PROJECT: Hidden For Privacy
ADDRESS:

DATE: REV: 0

SR. NO.	DESCRIPTION	QUANTITY	WASTAGE	QTY WITH WASTAGE	UNIT	UNIT COST	UNIT	MATERIAL COST	LABOR RATE	LABOR	UNIT	LABOR RATE / TOTAL LABOR	LABOR COST	TOTAL COST
	DEMOLITION & REPLACEMENT													
DEMOLITION														
1	Existing Smoke Detector To Be Removed & Wire Back To The Source & Provide Blank Cover plate Secured With Screws At Each Location Where Device is Removed	80	0%	80	EA			$ -				0.00	$ -	$ -
2	Existing Surge Suppression Device To Be Removed	5	0%	5	EA			$ -				0.00	$ -	$ -
3	Remove Existing Remote Auxiliary Booster Power Supply, Back Up Batteries & Associated Components	5	0%	5	EA			$ -				0.00	$ -	$ -
4	Remove Existing SLC & NAC Circuit Terminals, Twist-On Connectors Attaching Fire Alarm Wiring, Power Supplies, Surge Protection Device & Associated Components. Existing Cabinet To Remain & Be Reused	4	0%	4	EA			$ -				0.00	$ -	$ -
REPLACEMENT														
1	Existing Addressable Input Module To Be Replaced	8	0%	8	EA			$ -				0.00	$ -	$ -
2	Existing Addressable Input Module To be Replaced	17	0%	17	EA			$ -				0.00	$ -	$ -
3	Existing Addressable Output Module To Be Replaced	8	0%	8	EA			$ -				0.00	$ -	$ -
4	Existing Addressable Output Module To be Replaced	1	0%	1	EA			$ -				0.00	$ -	$ -
5	Existing Control Relay Output Module To Be Replaced	50	0%	50	EA			$ -				0.00	$ -	$ -
6	Existing Duct Smoke Detector To Be Replaced	50	0%	50	EA			$ -				0.00	$ -	$ -
7	Existing Monitoring Module To Be Replaced	50	0%	50	EA			$ -				0.00	$ -	$ -
	NEW WORK													
FIRE ALARM (SEE NOTE 2)														
	CONDUITS													
1	3/4" EMT Conduit	8427	10%	9270	FT			$ -				0.00	$ -	$ -
2	3/4" PVC SCH 40 Conduit	133.57	10%	147	FT			$ -				0.00	$ -	$ -
	CONDUCTORS													
1	2#16 Twisted Pair Shielded Cable, WEST PENN D991	6075	10%	6682	FT			$ -				0.00	$ -	$ -
2	2#14 Twisted Pair Shielded Cable, WEST PENN 994S	2407	10%	2648	FT			$ -				0.00	$ -	$ -
3	CAT6 Cable	158	10%	174	FT			$ -				0.00	$ -	$ -
4	2-Strand OM3 MM Fiber Optic Cable (Factory Manufactured)	230	10%	253	FT			$ -				0.00	$ -	$ -
	DEVICES													
1	Addressable Heat Detector & Detector Base	1	0%	1	EA			$ -				0.00	$ -	$ -
	4" Octagonal Box	1	0%	1	EA			$ -				0.00	$ -	$ -
2	Addressable Input Module	8	0%	8	EA			$ -				0.00	$ -	$ -
3	Addressable Output Module	8	0%	8	EA			$ -				0.00	$ -	$ -
4	Addressable Spot Smoke Detector & Detector Base	43	0%	43	EA			$ -				0.00	$ -	$ -
	4" Octagonal Box	43	0%	43	EA			$ -				0.00	$ -	$ -
5	Addressable Spot Smoke Detector & Detector Base	25	0%	25	EA			$ -				0.00	$ -	$ -
	4" Octagonal Box	25	0%	25	EA			$ -				0.00	$ -	$ -
6	Addressable Spot Smoke Detector & Detector Base	3	0%	3	EA			$ -				0.00	$ -	$ -
	4" Octagonal Box	3	0%	3	EA			$ -				0.00	$ -	$ -
	Wire Guard	3	0%	3	EA			$ -				0.00	$ -	$ -
7	Addressable Spot Smoke Detector & Detector Base With Existing Protective Guard	162	0%	162	EA			$ -				0.00	$ -	$ -
8	Carbon Monoxide Gas Detector & Detector Base	20	0%	20	EA			$ -				0.00	$ -	$ -
9	Combination Heat & Carbon Monoxide as Detector & Detector Base	2	0%	2	EA			$ -				0.00	$ -	$ -
10	Combination Smoke Detector & Carbon Monoxide as Detector & Detector Base	1	0%	1	EA			$ -				0.00	$ -	$ -
11	Combination Smoke Detector & Carbon Monoxide as Detector & Detector Base With Existing Wire Guard	3	0%	3	EA			$ -				0.00	$ -	$ -
12	Fire Alarm Sprinkler Flow Switch	4	0%	4	EA			$ -				0.00	$ -	$ -
13	Fire Alarm Sprinkler Tamper Switch	5	0%	5	EA			$ -				0.00	$ -	$ -
14	Fire Sprinkler Post Indicator Valve Switch	3	0%	3	EA			$ -				0.00	$ -	$ -
15	Key Operated Manual Pull Station	3	0%	3	EA			$ -				0.00	$ -	$ -
16	Manual Pull Station	4	0%	4	EA			$ -				0.00	$ -	$ -
17	Combination Audible & Visual Notification Appliance, Ceiling Mounted, 30CD With Existing Wire Guard	2	0%	2	EA			$ -				0.00	$ -	$ -
18	Combination Audible & Visual Notification Appliance, Ceiling Mounted, 75CD With Existing Wire Guard	6	0%	6	EA			$ -				0.00	$ -	$ -
19	Combination Audible & Visual Notification Appliance, Ceiling Mounted, 110CD With Existing Wire Guard	2	0%	2	EA			$ -				0.00	$ -	$ -
20	Combination Audible & Visual Notification Appliance, Wall Mounted, 15CD	3	0%	3	EA			$ -				0.00	$ -	$ -
21	Combination Audible & Visual Notification Appliance, Wall Mounted, 15CD With Existing Wire Guard	3	0%	3	EA			$ -				0.00	$ -	$ -
22	Combination Audible & Visual Notification Appliance, Wall Mounted, 30CD	1	0%	1	EA			$ -				0.00	$ -	$ -
23	Combination Audible & Visual Notification Appliance, Wall Mounted, 75CD With Existing Wire Guard	1	0%	1	EA			$ -				0.00	$ -	$ -
24	Combination Audible & Visual Notification Appliance, Wall Mounted, 110CD	16	0%	16	EA			$ -				0.00	$ -	$ -
25	Combination Audible & Visual Notification Appliance, Wall Mounted, 110CD With Existing Wire Guard	4	0%	4	EA			$ -				0.00	$ -	$ -
26	Visual Only Notification Appliance, Ceiling Mounted, 15CD	9	0%	9	EA			$ -				0.00	$ -	$ -
27	Visual Only Notification Appliance, Wall Mounted, 15CD With Existing Wire Guard	2	0%	2	EA			$ -				0.00	$ -	$ -
28	Visual Only Notification Appliance, Wall Mounted, 75CD	1	0%	1	EA			$ -				0.00	$ -	$ -
29	Visual Only Notification Aplliance,Wall Mounted, 15CD	2	0%	2	EA			$ -				0.00	$ -	$ -
30	Fire Alarm Annunciator Panel	1	0%	1	EA			$ -				0.00	$ -	$ -
31	Fire Alarm Control Panel	5	0%	5	EA			$ -				0.00	$ -	$ -
	1P/20A Lock On Breaker For FACP	5	0%	5	EA			$ -				0.00	$ -	$ -
32	Fire Alarm Termination Cabinet	2	0%	2	EA			$ -				0.00	$ -	$ -
33	Fire management Graphics Workstation (FMS) With 24" LCD Monitor, Server (CPU), Keyboard & Optical Mouse	1	0%	1	EA			$ -				0.00	$ -	$ -
	2-Port Data Outlet For FMS Workstation	1	0%	1	EA			$ -				0.00	$ -	$ -
	CAT6 Patch Cord, 10FT	1	0%	1	EA			$ -				0.00	$ -	$ -
34	Printer (Furnish & Install)	1	0%	1	EA			$ -				0.00	$ -	$ -
35	Remote Auxiliary Power Expander Unit, Backup Batteries & Associated Components	5	0%	5	EA			$ -				0.00	$ -	$ -
36	Surge Suppression Device, NEMA 1	11	0%	11	EA			$ -				0.00	$ -	$ -

Concept Estimating LLC

MISCELLANEOUS														
1	4" Steel Blank Cover Plate Attach To The Existing Junction Box With Security Pin-Torx Type Screws	1	0%	1	EA			$ -				0.00	$ -	$ -
FIRESTOPPING														
1	Caulking Sealant	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
SAW CUT														
1	Saw Cut & Repair Concrete Floor For Conduit Installation	134	0%	134	FT		E	$ -			E	0.00	$ -	$ -
ALLOWANCES (PLEASE ADD YOUR NUMBER)														
1	Temporary Power & Lighting	500	0%	500	SFT		E	$ -			E	0.00	$ -	$ -
2	Mobilization and Demobilization	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
3	Permit and Utility Fees	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
4	As Built Documents/Submittals	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
5	Arc Flash Study	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
6	Protection Devices Coordination Study	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
7	Testing and Commissioning	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
8	Tags & Directory	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
9	Lifts/Crane	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
10	Final Clean Up & Housekeeping	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
11	Core Drill	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -
12	Fire Alarm Contractor Shall Fireproof All Penetrations Created For This Project. Penetrations Through Rated Floors, Ceilings & Walls Shall Be Properly Sealed & Sleeved To Maintain The Existing Fire-Resistant Rating. Where Rating Is Unknown Fireproofing Shall Meet A 2HR Rating In All Cases. Sealant Color Shall Match The Existing Surfaces As Closely As Possible	1	0%	1	LS		E	$ -			E	0.00	$ -	$ -

TOTAL MATERIAL COST		**$ -**
TOTAL LABOR COST		**$ -**
TOTAL LABOR HOURS		**0**
TOTAL COST		**$ -**
OVERHEADS & PROFIT	**25%**	**$ -**
MATERIAL TAX	**7%**	**$ -**
TOTAL BID		**$ -**

SCOPE OF ESTIMATE:

I	**SUPPLY & INSTALLATION**
1	Demolition, Relocation & Replacement
2	Fire Alarm
3	Miscellaneous
4	Fire Stopping
5	Saw Cut
6	Allowances
II	**NOTES**
1	We could not figure pricing of yellow highlighted fixtures. We have figured standard pricing for the remaining fixtures. Please get the quotes from your local suppliers for firm pricing.
2	All the equipment, FA panels, devices, modules are being supplied by the client. We are going to provide the labor to install all items & wire.

Concept Estimating LLC

CoreCivic

TORRANCE COUNTY DETENTION FACILITY

Estancia, New Mexico

FIRE ALARM SYSTEM REPLACEMENT

Concept Estimating LLC

DATE: AUGUST 23, 2024

100% CONSTRUCTION DOCUMENTS

R&N SYSTEMS DESIGN
615 OAKLEAF OFFICE LANE
MEMPHIS, TENNESSEE 38117
tel. 901/309-0115
www.rnsystemsdesign.com

CoreCivic
COVER SHEET
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM
FA0.00
AUGUST 23, 2024

R&N SYSTEMS DESIGN
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GENERAL NOTES:

1. THESE DRAWINGS ARE DIAGRAMMATIC AND ARE PROVIDED TO INDICATE THE CONTROL/MONITOR OF THE ADDRESSABLE FIRE ALARM SYSTEM AND THE INTERCONNECTION TO THE NEW EQUIPMENT THAT IS TO BE FURNISHED AND INSTALLED AS A PART OF THIS PROJECT. ALL DIMENSIONS SHALL BE FIELD VERIFIED.
2. INFORMATION PROVIDED ON THESE DRAWINGS IS BASED ON A SITE SURVEY AND AS-BUILT INFORMATION. THE INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. FAC SHALL CONFIRM INFORMATION AND COVER ANY REQUIREMENTS FOR A COMPLETE AND FUNCTIONAL SYSTEM IN THE BASE BID. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COUNTS.
3. EXISTING DEVICES ARE INTENDED TO BE REPLACED WITH NEW. ADDED DEVICES THAT ARE REQUIRED SHALL BE PROVIDED WITH NEW CONDUIT AND WIRE AS INDICATED ON PLANS. NEW DEVICES ARE SHOWN IN BOLD. WHERE "WG" PROTECTIVE DETECTOR/AV DEVICES GUARDS EXIST, THE FAC SHALL REMOVE AND REINSTALL THE EXISTING WIRE GUARD OVER THE NEW DEVICE.
4. THE FIRE ALARM CONTRACTOR (FAC) WILL BE THE PRIMARY CONTRACTOR FOR THIS SYSTEM AND SHALL BE RESPONSIBLE FOR PROVIDING AND COORDINATING THE FIRE ALARM SYSTEM, CONNECTIVITY WITH THE EXISTING EQUIPMENT, DUCT WORK AND ELECTRICAL SYSTEMS.
5. THE (FAC) SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE, WHERE FLOORS OR WALLS ARE PENETRATED, TAKE ALL PRECAUTIONS TO AVOID STRUCTURAL DAMAGE.
6. ALL FIRE ALARM SYSTEM CABLE, WIRING AND FIBER SHALL BE IN CONDUIT.
7. EXISTING FIRE ALARM CONDUIT AND ADDRESSABLE FIRE ALARM WIRING SHALL BE MAINTAINED AND USED TO RECONNECT NEW FIRE ALARM DEVICES TO THE NEW FIRE ALARM SYSTEM.
8. ADDRESSABLE SIGNALING LINE CIRCUIT (SLC) AND NOTIFICATION APPLIANCE CIRCUITS (NAC) SHALL BE CONSTRUCTED AS A CLASS A (STYLE 7) WIRING LOOP.
9. FIREPROOF ALL PENETRATIONS MADE FOR THIS PROJECT. THE FAC SHALL PATCH ANY HOLES IN EXISTING WALLS AND FLOORS. FILL PENETRATIONS WITH FIRESTOP CAULK. ALL INTERIOR PENETRATIONS SHALL BE FIRE SEALED IN ACCORDANCE WITH THE EXISTING WALL RATING. EXPOSED CONDUIT BELOW (10') SHALL BE RIGID, ATTACHED, AND STRAPPED AS INDICATED IN SECTION 280500.2.
10. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE CONDITIONS OF THE EXISTING EMERGENCY POWER PANELS FOR THE FIRE ALARM INSTALLATION. FIELD VERIFY THE 120 VAC CIRCUIT BREAKERS THAT WILL SUPPLY THE NEW FIRE ALARM SYSTEM AS INDICATED ON PLANS. THE INTENT IS TO UTILIZE THE EXISTING BRANCH CIRCUIT SERVING THE EXISTING FACP TO POWER THE NEW CONTROL PANEL. AT LOCATIONS WHERE FIRE ALARM TERMINATION CABINETS (FATC) ARE REPLACED WITH A NEW FACP, ONE (1) 20AMP, 120 VAC EMERGENCY POWER CIRCUIT AND CONDUIT SHALL BE PROVIDED FOR THE FACP. THE CIRCUIT SHALL ONLY POWER FIRE ALARM DEVICES AND SHALL BE MARKED IN RED PER NEC 760.121.
11. THE FIRE ALARM EQUIPMENT SHALL BE CONNECTED TO A UNIFIED GROUND SYSTEM. ALL SURGE PROTECTOR DEVICE GROUND CONNECTIONS MUST BE LESS THAN 1 OHM.
12. EXISTING FIRE ALARM DEVICES AND EQUIPMENT TO BE REPLACED AS INDICATED ON THE DRAWINGS. THIS INCLUDES REPLACING ALL FIRE ALARM PIV AND SPRINKLER RISER VALVE INITIATING AND MONITORING MODULES AND DEVICES. THE FAC SHALL PROVIDE NEW WIRING WHERE REQUIRED TO COMPLETE THE INSTALLATION AND AT EXISTING EQUIPMENT INTERFACES.
13. EXISTING FIRE ALARM SYSTEM WIRING AND CONDUIT SHALL REMAIN AND BE REUSED UNLESS NOTED OTHERWISE. EXISTING WIRING THAT IS NOT ENERGIZED CANNOT BE ABANDONED IN PLACE. REMOVE ALL ABANDONED FIRE ALARM WIRE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. THE FAC SHALL PROVIDE NEW WIRING WHERE REQUIRED TO COMPLETE THE INSTALLATION AND AT EXISTING EQUIPMENT INTERFACES.
14. WHERE INDICATED ON PLANS, FURNISH AND INSTALL NEW CONDUIT AND WIRING FOR FIRE ALARM DEVICE. CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP UNLESS OTHERWISE NOTED.
15. WHERE INDICATED ON PLANS, NEW CONDUIT INSTALLED SHALL BE A MINIMUM 3/4" IN SIZE. CONDUIT SHALL BE SIZED AS REQUIRED PER NEC STANDARDS. NEW CONDUIT SHALL ROUTE ABOVE THE CEILING. IF THE SPACE DOES NOT HAVE A CEILING, ROUTE CONDUIT SURFACE MOUNTED ON A WALL 12" ABOVE FINISHED FLOOR OR ON THE STRUCTURAL CEILING. EXPOSED EXTERIOR CONDUIT SHALL BE RIGID. COORDINATE EXACT ROUTING WITH ENGINEER. EXPOSED SURFACE MOUNTED BACK BOXES WITH REMOVABLE KO's ARE UNACCEPTABLE. DEVICE BACK BOXES SHALL BE SIZED TO ACCOMMODATE THE DEVICE BEING INSTALLED WITHOUT ANY FACE PLATE OVERHANG.
16. THE LOCATION OF FIRE ALARM NOTIFICATION VISUAL DEVICES ARE CRITICAL AND MUST MEET ADA AND APPLICABLE CODES. ALL INDICATED CANDELA RATINGS ARE MINIMUMS AND SHALL BE AS LISTED OR HIGHER. CANDELA LEVELS ARE CALCULATED WITHOUT PROTECTIVE COVERS. INSTALL FIRE VISUAL DEVICES IN LOCATIONS INDICATED ON THE PLANS. WHERE SHOWN AS WALL MOUNTED AUDIO VISUAL DEVICES CAN BE PLACED ON THE CEILING AS LONG AS THE INTENDED COVERAGES ARE ACHIEVED.
17. ANCILLARY POWER FOR MECHANICAL DAMPERS AND/OR RELATED EQUIPMENT IS NOT PROVIDED BY THE FAC. THIS INCLUDES THE WIRING FROM THE POWER SOURCE TO POWER ANY EXISTING DAMPER. THE INTENT OF THE DESIGN IS FOR THE FAC TO REPLACE THE RELAY MODULE AND RECONNECT THE EXISTING CONTROL WIRING.
18. FURNISH AND INSTALL RELAYS AS REQUIRED IF LOADS ARE MORE THAN THE FIRE ALARM RELAYS BEING INSTALLED.
19. AT EXISTING AREAS WITH OPEN CEILING STRUCTURES AND PRE-CAST "DOUBLE T" TYPE CEILING CONSTRUCTION, THE SMOKE AND HEAT DETECTORS ARE LOCATED WITHIN EACH CAVITY OF THE "DOUBLE T" CEILING MEMBERS. FAC SHALL VERIFY THE EXISTING CONDITIONS.
20. PROVIDE PIN-TORX STYLE SECURITY FASTENERS ON ALL WALL MOUNTED VISUAL "ONLY" OR COMBINATION AUDIBLE/VISUAL NOTIFICATION APPLIANCE IN INMATE I-3 OCCUPIED AREAS.
21. WHERE INDICATED ON PLANS, FURNISH AND INSTALL A 4" STAINLESS STEEL COVER PLATE WITH HOLES MOUNTINGS TO ATTACH SECURITY SCREWS.
22. MAINTAIN RECOMMENDED SEPARATIONS BETWEEN FIRE ALARM WIRING AND INTERFERENCE PRODUCING ELECTRICAL DEVICES SUCH AS POWER CONDUIT AND CABLING, ELECTRICAL PANELS, FLUORESCENT LIGHTS, BALLASTS, RELAYS, ELECTRIC MOTORS, MOTOR CONTROLLERS, TRANSFORMERS, AND OTHER ELECTROMAGNETIC DEVICES.
23. ALL FIRE ALARM CIRCUITS ARE CONTINUOUS FROM DEVICE TO DEVICE. NO SPLICES OR INTERIM CIRCUIT CONNECTIONS SHALL BE MADE UNLESS IN AN APPROVED JUNCTION BOX ON APPROVED TERMINAL BLOCKS.
24. DETECTORS ARE NOT TO BE LOCATED IN A DIRECT AIR-FLOW NOR WITHIN 3'-0" OF ANY AIR SUPPLY DIFFUSER IN ACCORDANCE WITH NFPA 72, A.17.7.4.1.
25. DUCT SMOKE DETECTORS TO BE INSTALLED PER MANUFACTURER INSTALLATION INSTRUCTION AND ALL APPLICABLE STANDARDS. FAC SHALL FURNISH ONE DUCT SMOKE DETECTOR FOR EACH HVAC UNITS OVER 2000 CFM AND LESS THAN 15000 CFM (CUBIC FEET PER MINUTE). FURNISH TWO DUCT SMOKE DETECTORS FOR EACH HVAC UNIT OVER 15000 CFM. IT IS THE FACs RESPONSIBILITY TO IDENTIFY EXISTING DUCT DETECTOR LOCATIONS AND EQUIPMENT INTERFACES AND TO PROVIDE NEW INSTALLATIONS AS REQUIRED.
26. THE FAC IS RESPONSIBLE FOR ALL FEES RELATED TO THE DISPOSAL OF EQUIPMENT, DEVICES, AND GENERAL TRASH CREATED BY THIS PROJECT SCOPE.
27. IN ADDITION TO WHAT IS DESCRIBED IN THE PROJECT SPECIFICATIONS, THE FAC SHALL PROVIDE A FIRE ALARM SYSTEM RISER AND TERMINATION SCHEDULE THAT CLEARLY IDENTIFIES ALL EQUIPMENT, DEVICES, CABLE AND FIBER. THE TERMINATION SCHEDULE AND RISER SHALL IDENTIFY THE EQUIPMENT ROOM AND THE ASSOCIATED FIRE ALARM SYSTEM EQUIPMENT BY NAME AT EACH LOCATION. THE TERMINATION SCHEDULE AND RISER PROVIDED SHALL INCLUDE FIBER TYPES, ROUTING INFORMATION, TERMINATION AND LIU LOCATION AND MUST INCLUDE THE INDIVIDUAL FIBER COLOR USED AT EACH PANEL CONNECTION. THE RISER SHALL INCLUDE VISUAL REFERENCE BETWEEN EACH PANEL AND INDIVIDUAL DETECTION AND ANNUNCIATION DEVICE.

APPLICABLE CODES:

1. INTERNATIONAL BUILDING CODE, 2021 EDITION.
2. NATIONAL ELECTRIC CODE, 2020 EDITION – NFPA 70.
3. NATIONAL FIRE PROTECTION ASSOCIATION – NFPA 72.
4. INTERNATIONAL FIRE CODE, 2021 EDITION.

WIRE SCHEDULE

SYSTEM NAME	MANUFACTURER	PART NUMBER	DESCRIPTION	COLOR
FIRE ALARM SIGNAL CIRCUITS AND POWER	EQUAL TO WEST PENN	994S	2 CONDUCTORS-STRANDED, UNSHIELDED WITH OVERALL JACKET. 14 AWG	RED
FIRE ALARM SIGNAL LINE CIRCUIT	EQUAL TO WEST PENN	D975	2 CONDUCTORS-TWISTED PAIR, SHIELDED WITH OVERALL JACKET. 18 AWG	RED
FIRE ALARM ANNUNCIATOR	EQUAL TO WEST PENN	D991	COMMUNICATION 2 CONDUCTORS-TWISTED PAIR, SHIELDED WITH OVERALL JACKET. 16 AWG	RED
	EQUAL TO LIBERTY	THHN14SOLRED500RL	POWER 3 CONDUCTORS-STRANDED THHN. 14 AWG	RED

NOTE: CONDUIT IS TO BE INSTALLED BY FIRE ALARM CONTRACTOR. PROVIDE WET RATED CABLE FOR UNDERGROUND INSTALLATION AS REQUIRED BY NEC. CONFIRM ALL CABLE/CONDUIT REQUIREMENTS WITH FIRE ALARM SYSTEM CONTRACTOR BEFORE INSTALLATION.

SHEET INDEX

SHEET NUMBER	SHEET DESCRIPTION
FA0.00	COVER SHEET
FA0.01	FIRE ALARM LEGEND
FA1.00	FIRE ALARM PLAN, OVERALL SITE PLAN
FA1.01	FIRE ALARM PLAN, FIRST LEVEL – AREA A
FA1.02	FIRE ALARM PLAN, FIRST LEVEL – HOUSING UNIT 1 & 2
FA1.03	FIRE ALARM PLAN, UPPER CELL TIER – HOUSING UNIT 1 & 2
FA1.04	FIRE ALARM PLAN, FIRST LEVEL – HOUSING UNIT 4
FA1.05	FIRE ALARM PLAN, UPPER CELL TIER – HOUSING UNIT 4
FA1.06	FIRE ALARM PLAN, FIRST LEVEL – HOUSING UNIT 5 & 6
FA1.07	FIRE ALARM PLAN, UPPER CELL TIER – HOUSING UNIT 5 & 6
FA1.08	FIRE ALARM PLAN, FIRST LEVEL – HOUSING UNIT 7 & 8
FA1.09	FIRE ALARM PLAN, UPPER CELL TIER – HOUSING UNIT 7 & 8
FA1.10	FIRE ALARM PLAN, FIRST LEVEL – GYM & EDU BLDG AND PUMP HOUSE
FA1.11	FIRE ALARM PLAN, FIRST LEVEL – MAINTENANCE BUILDING
FA1.12	FIRE ALARM PLAN, FIRST LEVEL – INTAKE BUILDING
FA2.01	FIRE ALARM, LARGE SCALE PLANS
FA4.01	FIRE ALARM PLAN, FIRE ALARM RISER DIAGRAM
FA6.01	FIRE ALARM PLANS, CONDUIT AND DEVICE INSTALLATION DETAILS

FIRE ALARM OPERATION MATRIX

	ACTIVATE ALARM AT LOCAL FACP & LOCAL ANNUNCIATOR	ACTIVATE ALARM AT MAIN FACP & CENTRAL CONTROL FMS & FAA	ACTIVATE TROUBLE SIGNAL AT LOCAL FACP	ACTIVATE TROUBLE AT MAIN FACP & CENTRAL CONTROL FMS & FAA	ACTIVATE SUPERVISORY SIGNAL AT LOCAL FACP	ACTIVATE SUPERVISORY SIGNAL AT MAIN FACP & CENTRAL CONTROL FMS & FAA	ACTIVATE LOCAL AUDIBLE/VISIBLE SIGNALS	ACTIVATE LOCAL SMOKE EXHAUST FANS	SHUTDOWN HVAC UNITS	CLOSE FIRE/SMOKE DAMPERS IN AREA OF ALARM	DEACTIVATE AUDIBLE SIGNALS	DEACTIVATE VISIBLE SIGNALS	SYSTEM NORMAL
LOCAL MANUAL PULL STATION	X	X											
LOCAL SMOKE DETECTORS	X	X											
LOCAL HEAT DETECTOR	X	X											
LOCAL BEAM SMOKE DETECTOR	X	X											
LOCAL DUCT SMOKE DETECTOR	X	X											
LOCAL CARBON MONOXIDE DETECTOR	X	X											
POST INDICATOR VALVE (IF APPLICABLE)	X	X											
LOCAL SPRINKLER WATER FLOW	X	X											
LOCAL SPRINKLER TAMPER SWITCH	X	X											
LOCAL KITCHEN HOOD	X	X											
FIRE PUMP (IF APPLICABLE)													
RUNNING					X	X							
LOSS OF PHASE OR POWER					X	X							
PHASE REVERSAL					X	X							
FIRE PUMP SUPERVISORY VALVE TAMPER					X	X							
WIRING CONDITIONS:													
SIGNALING LINE CIRCUIT (SLC)													
WIRE-TO-WIRE SHORT			X	X									
SINGLE OPEN			X	X									
SINGLE GROUND			X	X									
NOTIFICATION APPLIANCE CIRCUIT (NAC)													
WIRE-TO-WIRE SHORT			X	X									
SINGLE OPEN			X	X									
SINGLE GROUND			X	X									
LOSS OF 120 VAC			X	X									
SURGE SUPPRESSION DEVICE FAULT			X	X									
SIGNAL SILENCE			X	X									X
RESET FACP			X	X									X

ALARM CONDITIONS:

ACTIVATION OF ANY ALARM INITIATING DEVICE (AUTOMATIC DETECTOR, MANUAL PULL STATION, SPRINKLER FLOW/TAMPER/PRESSURE SWITCH) SHALL CAUSE THE FOLLOWING TO OCCUR:

- ACTIVATE ALL NOTIFICATION APPLIANCE WITHIN THE BUILDING OF ALARM.
- ANNUNICATE ON THE BUILDING OF ALARM'S LOCAL FACP.
- ANNUNICATE ON THE FAA & FMS SYSTEM IN MASTER CONTROL ROOM 133.
- ANNUNICATE ON THE MAIN FACP IN SECURITY ELECTRONICS ROOM A101.

