REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

NASH CORRECTIONAL INSTITUTION
2869 US 64 ALT.
NASHVILLE, NORTH CAROLINA 27856

JOB ORDER # 3987
SCO ID # 22-24604-01A

ENGINEERS OF RECORD

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DRAWING INDEX

REV. **GENERAL**

G001 COVER SHEET
G002 UL PENETRATION DETAILS

MECHANICAL

M501 MECHANICAL - BUILDINGS 1, 2 & 3 WINGS B & C DETAILS & CONTROL DIAGRAMS MAINTENANCE
M502 MECHANICAL - BUILDING 4 WINGS B & C DETAILS & CONTROL DIAGRAMS
M503 MECHANICAL - BUILDINGS 1, 2, 3 & 4 WINGS B& C DETAILS & CONTROL DIAGRAMS MAINTENANCE

ELECTRICAL

E001 ELECTRICAL GENERAL NOTES, ABBREVIATIONS & SYMBOL LEGEND
EFD101 SINGLE CELL - 1 MAIN FLOOR AREA "A" & "C" FIRE ALARM DEMOLITION PLAN
EFD102 SINGLE CELL - 1 MAIN FLOOR AREA "B" FIRE ALARM DEMOLITION PLAN
EFD103 SINGLE CELL - 1 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM DEMOLITION PLAN
EFD104 SINGLE CELL - 2 MAIN FLOOR AREA "A" & "C" FIRE ALARM DEMOLITION PLAN
EFD105 SINGLE CELL - 2 MAIN FLOOR AREA "B" FIRE ALARM DEMOLITION PLAN
EFD106 SINGLE CELL - 2 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM DEMOLITION PLAN
EFD107 SINGLE CELL - 3 MAIN FLOOR AREA "A" & "C" FIRE ALARM DEMOLITION PLAN
EFD108 SINGLE CELL - 3 MAIN FLOOR AREA "B" FIRE ALARM DEMOLITION PLAN
EFD109 SINGLE CELL - 3 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM DEMOLITION PLAN
EFD110 SINGLE CELL - 4 MAIN FLOOR AREA "A" & "C" - FIRE ALARM DEMOLITION PLAN
EFD111 SINGLE CELL - 4 MAIN FLOOR AREA "B" FIRE ALARM DEMOLITION PLAN
EFD112 SINGLE CELL - 4 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM DEMOLITION PLAN
EFD113 GATE HOUSE - FIRE ALARM DEMOLITION PLAN
EF101 SINGLE CELL - 1 MAIN FLOOR AREA "A" & "C" FIRE ALARM PLAN
EF102 SINGLE CELL - 1 MAIN FLOOR AREA "B" FIRE ALARM PLAN
EF103 SINGLE CELL - 1 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM PLAN
EF104 SINGLE CELL - 2 MAIN FLOOR AREA "A" & "C" FIRE ALARM PLAN
EF105 SINGLE CELL - 2 MAIN FLOOR AREA "B" FIRE ALARM PLAN
EF106 SINGLE CELL - 2 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM PLAN
EF107 SINGLE CELL - 3 MAIN FLOOR AREA "A" & "C" FIRE ALARM PLAN
EF108 SINGLE CELL - 3 MAIN FLOOR AREA "B" FIRE ALARM PLAN
EF109 SINGLE CELL - 3 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM PLAN
EF110 SINGLE CELL - 4 MAIN FLOOR AREA "A" & "C" FIRE ALARM PLAN
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EF112 SINGLE CELL - 4 MEZZANINE FLOOR AREA "A" & "C" FIRE ALARM PLAN
EF113 GATE HOUSE FIRE ALARM PLAN

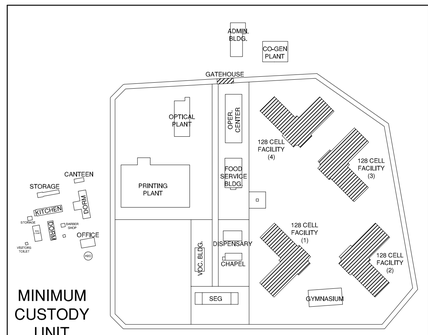
E401 TYPICAL FIRE ALARM RISER AND DETAILS
E501 TYPICAL FIRE ALARM RISER
EF601 FIRE ALARM MATRIX
E701 PARTIAL SITE PLAN - GENERAL LAYOUT

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	[X] Yes	[ ] No	
Exit Signs:	[X] Yes	[ ] No	
Fire Alarm:	[X] Yes	[ ] No	
Smoke Detection Systems:	[X] Yes	[ ] No	[ ] Partial
Carbon Monoxide Detection:	[ ] Yes	[X] No	
Sprinkler System :	[ ] Yes	[X] No	

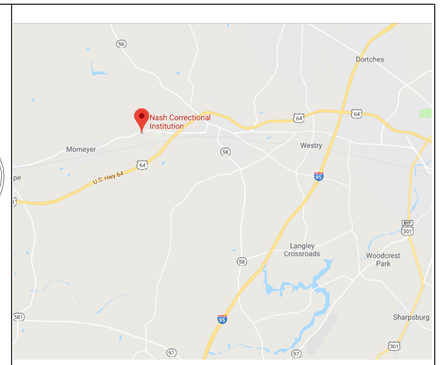
SYMBOLS LEGEND

# PAGE — WHERE THE ELEVATION IS LOCATED	ELEVATION SYMBOL
# PAGE — WHERE THE SECTION IS LOCATED	SECTION SYMBOL
N	NORTH ARROW
ROOM NAME ####	ROOM NAME AND NUMBER
	ELEVATION MARKER
1234567	KEYED NOTE MARKER
#	REVISION MARKER
A	WINDOW TYPE
1111A	DOOR NUMBER
A	PARTITION TYPE
1 2 3 4	ROOM FINISH INDICATOR



KEY PLAN

VICINITY MAP



LOCATION MAP
NASH COUNTY

N•C DPS
DEPARTMENT OF PUBLIC SAFETY
CENTRAL ENGINEERING
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NORTH CAROLINA DEPARTMENT OF PUBLIC SAFETY
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12.20.22 ISSUED FOR CONSTRUCTION

NO	DATE	REVISION

DRAWN BY: APD
DESIGNED BY: XXX
CHECKED BY: WWS
CADD DWG NO: JO3987-G001
JOB ORDER NO: 3987
PLOT DATE: 12.19.2022

NASH CORRECTIONAL INSTITUTION

2869 US 64 ALT
NASHVILLE, NORTH CAROLINA 27856

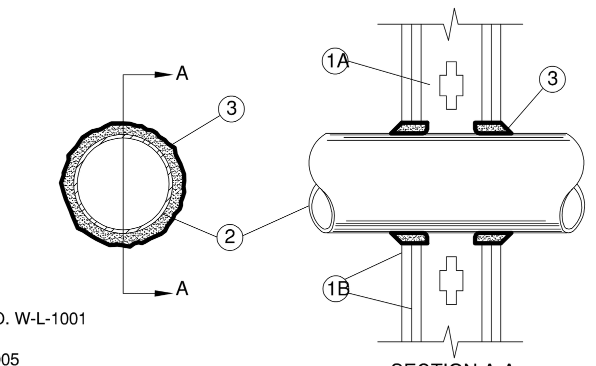
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL 1, 2, 3 & 4

SCO ID # 22-24604-01A

COVER SHEET

G001

UL DESIGN #W-L-1001



SYSTEM NO. W-L-1001

JUNE 15, 2005

F RATINGS - 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS - 0, 1, 2, 3, AND 4 HR (SEE ITEM 3)
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT

1. WALL ASSEMBLY - THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 H FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.

B. GYPSUM BOARD* - NOM 1/2 OR 5/8 IN. (13 OR 16 MM) THICK, 4 FT. (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 26 IN. (660 MM).

2. THROUGH-PENETRANT - ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN / (0 MM). (POINT CONTACT) TO MAX 2 IN. (51 MM) PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. STEEL PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.

B. IRON PIPE - NOM 24 IN. (610 MM) DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN (305 MM) DIAM (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.

C. CONDUIT - NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING

D. COPPER TUBING - NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING

E. COPPER PIPE - NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

F. THROUGH PENETRATING PRODUCT* - FLEXIBLE METAL PIPING THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:

1. NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

OMEGA FLEX INC

2. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

TITEFLEX CORP A BUNDY CO

3. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

WARD MFG INC

3. FILL, VOID OR CAVITY MATERIAL* - CAULK OR SEALANT - MIN 5/8. , 1-1/4,1-7/8 AND 2-1/2 IN. (16, 32, 48 AND 64 MM) THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY, APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

Max Pipe or Conduit Diam in. (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+WHEN COPPER PIPE IS USED, T RATING IS 0 H.

3M COMPANY - CP 25WB+ OR FB-3000 WT.

*BEARING THE UL CLASSIFICATION MARK

LAST UPDATED ON 2005-06-15

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THE APPEARANCE OF A COMPANY'S NAME OR PRODUCT IN THIS DATABASE DOES NOT IN ITSELF ASSURE THAT PRODUCTS SO IDENTIFIED HAVE BEEN MANUFACTURED UNDER UL'S FOLLOW-UP SERVICE. ONLY THOSE PRODUCTS BEARING THE UL MARK SHOULD BE CONSIDERED TO BE LISTED AND COVERED UNDER UL'S FOLLOW-UP SERVICE. ALWAYS LOOK FOR THE MARK ON THE PRODUCT.

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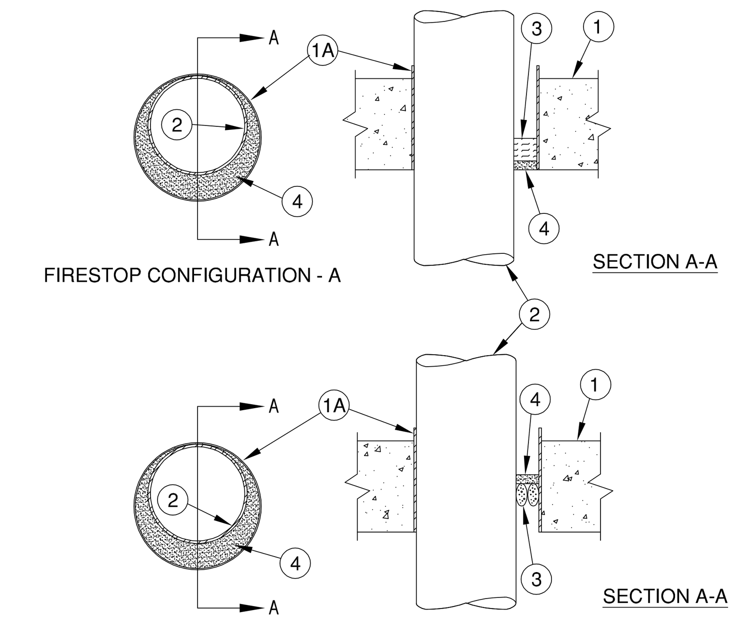
UL DESIGN #C-AJ-1175



FIRESTOP CONFIGURATION - A

FIRESTOP CONFIGURATION - B

1. FLOOR OR WALL ASSEMBLY - MIN 2-1/2 IN. THICK LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WHEN CONFIGURATION A IS USED, ON CONFIGURATION B IS USED IN CONJUNCTION WITH THE STEEL SLEEVE (ITEM 1A), FLOOR MAY BE CONSTRUCTED OF ANY MIN 6 IN. THICK UL CLASSIFIED HOLLOW CORE **PRECAST CONCRETE UNITS***. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED **CONCRETE BLOCKS***. MAX DIAM OF CIRCULAR THROUGH OPENING IS 10 IN.
SEE **CONCRETE BLOCKS** (CAZT) AND **PRECAST CONCRETE UNITS** (CFTV) CATEGORIES IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.

1A. STEEL SLEEVE (OPTIONAL) - NO. 10 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE SLEEVE CAST INTO CONCRETE FLOOR OR WALL. SLEEVE TO BE FLUSH WITH OR PROJECT MAX 2 IN. FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL.

2. THROUGH PENETRANTS - ONE METALLIC PIPE, CONDUIT OR TUBING TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. MAX ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND EDGE OF THROUGH OPENING NOT TO EXCEED 1-3/8 IN. MIN ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF THROUGH OPENING IS ZERO IN. (POINT CONTACT). PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. **STEEL PIPE** - NOM 8 IN. DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
B. **CONDUIT** - NOM 6 IN. DIAM (OR SMALLER) RIGID STEEL CONDUIT.
C. **CONDUIT** - NOM 4 IN. DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING.
D. **IRON PIPE** - NOM 4 IN. DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE.
E. **COPPER TUBING** - NOM 6 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBE.
F. **COPPER PIPE** - NOM 6 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

FIRESTOP CONFIGURATION A

3. PACKING MATERIAL - MIN 1 IN. THICKNESS OF TIGHTLY-PACKED MINERAL WOOL BATT MATERIAL USED AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP OR BOTTOM SURFACE OF FLOOR OR FROM EITHER SURFACE OF SOLID CONCRETE WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4). WHEN WALL IS CONSTRUCTED OF CONCRETE BLOCK, PACKING MATERIAL IS TO BE INSTALLED ON BOTH SIDES OF WALL ASSEMBLY. WHEN PRECAST HOLLOW CORE FLOOR IS USED, PACKING MATERIAL MUST BE INSTALLED ON BOTTOM SURFACE OF FLOOR.

4. FILL,VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - APPLIED TO FILL THE ANNULAR SPACE TO A MIN DEPTH OF 1/2 IN. FLUSH WITH THE TOP OR BOTTOM SURFACE OF THE FLOOR OR EITHER SURFACE OF THE SOLID CONCRETE WALL. A MIN 1/4 IN. DIAM BEAD OF CAULK SHALL BE APPLIED TO THE FLOOR OR WALL SURFACE WHERE THE PIPE, CONDUIT OR EMT IS INSTALLED IN POINT CONTACT WITH THE EDGE OF THE THROUGH OPENING. WHEN WALL IS CONSTRUCTED OF CONCRETE BLOCK, CAULK TO BE INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. WHEN PRECAST HOLLOW CORE FLOOR IS USED, CAULK FILL MATERIAL MUST BE INSTALLED ON BOTTOM SURFACE OF FLOOR.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT.
(THE W RATING APPLIES ONLY WHEN FB-3000 WT IS USED FLUSH WITH THE TOP SURFACE OF FLOOR.)

FIRESTOP CONFIGURATION B

3. PACKING MATERIAL - POLYETHYLENE BACKER ROD OR NOM 1 IN. THICKNESS OF TIGHTLY-PACKED MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED MIN 1/2 IN. FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF CAULK FILL MATERIAL (ITEM 4).

4. FILL,VOID OR CAVITY MATERIALS* - CAULK OR SEALANT - APPLIED TO FILL THE ANNULAR SPACE TO A MIN DEPTH OF 1/2 IN. FLUSH WITH THE TOP SURFACE OF THE FLOOR OR BOTH SURFACES OF THE WALL. A MIN 1/4 IN. DIAM BEAD OF CAULK SHALL BE APPLIED TO THE FLOOR OR WALL SURFACE WHERE THE PIPE, CONDUIT OR EMT IS INSTALLED IN POINT CONTACT WITH THE EDGE OF THE THROUGH OPENING.

3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT. (THE W RATING APPLIES ONLY WHEN FB-3000 WT IS USED.)

*BEARING THE UL CLASSIFICATION MARK

N★C DPS
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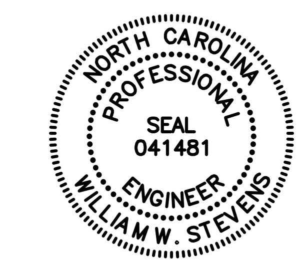


Digitally signed by William W Stevens
Date: 2022.12.28 07:57:53-05'00'

NO	DATE	REVISION
	12.20.22	ISSUED FOR CONSTRUCTION

DRAWN BY: MHA
DESIGNED BY: WWS
CHECKED BY: WWS
CADD DWG NO: JO3987-G002
JOB ORDER NO: 3987
PLOT DATE: 12.19.2022

NASH CORRECTIONAL INSTITUTION

2869 US 64 ALT
NASHVILLE, NORTH CAROLINA
27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL 1, 2, 3 & 4

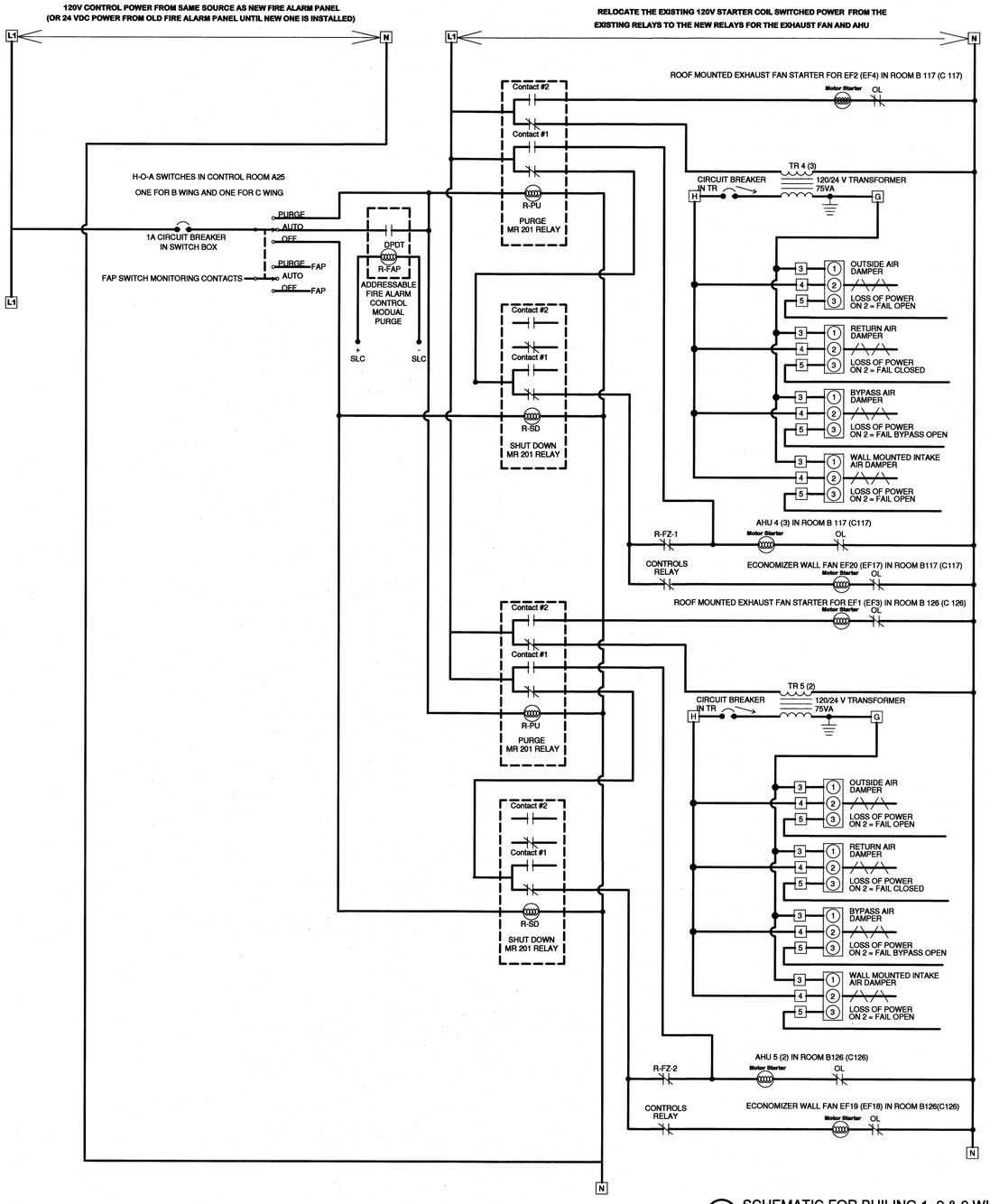
SCO ID # 22-24604-01A

UL DETAILS

G002

J:\UNIT – DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\COVER SHEET\JO3987-G000-GENERAL SHEETS.dwg MHARBED 12/19/22 – 4:49 P

NASH SINGLE CELL BUILDING 1 , 2 AND 3 HOUSING WINGS B AND C SMOKE PURGE/EVACUATION SCHEMATIC FAN AND ROOM NUMBERS FOR C ARE IN PARENTHESES



A3 M501 SCHEMATIC FOR BUILING 1, 2 & 3 WINGS B & C
SCALE: NONE

BUILDINGS 1, 2 AND 3. HAVE SINGLE SPEED AIR HANDLERS IN THE HOUSING AREAS. THE INCREASED AIR FLOW DURING SMOKE PURGE IS ACHIEVED BY OPENING THE MECHANICAL ROOM WALL MOUNTED OUTSIDE AIR DAMPER AND LETTING AIR FLOW INTO THE DAYROOMS THROUGH WHAT IS NORMALLY THE RETURN AIR GRILLS. THE ROOFTOP EXHAUST FANS ARE PULLING 22,000 CFM OUT OF EACH WING. 13,000 CFM IS SUPPLIED THROUGH THE TWO AIR HANDLERS AT 100 % OUTSIDE AIR AND THE REMAINING 9,000 CFM OF OUTSIDE AIR IS PULLED THROUGH THE FOUR RETURN AIR GRILLS INTO THE DAY ROOM. WE WILL MAINTAIN MOST OF THEIR ORIGINAL SEQUENCE OF OPERATION. THE NEW MANUAL SWITCHES AT THE GUARD STATION HAVE PRIORITY. WHEN A RETURN AIR DUCT DETECTOR IS ACTIVATED IN EITHER AIR HANDLER IN B OR C WINGS BOTH AIR HANDLERS SERVING THAT WING SHALL GO INTO THE PURGE MODE. IN PURGE THE RESPECTIVE AHU SYSTEM SHALL CONTINUE TO OPERATE AT THEIR NORMAL SPEED, EXHAUST FANS SHALL BE ENERGIZED TO RUN, OUTSIDE AIR DAMPERS OPEN 100%, RETURN AIR DAMPERS SHALL BE CLOSED 100%, THE BYPASS DAMPER WILL BE IN THE BYPASS POSITION. THE ONLY DIFFERENCE FROM THE ORIGINAL SEQUENCE IS THAT THE NEW FIRE ALARM SYSTEM SUPPLY DUCT DETECTORS WILL NO LONGER AUTOMATICALLY SHUT THE AIR HANDLERS DOWN IN THE HOUSING AREAS B AND C. IT WILL ONLY GIVE A SUPERVISORY SIGNAL ON A SUPPLY DUCT SMOKE DETECTOR ACTIVATION. THE ADMINISTRATION AREA A AIR HANDLER WILL STILL SHUT DOWN AUTOMATICALLY ON ACTIVATION OF ANY OF ITS DUCT DETECTORS. THE COIL VALVES WILL OPEN TO PREVENT COIL FREEZING BUT THROUGH THE CONTROLS SINCE THIS IS NOT A LIFE SAFETY ISSUE.

SCOPE:

THIS IS MAINTENANCE WORK PERFORMED IN CONJUNCTION WITH THE FIRE ALARM REPLACEMENT, JO 3987, THE MAINTENANCE WILL INCLUDE INSTALLING THE NEW OFF AUTO PURGE SWITCHES, 120 AND 24 VAC WIRING, CONDUIT AND NEW REMOTE PURGE AND SHUT DOWN RELAYS IN THE MECHANICAL ROOMS. THE NEW PURGE AND SHUT DOWN RELAYS WILL BE CONNECTED TO THE EXISTING POWER WIRING AND EXISTING CONTROLS IN PLACE OF THE EXISTING RELAYS THAT CURRENTLY SERVE THOSE FUNCTIONS. THE NEW SHUT DOWN AND PURGE RELAYS WILL EACH BE MOUNTED IN THEIR OWN BOX NEXT TO THE EXISTING CONTROLS BOX. SOME OF THE WORK THAT IS SHOWN ON THESE DRAWINGS ON THE CONTROLS SIDE OF THE SHUT DOWN AND PURGE RELAYS MAY BE PERFORMED AT A LATER DATE WHEN THE CONTROLS ARE REPLACED. THE MR 201 RELAYS ARE THE DIVIDING POINT BETWEEN THE NEW CONTROLS AND THIS WORK. CURRENTLY THE CONTROLS ARE WORKING IN BUILDING 1 AND 3. BUILDING 2 IS CURRENTLY HAVING ITS CONTROLS REPLACED UNDER A SEPARATE PROJECT. THEY HAVE ALSO BEEN ASKED TO INSTALL THE RELAYS THAT CONTROL PURGE AND SHUT DOWN AS WE HAVE SHOWN ON THESE DRAWINGS. IF THE CONTROLS ARE DONE FIRST THEY WILL CONNECT THE TEMPORARY 24 VDC CONTROL POWER FROM THE EXISTING FIRE ALARM BATTERIES CURRENTLY RUNNING THE EXISTING PURGE CONTROL RELAYS TO THE NEW RELAYS. THEIR WORK MAY BE COMPLETED BEFORE THE FIRE ALARM REPLACEMENT BUT IF IT IS NOT THEN THE FIRE ALARM PROJECT WILL BE REQUIRED TO INSTALL THE RELAYS. THE NEW CONTROLS CAN OPERATE ALL OF THE FANS AS NECESSARY USING THE POWER THAT COMES FROM THE SHUT DOWN RELAY WITHOUT INTERFERING WITH THE PURGE SEQUENCE. (WE HAVE AN EXAMPLE CONTROLS DESIGN AVAILABLE FROM JOHNSON COUNTY FOR THE 104 DORMITORIES THERE.) THE BACK DRAFT DAMPERS BELOW THE ROOFTOP EXHAUST FANS NEED TO BE SERVICED AND LUBRICATED WITH A CARBON GRAPHITE OR DRY TEFLON LUBRICANT TO INSURE PROPER OPERATION AS PART OF THIS WORK. THE RETURN AIR GRILLS ARE CURRENTLY PARTIALLY BLOCKED WITH TEMPORARY FILTER MATERIAL THAT NEEDS TO BE REMOVED TO ENABLE THE CORRECT AIR FLOW FOR SMOKE PURGE OF THE DAYROOM. ALSO THE HOLES IN THE RETURN AIR GRILLS NEED TO BE CLEANED OUT. ANY NEW CONDUIT PENETRATIONS OF FIRE SMOKE WALLS WILL BE FIRE STOPPED PER THE ORIGINAL DETAILS. ELECTRICAL INSPECTION AND FUNCTIONAL TEST WILL BE PERFORMED PRIOR TO ACCEPTANCE.

MATERIALS FOR ALL FOUR BUILDINGS TO SUPPORT FIRE ALARM REPLACEMENT

16 PURGE AND 20 SHUT DOWN RELAYS: AIR PRODUCTS INC MR 201/C/R UUKL LISTED FOR SMOKE CONTROL, 10 AMP DOUBLE POLE DOUBLE THROW, LED INDICATOR, MULTIPLE VOLTAGES FOR ACTIVATION 24 VDC 24 VAC.120 VAC, 230 VAC WITH RED ABS COVER AND 18 GA BACK BOX

12 SWITCHES 8 EA. 3 POSITION AND 4 EA. TWO POSITION STAY PUT NEW MANUAL PURGE/AUTO/OFF,AND AUTO OFF 30 MM SWITCHES IN CONTROL ROOMS: SQUARE D / SCHNEIDER STAY PUT 3 POSITION F CAM FOR 3 POSITION MODEL 9001SKS46B AND THE TWO POSITION SWITCH IS MODEL 9001KS34B, GRAINGER 6B326 WITH 8 RED 1NC SCHNEIDER 9001 KA3 AND 24 WHITE 1NC / 1NO SCHNEIDER MODEL 9001KA1 STANDARD DIRECT ACTING CONTACT BLOCKS TO PROVIDE SWITCHING AS SHOWN ON THESE DRAWINGS AND SPARE DRY CONTACTS TO MONITOR THE PURGE AND OFF POSITION FOR THE FIRE ALARM SYSTEM TO PROVIDE TROUBLE SIGNAL ALARM IN THE OFF POSITION AND SUPERVISORY SIGNAL IN THE PURGE POSITION. LOOKING AT THE BACK OF THE SWITCH THE RED BLOCK WILL BE ON THE RIGHT AND THE TWO WHITE BLOCKS WILL BE ON THE LEFT. 4 EA. NEW AUTO/ OFF SWITCHES LIKE THE ABOVE SWITCHES BUT WITH A DIFFERENT CAM FOR TWO POSITIONS USE GREENLEE KNOCK OUT PUNCH 60242 TO MAKE HOLES IN THE BOX FOR MOUNTING THE SWITCHES.

4 NEW UL LISTED NEMA 12 ELECTRICAL BOXES HOFFMAN A1008CHS 10 INCHES WIDE BY 8 INCHES TALL AND 4 INCHES DEEP WITH GROUNDED HINGED DOORS AND INTERIOR MOUNTING PLATE A10P8 TO MOUNT THE CONTROL ROOM SWITCHES AND LEDS. THEY WILL HAVE RED PHENOLIC FACEPLATES ATTACHED TO THE DOOR WITH WHITE ETCHED LETTERING AS SHOWN ON DRAWING M503.

32 LED INDICATING LIGHTS 120 VAC, 100,000 HOUR AVERAGE LIFE, 12 YELLOW TO INDICATE OFF POSITION, 12 GREEN TO INDICATE AUTO POSITION AND 8 RED TO INDICATE THE PURGE POSITION.

USE 12 GAUGE WIRE WITH 600 VOLT RATED INSULATION BETWEEN THE JUNCTION BOX THAT SUPPLIES THE POWER TO THE NEW FIRE ALARM PANEL AND THE 1 AMP CIRCUIT BREAKER IN THE SWITCH BOX. USE 16 GAUGE WIRE WITH 600 VOLT RATED INSULATION FROM THE 1 AMP CIRCUIT BREAKER TO THE RELAYS IN THE MECHANICAL ROOMS. THE 16 GAUGE WIRING WILL BE COLOR CODED RED FOR PURGE, YELLOW FOR OFF AND WHITE FOR NEUTRAL. THE CONNECTIONS ON THE TERMINATION BAR IN THE SWITCH BOX SHALL BE NUMBERED. THE WIRES SHALL ALSO BE NUMBERED AND IDENTIFIED BY RELAY ROOM LOCATION ON THE SHOP DRAWINGS.

