

GENERAL

- AFF ABOVE FINISHED FLOOR
- FP FIRE PUMP
- JP JOCKEY PUMP
- PSI POUNDS PER SQUARE INCH
- GPM GALLONS PER MINUTE
- F.E. FIRE EXTINGUISHER
- N.C. NORMALLY CLOSED
- N.O. NORMALLY OPEN
- PIV POST INDICATOR VALVE
- WV WALL INDICATOR VALVE
- WP WEATHER PROOF

- ◆ ONE HOUR RATED FIRE PARTITION
- ◆ TWO HOUR RATED FIRE SEPARATION WALL

FIRE PUMP/SPRINKLER SYSTEM

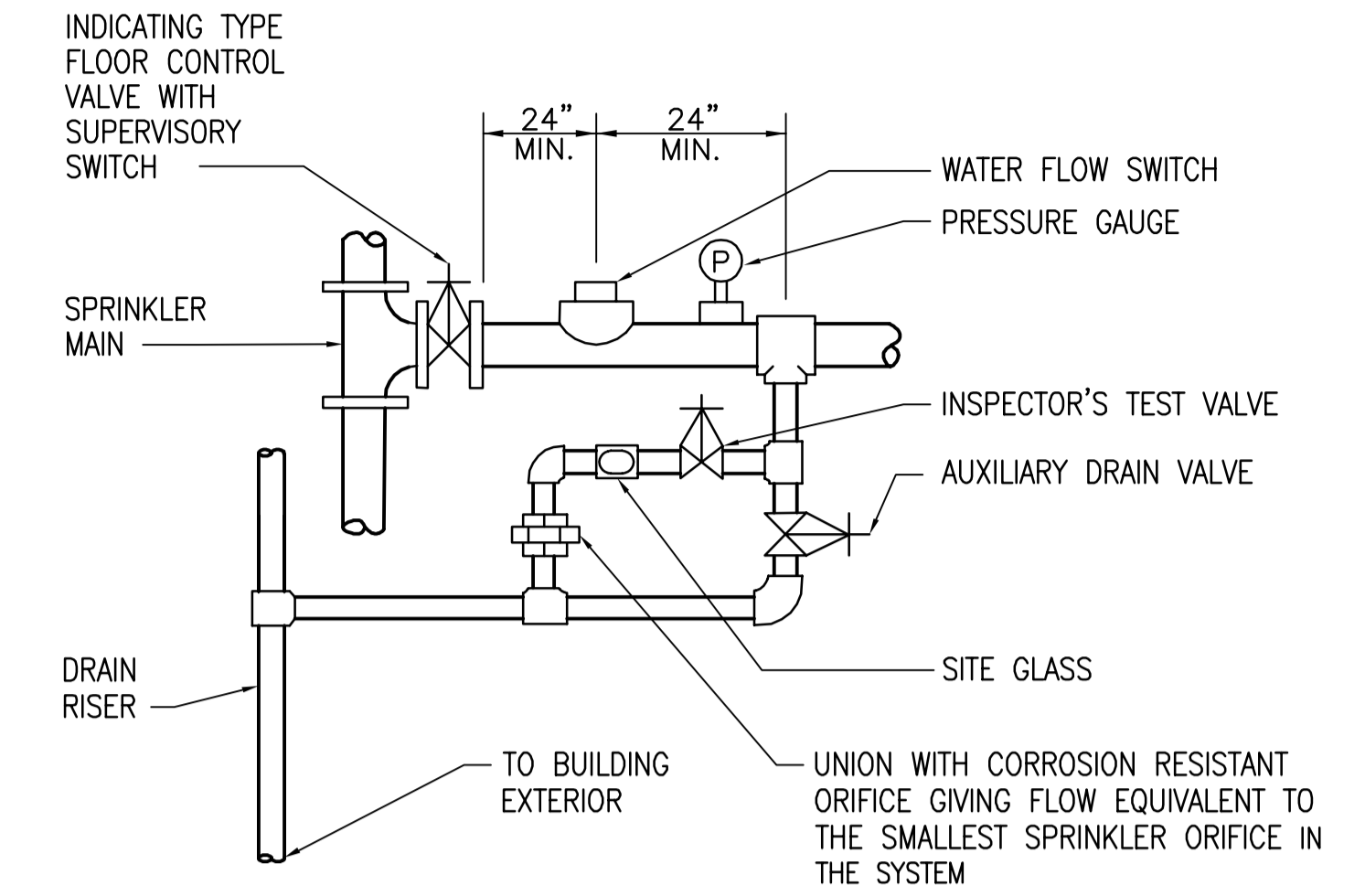
- BACKFLOW PREVENTER
- BRANCH TOP CONNECTION
- BRANCH BOTTOM CONNECTION
- BRANCH SIDE CONNECTION
- CHECK VALVE
- FD DRAIN LINE FOR WATERFLOW SWITCHES
- FDC FIRE DEPARTMENT CONNECTION
- F FIRE SPRINKLER LINE
- FLANGES
- FLOW IN DIRECTION OF ARROW
- GATE VALVE
- GAUGE WITH COCK (TYPE AS NOTED)
- GLOBE VALVE
- OUTSIDE SCREW AND YOKE VALVE (OS & Y)
- PENDENT SPRINKLER
- PIPE CAP
- PIPE REDUCER/INCREASER
- RELIEF VALVE
- RISER UP
- RISER DOWN
- SIDEWALL SPRINKLER
- SPRINKLER RISER
- UPRIGHT SPRINKLER
- FULL FLOW TEST CONNECTION (2) 2 1/2" HOSE VALVE OUTLETS