* THE FMS SYSTEM SHALL SEE ALL BUILDINGS' ALARMS.
* ALARMS SHALL BE RESET AT THE MAIN FAA.CC AND FMS WORKSTATION IN MASTER CONTROL ROOM 133 AND THE MAIN FACP.B IN SECURITY ELECTRONICS ROOM A101.

ENCLOSURE IDENTIFICATION EXAMPLE

GENERAL DEVICE LEGEND

PIX ##
THIS SYMBOL REFERS TO ADDITIONAL PHOTOGRAPHIC INFORMATION PROVIDED IN SPECIFICATION SECTION 024120. "##" REFERENCES THE PHOTOGRAPH NUMBER WITHIN THE SPECIFICATION SECTION. THE ARROW SHOWS THE VIEW OF THE PHOTOGRAPH.

DET# SHEET
THIS SYMBOL REFERS TO ADDITIONAL INFORMATION BY DETAIL NUMBER "DET#" AND SHEET REFERENCE "SHEET".

No.##
NOTE BLOCK REFERRING TO NOTE "##" IN THE LEGEND ON THE SHEET WHERE THIS SYMBOL OCCURS. THE GENERAL NOTES ON THIS PAGE APPLY TO ALL SHEETS. THE NUMBERED NOTES ON EACH PAGE APPLY TO THAT PAGE ONLY.

FIRE ALARM DEVICE LEGEND

LR.B
ARROWS INDICATE A CONDUIT HOME RUN TO THE CABINET OR PULL BOX INDICATED. HOME RUNS ROUTE TO THE TERMINATING EQUIPMENT (I.E. "LR.B" INDICATES THAT THE RUN IS ROUTED TO LOCKING RACK 'LR.B'.)

FACP MOUNT
FIRE ALARM CONTROL PANEL INSTALLED AT CURRENT HEIGHT. "MOUNT" REFERS TO THE TYPE OF MOUNTING AS FOLLOWS:
S = SURFACE WALL MOUNTED.
F = FLUSH WALL MOUNTED.

FAA MOUNT
FIRE ALARM ANNUNCIATOR. INSTALL AT EXISTING LOCATION. "MOUNT" REFERS TO THE TYPE OF MOUNTING AS FOLLOWS:
S = SURFACE WALL MOUNTED.

FATC MOUNT
FIRE ALARM TERMINATION CABINET SHALL REMAIN INSTALLED AND BE REUSED. REPLACE EXISTING TERMINAL BLOCKS AND TERMINAL STRIPS UNLESS OTHERWISE NOTED.

FMS
FIRE MANAGEMENT WORKSTATION SYSTEM. NEW GRAPHICAL USER COMPUTER INTERFACE SYSTEM. REFER TO SPECIFICATION SECTION 283111.

PAD
NOTIFICATION AND AUXILIARY POWER EXPANDER. MATCH EXISTING MOUNTING LOCATION AND HEIGHT UNLESS OTHERWISE NOTED.

AUX (S) WG WG
ADDRESSABLE SPOT SMOKE DETECTOR AND DETECTOR BASE. MOUNT AT EXISTING DETECTOR LOCATION UNLESS OTHERWISE NOTED. NEW DETECTOR LOCATIONS ARE INDICATED ON THE PLANS WITH A "NOTE BLOCK" AND MOUNTED ON A 4" OCTAGONAL BOX. CERTAIN DEVICES MAY HAVE AN AUXILIARY RELAY PROVIDED FOR SPECIAL FUNCTIONS. "AUX" DEFINES SPECIAL FUNCTIONS. "WG" DEFINES WITH GUARD. "WG" ARRANGEMENTS ARE AS FOLLOWS:
WG = HALF-TONE NOTATION INDICATES THE PROTECTIVE GUARD IS EXISTING AND SHALL BE REMOVED AND REINSTALLED WITH SECURITY SCREWS UNLESS NOTED OTHERWISE.
WG = BOLD NOTATION INDICATES A NEW UL LISTED PROTECTIVE GUARD SHALL BE FURNISHED AND INSTALLED WITH SECURITY SCREWS BY THE FAC.

WG (H) WG
ADDRESSABLE HEAT DETECTOR AND DETECTOR BASE. MOUNT AT EXISTING DETECTOR LOCATION UNLESS OTHERWISE NOTED. NEW DETECTOR LOCATIONS ARE INDICATED ON THE PLANS WITH A "NOTE BLOCK" AND MOUNTED ON A 4" OCTAGONAL BOX. "WG" DEFINES WITH GUARD. "WG" ARRANGEMENTS ARE AS FOLLOWS:
WG = HALF-TONE NOTATION INDICATES THE PROTECTIVE GUARD IS EXISTING AND SHALL BE REMOVED AND REINSTALLED WITH SECURITY SCREWS UNLESS NOTED OTHERWISE.
WG = BOLD NOTATION INDICATES A NEW UL LISTED PROTECTIVE GUARD SHALL BE FURNISHED AND INSTALLED WITH SECURITY SCREWS BY THE FAC.

CO
CARBON MONOXIDE (CO) GAS DETECTOR AND DETECTOR BASE.

I (S) AUX
DUCT SMOKE DETECTOR AND AIR-DUCT DETECTOR HOUSING USED TO SIGNAL THE PRESENCES SMOKE BEING CARRIED THROUGH THE HVAC DUCT SYSTEM. CERTAIN DEVICES MAY HAVE AN AUXILIARY RELAY PROVIDED FOR SPECIAL FUNCTIONS. "AUX" DEFINES SPECIAL FUNCTIONS.

I (S) AUX CO
COMBINATION DUCT SMOKE AND CARBON MONOXIDE (CO) GAS DETECTOR AND AIR-DUCT DETECTOR HOUSING USED TO SIGNAL THE PRESENCES SMOKE AND CARBON MONOXIDE BEING CARRIED THROUGH THE HVAC DUCT SYSTEM. CERTAIN DEVICES MAY HAVE AN AUXILIARY RELAY PROVIDED FOR SPECIAL FUNCTIONS. "AUX" DEFINES SPECIAL FUNCTIONS.

(H) AUX CO
COMBINATION HEAT AND CARBON MONOXIDE (CO) GAS DETECTOR AND DETECTOR BASE USED TO SIGNAL THE PRESENCES FIRE AND CARBON MONOXIDE WITHIN THE COVERAGE AREA. CERTAIN DEVICES MAY HAVE AN AUXILIARY RELAY PROVIDED FOR SPECIAL FUNCTIONS. "AUX" DEFINES SPECIAL FUNCTIONS.

WF ZONE
FIRE SPRINKLER FLOW SWITCH MONITORED BY THE FIRE ALARM SYSTEM. "ZONE" REFERS TO THE UNIQUE ZONE NUMBER ASSIGNED TO THE DEVICE.

TS ZONE
FIRE SPRINKLER TAMPER SWITCH MONITORED BY THE FIRE ALARM SYSTEM. "ZONE" REFERS TO THE UNIQUE ZONE NUMBER ASSIGNED TO THE DEVICE.

PIV
FIRE SPRINKLER POST INDICATOR VALVE "PIV" SWITCH MONITORED BY THE FIRE ALARM SYSTEM.

F MOUNT
MANUAL PULL STATION. "MOUNT" REFERS TO OPTIONAL MOUNTING CONFIGURATIONS AS FOLLOWS:
K = KEY OPERATED MANUAL PULL STATION.

CANDELA WG WG
WALL MOUNTED VISUAL ONLY NOTIFICATION APPLIANCE. REINSTALL AT EXISTING DEVICE LOCATION UNLESS OTHERWISE NOTED. NEW DEVICE LOCATIONS ARE INDICATED ON THE PLANS WITH A "NOTE BLOCK" AND SHALL MATCH THE EXISTING WALL APPLIANCE HEIGHTS. HALF-TONE "WG" NOTATION INDICATES THE PROTECTIVE GUARD IS EXISTING AND SHALL BE REMOVED AND REINSTALLED WITH SECURITY SCREWS UNLESS NOTED OTHERWISE. BOLD "WG" NOTATION INDICATES A NEW UL LISTED PROTECTIVE GUARD SHALL BE FURNISHED AND INSTALLED BY THE FAC. "CANDELA" REFERS TO THE DIFFERENT INTENSITIES AS FOLLOWS:
15 CANDELA
30 CANDELA
75 CANDELA
110 CANDELA

CANDELA WG WG
CEILING MOUNTED VISUAL ONLY NOTIFICATION APPLIANCE. REINSTALL AT EXISTING DEVICE LOCATION UNLESS OTHERWISE NOTED. NEW DEVICE LOCATIONS ARE INDICATED ON THE PLANS WITH A "NOTE BLOCK" AND SHALL BE CEILING MOUNTED. HALF-TONE "WG" INDICATES THE PROTECTIVE GUARD IS EXISTING AND SHALL BE REMOVED AND REINSTALLED UNLESS NOTED OTHERWISE BOLD "WG" NOTATION INDICATES A NEW UL LISTED PROTECTIVE GUARD SHALL BE FURNISHED AND INSTALLED BY THE FAC. "CANDELA" REFERS TO THE DIFFERENT INTENSITIES AS FOLLOWS:
15 CANDELA
30 CANDELA
75 CANDELA
110 CANDELA

CANDELA SP WG WG
COMBINATION AUDIBLE AND VISUAL NOTIFICATION APPLIANCE. REINSTALL AT EXISTING DEVICE LOCATION UNLESS OTHERWISE NOTED. NEW DEVICE LOCATIONS ARE INDICATED ON THE PLANS WITH A "NOTE BLOCK" AND SHALL MATCH THE EXISTING WALL APPLIANCE HEIGHTS. HALF-TONE "WG" NOTATION INDICATES THE PROTECTIVE GUARD IS EXISTING AND SHALL BE REMOVED AND REINSTALLED UNLESS NOTED OTHERWISE BOLD "WG" NOTATION INDICATES A NEW UL LISTED PROTECTIVE GUARD SHALL BE FURNISHED AND INSTALLED BY THE FAC. "CANDELA" REFERS TO THE DIFFERENT INTENSITIES AS FOLLOWS:
15 CANDELA
30 CANDELA
75 CANDELA
110 CANDELA

RL
AUXILIARY RELAY MODULE. RECONNECT TO THE EXISTING CONTROL WIRING.

OM AUX #
ADDRESSABLE OUTPUT MODULE. "#" REFERS TO THE NUMBER OF OUTPUT CONTACT CONTROL RELAY MODULES. "AUX" DEFINES THE FOLLOWING FUNCTIONS:
FDR = FIRE DOOR RELEASE.
FSD = FIRE/SMOKE DAMPER CONTROL.
ON = HVAC SYSTEM UNIT ON.
OFF = HVAC SYSTEM UNIT OFF.
DO = DAMPER OPEN.
DC = DAMPER CLOSE.

IM AUX #
ADDRESSABLE INPUT MODULE. "#" REFERS TO THE NUMBER OF INPUT CONTACT MONITORING MODULES. "AUX" DEFINES THE FOLLOWING FUNCTIONS:
HOOD = KITCHEN HOOD EXTINGUISHING SYSTEM ACTIVATION.
ANSUL = ANSUL FIRE SUPPRESSION SYSTEM ACTIVATION.
WF = WATER FLOW SWITCH ACTIVATION.
TS = TAMPER SWITCH ACTIVATION.
FPR = FIRE PUMP RUNNING CONDITION.
FPP = FIRE PUMP PHASE REVERSAL.
FPF = FIRE PUMP FAILURE CONDITION.
PIV = POST INDICATOR VALVE CONDITION.
SI = STATUS INDICATION FOR HVAC SYSTEM AND ASSOCIATED DAMPERS.

FAN ON/OFF MD DAMPER/SAIL SW
THIS SYMBOL INDICATES THE LOCATION OF AN ADDRESSABLE INPUT/OUTPUT COMBINATION MODULE. ATTRIBUTE "ADDRESS" IS THE ADDRESS IF ADDRESSABLE; "GROUP" IS THE CONVENTIONAL CIRCUIT OR FUNCTION GROUPING; "TYPEMOUNT" HOLD DEVICE TYPE OR REFERENCE NUMBER; "DBAUXRELEASE" HOLDS SPECIAL FUNCTIONS; AND "DRRM" CONTAINS THE LOCATION ROOM NUMBER OR AREA. "ADDRESS", "TYPEMOUNT", AND "DBAUXRELEASE" ARE DISPLAYED.

SS
SURGE SUPPRESSION DEVICE COMPATIBLE WITH FIRE ALARM NOTIFICATION APPLIANCE OR SIGNAL LINE CIRCUITS MOUNTED IN A NEMA 1 ENCLOSURE. CONNECT TO THE EXISTING GROUNDING ROD OR PROVIDE A NEW GROUND ROD, WIRING AND INSTALLATIONS AS REQUIRED.

SPD
SURGE PROTECTION DEVICE COMPATIBLE WITH 120 VAC CIRCUITS MOUNTED IN A NEMA 1 ENCLOSURE. CONNECT TO THE EXISTING GROUNDING ROD OR PROVIDE A NEW GROUND ROD, WIRING AND INSTALLATIONS AS REQUIRED.

FIBER OPTIC CABLE. REFER TO SHEET FA4.01, FIRE ALARM NETWORK FIBER RISER DIAGRAM.

S ID
EXISTING SECURITY ELECTRONICS ROOM LOCATION FOR SITE CONDUIT COORDINATION PURPOSES ONLY. "ID" DENOTES THE ROOM OR PANEL NUMBER.

M ID
EXISTING MECHANICAL ROOM LOCATION FOR SITE CONDUIT COORDINATION PURPOSES ONLY."ID" DENOTES THE ROOM OR PANEL NUMBER.

E ID
EXISTING ELECTRICAL ROOM LOCATION FOR SITE CONDUIT COORDINATION PURPOSES ONLY. "ID" DENOTES THE ROOM OR PANEL NUMBER.

CC ID
EXISTING CENTRAL CONTROL ROOM LOCATION FOR SITE CONDUIT COORDINATION PURPOSES ONLY. "ID" DENOTES THE ROOM OR PANEL NUMBER.

IDF ID
EXISTING INDEPENDENT DISTRIBUTION FRAME ROOM LOCATION FOR SITE CONDUIT COORDINATION PURPOSES ONLY. "ID" DENOTES THE ROOM OR PANEL NUMBER.

ID#
LOCATION OF CONTROL PANELS, RACKS, AND SPECIAL PULL BOXES. REFER TO SPECIFICATION FOR SPECIFIC EQUIPMENT. "ID" IDENTIFIES THE PANEL AND IS NOT A COUNT OF PANELS. PANELS ARE IDENTIFIED AS FOLLOWS:
FAA = FIRE ALARM ANNUNCIATOR.
FACP = FIRE ALARM CONTROL PANEL.
HVAC = EXISTING HVAC TRI CABINET
FODP = FIBER OPTIC DISTRIBUTION PANEL (EXISTING).

P
PULL BOX. SIZE AS REQUIRED UNLESS OTHERWISE NOTED.

LIU
EXISTING FIBER PATCH PANEL/LIGHT INTERFACE UNIT.

FAC
FIRE ALARM CONTRACTOR.

MM
MULTI-MODE FIBER.

RTU
ROOFTOP UNIT.

SEF
SMOKE EXHAUST FAN.

SCP
SMOKE CONTROL PANEL

NOTE: THIS PLAN IS A MASTER SHEET. ALL SYMBOLS MAY NOT BE USED ON THIS PROJECT.

Concept Estimating LLC

FIRE ALARM LEGEND
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA0.01
AUGUST 23, 2024

SYSTEMS DESIGN
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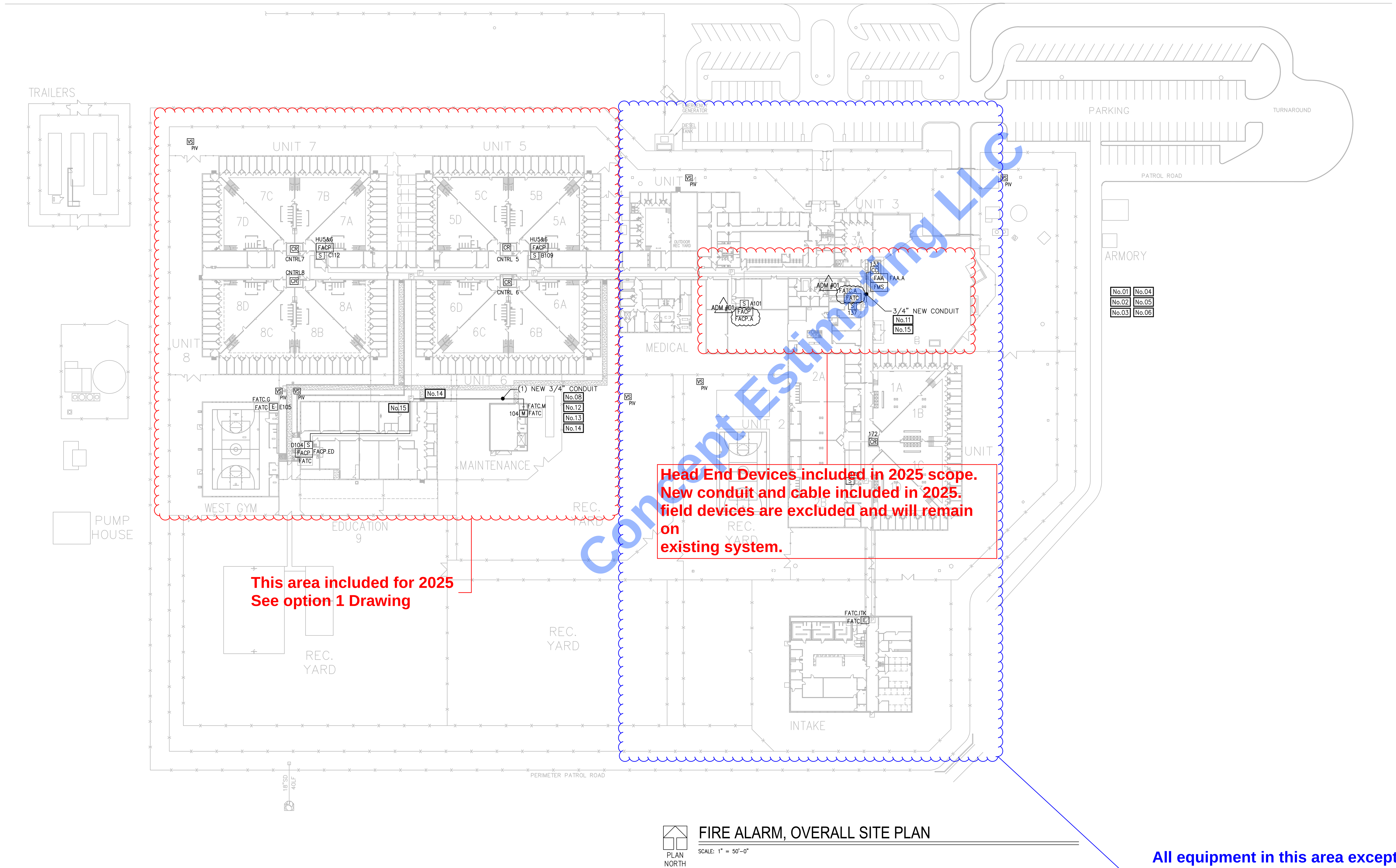
Torrance
Existing EST is one panel for the entire site.
Scope Option 1
- **Add panels in 5-6, 7-8, Education. Total of 3.**
- **Replace the devices in areas 5,6,7,8, Maintenance, Education, Gym. Disconnect from the existing EST and connect to new local Hochiki panels.**
- **All devices in remaining areas will remain on existing EST panels.**
- **New FACP in A101 (Confirm if FMC requires a local FACP or Local FAA to connect the FMC to the network.)**
- **New 1" conduit from A101 to Central Control.**
- **New FAA and FMC in Central control. (Confirm if the new FMC can piggyback off of the FAA or will it need a FACP)**
- **Existing EST FAA will remain in Central Control.**
- **New programming for EST section that remains.**



Head End Devices included in 2025 scope.
New conduit and cable included in 2025.
field devices are excluded and will remain on existing system.

This area included for 2025
See option 1 Drawing

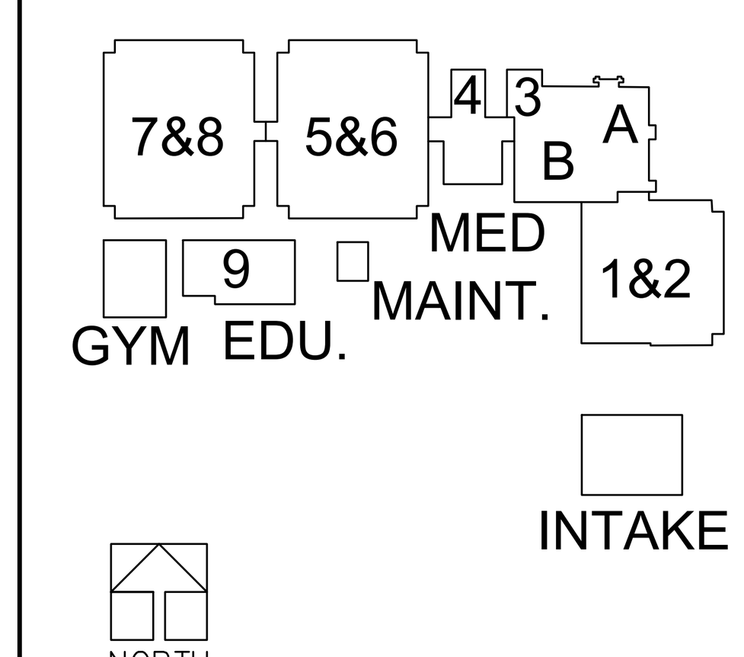
All equipment in this area except as noted above is excluded in the 2025 scope.

FIRE ALARM, OVERALL SITE PLAN
SCALE: 1" = 50'-0"
PLAN NORTH

LEGEND NOTES

1. REFER TO GENERAL NOTES ON FA0.01 AND INCORPORATE AS APPLICABLE.
2. EXISTING DEVICES AND CONDITIONS INDICATED HERE WERE GATHERED FROM AS-BUILT DOCUMENTS AND SITE SURVEYS. ALL INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DEVICE LOCATIONS AND CONDITIONS.
3. EXISTING MULTI-MODE FIBER OPTIC CABLE NETWORK WILL BE USED TO ESTABLISH COMMUNICATIONS BETWEEN THE NEW FIRE ALARM PANELS.
4. THE FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. EXISTING CONDUIT, J-BOXES, FIBER OPTIC CABLE AND FIRE ALARM COPPER WIRING SHALL REMAIN AND BE REUSED FOR THE FIRE ALARM SYSTEM. (TYPICAL)
6. THE FAC SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTING FIBER LOOP USED FOR THE FIRE ALARM SYSTEM. DOCUMENT AND RECORD THE FIBER TYPE, JACKET COLOR, STRAND QUANTITY, AND DESIGNATED TERMINATIONS. LABEL ALL FIBER IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
7. EXISTING FIRE ALARM WIRING THAT LEAVES AND/OR ENTERS THE BUILDING SHALL HAVE A NEW SURGE PROTECTION DEVICE (SS). PROVIDE GROUND WIRE AND CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
8. ROUTE ALL EXTERIOR CONDUIT UNDERGROUND. WHERE EXPOSED, EXTERIOR CONDUIT SHALL BE RIGID. EXPOSED CONDUIT IS ACCEPTABLE ONLY WHEN TRANSITIONING INTO EXTERIOR CABINETS AND EXISTING BUILDINGS. EXPOSED CONDUIT SHALL BE ATTACHED AND STRAPPED AS INDICATED IN SECTION 280500.0 AND IN ACCORDANCE WITH THE NEC.
9. TERMINATE AND TEST THE EXISTING FIBER OPTIC CABLE SCHEDULED FOR USE BY THE FIRE ALARM SYSTEM AT BOTH ENDS BEFORE PLACING IT INTO SERVICE.
10. FAC IS RESPONSIBLE FOR VERIFYING ALL SITE POST INDICATOR VALVE (PIV) LOCATIONS AND REPLACING THE ASSOCIATED ADDRESSABLE INPUT MODULES (AIM) USED TO MONITOR WATER FLOW AND TAMPER SWITCHES, CONTROL VALVES, FIRE PUMP CONDITIONS AND TROUBLES.
11. FURNISH AND INSTALL NEW CONDUIT AND (2) CAT6 CABLES BETWEEN THE MAIN FACP IN SEC ROOM 137 AND FMS WORKSTATION IN MASTER CONTROL ROOM 133.
12. FURNISH AND INSTALL NEW CONDUIT AND FIRE ALARM WIRING BETWEEN THE MAINTENANCE BUILDING TERMINATION CABINET (FATC) IN MECHANICAL ROOM 104 AND THE NEW FACP IN THE EDUCATION BUILDING SECURITY ELECTRONICS ROOM D104.
13. TERMINATE AND TEST ALL FIRE ALARM WIRING AND CIRCUITRY AT BOTH ENDS BEFORE PLACING IT INTO SERVICE.
14. PROVIDE A PROTECTIVE SHROUD AT LOCATIONS WHERE CONDUIT TURNS UP AND RUNS ALONG THE SIDE OF THE BUILDING.
15. ROUTE INTERIOR CONDUIT AT 12' AFF AND PROVIDE PULL BOXES WHERE REQUIRED. FIRE SEAL ALL INTERIOR PENETRATIONS IN ACCORDANCE WITH THE EXISTING WALL RATING.

