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South Walton County Mosquito Control District
New Headquarters Building

774 North County Highway 393
Santa Rosa Beach, Florida 32459

PERMIT SET

No.	Description	Date

FIRE PROTECTION LEGEND, NOTES, AND SITE PLAN

Project number: 18106
Date: 06-20-2023
PIC: KAJ
PM: KAJ

FP100

GENERAL NOTES

- IT IS NOTED THAT SOME AREAS WILL BE REQUIRED TO BE PROTECTED AS ORDINARY HAZARD (MECHANICAL ROOMS, ETC.) THESE AREAS HAVE BEEN IDENTIFIED BY A DIFFERENT HATCHING PATTERN THEN THE LIGHT HAZARD AREAS ON THE PLANS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN CURRENT WATER FLOW DATA AND DESIGN SPRINKLER SYSTEMS ACCORDINGLY. SHALL OBTAIN CURRENT WATER FLOW DATA AND DESIGN MODIFICATIONS ACCORDINGLY.
- MAINTAIN THE INTEGRITY OF ALL FIRE RATED ASSEMBLIES AND ACOUSTICAL ASSEMBLIES.
- CONTRACTOR SHALL COORDINATE SYSTEM DESIGN WITH ALL OTHER TRADES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING INSPECTOR'S TEST LOCATIONS IN ACCORDANCE WITH NFPA 13 AND THE AUTHORITY HAVING JURISDICTION.
- ALL PIPING SHALL OBSERVE PROPER PITCH. PROVIDE DRAINS FOR LOW POINTS.
- THE SPRINKLER SYSTEM SHALL BE ARRANGED FOR FLUSHING. READILY REMOVABLE FITTINGS SHALL BE PROVIDED AT THE END OF ALL CROSSMAINS.
- PIPE HANGERS SHALL BE INSTALLED AS REQUIRED BY NFPA 13 FOR SUPPORTING SPRINKLER PIPING. NO OTHER PIPING OR DEVICES SHALL BE ATTACHED TO THE SPRINKLER HANGER SYSTEM UNLESS THE HANGER HAS BEEN DESIGNED TO CARRY THE ADDITIONAL LOAD.
- THIS CONTRACT DOES NOT INCLUDE ANY MATERIAL OR DEVICE TO IMPROVE THE STRUCTURAL STRENGTH OF THE BUILDING TO ENABLE IT TO CARRY THE LOAD OF THE FIRE PROTECTION SYSTEM.
- ALL UNDERGROUND PIPING SHALL BE DUCTILE IRON WITH FITTINGS AND JOINTS PER NFPA 13. TEFLON TAPE SHALL BE ADDED TO ALL MALE THREADS OF PIPE AS A JOINING COMPOUND.
- ALL ABOVE GROUND WET SPRINKLER PIPE THAT IS THREADED SHALL BE SCHEDULE 40 BLACK WITH BLACK CAST/MALEABLE IRON FITTINGS WITH JOINTS PER NFPA 13. TEFLON TAPE SHALL BE ADDED TO ALL MALE THREADS OF PIPE AS A JOINING COMPOUND. CPVC PIPING IS NOT ACCEPTABLE.
- ALL ABOVE GROUND WET SYSTEM SPRINKLER PIPE THAT IS WELDED OR ROLL-GROOVED SHALL BE SCHEDULE 10 BLACK WITH BLACK CAST/MALEABLE IRON FITTINGS WITH JOINTS PER NFPA 13. CPVC PIPING IS NOT ACCEPTABLE.
- TRENCHING SHALL BE PERFORMED BY HAND WHERE THERE IS THE POSSIBILITY OF ENCOUNTERING OBSTACLES OR EXISTING UTILITY LINES. WHERE CLEAR AND UNOBSTRUCTED AREAS ARE TO BE EXCAVATED, APPROPRIATE MACHINE EXCAVATION METHODS MAY BE EMPLOYED. PROVIDE PROPER BACKFILL AS REQUIRED PER SPECIFICATIONS.
- INSTALL SPRINKLER HEADS CENTER OF TILE IN ACOUSTICAL CEILINGS. HEAD LOCATIONS SHALL BE GUIDED BY ARCHITECTURAL ELEMENTS FOR OTHER CEILING TYPES.
- DO NOT LOCATE INSPECTOR'S TEST LOCATIONS OR DRAINS IN FINISHED SPACES. INDICATE ALL LOCATIONS OF EXPOSED PIPING ON SHOP DRAWINGS.
- REFER TO MECHANICAL DRAWINGS FOR FIRE WALL PIPE PENETRATION DETAILS.
- SITE PIPING BEYOND 5'-0" OUTSIDE OF BUILDING SHOWN FOR REFERENCE ONLY. REFER TO CIVIL SITE UTILITY PLANS FOR BACK FLOW PREVENTER, FIRE DEPARTMENT CONNECTION, AND HYDRANT LOCATIONS.
- FLEXIBLE CONNECTIONS TO SPRINKLER HEADS ARE NOT ALLOWED.
- PROVIDE MEANS FOR A FORWARD FLOW TEST, DOWNSTREAM OF BACKFLOW PREVENTION VALVES.