(FUTURE REFERENCE FOR CONTROLS BUT NOT INCLUDED AS PART OF FIRE ALARM SUPPORT THE DAMPER OPERATORS WILL BE BELIMO FSAFB24-SR, 24 VAC, 180 INCH LB, DIRECTION OF FAIL SAFE ROTATION SELECTED BY MOUNTING, FAIL SAFE SPRING OPERATION TIME LESS THAN 20 SECONDS, SUITABLE FOR USE ON UL555S SMOKE DAMPERS, WITH ANTI-ROTATION BRACKET AF-P)

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NORTH CAROLINA PROFESSIONAL SEAL A2404 ENGINEER JERRY LEE IMPORT

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DESIGNED BY: JI
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NASH CORRECTIONAL INSTITUTION

2869 US 64 ALT
NASHVILLE, NORTH CAROLINA
27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL 1, 2. 3 & 4

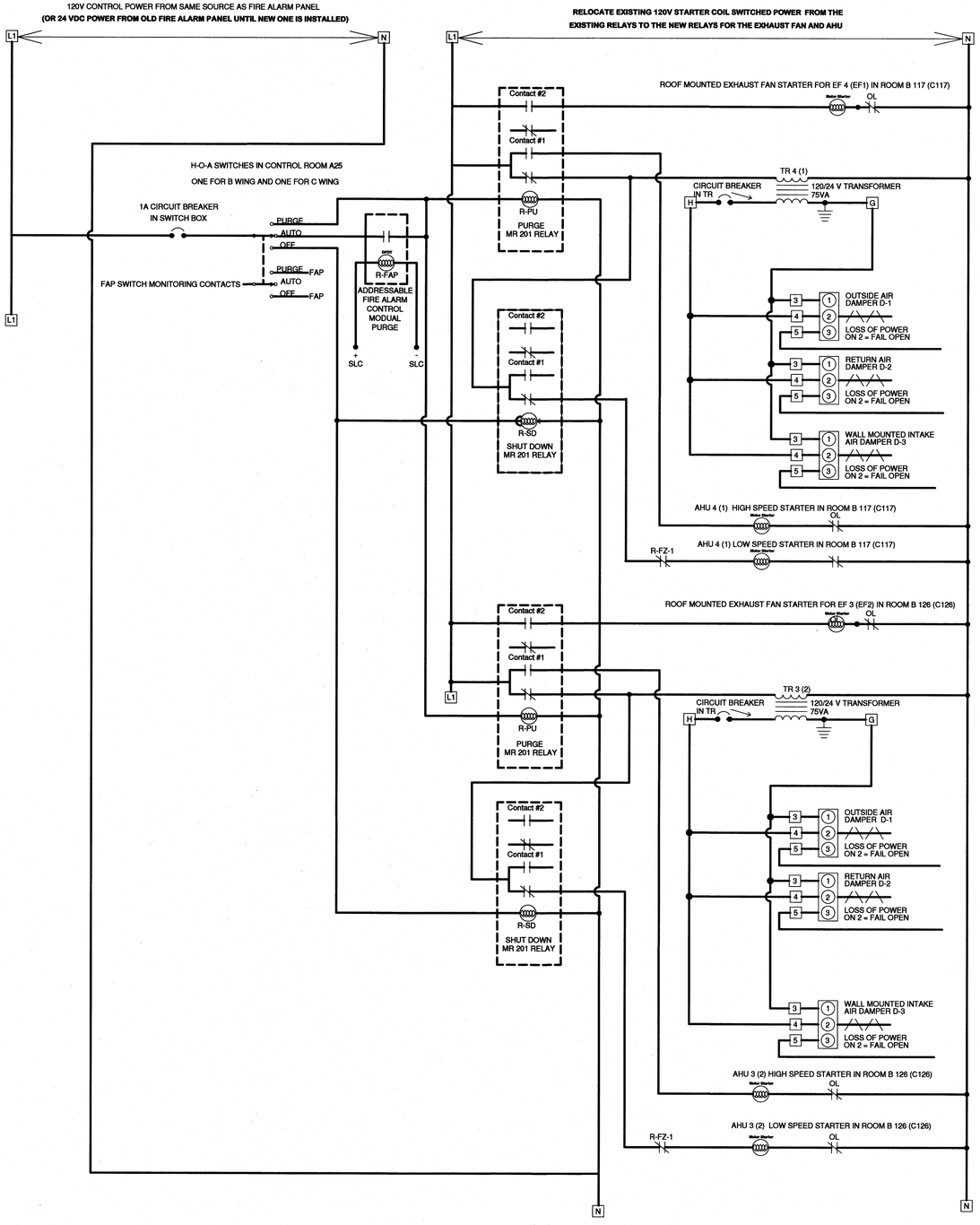
SCO ID # 22-24604-01A

MECHANICAL
BUILDINGS 1, 2 & 3 WINGS B & C
DETAILS &
CONTROL DIAGRAMS
MAINTENANCE

M501

SPARE CONTACTS TO REPORT STATUS TO CONTROLS TYPICAL

NASH SINGLE CELL BUILDING 4 HOUSING WINGS B AND C SMOKE PURGE / EVACUATION SCHEMATIC FAN AND ROOM NUMBERS FOR C ARE IN PARENTHESES



A3 M502 SCHEMATIC FOR BUILDING 4 WINGS B & C
SCALE: NONE

BUILDING 4 IS SLIGHTLY DIFFERENT AND NEWER THAN BUILDINGS 1, 2 AND 3. IT HAS TWO SPEED AIR HANDLERS IN THE HOUSING AREAS. WE WILL MAINTAIN MOST OF THEIR ORIGINAL SEQUENCE OF OPERATION SHOWN ON DETAIL 11 ON DRAWING M4.1 OF THE ORIGINAL PLANS. THERE IS A CONFLICT BETWEEN THAT DETAIL AND THE DAMPER SCHEDULE ON DRAWING M1 WHICH SHOWS THE RETURN DAMPER AS BEING OPEN IN SMOKE PURGE. THAT MAKES MORE SENSE SINCE THE MECHANICAL ROOM IS FLOODED WITH OUTSIDE AIR AND THE RETURN AIR DAMPER IS NOT DUCTED BUT OPEN TO THE MECHANICAL ROOM. ALSO DETAIL 11 SHOWS A COIL BYPASS DAMPER WHICH WE DON'T HAVE, SO I AM COMPLYING WITH THE DAMPER SCHEDULE ON DRAWING M1. THE MANUAL SWITCHES AT THE GUARD STATION SHALL HAVE PRIORITY OVER THE AUTOMATIC RESPONSE. WHEN A RETURN AIR DUCT DETECTOR IS ACTIVATED IN EITHER AIR HANDLER IN WING B OR C BOTH AIR HANDLERS SERVING THAT WING SHALL GO INTO THE PURGE MODE. IN PURGE THE RESPECTIVE AHU SYSTEM SHALL BE ENERGIZED TO HIGH SPEED, EXHAUST FANS SHALL BE ENERGIZED TO RUN, OUTSIDE AIR DAMPERS TO 100% OPEN, RETURN AIR DAMPERS SHALL BE 100% OPEN. THE DIFFERENCE FROM THE ORIGINAL FIRE ALARM SEQUENCE IS THAT THE NEW FIRE ALARM SYSTEM WILL NO LONGER AUTOMATICALLY SHUT THE AIR HANDLERS DOWN IN THE HOUSING AREAS B AND C. IT WILL ONLY GIVE A SUPERVISORY SIGNAL ON A SUPPLY DUCT SMOKE DETECTOR ACTIVATION. THE ADMINISTRATION AREA WING A AIR HANDLER WILL STILL SHUT DOWN ON ACTIVATION OF ANY OF ITS DUCT DETECTORS .THE COIL VALVES WILL OPEN TO PREVENT COIL FREEZING BUT THROUGH THE CONTROLS SINCE THIS IS NOT A LIFE SAFETY ISSUE. THE CONTROLS WILL BE NOTIFIED OF THE SMOKE PURGE ACTIVATION THROUGH ADDITIONAL RELAYS AS DETERMINED BY THE CONTROLS CONTRACTOR. ONE GOOD LOCATION IS ACROSS THE DAMPER TRANSFORMER WHICH IS ON UNLESS WE ARE IN PURGE. THE SPARE CONTACTS ON THE OFF SWITCH CAN BE USED TO NOTIFY THE CONTROLS THAT THE SWITCH IS IN THE OFF POSITION.

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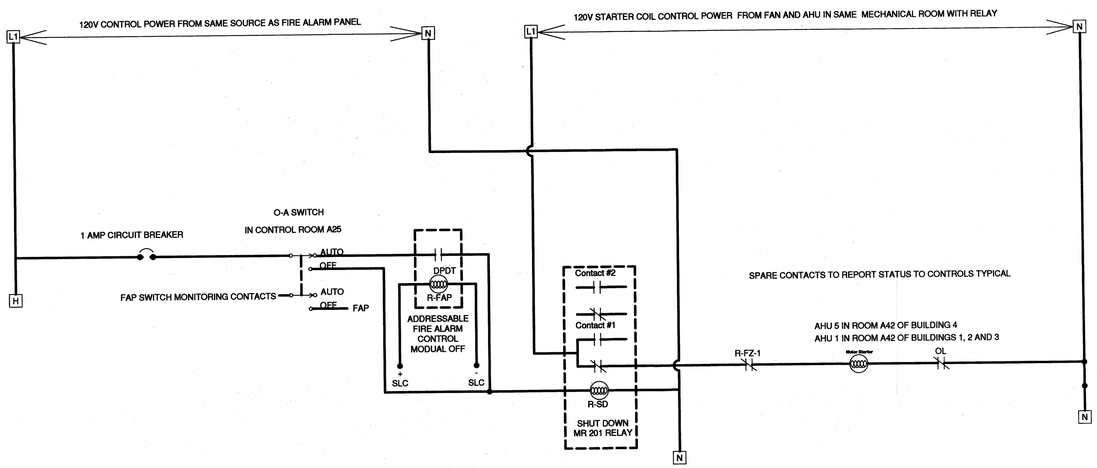
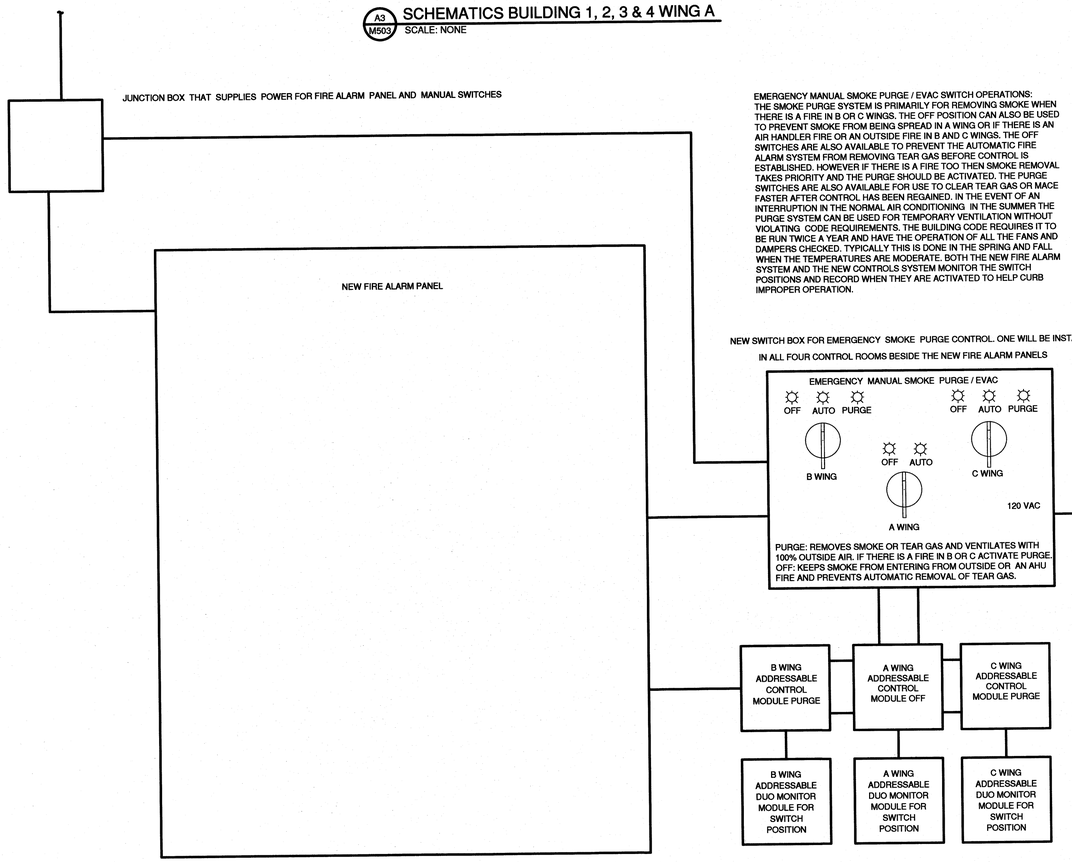
MAINTENANCE

M502

NASH SINGLE CELL BUILDING 1 , 2 AND 3 ADMINISTRATION AREA A ONLY HAS AIR HANDLER SHUT DOWN IN THE EVENT THAT SMOKE ACTIVATES A DUCT DETECTOR

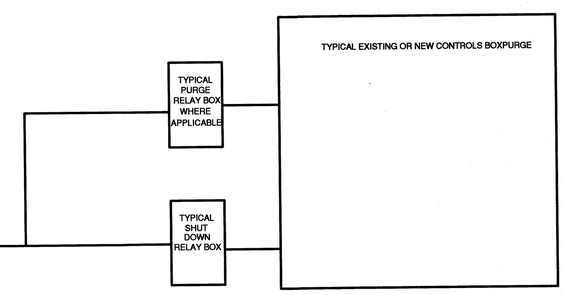


A3 M503 SCHEMATICS BUILDING 1, 2, 3 & 4 WING A
SCALE: NONE



EMERGENCY MANUAL SMOKE PURGE / EVAC SWITCH OPERATIONS:
THE SMOKE PURGE SYSTEM IS PRIMARILY FOR REMOVING SMOKE WHEN THERE IS A FIRE IN B OR C WINGS. THE OFF POSITION CAN ALSO BE USED TO PREVENT SMOKE FROM BEING SPREAD IN A WING OR IF THERE IS AN AIR HANDLER FIRE OR AN OUTSIDE FIRE IN B AND C WINGS. THE OFF SWITCHES ARE ALSO AVAILABLE TO PREVENT THE AUTOMATIC FIRE ALARM SYSTEM FROM REMOVING TEAR GAS BEFORE CONTROL IS ESTABLISHED. HOWEVER IF THERE IS A FIRE TOO THEN SMOKE REMOVAL TAKES PRIORITY AND THE PURGE SHOULD BE ACTIVATED. THE PURGE SWITCHES ARE ALSO AVAILABLE FOR USE TO CLEAR TEAR GAS OR MACE FASTER AFTER CONTROL HAS BEEN REGAINED. IN THE EVENT OF AN INTERRUPTION IN THE NORMAL AIR CONDITIONING IN THE SUMMER THE PURGE SYSTEM CAN BE USED FOR TEMPORARY VENTILATION WITHOUT VIOLATING CODE REQUIREMENTS. THE BUILDING CODE REQUIRES IT TO BE RUN TWICE A YEAR AND HAVE THE OPERATION OF ALL THE FANS AND DAMPERS CHECKED. TYPICALLY THIS IS DONE IN THE SPRING AND FALL WHEN THE TEMPERATURES ARE MODERATE. BOTH THE NEW FIRE ALARM SYSTEM AND THE NEW CONTROLS SYSTEM MONITOR THE SWITCH POSITIONS AND RECORD WHEN THEY ARE ACTIVATED TO HELP CURB IMPROPER OPERATION.

A3 M503 CONTROL ROOM ARRANGEMENT OF NEW FIRE ALARM PANEL, SWITCHES AND RELAY MODULES
SCALE: NONE



NEW RELAY BOXES FOR EMERGENCY SMOKE PURGE AND SHUT DOWN CONTROL WILL BE INSTALLED
IN EACH MECHANICAL ROOM NEXT TO THE NEW OR EXISTING CONTROLS. A WINGS ONLY GETS A SHUT DOWN RELAY BOX

A3 M503 TYPICAL MECHANICAL ROOM LAYOUT OF RELAYS ON WALL NEXT TO CONTROLS
SCALE: NONE

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NORTH CAROLINA PROFESSIONAL SEAL 12404 ENGINEER JEFFREY LEE IMHOFF
12/12/22

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ELECTRICAL SYMBOLS LEGEND

LUMINAIRE SYMBOLS: REFER TO LUMINAIRE SCHEDULE FOR ADDITIONAL REQUIREMENTS. LETTER DESIGNATES TYPE.

Symbol	Description
A	CEILING MOUNTED LUMINAIRE
B	WALL OR CEILING MOUNTED LINEAR LUMINAIRE
	EMERGENCY LUMINAIRE
D	ROUND, CEILING MOUNTED LUMINAIRE, SIZE AS SHOW ON PLANS AND AS SCHEDULED
F	WALL MOUNTED SCONCE TYPE LUMINAIRE
	TRACK LIGHTING, PROVIDE NUMBER OF LIGHTING HEADS AS INDICATED
X1	EXIT LIGHT, BATTERY POWERED, UON. SHADED QUADRANTS INDICATE FACES. CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF SWITCHING. ARROWS INDICATE DIRECTION ARROWS.
EMB-1	EMERGENCY BATTERY LUMINAIRE, WALL MOUNTED, 90 MINUTES BATTERY POWERED. CONNECT TO LOCAL LIGHTING CIRCUIT AHEAD OF SWITCHING/CONTROLS UON.
ER	REMOTE MOUNTED EMERGENCY LIGHTING HEADS
	POLE-MOUNTED SITE LUMINAIRE
30A	DISCONNECT SWITCH - HEAVY DUTY, UNFUSED WITH CURRENT RATING
30A/20A	ENCLOSED CIRCUIT BREAKER DISCONNECT SWITCH, CURRENT RATING/FUSE SIZE
	PANELBOARD (PANEL)
30A/30A	NONFUSED DISC ATT
	COMBINATION STARTER
ASD	ADJUSTABLE SPEED DRIVE (VFD)
M	MOTOR
	UTILITY POLE
J	JUNCTION BOX
	DUPLEX RECEPTACLE, NEMA 5-20R
S	DUPLEX RECEPTACLE, NEMA 5-20R SUBSCRIPT INDICATES SECURITY WALL PLATE
	DOUBLE DUPLEX RECEPTACLE, NEMA 5-20R
	FLUSH FLOOR MOUNTED DUPLEX RECEPTACLE. NEMA 5-20R, WITH COMMUNICATION/DATA CAPABILITY
GFI	DUPLEX RECEPTACLE, NEMA 5-20R SUBSCRIPT INDICATES THE FOLLOWING: S SECURITY WALL PLATE GFI GROUND FAULT CIRCUIT INTERRUPTER WP GROUND FAULT CIRCUIT INTERRUPTER WITH WEATHERPROOF COVER H HOSPITAL GRADE EWC ELECTRIC WATER COOLER. WIRE TO GFCI BREAKER IG ISOLATED GROUND AC ABOVE COUNTER
	SPECIAL PURPOSE RECEPTACLE, FOR ELECTRICAL EQUIPMENT. REFER TO PLANS FOR NEMA CONFIGURATION.
	FACTORY WIRED PLUGMOLD
$	SINGLE-POLE WALL SWITCH
$3	3-WAY WALL SWITCH
$4	4-WAY WALL SWITCH
$D	DIMMER SWITCH, TYPE SHALL MATCH LUMINAIRES BEING CONTROLLED
$P	SINGLE-POLE WALL SWITCH WITH PILOT LIGHT (LIT WHEN IN THE ON POSITION)
$M	SINGLE-POLE MOTOR RATED SWITCH. A "2" SUBSCRIPT INDICATES A 2-POLE SWITCH.
$a,b	WALL SWITCH, SUBSCRIPT INDICATES ASSOCIATED LUMINAIRES BEING CONTROLLED. PROVIDE A SEPARATE SWITCH FOR EACH SUBSCRIPT LETTER INDICATED.
	HOMERUN - PROVIDE 20-1P BREAKER WITH 2-#12, 1-#12G, 3/4"C TO PANEL AS INDICATED MINIMUM, UON
PC	PHOTOCELL
800A LSIG	CIRCUIT BREAKER WITH ASSOCIATED AMPACITY AND FEATURES TRIP ELEMENTS - ELECTRONIC TRIP UNIT L - LONG TIME I - INSTANTANEOUS S - SHORT TIME G - GROUND FAULT
	GROUND BAR
G	GROUND LOOP
	GROUND ROD, 10' LONG, 3/4" DIAMETER
	CADWELD CONNECTION
	GROUND TEST WELL
	AIR TERMINAL, 1/2" DIAMETER, 12" LONG, ALUMINUM, TAPERED POINT
	DOWN CONDUCTOR, CLASS I, COPPER, 29 STRAND, 17 GUAGE, COPPER WIRE
	GROUND PIGTAIL
	LIGHTNING CONDUCTOR CONNECTION
	CHANGE IN ELEVATION, LIGHTNING CONDUCTOR
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR

ELECTRICAL DIAGRAM SYMBOLS LEGEND

Symbol	Description
	GROUND
E N L	AUTOMATIC TRANSFER SWITCH
E L N	AUTOMATIC TRANSFER SWITCH - BYPASS ISOLATION TYPE
	PANELBOARD - WITH MAIN LUGS ONLY
	PANELBOARD - WITH MAIN CIRCUIT BREAKER
	TRANSFORMER
	ENCLOSED CIRCUIT BREAKER
	FUSED SAFETY SWITCH

FIRE ALARM SYMBOLS LEGEND

Symbol	Description
S	SMOKE DETECTOR
S GW	SMOKE DETECTOR WITH WIRE GUARD
H	HEAT DETECTOR, 135° UON
DD S	DUCT TYPE SMOKE DETECTOR SUBSCRIPT INDICATES THE FOLLOWING: S SUPPLY DUCT R RETURN DUCT
RAIL	REMOTE ALARM INDICATOR LIGHT WITH KEYED TEST SWITCH
RL	REMOTE INDICATOR LIGHT
15CD F	FIRE ALARM AUDIO/VISUAL UNIT, SUBSCRIPT INDICATES CANDELA RATING
15CD F	FIRE ALARM VISUAL ONLY UNIT, SUBSCRIPT INDICATES CANDELA RATING
F	FIRE ALARM MANUAL PULL STATION
B	ALARM BELL
FACU	FIRE ALARM CONTROL UNIT (PANEL)
FAA	FIRE ALARM ANNUNCIATOR PANEL
FAD	FIRE ALARM DOCUMENT CABINET
NAC	NOTIFICATION APPLIANCE CIRCUIT PANEL
TC	FIRE ALARM TERMINAL CABINET
FS	FLOW SWITCH
TS	TAMPER SWITCH
DH	DOOR HOLDER
WG	DEVICE WITH THIS SUBSCRIPT INDICATES WIRE GUARD

COMMUNICATIONS SYMBOLS LEGEND

Symbol	Description
SP	PAGING SPEAKER, MOUNTING HEIGHTS AS PER PLANS
a	VOICE/DATA OUTLET, SUBSCRIPT INDICATES CONFIGURATION

ELECTRICAL DRAWING PRESENTATION

Symbol	Description
light line	LIGHT LINEWEIGHT INDICATES EXISTING UON
dashed line	ON DEMOLITION PLANS, HEAVY DASHED LINEWEIGHT INDICATES EXISTING TO BE REMOVED UON
heavy line	HEAVY SOLID LINEWEIGHT INDICATES NEW TO BE PROVIDED UON
1	DRAWING NOTE
A	INDICATES FIXTURE TYPE
a	INDICATES SWITCHING DESIGNATION
12	INDICATES CIRCUIT
28,269A	INDICATES FAULT CURRENT AVAILABLE AT THE EQUIPMENT
42,000A	INDICATES DISTRIBUTION EQUIPMENT FAULT CURRENT RATING

GENERAL ELECTRICAL NOTES:

A. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED FOR THE APPLICATION BY A TESTING AGENCY APPROVED BY THE AUTHORITY HAVING JURISDICTION, WHERE SUCH LISTING EXISTS.

B. ALL 20 AMPERE, 120 VOLT CIRCUITS LONGER THAN 50 FEET AND 277 VOLT CIRCUITS LONGER THAN 125 FEET SHALL BE # 10 AWG MINIMUM.

C. ALL CONDUCTORS SHALL BE MINIMALLY SIZED PER THE 75 DEGREE CELSIUS TABLES IN THE NEC. ADJUST TO THE HIGHER RATING WHERE RECOMMENDED BY EQUIPMENT MANUFACTURER.

D. ALL CONDUCTORS SHALL BE INSTALLED IN APPROVED RACEWAYS. MINIMUM CONDUIT SIZE SHALL BE 3/4 INCH.

E. SIZE ALL CONDUITS AND RACEWAYS PER THE THHN/THWN INSULATION TABLES IN THE NEC. RESIZE CONDUITS WHERE THICKER CONDUCTOR INSULATION IS USED.

F. PROVIDE AN NEC SIZED GROUND WIRE IN ALL POWER CIRCUITS.

G. ALL ITEMS USED AS SERVICE ENTRACE EQUIPMENT SHALL BE LISTED AND LABELED FOR THAT PURPOSE.

H. CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE NORTH CAROLINA STATE CONSTRUCTION OFFICE TO SCHEDULE REQUIRED INSPECTIONS. A "CERTIFICATE OF APPROVAL" SHALL BE OBTAINED FROM THE STATE EECTRICAL INSPECTOR AFTER ALL WORK IS COMPLETED.

I. POWER PHASE CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS:

	120/240 VOLT 1 PHASE SYSTEMS	208/120 VOLT 3 PHASE SYSTEM	480/277 VOLT 3 PHASE SYSTEM
PHASE A	BLACK	BLACK	BROWN
PHASE B	RED	RED	ORANGE
PHASE C	N/A	BLUE	YELLOW
NEUTRAL	WHITE	WHITE	GREY

J. INSTALL DETECTABLE WARNING TAPE 6" BELOW GRADE FOR ALL UNDERGROUND CONDUIT.

FIRE ALARM GENERAL NOTES:

A. ALL CONDUIT SHALL BE MINIMUM 3/4", INCLUDING FLEXIBLE CONDUIT.

B. SEE PLANS FOR QUANTITY AND LOCATION OF DEVICES AND EQUIPMENT.

C. CIRCUITRY SHALL BE CONDUCTOR SIZE, QUANTITY, AND TYPE AS RECOMMENDED BY PARTICULAR MANUFACTURER FOR SPECIFIC USE AS INITIATION, NOTIFICATION, RELAY, OR SIGNALING LINE CIRCUIT CONDUCTORS.

D. SIGNALING LINE CIRCUITS (SLC) SHALL BE NFPA 72, CLASS A, STYLE 6 WIRING. THE OUTGOING AND THE RETURN CIRCUIT CONDUCTORS SHALL NOT BE RUN IN THE SAME CONDUIT.

E. SMOKE AND HEAT DETECTORS SHALL BE LOCATED A MINIMUM OF 36" FROM HVAC SUPPLY, RETURN AND EXHAUST AIR DIFFUSERS, GRILLES AND OUTLETS. COORDINATE EXACT LOCATIONS WITH THE MECHANICAL CONTRACTOR AND EXISTING FIELD CONDITIONS.

F. LABEL ALL DUCT MOUNT SMOKE DETECTOR REMOTE ALARM INDICATING LIGHTS. LABEL SHALL INCLUDE THE ASSIGNED SMOKE DETECTOR ADDRESS, THE ROOM NUMBER IN WHICH THE DUCT MOUNT SMOKE DETECTOR IS LOCATED AND VICINITY IN ROOM. LABELS IN AREAS WITH HIGH CEILING SHALL HAVE A LARGER FONT TO BE READABLE FROM THE FINISHED FLOOR HEIGHT.

COMMUNICATION GENERAL NOTES:

A. CONTRACTOR SHALL INSTALL CONDUITS AND BACK BOXES FOR ALL COMMUNICATION DEVICES.

B. 3/4" CONDUIT FROM EACH DEVICE IS REQUIRED AS HOME RUN BACK TO TELEPHONE BOARD FOR ADMINSTRATION AREA DEVICES.

C. 3/4" CONDUIT FROM EACH DEVICE IS REQUIRED TO BE HOME RUN BACK TO COMMUNICATION J-BOX IN MECHANICAL ROOM FOR DORM AREA DEVICES.

D. CONTRACTOR SHALL PURCHASE AND INSTALL THE TELEPHONE BACKBOARD.

E. SINGLE GANG BACK BOX IS REQUIRED FOR EACH V/D OUTLET.

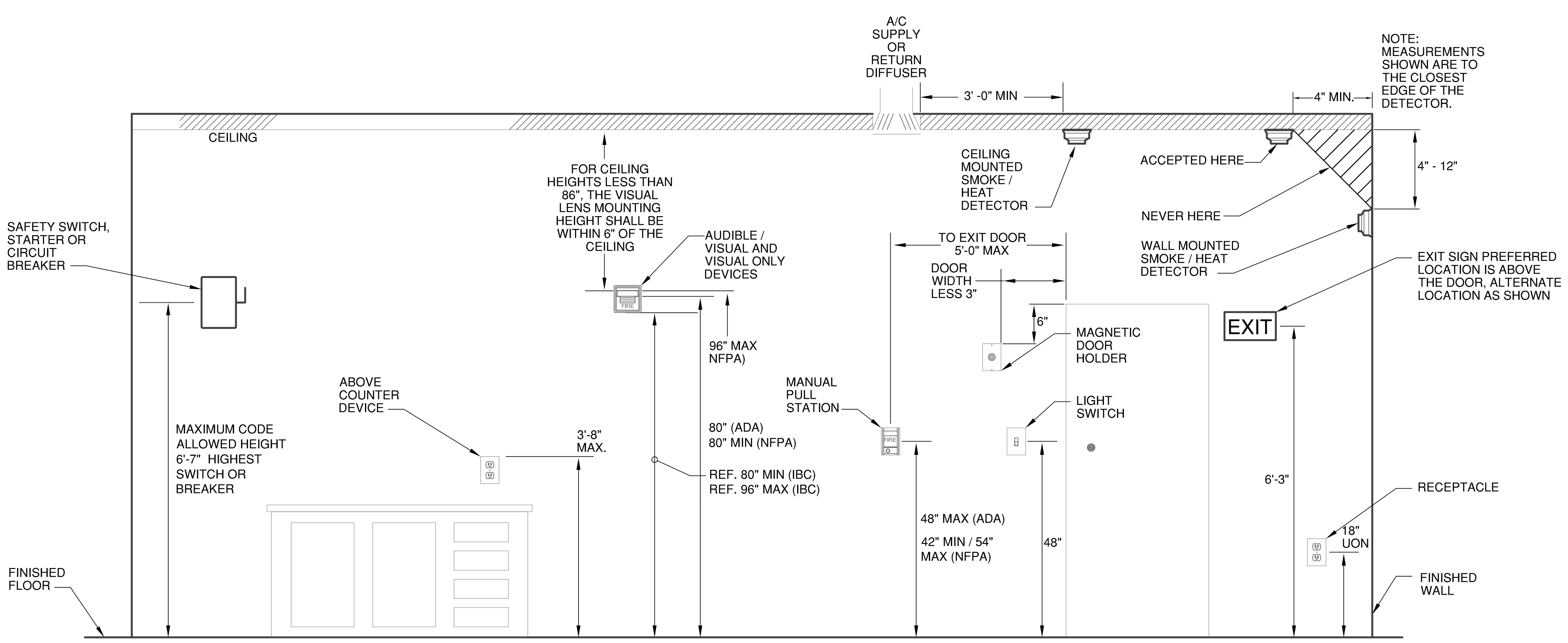
F. MOUNT SPEAKERS 10'-12' AFF (EACH FLOOR) OR ON THE CEILING.