KEY PLAN



CoreCivic

FIRE ALARM, OVERALL SITE PLAN
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.00
AUGUST 23, 2024

Attachment No. FA01
to ADM No. 1
dated 26 September 2024

R&N SYSTEMS DESIGN

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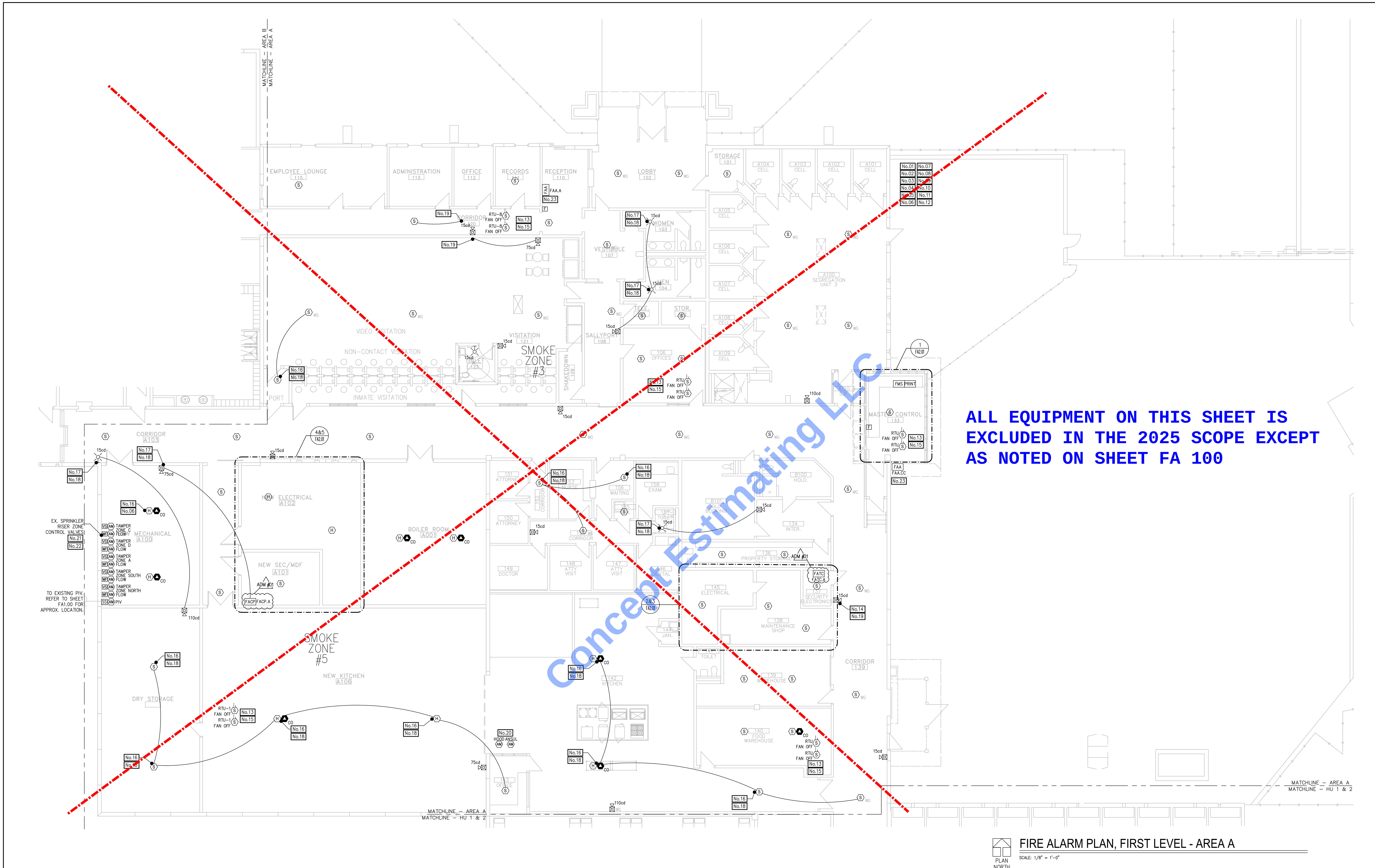


FIRE ALARM PLAN, FIRST LEVEL - AREA A

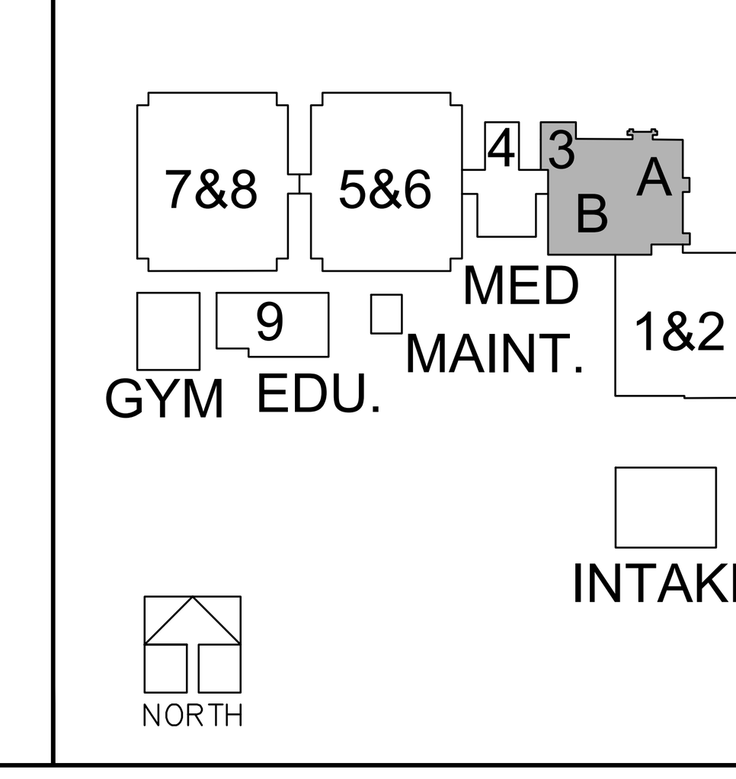
SCALE: 1/8" = 1'-0"

PLAN NORTH

LEGEND NOTES

1. REFER TO GENERAL NOTES ON SHEET FA0.01 AND INCORPORATE AS APPLICABLE.
2. EXISTING DEVICES AND CONDITIONS INDICATED HERE WERE GATHERED FROM AS-BUILT DOCUMENTS AND SITE SURVEYS. ALL INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DEVICE LOCATIONS AND CONDITIONS.
3. FAC SHALL FIREPROOF ALL PENETRATIONS CREATED FOR THIS PROJECT. PENETRATIONS THROUGH RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROPERLY SEALED AND SLEEVED TO MAINTAIN THE EXISTING FIRE-RESISTANT RATING. WHERE RATING IS UNKNOWN FIREPROOFING SHALL MEET A 2HR RATING IN ALL CASES. SEALANT COLOR SHALL MATCH THE EXISTING SURFACES AS CLOSELY AS POSSIBLE.
4. FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. THE EXISTING FIRE ALARM SYSTEM EQUIPMENT REFERENCED ON THIS PLAN ARE SCHEDULED TO BE REPLACED AS PART OF THE PROJECT SCOPE.
6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SEC/MDF ROOM A101.
8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY THE MAIN FACP.B IN SEC/MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
10. ALL INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES FOR THIS PROJECT ARE NEW AND SHALL BE MONITORED AND CONTROLLED BY BUILDING'S NEW ADDRESSABLE FIRE ALARM SYSTEM.
11. FAC TO REMOVE AND REPLACE ALL EXISTING INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES. EXAMPLES: SMOKE, HEAT, BEAM, AND DUCT DETECTORS, I/O MODULES, AUXILIARY RELAYS, PULL STATIONS, STROBES, COMBINATION HORN STROBES, AND ANY ADDRESSABLE DEVICE.
12. EXISTING "WG" DETECTOR / AV PROTECTIVE GUARDS SHALL BE REMOVED AND REINSTALLED UNLESS OTHERWISE NOTED. ATTACH WITH SECURITY SCREWS.
13. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
14. FAC SHALL MOUNT THE FIRE ALARM DEVICE AT 80"AFF.
15. FAC SHALL REPLACE THE EXISTING DUCT SMOKE DETECTOR AND CONTROL RELAY OUTPUT MODULE TO SHUTDOWN THE ROOFTOP UNIT (RTU).
16. FURNISH AND INSTALL ADDRESSABLE INITIATING DEVICE AS INDICATED ON PLANS. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
17. FURNISH AND INSTALL A AUDIBLE/VISUAL OR VISUAL ONLY NOTIFICATION APPLIANCE AS INDICATED. ADJUST THE CANDELA RATINGS AS REQUIRED BY NFPA 72 FOR COMPLETE COVERAGE. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
19. EXTEND NEW CONDUIT, BACKBOX, AND WIRING FROM THE EXISTING BACKBOX TO RELOCATE THE NEW FIRE ALARM DEVICE AS INDICATED ON THE PLANS. PROVIDE A 4" STEEL BLANK COVER PLATE AND ATTACH TO THE EXISTING BACKBOX WITH PIN-TORX TYPE SECURITY SCREWS. SEAL THE PERIMETER OF THE COVER PLATE.
20. FAC SHALL REPLACE THE EXISTING MODULES TO MONITOR THE KITCHEN ANSUL FIRE SUPPRESSION AND VENT HOOD SYSTEMS.
21. FAC SHALL REPLACE THE EXISTING MODULES TO MONITOR THE SPRINKLER CONTROL ZONE VALVES, PIV, FLOW AND TAMPER SWITCHES.
22. PROVIDE NEW (SS AND SPD) DEVICES AND GROUND WIRING FOR ALL FIRE ALARM WIRING THAT ENTERS AND/OR LEAVES THE BUILDING. CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
23. FAC SHALL REPLACE THE EXISTING FIRE ALARM ANNUNCIATOR. REUSE THE EXISTING WIRING TO CONNECT TO THE NEW FIRE ALARM SYSTEM.

KEY PLAN



CoreCivic

FIRE ALARM PLAN, FIRST LEVEL - AREA A
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.01

AUGUST 23, 2024

Attachment No. FA02 to ADM No. 1 dated 26 September 2024

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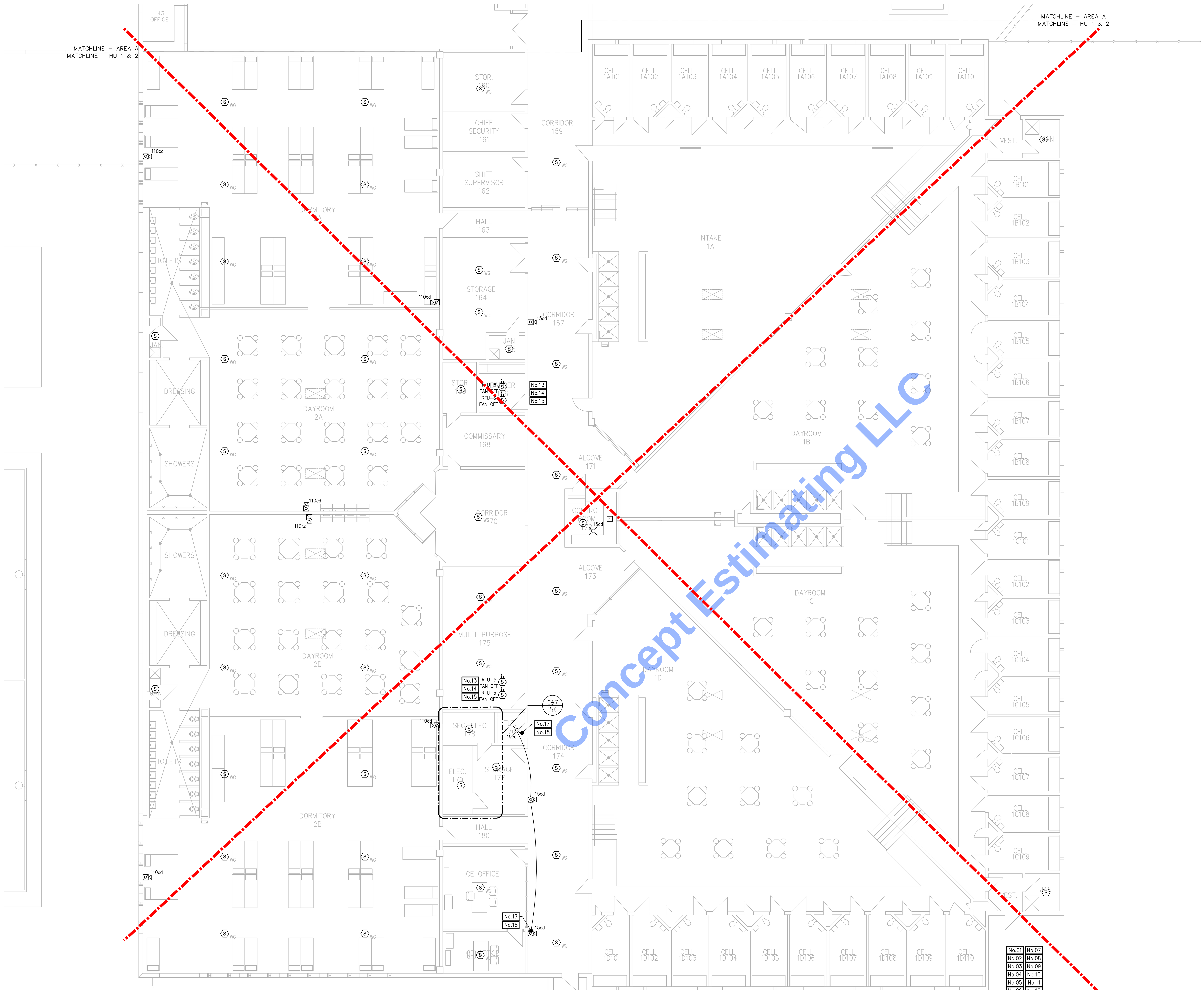


Concept Estimating LLC

ALL EQUIPMENT ON THIS SHEET IS EXCLUDED IN THE 2025 SCOPE EXCEPT AS NOTED ON SHEET FA 100

PLAN NORTH

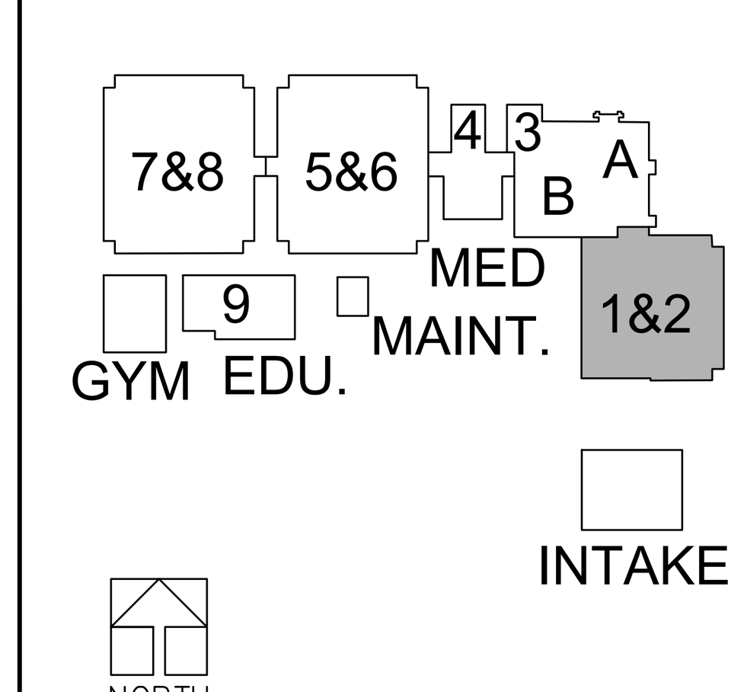
FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 1 & 2

SCALE: 1/8" = 1'-0"

LEGEND NOTES

1. REFER TO GENERAL NOTES ON SHEET FA0.01 AND INCORPORATE AS APPLICABLE.
2. EXISTING DEVICES AND CONDITIONS INDICATED HERE WERE GATHERED FROM AS–BUILT DOCUMENTS AND SITE SURVEYS. ALL INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DEVICE LOCATIONS AND CONDITIONS.
3. FAC SHALL FIREPROOF ALL PENETRATIONS CREATED FOR THIS PROJECT. PENETRATIONS THROUGH RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROPERLY SEALED AND SLEEVED TO MAINTAIN THE EXISTING FIRE–RESISTANT RATING. WHERE RATING IS UNKNOWN FIREPROOFING SHALL MEET A 2HR RATING IN ALL CASES. SEALANT COLOR SHALL MATCH THE EXISTING SURFACES AS CLOSELY AS POSSIBLE.
4. FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. THE EXISTING FIRE ALARM SYSTEM EQUIPMENT REFERENCED ON THIS PLAN ARE SCHEDULED TO BE REPLACED AS PART OF THE PROJECT SCOPE.
6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SEC/MDF ROOM A101.
8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY THE MAIN FACP.B IN SEC/MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
10. ALL INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES FOR THIS PROJECT ARE NEW AND SHALL BE MONITORED AND CONTROLLED BY BUILDING'S NEW ADDRESSABLE FIRE ALARM SYSTEM.
11. FAC TO REMOVE AND REPLACE ALL EXISTING INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES. EXAMPLES: SMOKE, HEAT, BEAM, AND DUCT DETECTORS, I/O MODULES, AUXILIARY RELAYS, PULL STATIONS, STROBES, COMBINATION HORN STROBES, AND ANY ADDRESSABLE DEVICE.
12. EXISTING "WG" DETECTOR / AV PROTECTIVE GUARDS SHALL BE REMOVED AND REINSTALLED UNLESS OTHERWISE NOTED. ATTACH WITH SECURITY SCREWS.
13. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
14. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES REQUIRED TO PERFORM SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM.
15. FAC SHALL REPLACE THE EXISTING DUCT SMOKE DETECTOR AND CONTROL RELAY OUTPUT MODULE TO SHUTDOWN THE ROOFTOP UNIT (RTU).
16. FURNISH AND INSTALL ADDRESSABLE INITIATING DEVICE AS INDICATED ON PLANS. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
17. FURNISH AND INSTALL A AUDIBLE/VISUAL OR VISUAL ONLY NOTIFICATION APPLIANCE AS INDICATED. ADJUST THE CANDELA RATINGS AS REQUIRED BY NFPA 72 FOR COMPLETE COVERAGE. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP

KEY PLAN



CoreCivic

FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 1 & 2
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.02
AUGUST 23, 2024

R&N SYSTEMS DESIGN
615 OAKLEAF OFFICE LANE
MEMPHIS, TENNESSEE 38117
tel. 901/309-0115
www.rnsystemsdesign.com

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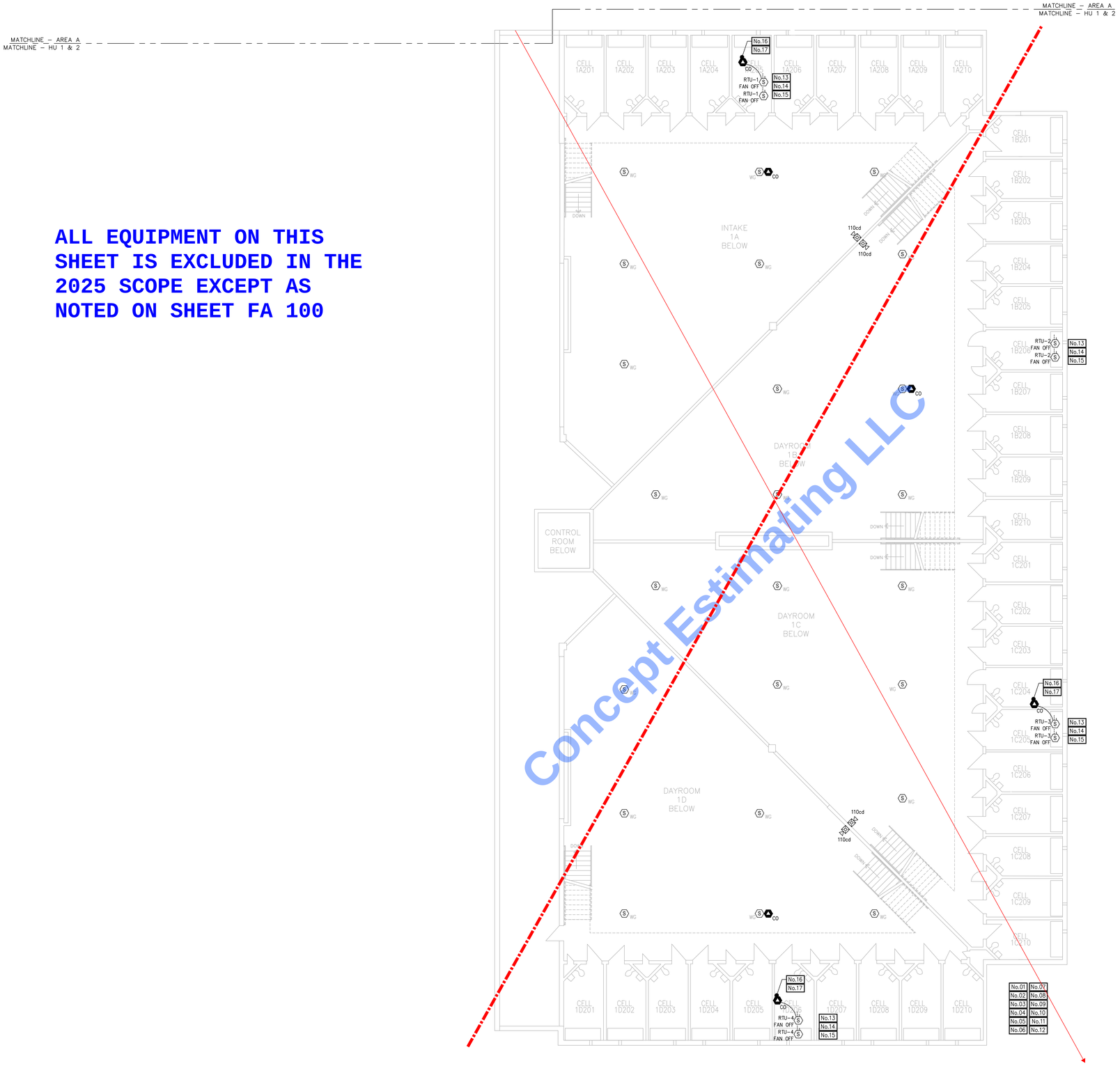

Concept Estimating LLC

LEGEND NOTES

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3. FAC SHALL FIREPROOF ALL PENETRATIONS CREATED FOR THIS PROJECT. PENETRATIONS THROUGH RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROPERLY SEALED AND SLEEVED TO MAINTAIN THE EXISTING FIRE–RESISTANT RATING. WHERE RATING IS UNKNOWN FIREPROOFING SHALL MEET A 2HR RATING IN ALL CASES. SEALANT COLOR SHALL MATCH THE EXISTING SURFACES AS CLOSELY AS POSSIBLE.
4. FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. THE EXISTING FIRE ALARM SYSTEM EQUIPMENT REFERENCED ON THIS PLAN ARE SCHEDULED TO BE REPLACED AS PART OF THE PROJECT SCOPE.
6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SEC/MDF ROOM A101.
8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY THE MAIN FACP.B IN SEC/MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
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13. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
14. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES REQUIRED TO PERFORM SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM.
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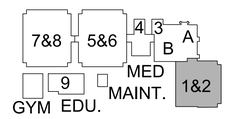
17. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.

KEY PLAN



PLAN NORTH

FIRE ALARM PLAN, UPPER CELL TIER - HOUSING UNIT 1 & 2

SCALE: 1/8" = 1'–0"

FIRE ALARM PLAN, UPPER CELL TIER - HOUSING UNIT 1 & 2
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

CoreCivic

FA1.03
AUGUST 23, 2024

R&N SYSTEMS DESIGN
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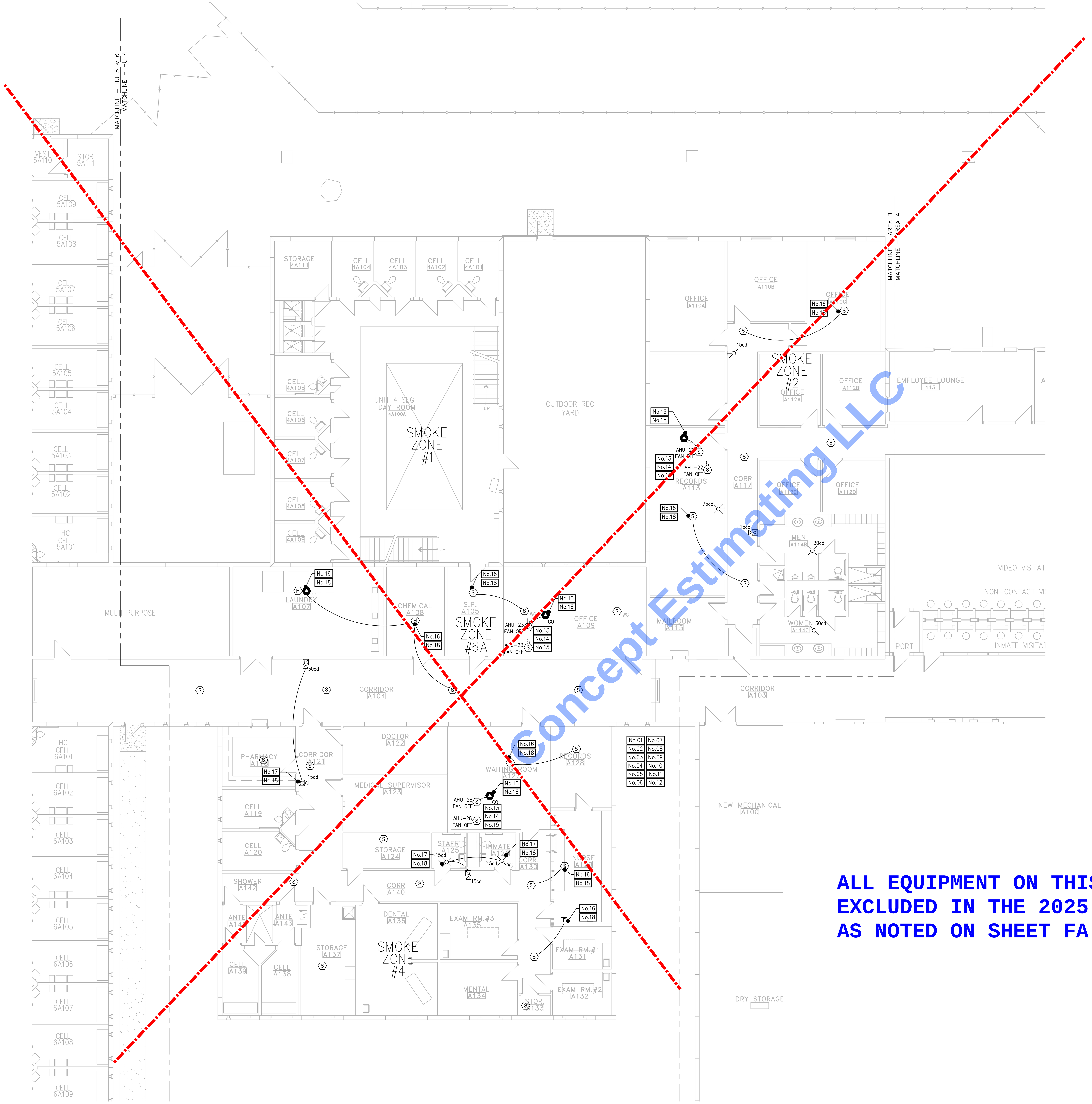

ALL EQUIPMENT ON THIS SHEET IS EXCLUDED IN THE 2025 SCOPE EXCEPT AS NOTED ON SHEET FA 100

FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 4

SCALE: 1/8" = 1'-0"

PLAN NORTH

LEGEND NOTES

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3. FAC SHALL FIREPROOF ALL PENETRATIONS CREATED FOR THIS PROJECT. PENETRATIONS THROUGH RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROPERLY SEALED AND SLEEVED TO MAINTAIN THE EXISTING FIRE-RESISTANT RATING. WHERE RATING IS UNKNOWN FIREPROOFING SHALL MEET A 2HR RATING IN ALL CASES. SEALANT COLOR SHALL MATCH THE EXISTING SURFACES AS CLOSELY AS POSSIBLE.
4. FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. THE EXISTING FIRE ALARM SYSTEM EQUIPMENT REFERENCED ON THIS PLAN ARE SCHEDULED TO BE REPLACED AS PART OF THE PROJECT SCOPE.
6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SEC/MDF ROOM A101.
8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY THE MAIN FACP.B IN SEC/MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
10. ALL INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES FOR THIS PROJECT ARE NEW AND SHALL BE MONITORED AND CONTROLLED BY BUILDING'S NEW ADDRESSABLE FIRE ALARM SYSTEM.
11. FAC TO REMOVE AND REPLACE ALL EXISTING INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES. EXAMPLES: SMOKE, HEAT, BEAM, AND DUCT DETECTORS, I/O MODULES, AUXILIARY RELAYS, PULL STATIONS, STROBES, COMBINATION HORN STROBES, AND ANY ADDRESSABLE DEVICE.
12. EXISTING "WG" DETECTOR / AV PROTECTIVE GUARDS SHALL BE REMOVED AND REINSTALLED UNLESS OTHERWISE NOTED. ATTACH WITH SECURITY SCREWS.
13. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
14. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES REQUIRED TO PERFORM SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM.
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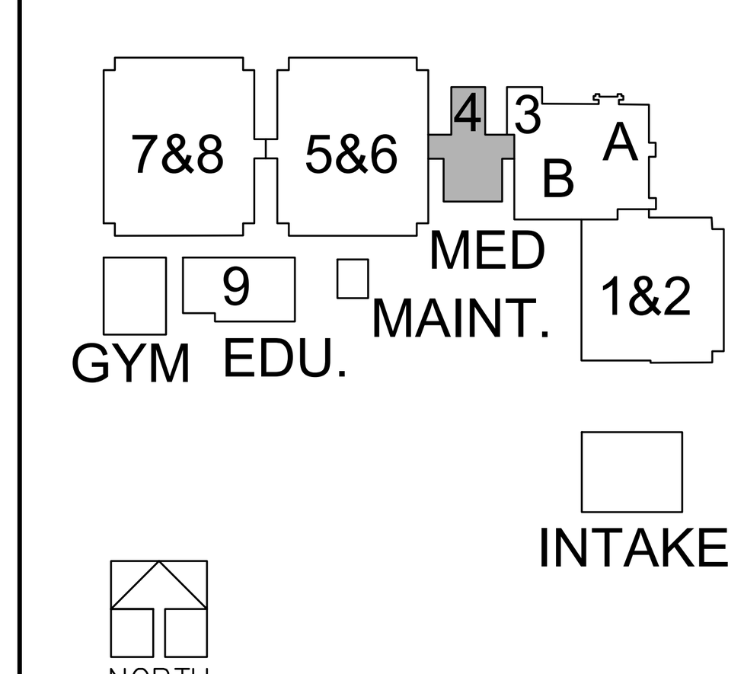
18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
19. EXTEND NEW CONDUIT, J-BOX, AND WIRING FROM THE EXISTING J-BOX TO RELOCATE THE NEW FIRE ALARM DEVICE AS INDICATED ON THE PLANS. PROVIDE A 4" STEEL BLANK COVER PLATE AND ATTACH TO THE EXISTING J-BOX WITH SECURITY PIN-TORX TYPE SCREWS. SEAL THE PERIMETER OF THE COVER PLATE.