FIRE ALARM SYSTEM

- AUTOMATIC TELEPHONE DIALER
- ISOLATION MODULE
- CONTACT MONITOR MODULE
- DUCT SMOKE DETECTOR
- ELECTRICAL POWER
- FIRE ALARM CONTROL PANEL
- HORN/STROBE - MOUNT 7'-0" AFF
- MANUAL PULL STATION, MOUNT +4'-0" AFF
- REMOTE ANNUNCIATOR PANEL
- REMOTE INDICATOR LIGHT
- SMOKE DETECTOR CEILING MOUNTED
- STROBE UNIT - MOUNT 7'-0" AFF
- VALVE TAMPER SWITCH
- WATERFLOW SWITCH - PADDLE TYPE

GENERAL NOTES

- DESIGN THE SPRINKLER SYSTEM FOR THE HAZARD OCCUPANCY SHOWN ON THE CONSTRUCTION DOCUMENTS.
- RUN PIPING IN ROOMS AND CORRIDORS CONCEALED ABOVE CEILING USING PENDENT SPRINKLER HEADS. IN ROOMS AND CORRIDORS WITH EXPOSED CONSTRUCTION, RUN PIPING EXPOSED USING UPRIGHT SPRINKLER HEADS, EXCEPT AS NOTED OTHERWISE.
- NO PIPE PENETRATIONS OF STRUCTURAL MEMBERS, EXCEPT AS NOTED ARE PERMITTED WITHOUT THE WRITTEN APPROVAL OF THE CONSTRUCTION OFFICER.
- PROVIDE FIRE SAFED UL LISTED PIPE/CONDUIT PENETRATIONS OF FIRE AND/OR SMOKE PARTITIONS/WALLS/FLOORS.
- DESIGN AND INSTALL SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13 - 2013 EDITION
- DESIGN AND INSTALL FIRE ALARM SYSTEM IN ACCORDANCE WITH NFPA 72 - 2013 EDITION
- LOCATE SPRINKLERS IN CENTER OF CEILING TILES THROUGHOUT AREAS WITH ACOUSTICAL SUSPENDED CEILING.
- COORDINATE FIRE PROTECTION WITH ALL TRADES TO INSURE PROPER CLEARANCE WITH ALL DISCIPLINES AND TO AVOID CONFLICTS.