G. WIRES WILL BE PROVIDED AND INSTALLED BY OTHERS.

H. FACE PLATES, ACTUAL DEVICES AND TEMINATION WILL BE BY OTHERS.

ABBREVIATIONS

A	AMPERE
ASD	ADJUSTABLE SPEED DRIVE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERES INTERRUPTING CAPACITY
AL	ALUMINUM
ARCH	ARCHITECT
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GUAGE
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
C°	CELSIUS
C	CONDUIT
C/B	CIRCUIT BREAKER
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CU	COPPER
DC	DIRECT CURRENT
DEG	DEGREES
DISC	DISCONNECT
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRIC/ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENG	ENGINEER
ER	EXISTING TO BE RELOCATED
EWC	ELECTRIC WATER COOLER
EX, (E), EXIST	EXISTING
F°	FAHRENHEIGHT
FACU	FIRE ALARM CONTROL UNIT (PANEL)
FIXT	FIXTURE
FLA	FULL LOAD AMPS
FLR	FLOOR
FLUOR	FLUORESCENT
FT	FEET
G,GND	GROUND
GC	GENERAL CONTRACTOR
GEC	GROUNDING ELECTRODE CONDUCTOR
GRS	GALVANIZED RIGID STEEL
HOA	HAND-OFF-AUTOMATIC
HH	HANDHOLE
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HPF	HIGH POWER FACTOR
HR	HOUR
HTR	HEATER
HZ	HERTZ
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
JB	JUNCTION BOX
K	(KILO) THOUSAND
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT(S)
KVA	KILOVOLT AMPHERE(S)
KW	KILOWATT(S)
KWH	KILOWATT HOUR(S)
LED	LIGHT EMITTING DIODE
LT(S)	LIGHT(S)
LTG	LIGHTING
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MFG	MANUFACTURED
MH	MANHOLE
MISC	MISCELLANEOUS
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
N/A	NON APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
P	POLE
PH, Ø	PHASE
PNL	PANELBOARD
PVC	POLYVINYL CHLORIDE
RECEPT(S)	RECEPTACLE(S)
SE	SERVICE ENTRANCE
SF	SQUARE FEET
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TBD	TO BE DETERMINED
UL	UNDERWRITERS LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTABLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPHERE(S)
W	WATTS,WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER



A1 E002 TYPICAL EQUIPMENT AND WIRING DEVICE MOUNTING HEIGHTS
SCALE: NONE

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NORTH CAROLINA PROFESSIONAL SEAL 041481 ENGINEER WILLIAM W. STEVENS
Digitally signed by William W Stevens Date: 2022.12.28 07:58:38-05'00'

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NASHVILLE, NC, 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

ELECTRICAL GENERAL NOTES, ABBREVIATIONS & SYMBOL LEGEND

E001

J:\UNIT - DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-1\JO3987-E000-E300 GENERAL AND PLAN SHEETS - SINGLE CELL 1.DWG MHARBED 12/19/22 - 4:57 P

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

C. ABANDON CONCEALED CONDUIT, REMOVE WIRING.

D. ALL DEMOLISHED DEVICES AND FACU SHALL BE TURNED OVER TO THE OWNER.

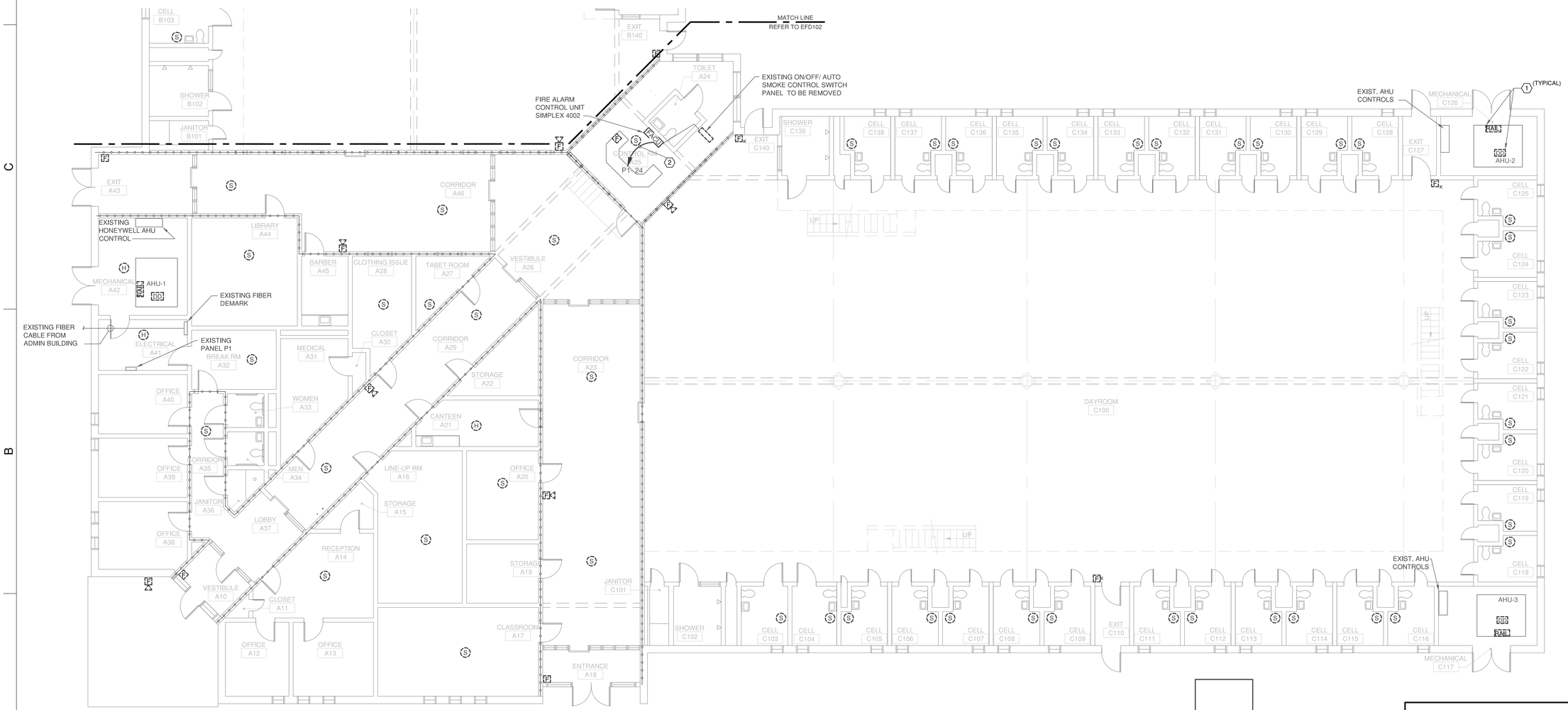
E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING DEMOLITION AND INSTALLATION OF THE FIRE ALARM SYSTEM. NOTIFY THE FACILITY PRIOR TO TAKING THE EXISTING SYSTEM OFFLINE

(#) SHEET KEYED NOTES:

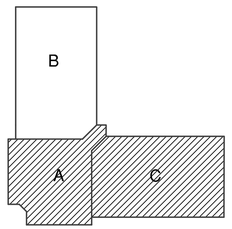
1. REMOVE DUCT DETECTOR RAIL AND ASSOCIATED WIRE AND CONDUIT. SMOKE EXHAUST CONTROLS SHALL REMAIN FOR RECONNECTION.

2. REMOVE 120 V BRANCH CIRCUIT COMPLETELY BACK TO SOURCE.



A3 EFD101 MAIN FLOOR AREA "A" AND "C" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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NORTH CAROLINA PROFESSIONAL SEAL 041481 ENGINEER WILLIAM W. STEVENS

Digitally signed by William W Stevens
Date: 2022.12.28 07:58:11-05'00'

12.20.22 ISSUED FOR CONSTRUCTION

NO	DATE	REVISION

DRAWN BY:	APD
DESIGNED BY:	ACD
CHECKED BY:	WWS
CADD DWG NO:	JO3987-EFD101
JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

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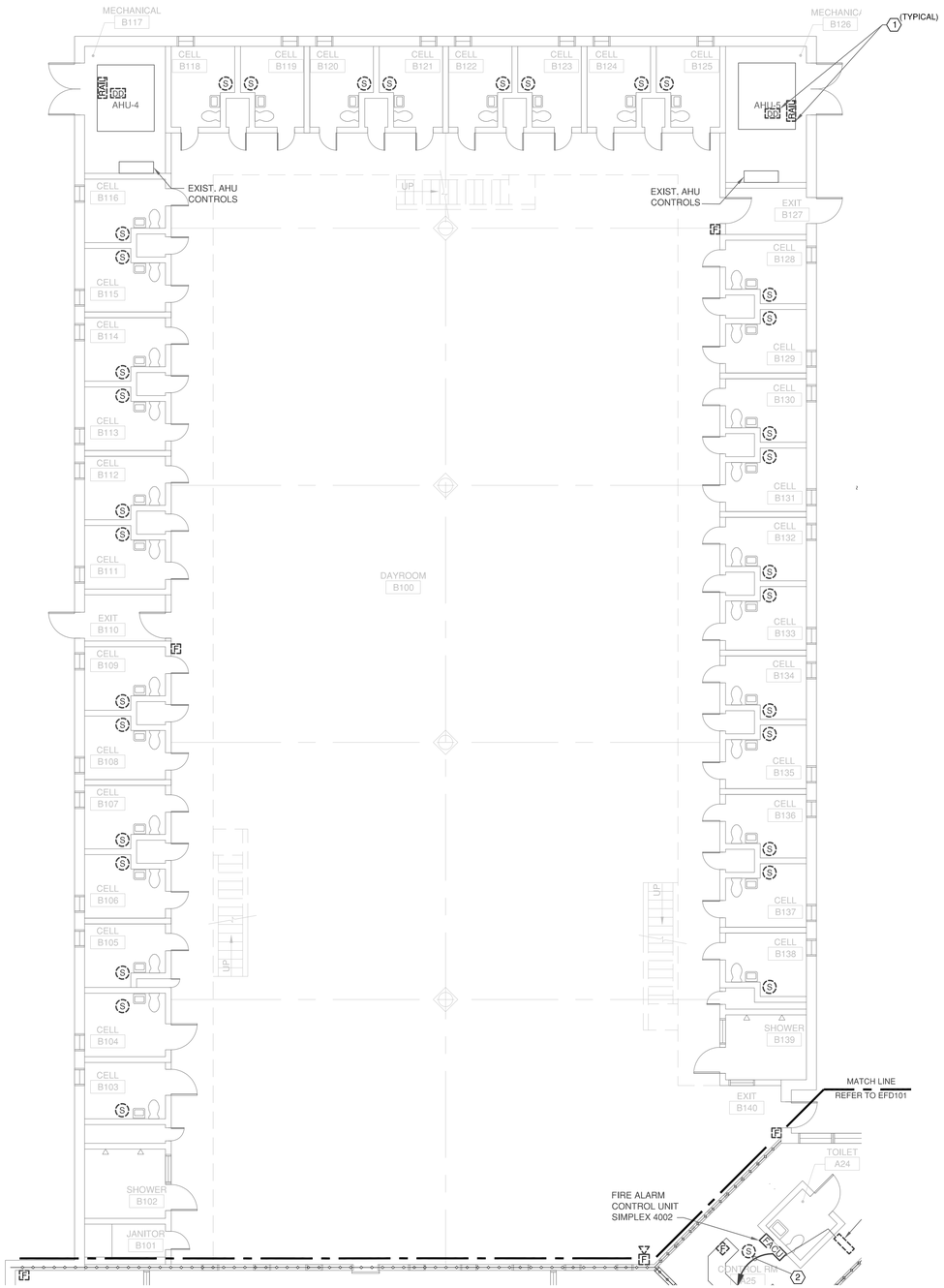
2869 US 64 ALT,
NASHVILLE, NC, 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-1
MAIN FLOOR AREA "A" & "C"
FIRE ALARM
DEMOLITION PLAN

EFD101



A1 EFD102 MAIN FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

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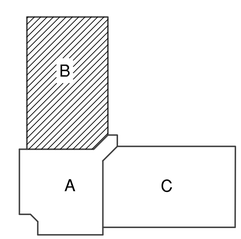
D. ALL DEMOLISHED DEVICES AND FACU SHALL BE TURNED OVER TO THE OWNER.

E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING DEMOLITION AND INSTALLATION OF THE FIRE ALARM SYSTEM. NOTIFY THE FACILITY PRIOR TO TAKING THE EXISTING SYSTEM OFFLINE

SHEET KEYED NOTES:

1. REMOVE DUCT DETECTOR RAIL AND ASSOCIATED WIRE AND CONDUIT. SMOKE EXHAUST CONTROLS SHALL REMAIN FOR RECONNECTION.



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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NASHVILLE, NC. 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT -1
MAIN FLOOR AREA "B"
FIRE ALARM
DEMOLITION PLAN

EFD102

\\UNIF - DOP\Wash Ci 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-1\JO3987-EDD0-EDD0 GENERAL AND PLAN SHEETS - SINGLE CELL 1.DWG MARKED 12/19/22 - 5:00 P

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

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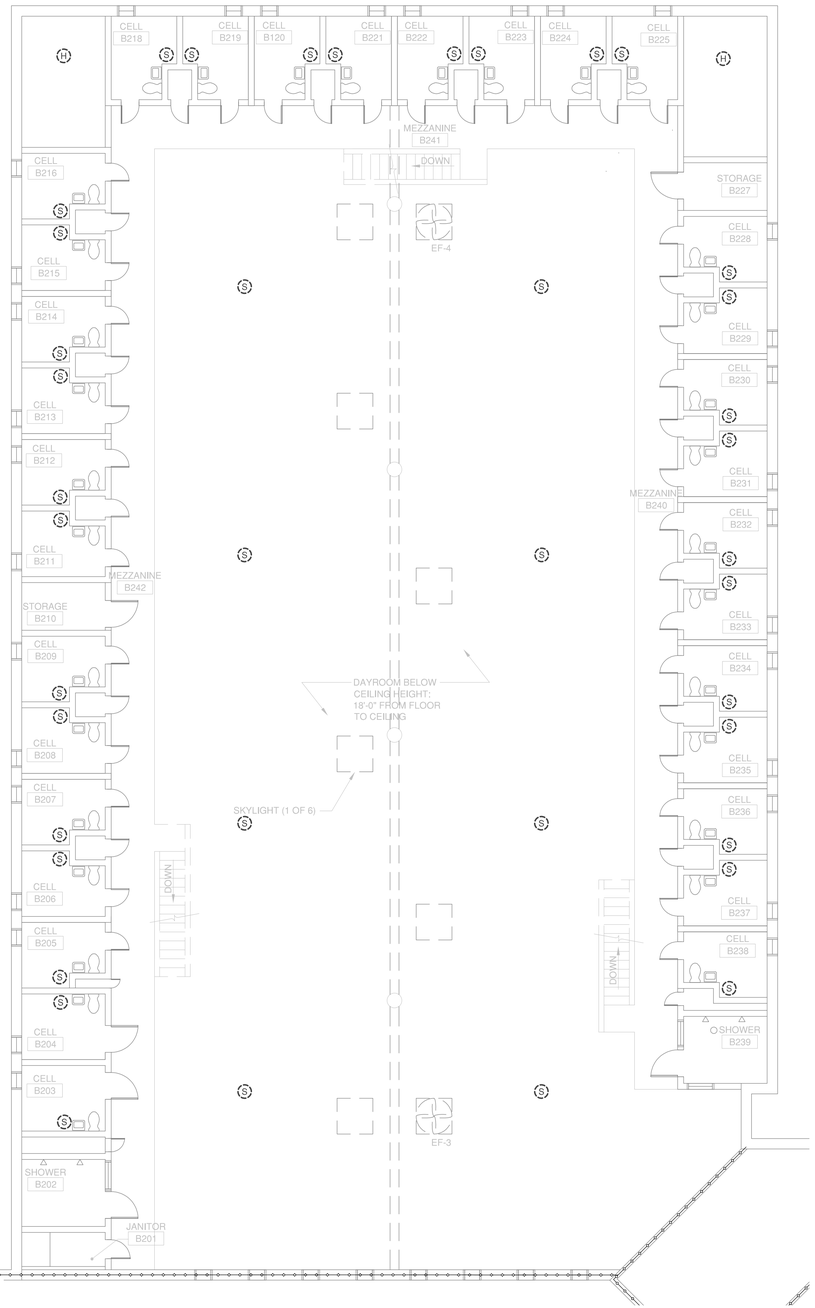
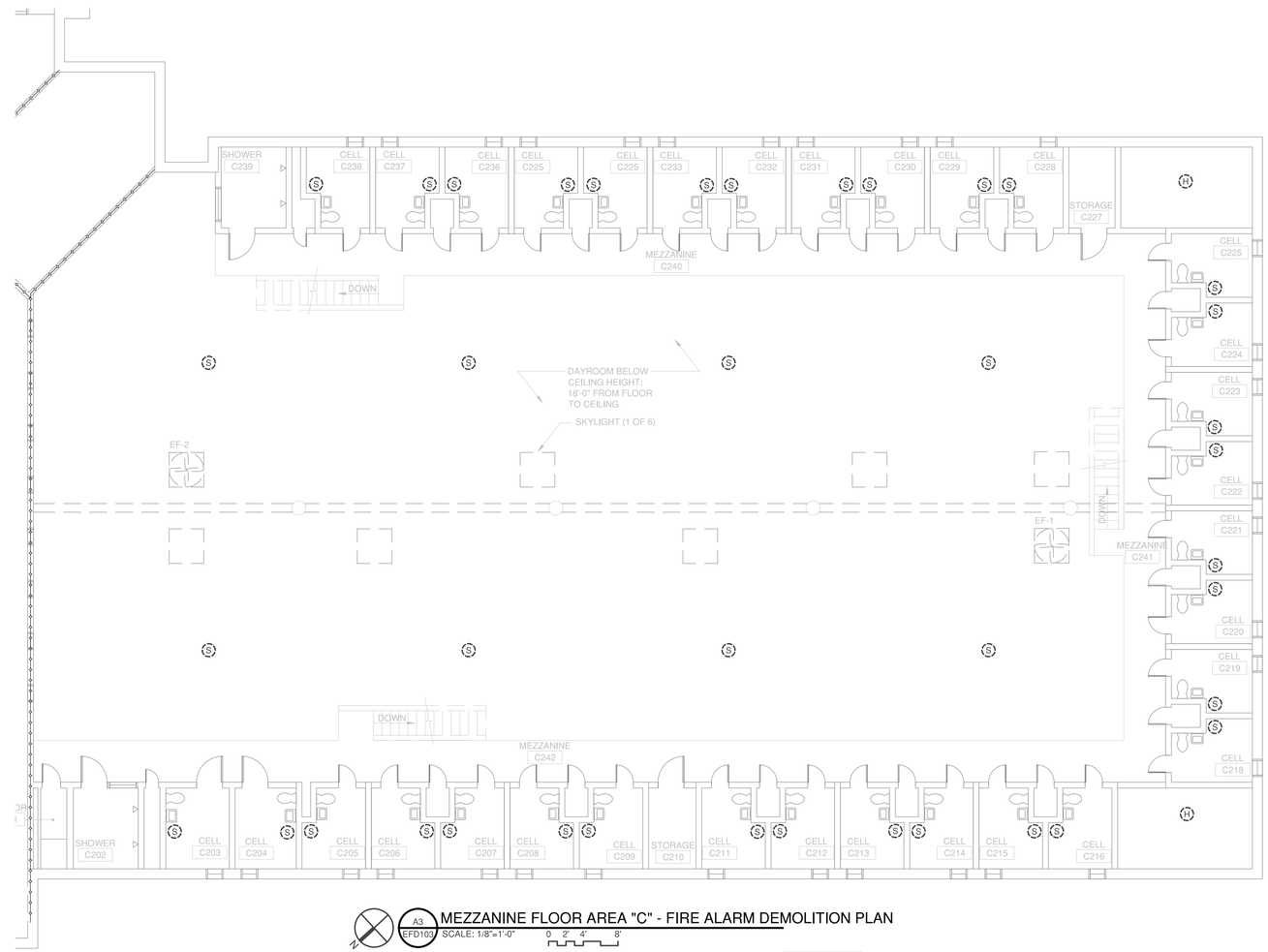
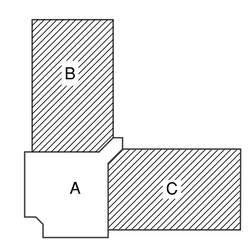


A1 EFD103 MEZZANINE FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0" 0 2' 4' 8'



A3 EFD103 MEZZANINE FLOOR AREA "C" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0" 0 2' 4' 8'



KEY PLAN - MEZZ FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

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NASHVILLE, NC, 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-1 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM DEMOLITION PLAN

EFD103

12/19/22 – 5:51 P
MWARBED – SINGLE CELL 1.DWG
JO3987-EDD0 GENERAL AND PLAN SHEETS
Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-1\JO3987-EDD0
DOP\Nash Cl 3710\Projects\JO 3987

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

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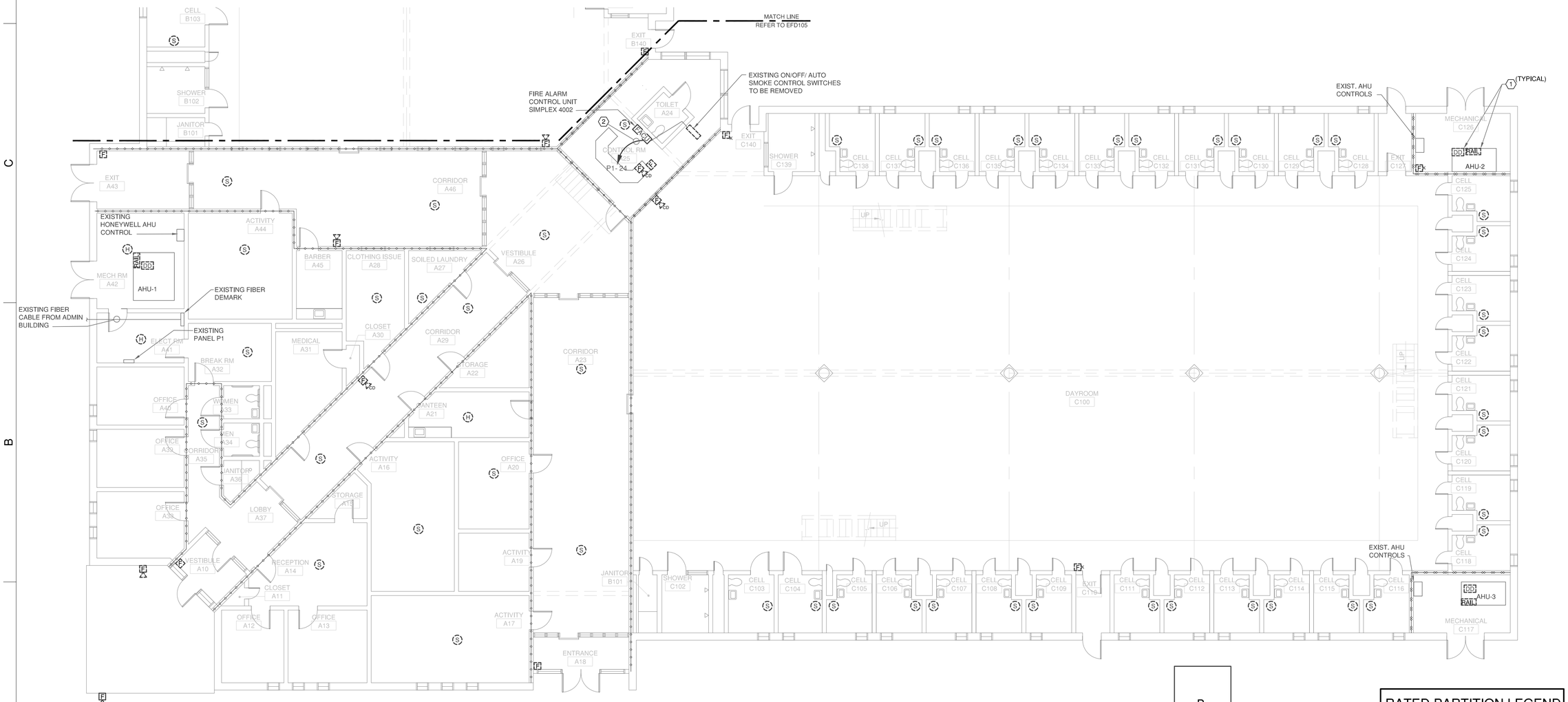
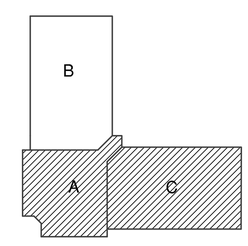
2. REMOVE 120 V BRANCH CIRCUIT COMPLETELY BACK TO SOURCE.



A3 EFD104 MAIN FLOOR AREA "A" AND "C" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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JOB ORDER NO:	3987
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NASHVILLE, NORTH CAROLINA 27856

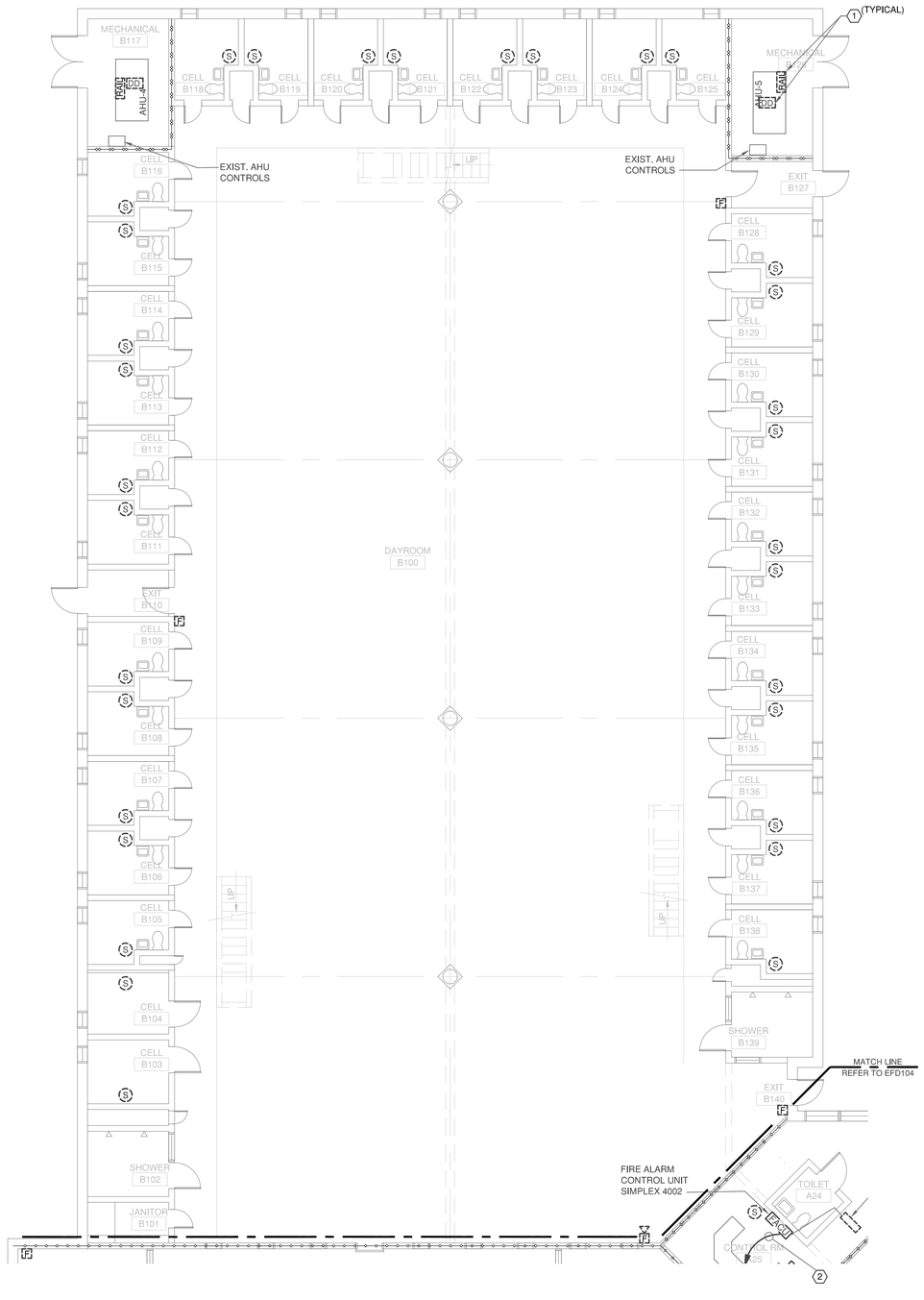
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-2
MAIN FLOOR AREA "A" & "C"
FIRE ALARM
DEMOLITION PLAN

EFD104

"J:\UNIT - DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-2\JO3987-EDD0-EDD0 GENERAL AND PLAN SHEETS - SINGLE CELL 2.dwg MHARBED 12/19/22 - 5:09 P



A1 EFD105 MAIN FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

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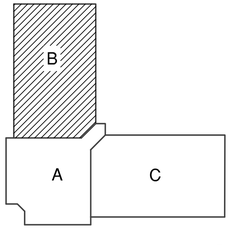
E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING DEMOLITION AND INSTALLATION OF THE FIRE ALARM SYSTEM. NOTIFY THE FACILITY PRIOR TO TAKING THE EXISTING SYSTEM OFFLINE

SHEET KEYED NOTES:

1. REMOVE DUCT DETECTOR RAIL AND ASSOCIATED WIRE AND CONDUIT. SMOKE EXHAUST CONTROLS SHALL REMAIN FOR RECONNECTION.



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

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NASHVILLE, NORTH CAROLINA 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT -2
MAIN FLOOR AREA "B"
FIRE ALARM
DEMOLITION PLAN

EFD105

"G:\UNIT - DOP\Nash Ci 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-2\JO3987-EDD0-EX00 GENERAL AND PLAN SHEETS - SINGLE CELL 2.dwg MHARBED 12/19/22 - 5:10 P

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

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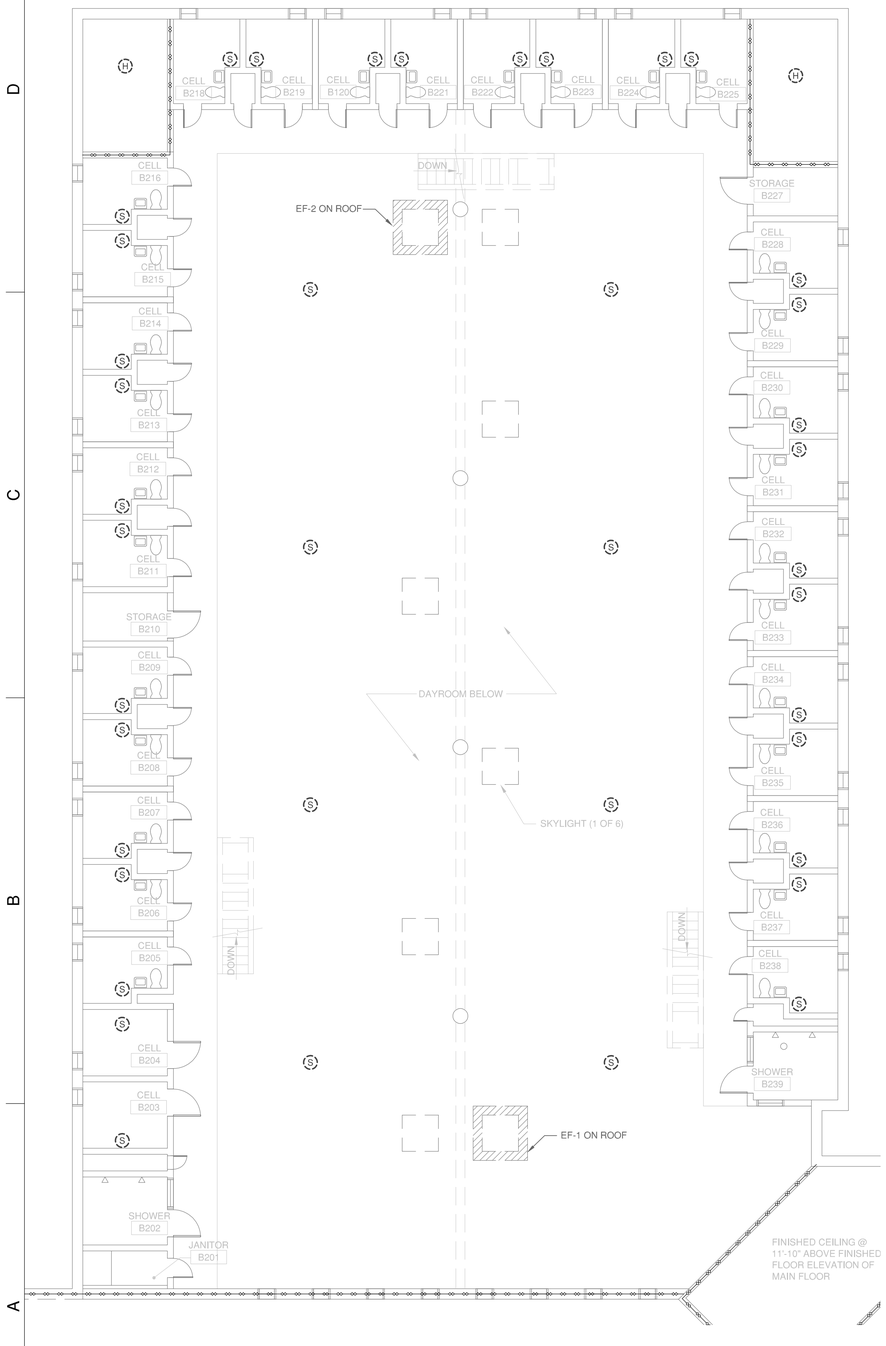
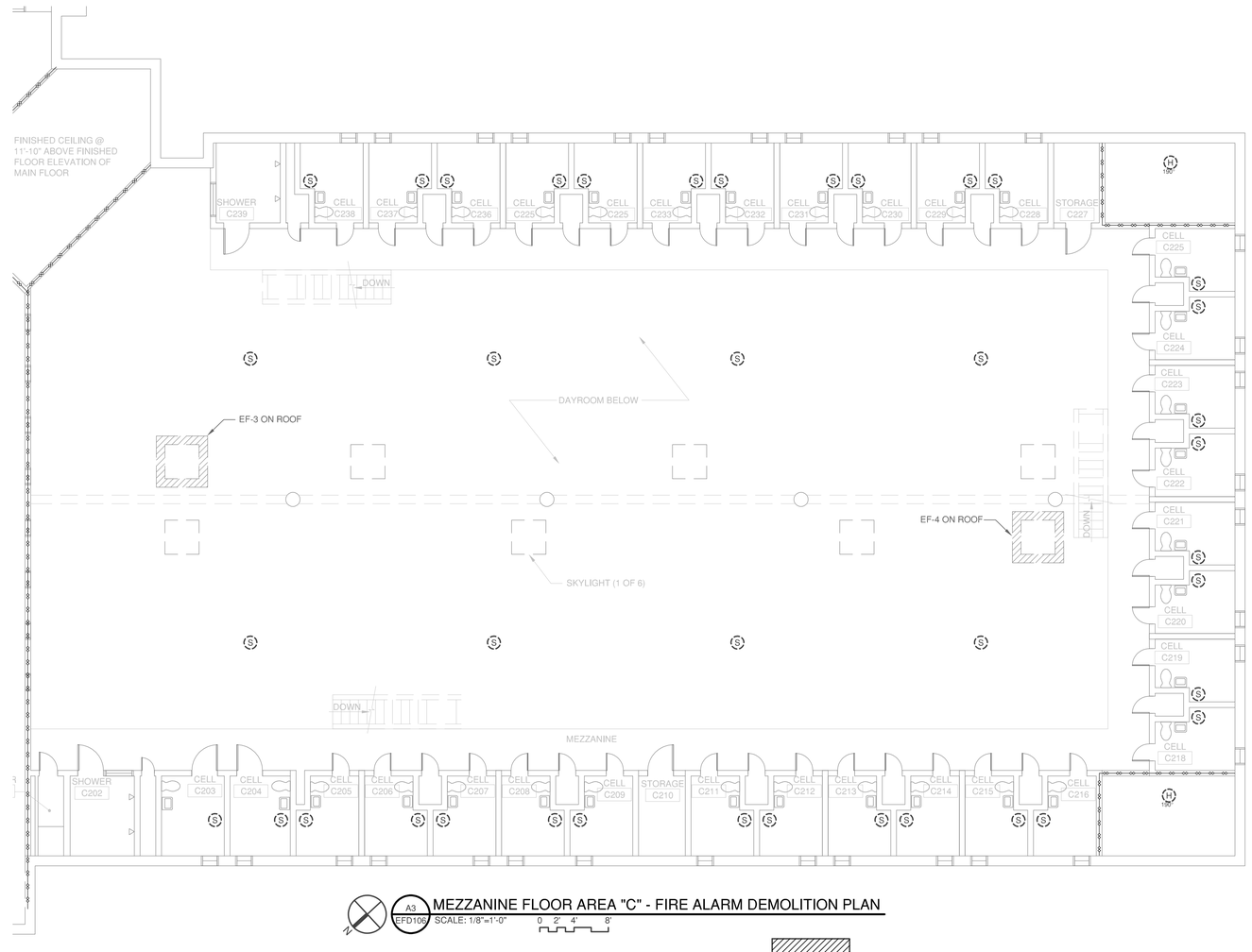
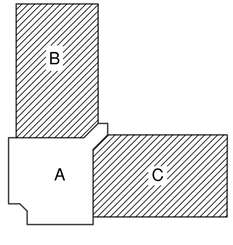


A1 EFD106 MEZZANINE FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0" 0 2' 4' 8'



A3 EFD106 MEZZANINE FLOOR AREA "C" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0" 0 2' 4' 8'



KEY PLAN - MEZZ FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

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2869 US 64 ALT,
NASHVILLE, NORTH CAROLINA 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-2 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM DEMOLITION PLAN

EFD106

"2\UNIT - DOP\Nash Cl 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-2\JO3987-EOOD-EDOO GENERAL AND PLAN SHEETS - SINGLE CELL 2.dwg MARBED 12/19/22 - 5:11 P

GENERAL NOTES:

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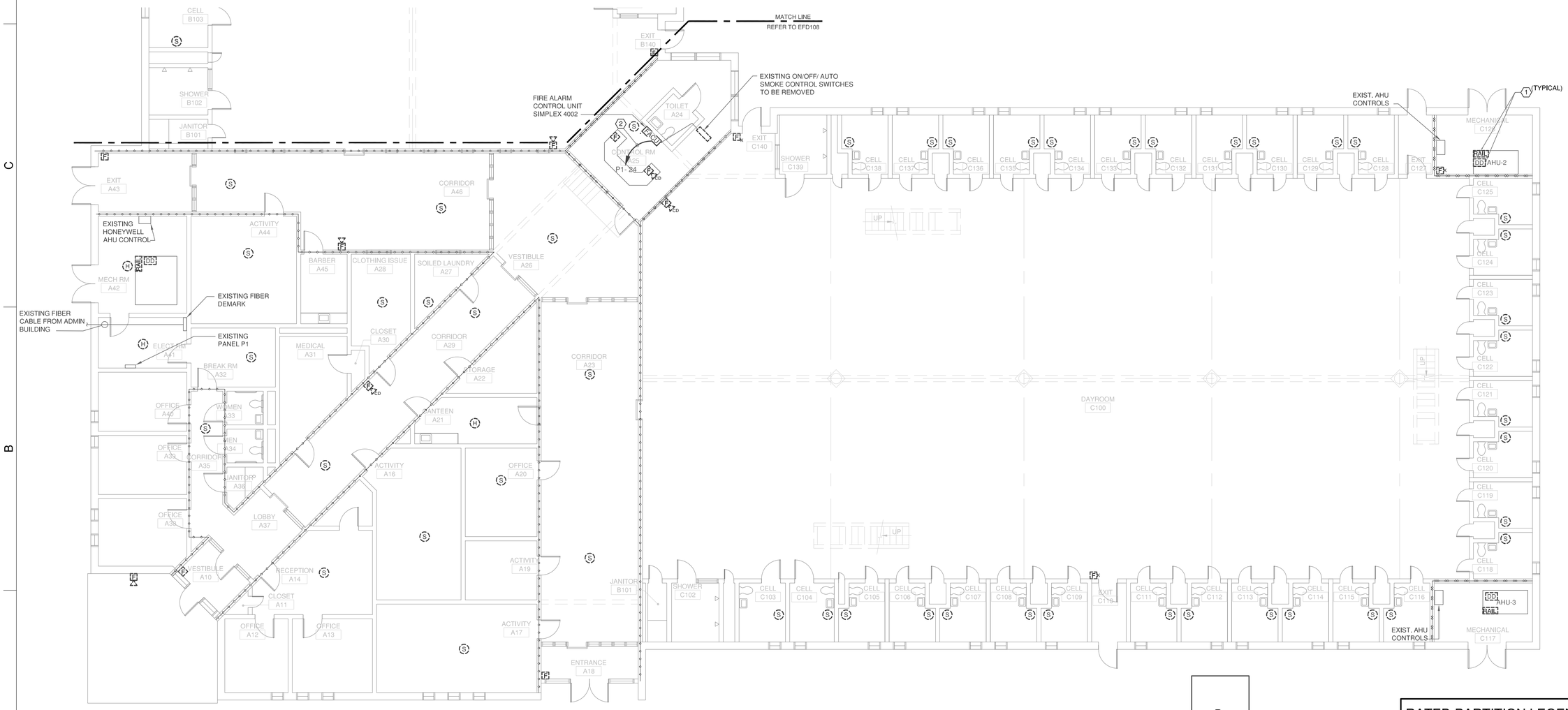
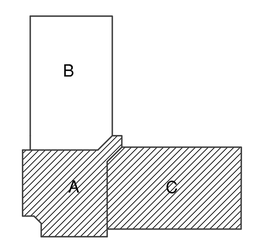


A3 EFD107 MAIN FLOOR AREA "A" AND "C" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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NORTH CAROLINA PROFESSIONAL SEAL 041481 ENGINEER WILLIAM W. STEVENS

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DRAWN BY:	APD
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CADD DWG NO:	JO3987-EFD107
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PLOT DATE:	12.19.2022

NASH CORRECTIONAL INSTITUTION
2869 US 64 ALT,
NASHVILLE, NORTH CAROLINA 27856

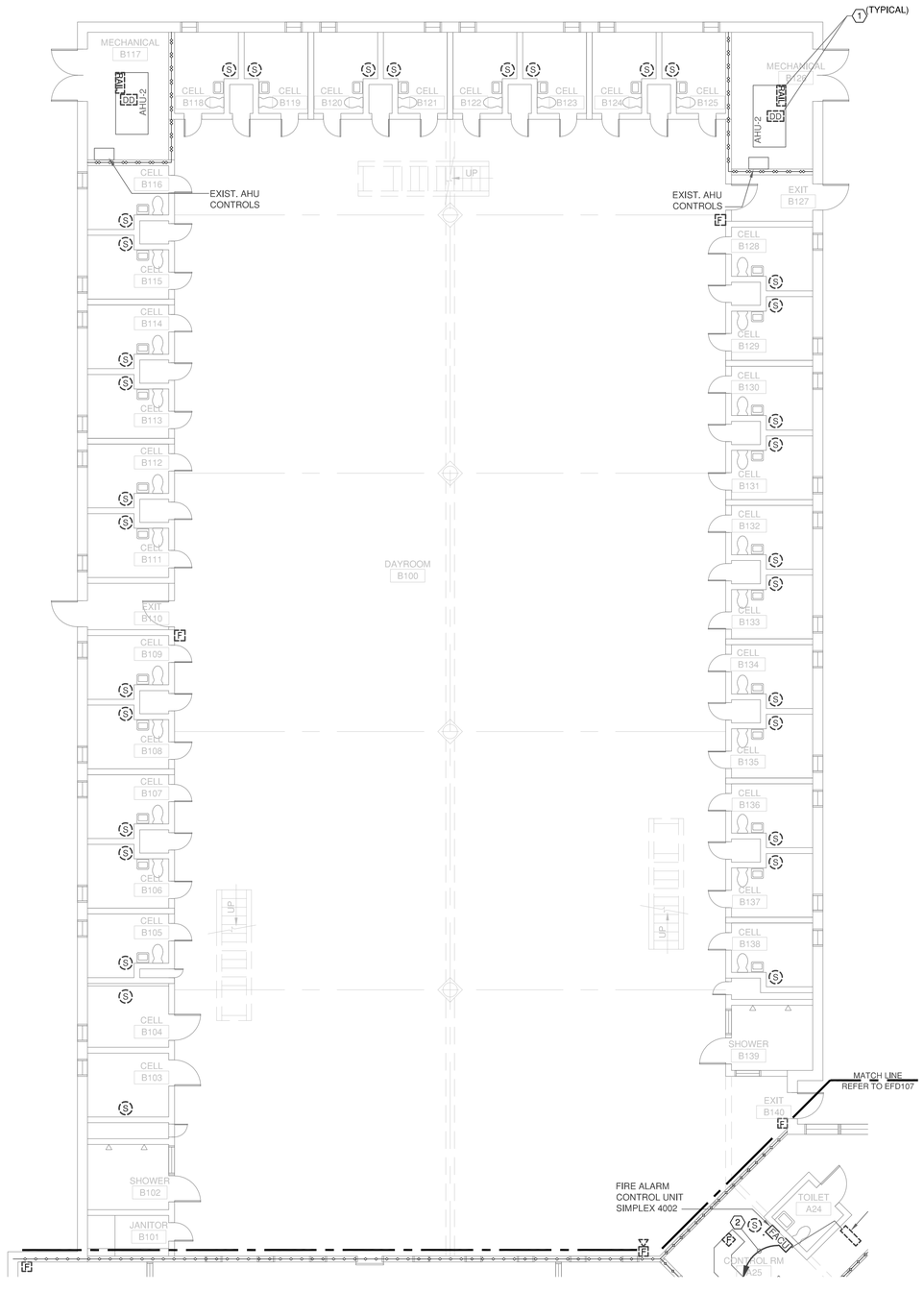
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-3 MAIN FLOOR AREA "A" & "C" FIRE ALARM DEMOLITION PLAN

EFD107

"J:\UNIT - DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-3\JO3987-EDD0-EDD0 GENERAL AND PLAN SHEETS - SINGLE CELL 3.dwg MHARBED 12/19/22 - 5:18 P



A1 EFD108 MAIN FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

C. ABANDON CONCEALED CONDUIT, REMOVE WIRING.

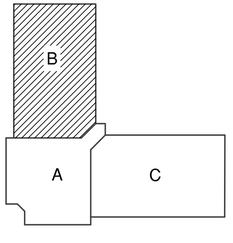
D. ALL DEMOLISHED DEVICES AND FACU SHALL BE TURNED OVER TO THE OWNER.

E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING DEMOLITION AND INSTALLATION OF THE FIRE ALARM SYSTEM. NOTIFY THE FACILITY PRIOR TO TAKING THE EXISTING SYSTEM OFFLINE

SHEET KEYED NOTES:

1. REMOVE DUCT DETECTOR RAIL AND ASSOCIATED WIRE AND CONDUIT. SMOKE EXHAUST CONTROLS SHALL REMAIN FOR RECONNECTION.



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT -3
MAIN FLOOR AREA "B"
FIRE ALARM
DEMOLITION PLAN

EFD108

Z:\UNIT - DOPS\Nash C 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-3\JO3987-EG00-EJ00 GENERAL AND PLAN SHEETS - SINGLE CELL 3.dwg MARKED 12/19/22 - 5:20 P

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

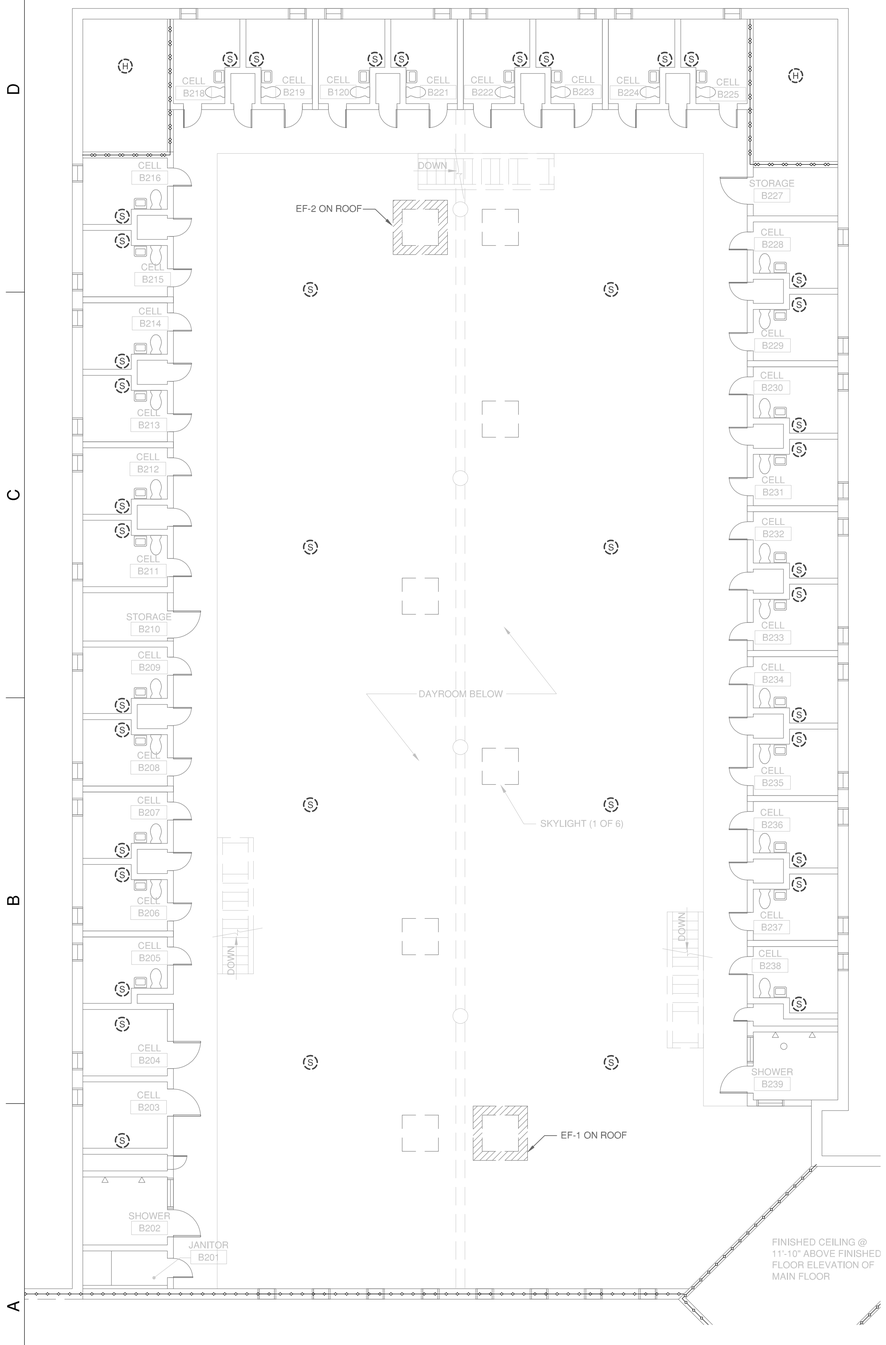
B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

C. ABANDON CONCEALED CONDUIT, REMOVE WIRING.

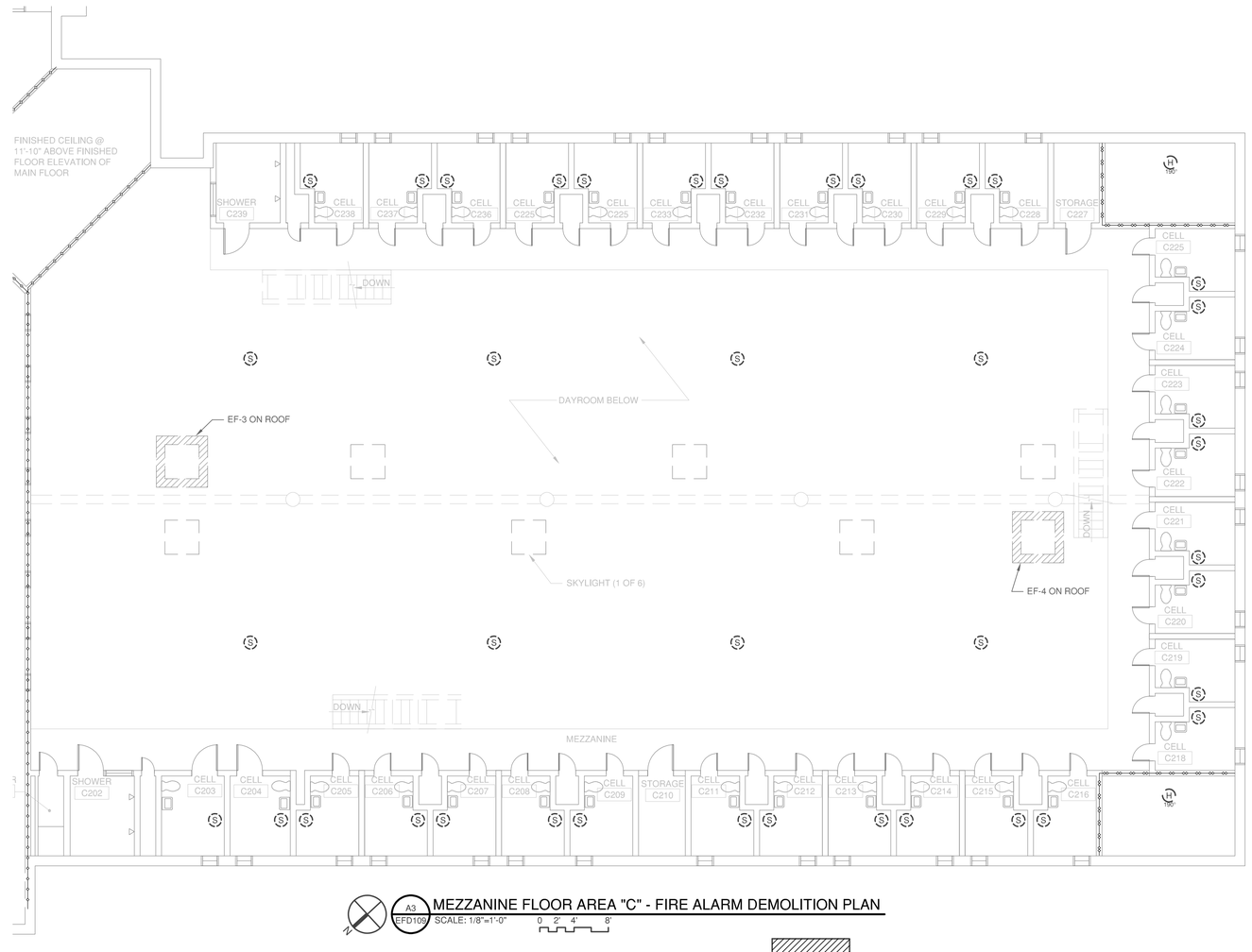
D. ALL DEMOLISHED DEVICES AND FACU SHALL BE TURNED OVER TO THE OWNER.

E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

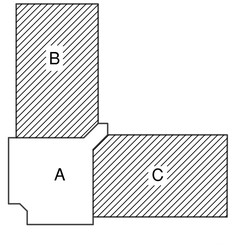
F. THE AREA SHALL BE UNDER FIRE WATCH DURING DEMOLITION AND INSTALLATION OF THE FIRE ALARM SYSTEM.



A1 EFD109 MEZZANINE FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0" 0 2' 4' 8'



A3 EFD109 MEZZANINE FLOOR AREA "C" - FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0" 0 2' 4' 8'



KEY PLAN - MEZZ FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-3 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM DEMOLITION PLAN

EFD109

"Z:\UNIT - DOP\Nash Cl 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-3\JO3987-EOOD-EDOO GENERAL AND PLAN SHEETS - SINGLE CELL 3.dwg MARRED 12/19/22 - 5:21 P

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

C. ABANDON CONCEALED CONDUIT, REMOVE WIRING.

D. ALL DEMOLISHED DEVICES AND FACU SHALL BE TURNED OVER TO THE OWNER.

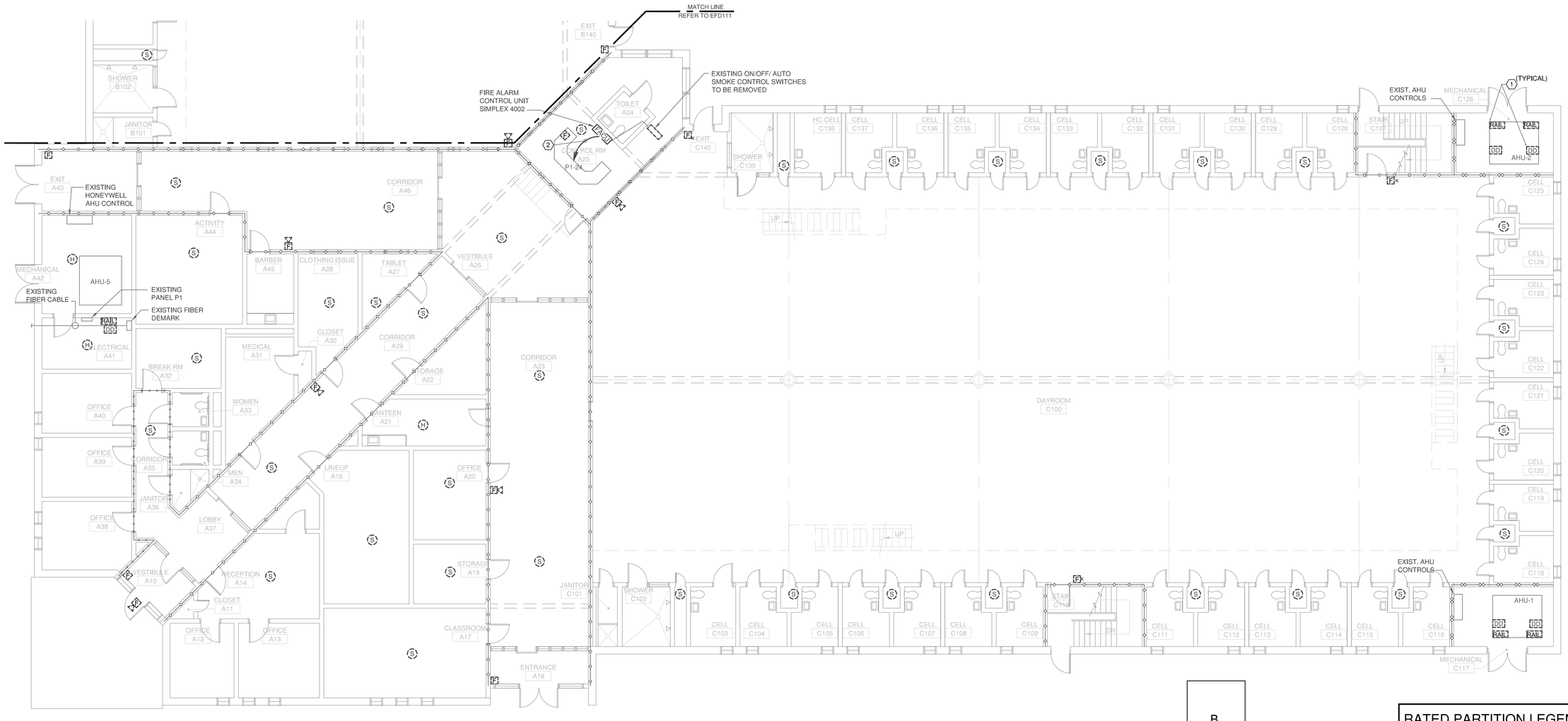
E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING THE REPLACEMENT OF THE FIRE ALARM SYSTEM. NOTIFY THE FACILITY PRIOR TO TAKING THE EXISTING SYSTEM OFFLINE

(#) SHEET KEYED NOTES:

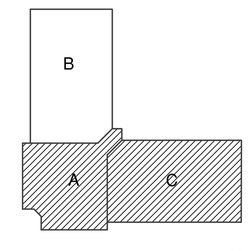
1. REMOVE DUCT DETECTOR, RAIL, AND ASSOCIATED WIRE AND CONDUIT. SMOKE EXHAUST CONTROLS SHALL REMAIN FOR RECONNECTION.