KEY PLAN



CoreCivic

FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 4

FIRE ALARM SYSTEM REPLACEMENT

TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.04

AUGUST 23, 2024

R&N SYSTEMS DESIGN

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Concept Estimating LLC

LEGEND NOTES

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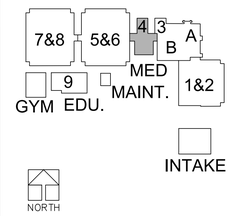

PLAN NORTH

FIRE ALARM PLAN, UPPER CELL TIER - HOUSING UNIT 4

SCALE: 1/8" = 1'–0"

FRANK N. NIEDZWIECKI NEW MEXICO 14791 07-23-24

CoreCivic

FIRE ALARM PLAN, UPPER CELL TIER - HOUSING UNIT 4
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.05

AUGUST 23, 2024

RN SYSTEMS DESIGN
615 CRESCENT EXECUTIVE COURT, SUITE 600
MEMPHIS, TENNESSEE 38117
tel. 901.259.4815
www.rnsystemsdesign.com

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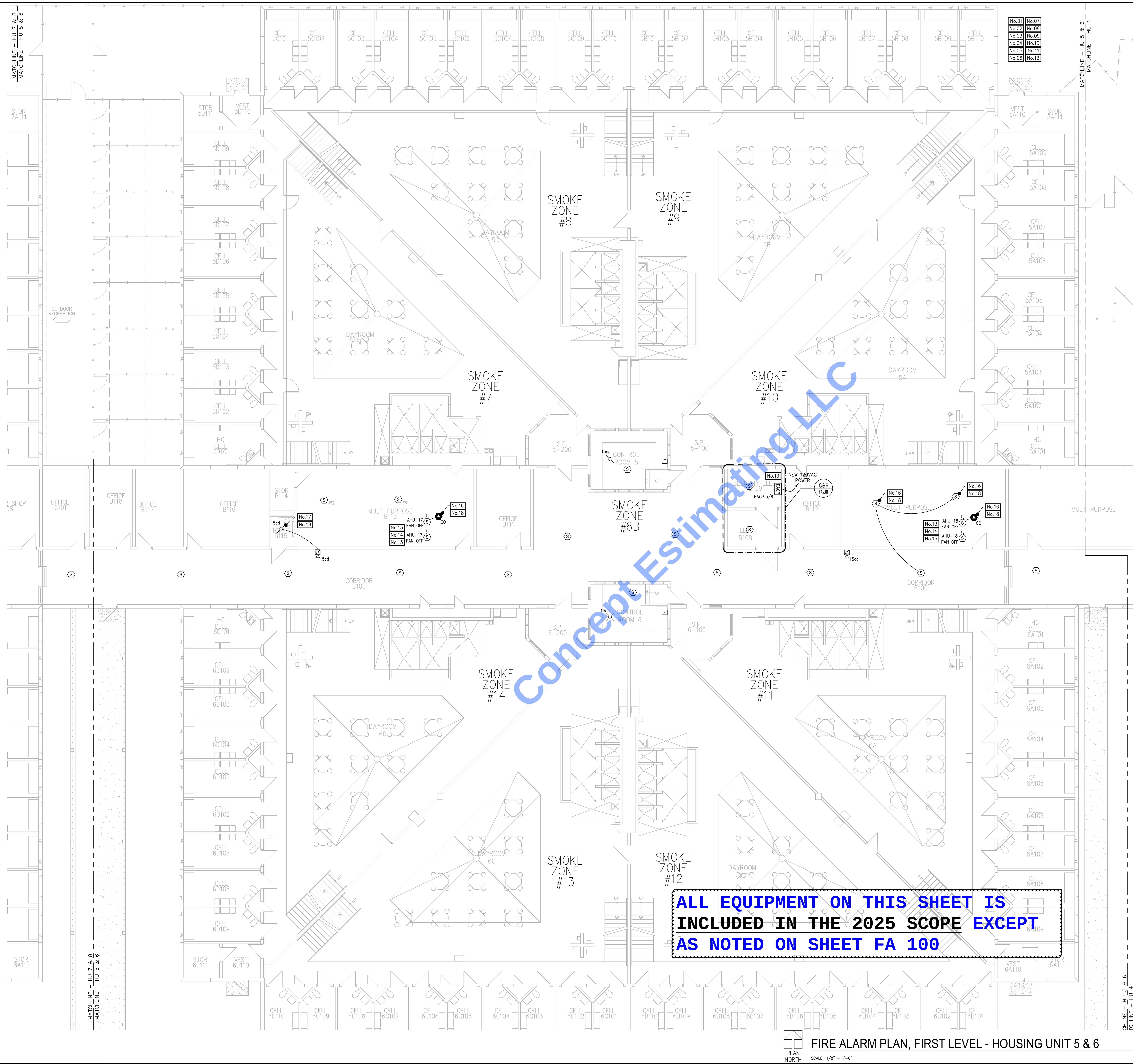

Concept Estimating LLC

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FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 5 & 6

SCALE: 1/8" = 1'-0"

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6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SEC/MDF ROOM A101.
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14. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES REQUIRED TO PERFORM SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM.
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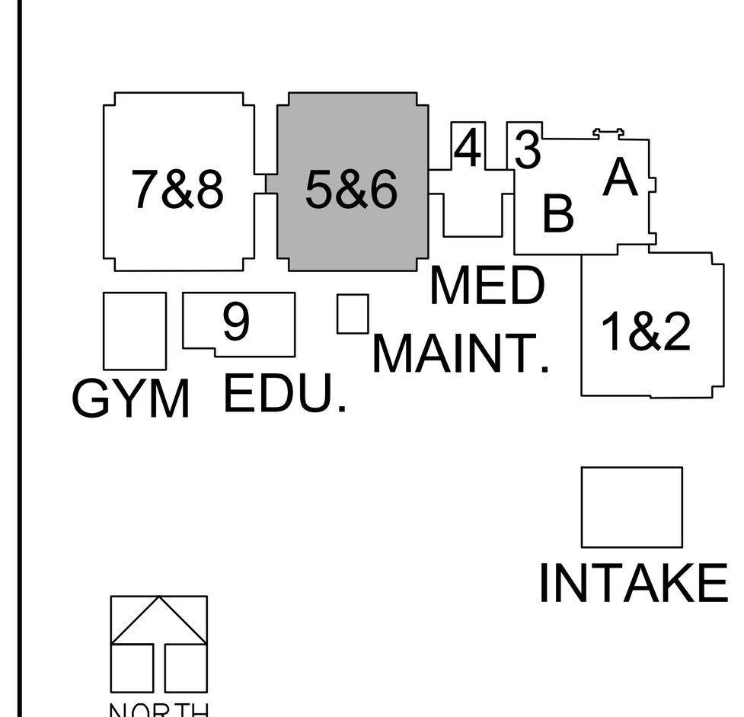
18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
19. FURNISH AND INSTALL (1) NEW 20AMP, 120VAC BRANCH POWER CIRCUIT FROM THE EMERGENCY POWER PANEL (EL4/S2) FOR THE FACP. PROVIDE NEW BRANCH CIRCUIT BREAKER, BREAKER LOCK, AND LABEL "FACP."

KEY PLAN



CoreCivic

FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 5 & 6
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.06

AUGUST 23, 2024

R&N SYSTEMS DESIGN
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www.rnsystemsdesign.com

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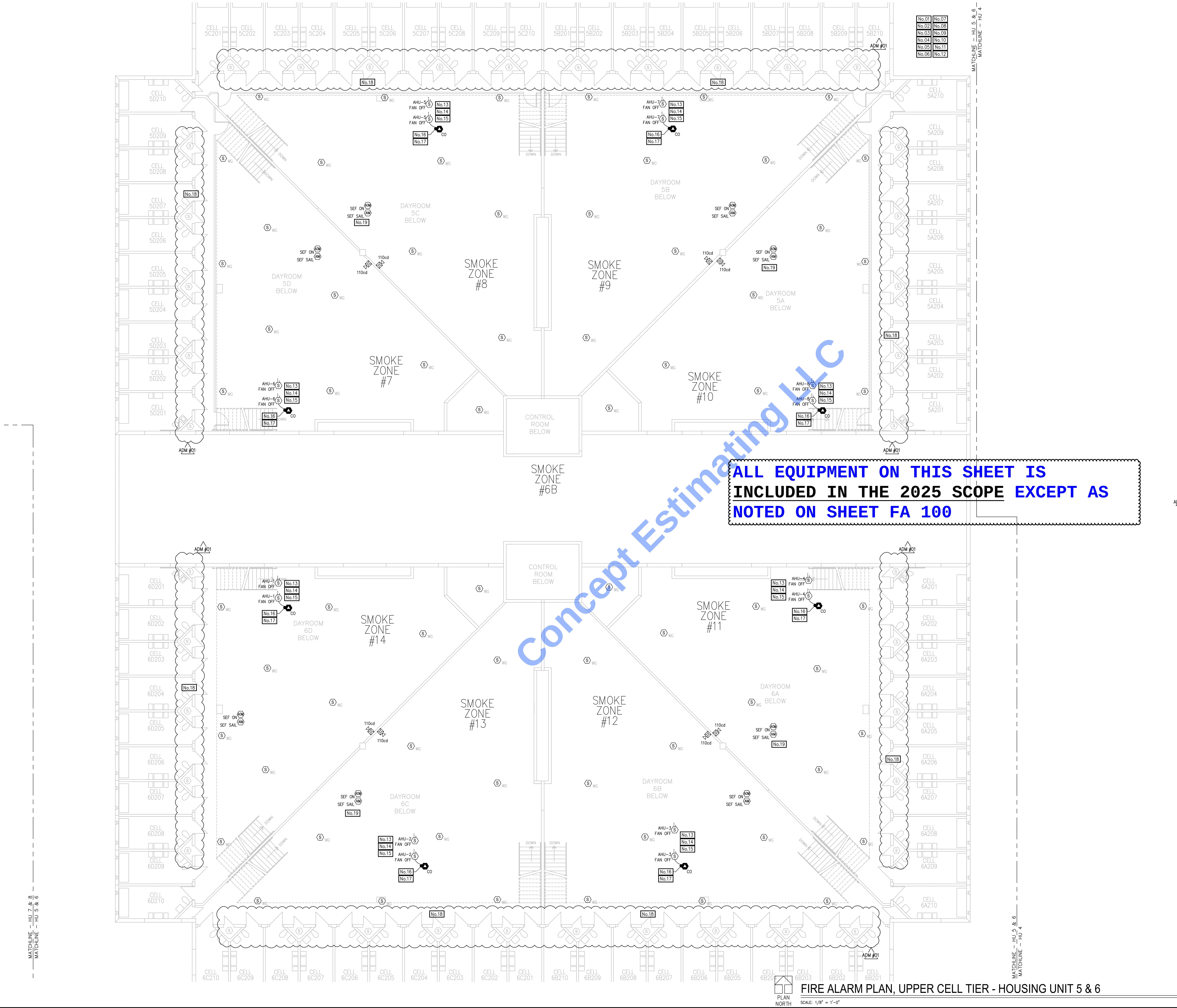

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Concept Estimating LLC

FIRE ALARM PLAN, UPPER CELL TIER - HOUSING UNIT 5 & 6

SCALE: 1/8" = 1'-0"

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11. FAC TO REMOVE AND REPLACE ALL EXISTING INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES. EXAMPLES: SMOKE, HEAT, BEAM, AND DUCT DETECTORS, I/O MODULES, AUXILIARY RELAYS, PULL STATIONS, STROBES, COMBINATION HORN STROBES, AND ANY ADDRESSABLE DEVICE.
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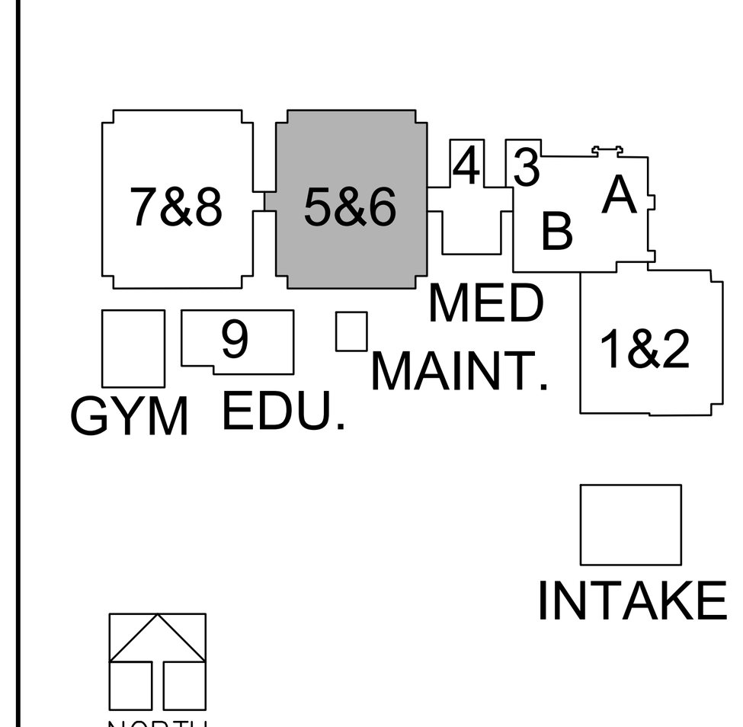
18. FAC SHALL REMOVE THE EXISTING SMOKE DETECTOR LOCATED IN UTILITY SPACE AT EACH PLUMBING CELL CHASE. REMOVE ALL WIRING BACK TO SOURCE. PROVIDE BLANK COVERPLATE SECURED WITH SCREWS AT EACH PULLBOX LOCATION WHERE DEVICE WAS REMOVED.
19. FAC SHALL REPLACE ALL RELAY CONTROL AND MONITORING MODULES USED FOR SMOKE EXHAUST FANS (SEF).

ADM #01

KEY PLAN



FIRE ALARM PLAN, UPPER CELL TIER - HOUSING UNIT 5 & 6

FIRE ALARM SYSTEM REPLACEMENT

TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

CoreCivic

FA1.07

AUGUST 23, 2024

Attachment No. FA03 to ADM No. 1 dated 26 September 2024

R&N SYSTEMS DESIGN

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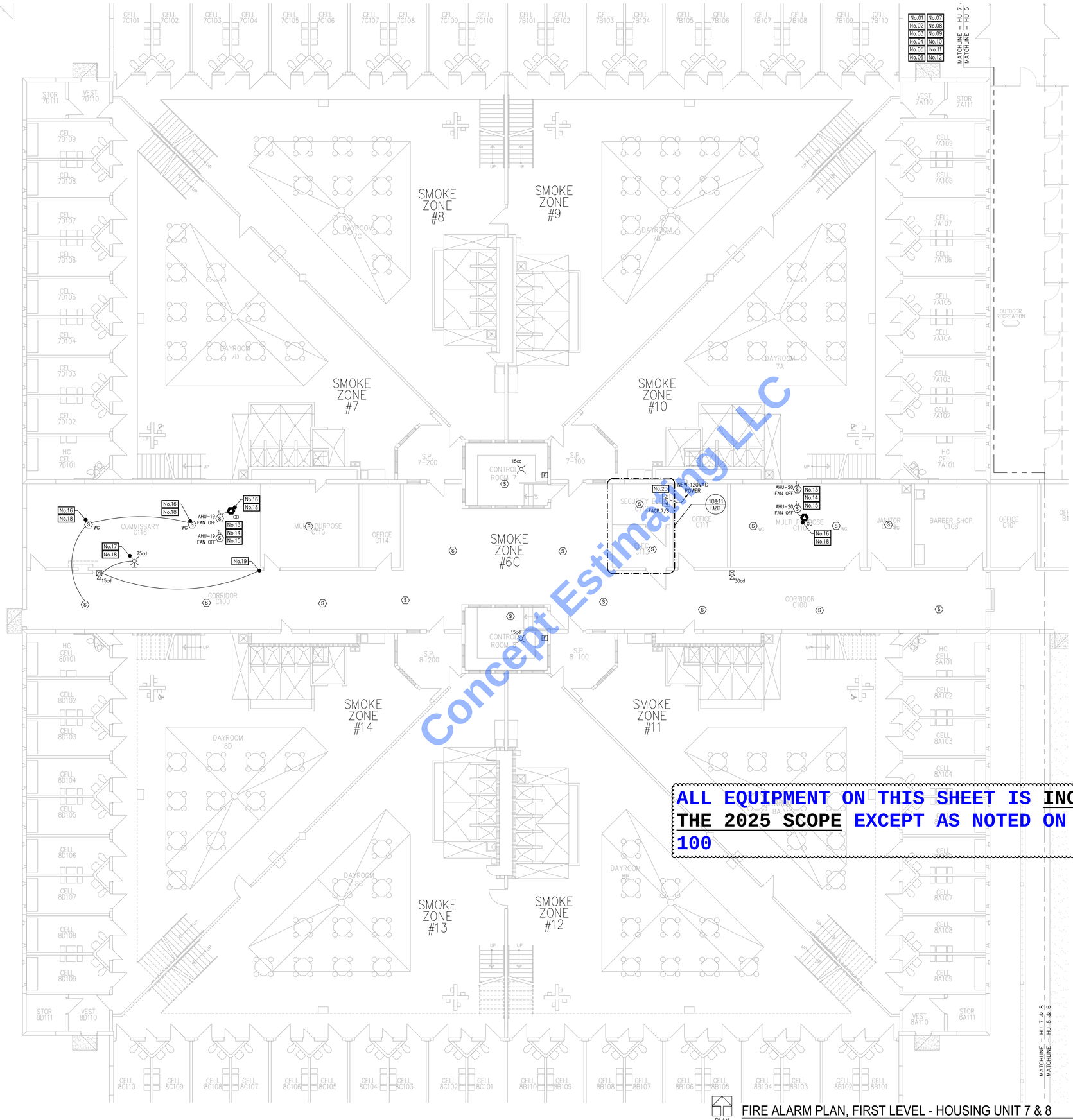


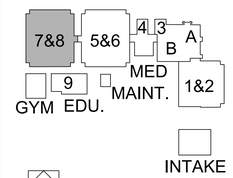
Concept Estimating LLC

ALL EQUIPMENT ON THIS SHEET IS INCLUDED IN THE 2025 SCOPE EXCEPT AS NOTED ON SHEET FA 100

LEGEND NOTES

1. REFER TO GENERAL NOTES ON SHEET FA0.01 AND INCORPORATE AS APPLICABLE.
2. EXISTING DEVICES AND CONDITIONS INDICATED HERE WERE GATHERED FROM AS-BUILT DOCUMENTS AND SITE SURVEYS. ALL INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DEVICE LOCATIONS AND CONDITIONS.
3. FAC SHALL FIREPROOF ALL PENETRATIONS CREATED FOR THIS PROJECT. PENETRATIONS THROUGH RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROPERLY SEALED AND SLEEVED TO MAINTAIN THE EXISTING FIRE-RESISTANT RATING. WHERE RATING IS UNKNOWN FIREPROOFING SHALL MEET A 2HR RATING IN ALL CASES. SEALANT COLOR SHALL MATCH THE EXISTING SURFACES AS CLOSELY AS POSSIBLE.
4. FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. THE EXISTING FIRE ALARM SYSTEM EQUIPMENT REFERENCED ON THIS PLAN ARE SCHEDULED TO BE REPLACED AS PART OF THE PROJECT SCOPE.
6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SEC/MDF ROOM A101.
8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY THE LOCAL FIRE ALARM CONTROL PANEL (FACP.7/8) IN SEC ROOM C112, THE MAIN FACP.B IN SEC/MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
10. ALL INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES FOR THIS PROJECT ARE NEW AND SHALL BE MONITORED AND CONTROLLED BY BUILDING'S NEW ADDRESSABLE FIRE ALARM SYSTEM.
11. FAC TO REMOVE AND REPLACE ALL EXISTING INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES. EXAMPLES: SMOKE, HEAT, BEAM, AND DUCT DETECTORS, I/O MODULES, AUXILIARY RELAYS, PULL STATIONS, STROBES, COMBINATION HORN STROBES, AND ANY ADDRESSABLE DEVICE.
12. EXISTING "WG" DETECTOR / AV PROTECTIVE GUARDS SHALL BE REMOVED AND REINSTALLED UNLESS OTHERWISE NOTED. ATTACH WITH SECURITY SCREWS.
13. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
14. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES REQUIRED TO PERFORM SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM.
15. FAC SHALL REPLACE THE EXISTING DUCT SMOKE DETECTOR AND CONTROL RELAY OUTPUT MODULE TO SHUTDOWN THE ROOFTOP UNIT (RTU).
16. FURNISH AND INSTALL ADDRESSABLE INITIATING DEVICE AS INDICATED ON PLANS. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
17. FURNISH AND INSTALL A AUDIBLE/VISUAL OR VISUAL ONLY NOTIFICATION APPLIANCE AS INDICATED. ADJUST THE CANDELA RATINGS AS REQUIRED BY NFPA 72 FOR COMPLETE COVERAGE. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
19. EXTEND NEW CONDUIT, J-BOX, AND WRING FROM THE EXISTING J-BOX TO RELOCATE THE NEW FIRE ALARM DEVICE AS INDICATED ON THE PLANS. PROVIDE A 4" STEEL BLANK COVER PLATE AND ATTACH TO THE EXISTING J-BOX WITH SECURITY PIN-TORX TYPE SCREWS. SEAL THE PERIMETER OF THE COVER PLATE.
20. FURNISH AND INSTALL (1) NEW 20AMP, 120VAC BRANCH POWER CIRCUIT FROM THE EMERGENCY POWER PANEL (E1.4/52) FOR THE FACP. PROVIDE NEW BRANCH CIRCUIT BREAKER, BREAKER LOCK, AND LABEL "FACP."

KEY PLAN



PLAN NORTH

FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 7 & 8

SCALE: 1/8" = 1'-0"

FIRE ALARM PLAN, FIRST LEVEL - HOUSING UNIT 7 & 8
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.08
AUGUST 23, 2024

CoreCivic

SYSTEMS DESIGN
615 CRESCENT EXECUTIVE COURT, SUITE 600
RALEIGH, NORTH CAROLINA 27607
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www.rnsystemsdesign.com

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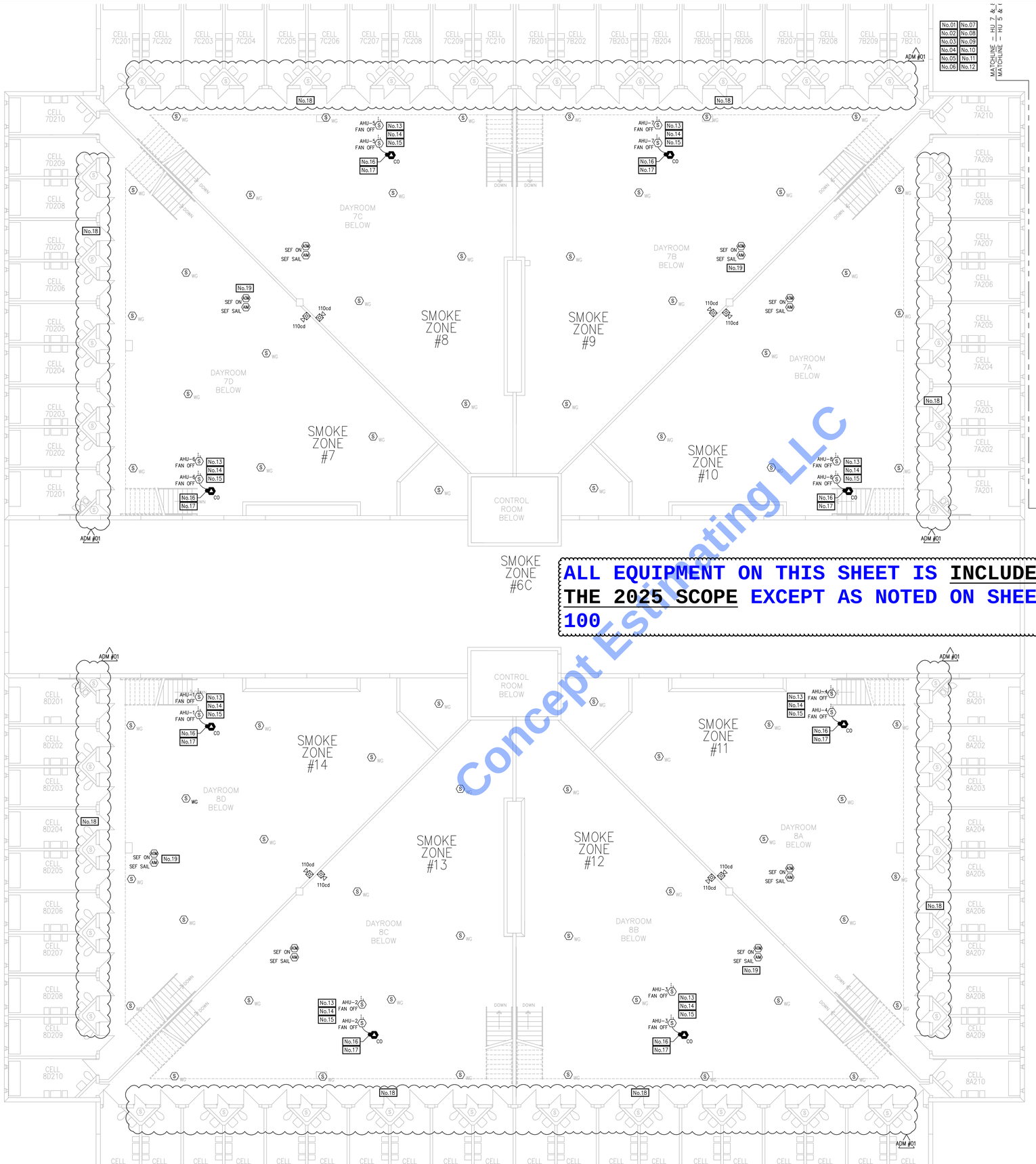

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Concept Estimating LLC

PLAN NORTH

SECURITY ELECTRONICS PLAN, UPPER CELL TIER - HOUSING UNIT 5 & 6

SCALE: 1/8" = 1'-0"

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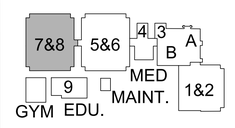
17. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
18. FAC SHALL REMOVE THE EXISTING SMOKE DETECTOR LOCATED IN UTILITY SPACE AT EACH PLUMBING CELL CHASE. REMOVE ALL WIRING BACK TO SOURCE. PROVIDE BLANK COVERPLATE SECURED WITH SCREWS AT EACH PULLBOX LOCATION WHERE DEVICE WAS REMOVED.
19. FAC SHALL REPLACE ALL RELAY CONTROL AND MONITORING MODULES USED FOR SMOKE EXHAUST FANS (SEF).

