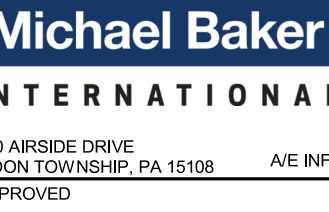


		SEQUENCE OF OPERATIONS													
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
ALARM CONDITIONS	ACTIVATION OF A MANUAL FIRE ALARM PULL STATION	1	X		X	X						X	X		
	ACTIVATION OF AREA SMOKE DETECTOR	2	X		X	X						X	X		
	ACTIVATION OF DUCT SMOKE DETECTOR	3		X				X	X						
	ACTIVATION OF WATERFLOW SWITCH	4	X		X	X			X		X	X			
	ACTIVATION OF A CARBON MONOXIDE DETECTOR	5	X		X	X						X	X	X	X
TROUBLE CONDITIONS	COMMON TROUBLE	6		X			X								
	FIELD WIRING OR SYSTEM COMPONENT FAULT	7		X			X								
	LOSS OF PRIMARY AC POWER	8		X			X								
	OPEN CIRCUIT	9		X			X								
	NAC SHORT	10		X			X								
	LOW BATTERY	11		X			X								
	CIRCUIT DISCONNECT	12		X			X								
GROUND FAULT	13		X			X									
SUPERVISORY CONDITIONS	COMMON SUPERVISORY	14		X			X								
	TAMPER SWITCH	15		X			X								
	ACTIVATION OF MASS NOTIFICATION SYSTEM	16		X	X		X				X	X	X		
	LOCAL MICROPHONE MNS OPERATION	17		X	X		X		X		X	X	X		
	LOC ACTIVATION OR PRE-RECORDED MNS MESSAGES	18		X	X		X		X		X	X	X		
	SIGNAL FROM WIDE AREA MASS NOTIFICATION SYSTEM	19		X	X		X		X		X	X	X		

SEQUENCE OF OPERATIONS

GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.



FOR COMMANDER NAVFAC
ACTIVITY
MARINE CORPS BASE
CAMP LEJEUNE

SATISFACTORY TO DATE
DES: _____ DRW: _____ CHK: _____

BRANCH MANAGER
CHIEF ENGINEER
FIRE PROTECTION

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC
ROICC FLORENCE CAMP LEJEUNE
MBC CAMP LEJEUNE
JACKSONVILLE, NC
JACKSONVILLE, NC
P1338 II MEF SIMULATION/TRAINING CENTER
REPLACEMENT
FIRE ALARM - SEQUENCE OF OPERATIONS

SCALE: AS NOTED
EPROJCT NO.: 1590892
CONSTR. CONTR. NO.: N40085-20-C-0059
NAVFAC DRAWING NO.:
SHEET _____ OF _____
FA002

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GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

D

C

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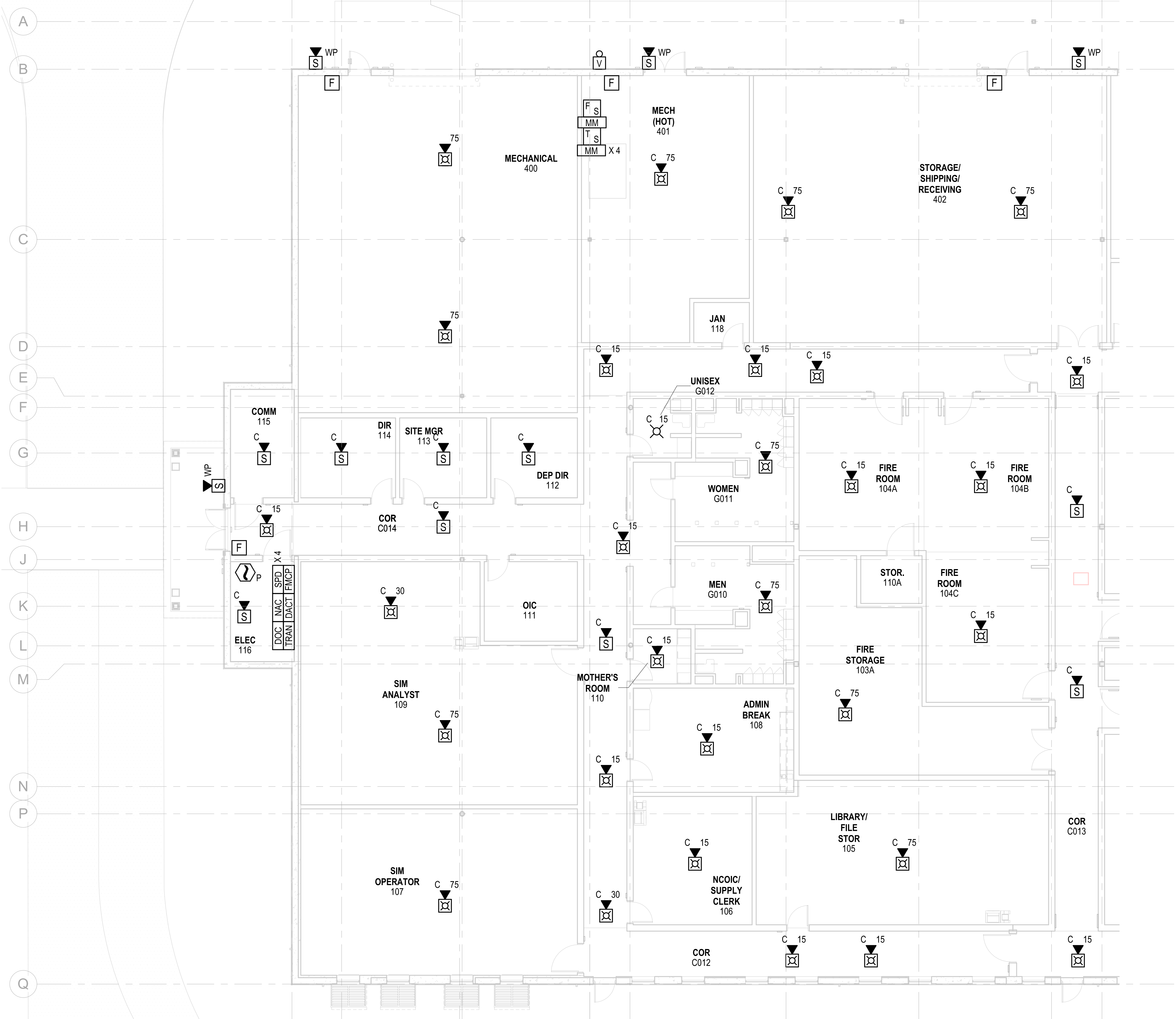
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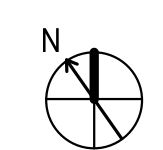
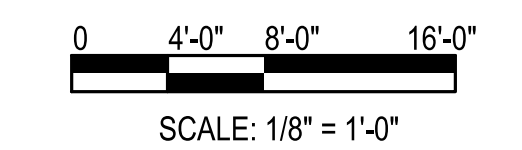
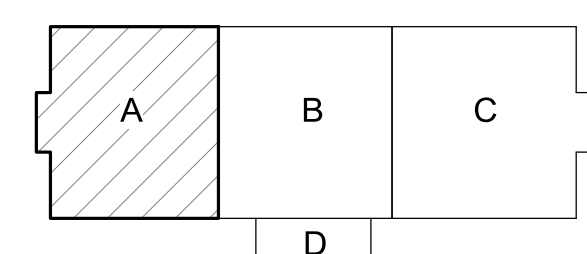
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FIRE ALARM - FIRST FLOOR PLAN - AREA A

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

KEYPLAN



APPR									
DATE									
DESCRIPTION									
SYMBOL									
SEAL									
100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED									
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE									
SATISFACTORY TO DATE DES: _____ DRW: _____ CHK: _____									
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION									
NAVAL FACILITIES ENGINEERING COMMAND JACKSONVILLE, NC JACKSONVILLE, NC P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT FIRE ALARM - FIRST FLOOR PLAN - AREA A									
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC ROIC FLORENCE CAMP LEJEUNE MCB CAMP LEJEUNE									
SCALE: AS NOTED EPROJECT NO.: 1590892 CONSTR. CONTR. NO.: N40085-20-C-0059 NAVFAC DRAWING NO.: SHEET OF									
FA111									