B8 SPRINKLER FLOOR CONTROL ASSEMBLY

F-001 F-001 NO SCALE

WATER FLOW TEST DATA

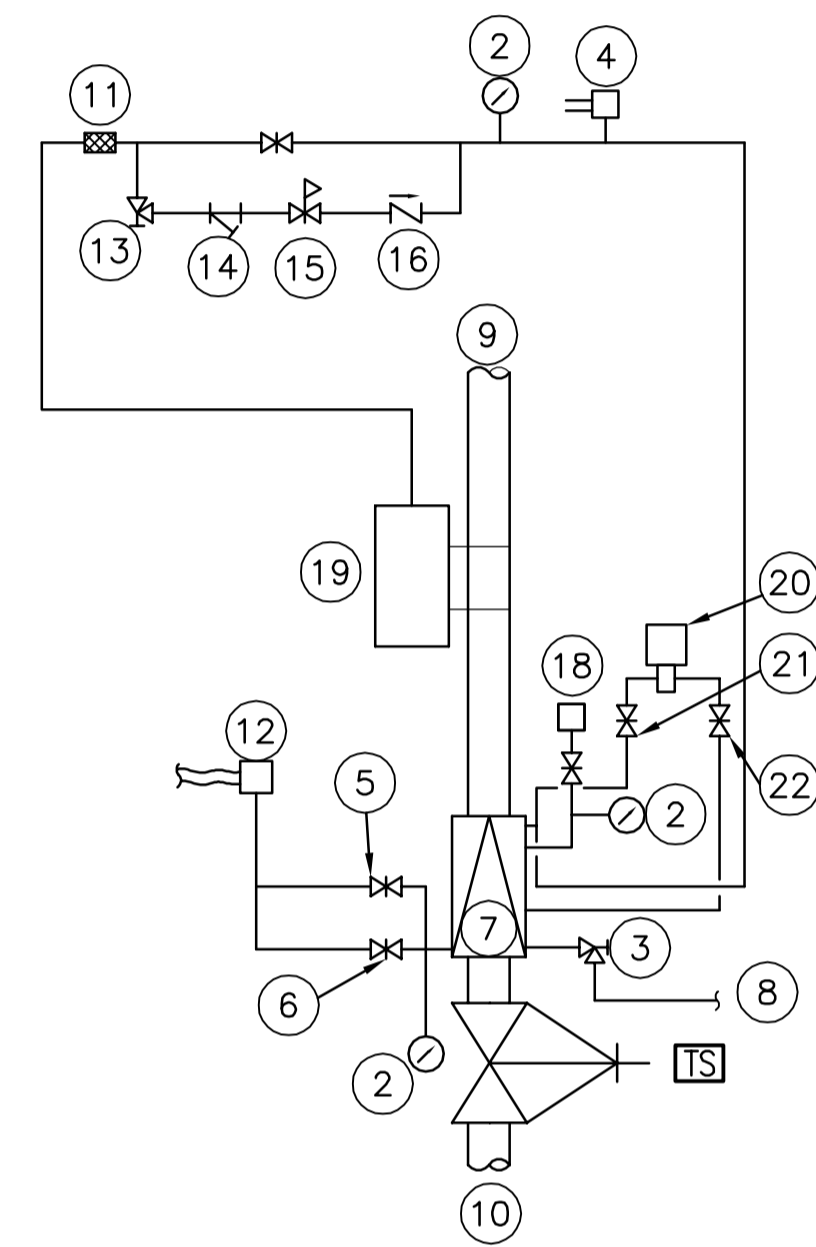
STATIC	RESIDUAL	FLOWING
65	60	843 GPM

INSPECTOR: ADAM SHEW
 COMPANY: SIMPLEX GRINNELL
 LOCATION: BLDG 16/MRI ENTRANCE
 DATE: OCTOBER 28, 2013

SPRINKLER SYSTEM DESIGN DATA

SPACE	SYSTEM TYPE	OCCUPANCY TYPE	DESIGN DENSITY GPM / FT ²	DESIGN AREA FT ²	HOSE STREAM GPM	ESTIMATED DEMAND @ BASE OF RISER GPM @ PSI
OFFICE AREAS	WET	LIGHT HAZARD	0.10	1500	100	218 @ 46
MECH/ELEC RMS, & LOADING DOCK	WET	ORDINARY HAZARD, GROUP 1	0.15	1500	250	320 @ 46

*NOTE: QUICK RESPONSE SPRINKLER REMOTE AREA REDUCTION PERMITTED WITHIN LIGHT HAZARD AREAS.



LEGEND

- 1 NOT USED
- 2 PRESSURE GAUGE
- 3 MAIN DRAIN VALVE
- 4 LOW AIR PRESSURE SWITCH TO FIRE ALARM PANEL
- 5 ALARM SHUT-OFF VALVE (NORMALLY OPEN)
- 6 ALARM TEST VALVE (NORMALLY CLOSED)
- 7 DRY PIPE VALVE
- 8 DISCHARGE TO EXTERIOR
- 9 TO SPRINKLERS
- 10 FROM PUMP DISCHARGE
- 11 FLEXIBLE CONNECTION
- 12 PRESSURE SWITCH TO FIRE ALARM PANEL
- 13 AIR CONTROL VALVE
- 14 STRAINER
- 15 AIR PRESSURE REGULATOR
- 16 RESTRICTOR CHECK VALVE
- 17 NOT USED
- 18 FILL CUP AND FUNNEL
- 19 RISER MOUNTED AIR COMPRESSOR, 1/3 HP
- 20 ACCELERATOR
- 21 ACCELERATOR AIR SUPPLY VALVE (N.O.)
- 22 ACCELERATOR SHUT-OFF VALVE (N.O.)

