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Landscape Architect  
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 5513 Vine Street  
 Cincinnati, OH 45217  
 513.242.0310 tel

**Olbrich Botanical Gardens  
 Expansion Phase 1**  
 3330 Atwood Avenue  
 Madison, WI 53704

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Engineer under the Laws of the State of Wisconsin.



Signature: \_\_\_\_\_  
 Print Name: MICHAEL NAKHLA  
 Date: 06.04.2018 License No.: E-42619-6

ISSUE	MARK	DATE	DESCRIPTION
		09.29.2017	SCHEMATIC DESIGN SUBMISSION
		12.08.2017	DESIGN DEVELOPMENT PRICING SET
		01.10.2018	100% DESIGN DEVELOPMENT
		03.30.2018	70% CONSTRUCTION DOCUMENTS
		05.04.2018	10% CONSTRUCTION DOCUMENTS
		06.01.2018	10% CONSTRUCTION DOCUMENTS
		06.04.2018	PERMIT ISSUE

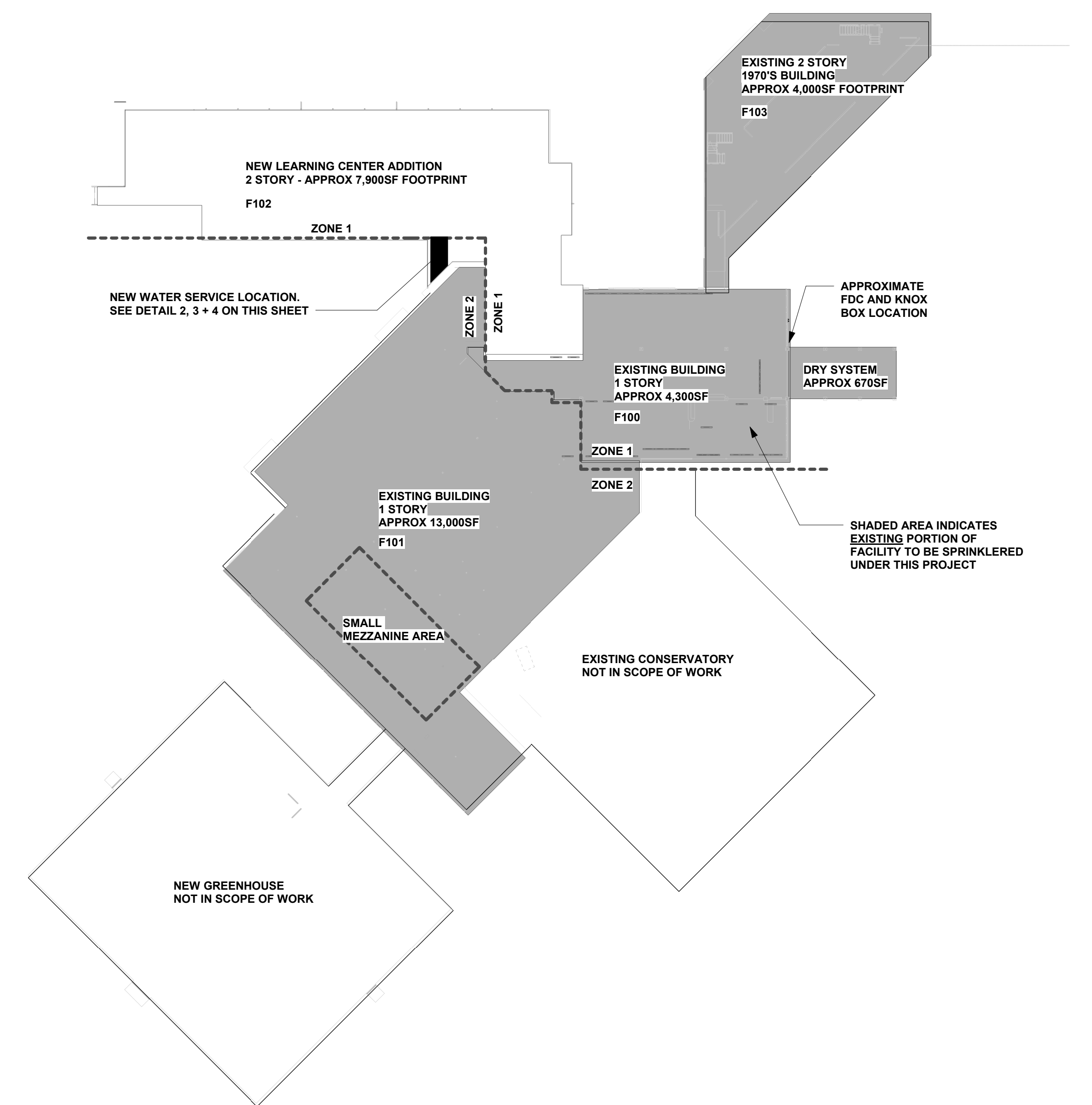
PROJECT NO: 2017016  
 PROJECT PHASE: PERMIT SET  
 DRAWN BY: NB CHECKED BY: CL  
 Design: 2017 Copyright: View, Amend & Redesign, Ltd.

