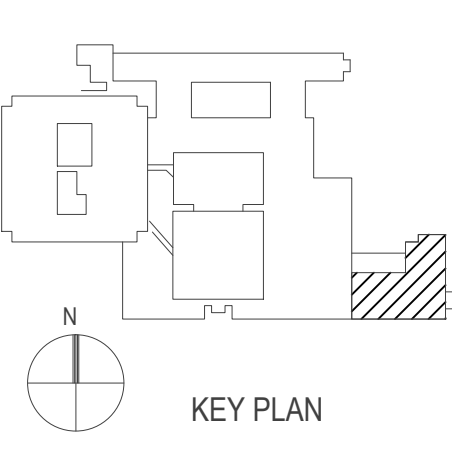


8 0 8 16
SCALE: 1/8" = 1'-0"

FULLY SPRINKLERED

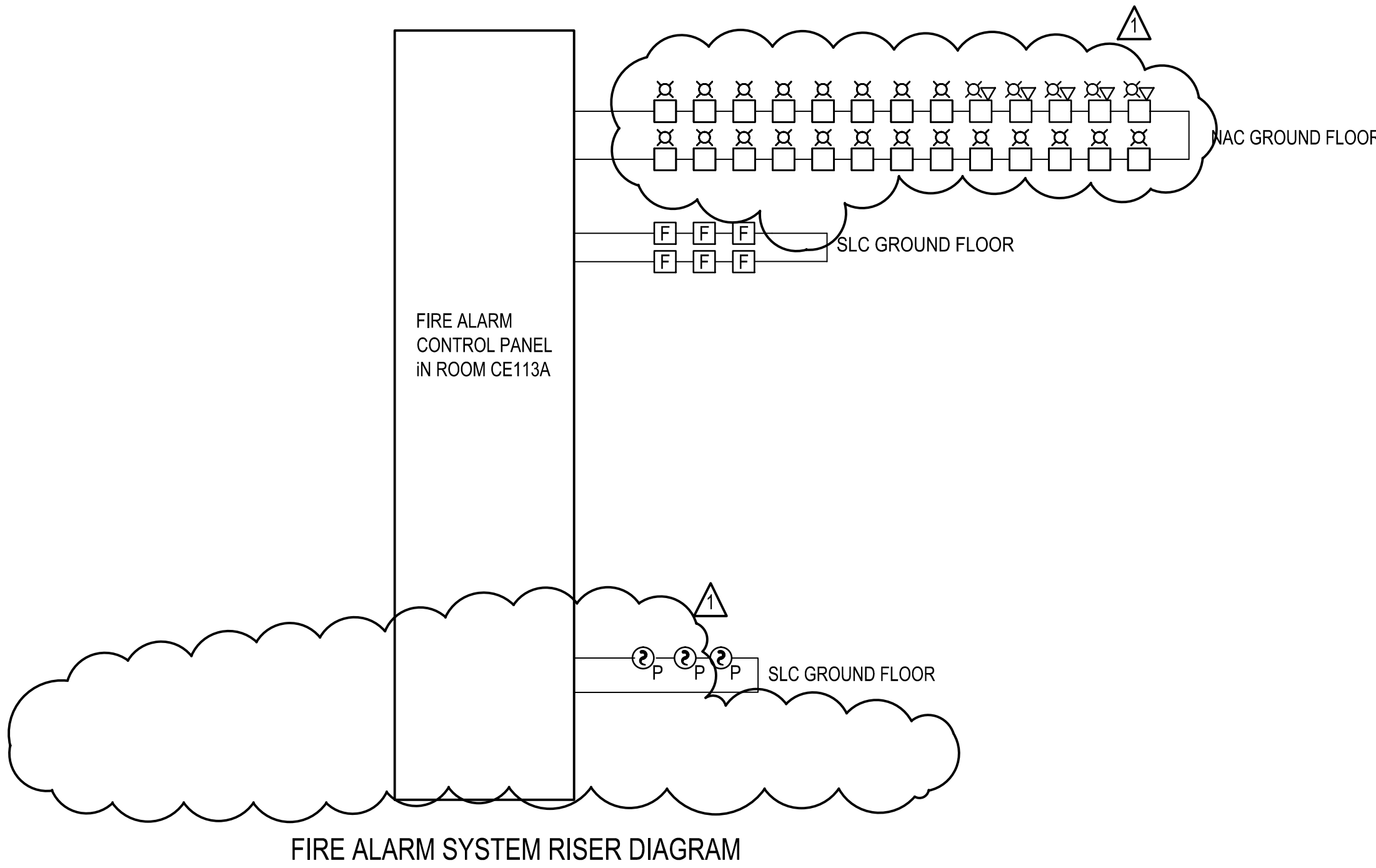


GENERAL NOTES:

1. SEE SHEET FP-001 FOR GENERAL NOTES, LEGEND, AND ABBREVIATIONS.

FIRE ALARM SYSTEM NOTES:

1. THE FIRE ALARM SYSTEM CONTRACTOR SHALL MODIFY THE EXISTING ADDRESSABLE FIRE ALARM SYSTEM AS SHOWN ON THE DRAWINGS.
2. THE EXISTING FIRE ALARM SYSTEM SERVING PROJECT AREA IS A NOTIFIER AM2020/AFP101 PANEL, AND IS LOCATED IN BUILDING ONE IN ROOM CE113A.
3. NEW NOTIFICATION APPLIANCES SHALL BE ADA COMPLIANT AND VOICE CAPABLE.
4. EACH INITIATING DEVICE SHALL REPRESENT A UNIQUE IDENTIFICATION TO THE SYSTEM SO THAT IN THE EVENT OF A FIRE ALARM OR SYSTEM TROUBLE ALARM INITIATION, THE FIRE ALARM CONTROL PANEL WILL INDICATE WHICH DEVICE HAS INITIATED THE ALARM OR TROUBLE SHOWN.
5. SYSTEMS SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 72 "NATIONAL FIRE ALARM AND SIGNALING CODE", NFPA 101, "LIFE SAFETY CODE", VA "FIRE PROTECTION DESIGN MANUAL" SEPTEMBER 2011, AND THE PROJECT SPECIFICATIONS. EDITIONS OF NFPA STANDARDS IN EFFECT AT BID DATE SHALL APPLY.
6. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. IF ANY DISCREPANCIES ARE OBSERVED BETWEEN REQUIREMENTS OF THESE DRAWINGS AND THOSE OF THE SPECIFICATIONS, NOTIFY THE CONTRACTING OFFICERS TECHNICAL REPRESENTATIVE (COTR) FOR DISPOSITION.
7. FOR CODE INTERPRETATION AND ENFORCEMENT, THE AUTHORITY HAVING JURISDICTION (AHJ) FOR ALL VA PROJECTS IS ULTIMATELY THE DEPUTY UNDER SECRETARY FOR HEALTH FOR OPERATIONS AND MANAGEMENT (10N), WITH THE SAFETY AND FIRE PROTECTION ENGINEER (10NS) ACTING AS THE VA FIRE MARSHAL. AT THE MEDICAL CENTER LEVEL, THE RESPECTIVE NETWORK SAFETY MANAGER OR NETWORK SAFETY AND FIRE PROTECTION ENGINEER (SFPE) ACTS AS THE AHJ REPRESENTATIVE ON BEHALF OF 10NS.
8. SEE ARCHITECTURAL PHASING PLANS AND SPECIFICATIONS FOR WORK HOURS AND SCHEDULE OF WORK.
9. ALL NOTIFICATION APPLIANCE CIRCUIT WIRING SHALL BE #14 AWG MINIMUM UNLESS NOTED OTHERWISE.
10. ALL SIGNALING CIRCUIT WIRING SHALL BE #18 AWG MINIMUM UNLESS NOTED OTHERWISE.
11. FIRE ALARM NOTIFICATION APPLIANCE CIRCUITS SHALL BE LOADED TO NO MORE THAN 80% OF CAPACITY TO ALLOW FOR FUTURE DEVICE ADDITIONS.
12. FIRE ALARM SIGNALING CIRCUITS SHALL HAVE NO MORE THAN 80% OF THE MAXIMUM NUMBER OF DEVICES CONNECTED TO ALLOW FOR FUTURE DEVICE ADDITIONS.
13. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR TEE TAPS AND CIRCUIT ARRANGEMENTS.
14. TEE TAPPING OF NOTIFICATION APPLIANCE CIRCUIT WIRING IS NOT ALLOWED.
15. ALL FIRE ALARM CONDUCTORS SHALL BE SUPPLIED BY THE FIRE ALARM CONTRACTOR.
16. ALL END OF LINE RESISTORS SHALL BE TERMINATED AT TERMINAL BLOCKS. PROVIDE TERMINAL BLOCK IN JUNCTION BOX WHERE TERMINALS ARE NOT PRESENT AT THE END OF LINE DEVICE.
17. FURNISH AND INSTALL TERMINAL BLOCK FOR TERMINATION OF STROBE/HORN WIRING PRIOR TO CONNECTION TO POWER SUPPLY.
18. SMOKE SENSORS SHALL NOT BE LOCATED IN A DIRECT AIRFLOW, NOR CLOSER THAN ONE METER FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING.
19. ALL AUDIBLE APPLIANCES WITHIN THE BUILDING AND ALL VISUAL APPLIANCES WITHIN THE SAME ROOM SHALL BE SYNCHRONIZED IN ACCORDANCE WITH NFPA 72.
