# FIRE PROTECTION LEGEND

	I NOTECTION LEGET	עו	
<u> </u>	BRANCH SIDE CONNECTION	FACP	FIRE ALARM CONTROL PANEL
	BRANCH TOP CONNECTION	F	MANUAL PULL STATION, MOUNT 4'-0" AFF
	— CHECK VALVE	(\$)	SMOKE DETECTOR CEILING MOUNTED
<u></u> ₩	GATE VALVE	V 15	STROBE UNIT W/CANDELA RATING, MOUNT 6'-8" AFF
	RISER DOWN	FI 15	WEATHERPROOF CHIME/STROBE UNIT W/CANDELA RATING, MOUNT 6'-8" AFF
<del></del>	RISER UP OR DOWN		MODINI 0 -0 ALI
SHV	STANDPIPE HOSE VALVE STATION	F <b>A</b>	CHIME/STROBE UNIT W/CANDELA RATING, MOUNT 6'-8" A
•	PENDENT SPRINKLER HEAD	FÞ	FIRE ALARM CHIME UNIT, MOUNT 6'-8" AFF
• E	EXISTING SPRINKLER HEAD	СМ	CONTACT MONITOR MODULE
F	PULL STATION, EXISTING TO REMAIN	TS	VALVE TAMPER SWITCH
R	FIRE ALARM RELAY	<b>(D)</b>	DUCT SMOKE DETECTOR
<b>F</b>	CEILING MOUNTED CHIME/STROBE	$\bigoplus$	HEAT DETECTOR
	UNIT W/CANDELA RATING	RA	REMOTE ANNUNCIATOR
M	MAGNETIC DOOR HOLD OPEN (24VDC)	NAC	NOTIFICATION APPLIANCE CIRCUIT BOOSTER PANEL
FC	FLOOR CONTROL VALVE ASSEMBLY	CI	CONTROL INTERFACE RELAY
<b>K</b>	KITCHEN HOOD FIRE SUPPRESSION SYSTEM	(F)	WATERFLOW SWITCH - PADDLE TYPE

FIRE ALARM SYSTEM SEQUENCE OF OPERATION MATRIX											
ACTION	KEY OPERATED MANUAL FIRE ALARM STATION	AREA SMOKE DETECTOR	DUCT SMOKE DETECTOR	WATERFLOW SWITCH	SPRINKLER VALVE TAMPER SWITCH	FACP MODULE TROUBLE	FIRST FLOOR ELEVATOR LOBBY SMOKE	SECOND FLOOR ELEVATOR LOBBY SMOKE	ELEVATOR SHAFT HEAT DETECTOR	ELEVATOR SHAFT SMOKE DETECTOR	DOOR HOLD OPEN SMOKE DETECTORS
ACTIVATE FIRE ALARM CHIMES AND STROBE LIGHTS	YES	YES	NO	YES	NO	NO	YES	YES	YES	YES	YES
DISPLAY ALARM INDICATION AT FACP	YES	YES	NO	YES	NO	NO	YES	YES	YES	YES	YES
RECORD INFORMATION ON FACP	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
DISPLAY SUPERVISION CONDITION AT FACP	NO	NO	YES	NO	YES	YES	NO	NO	NO	NO	NO
SHUT DOWN ASSOCIATED AHU	NO	NO	YES	NO	NO	NO	NO	NO	NO	NO	NO
TRANSMIT ALARM SIGNAL TO CAMPUS FIRE REPORTING STATION	YES	YES	NO	YES	NO	NO	YES	YES	YES	YES	YES
TRANSMIT TROUBLE SIGNAL TO CAMPUS FIRE REPORTING STATION	NO	NO	NO	NO	NO	YES	NO	NO	NO	NO	NO
TRANSMIT SUPERVISORY SIGNAL TO FIRE REPORTING STATION	NO	NO	YES	NO	YES	NO	NO	NO	NO	NO	NO
PRIMARY ELEVATOR RECALL	YES	YES	NO	YES	NO	NO	YES	YES	YES	YES	NO
SECONDARY ELEVATOR RECALL	NO	NO	NO	NO	NO	NO	YES	NO	NO	YES	NO
RELEASE DOOR MAGNETS	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	YES
SHUNT TRIP ELEVATOR POWER	NO	NO	NO	NO	NO	NO	NO	NO	YES	NO	NO