D1 DRY PIPE VALVE DETAIL

F-001 F-001 NO SCALE

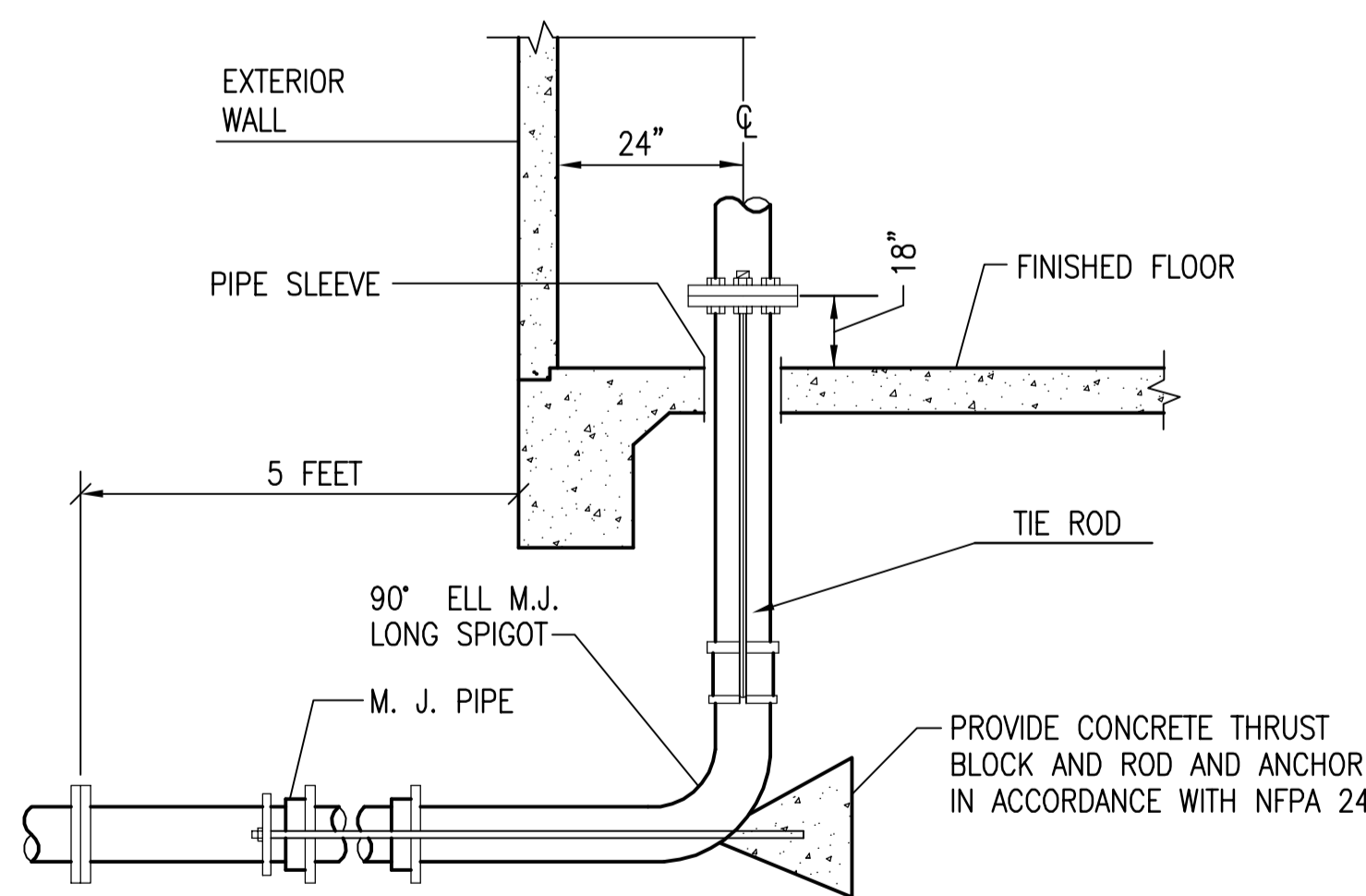
FIRE ALARM/DETECTION SYSTEM SEQUENCE OF OPERATION MATRIX

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
SYSTEM OUTPUT																
SYSTEM INPUT																
1 MANUAL PULL FIRE ALARM	X	X	X	X						X						
2 AREA SMOKE DETECTOR	X	X	X	X						X						
3 DUCT SMOKE DETECTOR					X		X	X							X	
4 ELEVATOR LOBBY 1ST FLR SMOKE	X	X	X	X						X	X	X				
5 ELEVATOR LOBBY BASEMENT-2ND FLR SMOKE	X	X	X	X						X	X	X				
6 ELEVATOR MACHINE ROOM SMOKE DETECTOR	X	X	X	X						X	X	X				
7 ELEVATOR MACHINE ROOM HEAT DETECTOR	X	X	X	X						X	X	X				
8 ELEVATOR SHAFT SMOKE DETECTOR	X	X	X	X						X	X	X				
9 ELEVATOR INTERFACE CIRCUIT SUPERVISORY					X		X	X								
10 FIRE SPRINKLER SYSTEM WATER FLOW	X	X	X	X						X					X	
11 FIRE SPRINKLER SYSTEM TAMPER						X	X	X								
12 FIRE ALARM AC POWER FAILURE						X		*1	X							
13 FIRE ALARM LOW BATTERY						X	X	X								
14 FIRE ALARM OPEN CIRCUIT						X	X	X								
15 FIRE ALARM GROUND FAULT						X	X	X								
16 NOTIFICATION APPLIANCE CIRCUIT FAULT						X	X	X								
17 FIRE ALARM PANEL CLEAR									X							X
18																
19																
20																

*1 TRANSMIT TROUBLE SIGNAL WHEN LOSS OF POWER EXCEEDS 2 HOURS.