**SITE PLAN,  
 GENERAL NOTES,  
 DETAILS**

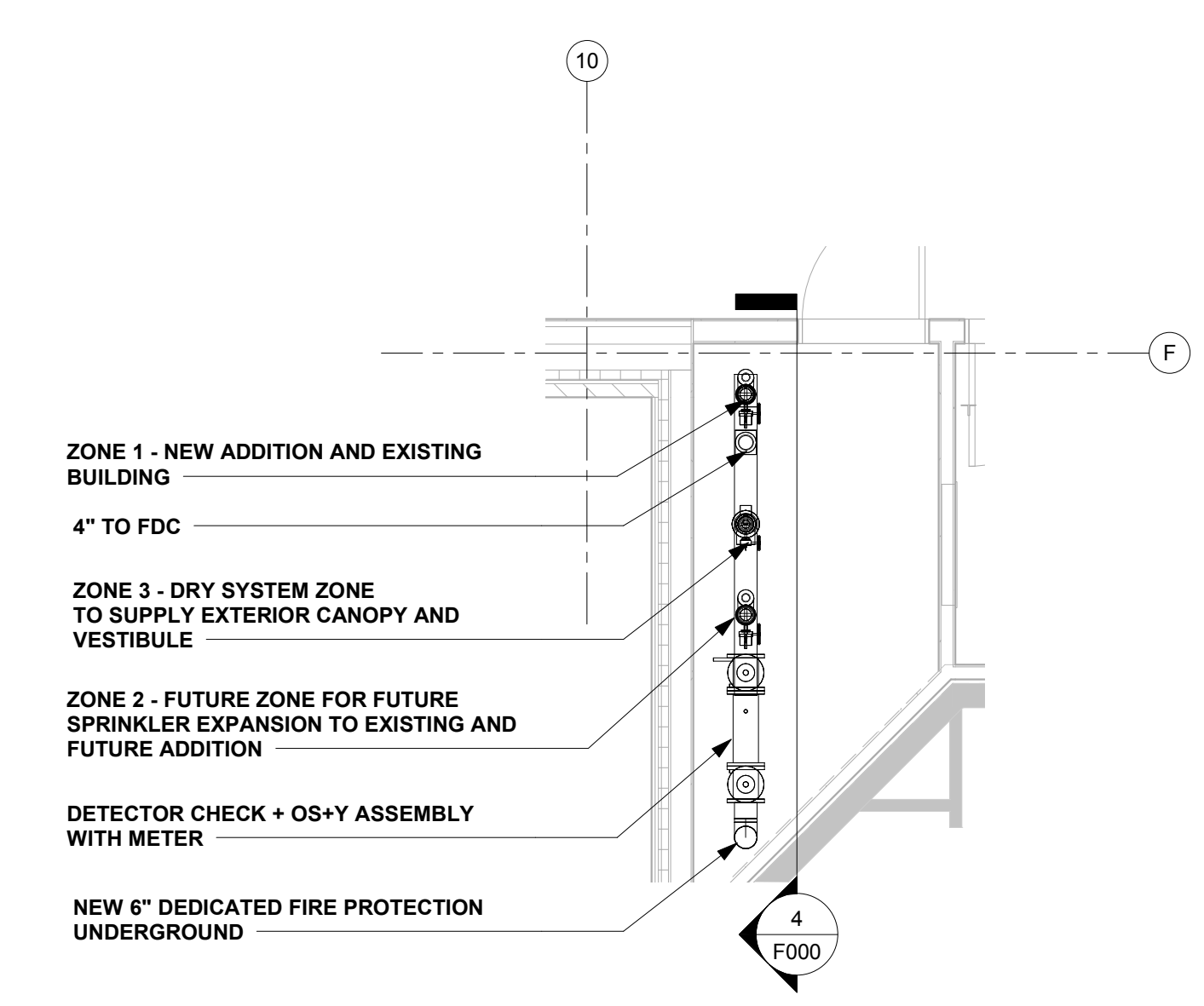
**EXHIBIT M  
 F000**

**DIVISION 21 GENERAL NOTES**

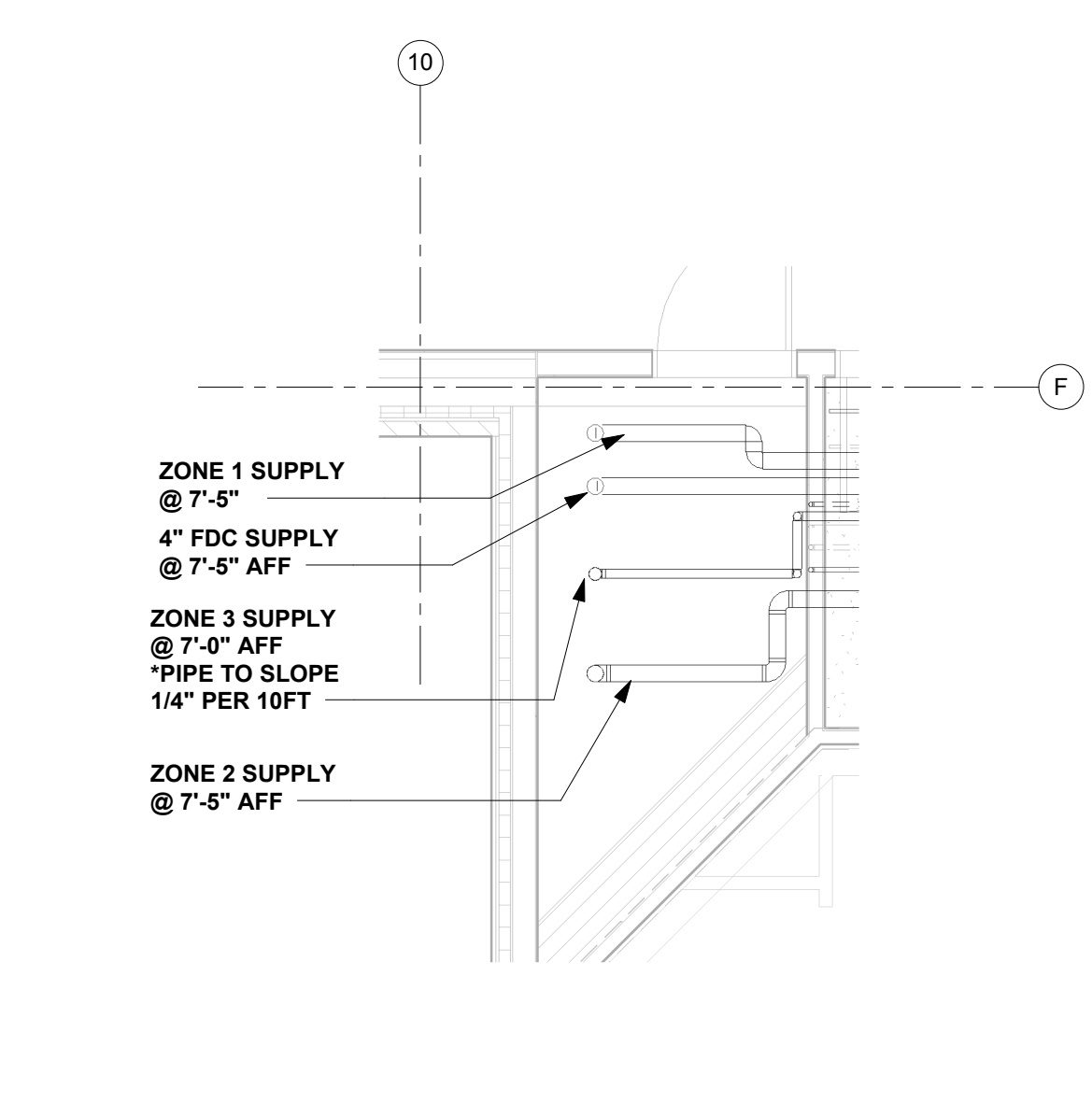
- FIRE PROTECTION CONTRACTOR'S SCOPE OF WORK INCLUDES NEW VALVE ASSEMBLIES AT NEW UNDERGROUND LOCATION AND NEW FIRE DEPARTMENT CONNECTION. SPRINKLER PROTECTION REQUIRED THROUGHOUT THE NEW 2-STORY LEARNING CENTER AND SELECT PORTIONS OF THE EXISTING FACILITY AS PART OF THIS PROJECT. SEE OVERALL PLAN FOR LOCATIONS REQUIRING SPRINKLER PROTECTION. WORK WITHIN THE EXISTING FACILITY INCLUDES WORK THROUGH EXISTING CEILINGS. DRY SYSTEM PROTECTION REQUIRED AT EXISTING ENTRANCE CANOPY.**
- ALL AREAS ASSUME LIGHT HAZARD PROTECTION IN ACCORDANCE WITH NFPA 13 (2013) UNLESS NOTED OTHERWISE.**
- CONFIRM SPRINKLER SYSTEM PIPE SIZING VIA HYDRAULIC CALCULATIONS**
- PROVIDE ALL SYSTEM COMPONENTS NECESSARY FOR A COMPLETE INSTALLATION. SYSTEM COMPONENTS SHALL INCLUDE BUT ARE NOT LIMITED TO DISTRIBUTION PIPING, SPRINKLER PIPING, SPRINKLERS, PIPE SUPPORTS, ALARMS, DRAINS, TEST CONNECTIONS, CONTROL VALVES AND CHECK VALVES.**
- CONCEALED SPRINKLERS REQUIRED IN AREAS WITH FINISHED CEILINGS.**
- ALL COMPONENTS OF THE SPRINKLER SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 13 (2013), NFPA 14 (2013) AND NFPA 25 (2014)**
- TAMPER SWITCHES, FLOW SWITCHES AND HORN & STROBES ARE TO BE PROVIDED AND INSTALLED BY THE FIRE PROTECTIN CONTRACTOR AND WIRED BY DIVISION 28.**
- TESTING OF SPRINKLER PIPING SHALL BE IN ACCORDANCE WITH NFPA 13 - 200 PSI FOR 2 HRS**
- SHOP DRAWINGS SHALL BE APPROVED BY THE OWNER'S DESIGNATED REPRESENTATIVE AND THE CITY OF MADISON PRIOR TO FABRICATION**
- HANG ALL PIPING PER NFPA 13 - CHAPTER 9. CONTRACTOR SHALL INDICATE ALL PIPE SUPPORTS**
- STEEL PIPING IS REQUIRED IN ALL AREAS**
- UNLESS NOTED OTHERWISE ALL AREAS INCLUDE WET SPRINKLER SYSTEMS. TEMPERATURES MAINTAINED GREATER THAN OR EQUAL TO 40 DEGREES FAHRENHEIT AT ALL TIMES, AT THE RESPONSIBILITY OF THE OWNER**
- ALL PENETRATIONS AT FIRE BARRIERS OR OTHER RATED ASSEMBLIES ARE REQUIRED TO BE SEALED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE OR OTHER APPROVED MEANS. SEE ARCHITECTURAL PLANS FOR RATED WALL LOCATIONS.**
- COORDINATION IS REQUIRED WITH ALL TRADES. PROVIDE SPRINKLER PROTECTION ABOVE AND BELOW ALL OBSTRUCTIONS AS REQUIRED BY NFPA**
- IN EXISTING AREAS THE CONTRACTOR SHALL CONFIRM PRIOR TO FABRICATION OF PIPING OR INSTALLATION OF SYSTEMS THE FINAL PIPE ROUTING AND ELEVATIONS WITHIN THOSE SPACES. ABOVE CEILING FIELD VERIFICATION WAS NOT POSSIBLE IN ALL SPACES AND IS BASED ON AS-BUILT DOCUMENTATION.**
- COORDINATE SCHEDULE AND PHASING OF INSTALLATION IN EXISTING AREAS CLOSELY WITH THE GENERAL CONTRACTOR AND/OR OWNER'S REPRESENTATIVE.**