2. REMOVE 120 V BRANCH CIRCUIT COMPLETELY BACK TO SOURCE.



A3 EFD110 MAIN FLOOR AREA "A" AND "C" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'



KEY PLAN -MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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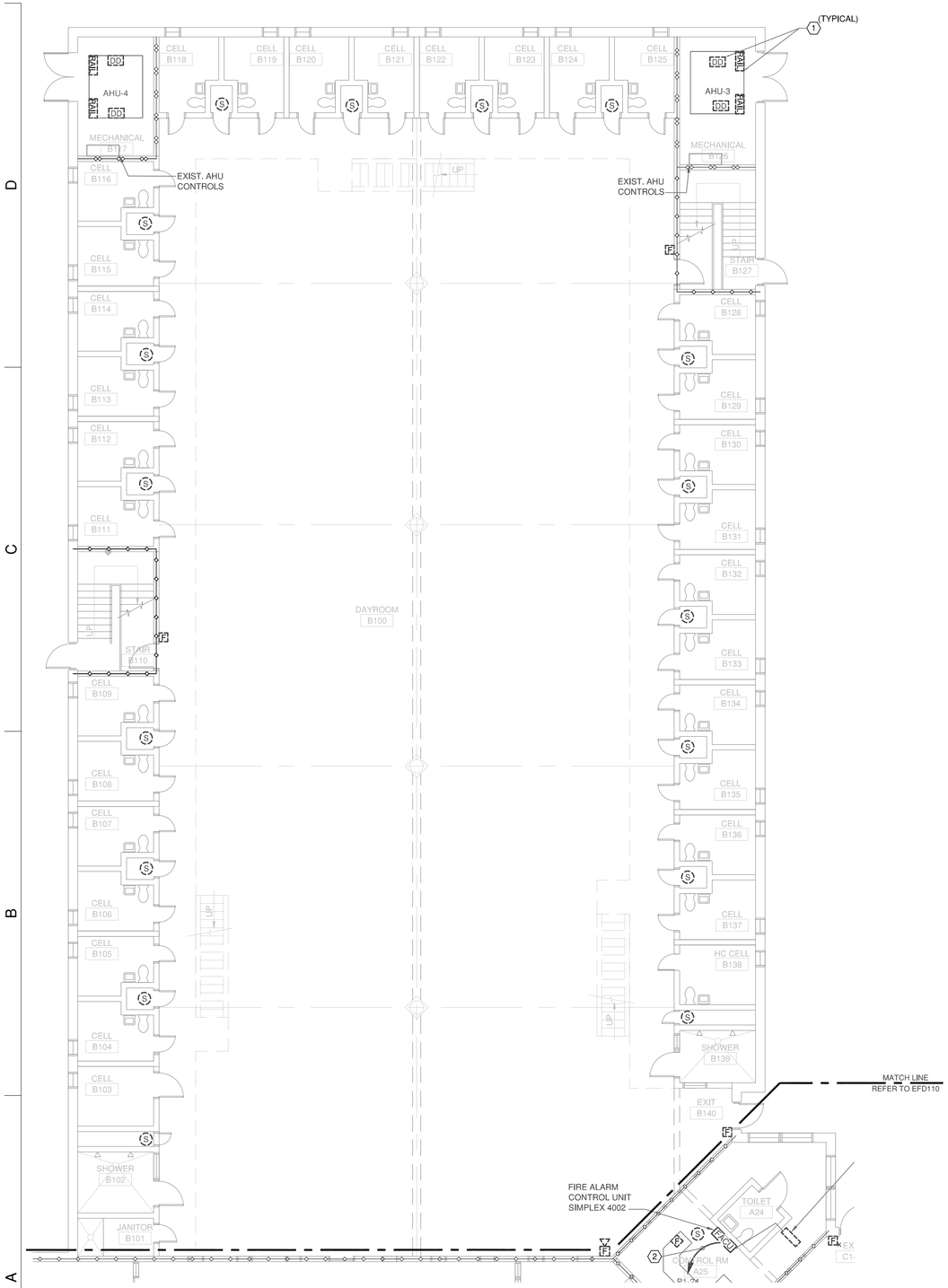
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT 4
MAIN FLOOR AREA "A" & "C"
DEMOLITION PLAN

EFD110



A1 EFD111 MAIN FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

C. ABANDON CONCEALED CONDUIT, REMOVE WIRING.

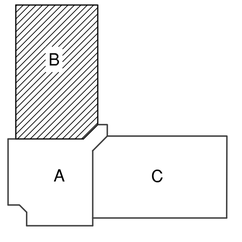
D. ALL DEMOLISHED DEVICES AND FACU SHALL BE TURNED OVER TO THE OWNER.

E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING THE REPLACEMENT OF THE FIRE ALARM SYSTEM.

(#) SHEET KEYED NOTES:

1. REMOVE DUCT DETECTOR, RAIL, AND ASSOCIATED WIRE AND CONDUIT. SMOKE EXHAUST CONTROLS SHALL REMAIN FOR RECONNECTION.



KEY PLAN -MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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PLOT DATE:	12.6.2022

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NASHVILLE, NC, 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT 4
MAIN FLOOR AREA "B"
DEMOLITION PLAN

EFD111

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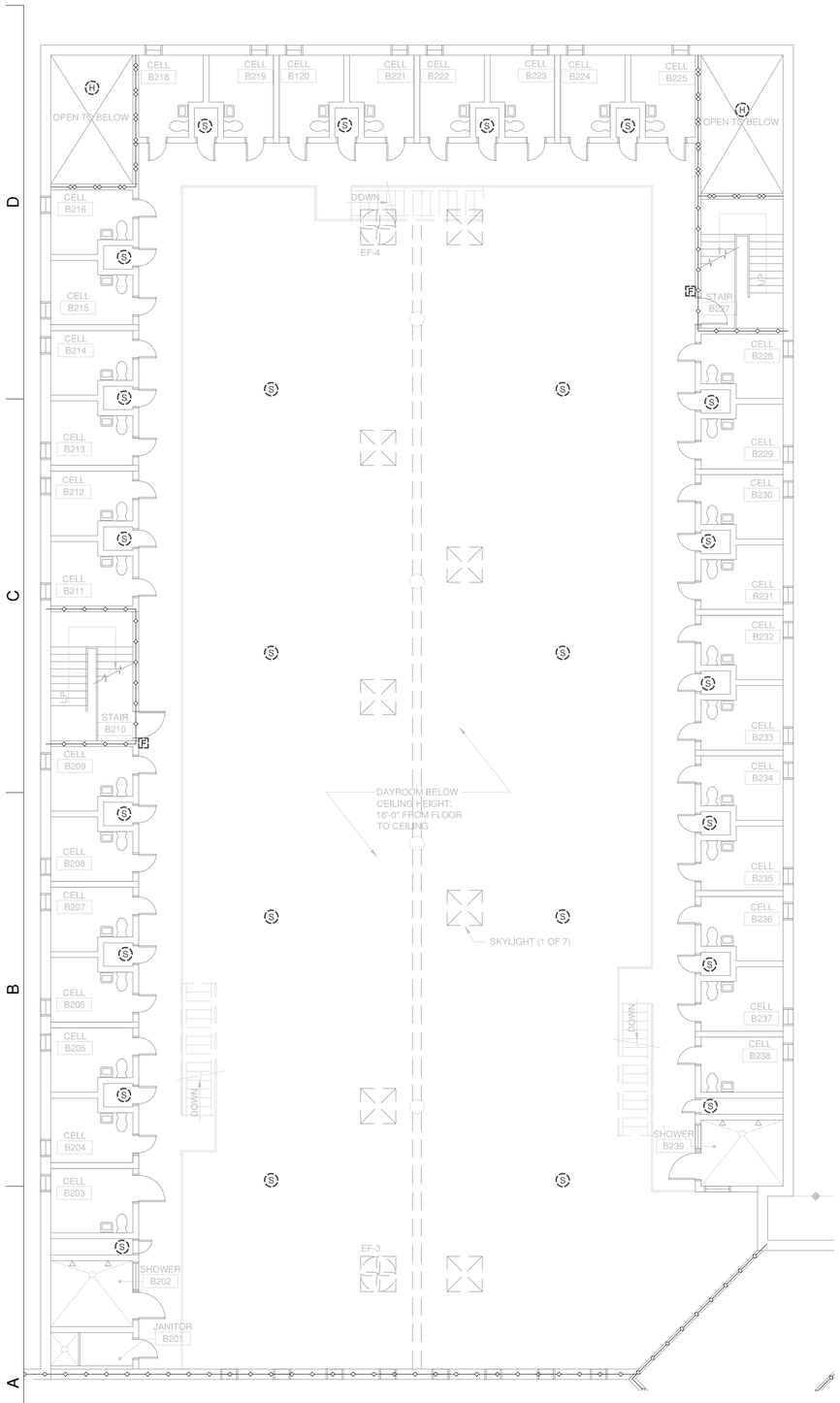
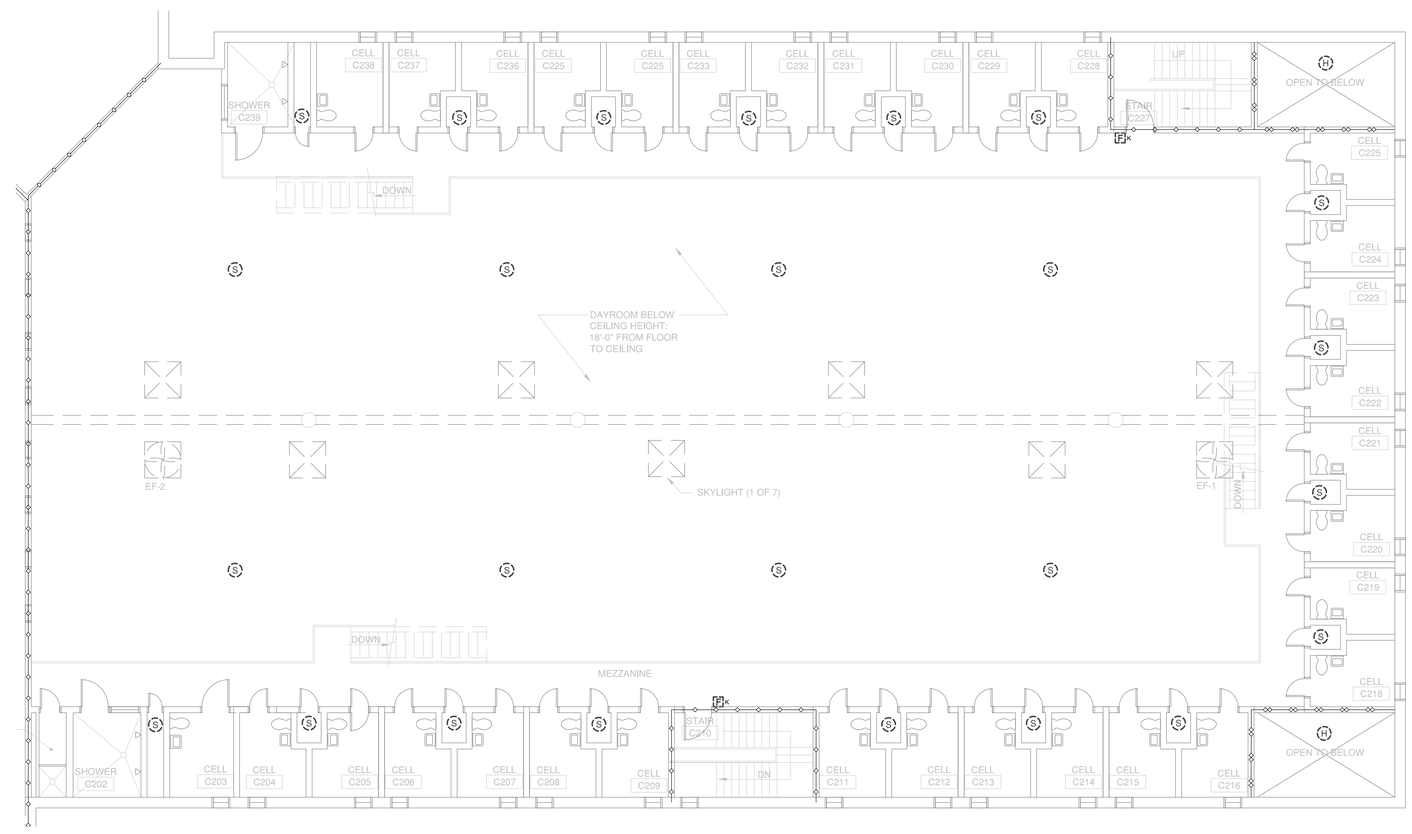


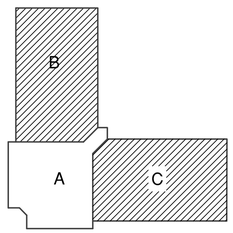
A1 EFD112 MEZZANINE FLOOR AREA "B" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'



A3 EFD112 MEZZANINE FLOOR AREA "C" - FIRE ALARM DEMOLITION PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'



KEY PLAN - MEZZANINE FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

GENERAL NOTES:

A. REMOVE EXISTING FACU, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

C. ABANDON CONCEALED CONDUIT, REMOVE WIRING.

D. ALL DEMOLISHED DEVICES AND FACU SHALL BE TURNED OVER TO THE OWNER.

E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING THE REPLACEMENT OF THE FIRE ALARM SYSTEM. NOTIFY THE FACILITY PRIOR TO TAKING THE EXISTING SYSTEM OFFLINE

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REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT 4
MEZZANINE FLOOR "B" & "C"
DEMOLITION PLAN

EFD112

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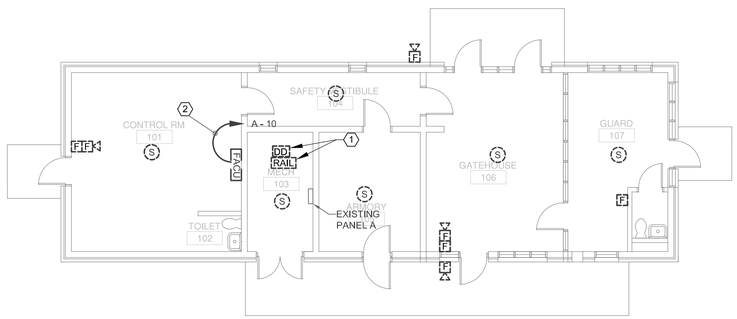

N

B2
EFD113 GATEHOUSE- FIRE ALARM DEMOLITION PLAN
SCALE: 1/8"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

A. REMOVE EXISTING FACP, POWER SUPPLY PANEL, ALL FIRE ALARM DEVICES, CONDUIT, AND WIRING COMPLETELY.

B. WHERE OUTLET BOXES AND CONDUIT ARE SURFACE MOUNTED ON WALLS OR CEILINGS, REMOVE BOX AND CONDUIT COMPLETELY. PATCH SURFACE AND PAINT AS NEEDED.

C. ABANDON CONCEALED CONDUIT, REMOVE WIRING.

D. ALL DEMOLISHED DEVICES AND FACP SHALL BE TURNED OVER TO THE OWNER.

E. ALL DEMOLITION WORK SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND ORDINANCES.

F. THE AREA SHALL BE UNDER FIRE WATCH DURING DEMOLITION AND INSTALLATION OF THE FIRE ALARM SYSTEM.

SHEET KEYED NOTES:

1. REMOVE DUCT DETECTOR RAIL AND ASSOCIATED WIRE AND CONDUIT.
2. REMOVE 120 V BRANCH CIRCUIT COMPLETELY BACK TO SOURCE.

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JOB ORDER NO: 3987
PLOT DATE: 12.19.2022

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NASHVILLE, NC, 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

GATEHOUSE - FIRE ALARM DEMOLITION PLAN

EFD113

\\NF – DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\GATEHOUSE\JO3987-EFD00-GATEHOUSE.dwg MHARBED 12/19/22 – 4:33 P

GENERAL NOTES:

A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

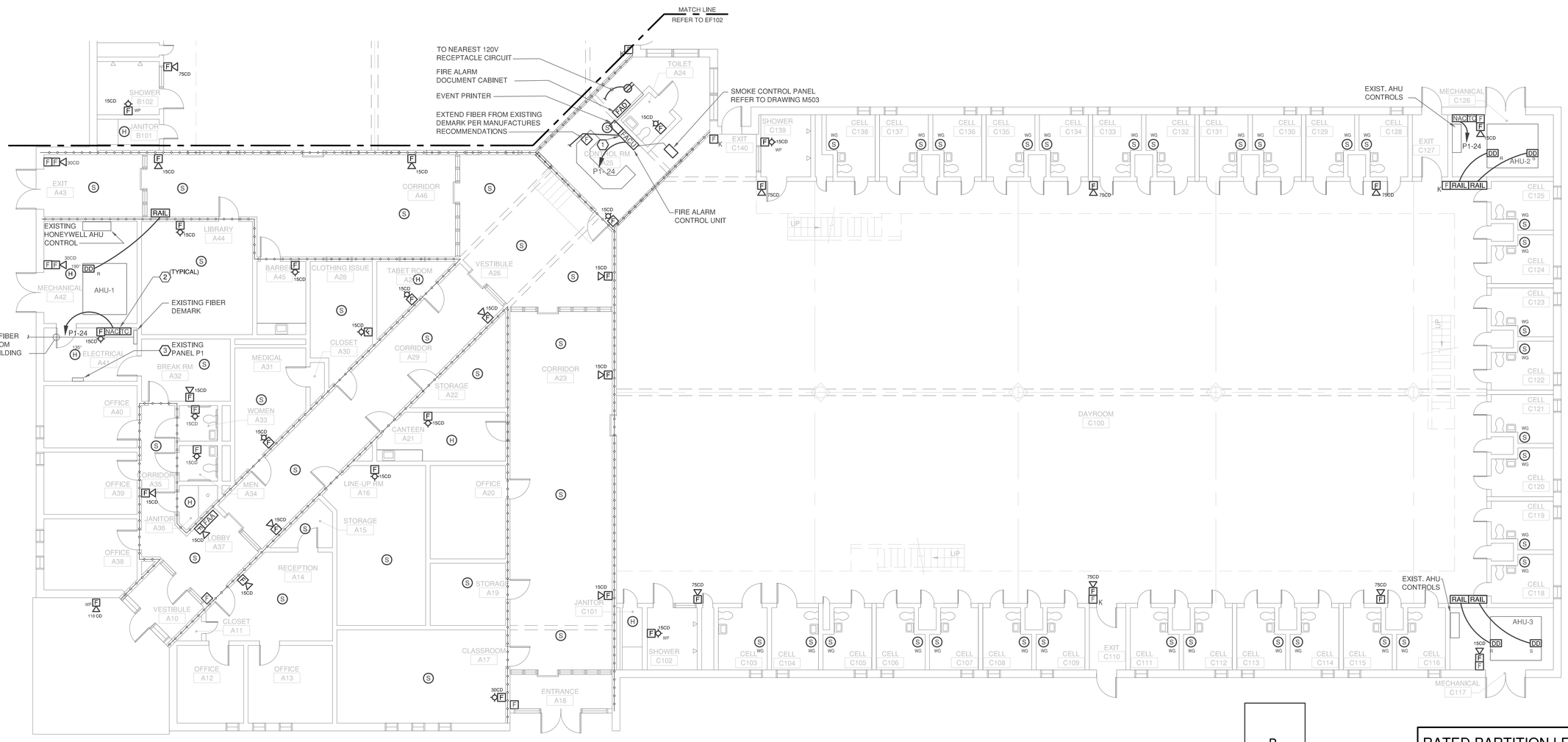
C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

(#) SHEET KEYED NOTES:

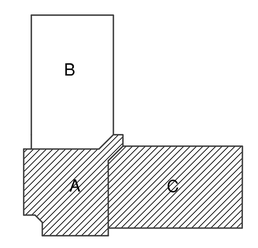
1. PROVIDE FACU INSTALLED IN THE LOCATION OF EXISTING FACU. REUSE EXISTING BREAKER #24 OF PANEL. PROVIDE NEW BRANCH CIRCUIT WIRING 2 #12, 1 #12 GND IN 3/4" CONDUIT FOR NEW FACU.

2. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINET AS RECOMMENDED BY MANUFACTURERS.

3. PANEL P1, 100 A, MCB 120/208V, 3Ø, 4W, SQUARE D TYPE NQOD CAT. NO. 2444559-D0. ALL NEW BREAKERS SHALL BE SAME AS EXISTING AND 10K AIC RATING.



A3 EF101 MAIN FLOOR AREA "A" & "C" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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DRAWN BY:	APD
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CHECKED BY:	WWS
CADD DWG NO:	JO3987-EF101
JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

NASH CORRECTIONAL INSTITUTION
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NASHVILLE, NC, 27856

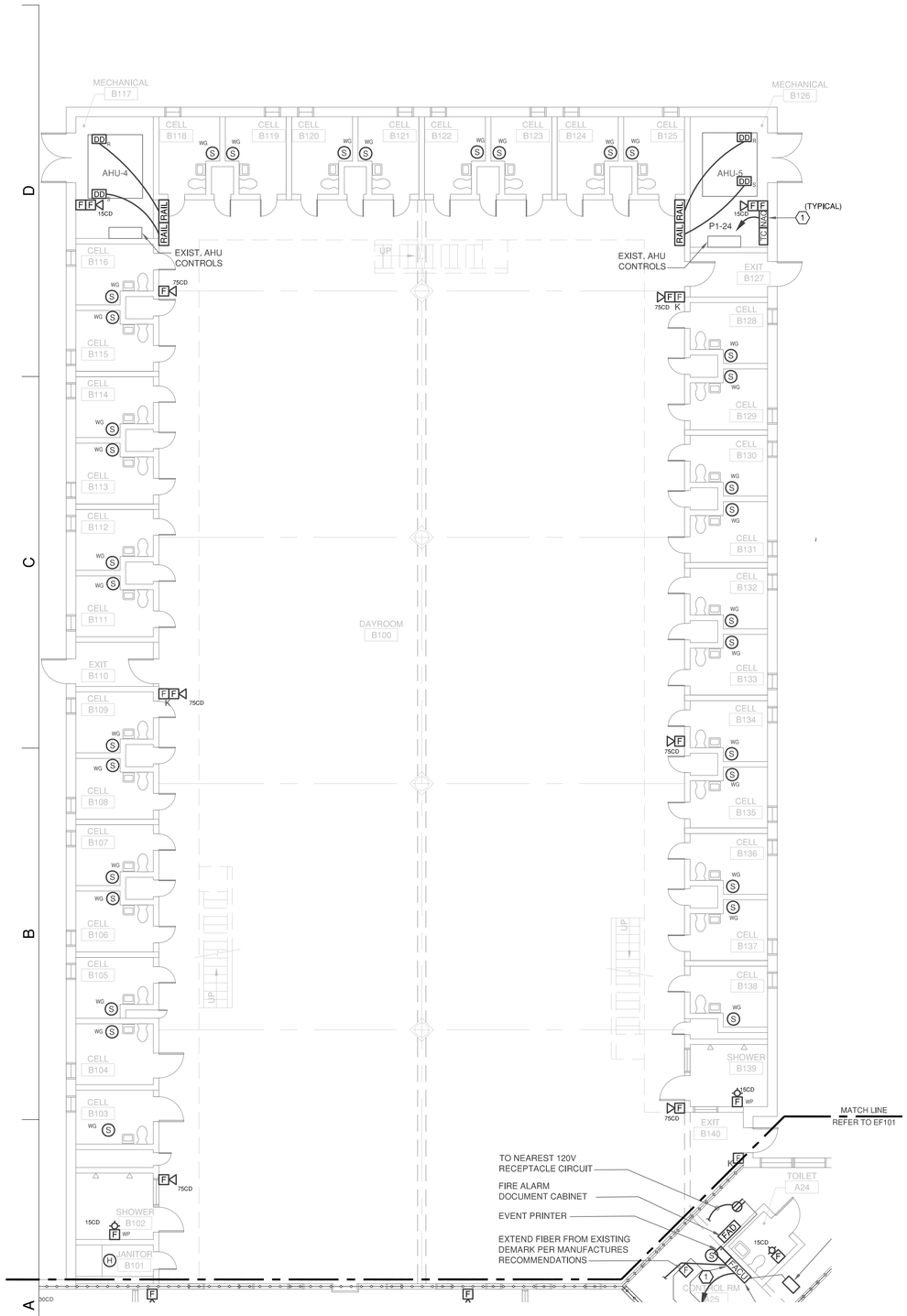
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-1
MAIN FLOOR AREA "A" & "C"
FIRE ALARM PLAN

EF101

"J:\UNIT - DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-1\JO3987-E000-E300 GENERAL AND PLAN SHEETS - SINGLE CELL 1.DWG MHARBED 12/19/22 - 5:02 P



A1 EF102 MAIN FLOOR AREA "B"- FIRE ALARM PLAN

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

GENERAL NOTES:

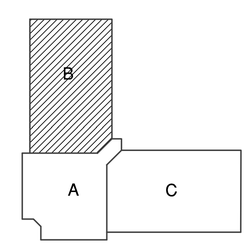
A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

SHEET KEYED NOTES:

1. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINET AS RECOMMENDED BY MANUFACTURER



KEY PLAN -1ST FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

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NASHVILLE, NC, 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-1
MAIN FLOOR AREA "B"
FIRE ALARM PLAN

EF102

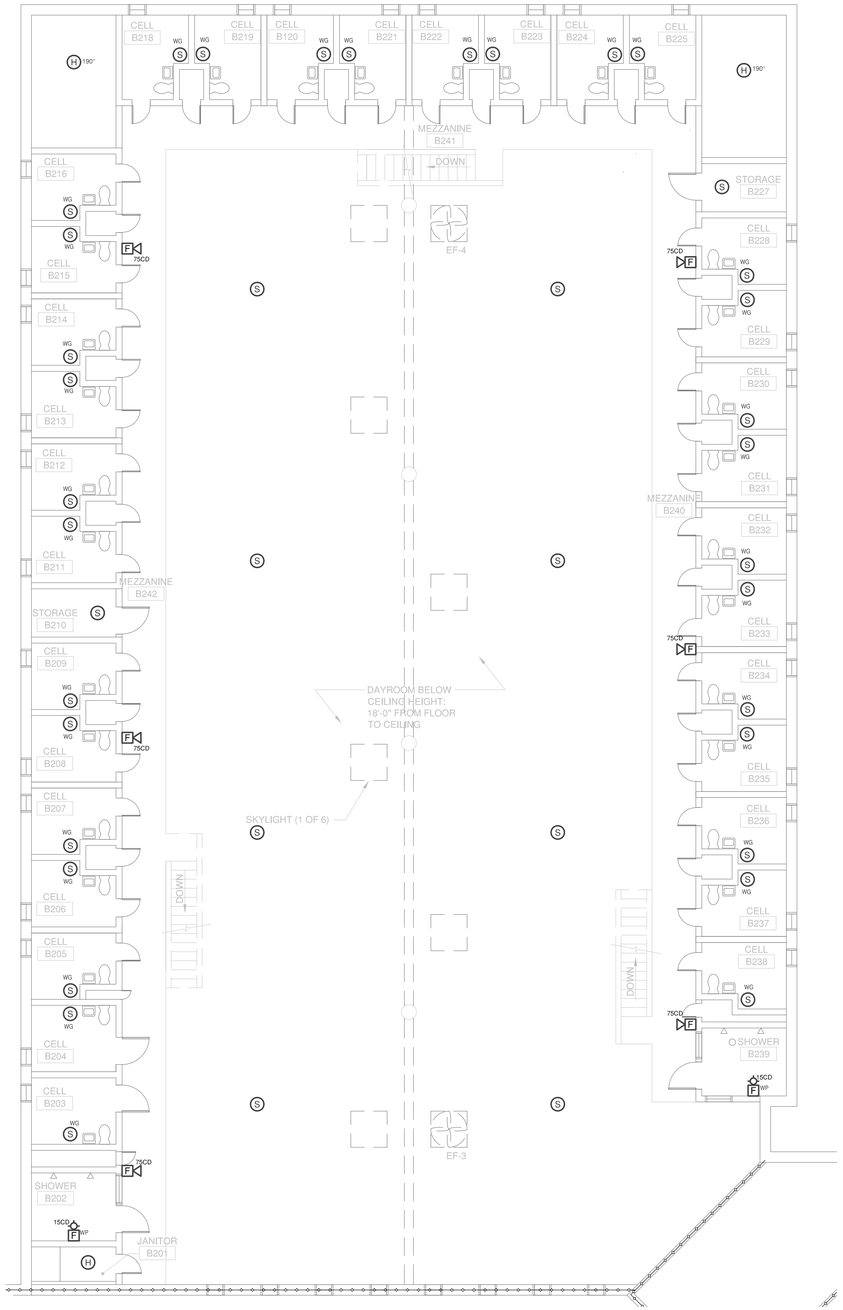
"Z:\UNIT - DOP\Nash Cl 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-1\JO3987-EF000-E300 GENERAL AND PLAN SHEETS - SINGLE CELL 1.DWG MARBED 12/19/22 - 5:03 P

GENERAL NOTES:

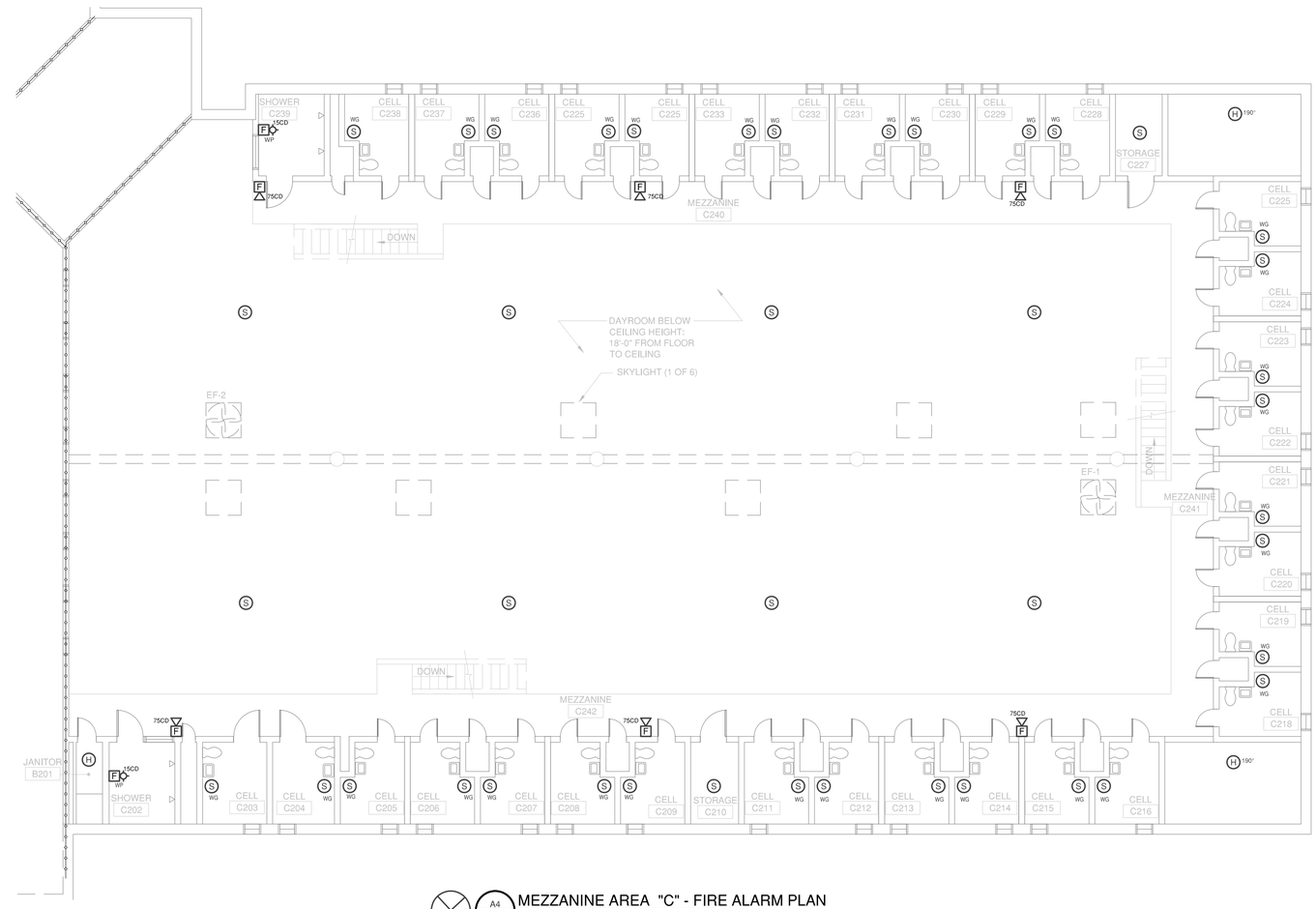
A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

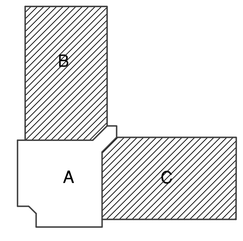
C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.