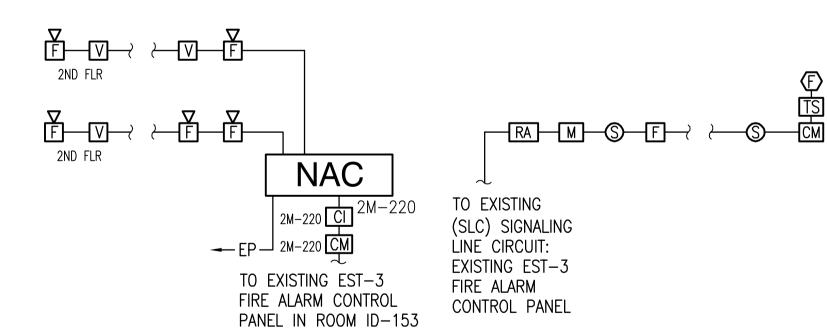
# MAIN STAIR LANDING EDGE OF REQUIRED TRAVEL PATH TRAVEL PATH STAIR HANDRAIL 2" DRAIN STAIR HANDRAIL STAIR HANDRAIL STAIR HANDRAIL STAIRWELL WALL STAIR

NOTE: THERE SHALL BE NO PIPING, VALVES OR EQUIPMENT RUN LOWER THAN 80" ABOVE THE TOP OF ANY STAIR LANDINGS, EXCEPT FOR FIRE HOSE VALVES.

STAIRWELL PIPING - MEANS OF EGRESS DETAIL

# FIRE ALARM RISER NOTES

- THE FIRE ALARM EQUIPMENT SUPPLIER IS RESPONSIBLE FOR PROVIDING ADDITIONAL INDICATING CIRCUITS
  OR POWER CONTROL MODULES AS REQUIRED TO PROPERLY OPERATE ALL AUDIO/VISUAL REQUIRED
  APPLIANCES.
- 2. ALL WIRING SHALL BE AS RECOMMENDED BY EQUIPMENT MANUFACTURER.
- 3. FIRE ALARM RISER DIAGRAM IS SHOWN FOR REFERENCE ONLY. LOCATIONS AND QUANTITIES SHALL BE AS SHOWN ON THE FLOOR PLANS. THE FIRE ALARM RISER DIAGRAM DOES NOT NECESSARILY INDICATE THE ACTUAL NUMBER OF ALARM NOTIFICATION APPLIANCE CIRCUITS. THE ACTUAL NUMBER OF APPLIANCE CIRCUITS NECESSARY IS DEPENDENT UPON THE EQUIPMENT MANUFACTURER.
- 4. PROVIDE A REMOTE LED TEST/INDICATOR LIGHT FOR EACH DUCT DETECTOR AND LABEL WHICH AHU IS SERVED.
- 5. PROVIDE SYNCHRONIZATION FOR AREAS WHERE MORE THAN ONE VISIBLE APPLIANCE IS LOCATED.6. CONNECT NOTIFICATION APPLIANCES ON FIRST FLOOR TO EXISTING EST-3 LOCATED IN 1D-153.



FIRE ALARM RISER DIAGRAM

SPACE	SYSTEM TYPE	OCCUPANCY TYPE	DESIGN DENSITY  GPM/SF	DESIGN AREA SF	HOSE STREAM GPM	ESTIMATED TOTAL FLOW RATE  GPM  *SEE NOTE
ALL OTHERS	WET	LIGHT HAZARD	0.10	1500	100	300
AS NOTED	WET	ORDINARY HAZARD, GROUP 1	0.15	1500	250	540

### TO SPRINKLER SYSTEM — **FLOOR** FOR ELEVATOR RECALL, MACHINE CEILING SHUTDOWN AND FIRE HAT (TYPICAL) —— SECOND **FLOOR** LEVEL **ELEVATOR NOTES** <u>ELEVATOR</u> – FIRST 1) HEAT DETECTOR FOR ELEVATOR **FLOOR** <u>SHAFT</u> CEILING SHUTDOWN. LOCATE WITHIN 3'-0" OF INTERMEDIATE TEMPERATURE SPRINKLER HEAD. CONNECT TO FIRE ALARM SYSTEM CONTROL PANEL. FOR ELEVATOR RECALL TO FIRST FLOOR. CONNECT TO FIRE ALARM CONTROL PANEL. FIRST 3 FOR ELEVATOR RECALL TO SECOND FLOOR. **FLOOR** LEVEL CONNECT TO FIRE ALARM CONTROL PANEL. 4 INTERMEDIATE TEMPERATURE SIDEWALL SPRINKLER - LOCATE BELOW ELEVATOR CAB AS HIGH AS POSSIBLE BUT NO MORE THAN 24" ABOVE THE PIT FLOOR.