KEY PLAN



FENNEMORE NIEDZWIECKI (1752) NEW MEXICO

CoreCivic

FIRE ALARM PLAN, UPPER CELL TIER - HOUSING UNIT 7 & 8
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.09

AUGUST 23, 2024

Attachment No. FA04
to ADM No. 1
dated 26 September 2024

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www.rnsystemsdesign.com

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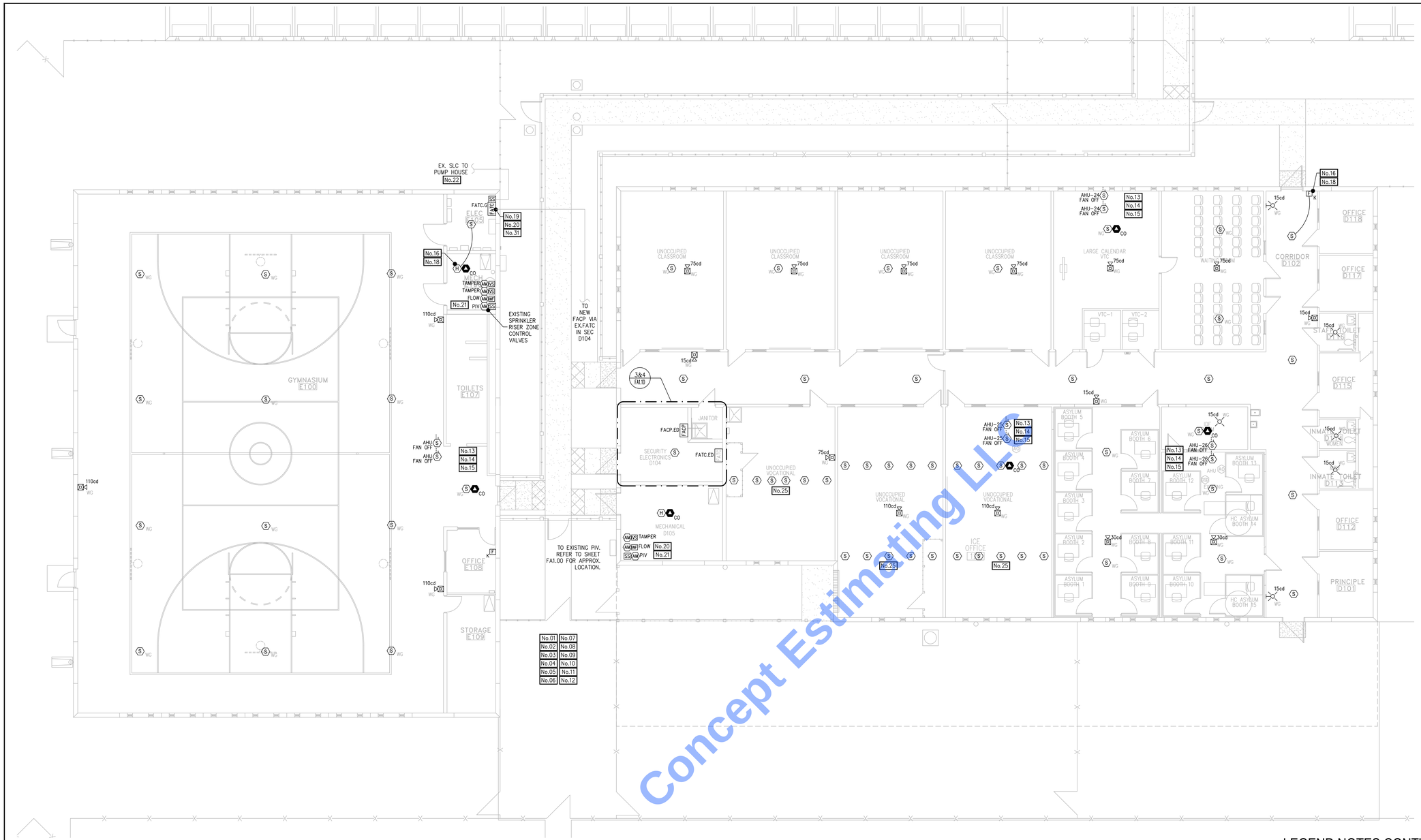
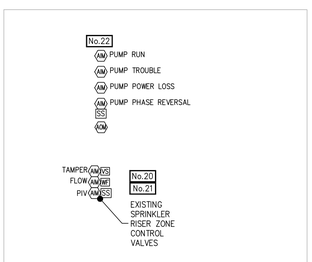


PLAN NORTH

FIRE ALARM PLAN, FIRST LEVEL - GYM AND EDUCATION BUILDING

SCALE: 1/8" = 1'-0"

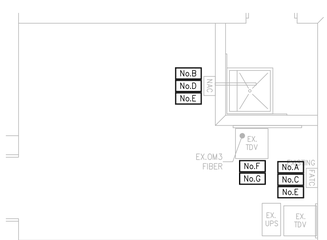
ALL EQUIPMENT ON THIS SHEET IS INCLUDED IN THE 2025 SCOPE EXCEPT AS NOTED ON SHEET FA 100



PLAN NORTH

FIRE ALARM PLAN, FIRST LEVEL - PUMP HOUSE (OUTSIDE SECURE PERIMETER)

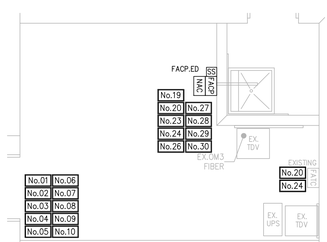
SCALE: 1/8" = 1'-0"



3 FA1.10

DEMO EQUIPMENT LAYOUT SECURITY ELECTRONICS ROOM D104

SCALE: 1/4"=1'-0"



4 FA1.10

NEW EQUIPMENT LAYOUT SECURITY ELECTRONICS ROOM D104

SCALE: 1/4"=1'-0"

LEGEND NOTES

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8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY ON THE LOCAL FIRE ALARM CONTROL PANEL (FACP.ED) IN SEC ROOM D104, THE MAIN FACP.B IN SEC./MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND MAIN FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
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18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
19. FURNISH AND INSTALL REMOTE AUXILIARY POWER EXPANDER UNIT (NAC), BACKUP BATTERIES, AND ASSOCIATED COMPONENTS. UTILIZE EXISTING FIRE ALARM POWER SOURCE FOR THE NEW FACP AT THIS LOCATION AND RECONNECT ALL FIRE ALARM WIRING TO THE NEW SYSTEM. PROVIDE NAC+ AS REQUIRED. PROVIDE NEW CIRCUIT BREAKER LOCK AND LABEL "FACP" AS REQUIRED.
20. PROVIDE NEW (SS AND SPD) DEVICES AND GROUND WIRING FOR ALL FIRE ALARM WIRING THAT ENTERS AND/OR LEAVES THE BUILDING. CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
21. FAC SHALL REPLACE THE EXISTING MODULES TO MONITOR THE SPRINKLER CONTROL ZONE VALVES, PIV, FLOW AND TAMPER SWITCHES.
22. FAC SHALL REPLACE THE EXISTING MODULES TO MONITOR THE FIRE PUMP DEVICES AT THE PUMP HOUSE.
23. FURNISH AND INSTALL NEW FIRE ALARM WIRING TO TIE IN THE MAINTENANCE BUILDING SLC AND NAC CIRCUITS TO THE NEW FACP.ED. TEST ALL NEW WIRING AT BOTH END BEFORE PLACING INTO SERVICE. REFER TO SHEET FA1.00 NEW CONDUIT INFORMATION.
24. FAC SHALL EXTEND THE EXISTING FIRE ALARM CIRCUIT WIRING FROM THE EXISTING CABINET (FATC) TO THE NEW FACP. PROVIDE NEW SET SCREW TERMINALS TO SPLICE CABLING BEING EXTENDED TO THE NEW FACP.
25. CEILING STRUCTURE IN THIS ARE IS A "DOUBLE T" ASSEMBLY.
26. ALL COMMUNICATIONS BETWEEN FIRE ALARM PANELS SHALL BE OVER THE EXISTING FIBER OPTIC CABLE NETWORK. REFER TO FIBER RISER ON SHEET FA4.01.
27. FURNISH AND INSTALL A FIRE ALARM CONTROL PANEL (FACP), BACKUP BATTERIES, AND ASSOCIATED COMPONENTS. UTILIZE THE EXISTING FIRE ALARM POWER SOURCE. PROVIDE A FIRE ALARM CIRCUIT BREAKER LOCK AND LABEL "FACP" AS REQUIRED.
28. UTILIZE (4) FOUR EXISTING STRANDS OF OM3 (MM) FIBER OPTIC CABLE FOR THE FIRE ALARM SYSTEM. REFER TO FIRE ALARM FIBER RISER DIAGRAM ON SHEET FA4.01 FOR ADDITIONAL INFORMATION.
29. FURNISH AND INSTALL NEW FACTORY MANUFACTURED (MM) DUPLEX FIBER PATCH CABLES WITH ST-STYLE CONNECTORS BETWEEN THE EXISTING RACK MOUNTED LIU AND FACP.
30. TERMINATE FIBER OPTIC CABLE AT BOTH ENDS OF ASSOCIATED LIU/FIBER PATCH PANEL. TEST ALL FIBER IN ACCORDANCE WITH THE SPECIFICATIONS BEFORE PLACING IT INTO SERVICE.
31. FAC TO REPLACE ALL SLC AND NAC CIRCUIT SCREW TERMINALS, NAC POWER SUPPLIES, (SS/SPD) DEVICES, AND ASSOCIATED FIRE ALARM COMPONENTS. REUSE EXISTING FIRE ALARM ENCLOSURE.

LEGEND NOTES DEMOLITION NOTES

A. EXISTING FIRE ALARM SYSTEM CONDUIT, SLC AND NAC CABLES TO REMAIN AND BE USED TO CONNECT TO THE NEW FIRE ALARM SYSTEM.

B. EXISTING POWER CIRCUIT USED FOR THE EXISTING FIRE ALARM SYSTEM TO REMAIN. VERIFY THE EXISTING EMERGENCY PANEL AND BRANCH POWER CIRCUIT USED FOR THE FIRE ALARM SYSTEM. REPLACE THE EXISTING BRANCH CIRCUIT BREAKER LOCK AND LABEL AS "FACP."

C. REMOVE EXISTING SLC AND NAC CIRCUIT TERMINALS, TWIST-ON CONNECTORS ATTACHING FIRE ALARM WIRING, POWER SUPPLIES, SURGE PROTECTION DEVICES (SPD), AND ASSOCIATED COMPONENTS. EXISTING CABINET TO REMAIN AND BE REUSED UNLESS OTHERWISE NOTED.

D. REPLACE THE REMOTE AUXILIARY BOOSTER POWER SUPPLY (NAC), BACK UP BATTERIES AND ASSOCIATED COMPONENTS.

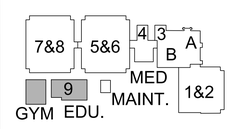
E. REPLACE THE EXISTING SURGE PROTECTION DEVICE (SPD) AND SURGE SUPPRESSION DEVICES (SS) USED FOR THE FIRE ALARM SYSTEM.

F. EXISTING RACKS, CABINETS, AND EQUIPMENT BY OTHERS SHALL REMAIN.

G. EXISTING LIU/FIBER PATCH PANEL TO REMAIN AND BE USED FOR THE NEW FIRE ALARM SYSTEM.

H. EXISTING FIBER PATCH CABLES TO BE REMOVED UNLESS OTHERWISE NOTED.

KEY PLAN



Concept Estimating LLC

FRANK NIEDZWIEDZ NEW MEXICO 14791 REGISTERED PROFESSIONAL ENGINEER 12-23-24

CoreCivic

FIRE ALARM PLAN, FIRST LEVEL - GYM & EDU BLDG AND PUMP HOUSE
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA1.10
AUGUST 23, 2024

SYSTEMS DESIGN
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ALBUQUERQUE, NEW MEXICO 87107
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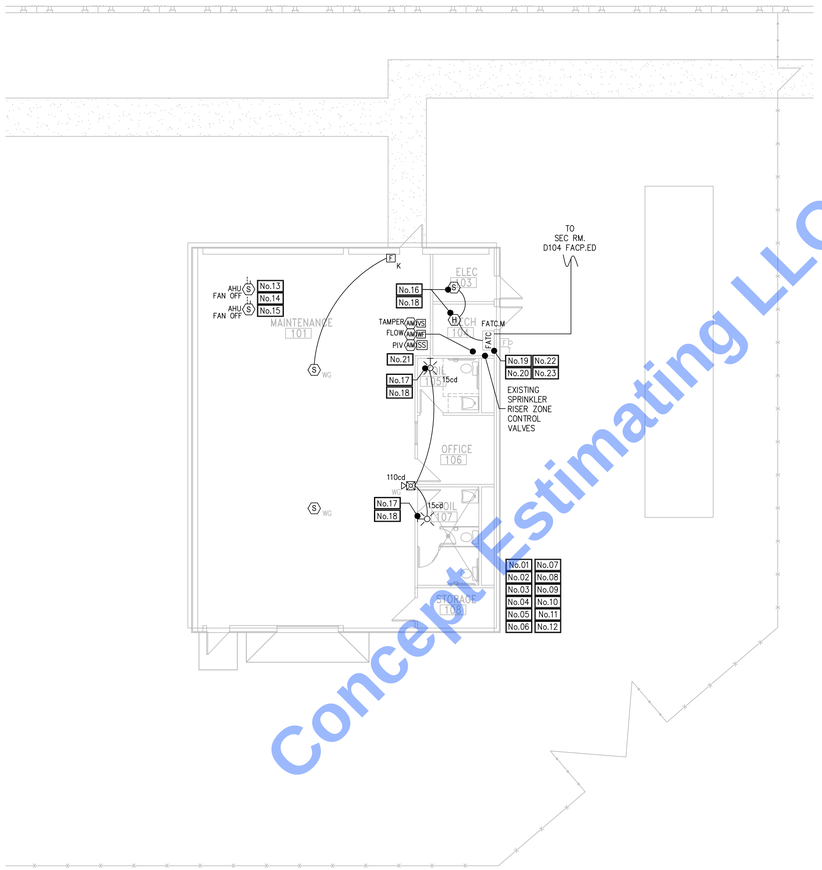

Concept Estimating LLC

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PLAN NORTH

FIRE ALARM PLAN, FIRST LEVEL - MAINTENANCE BUILDING

SCALE: 1/8" = 1'-0"

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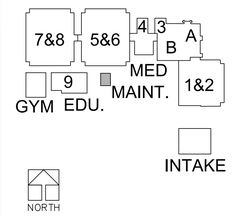
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY ON THE LOCAL FIRE ALARM CONTROL PANEL (FACP.ED) IN SEC ROOM D104, THE MAIN FACP.B IN SEC/MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
10. ALL INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES FOR THIS PROJECT ARE NEW AND SHALL BE MONITORED AND CONTROLLED BY BUILDING'S NEW ADDRESSABLE FIRE ALARM SYSTEM.
11. FAC TO REMOVE AND REPLACE ALL EXISTING INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES. EXAMPLES: SMOKE, HEAT, BEAM, AND DUCT DETECTORS, I/O MODULES, AUXILIARY RELAYS, PULL STATIONS, STROBES, COMBINATION HORN STROBES, AND ANY ADDRESSABLE DEVICE.
12. EXISTING "WG" DETECTOR / AV PROTECTIVE GUARDS SHALL BE REMOVED AND REINSTALLED UNLESS OTHERWISE NOTED. ATTACH WITH SECURITY SCREWS.
13. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
14. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES REQUIRED TO PERFORM SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM.
15. FAC SHALL REPLACE THE EXISTING DUCT SMOKE DETECTOR AND CONTROL RELAY OUTPUT MODULE TO SHUTDOWN THE ROOFTOP UNIT (RTU).
16. FURNISH AND INSTALL ADDRESSABLE INITIATING DEVICE AS INDICATED ON PLANS. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
17. FURNISH AND INSTALL A AUDIBLE/VISUAL OR VISUAL ONLY NOTIFICATION APPLIANCE AS INDICATED. ADJUST THE CANDELA RATINGS AS REQUIRED BY NFPA 72 FOR COMPLETE COVERAGE. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
19. FAC SHALL REPLACE THE EXISTING SLC AND NAC CIRCUIT SCREW TERMINALS ATTACHING FIRE ALARM WIRING, POWER SUPPLIES, SURGE PROTECTION DEVICES (SS), AND ASSOCIATED COMPONENTS. EXISTING CABINET TO REMAIN AND BE REUSED UNLESS OTHERWISE NOTED.
20. PROVIDE NEW SURGE PROTECTION DEVICES (SS) AND GROUND WIRING FOR ALL FIRE ALARM WIRING THAT ENTERS AND/OR LEAVES THE BUILDING. CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
21. FAC SHALL REPLACE THE EXISTING MODULES TO MONITOR THE SPRINKLER CONTROL ZONE VALVES, PIV, FLOW AND TAMPER SWITCHES.
22. FURNISH AND INSTALL NEW CONDUIT AND FIRE ALARM WIRING TO EXTEND THE MAINTENANCE BUILDING SLC AND NAC CIRCUITS TO THE NEW FACP IN THE EDUCATION BUILDING. ROUTE NEW CONDUIT AND CABLES BETWEEN THE MAINTENANCE BUILDING TERMINATION CABINET (FATC) AND EDUCATION BUILDINGS NEW FACP IN SECURITY ELECTRONICS ROOM D104.
23. TERMINATE AND TEST ALL FIRE ALARM WIRING AND CIRCUITRY AT BOTH ENDS BEFORE PLACING IT INTO SERVICE.

KEY PLAN



FIRE ALARM PLAN, FIRST LEVEL - MAINTENANCE BUILDING
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

CoreCivic

FA1.11
AUGUST 23, 2024

RN SYSTEMS DESIGN
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www.rnsystemsdesign.com

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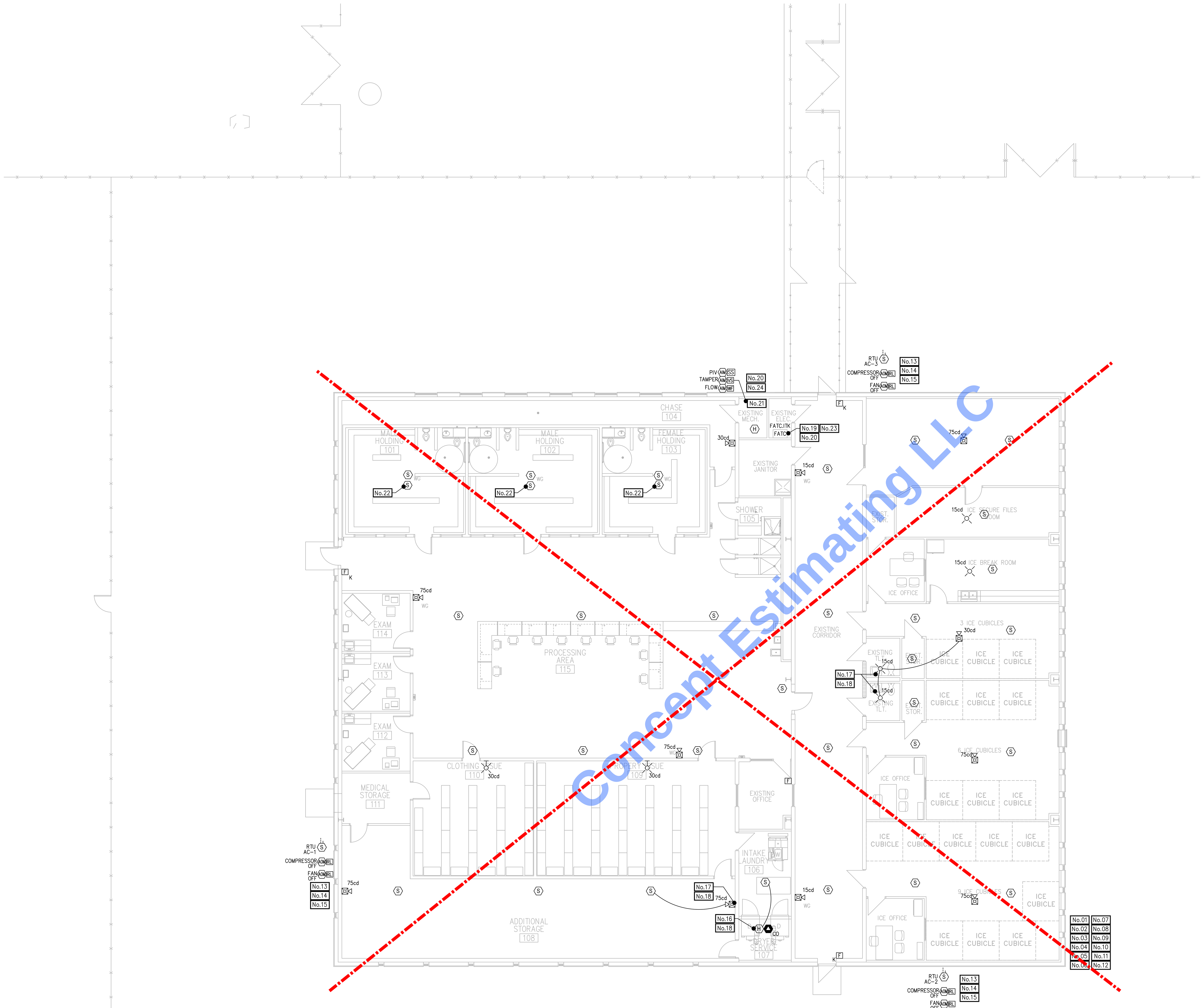


Concept Estimating LLC

ALL EQUIPMENT ON THIS SHEET IS EXCLUDED IN THE 2025 SCOPE EXCEPT AS NOTED ON SHEET FA 100

PLAN NORTH

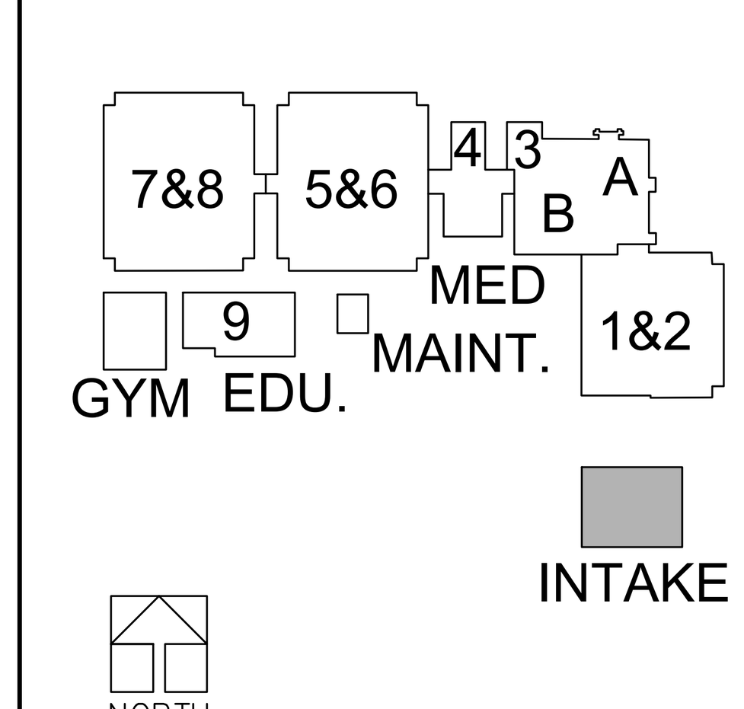
FIRE ALARM PLAN, FIRST LEVEL - INTAKE BUILDING

SCALE: 1/8" = 1'-0"

LEGEND NOTES

1. REFER TO GENERAL NOTES ON SHEET FA0.01 AND INCORPORATE AS APPLICABLE.
2. EXISTING DEVICES AND CONDITIONS INDICATED HERE WERE GATHERED FROM AS-BUILT DOCUMENTS AND SITE SURVEYS. ALL INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DEVICE LOCATIONS AND CONDITIONS.
3. FAC SHALL FIREPROOF ALL PENETRATIONS CREATED FOR THIS PROJECT. PENETRATIONS THROUGH RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROPERLY SEALED AND SLEEVED TO MAINTAIN THE EXISTING FIRE-RESISTANT RATING. WHERE RATING IS UNKNOWN FIREPROOFING SHALL MEET A 2HR RATING IN ALL CASES. SEALANT COLOR SHALL MATCH THE EXISTING SURFACES AS CLOSELY AS POSSIBLE.
4. FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. THE EXISTING FIRE ALARM SYSTEM EQUIPMENT REFERENCED ON THIS PLAN ARE SCHEDULED TO BE REPLACED AS PART OF THE PROJECT SCOPE.
6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SECURITY ELECTRONICS ROOM A1093.
8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY ON THE LOCAL FIRE ALARM CONTROL PANEL (FACP.A) IN SEC ROOM 137, THE MAIN FACP.B IN SEC ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE ALARM FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE LOCAL FACP.A, THE MAIN FMS SYSTEM, AND THE MAIN FACP.B ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
10. ALL INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES FOR THIS PROJECT ARE NEW AND SHALL BE MONITORED AND CONTROLLED BY BUILDING'S NEW ADDRESSABLE FIRE ALARM SYSTEM.
11. FAC TO REMOVE AND REPLACE ALL EXISTING INITIATING DEVICES AND AUDIBLE NOTIFICATION APPLIANCES. EXAMPLES: SMOKE, HEAT, BEAM, AND DUCT DETECTORS, I/O MODULES, AUXILIARY RELAYS, PULL STATIONS, STROBES, COMBINATION HORN STROBES, AND ANY ADDRESSABLE DEVICE.
12. EXISTING "WG" DETECTOR / AV PROTECTIVE GUARDS SHALL BE REMOVED AND REINSTALLED UNLESS OTHERWISE NOTED. ATTACH WITH SECURITY SCREWS.
13. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
14. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES REQUIRED TO PERFORM SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM.
15. FAC SHALL REPLACE THE EXISTING CONTROL RELAY MODULE IN EACH A.C. UNIT FOR TURNING THE UNIT FAN AND COMPRESSOR "OFF."
16. FURNISH AND INSTALL ADDRESSABLE INITIATING DEVICE AS INDICATED ON PLANS. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
17. FURNISH AND INSTALL A AUDIBLE/VISUAL OR VISUAL ONLY NOTIFICATION APPLIANCE AS INDICATED. ADJUST THE CANDELA RATINGS AS REQUIRED BY NFPA 72 FOR COMPLETE COVERAGE. PROVIDE A "WG" DETECTOR / AV PROTECTIVE GUARD WHERE NOTED.
18. FAC TO FURNISH AND INSTALL CONDUIT, WIRING, AND CONNECT THE NEW DEVICE TO THE EXISTING SLC OR NAC CIRCUITRY OR ROUTE TO THE NEAREST FACP.
19. FAC SHALL REPLACE ALL SLC AND NAC CIRCUIT TERMINALS, NAC POWER SUPPLIES, SURGE PROTECTION DEVICES (SS), ASSOCIATED FIRE ALARM COMPONENTS. THE EXISTING 120 VAC POWER SOURCE AND FIRE ALARM ENCLOSURE/CABINET TO BE REUSED.
20. PROVIDE NEW SURGE PROTECTION DEVICES (SS) AND GROUND WIRING FOR ALL FIRE ALARM WIRING THAT ENTERS AND/OR LEAVES THE BUILDING. CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
21. FAC SHALL REPLACE THE EXISTING MODULES TO MONITOR THE SPRINKLER CONTROL ZONE VALVES, PIV, FLOW AND TAMPER SWITCHES.
22. FAC SHALL REPLACE THE EXISTING SMOKE DETECTOR MOUNTED ON THE EXISTING ROOF STRUCTURE.
23. BASED ON AS-BUILT INFORMATION THE EXISTING FIRE ALARM WIRING IN THIS BUILDING ARE ROUTED TO FACP.A IN SEC ROOM 137 VIA FATC.ITK IN THE ELEC. ROOM.
24. FAC SHALL REPAIR EXISTING FLEX CONDUIT CONNECTING TO THE FIRE SPRINKLER RISER FLOW AND TAMPER SWITCH(ES).