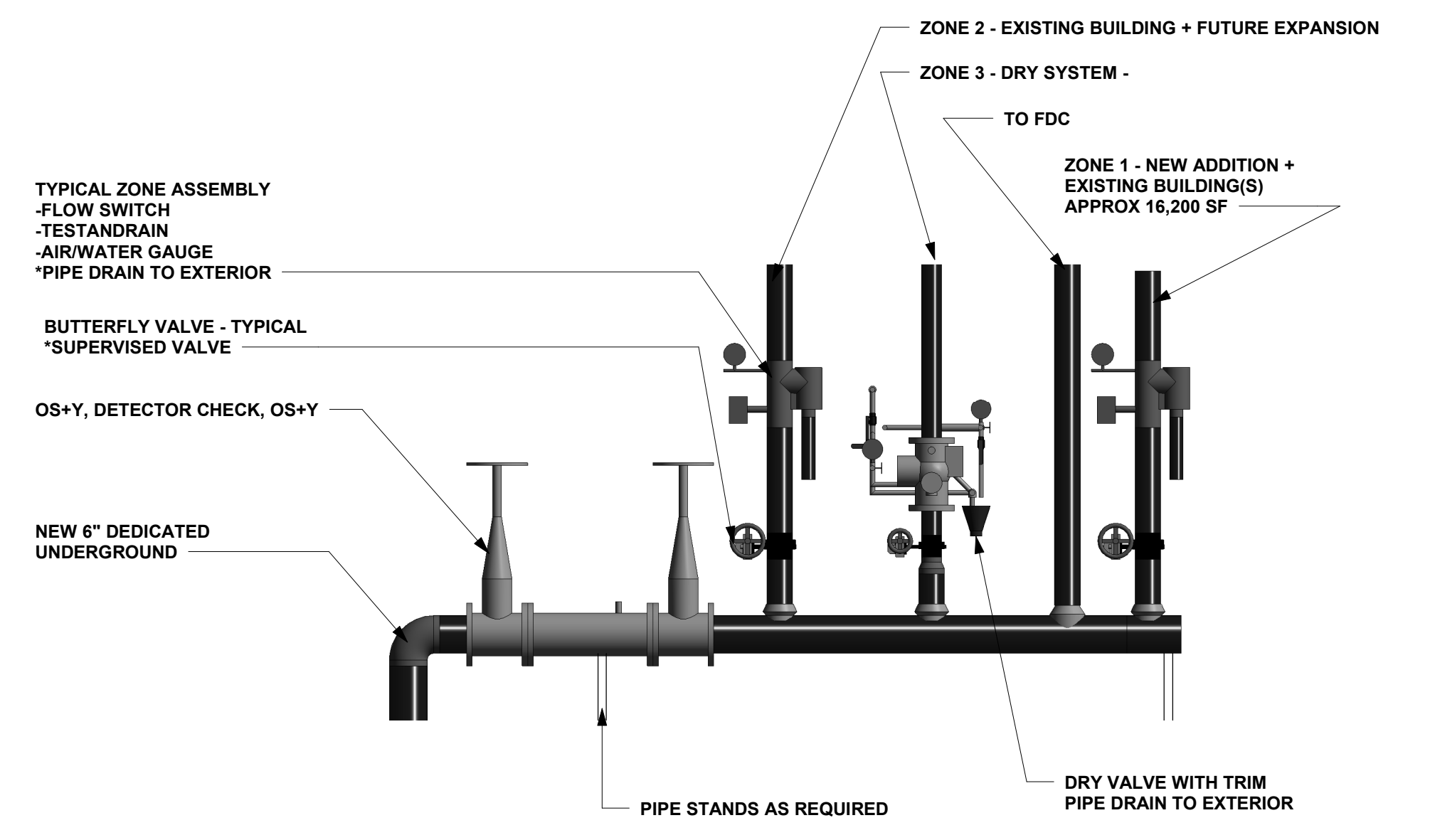
**1 OVERALL BUILDING PLAN**  
 F000 1" = 30'-0"



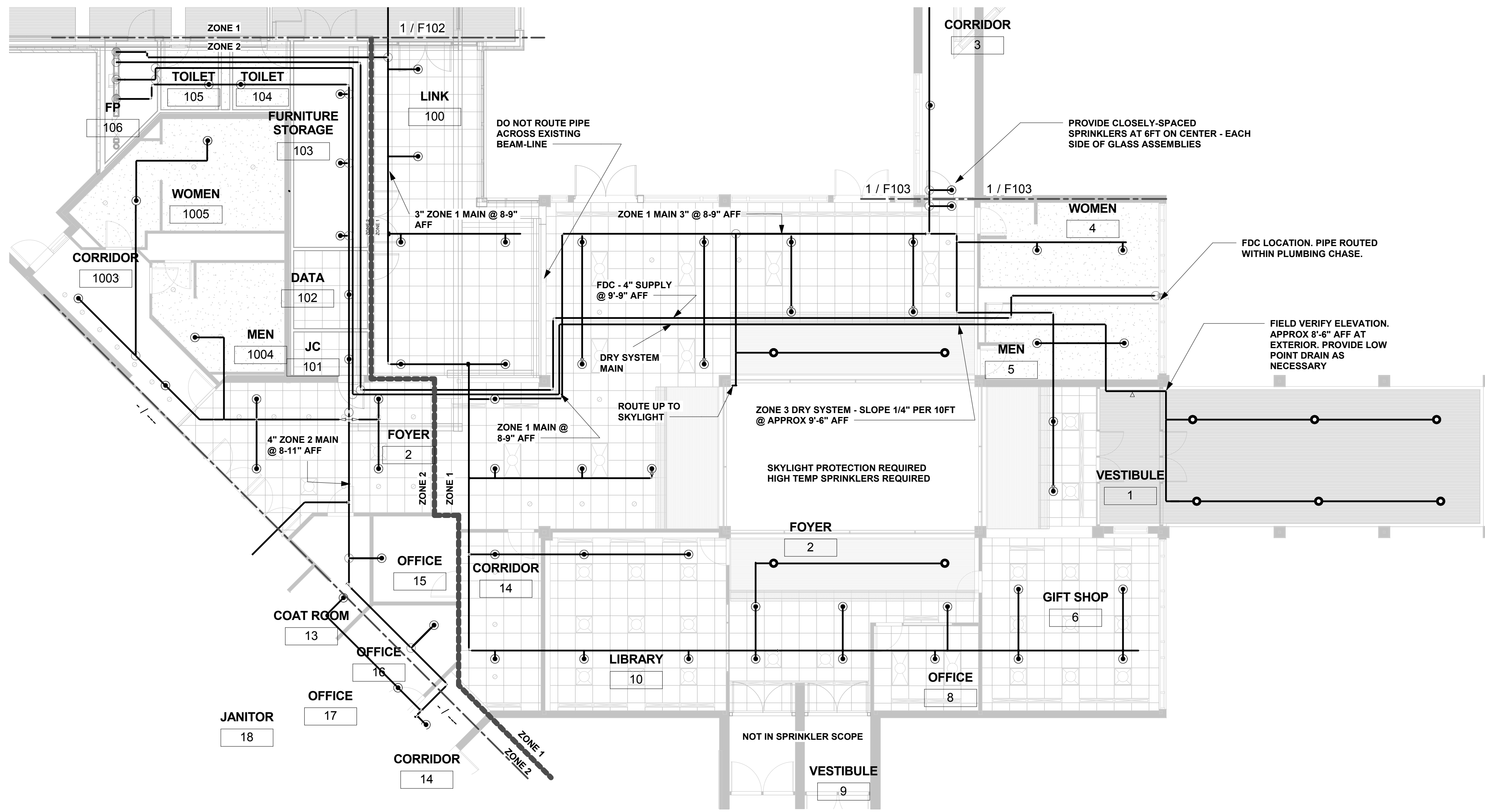
**2 VALVE ASSEMBLY PLAN VIEW**  
 F000 1/4" = 1'-0"