DESIGN CRITERIA

THE NEW FACILITY SYSTEM SHALL BE HYDRAULICALLY DESIGNED WITH NO INSIDE HOSE STREAM ALLOWANCE AND FIRE PROTECTION SPRINKLER DENSITY VALUES AS FOLLOWS:

LIGHT HAZARD = 0.10 GPM/SF WITH A MAXIMUM OF 225 SF COVERAGE PER SPRINKLER

ORDINARY HAZARD GROUP 1 = 0.15 GPM/SF WITH A MAXIMUM OF 130 SF COVERAGE PER SPRINKLER

ORDINARY HAZARD GROUP 2 = 0.20 GPM/SF WITH A MAXIMUM OF 130 SF COVERAGE PER SPRINKLER

THE SPRINKLER DESIGN SHALL BE BASED ON THE MOST HYDRAULICALLY DEMANDING 1500 SF. THE CONTRACTOR IS ALLOWED TO REDUCE THE DESIGN AREA BASED ON THE USE OF QUICK RESPONSE SPRINKLERS AND CEILING HEIGHT IN ACCORDANCE WITH NFPA 13.

THE DESIGN OF THE SPRINKLER SYSTEM SHALL BE BASED UPON WATER SUPPLY INFORMATION OBTAINED BY THE SPRINKLER CONTRACTOR AND WITNESSED BY THE AUTHORITY HAVING JURISDICTION. WATER SUPPLY SHALL BE PRESUMED AVAILABLE AT THE POINT OF CONNECTION OF THE FIRE MAIN TO THE WATER SUPPLY SYSTEM. THE FOLLOWING FLOW TEST DATA WAS OBTAINED BY THE ENGINEER ON MAY 12, 2023, PROVIDED BY SEACO FIRE PROTECTION.