20. WIRE AND CABLE FOR FIRE ALARM SYSTEMS SHALL BE UL LISTED AND LABELED AS COMPLYING WITH NFPA 70, ARTICLE 760.
21. SIGNALING LINE CIRCUITS: TWISTED, SHIELDED PAIR, NOT LESS THAN NO. 14 AWG. POWER-LIMITED FIRE ALARM CABLES SHALL NOT BE INSTALLED IN THE SAME CABLE OR RACEWAY AS SIGNALING LINE CIRCUITS.
22. SIGNALING LINE CIRCUITS SHALL BE CLASS A. NOTIFICATION APPLIANCE CIRCUITS SHALL BE CLASS B.
23. CIRCUIT INTEGRITY CABLE: TWISTED SHIELDED PAIR, NFPA 70, ARTICLE 760, CLASSIFICATION CI, FOR POWER-LIMITED FIRE ALARM SIGNAL SERVICE. UL LISTED AS TYPE FPL, AND COMPLYING WITH REQUIREMENTS IN UL 1424 AND IN UL 2196 FOR A 2-HOUR RATING.
24. NON-POWER-LIMITED CIRCUITS: SOLID-COPPER CONDUCTORS WITH 600-V RATED, 75 DEG C. COLOR-CODED INSULATION.
25. COLOR-CODE FIRE ALARM CONDUCTORS DIFFERENTLY FROM THE NORMAL BUILDING POWER WIRING. USE ONE COLOR-CODE FOR ALARM CIRCUIT WIRING AND A DIFFERENT COLOR-CODE FOR SUPERVISORY CIRCUITS. COLOR-CODE AUDIBLE ALARM-INDICATING CIRCUITS DIFFERENTLY FROM ALARM-INITIATING CIRCUITS. USE DIFFERENT COLORS FOR VISIBLE ALARM-INDICATING DEVICES.
26. ALL FIRE ALARM WIRING TO BE RUN IN MINIMUM 3/4-INCH EMT CONDUIT. ANY CABLE SPLICES OR TAPS ARE TO BE MADE IN STEEL JUNCTION BOXES. PAINT FIRE ALARM SYSTEM JUNCTION BOXES AND COVERS RED.
27. FIRE ALARM CIRCUITS AND EQUIPMENT CONTROL WIRING ASSOCIATED WITH THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN A DEDICATED RACEWAY SYSTEM. THIS SYSTEM SHALL NOT BE USED FOR ANY OTHER WIRE OR CABLE.
28. AUDIBLE NOTIFICATION APPLIANCES SHALL GENERATE PRIVATE MODE SOUND PRESSURE LEVELS, OVER VOICE CAPABLE DEVICES UNLESS OTHERWISE NOTED.
29. SMOKE DAMPERS IN CORRIDOR WALLS SHALL CLOSE UPON SIGNAL FROM CORRIDOR SMOKE DETECTORS IN ACCORDANCE WITH IBC 716.3.3.2 METHOD 4. SMOKE DAMPERS IN NON-CORRIDOR WALLS SHALL CLOSE ON SIGNAL FROM DUCT MOUNTED SMOKE DETECTORS IN ACCORDANCE WITH IBC 716.3.3.2 METHOD 1.
30. PROVIDE FIRE ALARM DEVICE CONNECTIONS TO HVAC SYSTEMS AND CONTROLS AND DEVICES FOR PROPER OPERATION INCLUDING SHUTDOWN. ON DETECTION OF FIRE IN ANY AREA OF THE BUILDING THE FIRE ALARM SYSTEM SHALL CAUSE THE AIR HANDLER SERVING THE SMOKE COMPARTMENT WHERE THE ALARM INITIATED TO SHUT DOWN, AND ALL SMOKE DAMPERS ASSOCIATED WITH THAT SMOKE COMPARTMENT TO CLOSE.
31. FIRE ALARM SYSTEM MONITORING AND CONTROL SHALL BE ACCOMPLISHED USING SUPERVISED FIRE ALARM WIRING TO WITHIN THREE FEET OF THE DEVICE BEING CONTROLLED OR MONITORED. IN THE CASE OF AN AIR HANDLER OR FAN, THE MOTOR STARTER OR VARIABLE FREQUENCY DRIVE IS THE DEVICE BEING CONTROLLED. IN THE CASE OF A SELF-CLOSING DAMPER HELD OPEN ELECTRICALLY, THE DAMPER POWER CIRCUIT IS THE DEVICE BEING CONTROLLED.
32. SEE THE LIFE SAFETY PLANS GI-100 AND GI-101 FOR PARTITION RATINGS.
33. CANDELA RATINGS/SETTINGS ON VISIBLE NOTIFICATION APPLIANCES SHALL BE 15 IN RESTROOMS AND 75 IN OTHER LOCATIONS UNLESS SHOWN ON THE DRAWINGS.