KEY PLAN



FIRE ALARM PLAN, FIRST LEVEL - INTAKE BUILDING

FIRE ALARM SYSTEM REPLACEMENT

TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

CoreCivic

FA1.12

AUGUST 23, 2024

R&N SYSTEMS DESIGN

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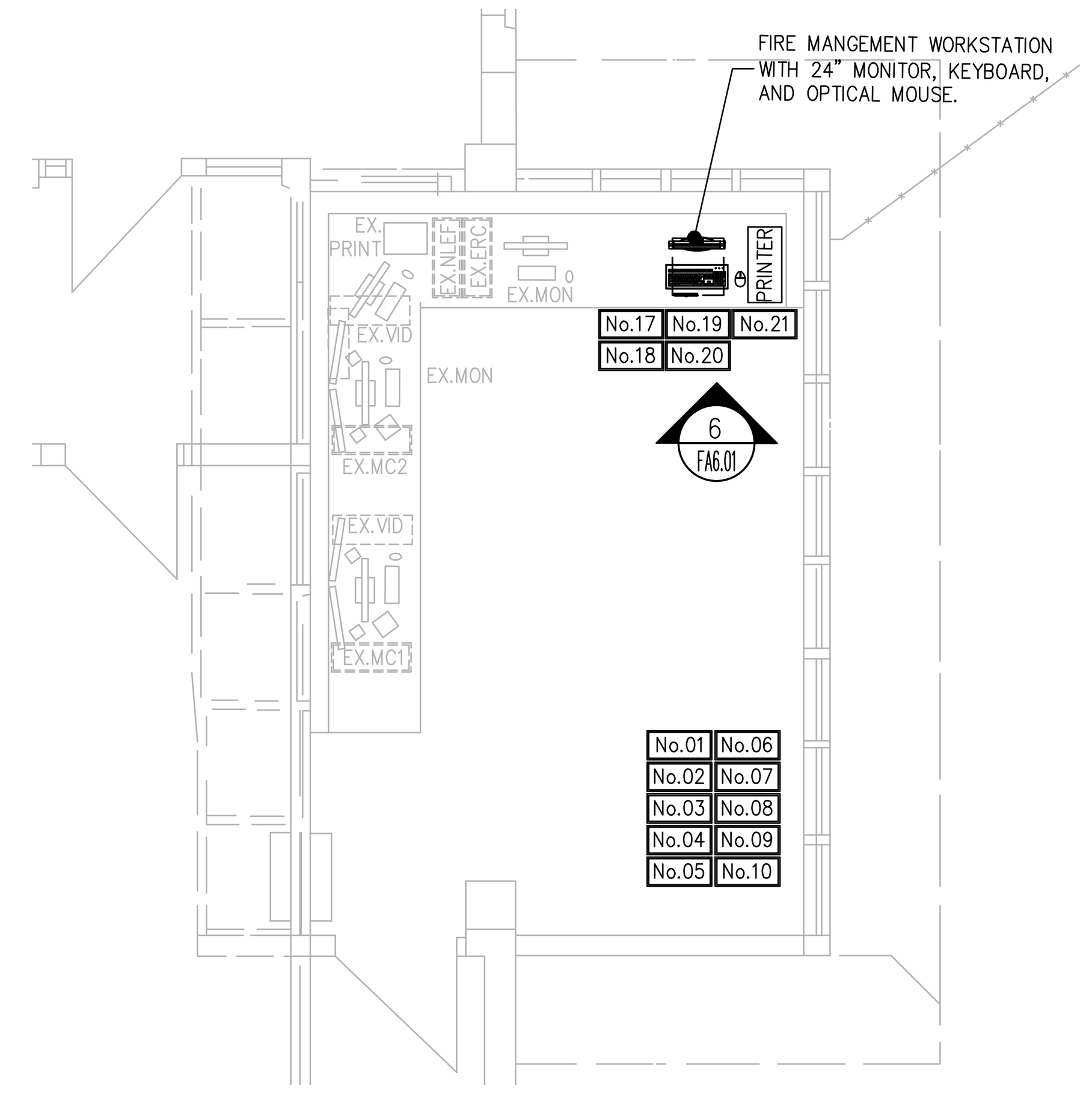
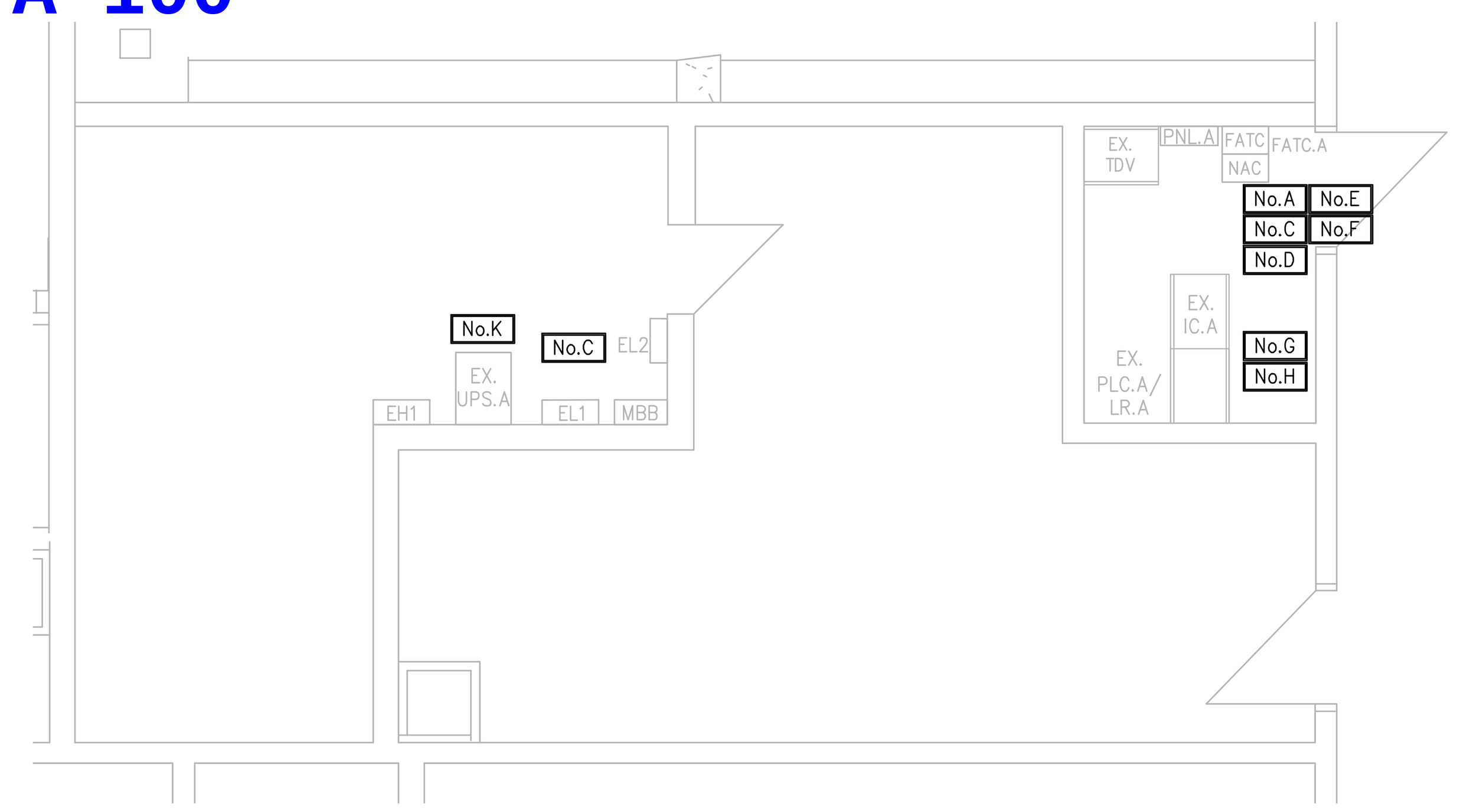
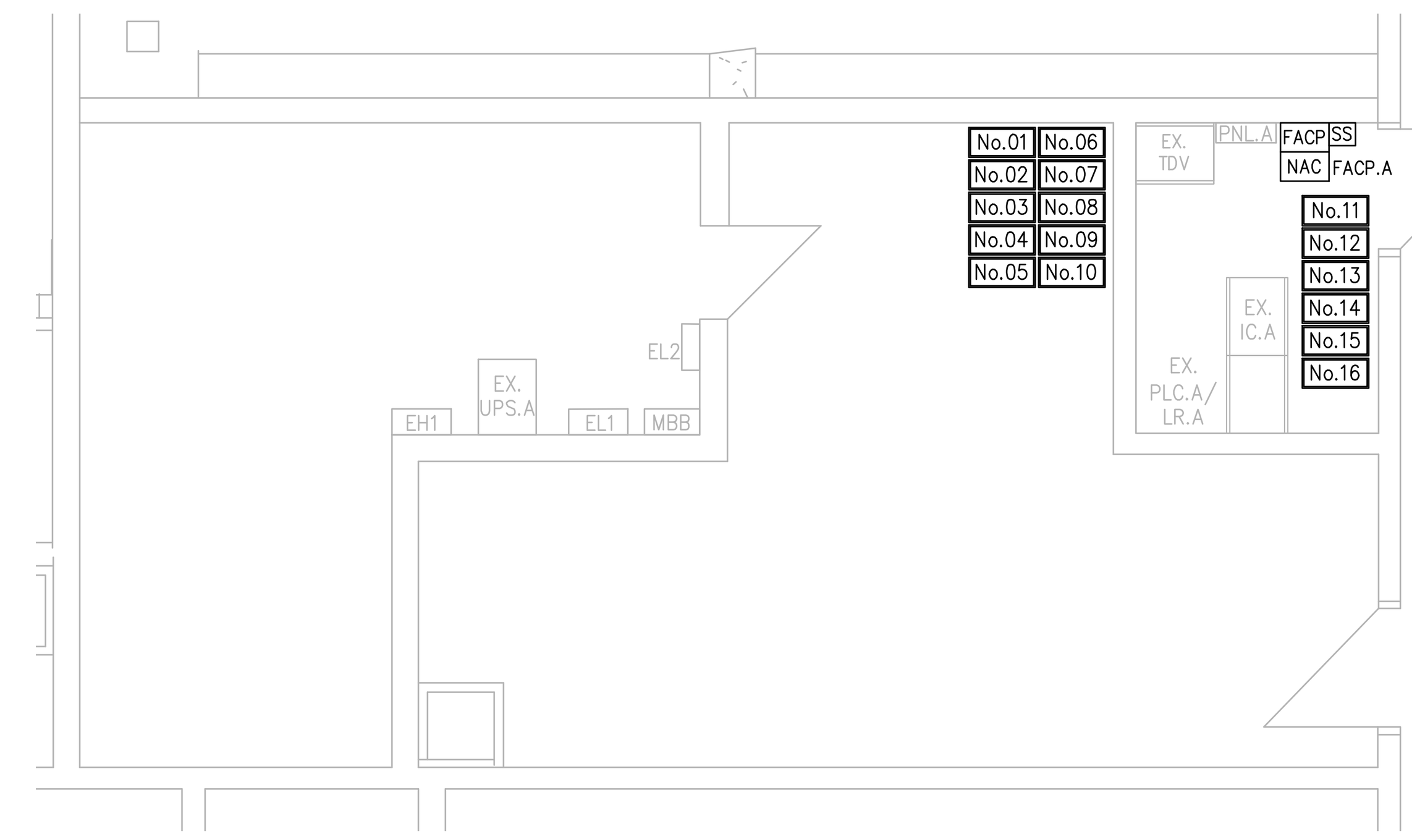
ITEMS ON THESE DETAILS ARE AS APPLICABLE TO SCOPE DEFINED ON SHEET FA 100



1 FA2.01 NEW EQUIPMENT LAYOUT, MASTER CONTROL ROOM 133
SCALE: 1/4"=1'-0"



2 FA2.01 DEMO EQUIPMENT LAYOUT BUILDING A, SEC. RM. 137 & ELEC. RM. 145
SCALE: 1/4"=1'-0"



3 FA2.01 NEW EQUIPMENT LAYOUT BUILDING A, SEC. RM. 137 & ELEC. RM. 145
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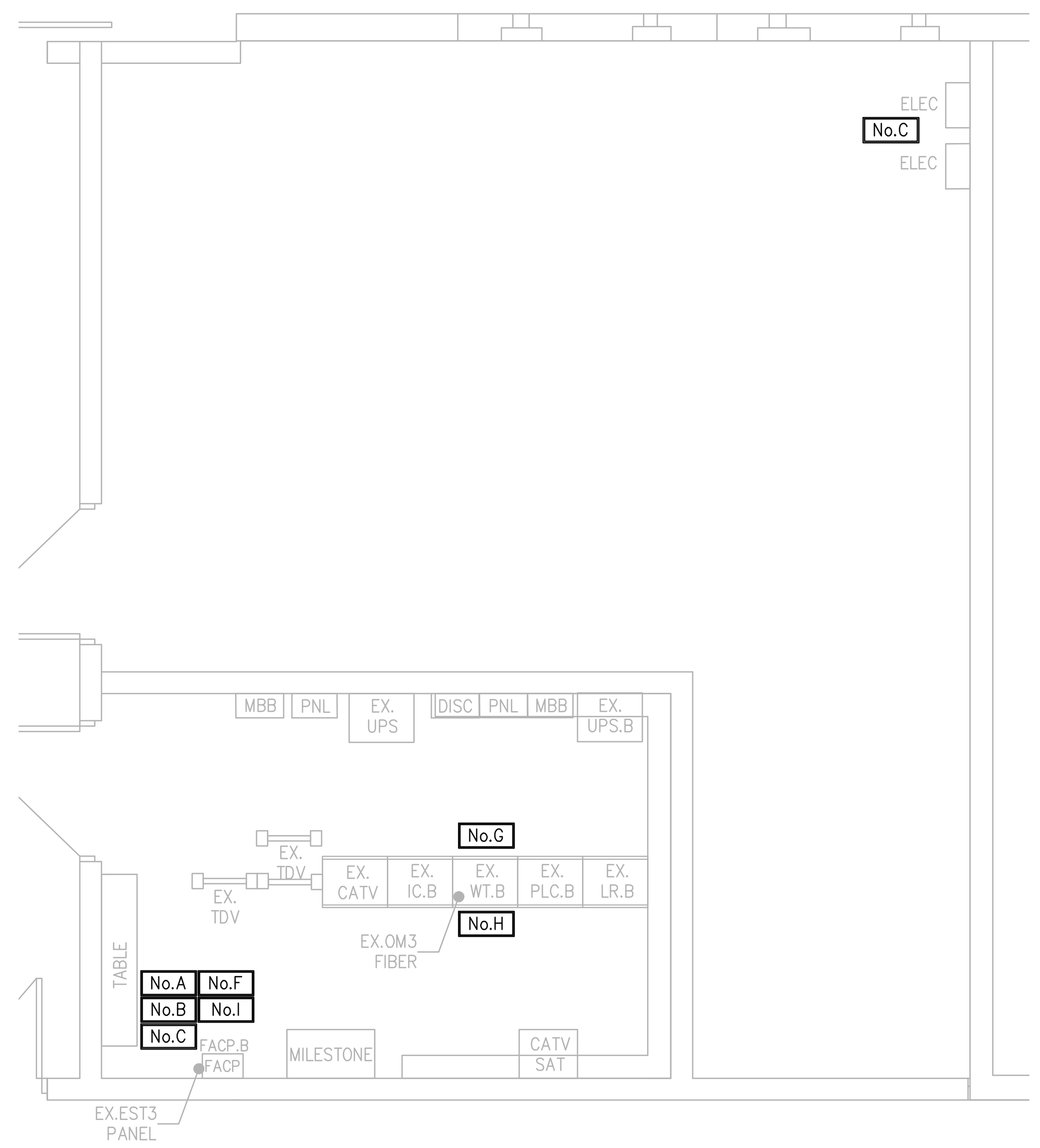
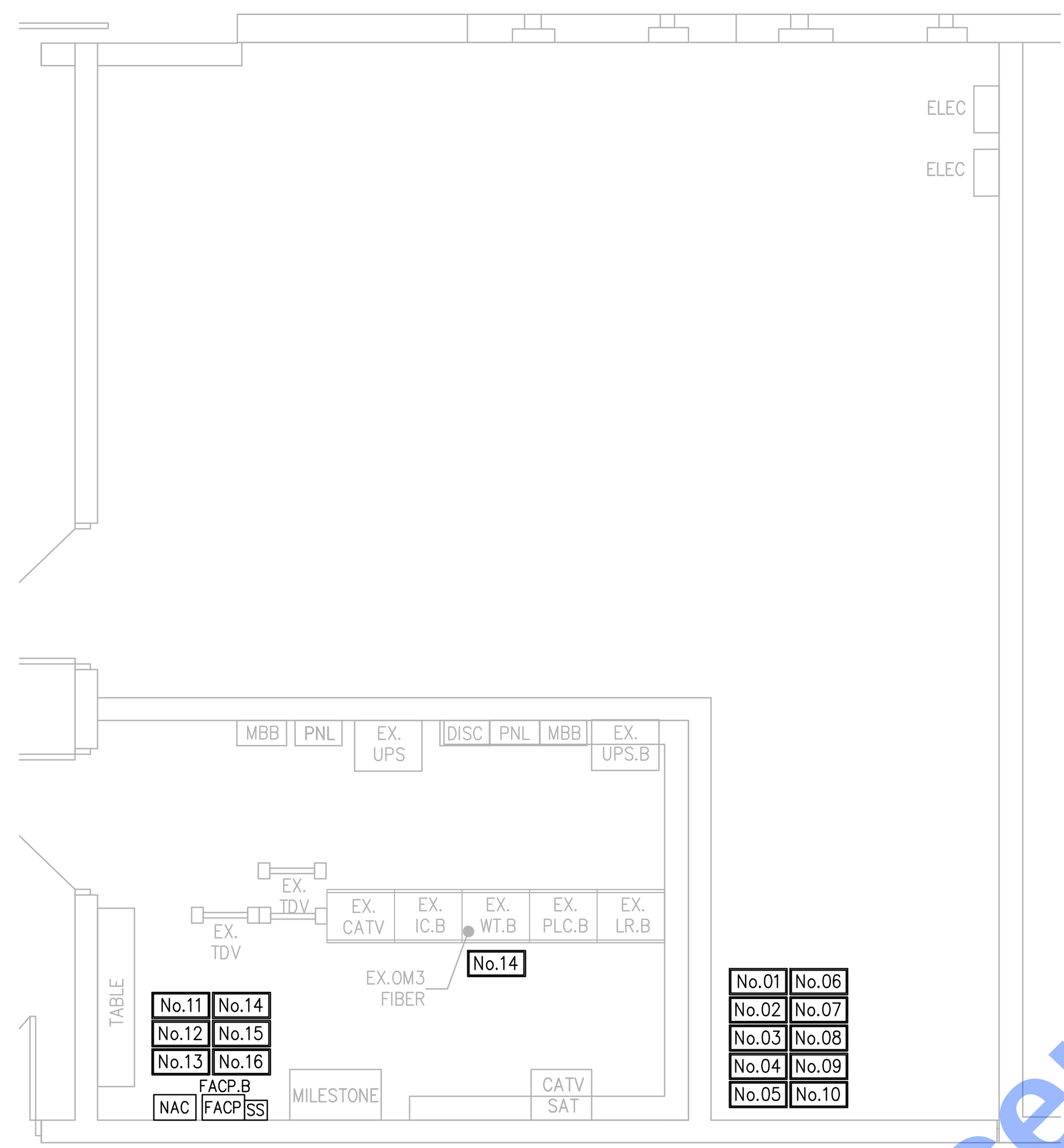


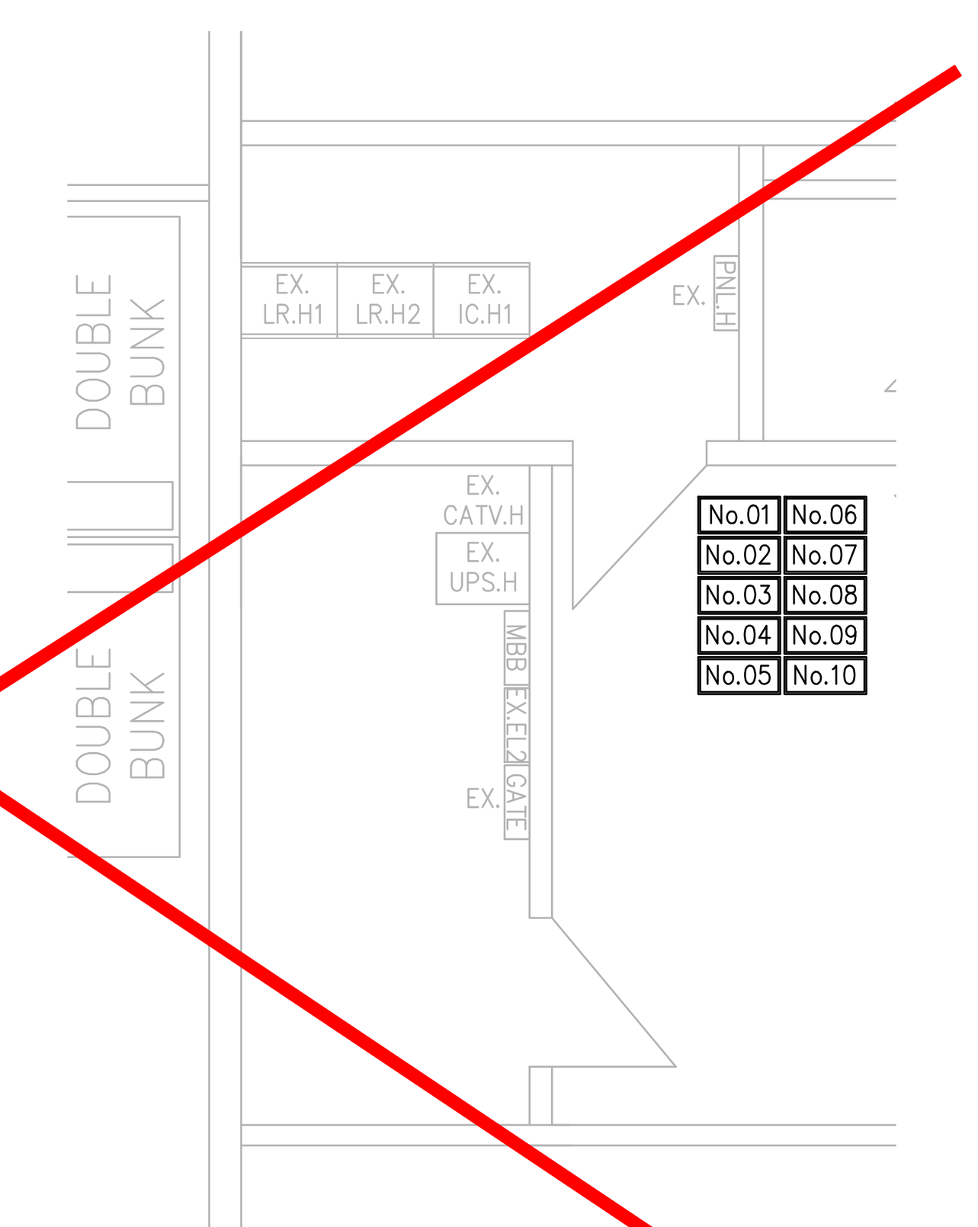
4 FA2.01 DEMO EQUIPMENT LAYOUT BUILDING B, MAIN SEC. A101 & ELEC. A102
SCALE: 1/4"=1'-0"



5 FA2.01 NEW EQUIPMENT LAYOUT BUILDING B, MAIN SEC. A101 & ELEC. A102
SCALE: 1/4"=1'-0"

Concept Estimating LLC

6 FA2.01 DEMO EQUIPMENT LAYOUT HSNG 1-2. SEC. ELEC. 178
SCALE: 1/4"=1'-0"



7 FA2.01 NEW EQUIPMENT LAYOUT HSNG 1-2. SEC. ELEC. 178
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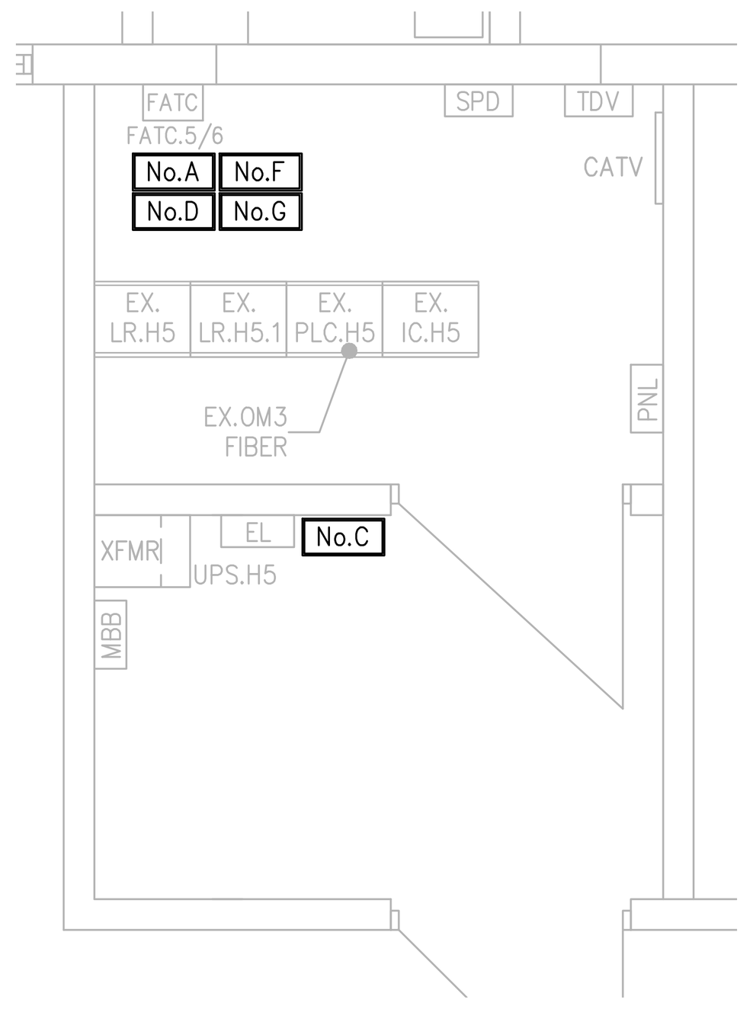
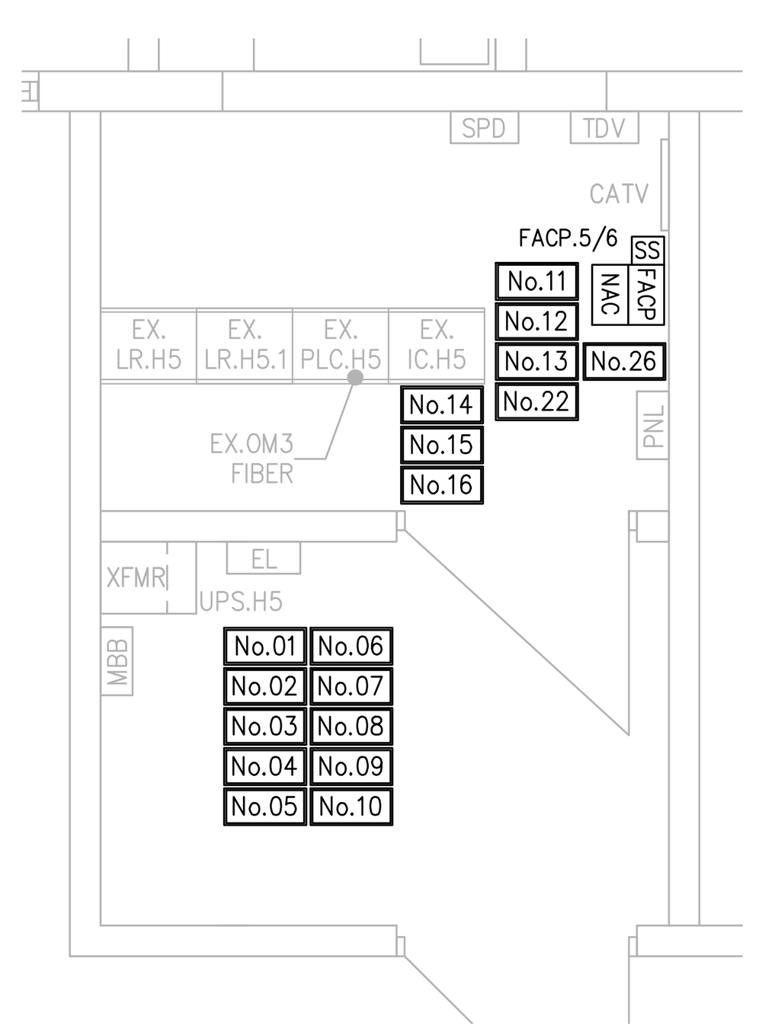
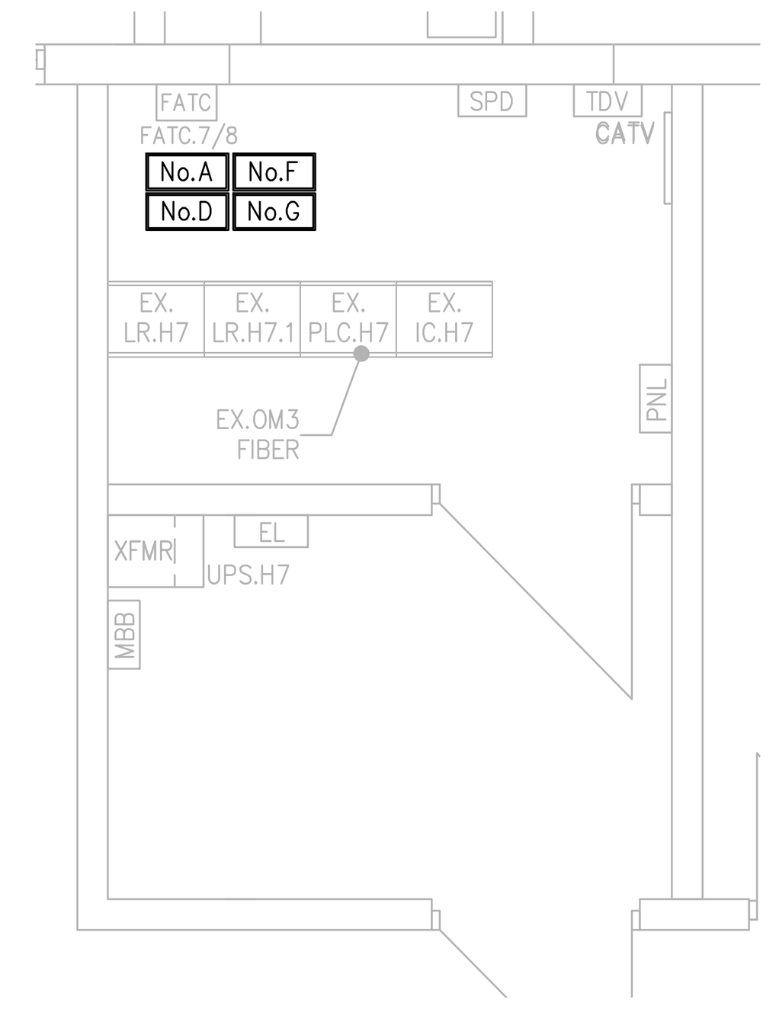


8 FA2.01 DEMO EQUIPMENT LAYOUT HSNG 5-6, SEC. B109, ELEC. B108
SCALE: 1/4"=1'-0"



9 FA2.01 NEW EQUIPMENT LAYOUT HSNG 5-6, SEC. B109, ELEC. B108
SCALE: 1/4"=1'-0"



10 FA2.01 DEMO EQUIPMENT LAYOUT HSNG 7-8, SEC. C112, ELEC. C113
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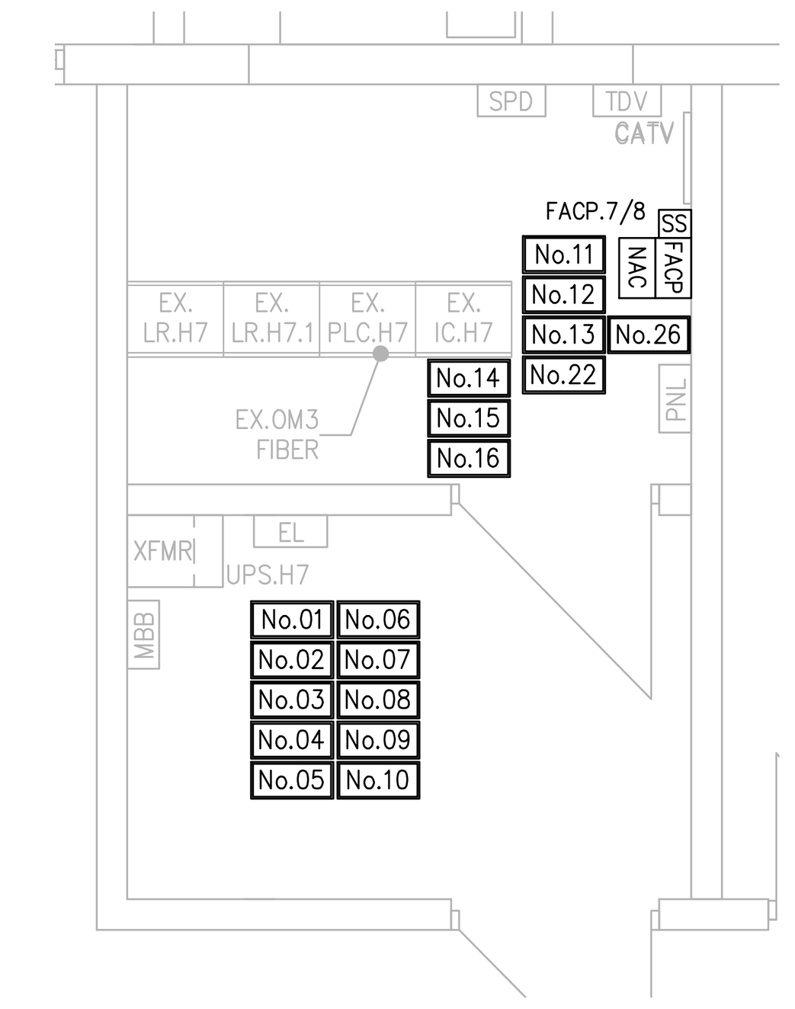


11 FA2.01 NEW EQUIPMENT LAYOUT HSNG 7-8, SEC. C112, ELEC. C113
SCALE: 1/4"=1'-0"

LEGEND NOTES
DEMOLITION NOTES

A. EXISTING FIRE ALARM SYSTEM CONDUIT, SLC AND NAC CABLES TO REMAIN AND BE USED TO CONNECT TO THE NEW FIRE ALARM SYSTEM.

B. REMOVE THE EXISTING FIRE ALARM CONTROL PANEL, CIRCUIT BOARDS, POWER SUPPLIES, BACKUP BATTERIES, AND ASSOCIATED COMPONENTS.