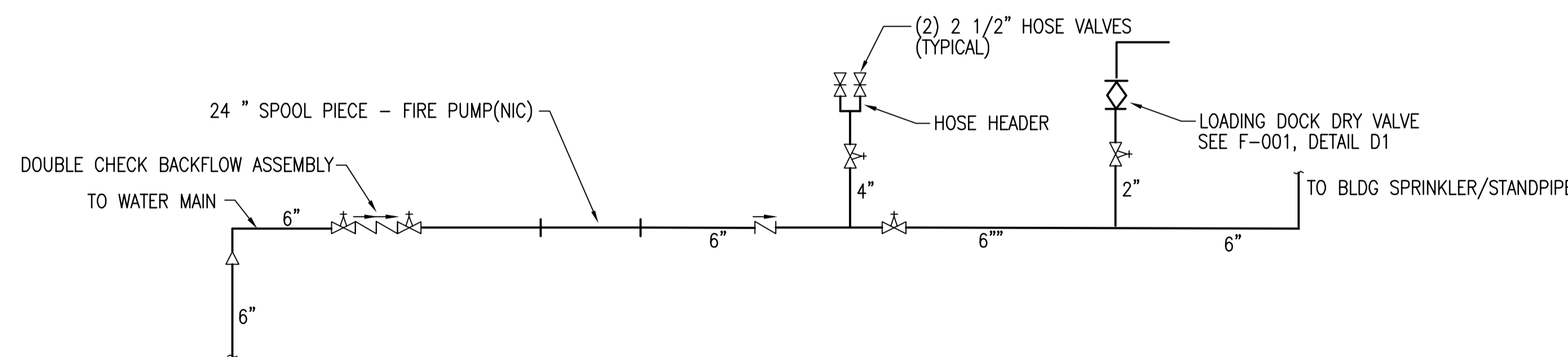
E4 FIRE ALARM OPERATION RESPONSE MATRIX

F-001 F-001 NO SCALE



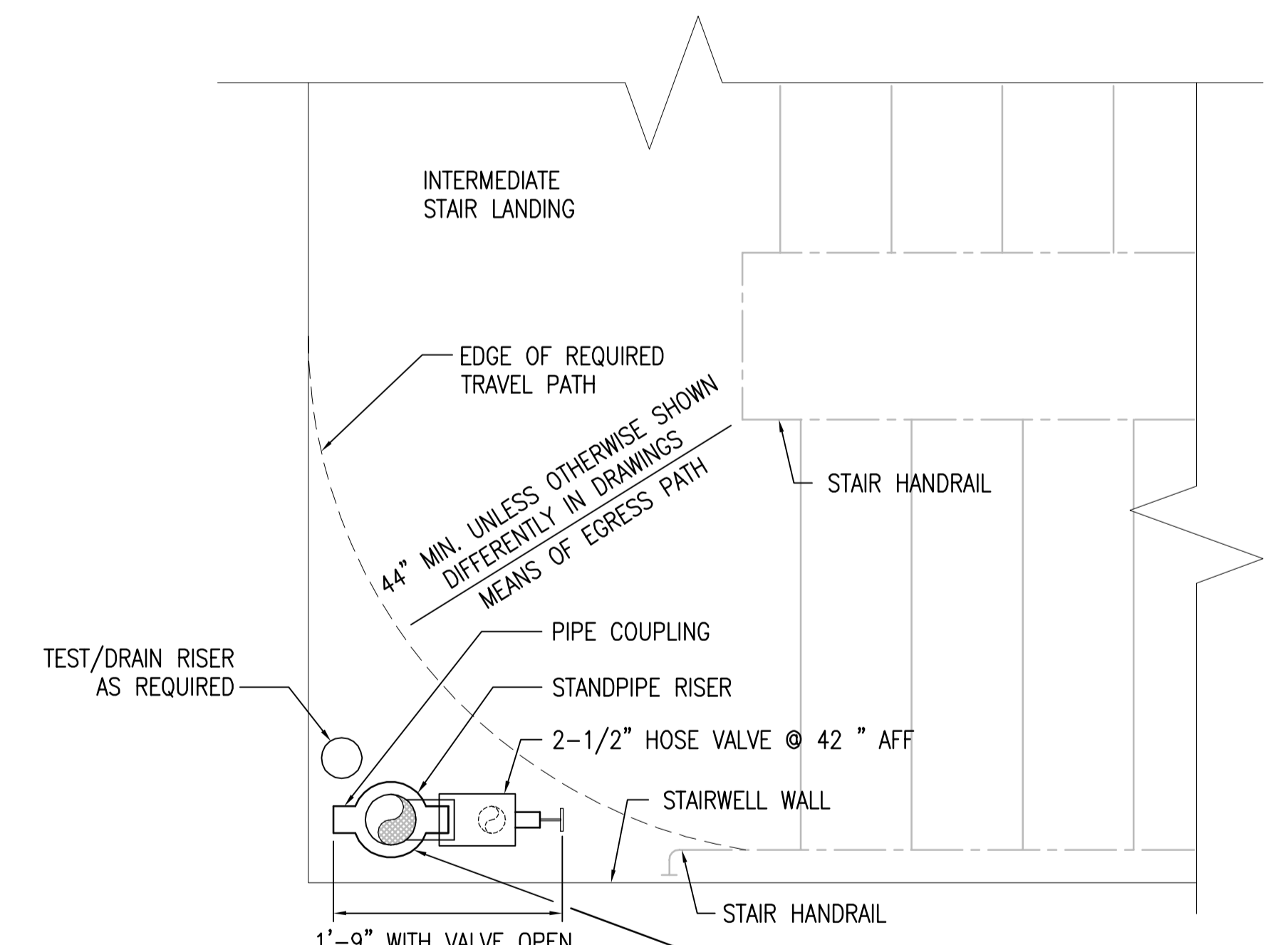
F2 FIRE WATER SERVICE DETAIL

F-001 F-001 NO SCALE



F4 FIRE WATER PIPING DIAGRAM

F-001 F-001 NO SCALE



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.