PLOTTED: 5/28/2021 2:24:20 PM

FILE NAME: BIM360/HF PACKAGE 3P11338.MEF SIM CTR-1590892.F.plt

DP2 SUBMISSION - P1338 BUILDING -PRE-FINAL SUBMISSION

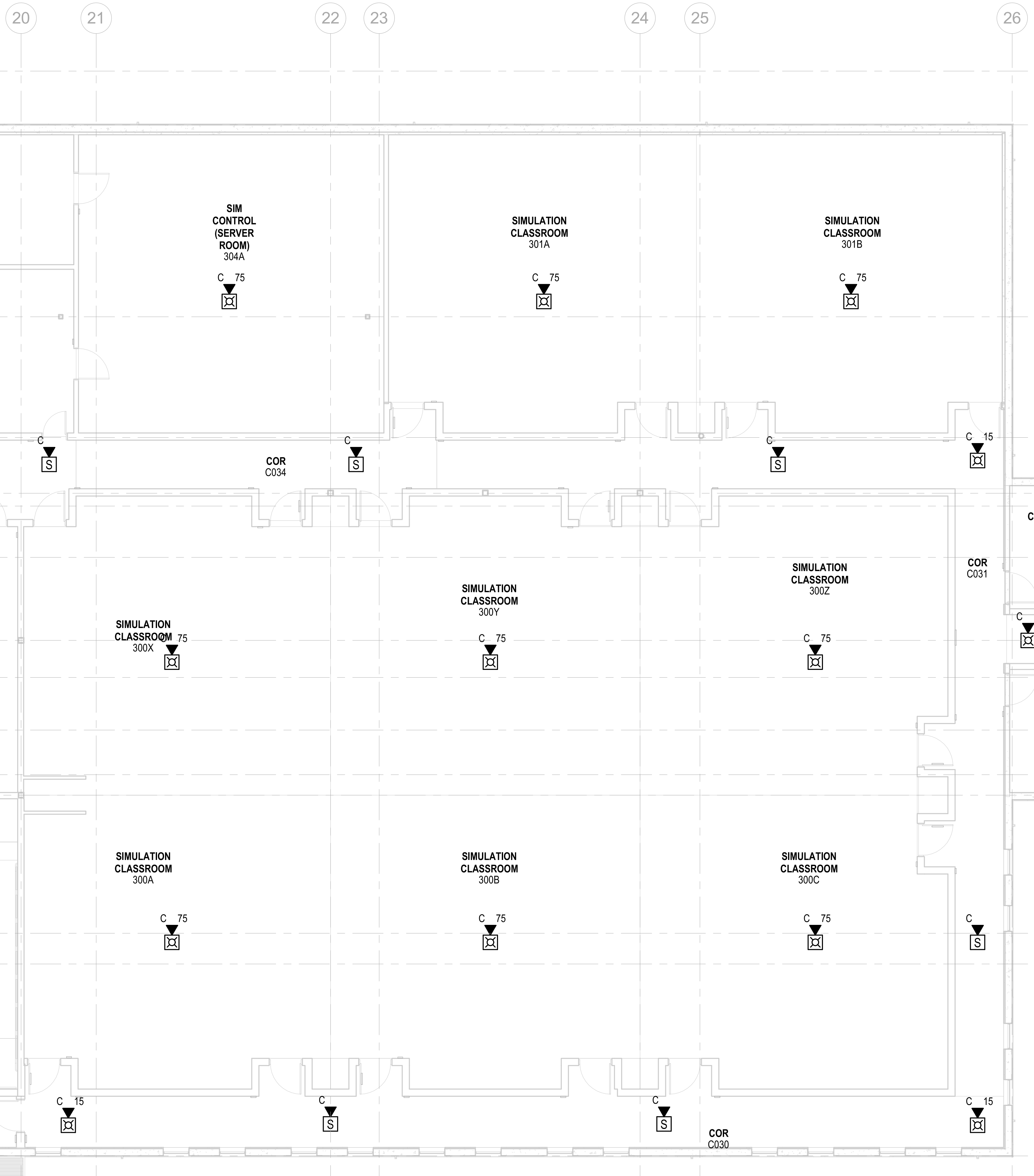
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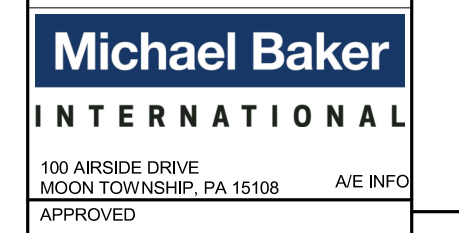
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GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

SYMBOL	DESCRIPTION	DATE	APPROVED



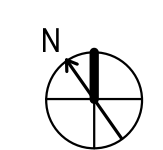
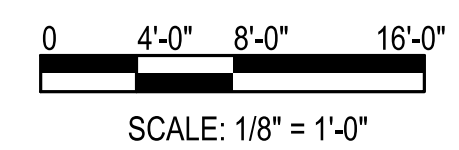
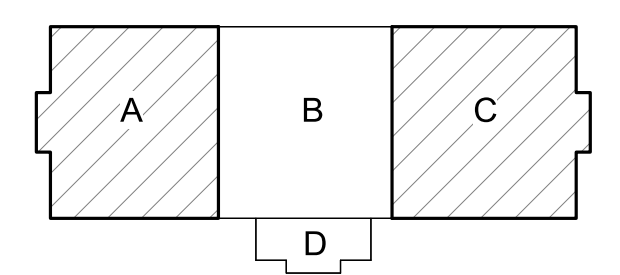
FOR COMMANDER NAVFAC	
ACTIVITY	MARINE CORPS BASE CAMP LEJEUNE
SATISFACTORY TO DATE	
DES	DRW
PM	CHK
BRANCH MANAGER	
CHIEF ENGINEER	
FIRE PROTECTION	

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC
 ROICC FLORENCE CAMP LEJEUNE
 JACKSONVILLE, NC
 JACKSONVILLE, NC
 P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT
 FIRE ALARM - FIRST FLOOR PLAN - AREA C

SCALE:	AS NOTED
EPROJCT NO.:	1590892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF

FA113

KEYPLAN



FIRE ALARM - FIRST FLOOR PLAN - AREA C

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

PLOTTED: 5/28/2021 2:24:21 PM

FILE NAME: BIM360/HF PACKAGE 3P11338.MEF SIM CTR-1590892.FVT

DP2 SUBMISSION - P1338 BUILDING - PRE-FINAL SUBMISSION

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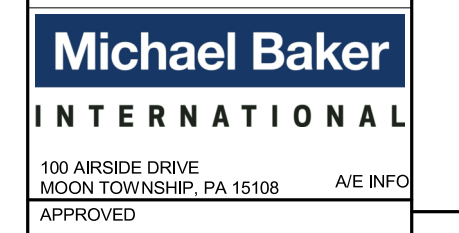
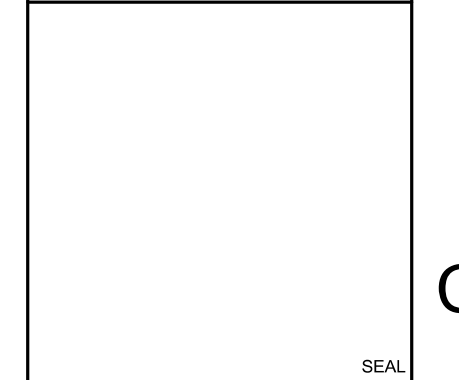
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GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

SYMBOL	DESCRIPTION	DATE	APPROVED



FOR COMMANDER NAVFAC
 ACTIVITY
 MARINE CORPS BASE
 CAMP LEJEUNE

SATISFACTORY TO DATE
 DES: DRW CHK

PM
 BRANCH MANAGER
 CHIEF ENGINEER
 FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND
 JACKSONVILLE, NC

NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC
 JACKSONVILLE, NC

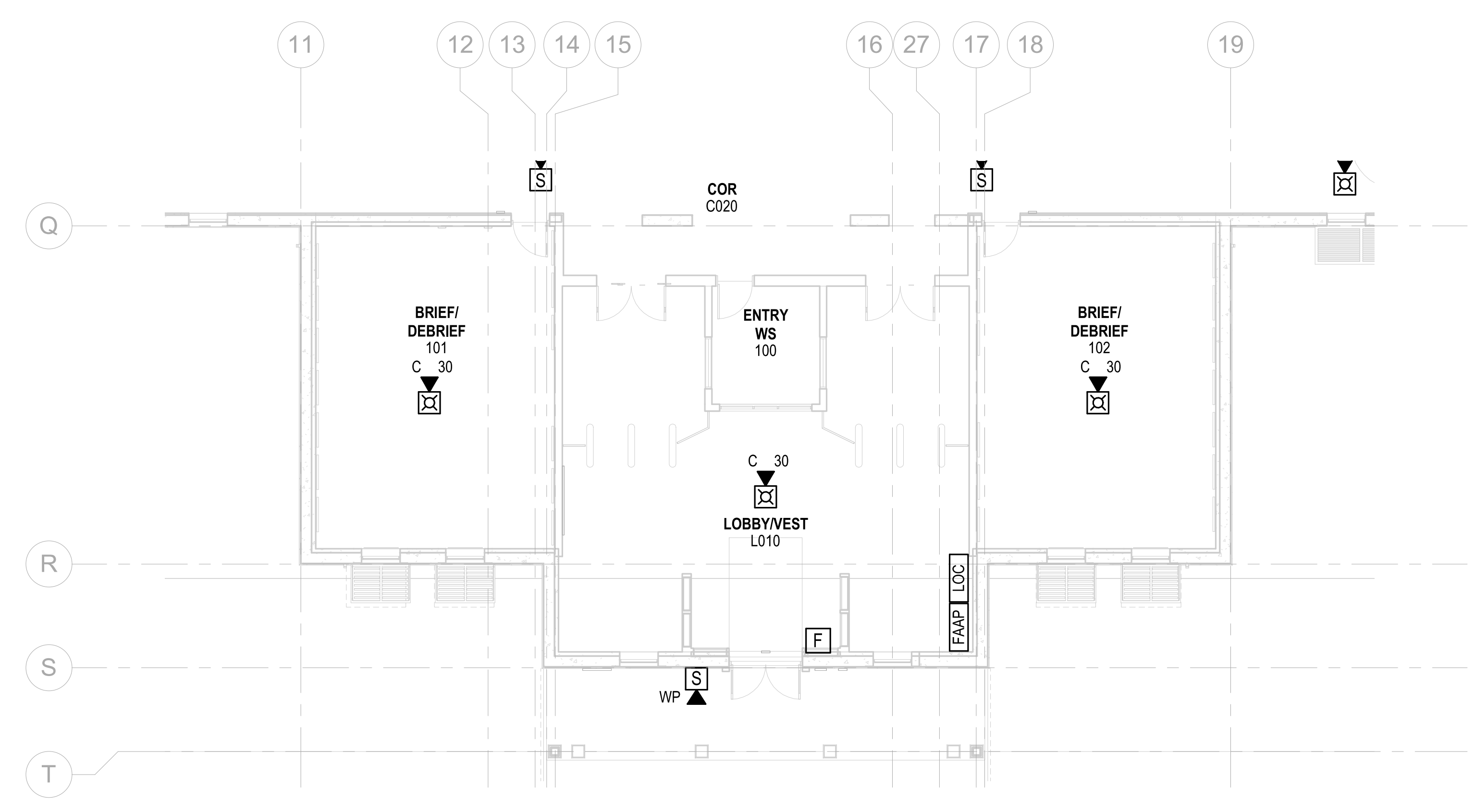
ROICC FLORENCE CAMP LEJEUNE
 MCB CAMP LEJEUNE
 JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER
 REPLACEMENT
 FIRE ALARM - FIRST FLOOR PLAN - AREA D

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 JACKSONVILLE, NC

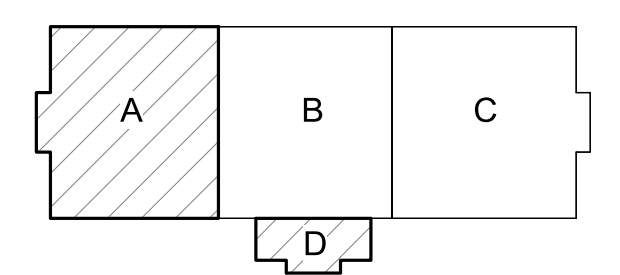
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 CONSTR. CONTR. NO.: N40085-20-C-0059
 NAVFAC DRAWING NO.:

SHEET OF
FA114

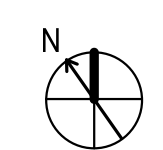


FIRE ALARM - FIRST FLOOR PLAN - AREA D
 SCALE: 1/8" = 1'-0"

KEYPLAN



0 4'-0" 8'-0" 16'-0"
 SCALE: 1/8" = 1'-0"



FILE NAME: BIM360/HF PACKAGE 3P11338.MEF SIM CTR-1590892.FVT

PLOTTED: 5/28/2021 2:24:22 PM

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DP2 SUBMISSION - P1338 BUILDING -PRE-FINAL SUBMISSION

UNCLASSIFIED

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GENERAL NOTES

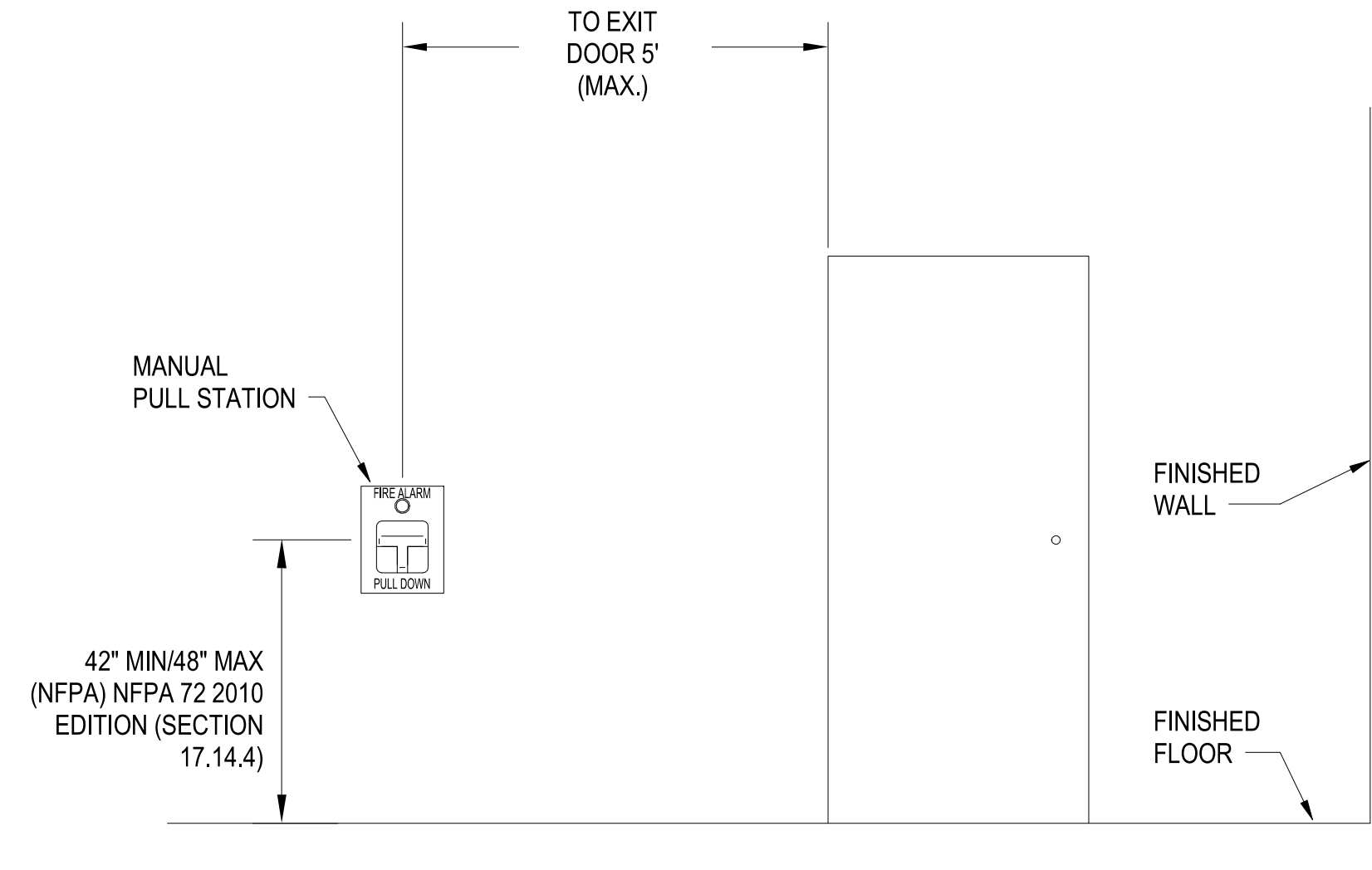
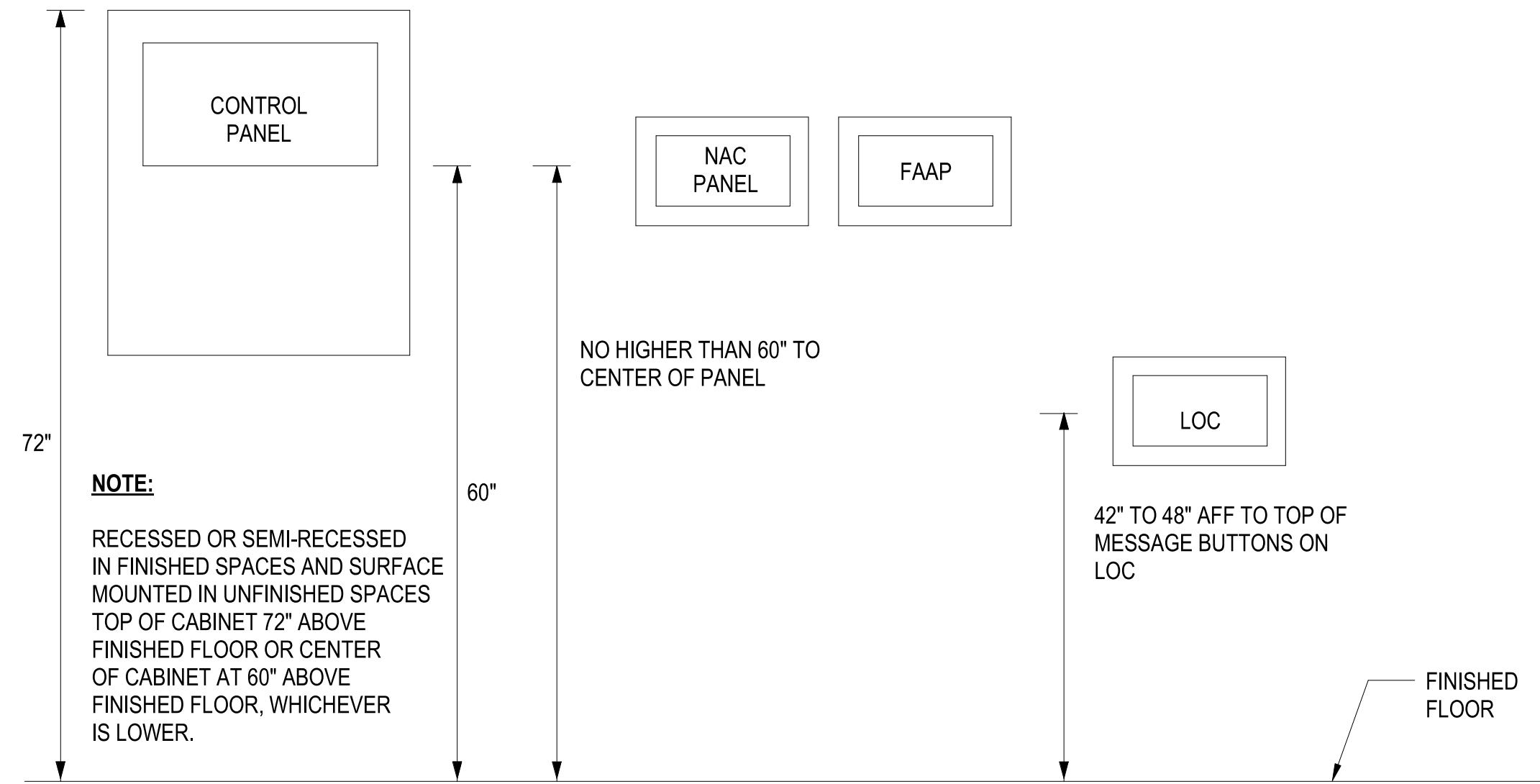
1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

