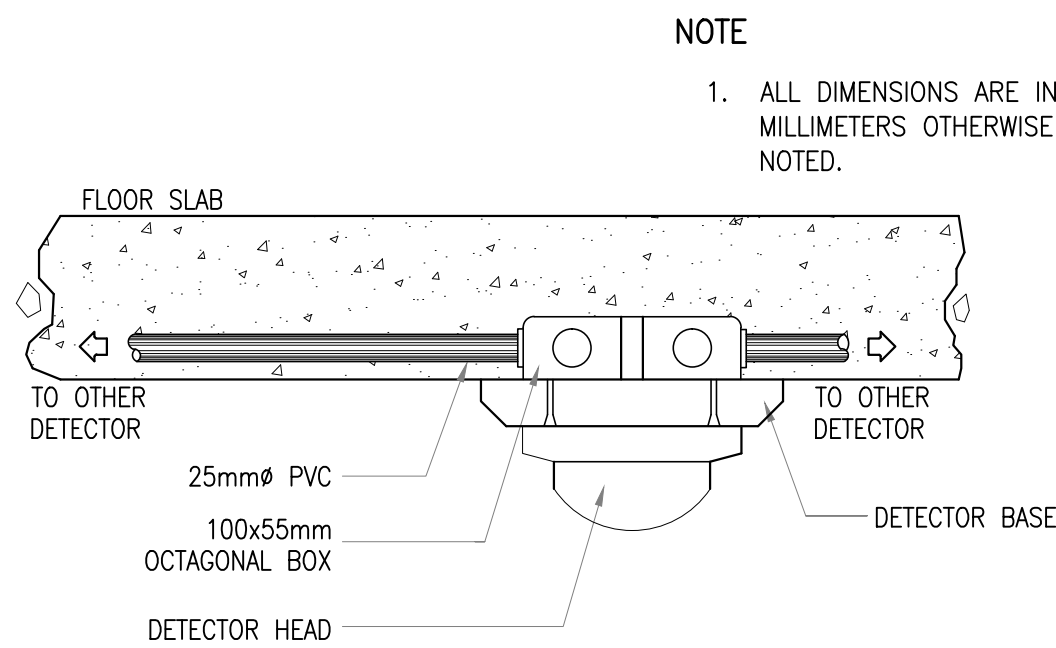
6 TYPICAL CAMERA MOUNTING DETAIL
EA-1001 SCALE NTS



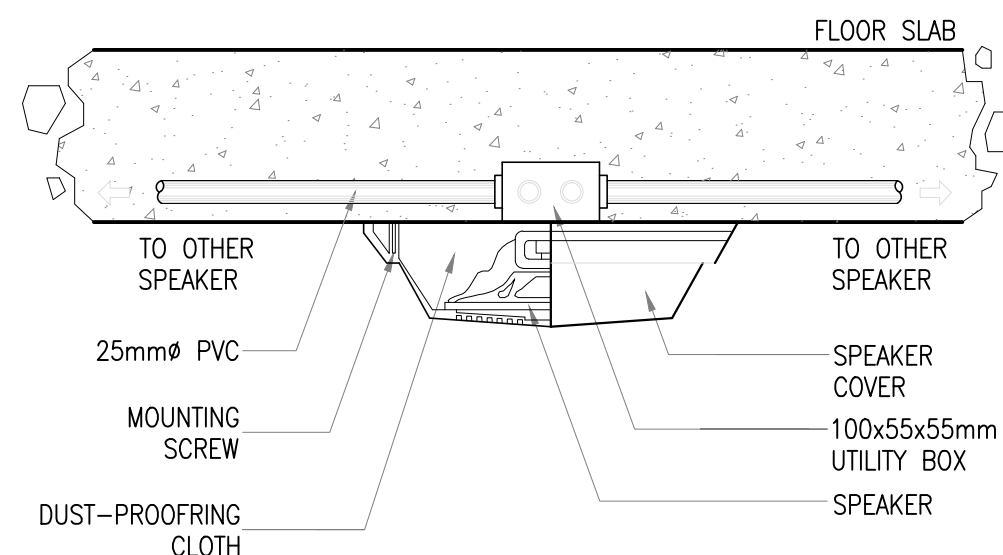
7 TYPICAL DOMED TYPE CAMERA MOUNTING DETAIL (WALL MOUNTED)
EA-1001 SCALE NTS



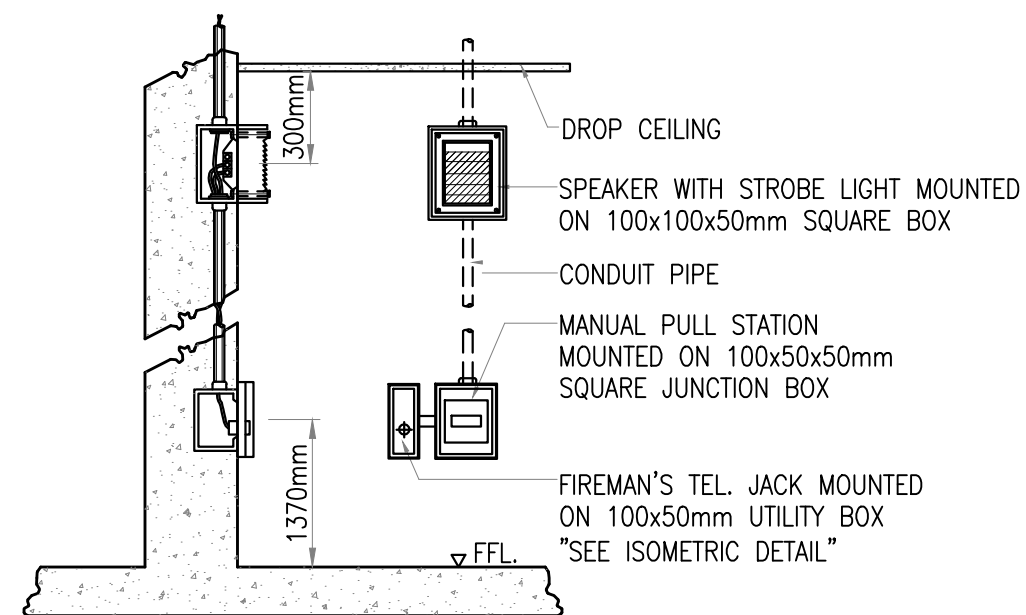
8 TYPICAL CAMERA MOUNTING DETAIL
EA-1001 SCALE NTS