F7 STAIRWELL PIPING - MEANS OF EGRESS DETAIL

F-001 F-001 NO SCALE

ADDENDUM NO. 1	03.31.15
ADDENDUM NO. 2	04.27.15
Revisions	Date

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SEAL:

ARCHITECT:

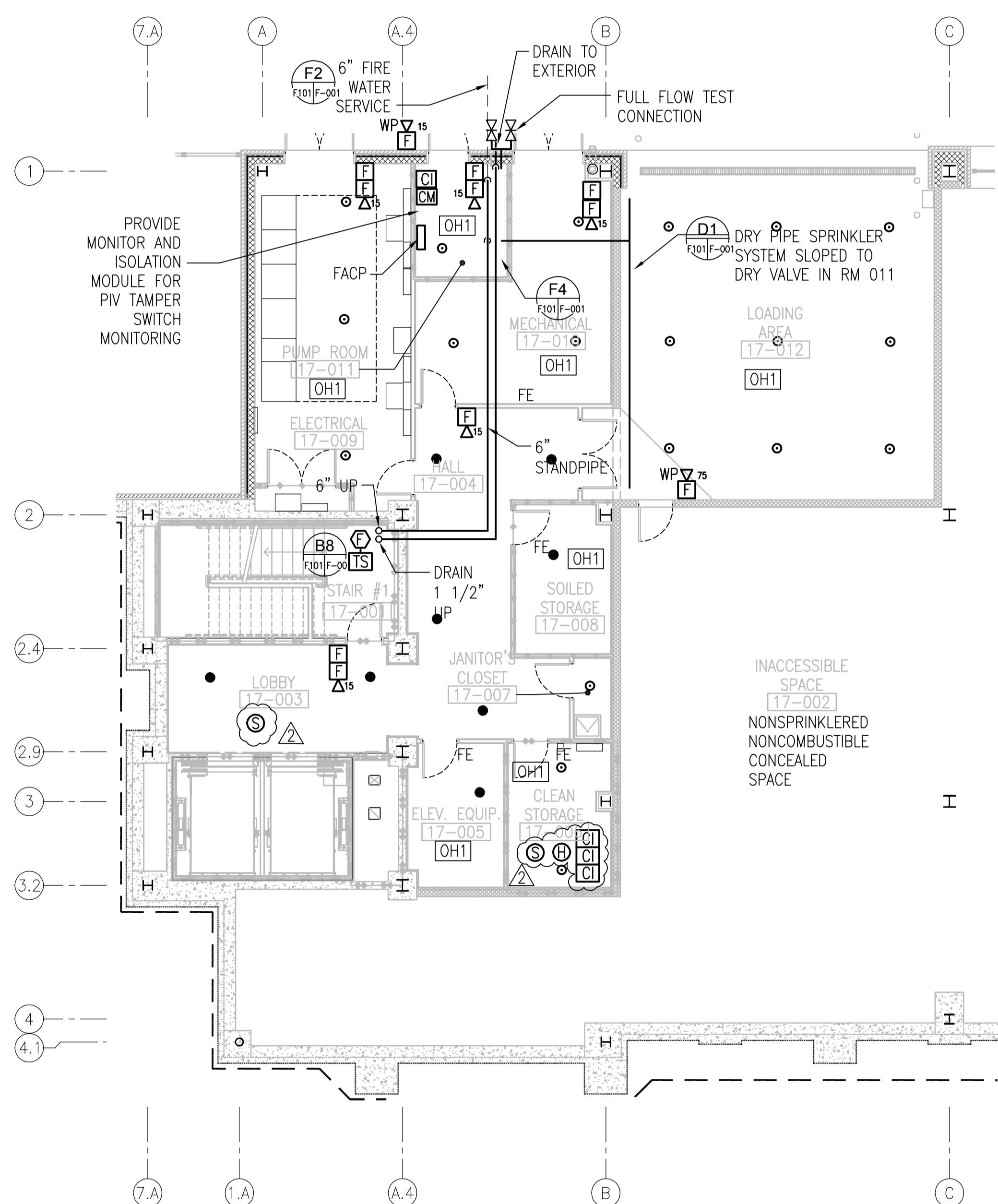
 123 BRUTON COURT, SUITE 100
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 PHONE: 757.389.5518

