

# FIRE PROTECTION SCHEDULES, LEGENDS, NOTES, AND DETAILS

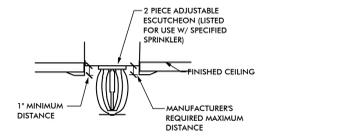
FIRE REFLECTED CEILING LEGEND	
CEILING TYPE	SPRINKLER HEAD TYPE
2"x2" ACOUSTICAL LAY-IN CEILING & GRID	RECESSED, EXISTING, & DEMO SPRINKLER HEADS
GYPSUM BOARD CEILING	RECESSED, EXISTING, & DEMO SPRINKLER HEADS

GENERAL NOTES:  
 1. DRAWINGS ARE FOR GRAPHIC PURPOSES ONLY. CONTRACTOR TO VERIFY ALL BUILDING DIMENSIONS & ALL LOCATIONS OF OFFENSES, LIGHTS, MECHANICAL DUCTS, ETC. IN FIELD. BEFORE SUBMITTING BID.  
 2. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR NEW WORK CEILING TYPE.

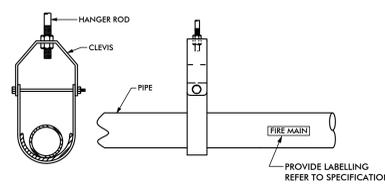
FIRE PROTECTION LEGEND	
	DEMOLITION SPRINKLER HEAD - TO BE REMOVED, PROVIDE HEADS AS REQUIRED.
	EXISTING SPRINKLER HEAD - TO REMAIN
	EXISTING SPRINKLER HEAD - RECESSED PENDENT
	SPRINKLER HEAD - UPRIGHT PENDENT
	FIRE LINE - MAIN
	PIPE TURNING UP
	PIPE TURNING DOWN
	GPM GALLONS PER MINUTE

FIRE SUPPRESSION HYDRAULIC DEMANDS	
1. SPRINKLER PROTECTION:	
a. ALL PATIENT CARE, SLEEPING, TREATMENT, OFFICE, WAITING AREAS, EDUCATIONAL AREAS, DINING AREAS, CORRIDORS AND ATTICS: LIGHT HAZARD, 0.10 GPM/SQ. FT. OVER THE HYDRAULICALLY MOST REMOTE 1500 SQ. FT.	
b. MECHANICAL EQUIPMENT ROOMS, TRANSFORMER ROOMS, ELECTRICAL SWITCHGEAR ROOMS, ELECTRIC CLOSETS, ELEVATOR SHAFTS (IF REQUIRED), ELEVATOR MACHINE ROOMS, AND STORAGE BETWEEN 150 AND 250 SQ. FT. ORDINARY HAZARD, GROUP 1, 0.15 GPM/SQ. FT. OVER THE HYDRAULICALLY MOST REMOTE 1500 SQ. FT.	
c. CLEAN AND SOILED LINEN ROOMS, TRASH ROOMS, CLEAN AND SOILED UTILITY ROOMS, LABORATORY, AND STORAGE ROOMS, STORAGE ROOMS OVER 250 SQ. FT. AND PHARMACY AREAS: ORDINARY GROUP 2, 0.20 GPM/SQ. FT. OVER THE HYDRAULICALLY MOST REMOTE 1500 SQ. FT.	
d. PROVIDE SPRINKLERS IN ACCESSIBLE SHAFTS PER NFPA 13 LATEST EDITION.	
e. PROVIDE SPRINKLERS IN GRAVITY TYPE METAL CHUTES PER NFPA 13.	
f. ADD WATER ALLOWANCE OF 250 GPM FOR INSIDE AND OUTSIDE HOSE STREAMS TO THE SPRINKLER REQUIREMENTS AT THE CONNECTION TO THE DISTRIBUTION MAIN.	
3. HYDRAULIC CALCULATIONS: THE CALCULATED DEMAND INCLUDING HOSE STREAM REQUIREMENTS SHALL FALL NO LESS THAN 10 PERCENT BELOW THE AVAILABLE SUPPLY CURVE.	
4. COMPLY WITH IBC (2009 EDITION), NFPA 13 (2009 EDITION), NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 72, NATIONAL ALARM AND SIGNALING CODE, AND NFPA 101 LIFE SAFETY CODE (2009 EDITION).	
5. WHEN HYDRAULIC CALCULATIONS ARE CALCULATED TO BUILDING STAND PIPE, CONTRACTOR REQUIRED TO PROVIDE CURRENT STANDPIPE AND FIRE PUMP TEST.	