A1 EF103 MEZZANINE AREA "B" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



A4 EF103 MEZZANINE AREA "C" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MEZZ FLOOR

RATED PARTITION LEGEND
4 HR FIRE WALL
3 HR FIRE WALL
2 HR FIRE WALL
4 HR FIRE BARRIER
3 HR FIRE BARRIER
2 HR FIRE BARRIER
1 HR FIRE BARRIER
1 HR FIRE PARTITION
2 HR SMOKE BARRIER
1 HR SMOKE BARRIER
SMOKE PARTITION

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PLOT DATE:	12.19.2022

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REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT -1 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM PLAN

EF103

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GENERAL NOTES:

A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

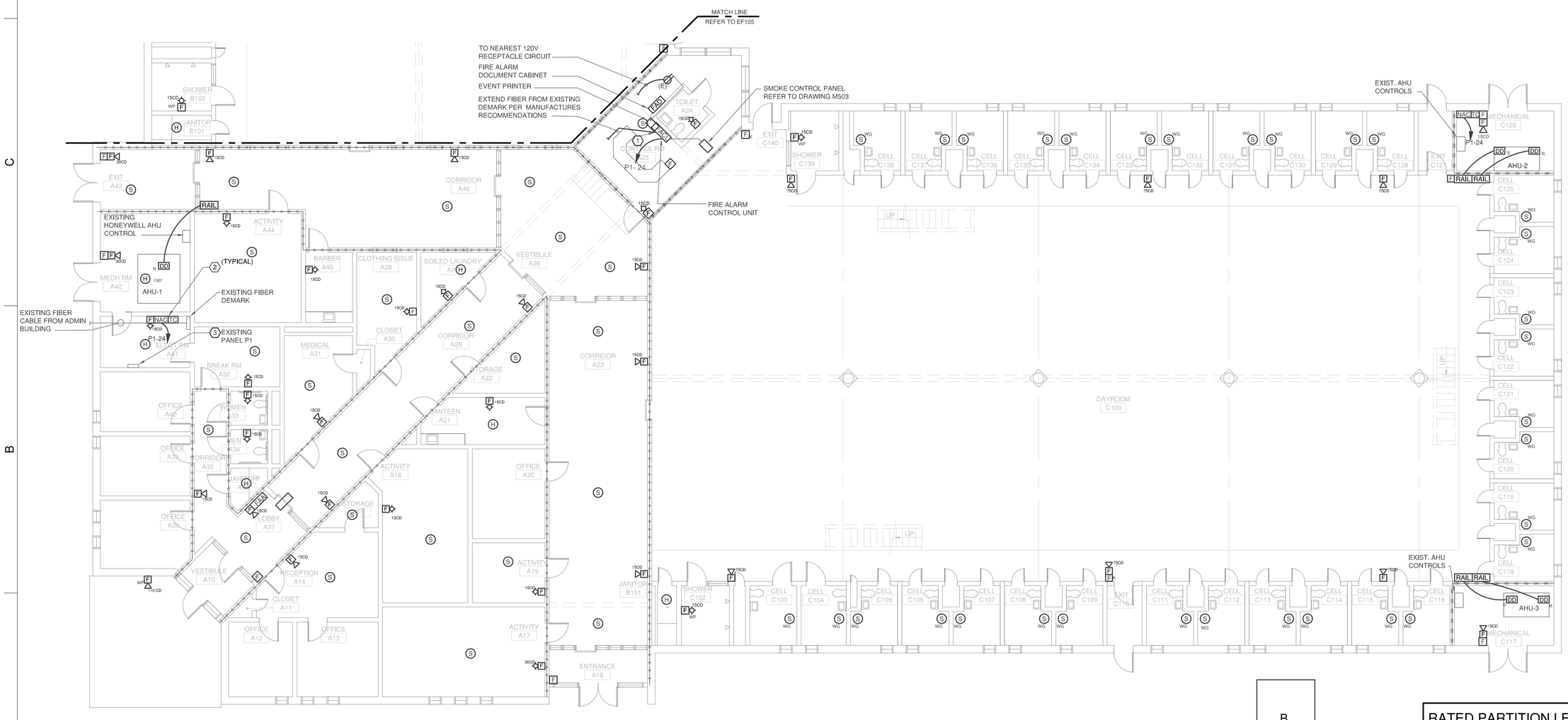
C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

(#) SHEET KEYED NOTES:

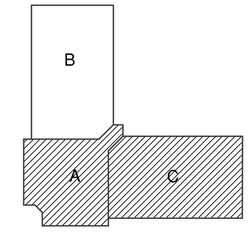
1. PROVIDE FACU INSTALLED IN THE LOCATION OF EXISTING FACU. REUSE EXISTING BREAKER #24 OF PANEL. PROVIDE NEW BRANCH CIRCUIT WIRING 2 #12, 1 #12 GND IN 3/4" CONDUIT FOR NEW FACU.

2. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINET AS RECOMMENDED BY MANUFACTURERS.

3. PANEL P1, 100 A, MCB 120/208V, 3Ø, 4W, SQUARE D TYPE NQOD CAT. NO. 2444926-E0. ALL NEW BREAKERS SHALL BE SAME AS EXISTING AND 10K AIC RATING.



A3 EF104 MAIN FLOOR AREA "A" & "C" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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NASHVILLE, NORTH CAROLINA 27856

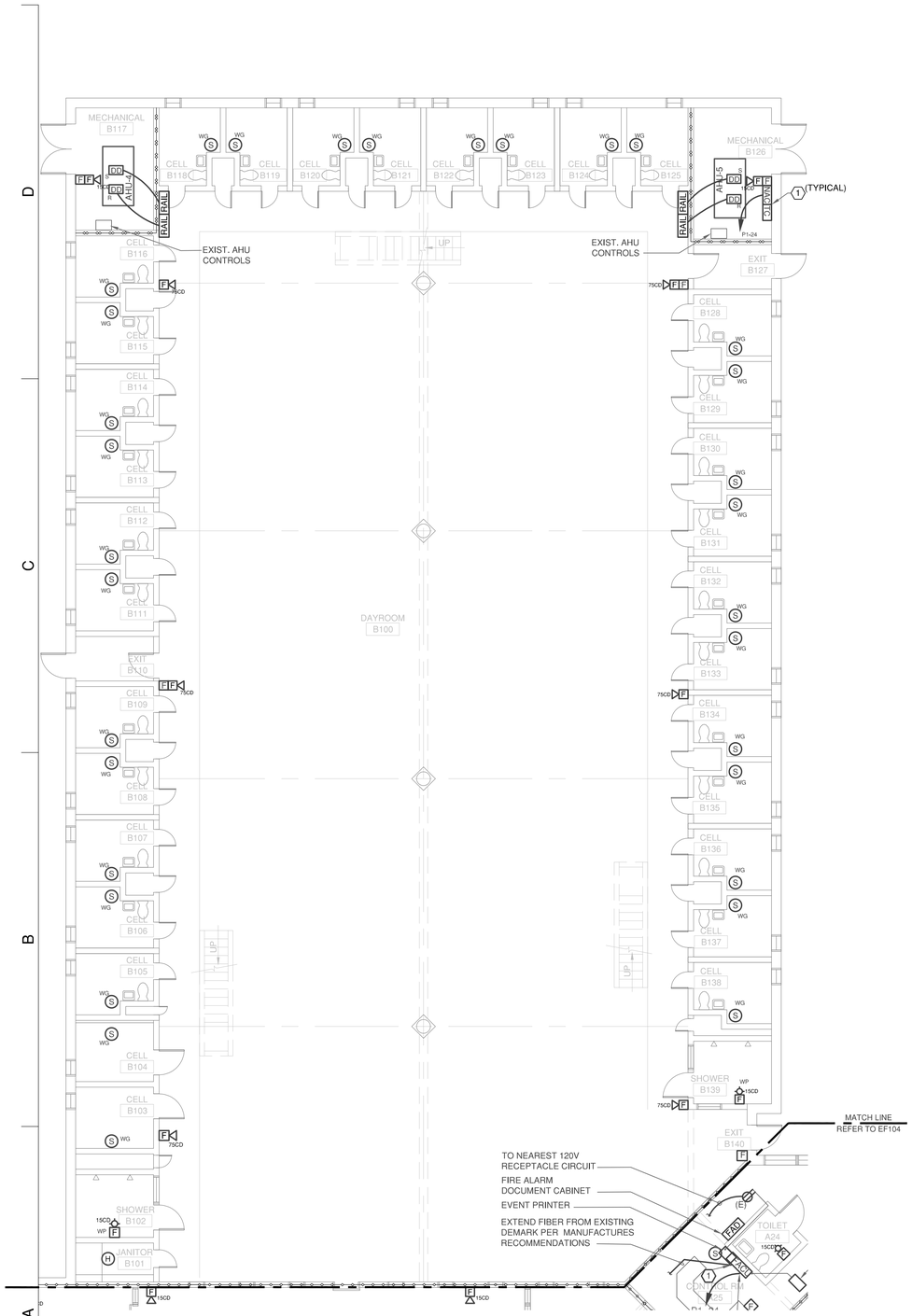
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-2
MAIN FLOOR AREA "A" & "C"
FIRE ALARM PLAN

EF104

"2\UNIT - DOPA\Nash Cl 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-2\JO3987-EC00-E300 GENERAL AND PLAN SHEETS - SINGLE CELL 2.dwg MARRED 12/19/22 - 5:13 P



A1 EF105 MAIN FLOOR AREA "B"- FIRE ALARM PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

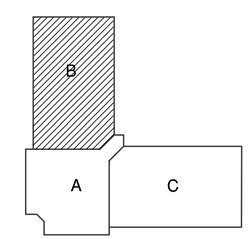
A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

SHEET KEYED NOTES:

1. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINET AS RECOMMENDED BY MANUFACTURER



KEY PLAN -1ST FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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PLOT DATE:	12.19.2022

NASH CORRECTIONAL INSTITUTION
2869 US 64 ALT,
NASHVILLE, NORTH CAROLINA 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-2
MAIN FLOOR AREA "B"
FIRE ALARM PLAN

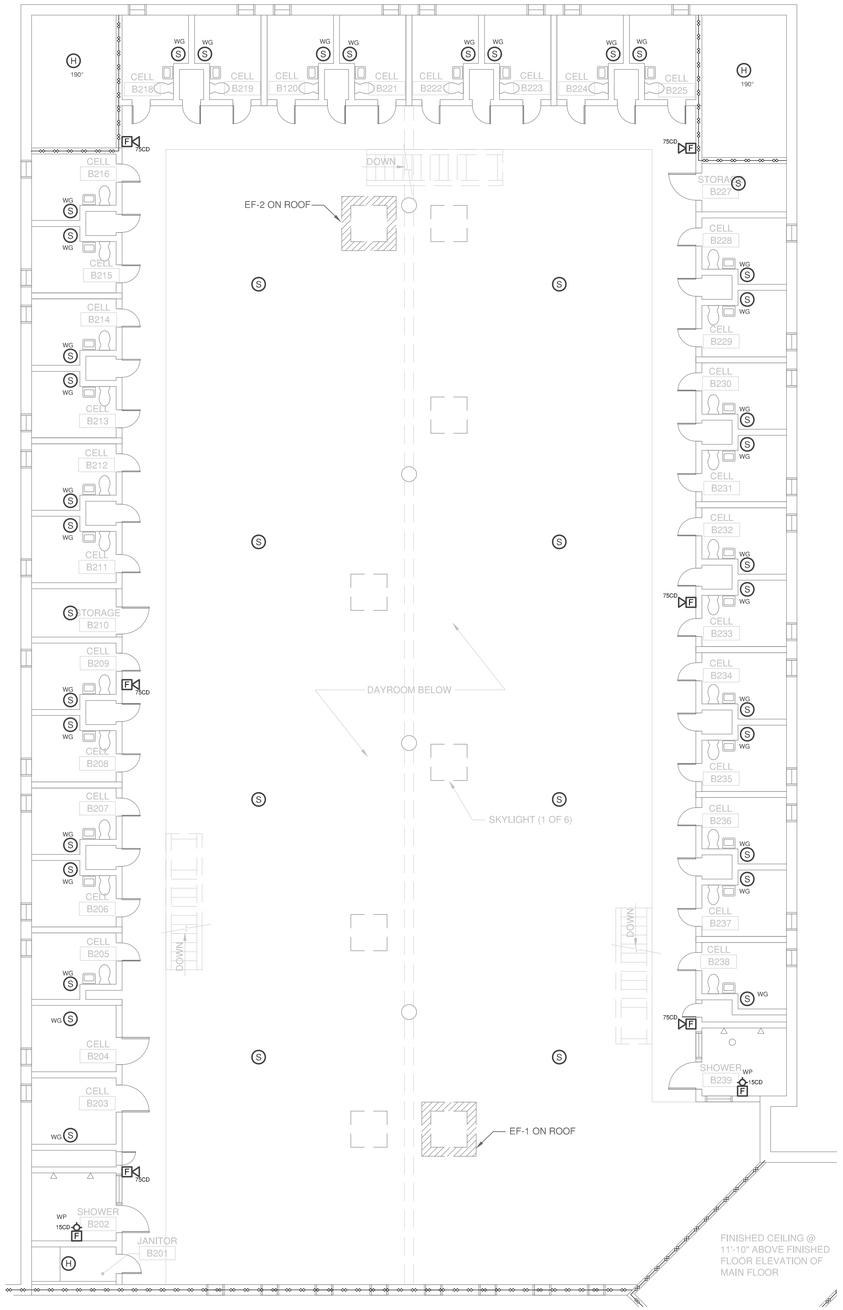
EF105

GENERAL NOTES:

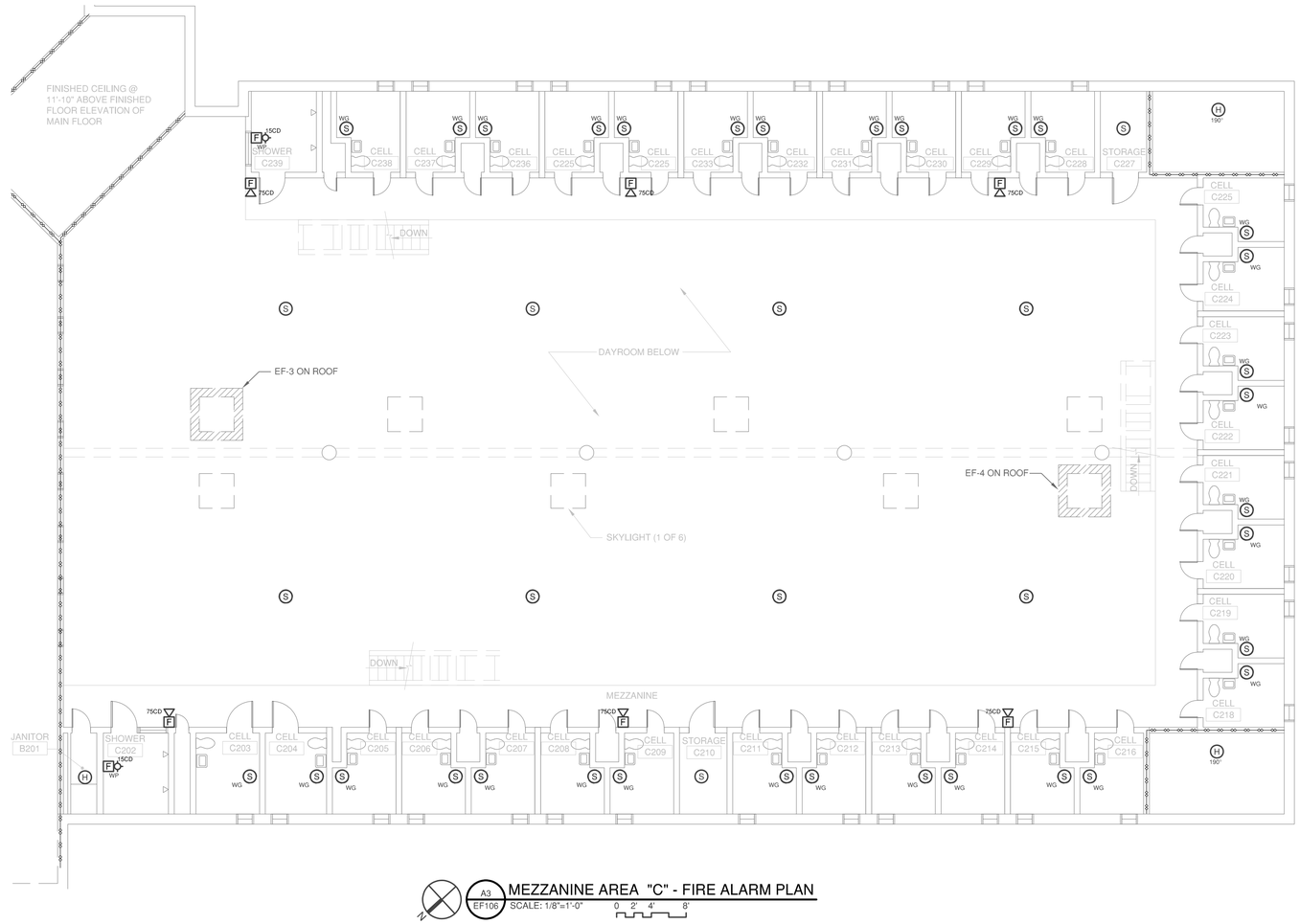
A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

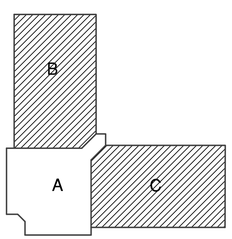
C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.



A1 EF106 MEZZANINE AREA "B" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



A3 EF106 MEZZANINE AREA "C" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MEZZ FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

NASH CORRECTIONAL INSTITUTION
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NASHVILLE, NORTH CAROLINA 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT -2 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM PLAN

EF106

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GENERAL NOTES:

A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

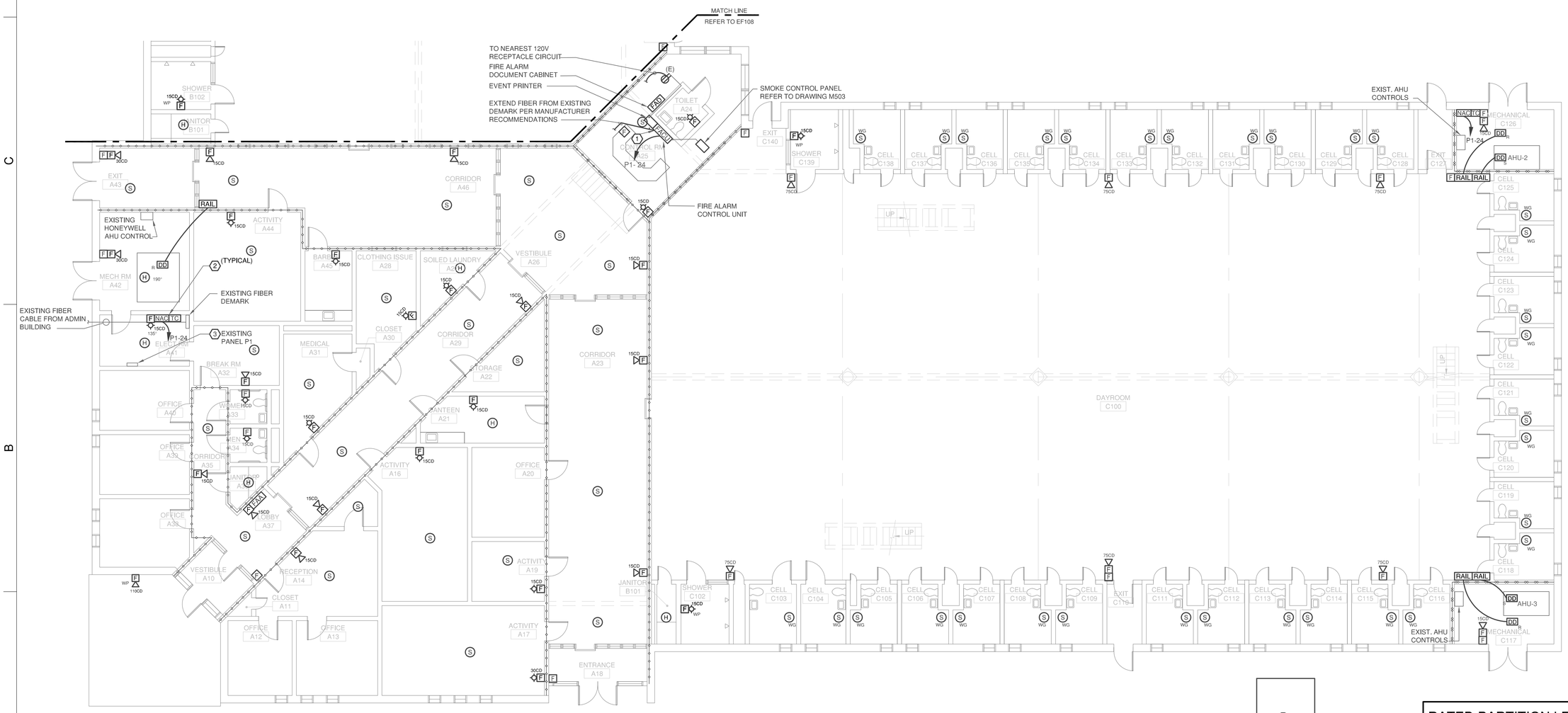
C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

(#) SHEET KEYED NOTES:

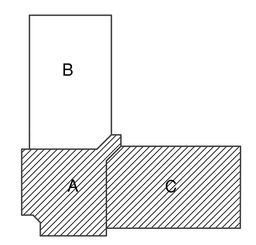
1. PROVIDE FACU INSTALLED IN THE LOCATION OF EXISTING FACU. REUSE EXISTING BREAKER #24 OF PANEL. PROVIDE NEW BRANCH CIRCUIT WIRING 2 #12, 1 #12 GND IN 3/4" CONDUIT FOR NEW FACU.

2. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINET AS RECOMMENDED BY MANUFACTURERS.

3. PANEL P1, 100 A, MCB 120/208V, 3Ø, 4W, SQUARE D TYPE NQOD CAT. NO. 2444926-D0. ALL NEW BREAKERS SHALL BE SAME AS EXISTING AND 10K AIC RATING.



A3 / EF107 MAIN FLOOR AREA "A" & "C" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

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2869 US 64 ALT.
NASHVILLE, NORTH CAROLINA 27856

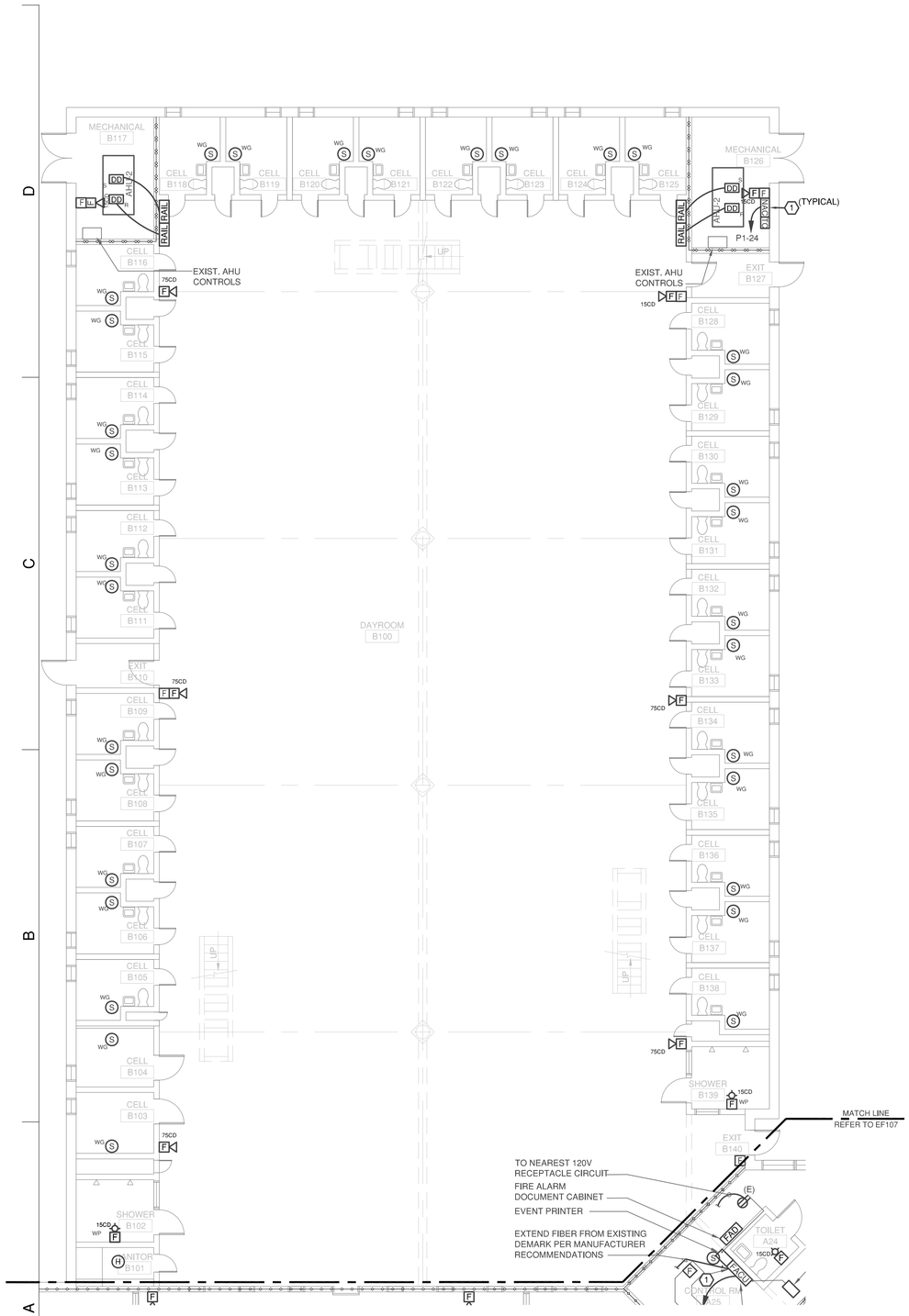
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-3
MAIN FLOOR AREA "A" & "C"
FIRE ALARM PLAN

EF107

"S:\UNIT - DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-3\JO3987-EF000-E000 GENERAL AND PLAN SHEETS - SINGLE CELL 3.dwg MHARBED 12/19/22 - 5:47 P



A1 EF108 MAIN FLOOR AREA "B"- FIRE ALARM PLAN

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

GENERAL NOTES:

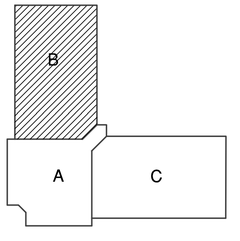
A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

SHEET KEYED NOTES:

1. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL, INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINET AS RECOMMENDED BY MANUFACTURER



KEY PLAN -1ST FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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DRAWN BY:	APD
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CADD DWG NO:	JO3987-EF108
JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

NASH CORRECTIONAL INSTITUTION
2869 US 64 ALT,
NASHVILLE, NORTH CAROLINA 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT-3
MAIN FLOOR AREA "B"
FIRE ALARM PLAN