**3 VALVE ROOM - OVERHEAD PIPING PLAN**  
 F000 1/4" = 1'-0"

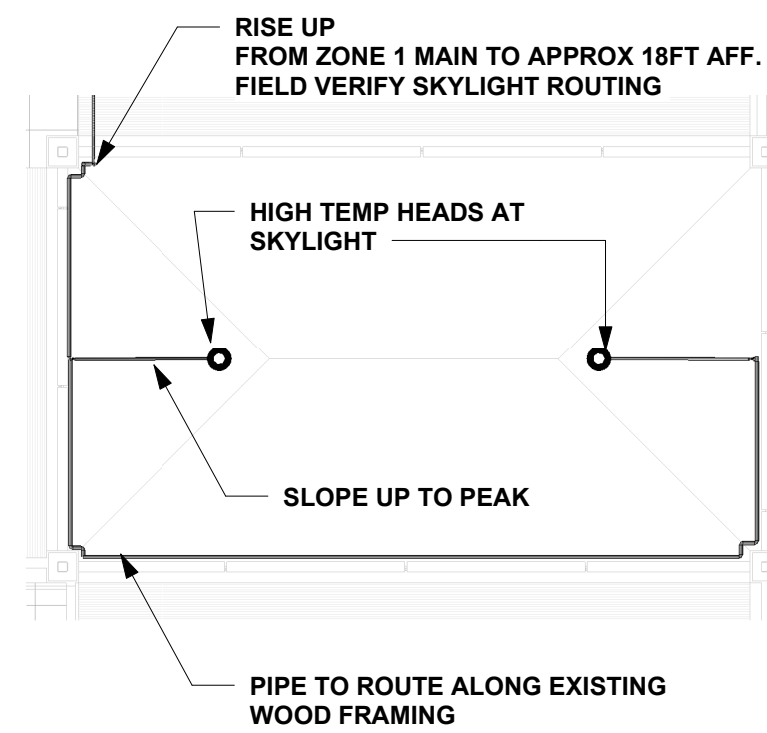


**4 VALVE ASSEMBLY SCHEMATIC**  
 F000 1/2" = 1'-0"



- PIPE ROUTING + ELEVATIONS THROUGHOUT THE EXISTING CEILING SPACES ARE APPROXIMATE AND BASED ON AVAILABLE AS-BUILT DOCUMENTATION. CONTRACTOR TO CONFIRM FINAL ROUTING + ELEVATIONS BASED ON SITE CONDITIONS AND EXISTING EQUIPMENT LOCATIONS ONCE CEILING TILE HAS BEEN REMOVED.
- COORDINATE CEILING TILE REMOVAL WITH GENERAL CONTRACTOR - FACILITY WILL REMAIN OPERATIONAL
- DRY SYSTEM PIPING TO SLOPE 1/4" PER 10FT FOR MAIN PIPING AND 1/2" PER 10FT FOR BRANCHLINE PIPING.
- SPRINKLER PROTECTION REQUIRED IN SKYLIGHT.
  - UPRIGHT - 5.6K BRASS (EXPOSED AREAS)
  - CONCEALED 5.6K WHITE (EXISTING CEILING AREAS)
  - SKYLIGHT - HIGH TEMP, EXTENDING COVERAGE BRASS UPRIGHT

**1** LEVEL 1 - FIRE PROTECTION PLAN EXISTING BUILDING  
F100 1/8" = 1'-0"



**2** SKYLIGHT PROTECTION  
F100 1/8" = 1'-0"

**Olbrich Botanical Gardens  
Expansion Phase 1**  
3330 Atwood Avenue  
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PROJECT PHASE PERMIT SET  
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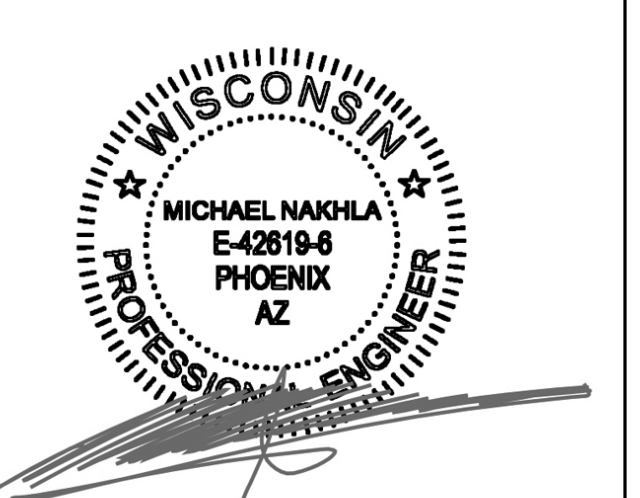
**FIRE PROTECTION  
LEVEL 1 - EXISTING  
BUILDING**

**EXHIBIT M  
F100**



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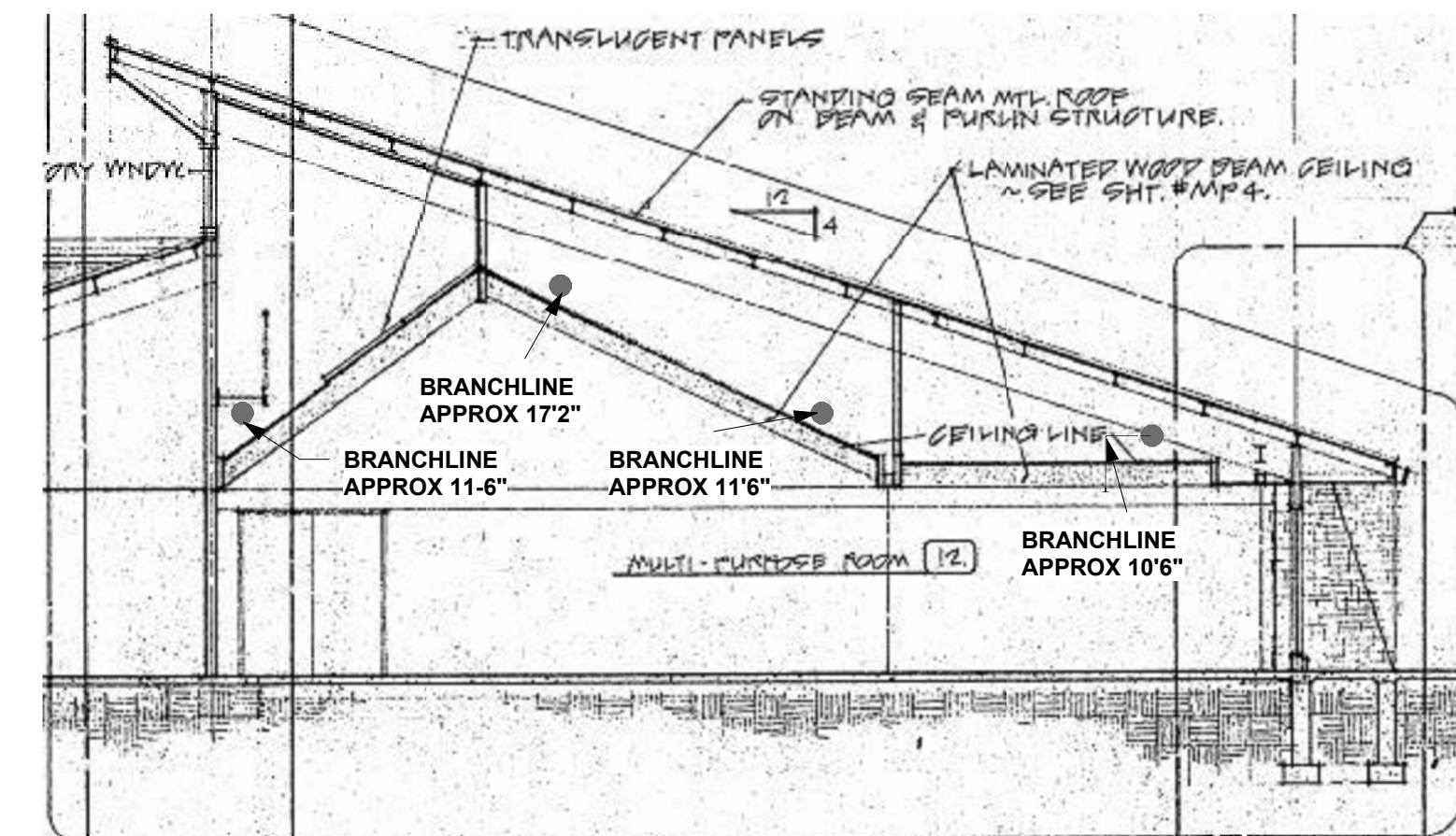
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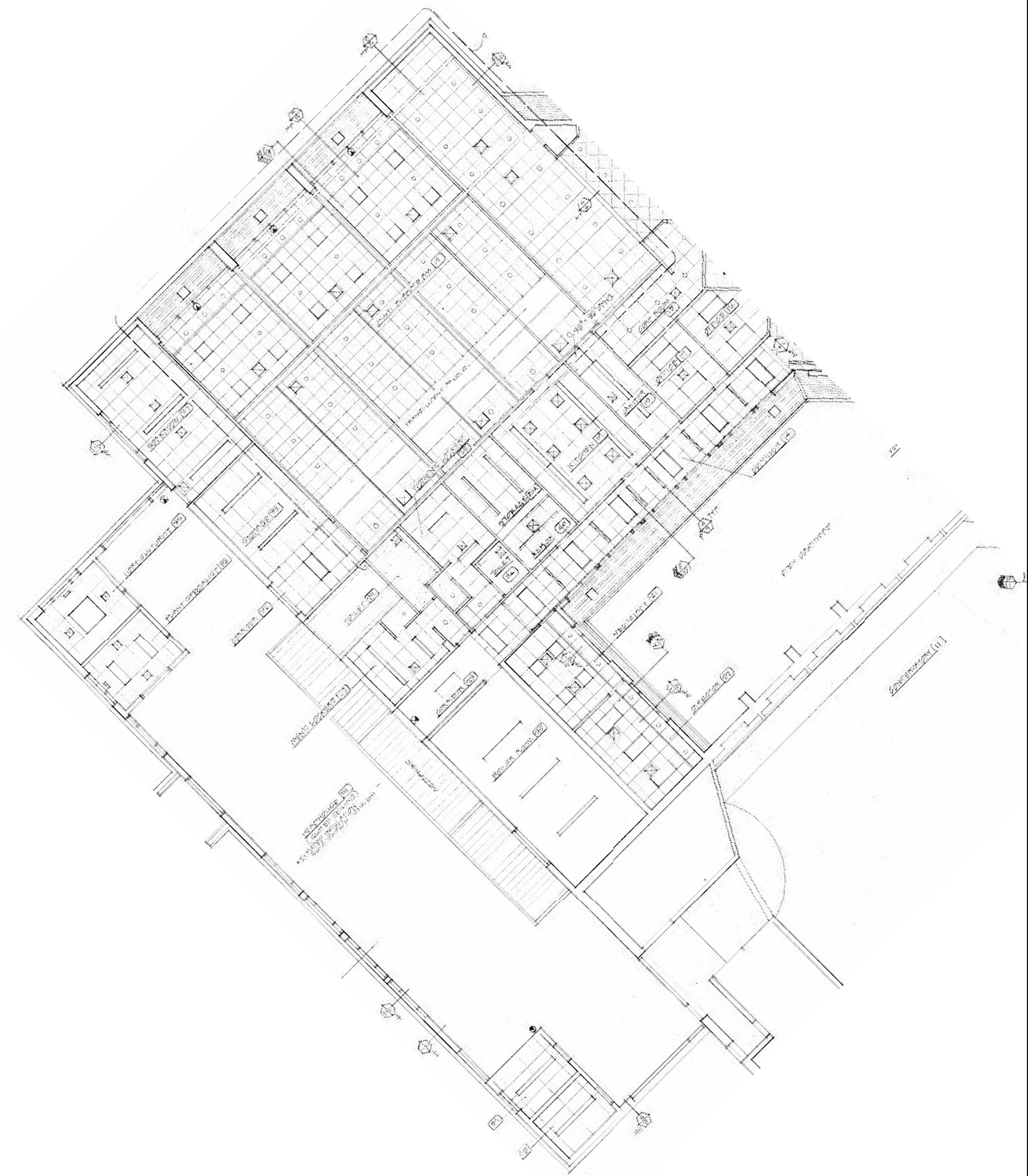
**FIRE PROTECTION  
 PLAN EXISTING  
 BUILDING CONT'D**