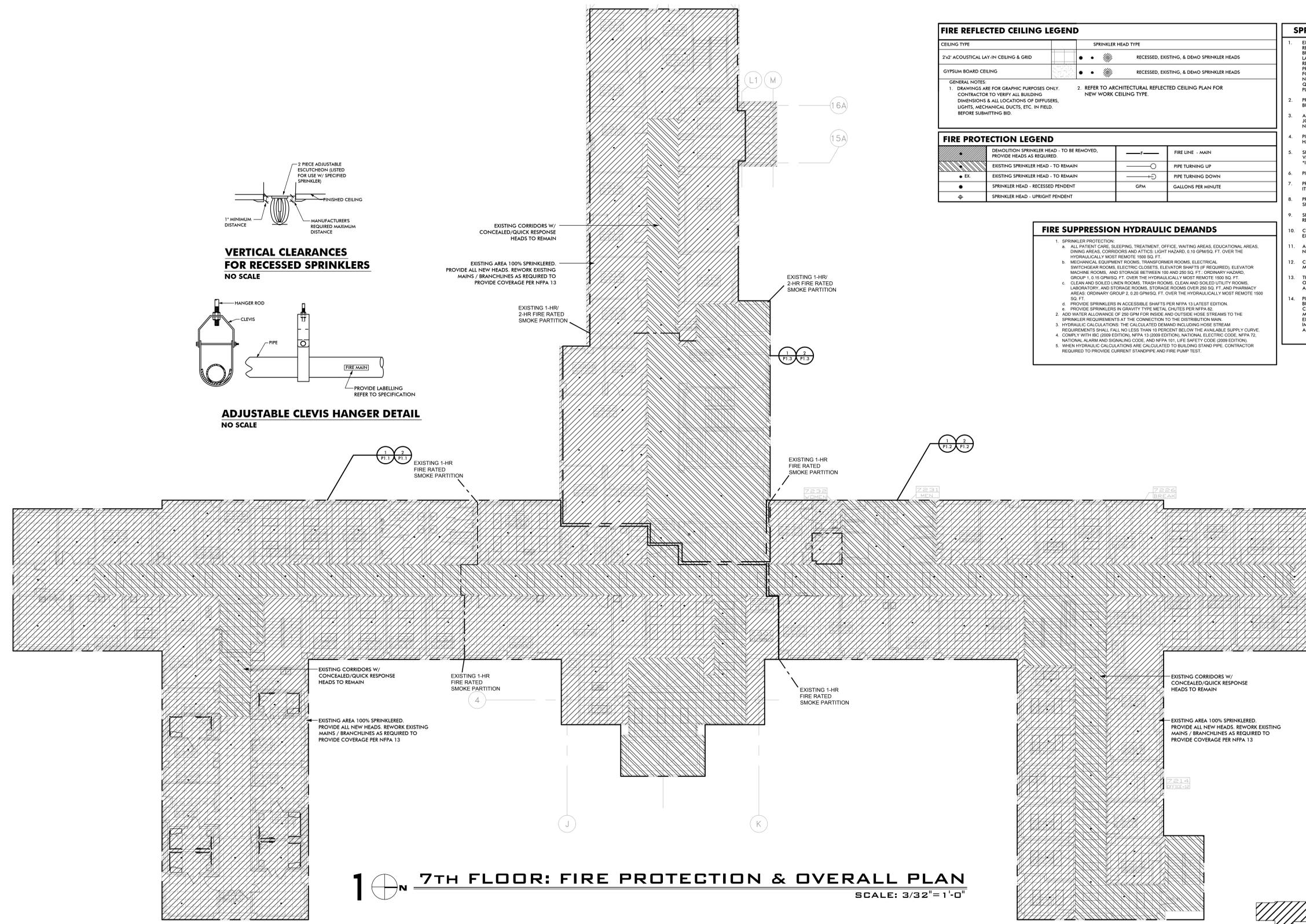
- ### SPRINKLER NOTES
- EXISTING BUILDING IS 100% SPRINKLERED. MODIFY EXISTING SYSTEMS AS REQUIRED FOR NEW RENOVATIONS BY REMOVING EXISTING MAINS AND BRANCHES AND INSTALLING NEW MAINS AND BRANCHES FOR NEW WALL LAYOUT. REPLACE STANDARD RESPONSE SPRINKLER HEADS WITH QUICK RESPONSE AND ADJUST THE EXISTING SPRINKLER HEAD LOCATIONS AND PIPING TO PROVIDE NFPA 13 COVERAGE FOR NEW WORK AREA. SEE ARCHITECTURAL PLANS FOR THE EXACT ROOM AND CEILING LAYOUT. PROVIDE SPRINKLER HEADS AS NEEDED FOR NEW WORK. ALL SPRINKLER HEADS TO MATCH EXISTING HEADS WHERE QUICK RESPONSE HEADS ARE EXISTING IN RENOVATED AREAS. SEE ARCHITECTURAL PLANS FOR LIMITS OF CONSTRUCTION FOR PROJECT.
  - PROVIDE A NFPA 13 COMPLIANT SYSTEM TO PROVIDE TOTAL COVERAGE FOR THE BUILDING.
  - ALL PIPING 1 1/2" AND SMALLER SHALL BE SCHEDULE 40 STEEL WITH THREADED JOINTS AND CAST IRON OR MALLEABLE IRON FITTINGS. PROVIDE HANGERS PER NFPA 13 SPACING.
  - PIPING LARGER 1 1/2" MAY BE SCHEDULE 10 PIPE WITH ROLL GROOVED JOINTS. HANGER SPACING TO BE PER NFPA 13 REQUIREMENTS.
  - SPRINKLER HEADS SHALL BE QUICK RESPONSE. GLASS BULB EQUAL TO WIRING MODEL. INSTALL SPRINKLER HEADS IN CENTER OF CEILING-TILE. \*INSTITUTIONAL HEADS IN PSYCHIATRIC AREAS.
  - PIPING IS TO BE INSTALLED IN A MANNER AS TO HIDE PIPING AS MUCH AS POSSIBLE.
  - PROVIDE A PIPING PLAN SHOWING COORDINATION OF SPRINKLER PIPING WITH ALL ITEMS ABOVE CEILING.
  - PROVIDE SHOP DRAWINGS INCLUDING A REFLECTED CEILING PLAN INDICATING SPRINKLER HEADS, LIGHTS AND HYAC CEILING DEVICES.
  - SEE ARCHITECT DRAWINGS FOR NEW CEILING PLAN, HEIGHTS AND AREAS BEING RENOVATED.