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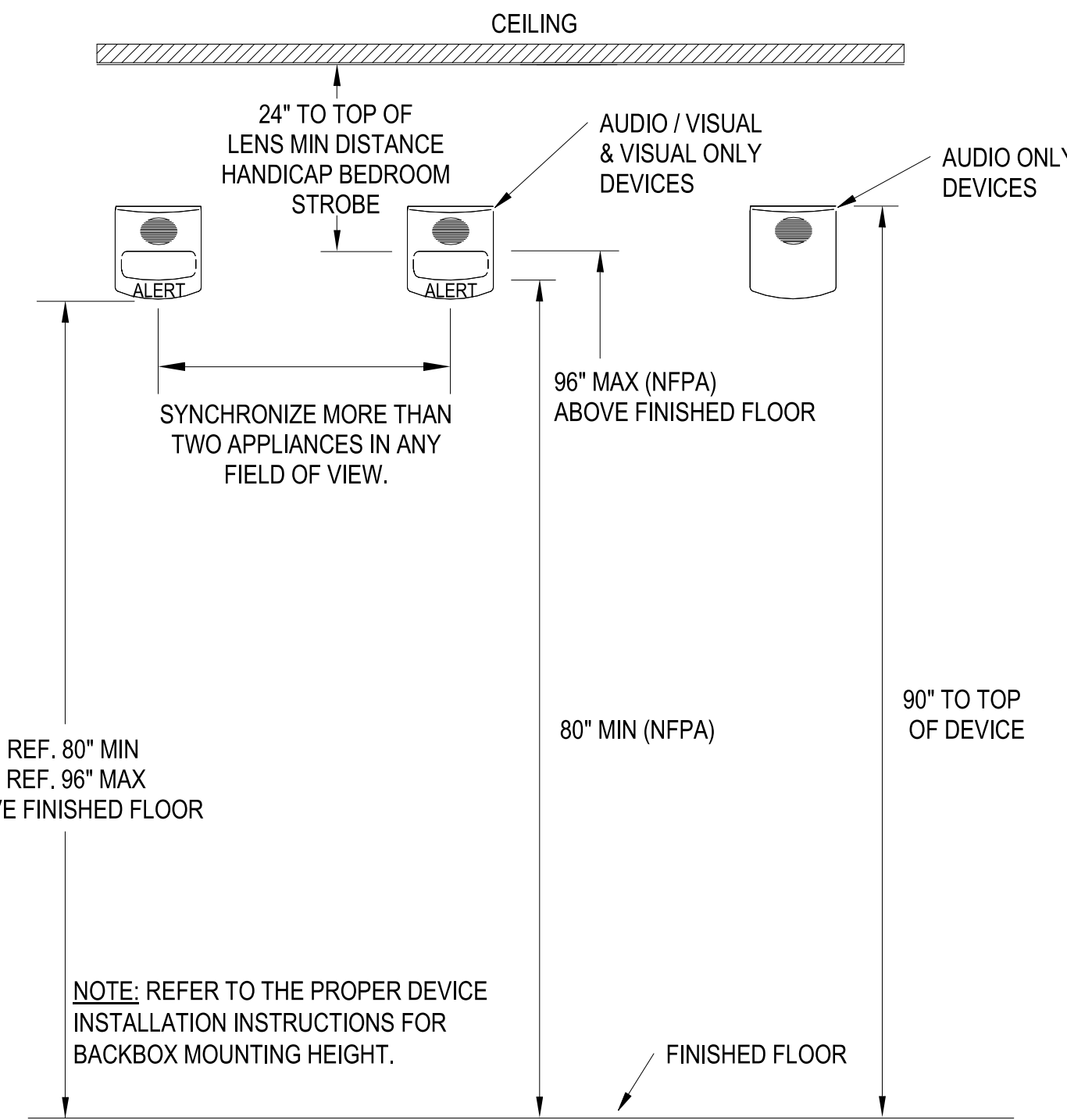
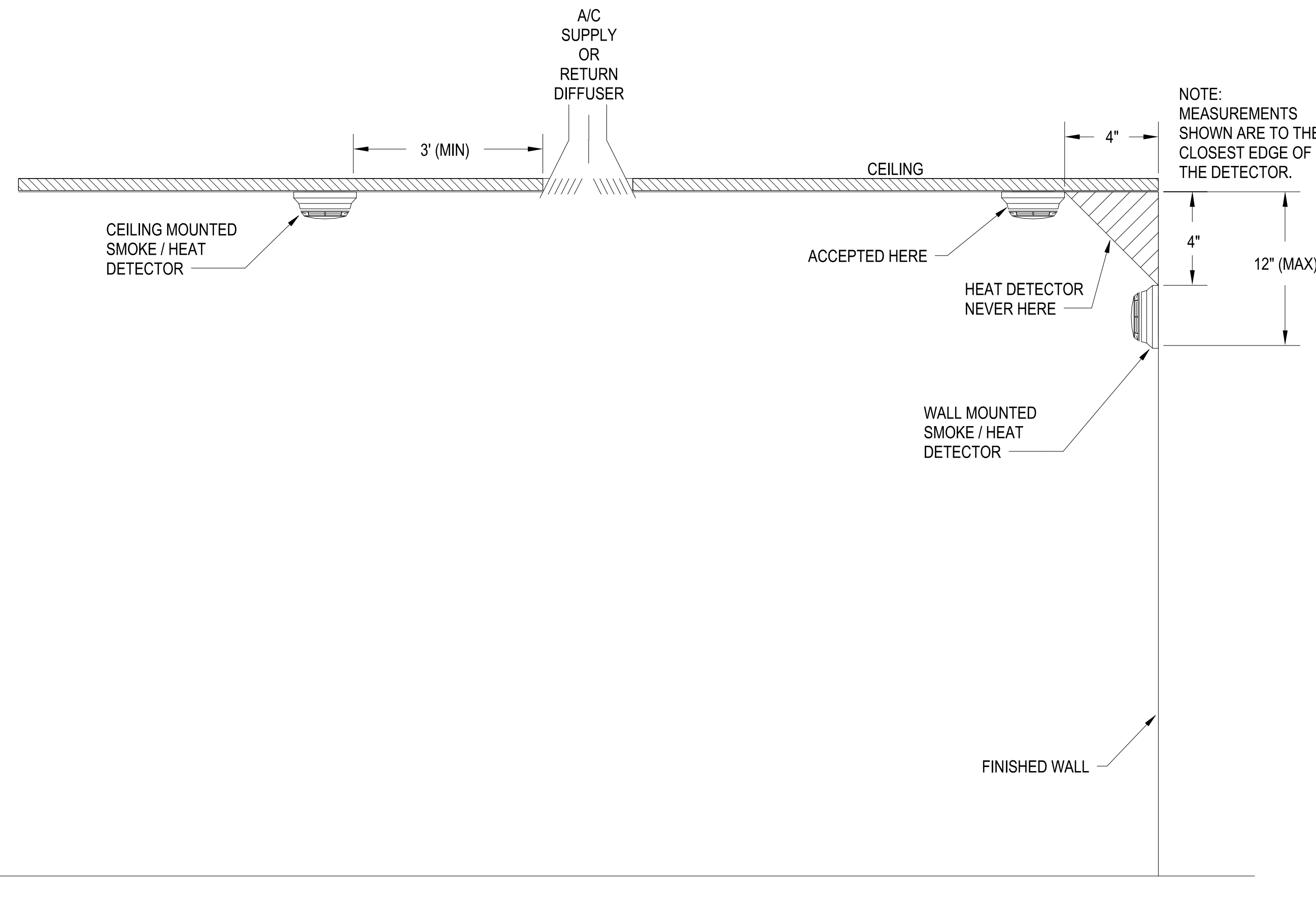
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A



C1 FMCP, FAAP, NAC, AND LOC MOUNTING HEIGHTS
SCALE: NTS

C3 PULL STATION INSTALLATION DETAIL
SCALE: NTS



A1 SMOKE / HEAT DETECTOR INSTALLATION REQUIREMENTS
SCALE: NTS

A3 AUDIO / VISUAL DEVICE INSTALLATION DETAIL
SCALE: NTS

D

C

B

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FOR COMMANDER NAVFAC		
ACTIVITY		
MARINE CORPS BASE CAMP LEJEUNE		
SATISFACTORY TO DATE		
DES	DRW	CHK
PM		
BRANCH MANAGER		
CHIEF ENGINEER		
FIRE PROTECTION		

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC
ROICC FLORENCE CAMP LEJEUNE
JACKSONVILLE, NC
JACKSONVILLE, NC
P1338 II MEF SIMULATION/TRAINING CENTER
REPLACEMENT
FIRE ALARM - DETAILS

SCALE:	AS NOTED
EPROJECT NO.:	1500892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF

FA501

DP2 SUBMISSION - P1338 BUILDING - PRE-FINAL SUBMISSION

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FILE NAME: BIM_360/HF PACKAGE 3P1338.MEF_SIM_CTR-1500892.FVT

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GENERAL NOTES

1. REFER TO SHEET FA001 FOR GENERAL NOTES AND SYMBOLS.

KEYNOTES

- 1 PROVIDE AUDIO INPUT AND CONTACT CLOSURE IN THE FMCP PANEL TO ACCEPT EXTERNAL SIGNAL FROM THE MNS TRANSCEIVER.
- 2 PROVIDE 3/4" RIGID METAL CONDUIT (RMC) BETWEEN THE FMCP PANEL AND MNS TRANSCEIVER PANEL.
- 3 PROVIDE DEDICATED WALL SPACE FOR 24"x24"x1" MOUNTING BOARD ADJACENT TO THE FMCP PANEL (WITHIN 15 FT MAX). ENSURE THE MOUNTING BOARD IS CLEARLY MARKED "FOR BASE-WIDE MNS USE".
- 4 PROVIDE 1-1/2" RIGID METAL CONDUIT.
- 5 PROVIDE 8"x8"x8" PULL BOX.
- 6 PROVIDE (2) 3/4-INCH ELECTRICAL METAL CONDUIT (EMT) WITH 18 AWG SHIELD AUDIO WIRE FROM THE NEMA-4 ENCLOSURE TO 2 DIFFERENT CENTRAL FACILITY LOCATIONS (DUTY ROOM, ADMINISTRATION AREA, CENTRAL HALLWAY -COORDINATE WITH THE BASE SECURITY FOR LOCATION). AT THESE LOCATIONS TERMINATE RMC IN A FLUSH MOUNTED 4"x4"x2" EMT BOX. ENSURE 2 CONDUIT RUNS AND THE EXIT FLUSH MOUNTED ENCLOSURES ARE LABELED "FOR MNS USE".
- 7 1-1/2" RMC FROM PULL BOX TO THE ROOF. MAXIMUM CONDUIT LENGTH TO THE ROOF TERMINATION IS 115 FT. TERMINATE THE TOP OF THE EXTERIOR RMC WITH UL LISTED WEATHERHEAD. PROVIDE 50 OHM, UMR-400 RF CABLE IN THE RMC. PROVIDE 3-FT CABLE LENGTH MAINTENANCE LOOP AT BOTH ENDS OF THE CABLE ROUTE AND TERMINATE ROOF CABLE WITH A STRAIGHT MALE N-TYPE CONNECTOR. DO NOT TERMINATE THE RF CABLE AT THE MNS MOUNTING AREA AND CLEARLY LABEL THE RF CABLE "FOR MNS". TEST RF CABLE FOR PROPER CONNECTIVITY. PROVIDE ONE 90DBI OMNI-DIRECTIONAL ANTENNA, COOPER ANT-109-OM OR, MOBILE MARK OD9-2400 OR EQUAL, ON TOP OF ROOFTOP ANTENNA MASS. DIRECTIONAL ANTENNA MAY BE MOUNTED ON FACILITY BELOW ROOFLINE IF PLACEMENT OF ANTENNA LOCATION IS PRE-APPROVED BY SPAWAR OR PHYSICAL SECURITY PERSONNEL. CONTACT
- 8 PROVIDE A NON-METALLIC 18" HEIGHT X 16" WIDTH X 10" DEPTH NEMA 4X ENCLOSURE WITH RAISED COVER AND PAD LOCKABLE LATCHES W/INTERIOR MOUNTING PLATE. MOUNT THE PANEL IN THE CENTER OF THE MNS MOUNTING BOARD. PROVIDE 3/4" RMC WITH 3 CONDUCTORS , 12 AWG ELECTRICAL WIRE FROM THE ENCLOSURE TO A DEDICATED 120VAC/15A ELECTRICAL CIRCUIT. PROVIDE A DEDICATED LOCKABLE BREAKER FROM THE SAME POWER PANEL FOR FIRE ALARM CONTROL PANEL. PROVIDE AC POWER SURGE SUPPRESSOR DEVICE INLINE WITH POWER CIRCUIT INSIDE THE LOWER RIGHT CORNER OF THE ENCLOSURE. PROVIDE A DUAL ELECTRICAL OUTLET MOUNTED INSIDE THE MNS ENCLOSURE ABOVE THE SURE SUPPRESSOR ON THE BOTTOM RIGHT OF THE MNS ENCLOSURE WIRE SURGE SUPPRESSOR IN SERIES WITH DUAL ELECTRICAL OUTLET. WIRING MUST BE IN ACCORDANCE WITH NFPA 70.