# ELEVATOR FIRE PROTECTION DIAGRAM NO SCALE

# **GENERAL NOTES**

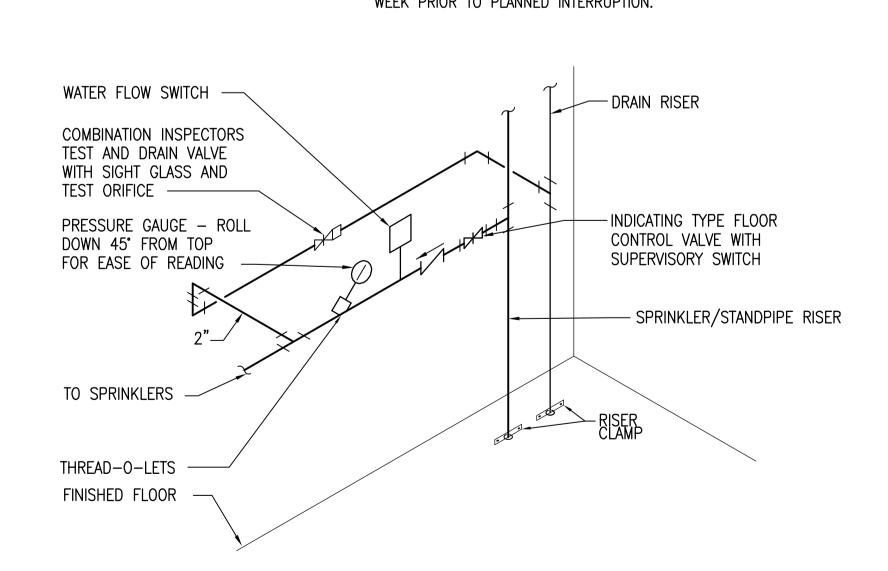
- THE CONTRACTOR SHALL PROVIDE A MODIFIED AND EXTENDED SYSTEM TO INCLUDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR A FUNCTIONAL SYSTEM INCLUDING ALL NECESSARY APPURTENANCES CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED OUT.
- 2. ENTIRE INSTALLATION, INCLUDING MATERIALS, EQUIPMENT, AND WORKMANSHIP, SHALL CONFORM WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS OF STATE AND FEDERAL AUTHORITIES.
- 3. THIS PROJECT SHALL CONFORM TO APPLICABLE NFPA STANDARDS AND OTHER REGULATORY BODIES HAVING JURISDICTION OVER THE CLASS OF WORK.
- 4. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES, DOCUMENTS, AND SERVICES RELATED TO INSTALLATION OF THE WORK.
- 5. CONTRACTORS SHALL COORDINATE THEIR WORK WITH THE OTHER TRADES IN ORDER TO RESOLVE ANY CONFLICT THAT MIGHT ARISE DUE TO THE LOCATION OF SPRINKLER PIPING, ALARM DEVICES, FIRE PROTECTION EQUIPMENT OR THE USE OF SPACE.
- 6. ALL EQUIPMENT REMOVED FROM THE BUILDING, DURING DEMOLITION, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE NOTED.
- EXISTING FIRE ALARM DEVICES, SPRINKLERS, SPRINKLER PIPING AND EQUIPMENT NOTED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FIRE ALARM DEVICES, SPRINKLERS, SPRINKLER PIPING AND FIRE PROTECTION EQUIPMENT, SIZES, AND THEIR RESPECTIVE LOCATIONS BEFORE PROCEEDING WITH ANY ASSOCIATED WORK.
- 8. PRIOR TO SUBMITTING A PROPOSAL THE CONTRACTOR IS STRONGLY ENCOURAGED TO VISIT THE SITE AND THOROUGHLY INSPECT ALL EXISTING CONDITIONS TO INSURE THAT THE WORK REPRESENTED ON THE DRAWINGS CAN BE INSTALLED AS INDICATED.
- 9. SPRINKLER SYSTEM SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH NFPA 13, 2010 EDITION AND THE DEPARTMENT OF VETERANS AFFAIRS VA FIRE PROTECTION DESIGN GUIDELINES.
- 10. NO PIPE PENETRATION OF STRUCTURAL MEMBERS, EXCEPT AS NOTED, IS PERMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER.
- 11. INSTALL HANGERS AND SUPPORTS FOR SPRINKLER SYSTEM PIPING ACCORDING TO NFPA 13. COMPLY WITH REQUIREMENTS FOR HANGER MATERIALS IN NFPA 13.
- 12. RUN SPRINKLER PIPING SUCH THAT IT DOES NOT RUN ABOVE ELECTRICAL PANELS, EQUIPMENT, OR SIMILAR.
- 13. FIRE ALARM SYSTEM SHALL BE MODIFIED AND INSTALLED IN ACCORDANCE WITH NFPA 72, 2010 EDITION AND THE DEPARTMENT OF VETERANS AFFAIRS VA FIRE PROTECTION DESIGN GUIDELINES. COORDINATE FIRE ALARM SYSTEM WITH ALL TRADES TO INSURE PROPER COMPLIANCE WITH NFPA 72 AND TO AVOID CONFLICTS.
- 14. PROGRAM EXISTING EDWARDS EST-3 FACP LOCATED IN ROOM 1D-153 TO ADDRESS NEW FIRE ALARM EQUIPMENT AND DEVICES.
- 15. EXTEND CONDUIT AND WIRING AS REQUIRED. USE METHODS AND MATERIALS SIMILAR TO EXISTING. RUN CONDUIT EXPOSED IN UNFINISHED AREAS. RUN CONDUIT IN CEILINGS AND WALLS IN FINISHED AREAS.
- 16. SPRINKLER HEADS IN ACOUSTICAL TILE CEILINGS SHALL BE INSTALLED IN THE CENTER OF THE CEILING TILES.
- 17. SPRINKLER PIPING SHALL BE INSTALLED WITHIN THE CONDITIONED BUILDING ENVELOPE SUCH THAT IT IS NOT SUBJECT TO FREEZING.
- 18. PROVIDE AUTOMATIC SPRINKLER PROTECTION FOR LINEN AND TRASH CHUTES,
- IN ACCORDANCE WITH NFPA 13, NFPA 82, AND NFPA 101 STANDARDS.