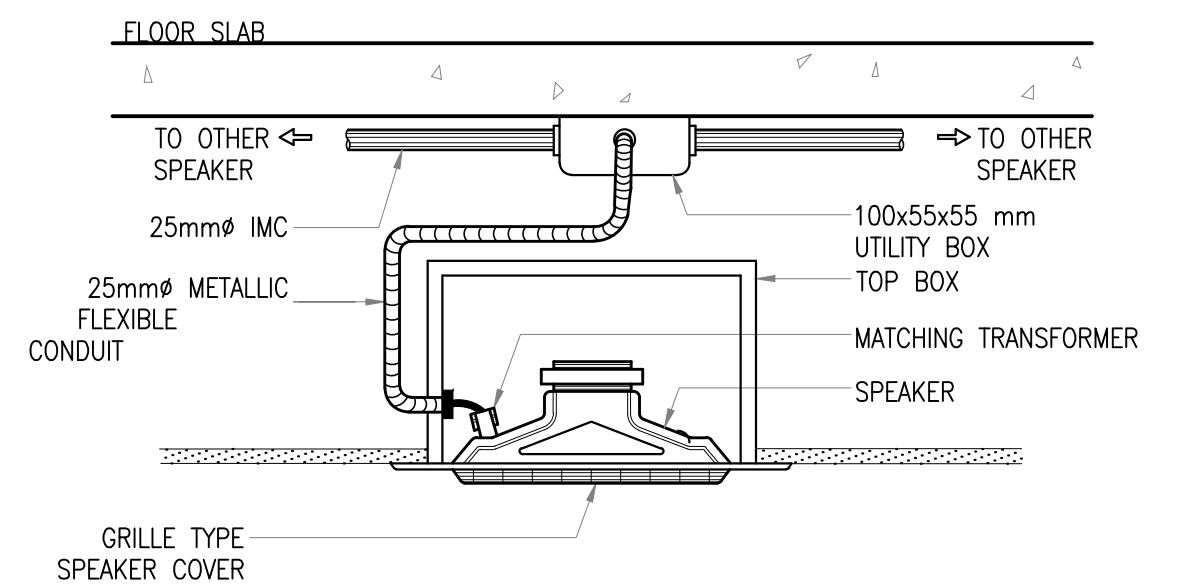
9 (SURFACE MOUNTED) DETECTOR MOUNTING DETAIL
EA-1001 SCALE NTS



10 SURFACE MOUNTED SPEAKER DETAIL
EA-1001 SCALE NTS



11 SPEAKER HORN, MANUAL PULL STATION AND FIREMAN'S TELEPHONE JACK MOUNTING DETAILS
EA-1001 SCALE NTS



12 FLUSH-MOUNTED SPEAKER DETAIL
EA-1001 SCALE NTS