FOR COMMANDER NAVFAC	
ACTIVITY	MARINE CORPS BASE CAMP LEJEUNE
SATISFACTORY TO DATE	
DES	DRW
PM	CHK
BRANCH MANAGER	
CHIEF ENGINEER	
FIRE PROTECTION	

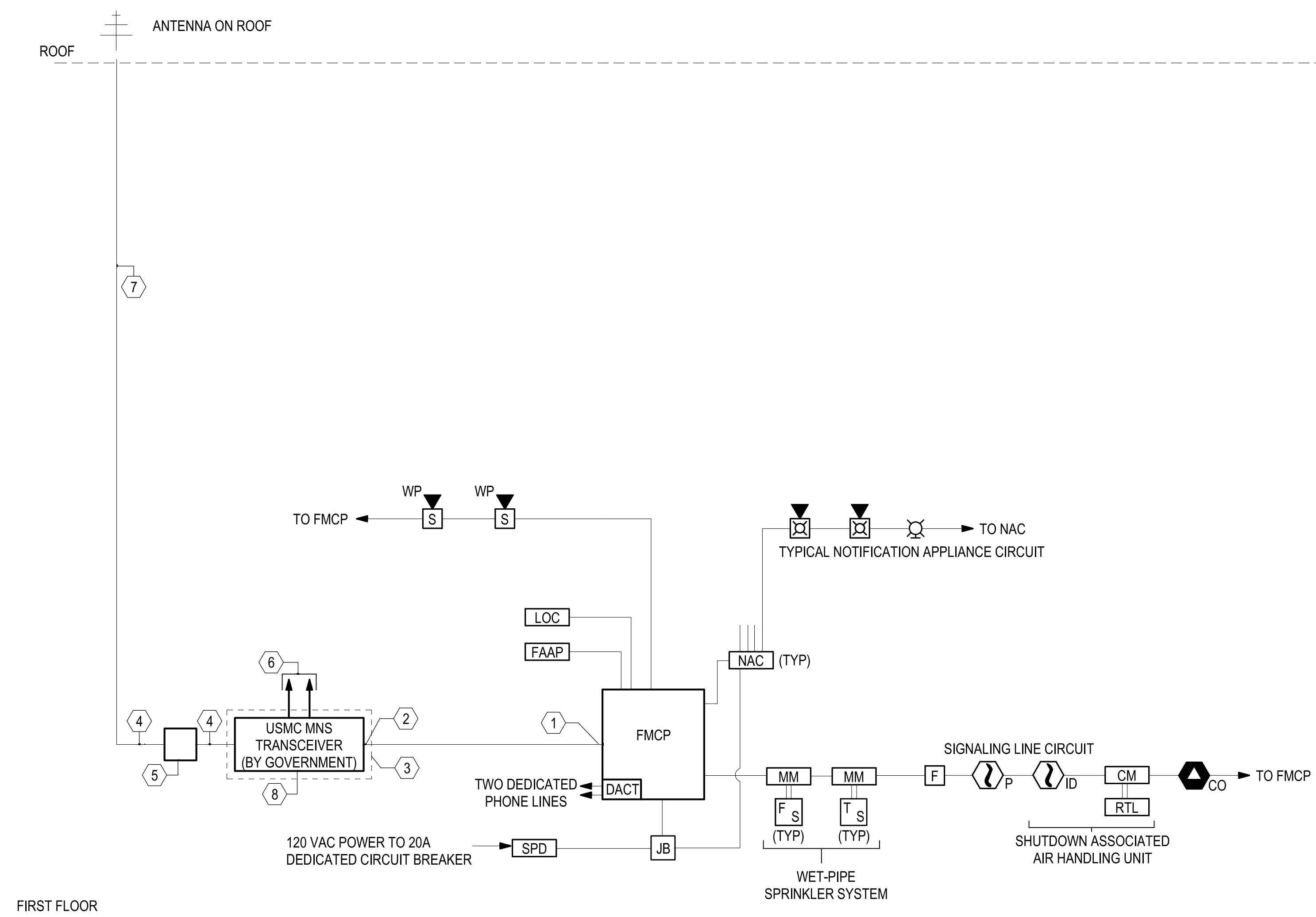
DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC
 ROIC FLORENCE CAMP LEJEUNE
 MCB CAMP LEJEUNE
 JACKSONVILLE, NC
 JACKSONVILLE, NC
 P1338 II MEF SIMULATION/TRAINING CENTER
 REPLACEMENT
 FIRE ALARM - RISER DIAGRAM

SCALE:	AS NOTED
EPROJCT NO.:	1500892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF

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FIRE ALARM RISER DIAGRAM

SCALE: NTS



FILE NAME: BIM_360/HF PACKAGE 3P1338.MEF_SIM_CTR-1500892.F41

PLOTTED: 5/28/2021 2:24:22 PM

DP2 SUBMISSION - P1338 BUILDING - PRE-FINAL SUBMISSION

UNCLASSIFIED

FIRE PROTECTION ABBREVIATIONS AND LEGEND		
SYMBOL	ABBREV	DESCRIPTION
ORDINARY	OH	ORDINARY HAZARD
[X / X]		SPRINKLER DESIGN DENSITY [GPM/SF / SF]

FIRE PROTECTION NOTES




- PROVIDE AN AUTOMATIC, SUPERVISED WET PIPE FIRE SPRINKLER SYSTEM THROUGHOUT THE FACILITY.
- THE CONTRACTOR MUST PERFORM A FIRE HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291.
- THE FIRE PROTECTION SYSTEM MUST COMPLY WITH NFPA 13 (2019), UFC 3-600-01 (7 FEBRUARY 2020), AND WITH THESE CONTRACT DRAWINGS.
- FIRE PROTECTION MATERIALS MUST BE UL LISTED AND/OR FM APPROVED.
- INSTALLING CONTRACTOR MUST OBTAIN APPROVAL OF THE AUTHORITIES HAVING JURISDICTION.
- IT IS THE INTENT OF THESE DOCUMENTS TO PROVIDE DESIGN, MATERIALS AND EQUIPMENT FOR A TOTALLY FUNCTIONING AND OPERATING FIRE PROTECTION SYSTEM, INCLUDING THE PROPER INTERFACING AND COORDINATING WITH ALL OTHER BUILDING SYSTEMS.
- THE GENERAL CHARACTER AND SCOPE OF THE WORK IS ILLUSTRATED IN THE SPECIFICATIONS AND DRAWINGS. THE SPECIFICATIONS AND DRAWINGS ARE DIVIDED INTO SEVERAL SECTIONS FOR CONVENIENCE ONLY AND THE CONTRACT DOCUMENTS MUST BE CONSIDERED AS A WHOLE. THE CONTRACTOR MUST BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND VENDORS ENGAGED IN WORK.
- THE SPRINKLER SYSTEM DESIGNER MUST BE RESPONSIBLE FOR AVOIDING CONFLICTS BETWEEN FIRE PROTECTION SYSTEMS AND LIGHTING FIXTURES, DIFFUSERS, GRILLES, DUCTS, EQUIPMENT FIXTURES, STRUCTURAL MEMBERS, PIPES, CONDUITS, AND OTHER OBSTRUCTIONS ENCOUNTERED.
- PIPING LAYOUTS, WHERE SHOWN, ARE DIAGRAMMATIC AND SHOW SYSTEM INTENT. PIPING MAY REQUIRE ADDITIONAL OFFSETS, DROPS, AND RISERS. CONTRACTOR MUST BE RESPONSIBLE FOR FINAL PIPING LAYOUT AND HYDRAULIC CALCULATIONS.
- SPRINKLER PIPING MUST BE INSTALLED SO THAT ALL PORTIONS OF THE SYSTEM CAN BE DRAINED BACK THROUGH THE MAIN DRAIN VALVES. WHERE TRAPPED SECTIONS OF PIPING CANNOT BE AVOIDED, AUXILIARY DRAINS MUST BE PROVIDED. PROVIDE TEST AND DRAIN CONNECTIONS IN ACCORDANCE WITH SPECIFICATIONS AND NFPA 13.
- THE INCOMING SPRINKLER SERVICE MUST BE PROVIDED WITH A REDUCED PRESSURE ZONE BACKFLOW PREVENTER. NEW BACKFLOW PREVENTER MUST INCLUDE A FORWARD FLOW TEST CONNECTION, WITH ONE 1/2 INCH HOSE CONNECTION FOR EVERY 250 GPM OF ANTICIPATED FLOW OF THE SPRINKLER SYSTEM. PROVIDE A MEANS OF DRAINING THE BACKFLOW PREVENTER PRESSURE RELIEF DISCHARGE. DRAIN TO OUTSIDE. SIZE DRAIN PIPE ACCORDING TO MANUFACTURER RECOMMENDATION.
- DRAINS MUST TERMINATE TO THE EXTERIOR OF THE BUILDING AND BE PROVIDED WITH A SPLASH BLOCK. DRAINS MAY NOT TERMINATE AT JANITOR'S CLOSETS OR OTHER INTERNAL DRAINS.
- LOCATE CONTROL VALVES, TEST VALVES, AND LOW POINT DRAIN VALVES IN READILY ACCESSIBLE AREAS WITHIN 5 FEET OF THE FLOOR. TEST VALVES MUST DISCHARGE TO THE OUTSIDE OF THE BUILDING ONTO A SPLASH BLOCK IF NOT DISCHARGING TO A PAVED SURFACE.
- SPRINKLER HYDRAULIC DESIGN MUST BE BASED ON NEW HYDRANT FLOW TESTS PERFORMED BY THE CONTRACTOR. NEW FIRE HYDRANT FLOW TESTS MUST BE PERFORMED IN ACCORDANCE WITH NFPA 291.
- HYDRAULIC CALCULATIONS MUST BE BASED ON AREA/DENSITY APPROACH ONLY. SPECIAL DESIGN APPROACHES, SUCH AS ROOM DESIGN MUST NOT BE USED.
- PROVIDE AT LEAST ONE HYDRAULIC CALCULATION FOR EACH HAZARD CLASSIFICATION IN EACH OF THE FACILITIES. HYDRAULIC CALCULATIONS MUST INCLUDE A MINIMUM PRESSURE DROP ACROSS THE BACKFLOW PREVENTERS OF 12 PSI OR THE ACTUAL PRESSURE DROP WHICHEVER IS GREATER, REGARDLESS OF TYPE OR SIZE.
- THE SPRINKLER SYSTEMS MUST BE DESIGNED HYDRAULICALLY FOR UNIFORM DISCHARGE DENSITIES ON THE FOLLOWING BASIS.