**EXHIBIT M  
 F101**

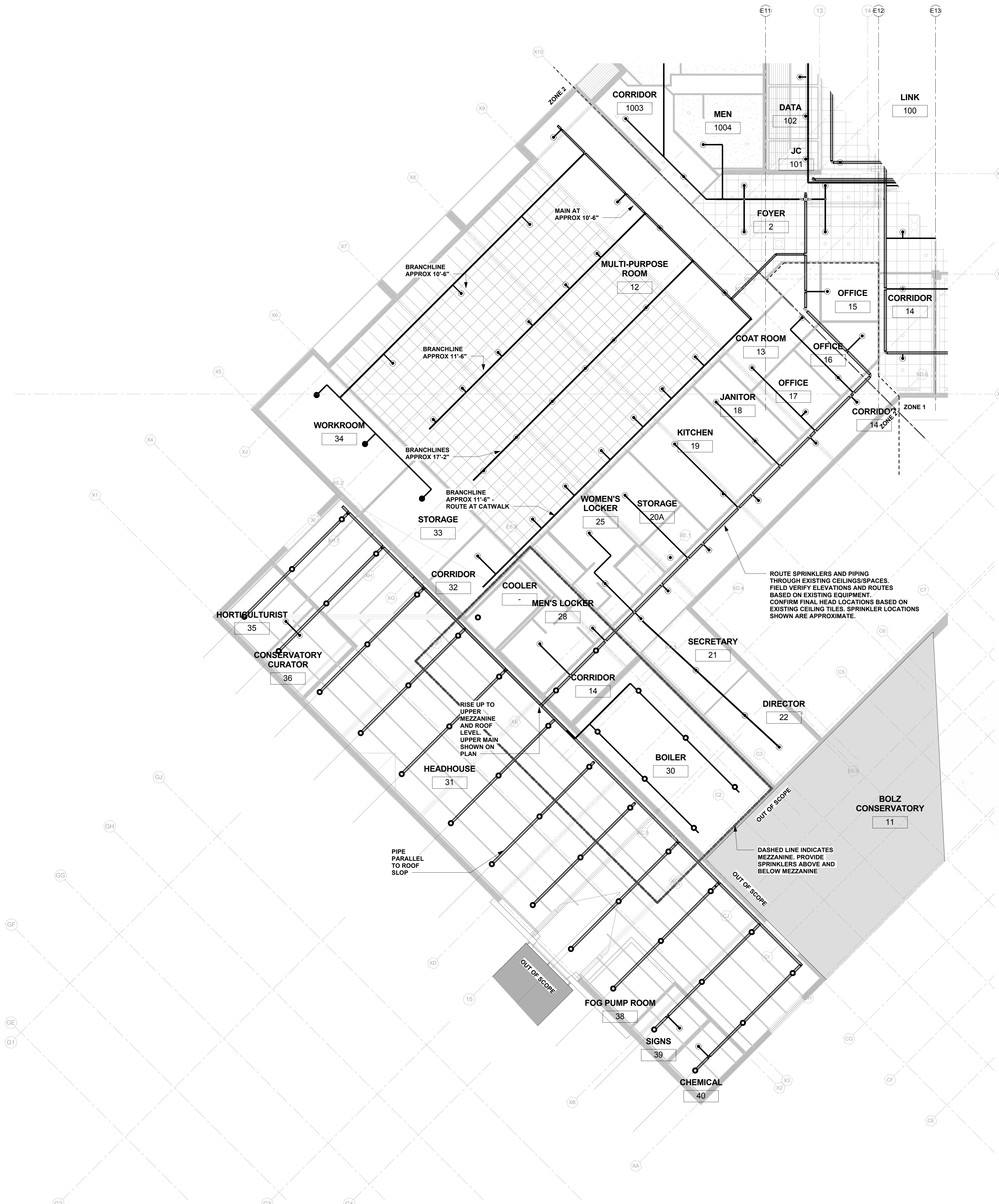
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- HEADHOUSE AREA AND MEZZANINE TO BE CONSIDERED AS ORDINARY HAZARD GROUP II PER NFPA 13
- SPRINKLER TYPES/FINISHES
  - UPRIGHT - 5.8K, BRASS (EXPOSED AREAS)
  - CONCEALED 5.8K WHITE (EXISTING DROP CEILING AREAS)
  - EXTENDED COVERAGE CONCEALED - MULTIPURPOSE ROOM EXISTING CEILING