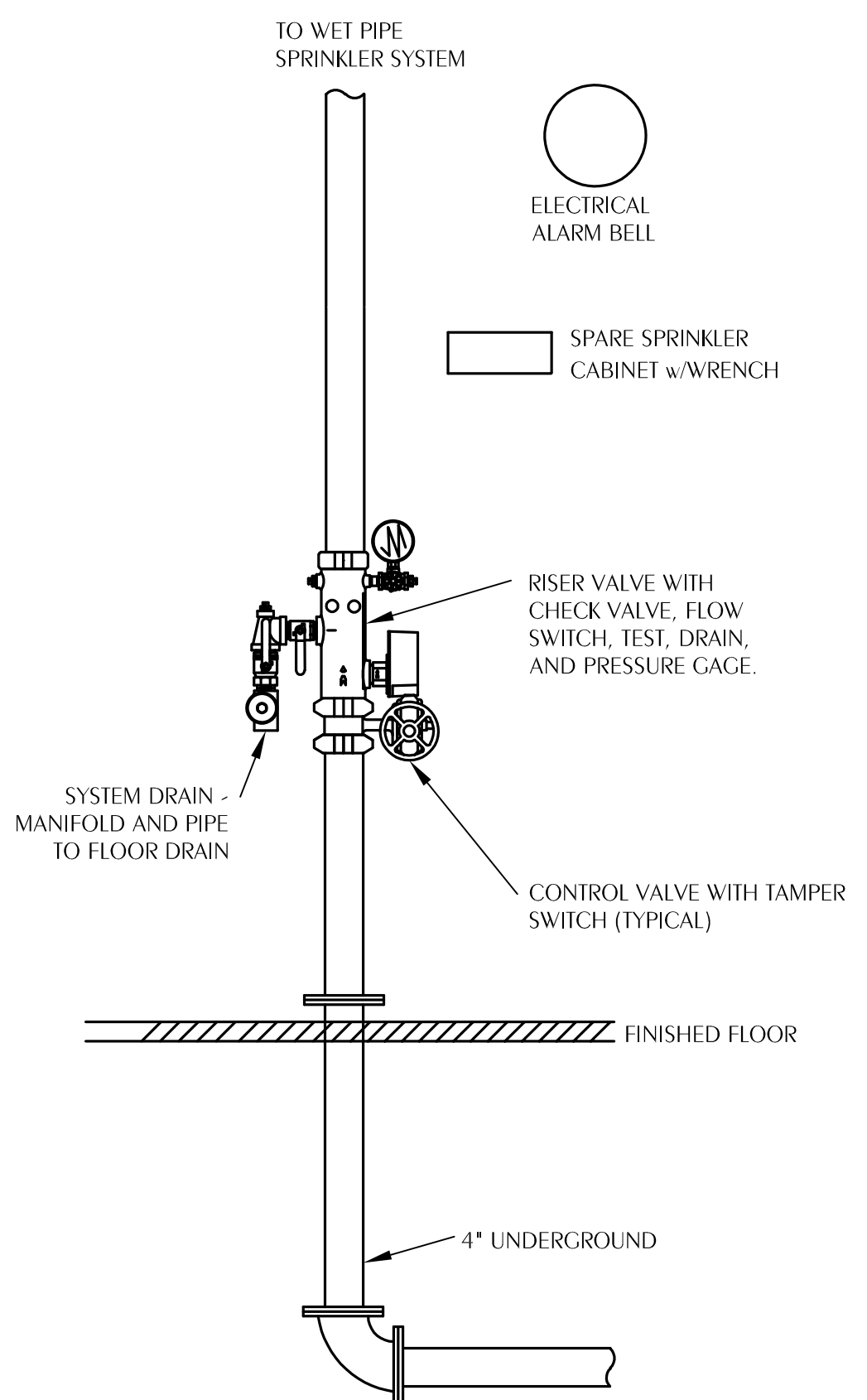
HYDRANT #1:
 STATIC = 83 PSI
 RESIDUAL = 74 PSI
 FLOWING 960 GPM
 COEFFICIENT 0.9"

LEGEND

- FW FIRE WATER SUPPLY (SITE)
- PW POTABLE WATER SUPPLY
- WM WATER MAIN
- FW(E) EXISTING FIRE WATER SUPPLY
- FIRE SPRINKLER MAIN
- FIRE RISER
- FIRE DEPARTMENT CONNECTION
- FIRE DEPARTMENT CONNECTION

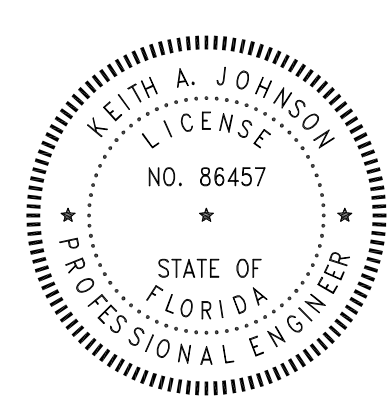
SYSTEM ENGINEERING SUMMARY

AREA SERVICED (WET PIPE)	9798 SF
HYDRAULICALLY MOST REMOTE AREA	1500 SF
HAZARD CLASSIFICATION OF REMOTE AREA	LIGHT HAZARD
SYSTEM DESIGN FLOW RATE (INDOOR)	195 GPM
OUTSIDE HOSE STREAM DEMAND	100 GPM
TOTAL WATER DEMAND	295 GPM
WATER PRESSURE DATA	
END HEAD PRESSURE	7.0 PSI
ELEVATION LOSS	12.12 PSI
OUTSIDE FRICTION LOSS	17.78 PSI
BACK FLOW PREVENTOR	2 PSI
SAFETY FACTOR	10 PSI
AVAILABLE INSIDE FRICTION LOSS	20 PSI