HAZARD CLASSIFICATION		WET-PIPE SPRINKLERS: (GPM/FT ²)/FT ² [MINIMUM K-FACTOR]			
		CEILING HEIGHT UP TO 30 FEET	CEILING HEIGHT 30 TO 45 FEET	CEILING HEIGHT 45 TO 60 FEET	CEILING HEIGHT 60 TO 100 FEET
LIGHT	DESIGN	0.1/1,500	0.2/2,500	0.2/2,500	12 SPRINKLERS AT 7 PSI
	K-FACTOR	5.6	11.2	11.2	25.2
ORDINARY	DESIGN	0.2/2,500	0.2/2,500	0.2/2,500	12 SPRINKLERS AT 7 PSI
	K-FACTOR	8.0	11.2	11.2	25.2
EXTRA	DESIGN	0.3/2,500	0.3/3,600	0.5/3,000	12 SPRINKLERS AT 7 PSI
	K-FACTOR	11.2	11.2	11.2	25.2

- MAXIMUM SPRINKLER PROTECTION AREA MUST BE 225 SQUARE FEET PER SPRINKLER FOR LIGHT HAZARD AREAS, 130 SQUARE FEET PER SPRINKLER FOR ORDINARY HAZARD AREAS, AND 100 SQUARE FEET PER SPRINKLER FOR EXTRA HAZARD AREAS. EXTENDED COVERAGE SPRINKLERS ARE NOT PERMITTED.
- PROVIDE PROTECTIVE CAGES ON SPRINKLERS LOCATED LESS THAN 7 FEET ABOVE THE FINISHED FLOOR AND IN AREAS SUBJECT TO MECHANICAL DAMAGE.
- PROVIDE INTERMEDIATE AND HIGH TEMPERATURE HEADS AS NEEDED TO MEET NFPA 13, SECTION 8.3.2.5. THIS INCLUDES BUT IS NOT LIMITED TO UNIT HEATERS, HEATING DUCTS AND DIFFUSERS.
- CENTER SPRINKLERS IN CENTER OF CEILING TILE.
- WHERE FREEZE PROTECTION IS REQUIRED FOR A SPECIFIC SPACE, DRY-TYPE SPRINKLERS MAY BE USED.
- SPRINKLER CONTROL VALVES MUST BE ELECTRICALLY SUPERVISED UNLESS OTHERWISE NOTED.
- GALVANIZED PIPING IS NOT PERMITTED TO BE USED IN DRY PIPE, PREACTION, OR WET PIPE SPRINKLER SYSTEMS.
- PIPING MUST BE INSTALLED TO MAINTAIN CEILING HEIGHTS OR CLEARANCES IN ACCORDANCE WITH NFPA 13, NFPA 101, AND THE CONTRACT DOCUMENTS.
- PENETRATIONS OF THE BUILDING AIR BARRIER MUST BE SEALED TO MAINTAIN THE INTEGRITY OF THE AIR BARRIER. REFER TO ARCHITECTURE DRAWINGS FOR LOCATION AND DETAILS OF AIR BARRIERS.
- DAMAGE TO WALLS, PARTITIONS, CEILINGS AND FLOORS FROM PENETRATIONS, INSTALLATION OR OTHER ACTIONS OF THE SPRINKLER INSTALLER MUST BE PATCHED, REPAIRED, PAINTED WITH NEW MATERIALS TO ORIGINAL CONDITION.
- STRUCTURAL MEMBERS MUST NOT BE CUT, DRILLED OR BURNED UNLESS PREVIOUSLY APPROVED BY THE PROJECTS STRUCTURAL ENGINEER AND CONTRACTING OFFICER.
- PROVIDE SPRINKLER PROTECTION UNDER OBSTRUCTIONS, INCLUDING DUCTS, THAT ARE GREATER THAN 4 FEET.
- PAINT CONCEALED PIPING AND PIPING IN NORMALLY UNOCCUPIED SPACES WITH PRIMER AND TWO COATS OF RED OIL BASED PAINT.
- PAINT EXPOSED PIPING IN OCCUPIED SPACES WITH PRIMER AND TWO COATS OF OIL BASE MATCHING THE CEILING PAINT IN THE SPACE.
- PROVIDE SPRINKLER GAUGE INSTALLATION LABELS ON EACH SPRINKLER GAUGE SHOWING SPRINKLER GAUGES HAVE BEEN TEST OR REPLACED WITHIN FIVE YEARS.
- PROVIDE A FIVE-INCH, 30 DEGREE ELBOW STORZ CONNECTION FOR THE FIRE DEPARTMENT CONNECTION. FIRE DEPARTMENT CONNECTIONS MUST BE THE FREESTANDING TYPE IN ACCORDANCE WITH DISCUSSION FROM THE BASE FIRE DEPARTMENT. FREESTANDING FIRE DEPARTMENT CONNECTIONS MUST BE LOCATED OUTSIDE OF THE COLLAPSE ZONE OF THE BUILDING.
- POST INDICATOR VALVES SHALL BE INSTALLED NO CLOSER THAN 40 FEET FROM THE BUILDING.

P1338 PROJECT SITE		
HYDRANT FLOW DATA		
TEST DATE:		03 DECEMBER 2020
TESTED BY:	JASON MILLER AND BASE PERSONNEL	
FLOW HYDRANT:	MCHUGH BLVD AND BIRCH STREET	
PRESSURE HYDRANT:	MCHUGH BLVD AND BIRCH STREET	
STATIC PRESSURE:		72 PSI
RESIDUAL PRESSURE:		66 PSI
FLOW:		846 GPM
HAZARD CLASSIFICATION	ORDINARY HAZARD	UFC 3-600-01
DESIGN DENSITY	0.2 GPM/SF	UFC 3-600-01
DESIGN AREA	2,500 SF	UFC 3-600-01
SPRINKLER K-FACTOR	11.2 MINIMUM	UFC 3-600-01
EXTERIOR HOSE DEMAND	250 GPM	UFC 3-600-01
SPRINKLER DEMAND	(0.2 GPM/SF X 2,500 SF)	500 GPM
HYDRAULIC IMBALANCE	20%	100 GPM
TOTAL SPRINKLER DEMAND		600 GPM
EXTERIOR HOSE DEMAND	250 GPM	250 GPM
TOTAL FIRE WATER DEMAND		850 GPM
END HEAD PRESSURE	(130 SF X 0.2 GPM/SF / 11.2) ²	7.0 PSI
SPRINKLER ELEVATION	23 FT X 0.433 =	9.9 PSI
BACKFLOW PREVENTER	UFC 3-600-01	12.0 PSI
UNDERGROUND LOSS	8 INCH AT 600 GPM = 0.428 PSI/100 FT X 1,200 FT	5.2 PSI
TOTAL PRESSURE	NOT INCLUDING INTERIOR LOSSES	34.1 PSI

BASED ON HYDRANT FLOW TEST DATA, 65.8 PSI IS AVAILABLE AT 850 GPM. THIS LEAVES 31.7 PSI FOR AVAILABLE INTERIOR LOSSES.