**2 MULTI PURPOSE ROOM**  
 F101 1/8" = 1'-0"

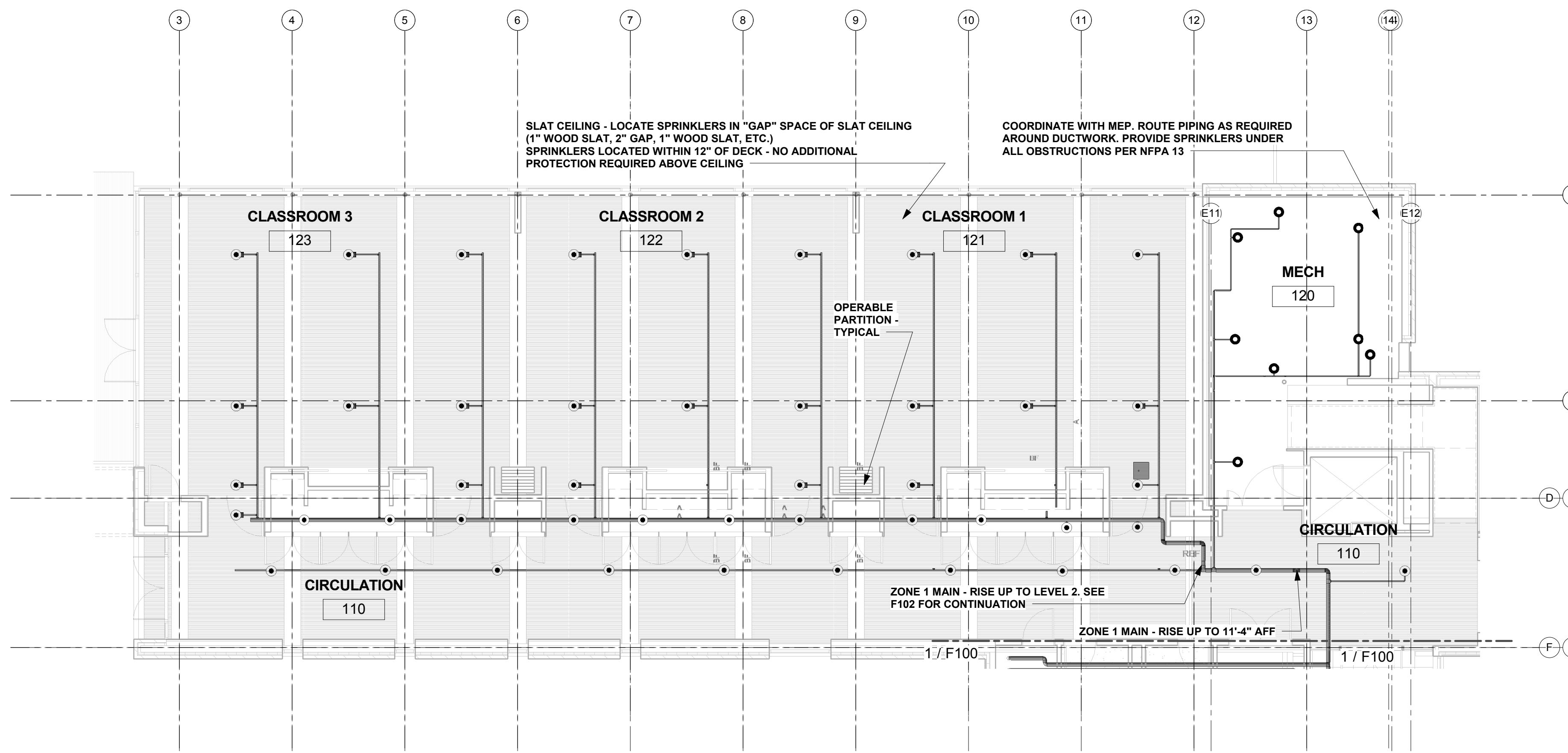


LEVEL 1 - AS-BUILT



**1 LEVEL 1 - FIRE PROTECTION PLAN EXISTING BUILDING CONT'D**  
 F101 1/8" = 1'-0"

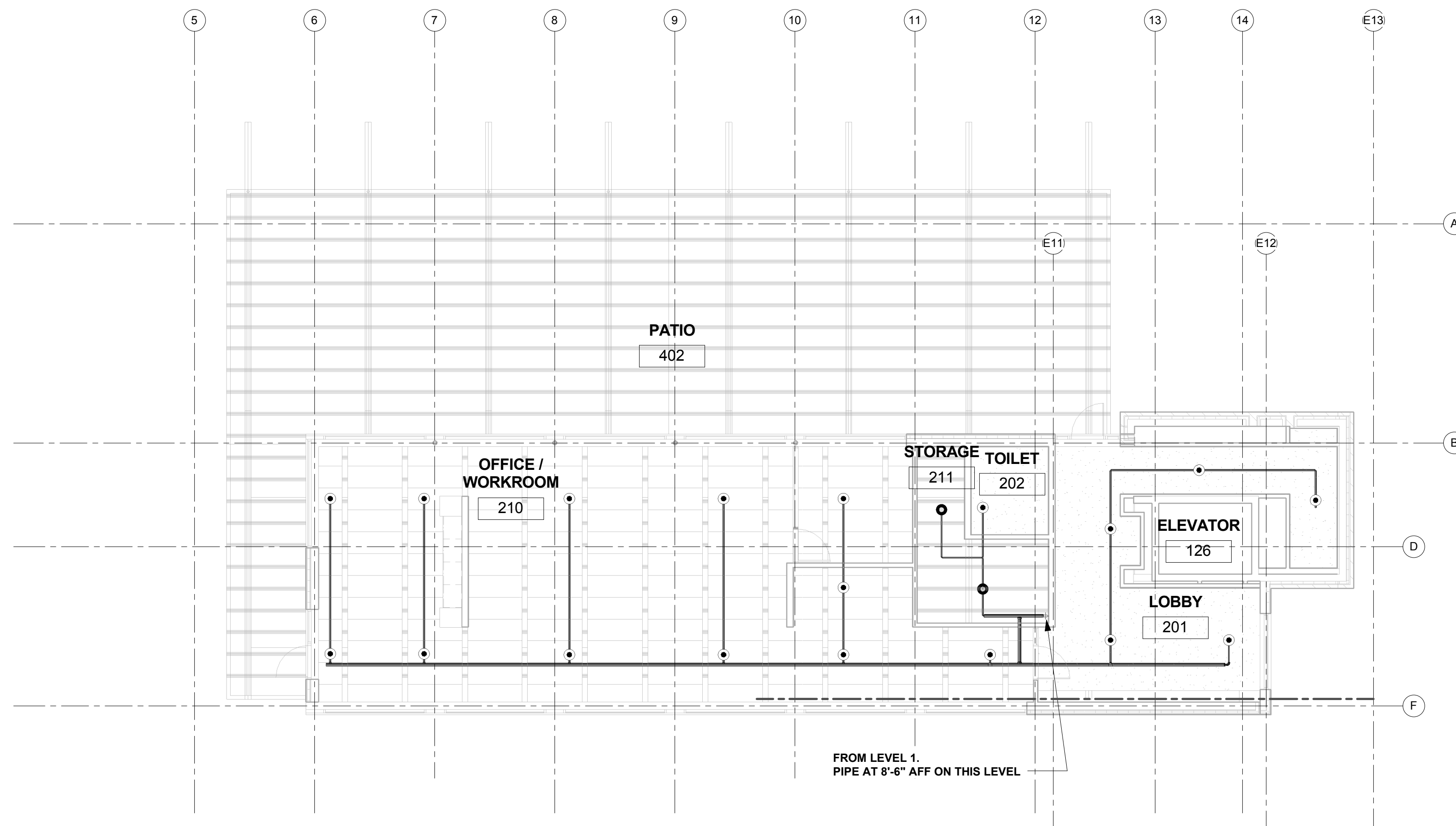




- CLASSROOM CEILINGS ARE WOOD SLAT INCLUDING A 1" WOOD SLAT, A 2" GAP, 1" SLAT, ETC. SPRINKLERS IN SLAT CEILINGS TO BE PENDENT AND LOCATED WITHIN THE GAP SPACES OF THE CEILING SYSTEM. COORDINATE WITH GENERAL CONTRACTOR AND FINAL CEILING INSTALLATION PLAN. SPRINKLER DEFLECTOR TO BE WITHIN 12" OF THE DECK TO AVOID SPRINKLERS ABOVE AND BELOW THE CEILING.
- SPRINKLER TYPES/FINISHES
  - UPRIGHT - 5.6K, BRASS (EXPOSED AREAS)
  - CONCEALED 5.6K WHITE (GYP CEILING AREAS)
  - PENDENT 5.6K, BRASS (SLAT CEILING AREAS - LEVEL 1 CLASSROOMS)