		ANNUNCIATION AT LOCAL PANELS				FIRE SUPPRESSION SYSTEM FUNCTIONS				TRANSMIT SIGNALS TO FIRE DEPARTMENT				AUXILIARY FUNCTIONS		EVACUATION SIGNALS				
		AUDIO-VISUAL FIRE ALARM INDICATION BY ZONE	AUDIO-VISUAL TROUBLE INDICATION BY ZONE	AUDIO-VISUAL COMMON TROUBLE INDICATION	AUDIO-VISUAL ALARM INDICATION BY DEVICE					COMMON TROUBLE SIGNAL	AUXILIARY SUPERVISORY SIGNAL BY DEVICE	COMMON FIRE ALARM PER GENERAL AREA	SPRINKLER WATER FLOW PER GENERAL AREA		SHUTDOWN ALL SUPPLY AND RECIRCULATING FANS	RELEASE MAGNETICALLY HELD SMOKE DOORS	CLOSE SMOKE DAMPER	FACILITY FIRE EVACUATION AUDIO-VISUAL SIGNAL	ELEVATOR RECALL	
FIRE ALARMS		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	
MANUAL FIRE ALARM STATIONS		X			X							X				X	X		X	X
SPOT-TYPE SMOKE DETECTORS		X			X							X				X	X		X	X
WATER FLOW SWITCHES-WET SPRINKLERS		X											X			X	X		X	
SUPERVISORY SIGNALS																				
VALVE SUPERVISORY SWITCH - WET SPRINKLERS			X								X									
TROUBLE CONDITIONS																				
LOW BATTERY VOLTAGE				X							X									
CIRCUIT FAULT			X	X							X									
SUPERVISED COMPONENT FAILURE				X							X									
AC POWER FAILURE				X							X									

FACILITY FIRE DETECTION & ALARM SYSTEM FUNCTIONAL MATRIX

1.	REVISED DEVICES	11/22/13
Revisions:		Date:

CONSULTANTS:

Allen & Hoshall
engineering since 1915
1661 International Drive Memphis, TN 38120
901 820 0820 fax 901 683 1001
www.allenhoshall.com

FIRE PROTECTION



RAC Project 12010

05/31/2012



ARCHITECT/ENGINEERS:

brg3sarchitects

119 S. Main Street Suite 200
Memphis, Tennessee 38103
t 901.260.9600
f 301.521.1337
w brg3s.com

DRAWING TITLE:
FIRE ALARM GENERAL NOTES AND
RISER DIAGRAM

SCALE: AS SHOWN

APPROVED PROJECT DIRECTOR:

PROJECT TITLE:

VA Building One
Expand Emergency Room

LOCATION:

VAMC, Memphis, Tennessee

DATE:

May 31, 2012

CHECKED:

WBH

DRAWN:

EFJ

PROJECT NUMBER:

614-10-102

BUILDING NUMBER:

one

DRAWING NUMBER:

FP-601

DWG. x OF x

FULLY SPRINKLERED