  19. SPRINKLERS ARE NOT REQUIRED WITHIN INTERSTITIAL SPACES, PER VA FIRE
- PROTECTION DESIGN MANUAL, SIXTH EDITION, SEPTEMBER 2011.
- 20. FIRE PROTECTION WORK DURING CONSTRUCTION SHALL COMPLY WITH VA MASTER CONSTRUCTION SPECIFICATION (VAMCS) 01 00 00, GENERAL REQUIREMENTS.
- 21. PROVIDE SPRINKLER PROTECTION UNDER AN ACCESSIBLE FIRST LANDING OF STAIRS AND AT THE TOP OF THE STAIR SHAFTS, IN ACCORDANCE WITH NFPA 13.
- HIGH INTENSITY STROBE ACTIVATION.

22. LIMITED STROBE COVERAGE HAS BEEN PROVIDED DUE TO PATIENT SENSITIVITY TO

- 23. PROVIDE SEMI—RECESSED INSTITUTIONAL SPRINKLER HEADS IN ALL TOILET SPACES FOR THE FIRST AND SECOND FLOORS.
- 24. NO INTERRUPTION OF THE EXISTING SPRINKLER SYSTEM OR FIRE ALARM SYSTEM IS PERMITTED WITHOUT PRIOR PERMISSION OF THE CONTRACTING OFFICER.

  CONTRACTOR SHALL DEVELOP AN INTERIM FIRE PROTECTION PROGRAM WHERE INTERRUPTIONS OCCUR IN OCCUPIED SPACES. REQUEST IN WRITING AT LEAST ONE WEEK PRIOR TO PLANNED INTERRUPTION.



# FLOOR CONTROL VALVE ASSEMBLY DETAIL

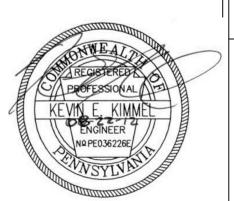
NO SCALE

FULLY SPRINKLERED

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Office of
Construction
and Facilities
Management

Department of
Veterans Affairs

Revisions:

VA FORM 08-6231

one eighth inch = one foot

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