APPR	DATE								
SYN	DESCRIPTION								
									
									
									
100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 APPROVED									
FOR COMMANDER NAVFAC ACTIVITY MARINE CORPS BASE CAMP LEJEUNE									
SATISFACTORY TO DATE DES _____ DRW _____ CHK _____ PM _____ BRANCH MANAGER _____ CHIEF ENGINEER _____ FIRE PROTECTION _____									
DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC ROIC FLORENCE CAMP LEJEUNE MCB CAMP LEJEUNE JACKSONVILLE, NC JACKSONVILLE, NC P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT FIRE PROTECTION GENERAL NOTES, ABBREVIATIONS, & SYMBOLS									
SCALE: AS NOTED EPROJECT NO.: 1590892 CONSTR. CONTR. NO. N40085-20-C-0059 NAVFAC DRAWING NO. SHEET _____ OF _____									
FX001									

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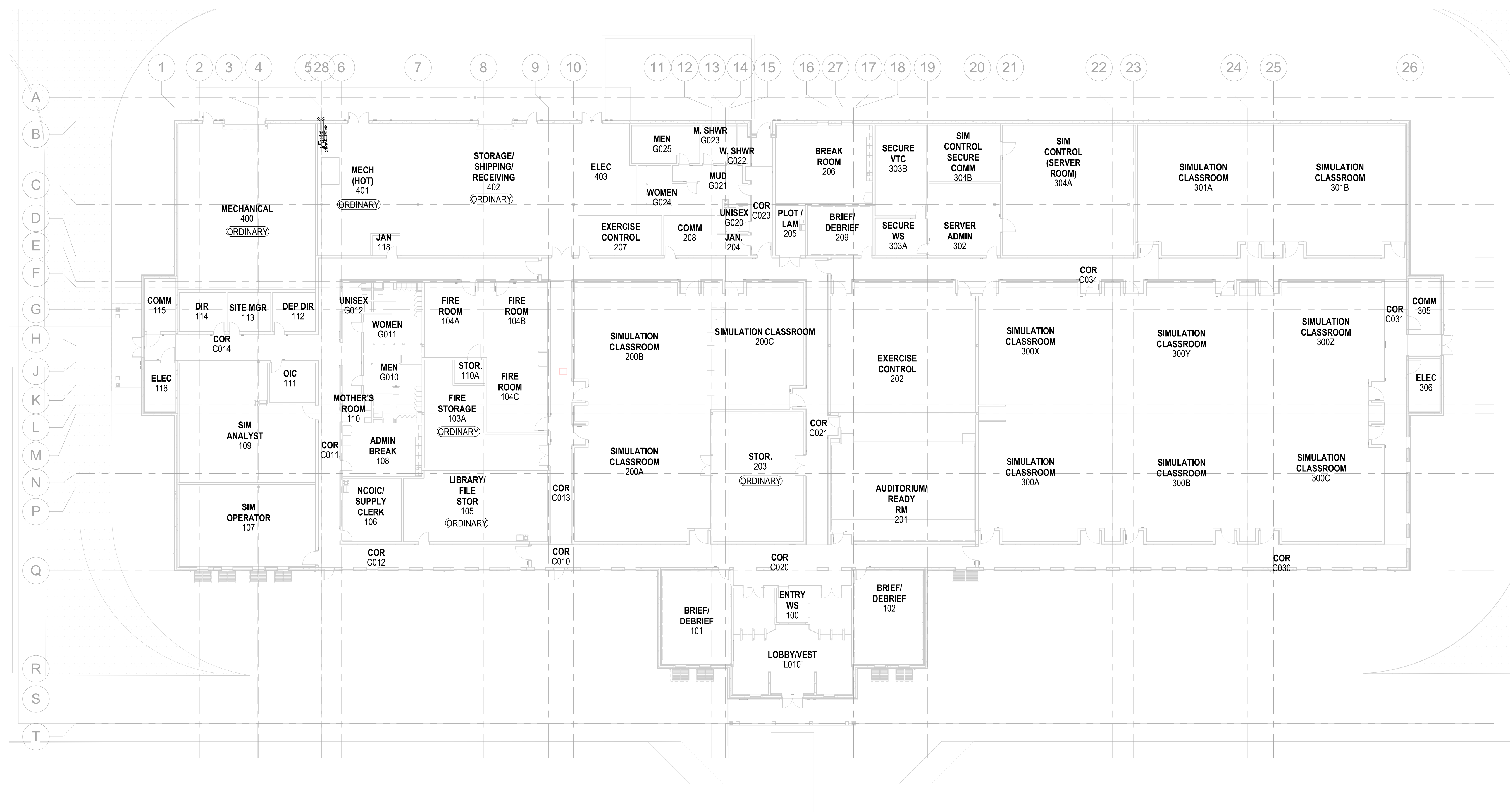
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UNCLASSIFIED



FIRE PROTECTION - OVERALL - FIRST FLOOR PLAN

SCALE: 1/16" = 1'-0"

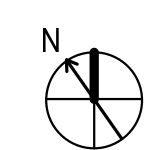
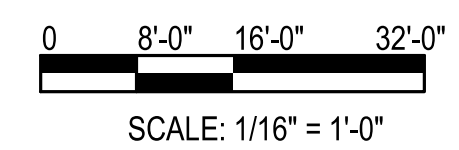
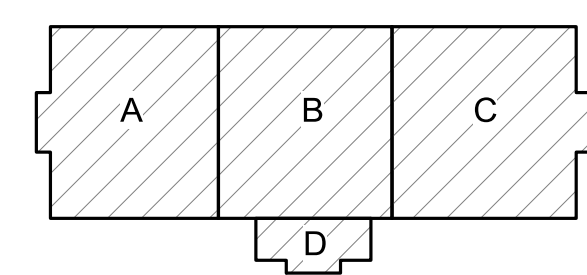
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GENERAL NOTES

1. REFER TO SHEET FX001 FOR GENERAL NOTES AND SYMBOLS.

KEYPLAN



	APPR
	DATE
	SYM DESCRIPTION
	
	
Michael Baker INTERNATIONAL <small>100 AIRSIDE DRIVE MOON TOWNSHIP, PA 15108 A/E/IN/P</small>	
<small>FOR COMMANDER NAVFAC</small> ACTIVITY MARINE CORPS BASE CAMP LEJEUNE	
SATISFACTORY TO DATE DES DRW CHK	
PM BRANCH MANAGER CHIEF ENGINEER FIRE PROTECTION	
<small>NAVAL FACILITIES ENGINEERING COMMAND</small> NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC <small>JACKSONVILLE, NC</small> MCB CAMP LEJEUNE JACKSONVILLE, NC P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT FIRE PROTECTION - OVERALL - FIRST FLOOR PLAN	
<small>DEPARTMENT OF THE NAVY</small> <small>NAVAL FACILITIES ENGINEERING COMMAND</small> <small>ROICC FLORENCE CAMP LEJEUNE</small> <small>JACKSONVILLE, NC</small> P1338 II MEF SIMULATION/TRAINING CENTER REPLACEMENT FIRE PROTECTION - OVERALL - FIRST FLOOR PLAN	
<small>SCALE: AS NOTED</small> <small>EPROJCT NO.: 1590892</small> <small>CONSTR. CONTR. NO. N40085-20-C-0059</small> <small>NAVFAC DRAWING NO.</small> SHEET OF	
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DP2 SUBMISSION - P1338 BUILDING - PRE-FINAL SUBMISSION

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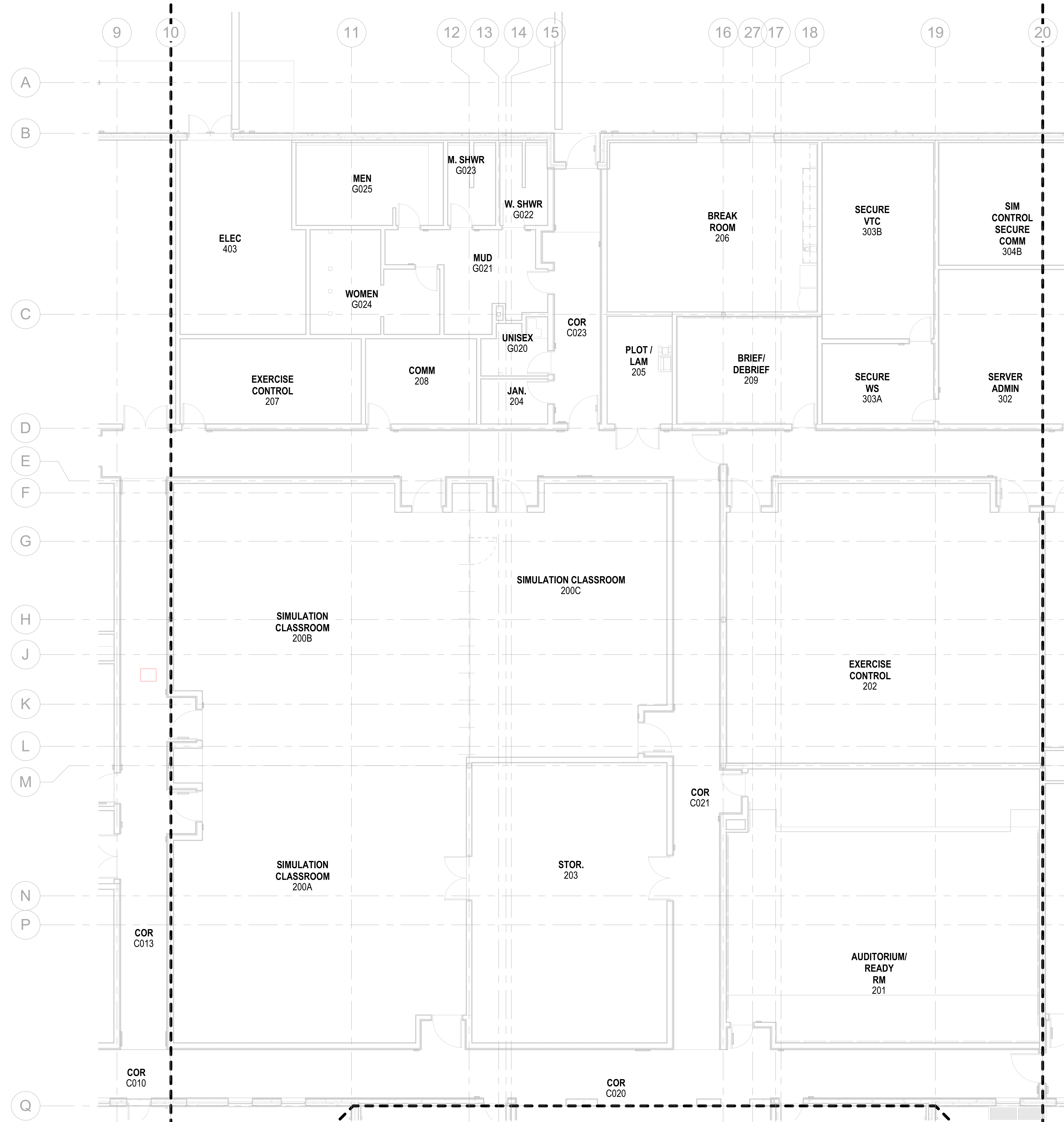
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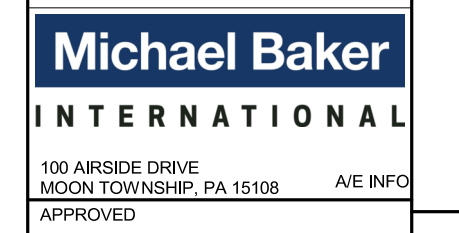


FIRE PROTECTION - FIRST FLOOR PLAN - AREA B
 SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. REFER TO SHEET FX001 FOR GENERAL NOTES AND SYMBOLS.