EF108

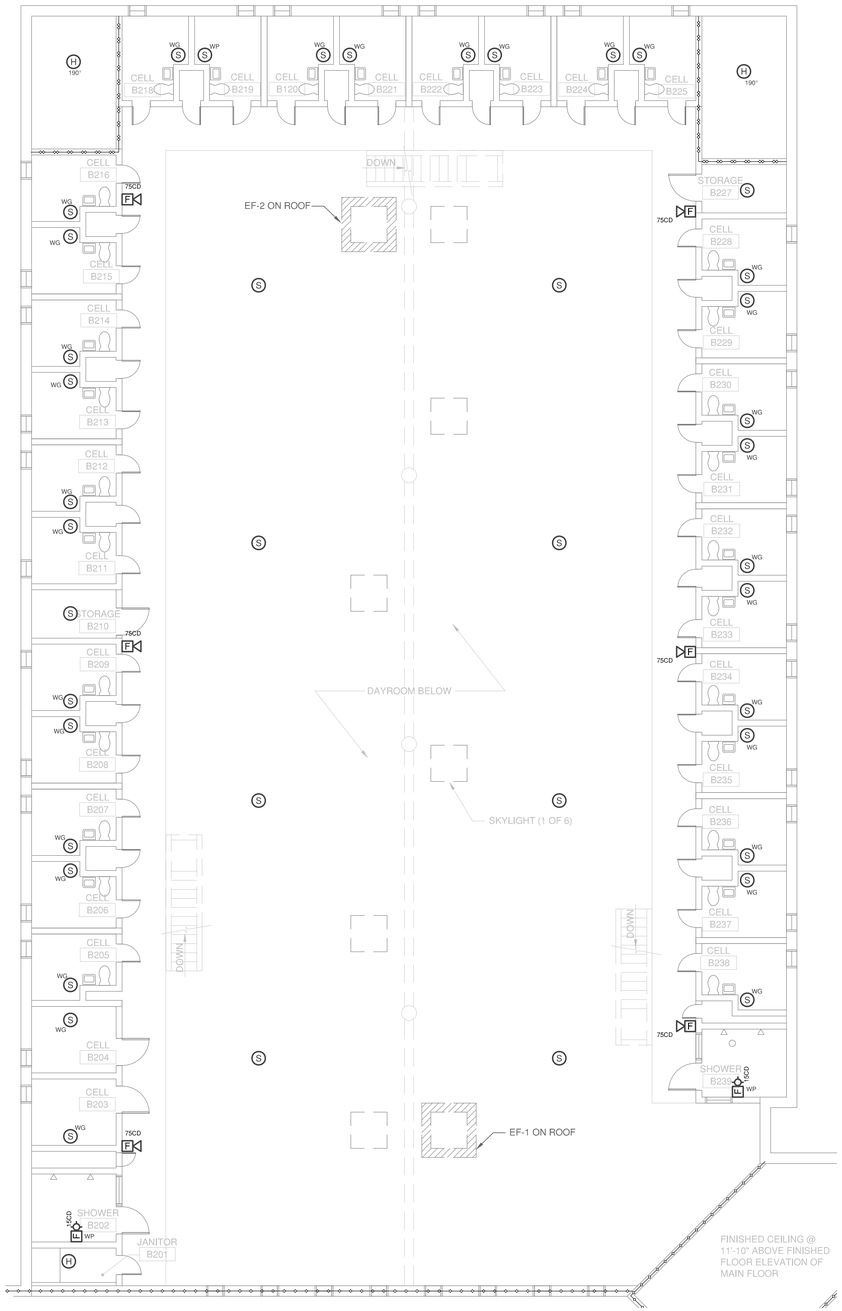
12/19/22 – 5:24 P
"J:\UNIT – DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-3\JO3987-EDD0-EX00 GENERAL AND PLAN SHEETS – SINGLE CELL 3.dwg MHARBED

GENERAL NOTES:

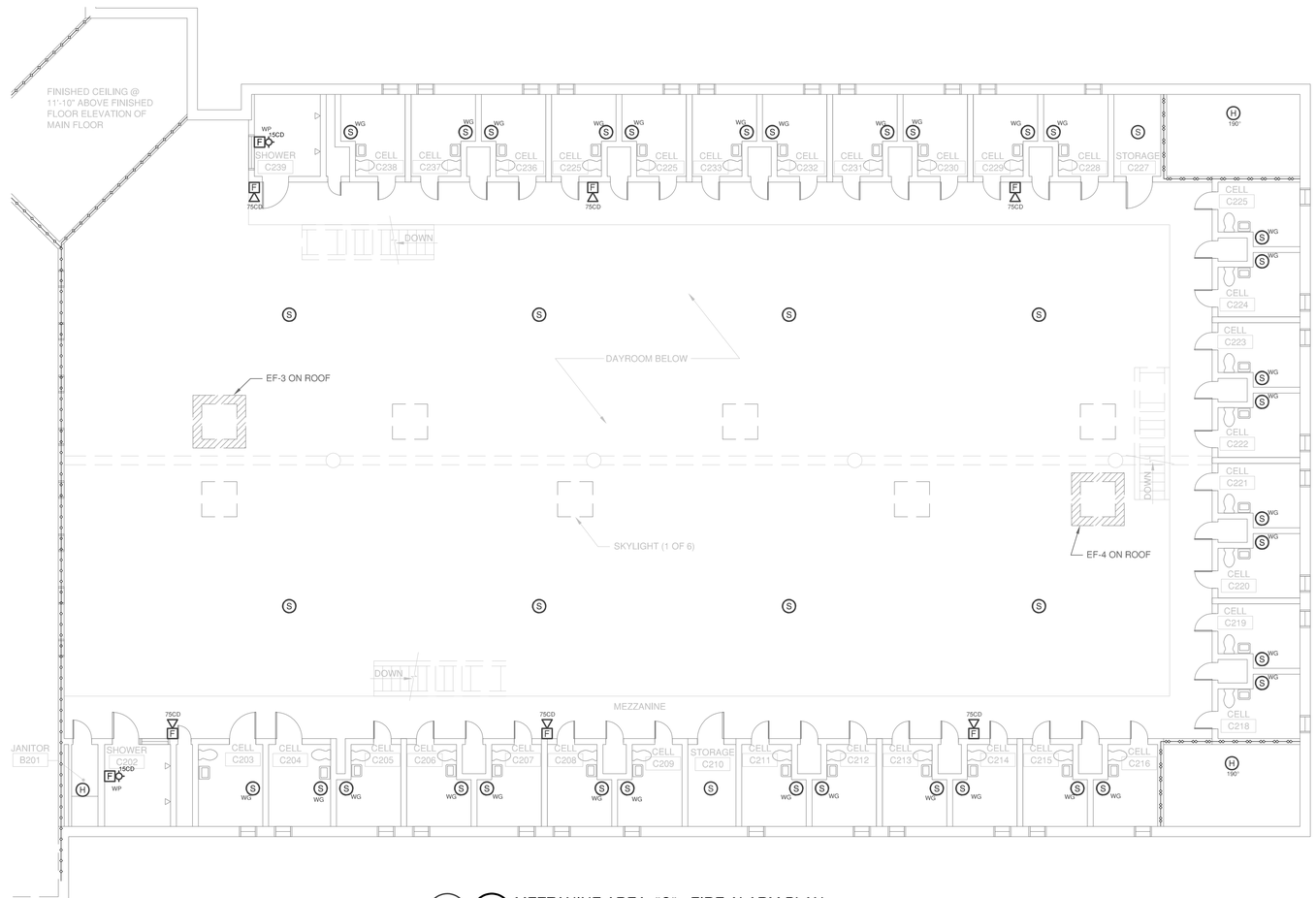
A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

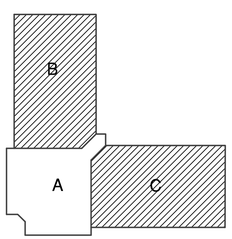
C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.



A1 EF109 MEZZANINE AREA "B" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



A4 EF109 MEZZANINE AREA "C" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MEZZ FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT -3 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM PLAN

EF109

Z:\UNIT - DOP\Nash CI 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-3\JO3987-E000-E300 GENERAL AND PLAN SHEETS - SINGLE CELL 3.dwg MHARBED 12/19/22 - 5:25 P

GENERAL NOTES:

A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACKBOXES FOR FIRE ALARM DEVICES.

C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

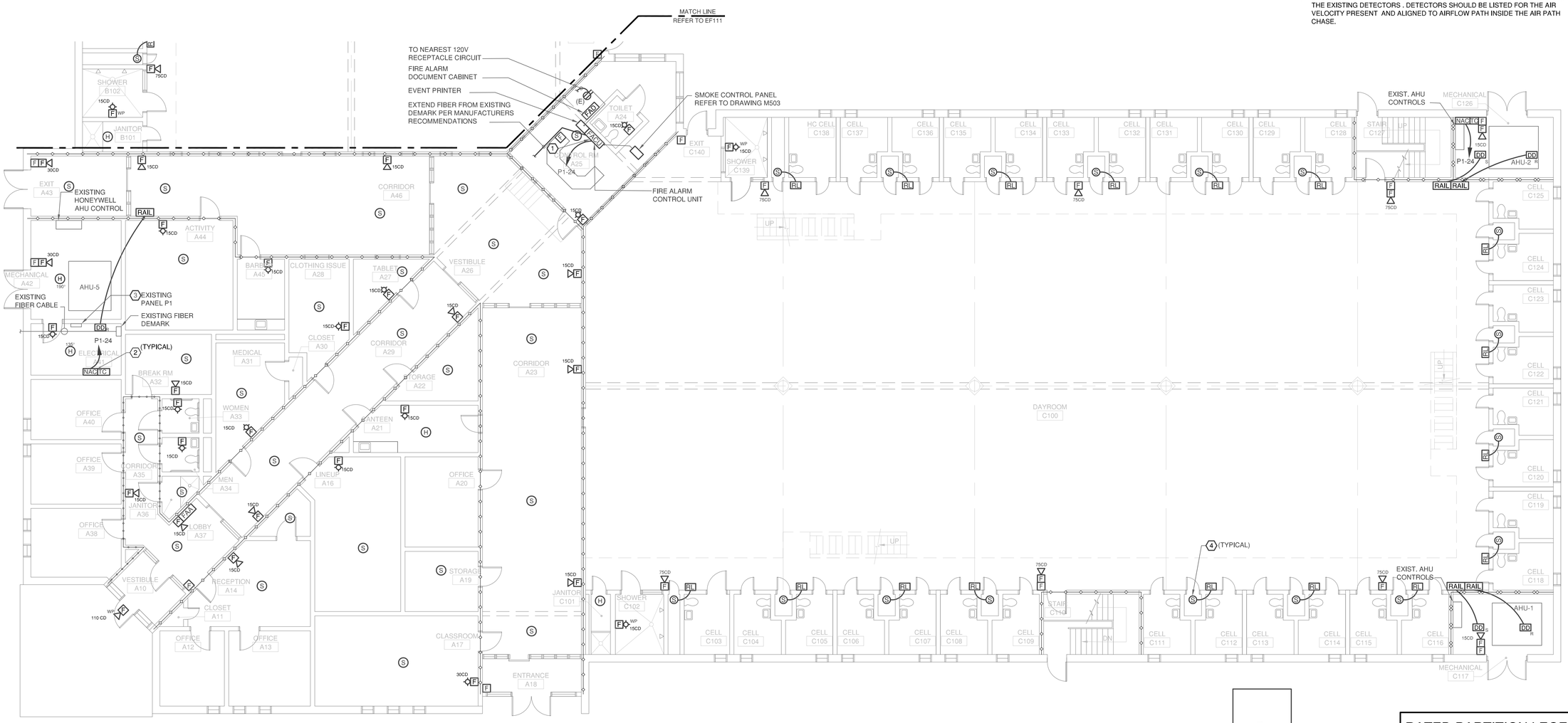
(#) SHEET KEYED NOTES:

1. PROVIDE FACU INSTALLED IN THE LOCATION OF EXISTING FACU. REUSE EXISTING BREAKER #24 OF PANEL. PROVIDE NEW BRANCH CIRCUIT WIRING 2 #12, 1 #12 GND IN 3/4" CONDUIT FOR NEW FACU.

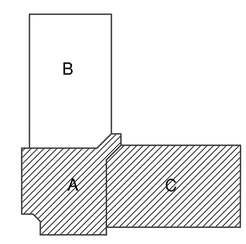
2. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINET AS RECOMMENDED BY MANUFACTURERS.

3. PANEL P1, 100 A, MCB 120/208V, 3Ø, 4W, SQUARE D TYPE NQOD CAT. NO. 12-3253874-E2. ALL NEW BREAKERS SHALL BE SAME AS EXISTING AND 10K AIC RATING.

4. PROVIDE PHOTO ELECTRIC SMOKE DETECTORS INSTALLED AT THE LOCATION OF THE EXISTING DETECTORS . DETECTORS SHOULD BE LISTED FOR THE AIR VELOCITY PRESENT AND ALIGNED TO AIRFLOW PATH INSIDE THE AIR PATH CHASE.



A3 EF110 MAIN FLOOR AREA "A" & "C" - FIRE ALARM PLAN
SCALE: 1/8"=1'-0"



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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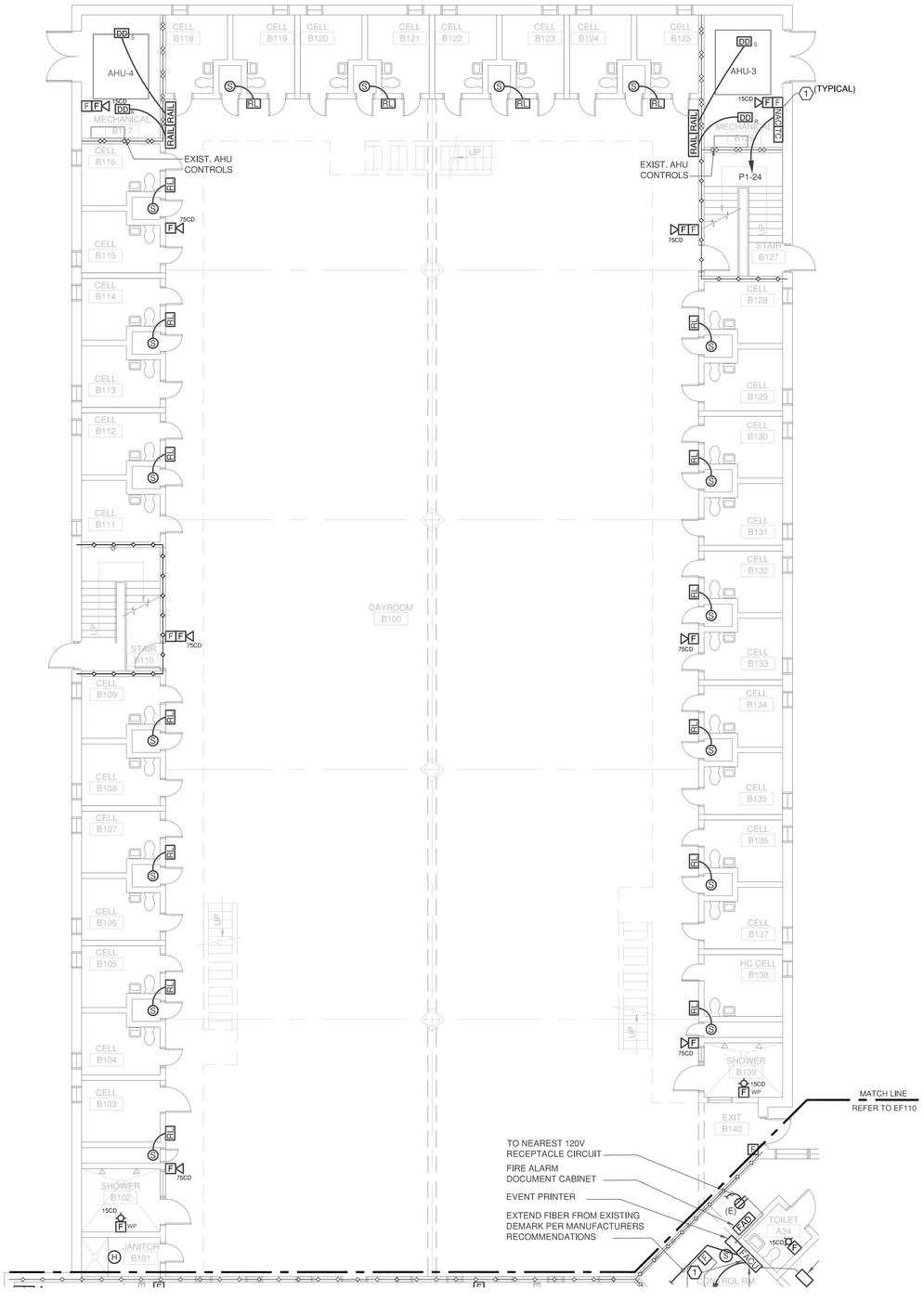
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT 4 MAIN FLOOR AREA "A" &"C" FIRE ALARM PLAN

EF110

"Z:\UNIT - DOP\Nash Cl 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-4\JO3987-EC00-E000 GENERAL AND PLAN SHEETS - SINGLE CELL 4.dwg MAARBED 12/19/22 - 5:31 P



A1 EF111 MAIN FLOOR AREA "B" - FIRE ALARM PLAN

SCALE: 1/8"=1'-0" 0 2' 4' 8'

GENERAL NOTES:

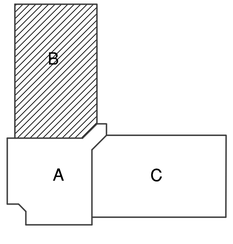
A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACKBOXES FOR FIRE ALARM DEVICES.

C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

SHEET KEYED NOTES:

1. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY, AMPLIFIERS AND LISTED TERMINAL CABINETS AS RECOMMENDED BY MANUFACTURER



KEY PLAN - MAIN FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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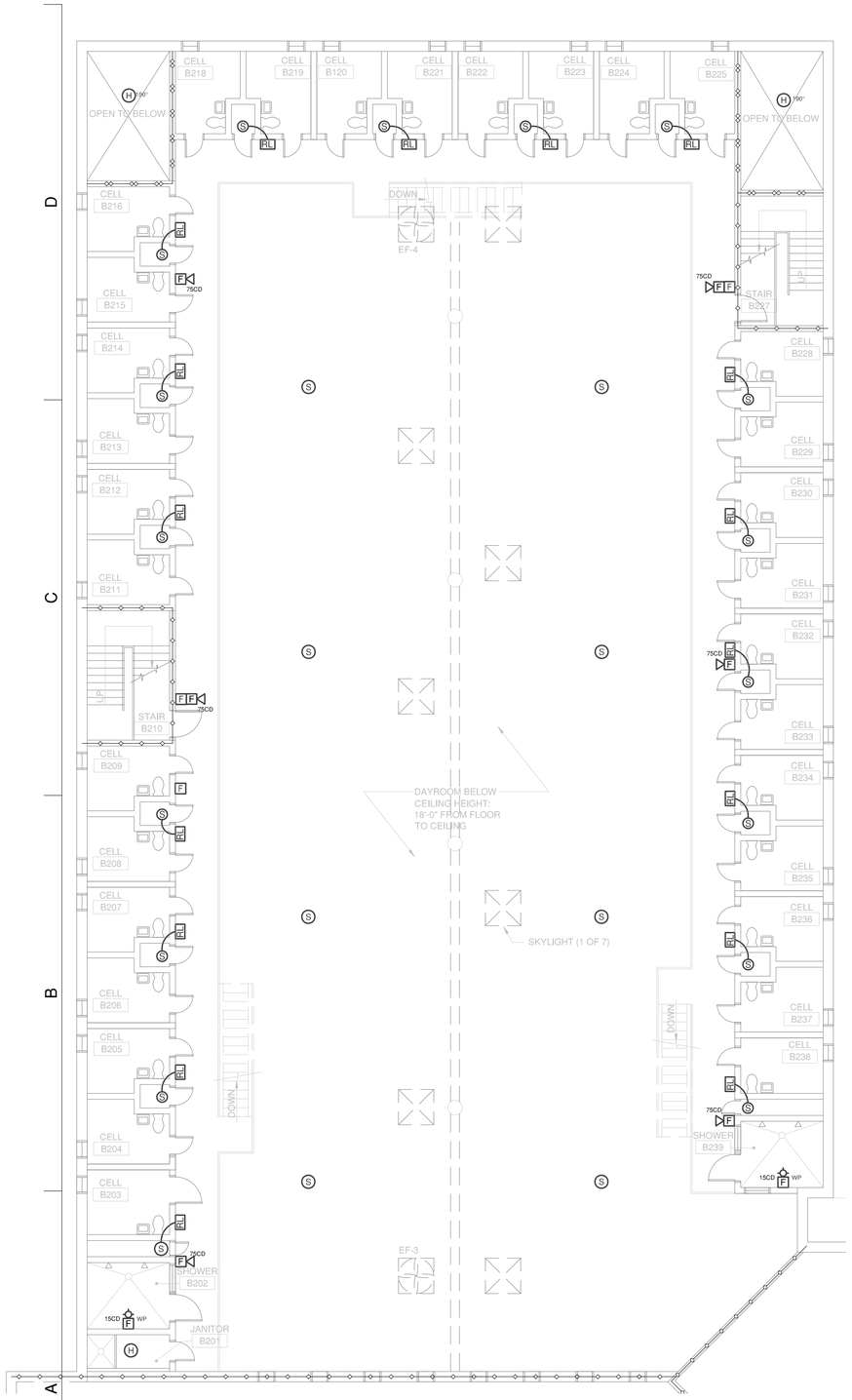
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT 4
MAIN FLOOR AREA "B"
FIRE ALARM PLAN

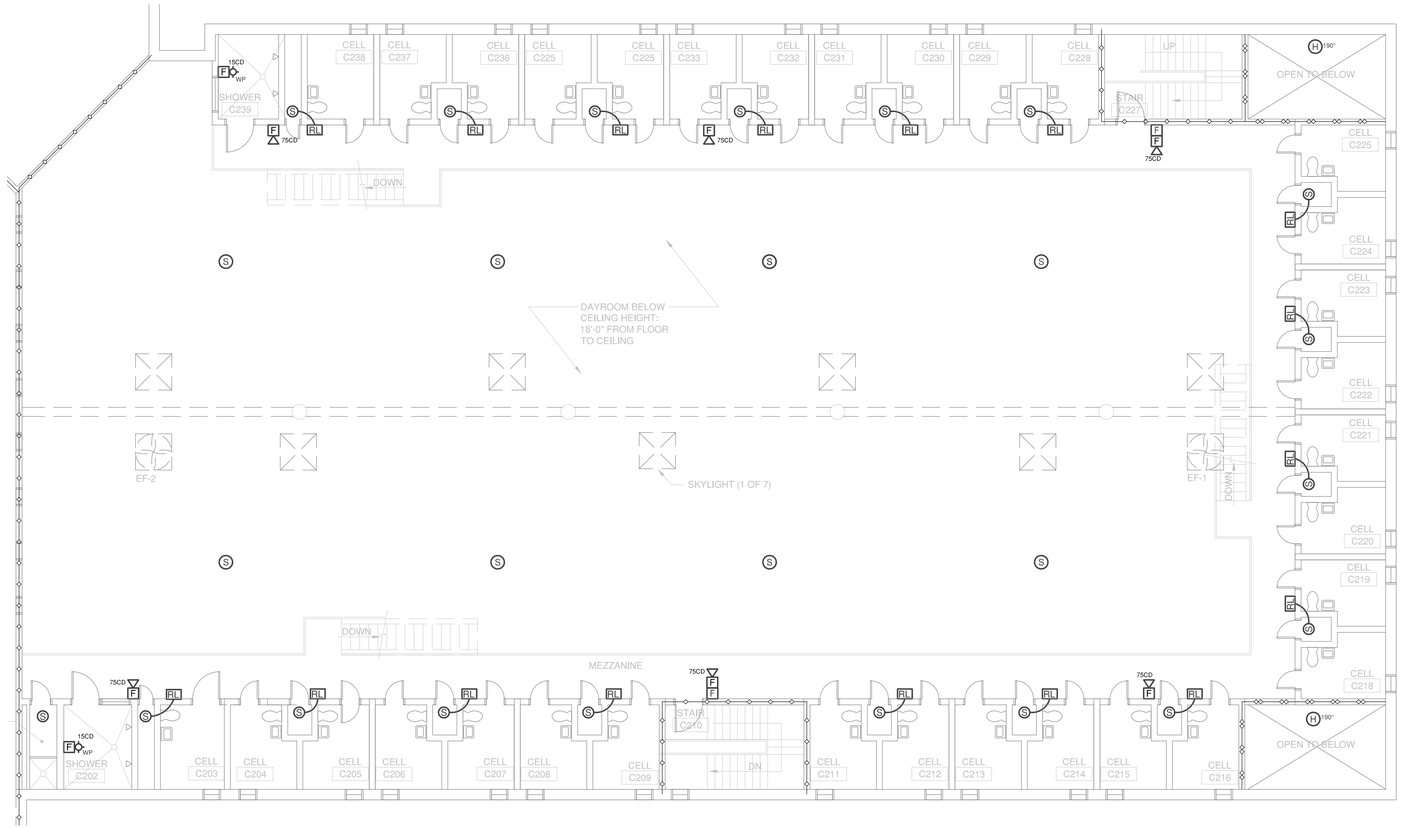
EF111

"G:\UNIT - DOP\Nash Cl 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SINGLE CELL UNIT-4\JO3987-E000-E300 GENERAL AND PLAN SHEETS - SINGLE CELL 4.dwg MHAMBED 12/19/22 - 5:33 P



A1 EF112 MEZZANINE FLOOR AREA "B" - FIRE ALARM PLAN

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



A3 EF112 MEZZANINE FLOOR AREA "C" FIRE ALARM PLAN

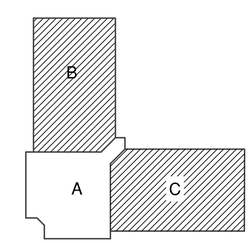
SCALE: 1/8"=1'-0"

GENERAL NOTES:

A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACKBOXES FOR FIRE ALARM DEVICES.

C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.



KEY PLAN - MEZZANINE FLOOR

RATED PARTITION LEGEND

- 4 HR FIRE WALL
- 3 HR FIRE WALL
- 2 HR FIRE WALL
- 4 HR FIRE BARRIER
- 3 HR FIRE BARRIER
- 2 HR FIRE BARRIER
- 1 HR FIRE BARRIER
- 1 HR FIRE PARTITION
- 2 HR SMOKE BARRIER
- 1 HR SMOKE BARRIER
- SMOKE PARTITION

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REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

SINGLE CELL UNIT 4 MEZZANINE FLOOR AREA "B" & "C" FIRE ALARM PLAN

EF112

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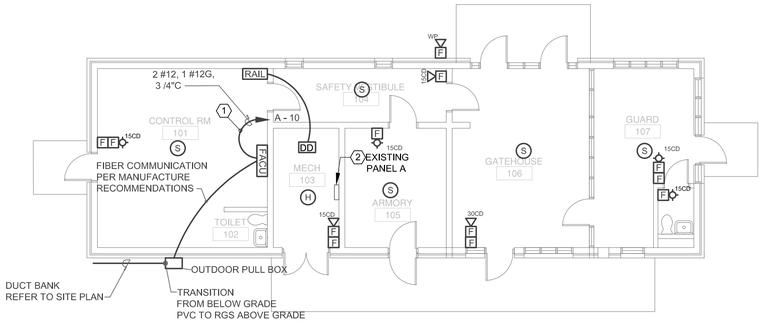

N

B2
EF113
GATEHOUSE- FIRE ALARM PLAN
SCALE: 1/8"=1'-0"
0 2' 4' 8'

GENERAL NOTES:

A. ALL CONDUITS MOUNTED 8'-0" AND BELOW SHALL BE RIGID GALVANIZED STEEL. CONDUITS AND DEVICES ARE SURFACE MOUNTED FOR THE MAJORITY OF THIS PROJECT..

B. NO UNUSED KNOCKOUTS ARE ALLOWED ON BACK BOXES FOR FIRE ALARM DEVICES.

C. PROVIDE THE TRIMMING WORK MATCH AND PAINT AROUND THE NEW FACU. PATCH SURFACE AND PAINT AS NEEDED.

SHEET KEYED NOTES:

1. NEW MASTER FACU INSTALLED IN THE LOCATION OF EXISTING FACU. REUSE EXISTING BREAKER. PROVIDE NEW BRANCH CIRCUIT WIRING 2 # 12, 1 #12 GND IN 3/4" CONDUIT FOR THE NEW MASTER FACU.

2. PANEL A, 100A MCB 120/208V, 3Ø, 4W, SQUARE D TYPE NQOB CAT. NO. 2444600-A0. ALL NEW BREAKERS SHALL BE SAME AS EXISTING AND 10K AIC RATING.