C. EXISTING POWER CIRCUIT USED FOR THE EXISTING FIRE ALARM SYSTEM TO REMAIN. VERIFY THE EXISTING EMERGENCY PANEL AND BRANCH POWER CIRCUIT USED FOR THE FIRE ALARM SYSTEM. REPLACE THE EXISTING BRANCH CIRCUIT BREAKER LOCK AND LABEL AS "FACP."

D. REMOVE EXISTING SLC AND NAC CIRCUIT TERMINALS, TWIST-ON CONNECTORS ATTACHING FIRE ALARM WIRING, POWER SUPPLIES, SURGE PROTECTION DEVICES (SPD), AND ASSOCIATED COMPONENTS. EXISTING CABINET TO REMAIN AND BE REUSED UNLESS OTHERWISE NOTED.

E. REPLACE THE REMOTE AUXILIARY BOOSTER POWER SUPPLY (NAC), BACK UP BATTERIES AND ASSOCIATED COMPONENTS.

F. REPLACE THE EXISTING SURGE PROTECTION DEVICE (SPD) AND SURGE SUPPRESSION DEVICES (SS) USED FOR THE FIRE ALARM SYSTEM.

G. EXISTING RACKS, CABINETS, AND EQUIPMENT BY OTHERS SHALL REMAIN.

H. EXISTING LIU/FIBER PATCH PANEL TO REMAIN AND BE USED FOR THE NEW FIRE ALARM SYSTEM.

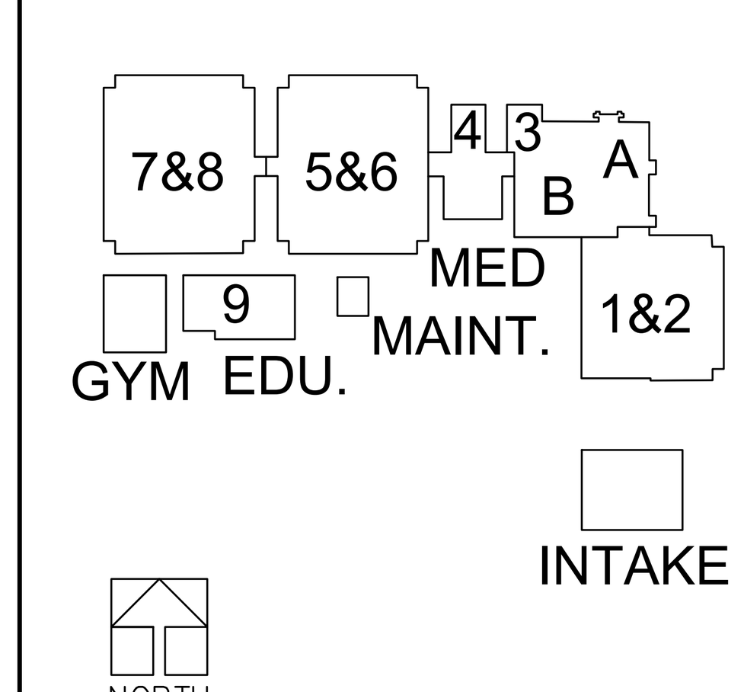
I. EXISTING FIBER PATCH CABLES TO BE REMOVED UNLESS OTHERWISE NOTED.

J. REMOVE EXISTING EQUIPMENT CABINET USED FOR THE EXISTING FIRE ALARM SYSTEM.

LEGEND NOTES
NEW EQUIPMENT NOTES

1. REFER TO GENERAL NOTES ON SHEET FA0.01 AND INCORPORATE AS APPLICABLE.
2. EXISTING DEVICES AND CONDITIONS INDICATED HERE WERE GATHERED FROM AS-BUILT DOCUMENTS AND SITE SURVEYS. ALL INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. THE CONTRACTOR SHALL CONFIRM ALL EXISTING DEVICE LOCATIONS AND CONDITIONS.
3. FAC SHALL FIREPROOF ALL PENETRATIONS CREATED FOR THIS PROJECT. PENETRATIONS THROUGH RATED FLOORS, CEILINGS, AND WALLS SHALL BE PROPERLY SEALED AND SLEEVED TO MAINTAIN THE EXISTING FIRE-RESISTANT RATING. WHERE RATING IS UNKNOWN FIREPROOFING SHALL MEET A 2HR RATING IN ALL CASES. SEALANT COLOR SHALL MATCH THE EXISTING SURFACES AS CLOSELY AS POSSIBLE.
4. FAC SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY THE INSTALLATION OF THIS WORK. NOTIFY THE FACILITY MAINTENANCE STAFF IMMEDIATELY OF ANY DAMAGE.
5. THE EXISTING FIRE ALARM SYSTEM EQUIPMENT REFERENCED ON THIS PLAN ARE SCHEDULED TO BE REPLACED AS PART OF THE PROJECT SCOPE.
6. EXISTING FIRE ALARM RACEWAYS AND WIRING TO BE REUSED UNLESS OTHERWISE NOTED. (TYPICAL)
7. THE NEW FIRE ALARM SYSTEM SHALL BE CONFIGURED AND INSTALLED AS A PROPRIETARY FIRE ALARM SYSTEM AS DEFINED BY NFPA WITH ALL ALARMS ANNUNCIATING AND RECORDED ON THE MAIN FACP IN SECURITY ELECTRONICS ROOM A1093.
8. FIRE ALARM SYSTEM SHALL SYNCHRONIZE ALL NOTIFICATION APPLIANCE CIRCUITS.
9. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY ON THE LOCAL FIRE ALARM CONTROL PANEL (FACP), THE MAIN FACP.B IN SEC ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE ALARM FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE LOCAL FACP, THE MAIN FMS SYSTEM, AND THE MAIN FACP.B ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
10. ALL COMMUNICATIONS BETWEEN FIRE ALARM PANELS SHALL BE OVER THE EXISTING FIBER OPTIC CABLE NETWORK. REFER TO FIBER RISER ON SHEET FA4.01.
11. FURNISH AND INSTALL A FIRE ALARM CONTROL PANEL (FACP), BACKUP BATTERIES, AND ASSOCIATED COMPONENTS. UTILIZE THE EXISTING FIRE ALARM POWER SOURCE. PROVIDE A FIRE ALARM CIRCUIT BREAKER LOCK AND LABEL "FACP" AS REQUIRED.
12. FAC SHALL REPLACE ALL SURGE PROTECTION DEVICES (SPD), SURGE SUPPRESSION DEVICES (SS) AND GROUND WIRING USED FOR THE FIRE ALARM SYSTEM. CONNECT TO THE NEAREST GROUNDING BAR OR CONDUCTOR AS REQUIRED.
13. FURNISH AND INSTALL REMOTE AUXILIARY BOOSTER POWER SUPPLY (NAC), BACKUP BATTERIES, AND ASSOCIATED COMPONENTS. UTILIZE EXISTING FIRE ALARM POWER SOURCE AND RECONNECT FIRE ALARM WIRING TO THE NEW SYSTEM. PROVIDE NACs AS REQUIRED. PROVIDE NEW CIRCUIT BREAKER LOCK AND LABEL "FACP" AS REQUIRED.
14. UTILIZE (4) FOUR EXISTING STRANDS OF OM3 (MM) FIBER OPTIC CABLE FOR THE FIRE ALARM SYSTEM. REFER TO FIRE ALARM FIBER RISER DIAGRAM ON SHEET FA4.01 FOR ADDITIONAL INFORMATION.
15. FURNISH AND AND INSTALL NEW FACTORY MANUFACTURED (MM) DUPLEX FIBER PATCH CABLES WITH ST-STYLE CONNECTORS BETWEEN THE EXISTING RACK MOUNTED LIU AND FACP.
16. TERMINATE FIBER OPTIC CABLE AT BOTH ENDS OF ASSOCIATED LIU/FIBER PATCH PANEL. TEST ALL FIBER IN ACCORDANCE WITH THE SPECIFICATIONS BEFORE PLACING IT INTO SERVICE.
17. FURNISH AND INSTALL FIRE MANAGEMENT GRAPHICS WORKSTATION (FMS). PROVIDE A NEW 24" LCD MONITOR, SERVER (CPU), KEYBOARD, AND OPTICAL MOUSE. LOCATE THE CPU IN A VENTED LOCKABLE CABINET UNDER THE EXISTING DESK OR MILLWORK COUNTERTOP.
18. FURNISH AND INSTALL NEW CONDUIT AND 2-PORT DATA OUTLET FOR THE NEW FMS WORKSTATION. ROUTE CONDUIT BETWEEN THE MAIN FACP AND EACH NEW FMS WORKSTATION. SURFACE MOUNT CONDUIT TO THE EXISTING STRUCTURE AND MOUNT DATA OUTLET NEAR FMS. MATCH DATA OUTLET FACEPLATE COLOR WITH THE EXISTING ONSITE. REFER TO DETAIL 6/FA6.01.
19. FURNISH AND INSTALL (2) CAT6 CABLES FOR EACH NEW FMS WORKSTATION.
20. UTILIZE THE AVAILABLE POWER OUTLETS FOR THE NEW FMS STATION AND PRINTER. REFER TO DETAIL 6/FA6.01.
21. FURNISH AND INSTALL A NEW PRINTER AND LOCATE ON THE EXISTING DESK OR MILLWORK NEAR THE FMS WORKSTATION. PROVIDE CABLES AS REQUIRED FOR CONNECTING TO THE NEW WORKSTATION.
22. FAC SHALL EXTEND THE EXISTING FIRE ALARM CIRCUIT WIRING FROM THE EXISTING CABINET (FATC) TO THE NEW FACP. PROVIDE NEW SET SCREW TERMINALS TO SPLICE CABLING BEING EXTENDED TO THE NEW FACP.
23. PROVIDE NEW (SS AND SPD) DEVICES AND GROUND WIRING FOR ALL FIRE ALARM WIRING THAT ENTERS AND/OR LEAVES THE BUILDING. CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
24. EXISTING HVAC PROGRAMMING FUNCTIONS AND SMOKE CONTROL OPERATIONAL INTERFACES CONNECTED TO THE EXISTING FIRE ALARM SYSTEM TO BE MAINTAINED AND INCORPORATED INTO THE NEW FIRE ALARM SYSTEM.
25. REPLACE ALL RELAYS CONTROL AND MONITORING MODULES IN THE EXISTING (HVAC) AOM/AIM CABINETS REQUIRED FOR SMOKE CONTROL. RECONNECT THE EXISTING WIRING TO THE NEW FIRE ALARM SYSTEM. REFER TO SHEET CABINET DETAILS ON SHEET FA4.02.
26. FURNISH AND INSTALL (1) NEW 20AMP, 120VAC BRANCH POWER CIRCUIT FROM THE EMERGENCY POWER PANEL (EL4/S2) FOR THE FACP. PROVIDE NEW BRANCH CIRCUIT BREAKER, BREAKER LOCK, AND LABEL "FACP."

KEY PLAN



CoreCivic

FIRE ALARM, LARGE SCALE PLANS
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA2.01
AUGUST 23, 2024

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MEMPHIS, TENNESSEE 38117
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www.rnsystemsdesign.com

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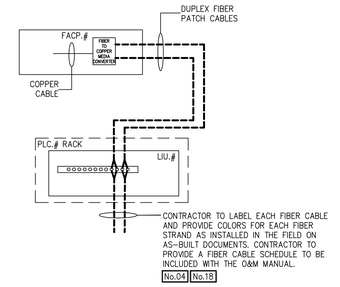
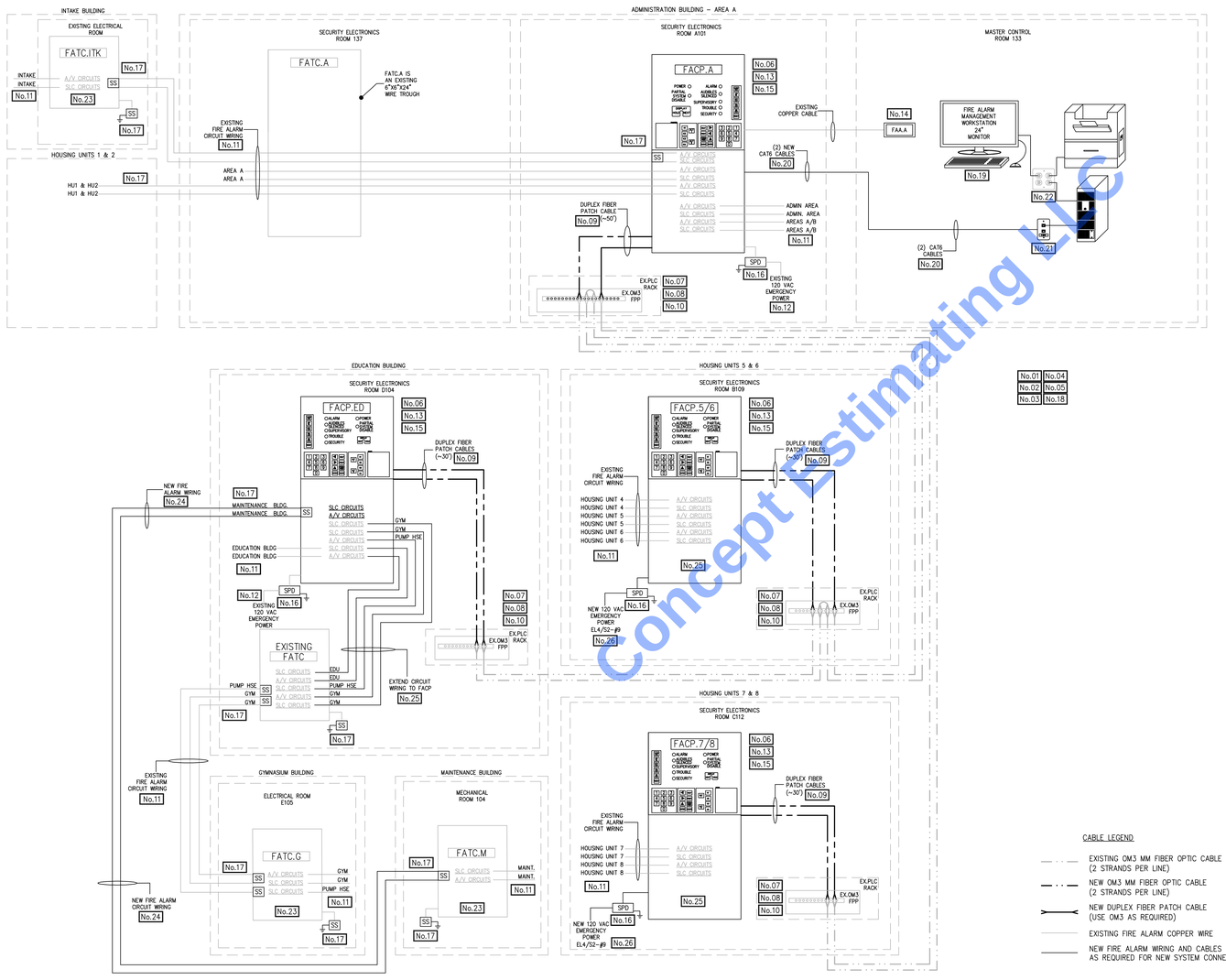
ITEMS ON THESE DETAILS ARE AS APPLICIPABLE TO SCOPE DEFINED ON SHEET FA 100

FOR AS-BUILT DOCUMENTATION:





No.01 No.04
No.02 No.05
No.03 No.18

CABLE LEGEND

- EXISTING OM3 MM FIBER OPTIC CABLE (2 STRANDS PER LINE)
- NEW OM3 MM FIBER OPTIC CABLE (2 STRANDS PER LINE)
- NEW DUPLEX FIBER PATCH CABLE (USE OM3 AS REQUIRED)
- EXISTING FIRE ALARM COPPER WIRE
- NEW FIRE ALARM WIRING AND CABLES AS REQUIRED FOR NEW SYSTEM CONNECTIONS

SHEET REISSUED IN ITS ENTIRETY.
ADM #01

FIRE ALARM RISER DIAGRAM

SCALE: NONE

Concept Estimating LLC

LEGEND NOTES

1. REFER TO GENERAL NOTES ON SHEET FA0.01 INCORPORATE AS APPLICABLE.
2. EXISTING EQUIPMENT AND CONDITIONS INDICATED HERE WERE GATHERED FROM AS–BUILT DOCUMENTS AND SITE SURVEYS. ALL INFORMATION IS BELIEVED TO BE CORRECT, BUT IS NOT GUARANTEED. THE CONTRACTOR SHALL CONFIRM ALL EXISTING EQUIPMENT LOCATIONS AND CONDITIONS AS SHOWN IN HALF–TONE UNLESS OTHERWISE NOTED.
3. THE OWNER SHALL HAVE FIRST RIGHT OF SALVAGE FOR ALL REMOVED USED EQUIPMENT. CONTRACTOR SHALL DISPOSE OF ALL EQUIPMENT NOT SALVAGED BY THE OWNER.
4. THE FAC SHALL BE RESPONSIBLE FOR VERIFYING THE FIBER LOOP USED FOR THE FIRE ALARM SYSTEM. DOCUMENT AND RECORD THE FIBER TYPE, JACKET COLOR, STRAND QUANTITY, AND DESIGNATED TERMINATIONS. LABEL ALL FIBER IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
5. EXISTING EQUIPMENT, WIRING AND CABLES SHOWN AS HALF–TONED SHALL REMAIN AND BE REUSED. NEW FIRE ALARM EQUIPMENT IS SHOWN IN BOLD.
6. FIRE ALARM SYSTEM NOTIFICATIONS AND STATUS ALARMS SHALL DISPLAY THE MAIN FACP.B IN SEC/MDF ROOM A101, THE FIRE ALARM ANNUNCIATOR (FAA) AND FIRE MANAGEMENT SYSTEM (FMS) IN MASTER CONTROL ROOM 133. ALARMS SHALL BE RESET FROM THE MAIN FACP.B AND FAA AND FMS WORKSTATION ONLY. PROVIDE A LIST OF ALARM TEXT NAME FOR REVIEW AND APPROVAL FROM THE FACILITY.
7. ALL COMMUNICATIONS BETWEEN FIRE ALARM PANELS SHALL BE OVER THE EXISTING OM3 MULTI–MODE FIBER OPTIC CABLE NETWORK. UTILIZE EXISTING STRANDS OF FIBER OPTIC CABLE FOR FIRE ALARM SYSTEM.
8. EXISTING FIBER PATCH PANELS (LIU) TO REMAIN AND BE USED FOR THE FIRE ALARM SYSTEM.
9. FURNISH AND INSTALL NEW FACTORY MANUFACTURED (MM) DUPLEX FIBER PATCH CABLES WITH ST–STYLE CONNECTORS, OM3 TYPE AS REQUIRED. PROVIDE CABLES IN LENGTHS AS REQUIRED IN ALL CASES.
10. TERMINATE AND TEST THE EXISTING FIBER SCHEDULED FOR USE BY THE FIRE ALARM SYSTEM AT BOTH ENDS BEFORE PLACING INTO SERVICE.
11. EXISTING SLC AND NAC WIRING SHALL REMAIN AND CONNECT TO THE NEW FIRE ALARM SYSTEM.
12. UTILIZE THE EXISTING 120VAC EMERGENCY POWER BRANCH CIRCUIT FOR THE FIRE ALARM EQUIPMENT BEING REPLACED. FURNISH AND INSTALL A NEW BREAKER LOCK AND LABEL "FACP" AS REQUIRED.
13. FURNISH AND INSTALL A FIRE ALARM CONTROL PANEL (FACP.#), BACKUP BATTERIES AND ASSOCIATED COMPONENTS. RECONNECT EXISTING CIRCUIT WIRING TO THE NEW FIRE ALARM SYSTEM. (TYPICAL)
14. FURNISH AND INSTALL A NEW FIRE ALARM ANNUNCIATOR (FAA.#). REUSE EXISTING CABLES TO CONNECT TO THE NEW FIRE ALARM SYSTEM.
15. FURNISH AND INSTALL REMOTE AUXILIARY POWER EXPANDERS UNIT (NAC), BACKUP BATTERIES, AND ASSOCIATED COMPONENTS. RECONNECT EXISTING CIRCUITRY TO THE NEW FIRE ALARM SYSTEM. PROVIDE NACs AS REQUIRED.
16. FURNISH AND INSTALL SURGE PROTECTION DEVICES (SPD) AND GROUND WIRING FOR ALL 120VAC POWER CIRCUITS USED FOR THE FIRE ALARM SYSTEM. CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
17. FURNISH AND INSTALL (SS/SPD) DEVICES AND GROUND WIRING FOR ALL FIRE ALARM WIRING THAT ENTERS AND/OR LEAVES THE BUILDING. CONNECT TO THE NEAREST EQUIPMENT GROUNDING BAR OR CONDUCTOR.
18. IN ADDITION TO WHAT IS DESCRIBED IN THE PROJECT SPECIFICATIONS, THE FAC SHALL PROVIDE A FIRE ALARM SYSTEM RISER AND TERMINATION SCHEDULE THAT CLEARLY IDENTIFIES ALL EQUIPMENT, DEVICES, CABLE AND FIBER. THE TERMINATION SCHEDULE AND RISER SHALL IDENTIFY THE EQUIPMENT ROOM AND THE ASSOCIATED FIRE ALARM SYSTEM EQUIPMENT BY NAME AT EACH LOCATION. THE TERMINATION SCHEDULE AND RISER PROVIDED SHALL INCLUDE FIBER TYPES, ROUTING INFORMATION, TERMINATION AND LIU LOCATION AND MUST INCLUDE THE INDIVIDUAL FIBER COLOR USED AT EACH PANEL CONNECTION. THE RISER SHALL INCLUDE VISUAL REFERENCE BETWEEN EACH PANEL AND INDIVIDUAL DETECTION AND ANNUNCIATION DEVICE.
19. FURNISH AND INSTALL FIRE MANAGEMENT GRAPHICS WORKSTATION. PROVIDE A 24" LCD MONITOR, SERVER (CPU), KEYBOARD, OPTICAL MOUSE, PRINTER, AND FACTORY MANUFACTURED CABLES AS REQUIRED FOR CONNECTIVITY; MOUNT CPU IN A LOCKABLE CABINET UNDER THE EXISTING MILLWORK.
20. FURNISH AND INSTALL (2) CAT6 CABLES BETWEEN THE FIRE ALARM CONTROL PANEL AND FMS WORKSTATION.
21. FURNISH AND INSTALL A NEW 2–PORT DATA OUTLET NEAR THE NEW FMS STATION. DATA OUTLET FACEPLATE TO MATCH THE EXISTING COLOR ONSITE. PROVIDE CONDUIT AS REQUIRED
22. UTILIZE THE AVAILABLE POWER OUTLETS FOR THE NEW FMS WORKSTATION AND PRINTER.
23. FAC TO REPLACE ALL SLC AND NAC CIRCUIT SCREW TERMINALS, NAC POWER SUPPLIES, (SS/SPD) DEVICES AND ASSOCIATED FIRE ALARM COMPONENTS. REUSE EXISTING FIRE ALARM ENCLOSURE.
24. FURNISH AND INSTALL NEW FIRE ALARM WIRING TO TIE IN THE MAINTENANCE BUILDING SLC AND NAC CIRCUITS TO THE NEW FACP.ED. TEST ALL NEW WIRING AT BOTH END BEFORE PLACING INTO SERVICE. REFER TO SHEET FA1.00 NEW CONDUIT INFORMATION.
25. FAC SHALL EXTEND THE EXISTING FIRE ALARM CIRCUIT WIRING FROM THE EXISTING CABINET (FATC) TO THE NEW FACP. PROVIDE NEW SET SCREW TERMINALS TO SPLICE CABLING BEING EXTENDED TO THE NEW FACP. REUSE EXISTING FIRE ALARM ENCLOSURE. (TYPICAL FOR NEW FACP IN SEC ROOM B109 AND SEC ROOM C112).
26. FURNISH AND INSTALL (1) NEW 20AMP, 120VAC BRANCH POWER CIRCUIT FROM THE EMERGENCY POWER PANEL (EL4/S2) FOR THE FACP. PROVIDE NEW BRANCH CIRCUIT BREAKER, BREAKER LOCK, AND LABEL "FACP."