**1 LEVEL 1 - FIRE PROTECTION PLAN NEW ADDITION**

F102 1/8" = 1'-0"



**2 LEVEL 2 - FIRE PROTECTION PLAN NEW ADDITION**

F102 1/8" = 1'-0"

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**FIRE PROTECTION -  
 NEW ADDITION**

**EXHIBIT M  
 F102**



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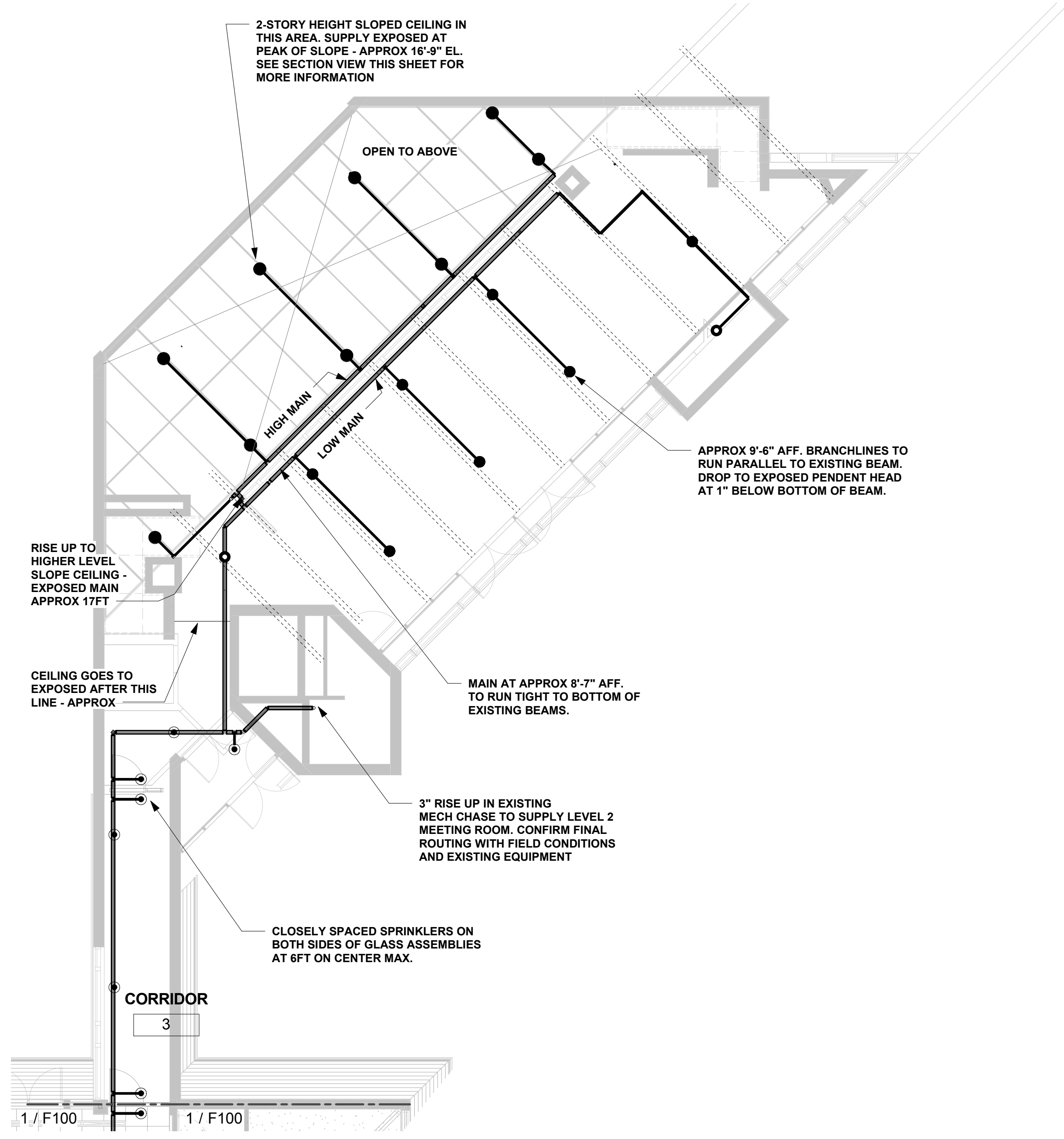
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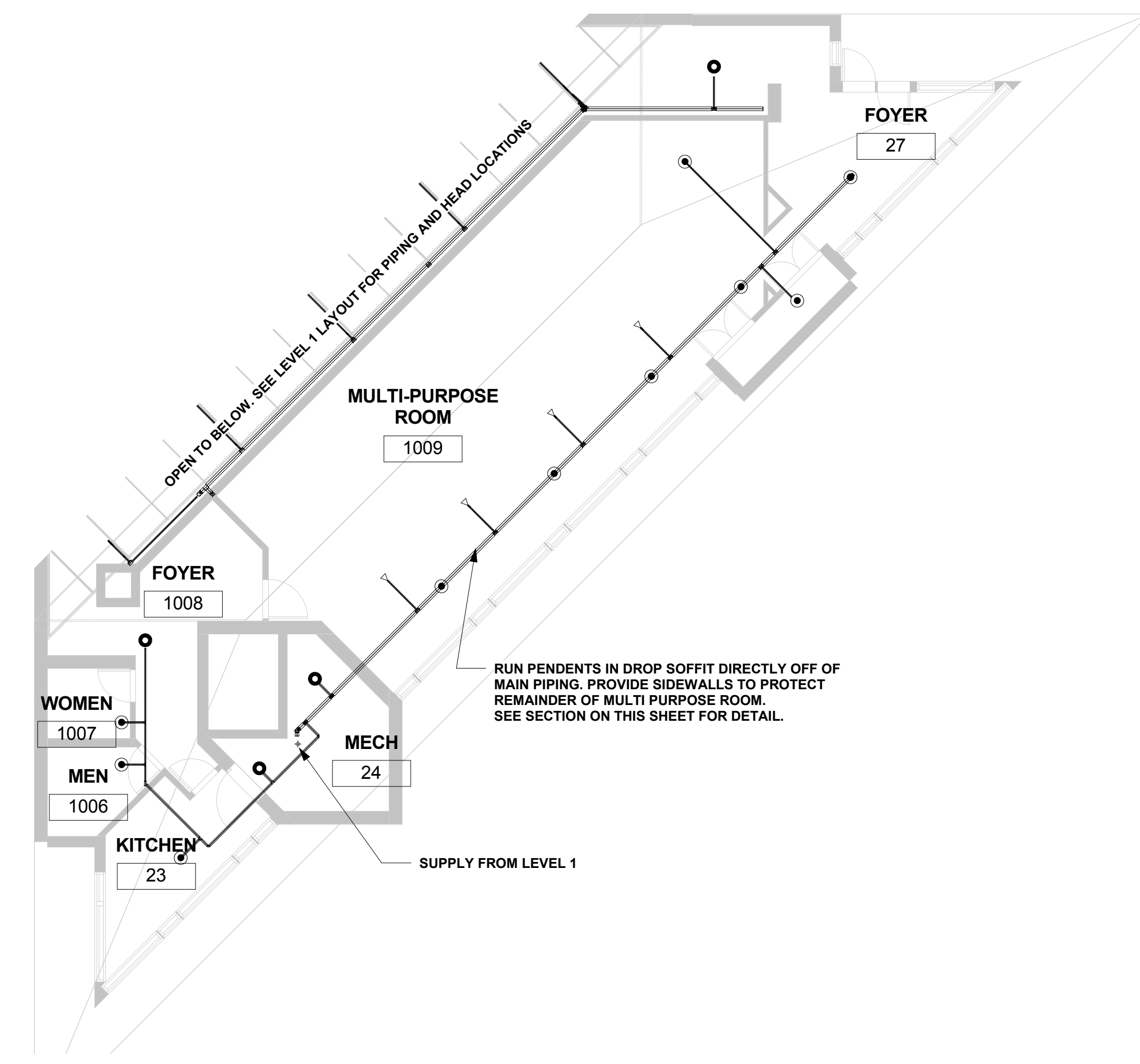
**FIRE PROTECTION  
 1970'S BUILDING**