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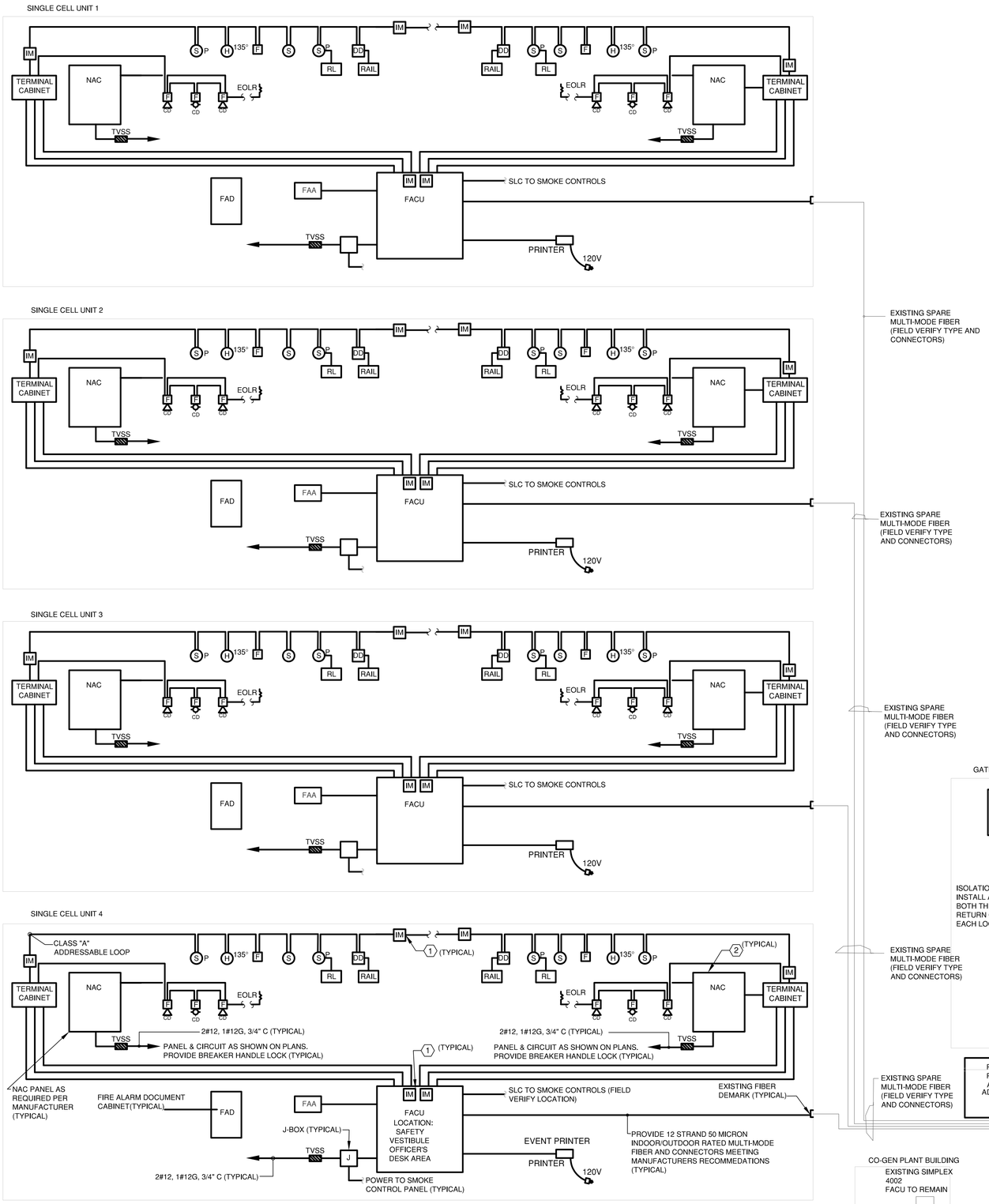
REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

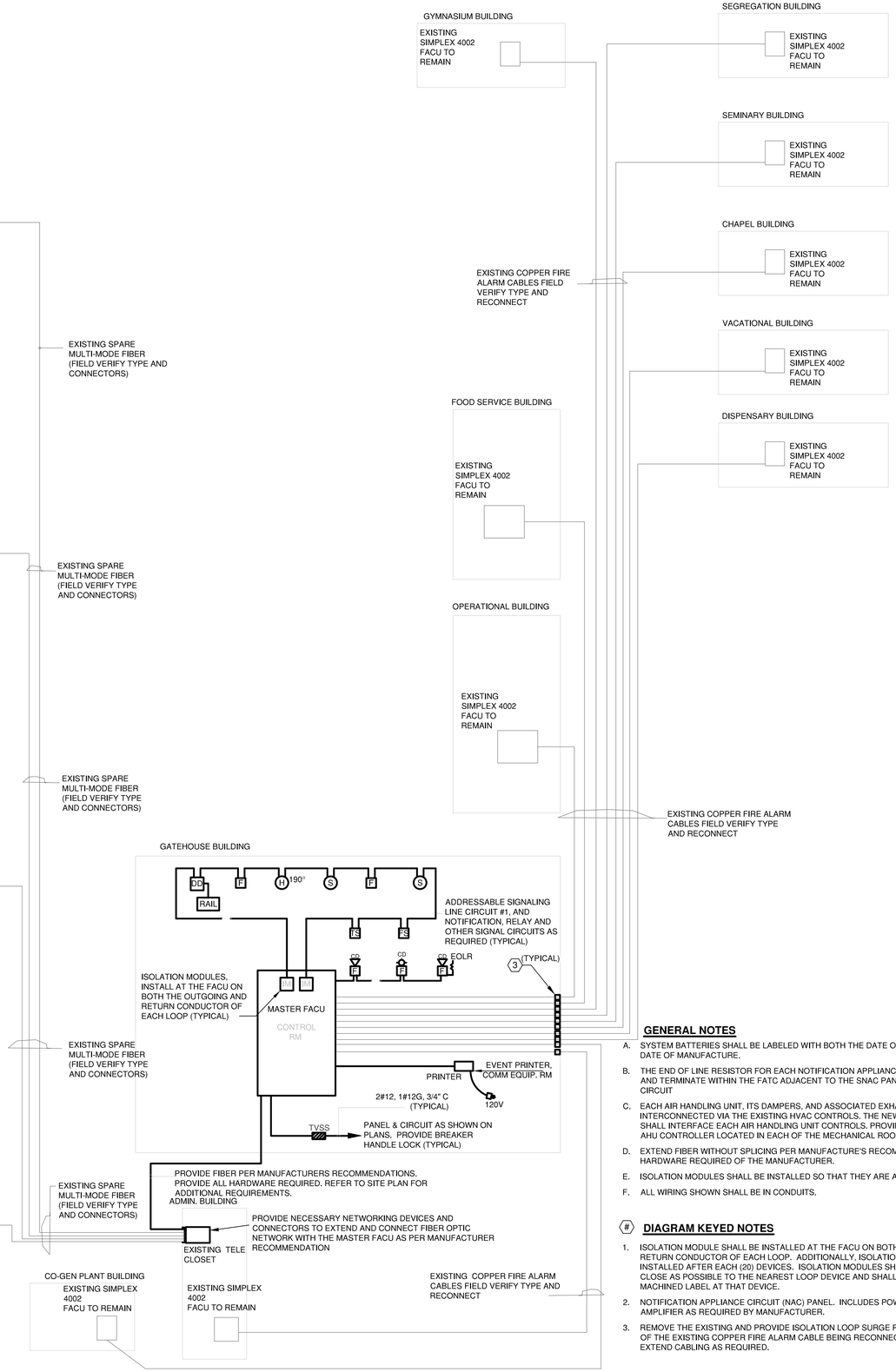
SCO ID # 22-24604-01A

GATEHOUSE - FIRE ALARM PLAN & MASTER FACU MATRIX

EF113



A2 / E401 TYPICAL FIRE ALARM RISER
SCALE: NONE



GENERAL NOTES

A. SYSTEM BATTERIES SHALL BE LABELED WITH BOTH THE DATE OF INSTALLATION AND THE DATE OF MANUFACTURE.

B. THE END OF LINE RESISTOR FOR EACH NOTIFICATION APPLIANCE CIRCUIT SHALL RETURN AND TERMINATE WITHIN THE FATC ADJACENT TO THE SNAC PANEL SERVING THAT CIRCUIT

C. EACH AIR HANDLING UNIT, ITS DAMPERS, AND ASSOCIATED EXHAUST FANS ARE INTERCONNECTED VIA THE EXISTING HVAC CONTROLS. THE NEW FIRE ALARM SYSTEM SHALL INTERFACE EACH AIR HANDLING UNIT CONTROLS. PROVIDE RELAYS FOR EACH AHU CONTROLLER LOCATED IN EACH OF THE MECHANICAL ROOMS.

D. EXTEND FIBER WITHOUT SPLICING PER MANUFACTURE'S RECOMMENDATIONS, USING ALL HARDWARE REQUIRED OF THE MANUFACTURER.

E. ISOLATION MODULES SHALL BE INSTALLED SO THAT THEY ARE ACCESSIBLE TO STAFF.

F. ALL WIRING SHOWN SHALL BE IN CONDUITS.

DIAGRAM KEYED NOTES

1. ISOLATION MODULE SHALL BE INSTALLED AT THE FACU ON BOTH THE OUTGOING AND RETURN CONDUCTOR OF EACH LOOP. ADDITIONALLY, ISOLATION MODULES SHALL BE INSTALLED AFTER EACH (20) DEVICES. ISOLATION MODULES SHALL BE INSTALLED AS CLOSE AS POSSIBLE TO THE NEAREST LOOP DEVICE AND SHALL BE IDENTIFIED BY A MACHINED LABEL AT THAT DEVICE.
2. NOTIFICATION APPLIANCE CIRCUIT (NAC) PANEL. INCLUDES POWER SUPPLY AND AMPLIFIER AS REQUIRED BY MANUFACTURER.
3. REMOVE THE EXISTING AND PROVIDE ISOLATION LOOP SURGE PROTECTOR FOR EACH OF THE EXISTING COPPER FIRE ALARM CABLE BEING RECONNECTED. PROVIDE AND EXTEND CABLING AS REQUIRED.

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REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

TYPICAL FIRE ALARM RISER

E401

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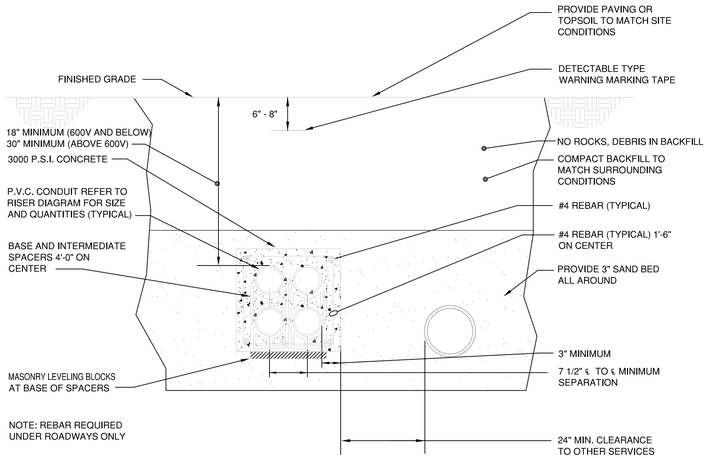
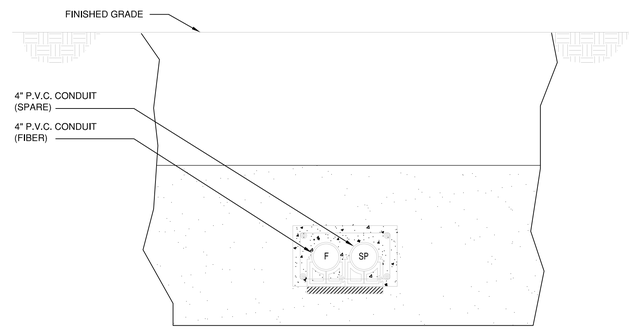


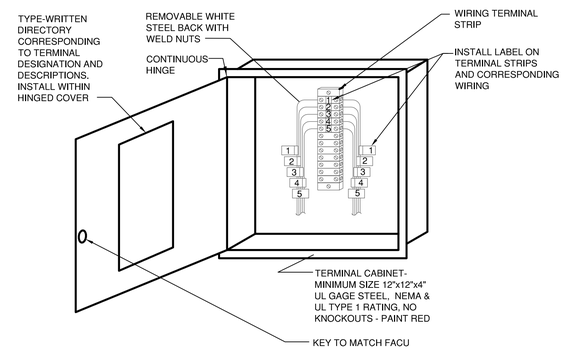
C1 / E501 TYPICAL TRENCHING DETAIL
SCALE: NONE



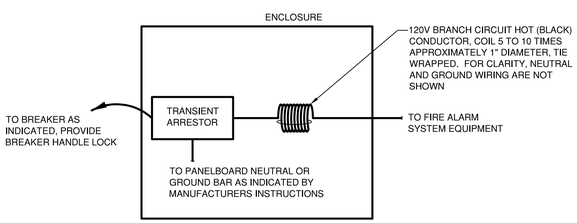
GENERAL DETAIL NOTES:

A. REFER TO TYPICAL TRENCHING DETAIL FOR ADDITIONAL REQUIREMENTS.

C3 / E501 TRENCHING DETAIL
SCALE: NONE



C4 / E501 TYPICAL FIRE ALARM TERMINAL CABINET
SCALE: NONE

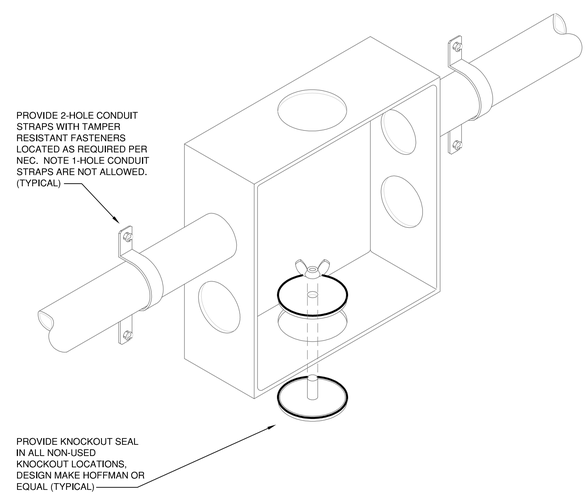


GENERAL DETAIL NOTES:

A. SECURELY MOUNT TRANSIENT ARRESTOR IN ACCESSIBLE JUNCTION BOX OR PROPER METAL ENCLOSURE ADJACENT TO THE ELECTRICAL PANELBOARD. PROVIDE ENGRAVED LABEL INDICATING ITS LOCATION.

B. TRANSIENT ARRESTOR DESIGN MAKE: DITEK MODEL DTK-TSS4D OR APPROVED EQUAL.

A1 / E501 TRANSIENT ARRESTOR INSTALLATION DETAIL
SCALE: NONE



GENERAL DETAIL NOTES:

A. THIS DETAIL APPLIES TO ALL SURFACE MOUNTED RACEWAYS IN LOCATIONS BELOW 8'-0"AFF. NOT REQUIRED IN LOCKED MECHANICAL/ELECTRICAL ROOMS UNLESS NOTED OTHERWISE.
B. DPS PREFERENCE IS FOR THE RACEWAY BOXES TO HAVE NO KNOCKOUTS, HOWEVER KNOCKOUT SEALS AS NOTED ARE ACCEPTABLE.

A3 / E501 SECURE SURFACE MOUNTED RACEWAYS
SCALE: NONE

DEPARTMENT OF PUBLIC SAFETY
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NORTH CAROLINA PROFESSIONAL SEAL 041481 ENGINEER WILLIAM W. STEVENS

Digitally signed by William W Stevens
Date: 2022.12.28 08:20:42-05'00'

12.20.22 ISSUED FOR CONSTRUCTION

NO	DATE	REVISION

DRAWN BY: MHA
DESIGNED BY: MHA
CHECKED BY: WWS
CADD DWG NO: JO3987-E501
JOB ORDER NO: 3987
PLOT DATE: 12.19.2022

NASH CORRECTIONAL INSTITUTION
2869 US 64 ALT.
NASHVILLE, NC 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

TYPICAL RISERS AND DETAILS

E501

J:\UNF - DOP\Nash Cl 3710\Projects\JO 3987 Replace Fire Alarm System in Four Single Cell Units\CAD Drawings\SITE PLAN\JO3987-E5101 ELECTRICAL SITE PLAN.dwg MHARBED 12/19/22 – 5:37 P

SYSTEMS OUTPUTS

	SYSTEM INPUTS	A ACTUATE COMMON ALARM SIGNAL INDICATOR (FACP ANNUNCIATION)	B ACTUATE AUDIBLE ALARM SIGNAL (FACP ANNUNCIATION)	C ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (FACP ANNUNCIATION)	D ACTUATE AUDIBLE SUPERVISORY SIGNAL (FACP ANNUNCIATION)	E ACTUATE COMMON TROUBLE INDICATOR (FACP ANNUNCIATION)	F ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (FACP ANNUNCIATION)	G ACTUATE ZONE ALARM INDICATOR (FACP ANNUNCIATION)	H DISPLAY / PRINT CHANGE OF STATUS (FACP ANNUNCIATION)	I ACTUATE BUILDING EVACUATION SIGNALS (NOTIFICATION)	J SHUT DOWN AHUS IN THE AFFECTED AREA (REQUIRED FIRE SAFETY CONTROL)	K PURGE AHUS IN THE AFFECTED AREA (REQUIRED FIRE SAFETY CONTROL)	L	M	N	O	P	Q	R	S	T	U	V	W ACTUATE EXTERIOR NOTIFICATION APPLIANCE (SUPPLEMENTARY)	X	
1	MANUAL FIRE ALARM BOXES	●	●					●	●		●													●		1
2	SMOKE DETECTORS	●	●					●	●		●													●		2
3	HEAT DETECTOR	●	●					●	●		●													●		3
4	SUPPLY AIR DUCT DETECTOR - AHU - 1 & 2			●	●				●																	4
5	SUPPLY AIR DUCT DETECTOR - AHU - 3 & 4			●	●				●																	5
6	RETURN AIR DUCT DETECTOR - AHU - 1 & 2	●	●					●	●		●			●										●		6
7	RETURN AIR DUCT DETECTOR - AHU - 3 & 4	●	●					●	●		●			●										●		7
8	RETURN AIR DUCT DETECTOR - AHU - 5	●	●					●	●		●		●											●		8
9	SMOKE CONTROL PANEL MANUAL SWITCH TURNED TO "OFF"					●			●																	9
10	SMOKE CONTROL PANEL MANUAL SWITCH TURNED TO "ON"			●					●																	10
11	GROUND FAULT					●	●																			11
12	LOSS OF POWER (8 HOURS)					●	●																			12
13	BATTERY FAILURE					●	●																			13
14	OPEN CIRCUIT					●	●																			14
15	NOTIFICATION APPLIANCE SHORT CIRCUIT					●	●																			15
16	FIBER OPTIC NETWORK COMMUNICATION FAILURE			●	●																					16
17	AHU SHUTDOWN BYPASS SWITCH TO BYPASS (NOTE 1)					●	●																			17
18	NOTIFICATION APPLIANCE BYPASS SWITCH TO BYPASS (NOTE 2)					●	●																			18
19																										19
20																										20
21																										21

NOTES:

1. PROVIDE A SUPERVISED "AHU SHUTDOWN BYPASS" SWITCH (BUTTON) TO OVERRIDE SHUTDOWN OF THE AIR HANDLING UNITS. THE FACU SHALL INDICATE A TROUBLE CONDITION WHEN THE SWITCH IS ACTIVATED.
2. PROVIDE A SWITCH (BUTTON) TO BYPASS THE ACTIVATION OF ALL NOTIFICATION APPLIANCES. THE FACU SHALL INDICATE A TROUBLE CONDITION WHEN THE SWITCH IS ACTIVATED.

C1 / EF601 FIRE ALARM MATRIX - TYPICAL OF SINGLE CELL UNIT 4
SCALE: NONE

SYSTEMS OUTPUTS

	SYSTEM INPUTS	A ACTUATE COMMON ALARM SIGNAL INDICATOR (FACP ANNUNCIATION)	B ACTUATE AUDIBLE ALARM SIGNAL (FACP ANNUNCIATION)	C ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (FACP ANNUNCIATION)	D ACTUATE AUDIBLE SUPERVISORY SIGNAL (FACP ANNUNCIATION)	E ACTUATE COMMON TROUBLE INDICATOR (FACP ANNUNCIATION)	F ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (FACP ANNUNCIATION)	G ACTUATE ZONE ALARM INDICATOR (FACP ANNUNCIATION)	H DISPLAY / PRINT CHANGE OF STATUS (FACP ANNUNCIATION)	I ACTUATE BUILDING EVACUATION SIGNALS (NOTIFICATION)	J SHUT DOWN AHUS IN THE AFFECTED AREA (REQUIRED FIRE SAFETY CONTROL)	K PURGE AHUS IN THE AFFECTED AREA (REQUIRED FIRE SAFETY CONTROL)	L	M	N	O	P	Q	R	S	T	U	V	W ACTUATE EXTERIOR NOTIFICATION APPLIANCE (SUPPLEMENTARY)	X	
1	MANUAL FIRE ALARM BOXES	●	●					●	●		●													●		1
2	SMOKE DETECTORS	●	●					●	●		●													●		2
3	HEAT DETECTOR	●	●					●	●		●													●		3
4	RETURN AIR DUCT DETECTOR - AHU - 1	●	●					●	●		●		●											●		4
5	RETURN AIR DUCT DETECTOR - AHU - 2 &3	●	●					●	●		●			●										●		5
6	RETURN AIR DUCT DETECTOR - AHU - 4 & 5	●	●					●	●		●			●										●		6
7	SUPPLY AIR DUCT DETECTOR - AHU - 2 &3			●	●				●																	7
8	SUPPLY AIR DUCT DETECTOR - AHU - 4 & 5			●	●				●																	8
9	SMOKE CONTROL PANEL MANUAL SWITCH TURNED TO "OFF"					●			●																	9
10	SMOKE CONTROL PANEL MANUAL SWITCH TURNED TO "ON"			●					●																	10
11	GROUND FAULT					●	●																			11
12	LOSS OF POWER (8 HOURS)					●	●																			12
13	BATTERY FAILURE					●	●																			13
14	OPEN CIRCUIT					●	●																			14
15	NOTIFICATION APPLIANCE SHORT CIRCUIT					●	●																			15
16	FIBER OPTIC NETWORK COMMUNICATION FAILURE			●	●																					16
17	AHU SHUTDOWN BYPASS SWITCH TO BYPASS (NOTE 1)					●	●																			17
18	NOTIFICATION APPLIANCE BYPASS SWITCH TO BYPASS (NOTE 2)					●	●																			18
19																										19
20																										20
21																										21

NOTES:

1. PROVIDE A SUPERVISED "AHU SHUTDOWN BYPASS" SWITCH (BUTTON) TO OVERRIDE SHUTDOWN OF THE AIR HANDLING UNITS. THE FACU SHALL INDICATE A TROUBLE CONDITION WHEN THE SWITCH IS ACTIVATED.
2. PROVIDE A SWITCH (BUTTON) TO BYPASS THE ACTIVATION OF ALL NOTIFICATION APPLIANCES. THE FACU SHALL INDICATE A TROUBLE CONDITION WHEN THE SWITCH IS ACTIVATED.

A1 / EF601 FIRE ALARM MATRIX - TYPICAL OF SINGLE CELL UNITS 1, 2 & 3
SCALE: NONE

SYSTEMS OUTPUTS

	SYSTEM INPUTS	A ACTUATE COMMON ALARM SIGNAL INDICATOR (FACP ANNUNCIATION)	B ACTUATE AUDIBLE ALARM SIGNAL (FACP ANNUNCIATION)	C ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR (FACP ANNUNCIATION)	D ACTUATE AUDIBLE SUPERVISORY SIGNAL (FACP ANNUNCIATION)	E ACTUATE COMMON TROUBLE INDICATOR (FACP ANNUNCIATION)	F ACTUATE AUDIBLE COMMON TROUBLE SIGNAL (FACP ANNUNCIATION)	G ACTUATE ZONE ALARM INDICATOR (FACP ANNUNCIATION)	H DISPLAY / PRINT CHANGE OF STATUS (FACP ANNUNCIATION)	I ACTUATE BUILDING EVACUATION SIGNALS (NOTIFICATION)	J	K	L AHU SHUTDOWN IN GATEHOUSE (REQUIRED FIRE SAFETY CONTROL)	M	N	O	P	Q	R ACTUATE EXTERIOR NOTIFICATION APPLIANCE (SUPPLEMENTARY)	S	T	U	V	W	
1	MANUAL FIRE ALARM BOXES (GATEHOUSE)	●	●					●	●	●									●						1
2	HEAT DETECTORS (GATEHOUSE)	●	●					●	●	●									●						2
3	SMOKE DETECTORS (GATEHOUSE)	●	●					●	●	●									●						3
4	RETURN AIR DUCT DETECTOR (GATEHOUSE)	●	●					●	●	●			●						●						4
5	ADMINISTRATION BUILDING	●	●	●		●		●	●																5
6	SINGLE CELL UNIT 1	●		●		●		●	●																6
7	SINGLE CELL UNIT 2	●		●		●		●	●																7
8	SINGLE CELL UNIT 3	●		●		●		●	●																8
9	SINGLE CELL UNIT 4	●		●		●		●	●																9
10	GYMNASIUM	●		●		●		●	●																10
11	SEGREGATION	●		●		●		●	●																11
12	VOCATIONAL	●		●		●		●	●																12
13	CHAPEL			●		●	●	●	●																13
14	SEMINARY			●		●	●	●	●																14
15	DISPENSARY			●		●	●	●	●																15
16	FOOD SERVICE			●		●	●	●	●																16
17	OPERATIONS BUILDING			●		●	●	●	●																17
18	CO-GEN			●		●	●	●	●																18
19	WATER FLOW	●	●					●	●	●									●						19
20	FIRE PUMP CONTROL VALVE			●	●																				20
21	POST INDICATOR VALVE (PIV)			●	●																				21
22	GROUND FAULT					●	●																		22
23	LOSS OF POWER (8 HOURS)					●	●																		23
24	BATTERY FAILURE					●	●																		24
25	OPEN CIRCUIT					●	●																		25
26	NOTIFICATION APPLIANCE SHORT CIRCUIT					●	●																		26
27	FIRE ALARM NETWORK COMMUNICATION FAILURE			●	●																				27
28	AHU SHUTDOWN BYPASS SWITCH TO BYPASS (NOTE 1)					●	●																		28
29	NOTIFICATION APPLIANCE BYPASS SWITCH TO BYPASS (NOTE 2)					●	●																		29
30	FIRE PUMP POWER					●	●																		30
31	FIRE PUMP AUTO POSITION			●	●																				31
32	FIRE PUMP OR CONTROLLER TROUBLE					●	●																		32

NOTES:

1. PROVIDE A SUPERVISED "AHU SHUTDOWN BYPASS" SWITCH (BUTTON) TO OVERRIDE SHUTDOWN OF THE AIR HANDLING UNITS. THE FACP SHALL INDICATE A TROUBLE CONDITION WHEN THE SWITCH IS ACTIVATED.
2. PROVIDE A SWITCH (BUTTON) TO BYPASS THE ACTIVATION OF ALL NOTIFICATION APPLIANCES. THE FACP SHALL INDICATE A TROUBLE CONDITION WHEN THE SWITCH IS ACTIVATED.

A4 / EF601 FIRE ALARM MATRIX - GATEHOUSE MASTER CONTROL PANEL
SCALE: NONE

N*C DPS
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NORTH CAROLINA DEPARTMENT OF PUBLIC SAFETY
2020 YONKERS ROAD
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NORTH CAROLINA PROFESSIONAL SEAL 041481 ENGINEER WILLIAM W. STEVENS

Digitally signed by William W Stevens
Date: 2022.12.28 08:21:01-05'00'

12.20.22 ISSUED FOR CONSTRUCTION

NO	DATE	REVISION

DRAWN BY: MHA
DESIGNED BY: MHA
CHECKED BY: WWS
CADD DWG NO: JO3987-EF601
JOB ORDER NO: 3987
PLOT DATE: 12.19.2022

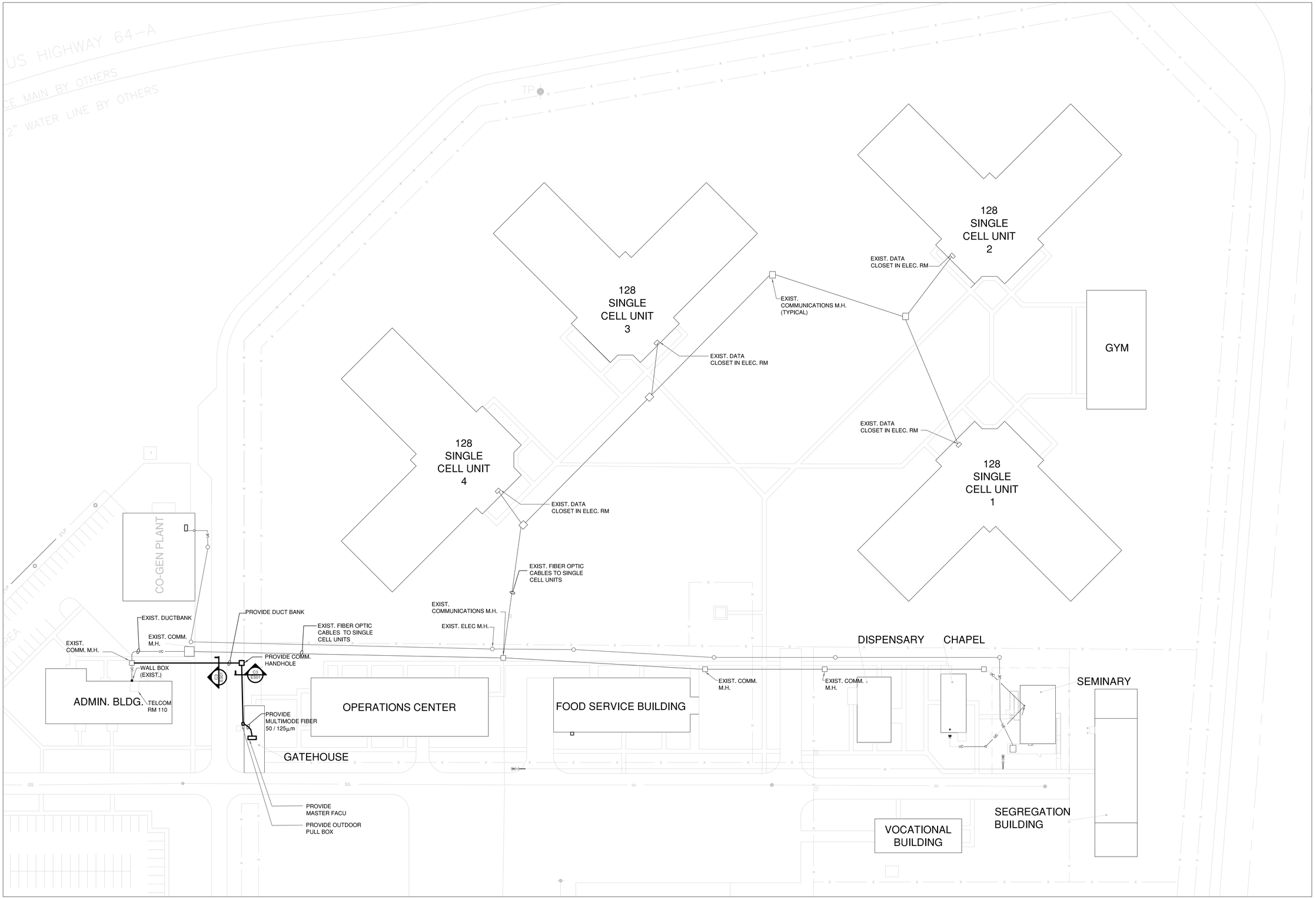
NASH CORRECTIONAL INSTITUTION
2869 US 64 ALT,
NASHVILLE, NC, 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

FIRE ALARM SYSTEM MATRIX

EF601



N

A3 E701 PARTIAL SITE PLAN
SCALE: 1"=50' 0 25' 50' 75'

N★C DPS
DEPARTMENT OF PUBLIC SAFETY

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 041481 WILLIAM W. STEVENS

Digitally signed by William W Stevens
Date: 2022.12.28 08:21:26-05'00'

12.20.22	ISSUED FOR CONSTRUCTION

NO	DATE	REVISION

DRAWN BY:	MHA
DESIGNED BY:	MHA
CHECKED BY:	WWS
CADD DWG NO:	JO3987-E701
JOB ORDER NO:	3987
PLOT DATE:	12.19.2022

NASH CORRECTIONAL INSTITUTION
2869 US 64 ALT,
NASHVILLE, NC 27856

REPLACE OBSOLETE FA SYSTEMS IN SINGLE CELL UNITS 1, 2, 3 & 4

SCO ID # 22-24604-01A

PARTIAL SITE PLAN GENERAL LAYOUT

E701