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FIRE ALARM RISER DIAGRAM
FIRE ALARM SYSTEM REPLACEMENT
TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA4.01
AUGUST 23, 2024

Attachment No. FA05
to ADM No. 1
dated 26 September 2024

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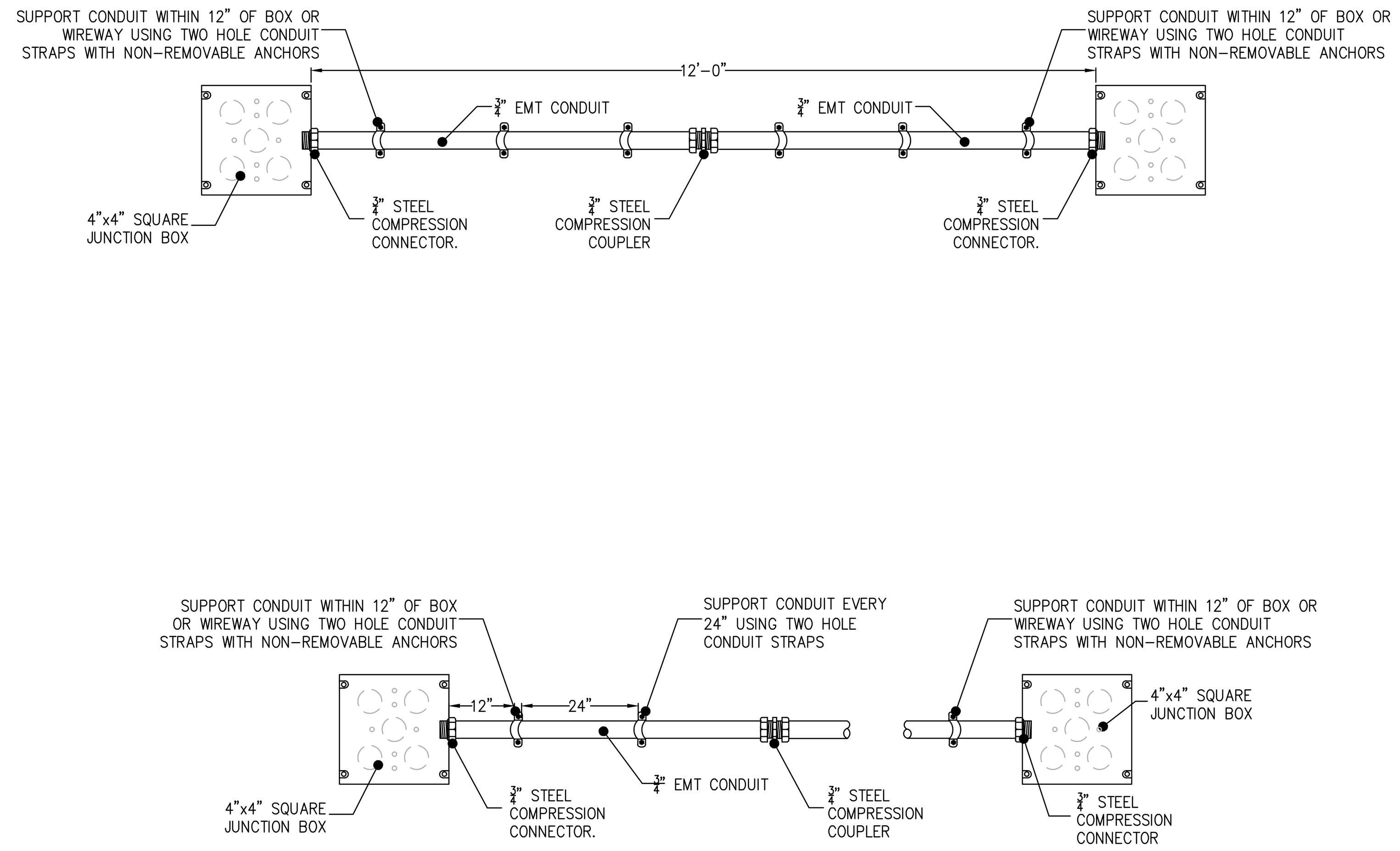
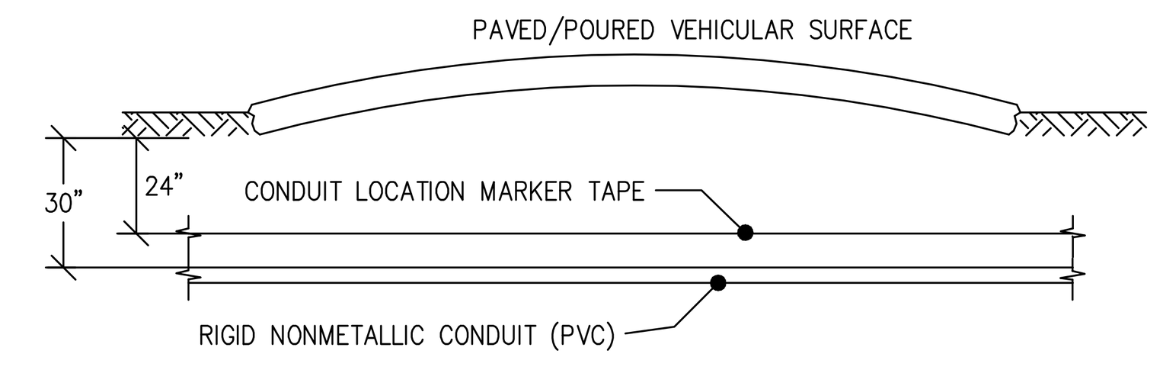


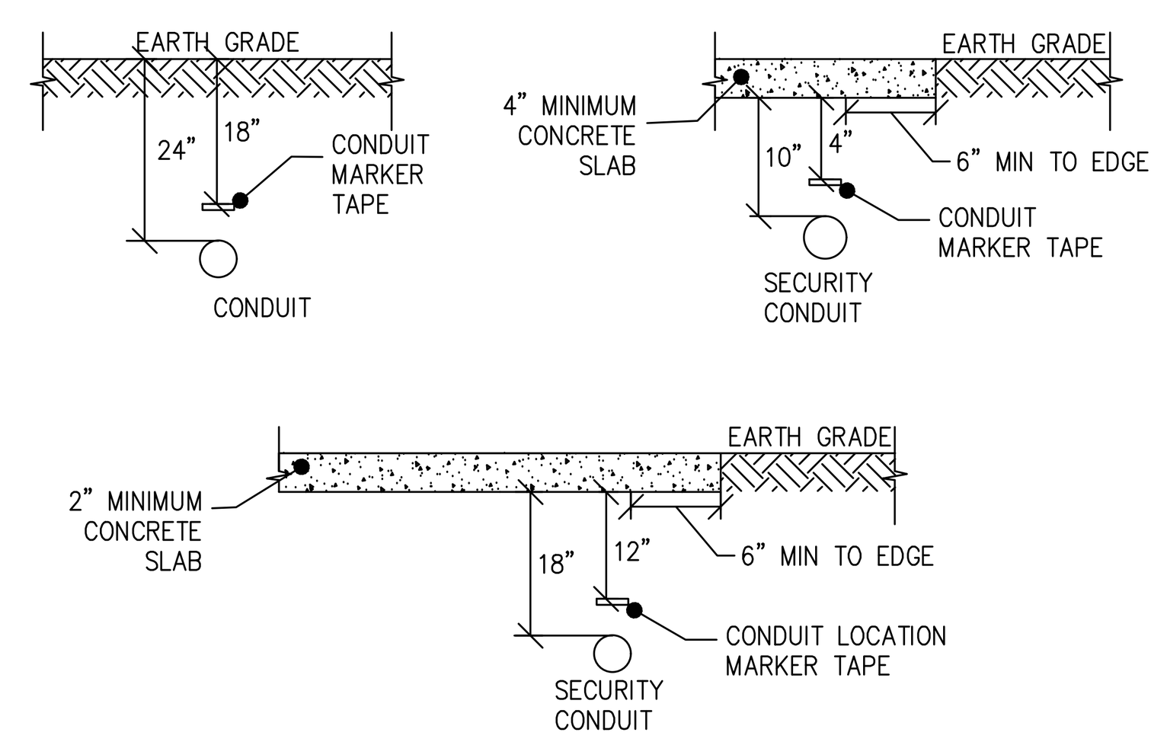
1 FA6.01 BOX INSTALLATION AND SUPPORT DETAILS

SCALE: NONE



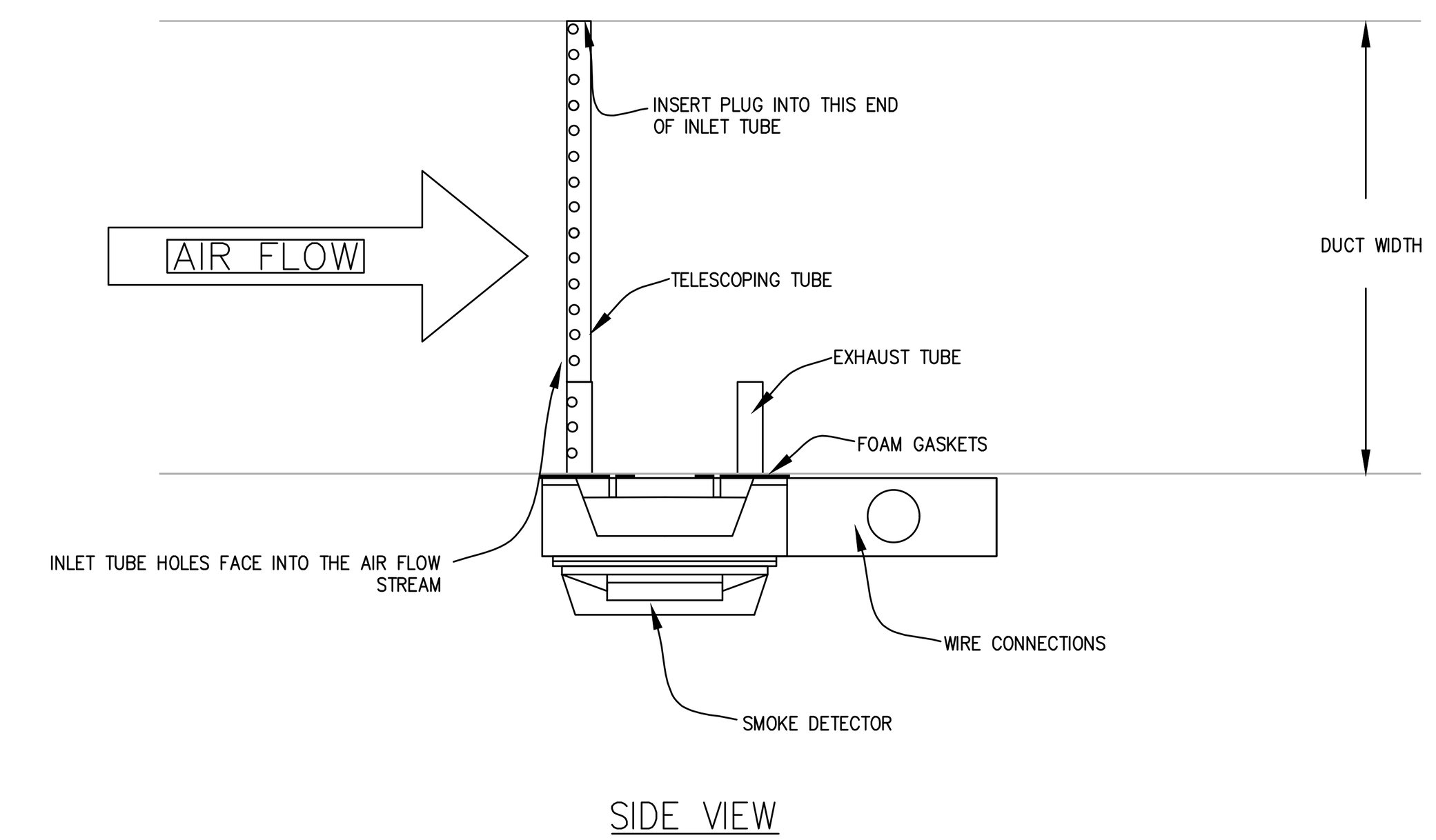
2 FA6.01 CONDUIT UNDER ROADWAY

SCALE: NONE



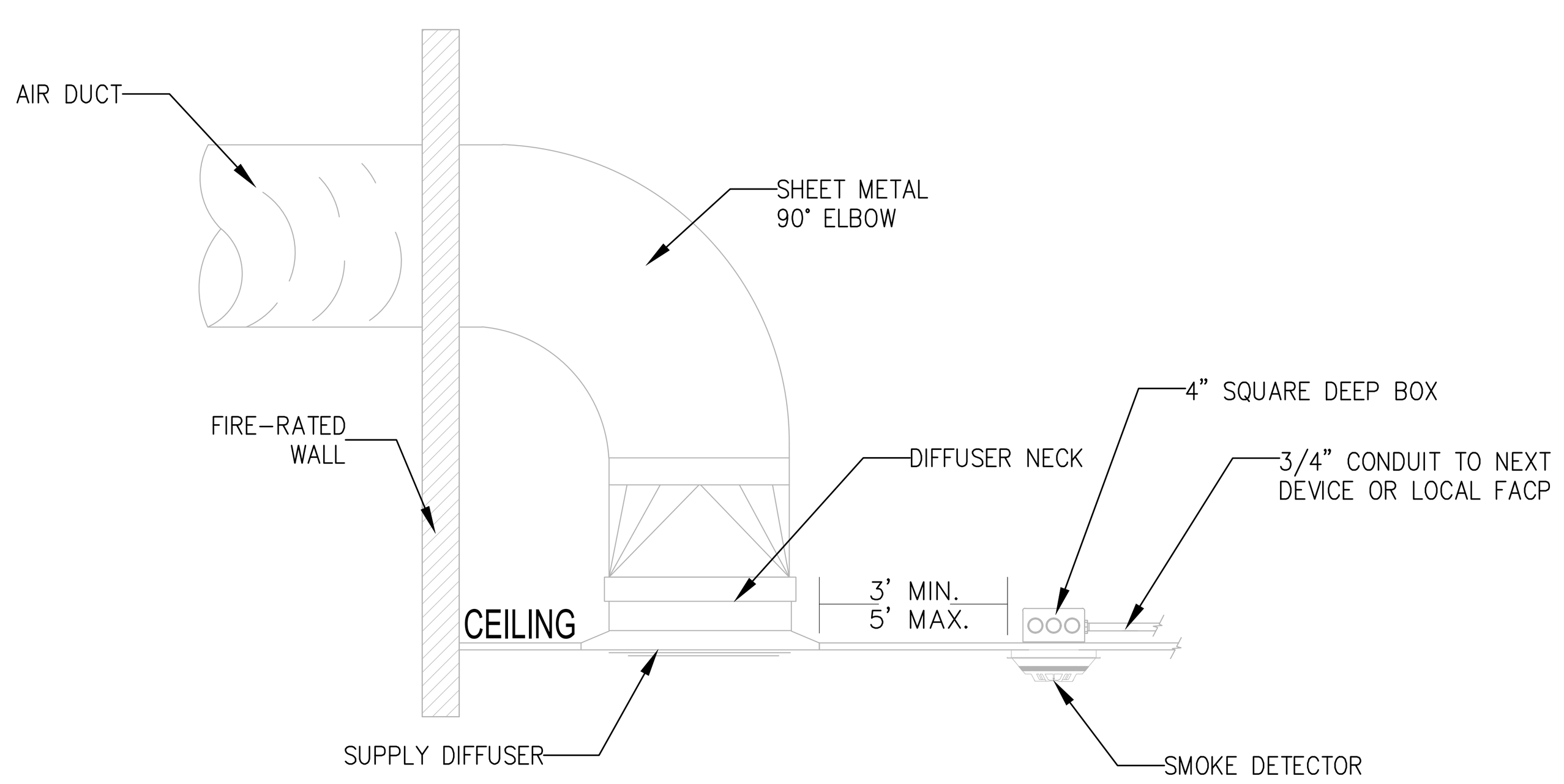
3 FA6.01 UNDERGROUND CONDUIT DETAIL

SCALE: NONE



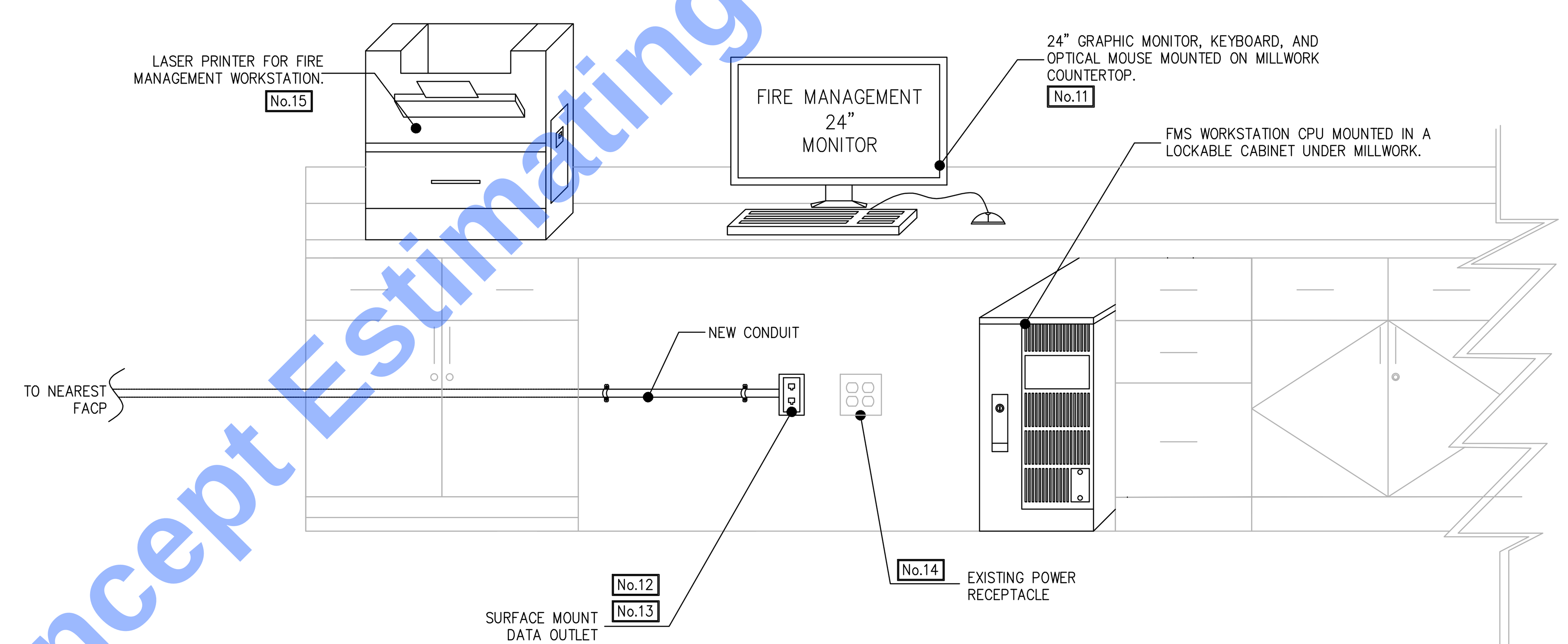
4 FA6.01 DUCT SMOKE DETECTOR INSTALLATION DETAIL

SCALE: NONE



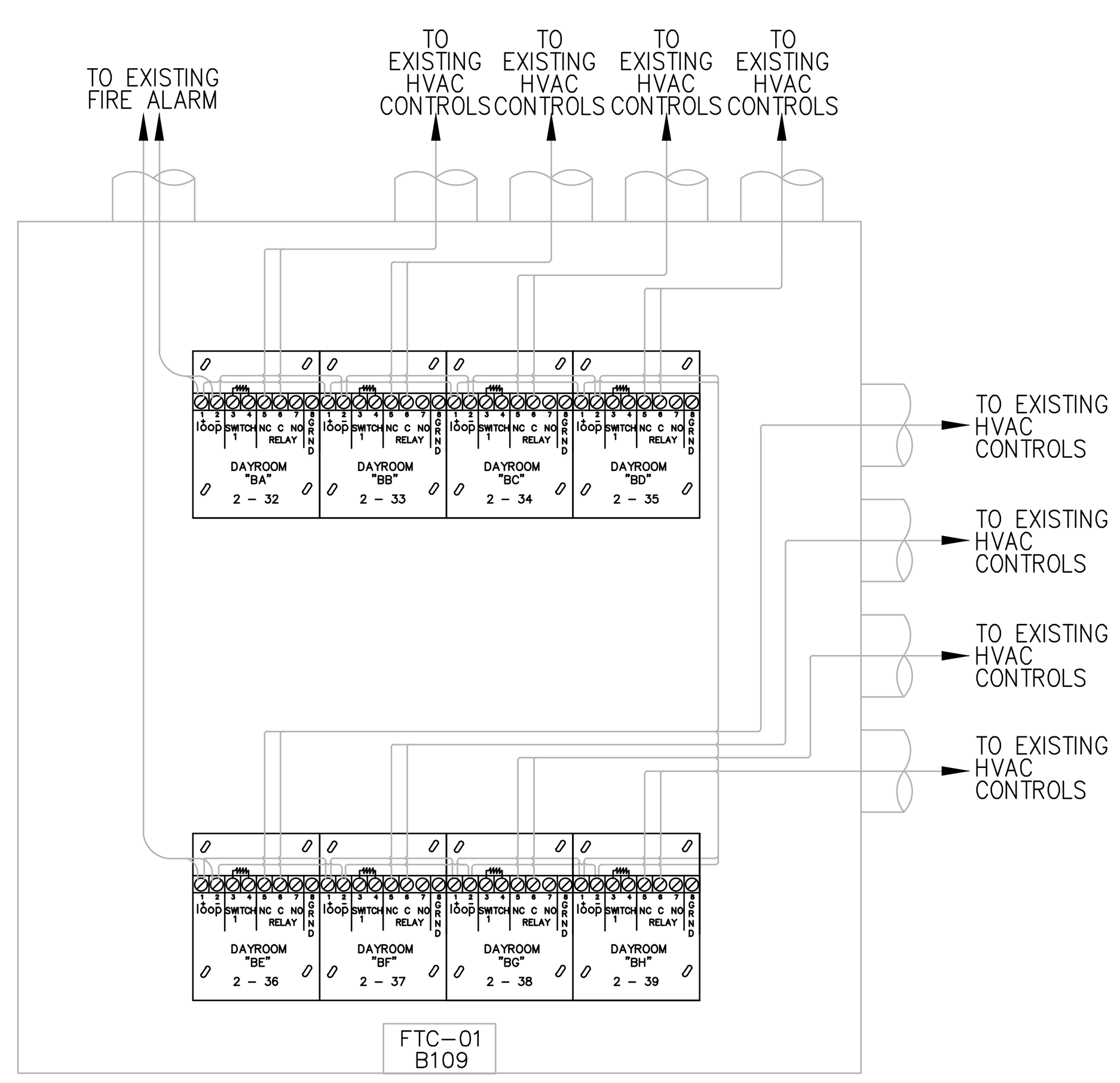
5 FA6.01 SMOKE DETECTOR AND AIR DIFFUSER INSTALLATION DETAIL

SCALE: NONE



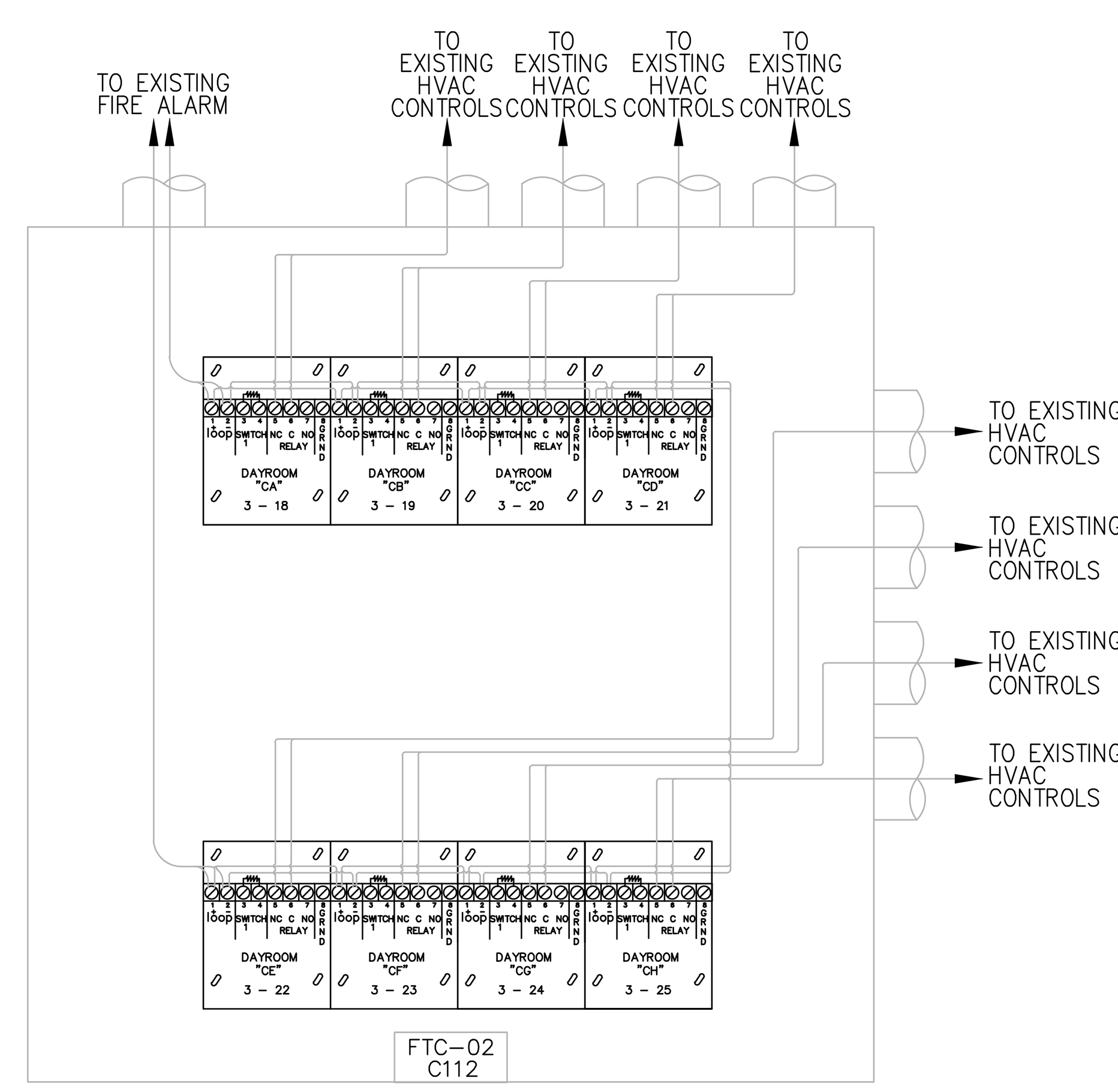
6 FA6.01 NEW EQUIPMENT LAYOUT, CENTRAL CONTROL ROOM J173 - FIRE MANAGEMENT STATION

SCALE: NONE



7 FA6.01 FTC CABINET #01 - HVAC INTERFACE FOR HOUSING UNITS 5 & 6

SCALE: NONE



8 FA6.01 FTC CABINET #02 - HVAC INTERFACE FOR HOUSING UNITS 7 & 8

SCALE: NONE

THIS SCOPE IS PART OF 2025 WIRING TO CONTROLS AND EXTERNAL DEVICES WILL REMAIN. MODULES IN ENCLOSURE Will be replaced and reconnected.

Concept Estimating LLC

LEGEND NOTES

1. REFER TO GENERAL NOTES ON SHEET FA0.00 INCORPORATE AS APPLICABLE.
2. ALL INSTALLATION SHALL BE AS REQUIRED BY THE NATIONAL ELECTRIC CODE. REFER TO SPECIFICATION SECTION 280500.2.
3. ALL CONDUIT SHALL BE INSTALLED AND SUPPORTED IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND LOCAL CODES. DETAILS HERE DESCRIBE TYPICAL CONDUIT INSTALLATION FOR THE FIRE ALARM SYSTEM.
4. ALL WIRING AND CABLE FOR THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN CONDUIT UNLESS NOTED OTHERWISE. FIRE ALARM CIRCUIT WIRING SHALL BE ROUTED IN A SEPARATE CONDUIT. MIXING WIRING AND CABLES OTHER THAN THAT OF WITH THE FIRE ALARM WIRING IN THE SAME CONDUIT IS UNACCEPTABLE.
5. ROUTE ALL EXTERIOR CONDUIT UNDERGROUND. WHERE EXPOSED, CONDUIT SHALL BE RIGID.
6. TOTAL BENDS BETWEEN PULL BOXES SHALL NOT EXCEED 360 DEGREES.
7. MINIMIZE STACKING OF CONDUITS UNDERGROUND. MUST COMPLY WITH MINIMUM DEPTHS. CONDUITS MUST BE FULLY SUPPORTED WITH NO GAPS.
8. WHERE CONFLICTS ARISE BETWEEN NATIONAL ELECTRIC CODE REQUIREMENTS, DIVISION 26 REQUIREMENTS, AND DIVISION 28 REQUIREMENTS, FURNISH AND INSTALL THE MOST STRINGENT.
9. ALL BOXES SHALL BE MASONRY BOXES.
10. PROVIDE NON-REMOVABLE BREAK OFF SECURITY TYPE BOLTS OR DRIVE-PIN ANCHORS. ALL EXPOSED FASTENERS TO BE TORX-PIN STYLE TAMPERPROOF SECURITY SCREWS.
11. FURNISH AND INSTALL FIRE MANAGEMENT GRAPHICS WORKSTATION (FMS). PROVIDE A NEW 24" LCD MONITOR, SERVER (CPU), KEYBOARD, AND OPTICAL MOUSE. LOCATE THE CPU IN A VENTED LOCKABLE CABINET UNDER THE EXISTING DESK OR MILLWORK COUNTERTOP.
12. FURNISH AND INSTALL NEW CONDUIT AND 2-PORT DATA OUTLET FOR THE NEW FMS WORKSTATION. ROUTE CONDUIT BETWEEN THE MAIN FACP AND EACH NEW FMS WORKSTATION. SURFACE MOUNT CONDUIT TO THE EXISTING STRUCTURE AND MOUNT DATA OUTLET NEAR FMS. MATCH DATA OUTLET FACEPLATE COLOR WITH THE EXISTING ONSITE.
13. FURNISH AND INSTALL (2) CAT6 CABLES FOR EACH NEW FMS WORKSTATION.
14. UTILIZE THE AVAILABLE POWER OUTLETS FOR THE NEW FMS STATION AND PRINTER.
15. FURNISH AND INSTALL A NEW PRINTER AND LOCATE ON THE EXISTING DESK OR MILLWORK NEAR THE FMS WORKSTATION. PROVIDE CABLES AS REQUIRED FOR CONNECTING TO THE NEW WORKSTATION.

CoreCivic

FIRE ALARM PLANS, CONDUIT AND DEVICE INSTALLATION DETAILS

FIRE ALARM SYSTEM REPLACEMENT

TORRANCE COUNTY DETENTION FACILITY, ESTANCIA, NM

FA6.01

AUGUST 23, 2024

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