SYMBOL	DESCRIPTION	DATE	APPROVED



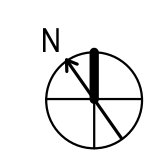
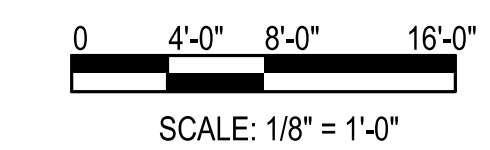
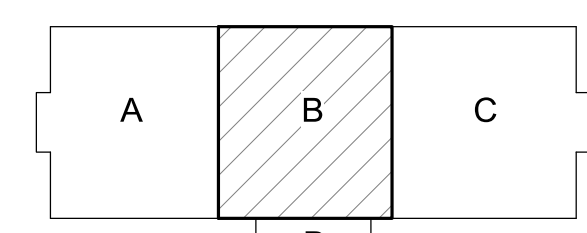
FOR COMMANDER NAVFAC	
ACTIVITY	MARINE CORPS BASE CAMP LEJEUNE
SATISFACTORY TO DATE	
DES	DRW
PM	CHK
BRANCH MANAGER	
CHIEF ENGINEER	
FIRE PROTECTION	

NAVAL FACILITIES ENGINEERING COMMAND
 NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC
 ROICC FLORENCE CAMP LEJEUNE
 JACKSONVILLE, NC
 JACKSONVILLE, NC
 P1338 II MEF SIMULATION/TRAINING CENTER
 REPLACEMENT
 FIRE PROTECTION - FIRST FLOOR PLAN - AREA B

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 ROICC FLORENCE CAMP LEJEUNE
 JACKSONVILLE, NC
 JACKSONVILLE, NC
 P1338 II MEF SIMULATION/TRAINING CENTER
 REPLACEMENT
 FIRE PROTECTION - FIRST FLOOR PLAN - AREA B

SCALE:	AS NOTED
PROJECT NO.:	1500892
CONSTR. CONTR. NO.:	N40085-20-C-0059
NAVFAC DRAWING NO.:	
SHEET	OF
FX112	

KEYPLAN



FILE NAME: BIM360/HF PACKAGE 3P11338.MEF SIM CTR-1500892.FVT
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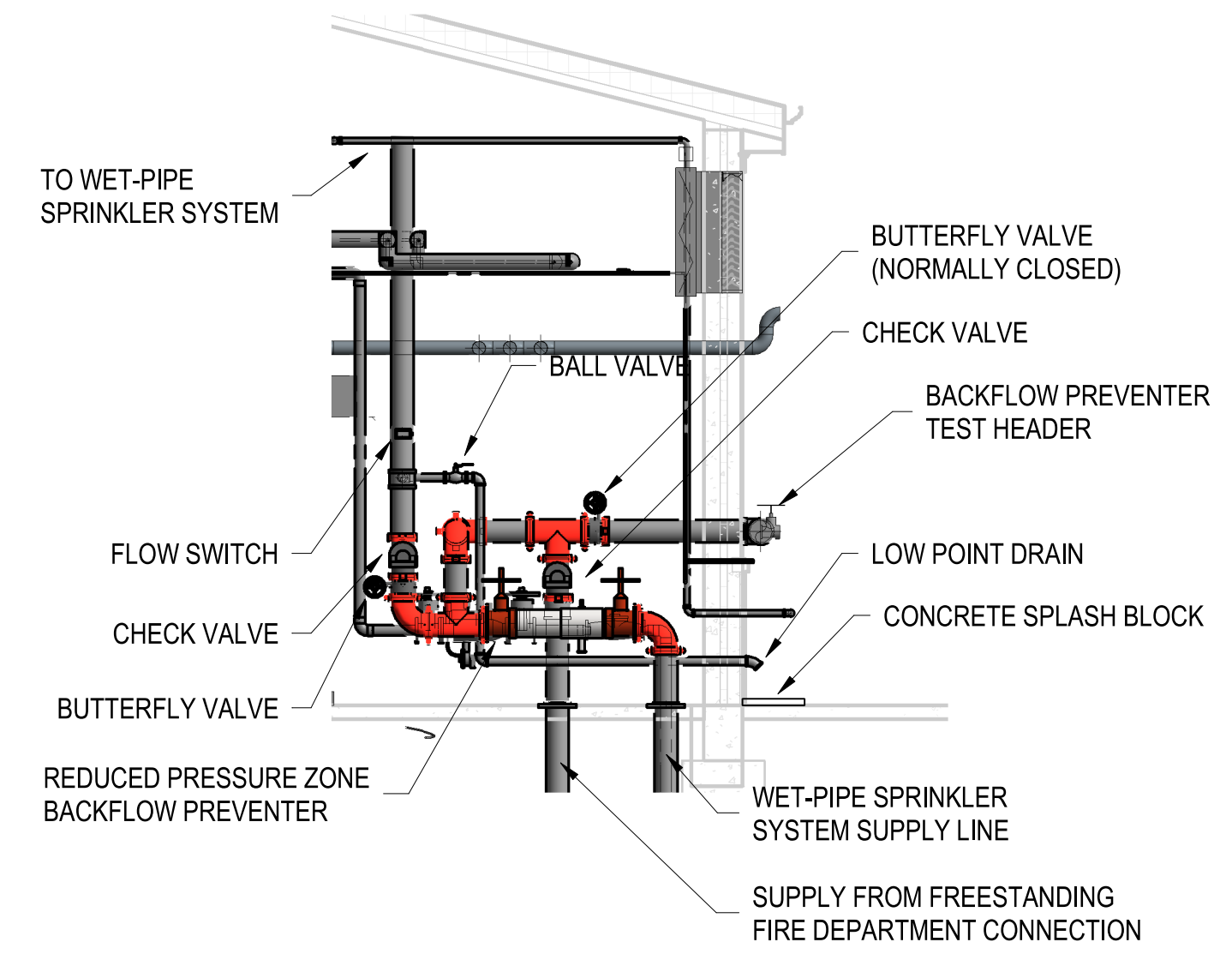
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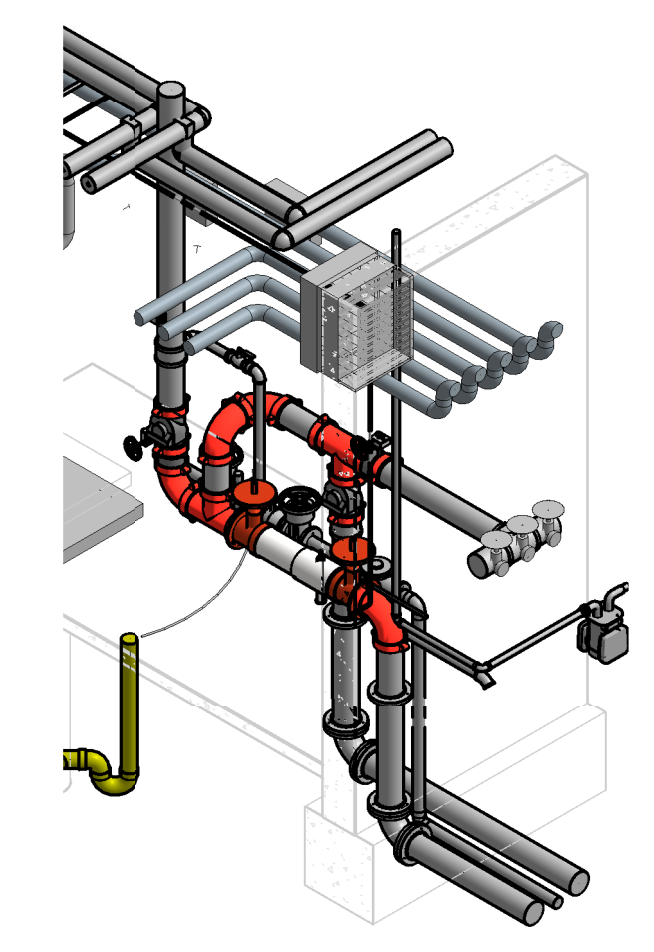
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GENERAL NOTES

1. REFER TO SHEET FX001 FOR GENERAL NOTES AND SYMBOLS.

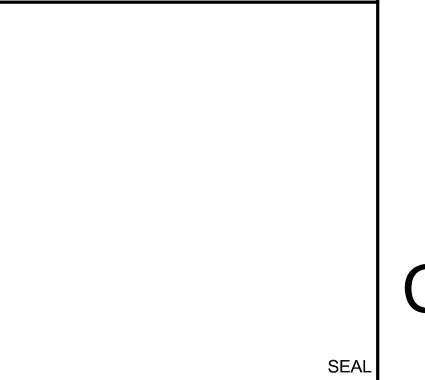


C3 FIRE PROTECTION - RISER DETAIL
SCALE: NTS



B3 FIRE PROTECTION - RISER ISOMETRIC
SCALE:

SYMBOL	DESCRIPTION	DATE	APPROVED



Michael Baker INTERNATIONAL
100 AIRSIDE DRIVE
MOON TOWNSHIP, PA 15108 A/E/INFC
APPROVED

FOR COMMANDER NAVFAC
ACTIVITY
MARINE CORPS BASE
CAMP LEJEUNE

SATISFACTORY TO DATE
DES DRW CHK
PM

BRANCH MANAGER
CHIEF ENGINEER
FIRE PROTECTION

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL FACILITIES ENGINEERING COMMAND ~ MID-ATLANTIC
JACKSONVILLE, NC
ROICC FLORENCE CAMP LEJEUNE
MCB CAMP LEJEUNE
JACKSONVILLE, NC

P1338 II MEF SIMULATION/TRAINING CENTER
REPLACEMENT
FIRE PROTECTION - DETAILS

SCALE: AS NOTED
EPROJECT NO.: 1590892
CONSTR. CONTR. NO.: N40085-20-C-0059
NAVFAC DRAWING NO.:
SHEET OF

FX501

PLOTTED: 5/28/2021 2:24:26 PM

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DP2 SUBMISSION - P1338 BUILDING - PRE-FINAL SUBMISSION

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