LEGEND NOTES AND DETAILS
 Approved Project Director

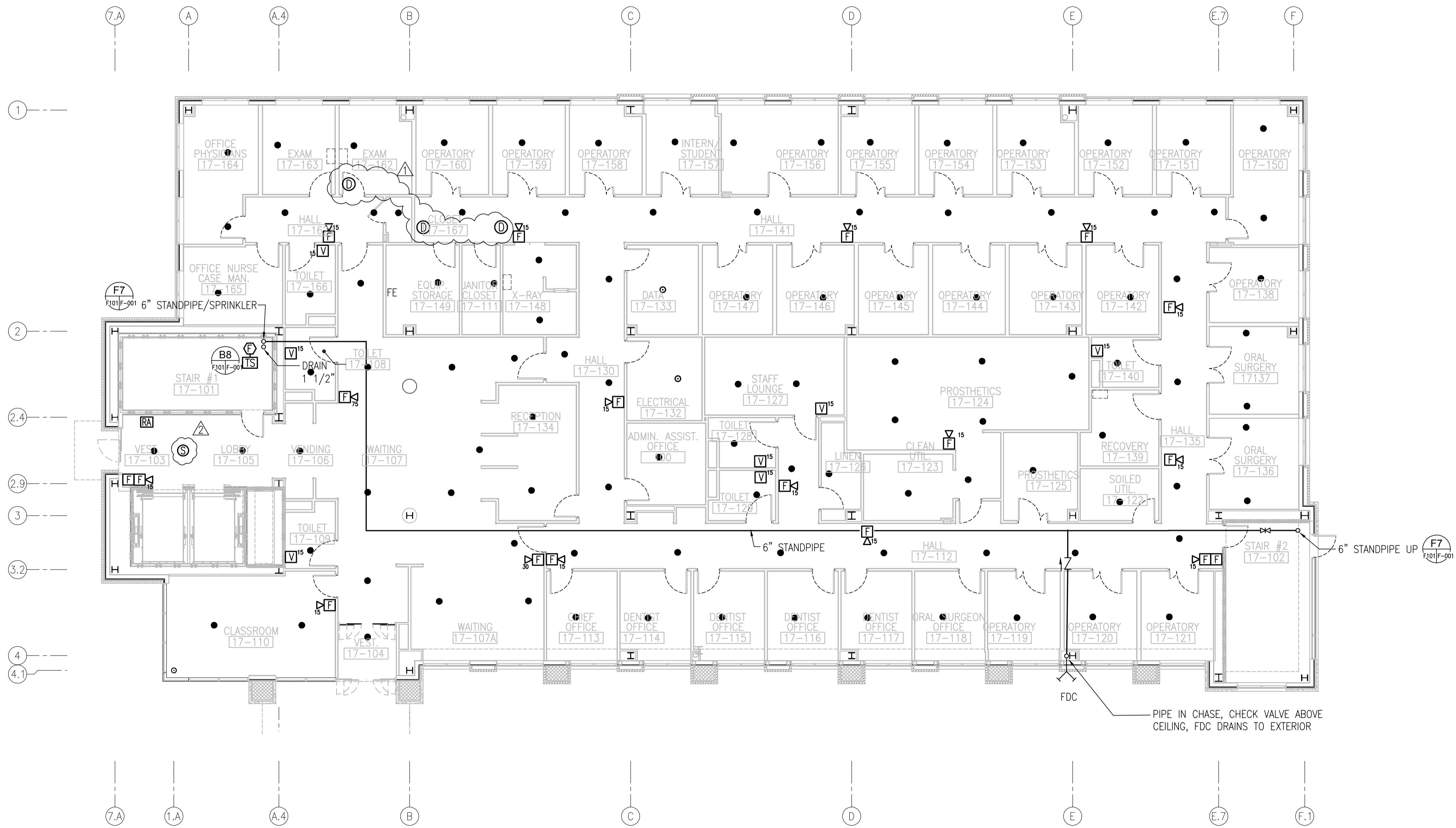
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Project Number: 558-319
Building Number: 17
Location: Durham, North Carolina
Date: 12.12.14
Checked: CHB
Drawn: EVA
Drawing Number: F-001
Dwg. 101 of 1465

Office of Construction and Facilities Management

- GENERAL NOTES**
1. PROVIDE WET MANUAL STANDPIPE SYSTEM IN ACCORDANCE WITH NFPA 14 - 2013 EDITION AND CONTRACT DOCUMENTS.
 2. PROVIDE WET PIPE SPRINKLER PROTECTION THROUGHOUT IN ACCORDANCE WITH NFPA 13 - 2013 EDITION AND CONTRACT DOCUMENTS.
 3. PROVIDE FIRE EXTINGUISHERS FOR QUICK RESPONSE SPRINKLERED BUSINESS OCCUPANCIES. SEE LIFE SAFETY DRWS FOR LOCATION AND QUANTITY.
 4. PROVIDE FIRE ALARM EVACUATION SYSTEM IN ACCORDANCE WITH NFPA 72 - 2013 EDITION AND CONTRACT DOCUMENTS.