  - CONTRACTOR SHALL VERIFY LOCATION, SIZE AND ELEVATION OF ALL EXISTING PIPING PRIOR TO INSTALLING ANY NEW PIPE.
  - ALL FIRE PIPING IS RUN ABOVE CEILING ON PLAN WHICH SHOWN UNLESS OTHERWISE NOTED.
  - COORDINATE ALL PIPE ROUTING TO AVOID CONFLICTS WITH STRUCTURAL, MECHANICAL, AND ELECTRICAL FEATURES OF BUILDING.
  - THE FIRE PROTECTION DRAWING IS DIAGNOSTIC AND DOES NOT SHOW ALL DETAILS OF THE WORK. OBTAIN DIMENSIONS AND PERTINENT INFORMATION FROM ARCHITECTURAL DRAWINGS.
  - PIPING SHALL BE INSTALLED PARALLEL AND PERPENDICULAR TO BUILDING LINES UNLESS SHOWN OTHERWISE. COORDINATE LOCATION OF COMPONENTS AND MATERIALS WITH ALL TRADES INCLUDING HVAC DUCT WORK, MECHANICAL, ELECTRICAL, AND STRUCTURAL. FINISH AND PRIME EQUIPMENT IN EXPOSED AREAS FOR PAINTING. COLOR TO BE SELECTED BY ARCHITECT. POOR OR IMPROPER WORKMANSHIP SHALL BE REMOVED AND REPLACED AS DIRECTED BY THE ARCHITECT.



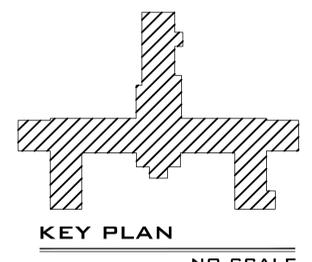
**VERTICAL CLEARANCES FOR RECESSED SPRINKLERS**  
NO SCALE



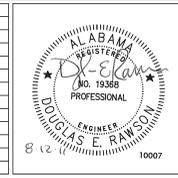
**ADJUSTABLE CLEVIS HANGER DETAIL**  
NO SCALE



**7TH FLOOR: FIRE PROTECTION & OVERALL PLAN**  
SCALE: 3/32" = 1'-0"



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**Department of Veterans Affairs  
MEDICAL CENTER  
BIRMINGHAM, ALABAMA**

Drawing Title <b>7th FLOOR OVERALL PLAN FIRE PROTECTION</b>	Project Title <b>RENOVATE SPACE FOR REHAB AND PHYSICAL MEDICINE</b>	Date: <b>08-12-11</b> VA Project No. 521-10-101 CAD File No. 4608A01
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**FINAL SUBMITTAL**  
Veterans Administration