**EXHIBIT M  
 F103**

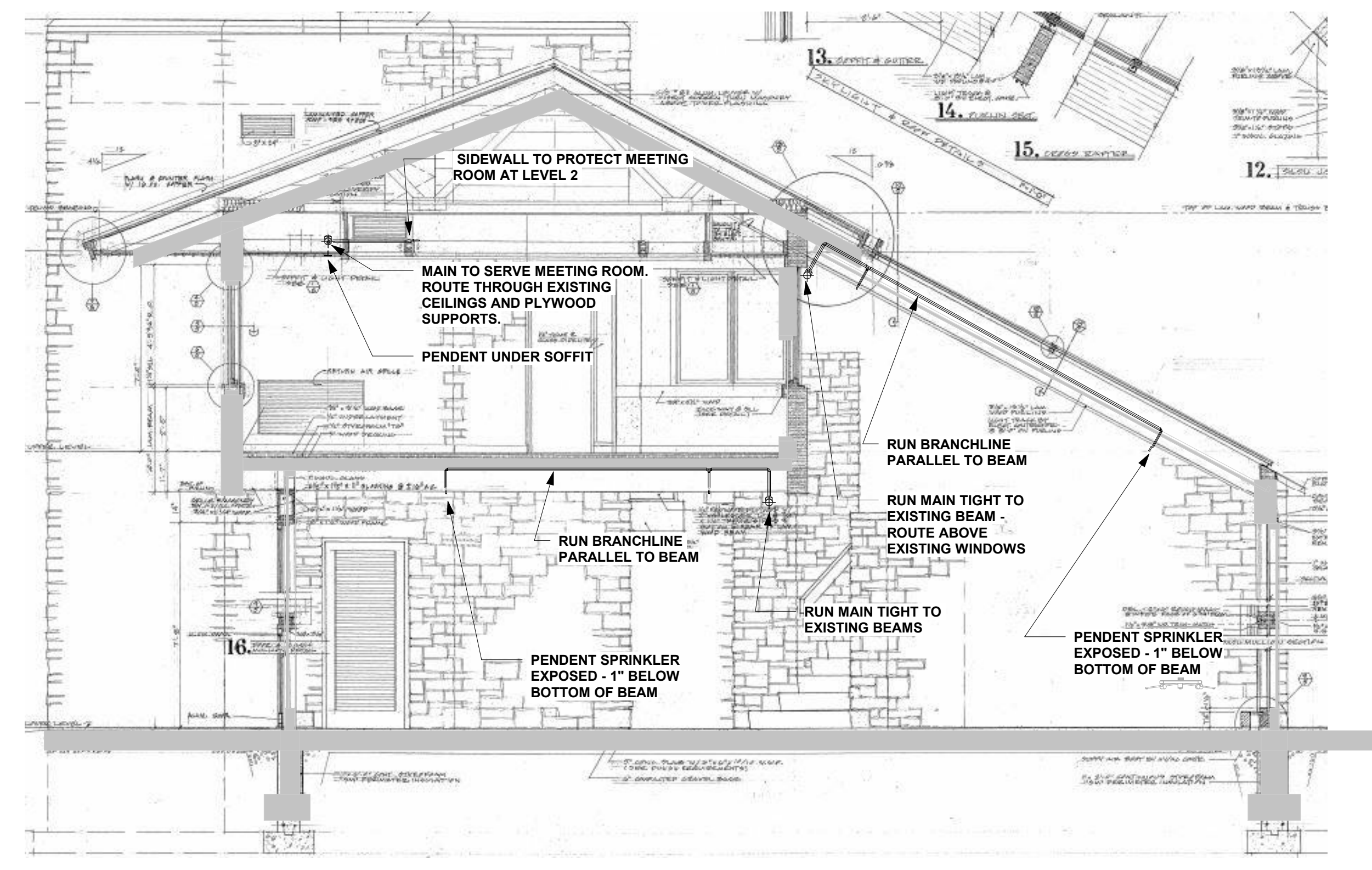
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- COORDINATE WITH EXISTING MEP EQUIPMENT
- CONFIRM ANY NECESSARY AUXILIARY DRAINS BASED ON FINAL ELEVATIONS
- LEVEL 1 AND SLOPED AREA INCLUDES OBSTRUCTED CONSTRUCTION
- SPRINKLER TYPES/FINISHES  
 A. PENDENT/UPRIGHT - 5.6K, BRASS (EXPOSED AREAS)  
 B. CONCEALED 5.6K WHITE (EXISTING DROP CEILING AREAS)



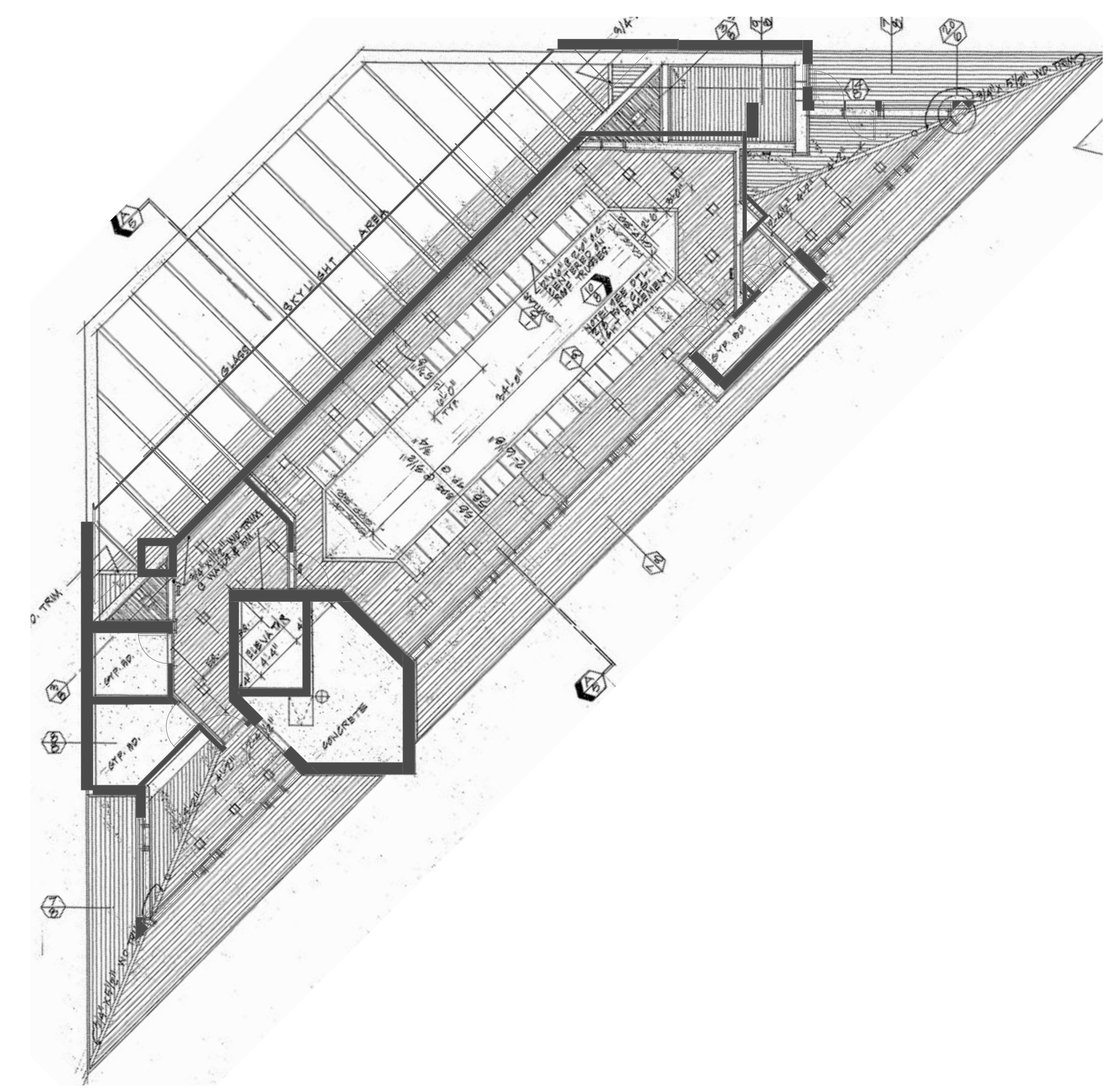
**1 LEVEL 1 - FIRE PROTECTION PLAN 1970'S BUILDING**  
 F103 1/8" = 1'-0"



**2 LEVEL 2 - FIRE PROTECTION PLAN 1970'S BUILDING**  
 F103 1/8" = 1'-0"



**3 1970'S BUILDING SECTION VIEW**  
 F103 1/4" = 1'-0"



**LEVEL 2 - FIRE PROTECTION PLAN 1970'S BUILDING RCP AS BUILT**