BASEMENT FLOOR PLAN - FIRE PROTECTION
 SCALE: 1/8" = 1'-0"



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

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot
 one sixteenth inch = one foot

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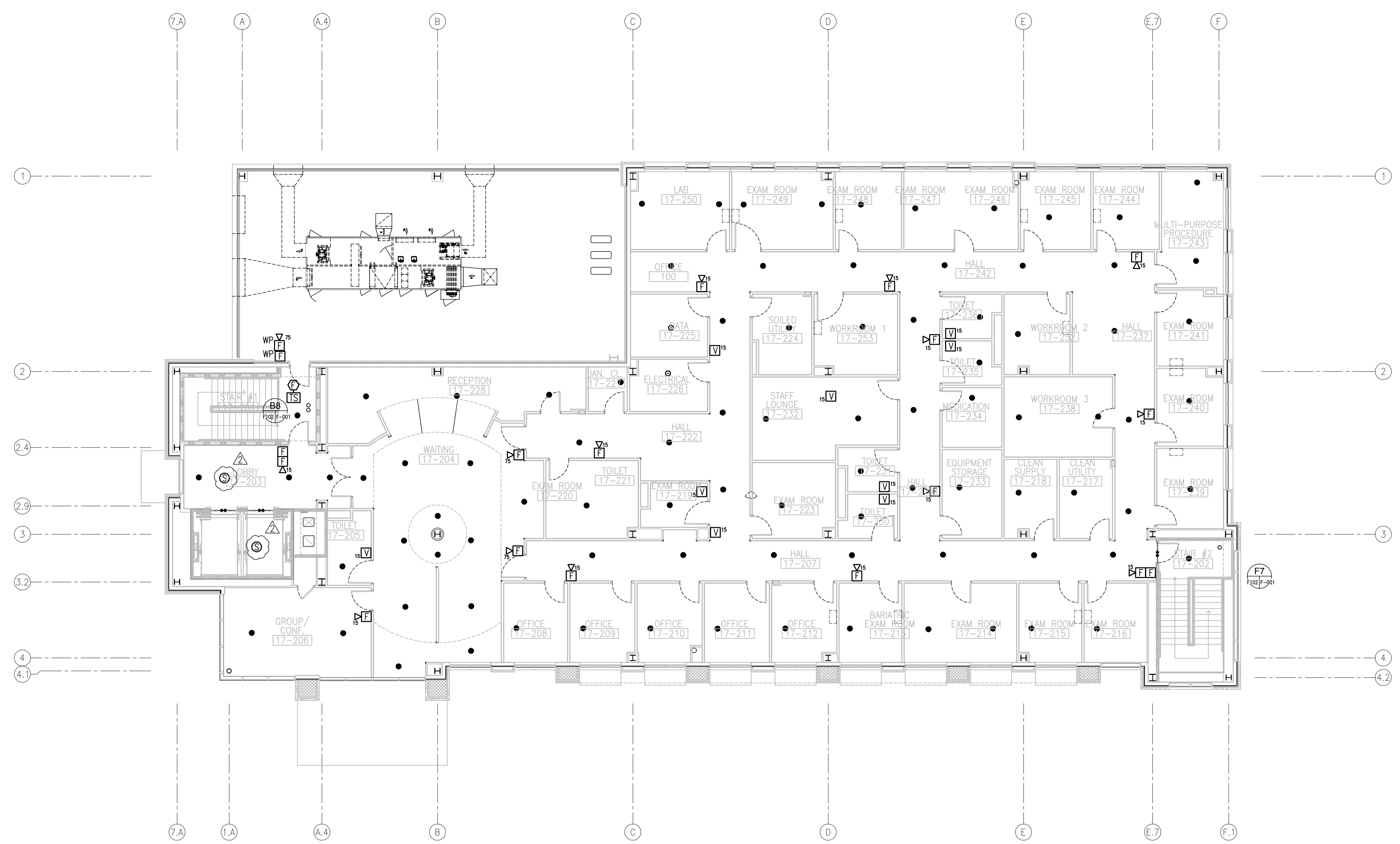
Drawing Title
BASEMENT & FIRST FLOOR PLAN - FIRE PROTECTION
 Approved Project Director

Project Title
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 DURHAM VAMC
Project Number
 558-319
Building Number
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Location
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Date
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 CHB
Drawn
 EVA
Drawing Number
 F101
 Dwg. 102 of 146

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SECOND FLOOR PLAN - FIRE PROTECTION
 SCALE: 1/8" = 1'-0"

Scale indicators for different drawing sections:
 three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
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Drawing Title
SECOND FLOOR PLAN - FIRE PROTECTION
 Approved Project Director

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Location Durham, North Carolina			Building Number 17		
Date 12.12.14			Checked CHB		
			Drawn EVA		
			Drawing Number F102		
			Dwg. 103 of 146		

Office of Construction and Facilities Management