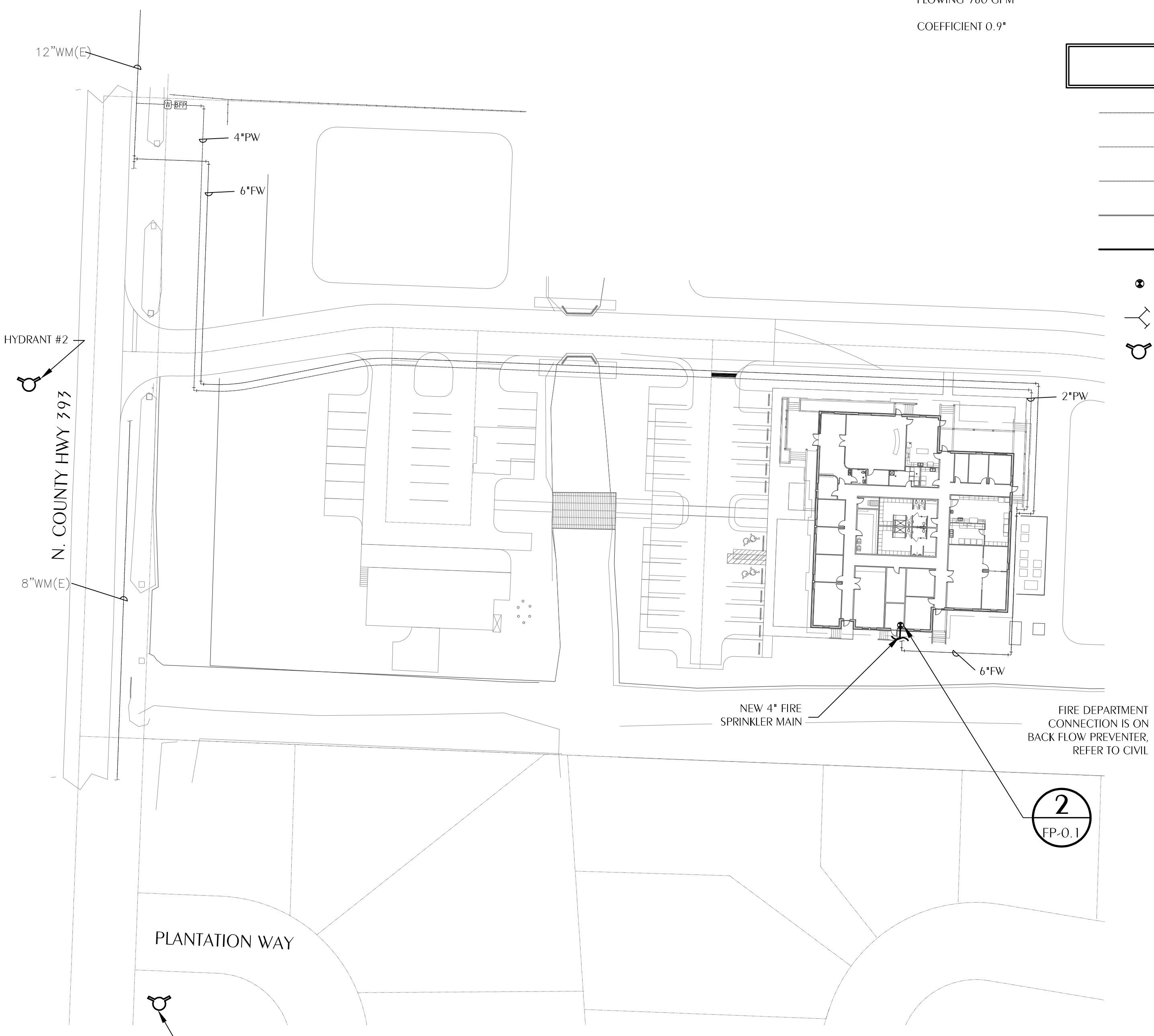
WET PIPE RISER DETAIL

SCALE: NONE



WATER BASED SPRINKLER SYSTEM REQUIREMENTS

- THE POINT OF SERVICE AND BACKFLOW PREVENTER ARE SHOWN FOR REFERENCE ONLY. REFER TO THE CIVIL SITE UTILITY PLAN FOR FURTHER INFORMATION.
- THE BUILDING SHALL BE FULLY SPRINKLED IN ACCORDANCE WITH THE MOST RECENT EDITION OF NFPA 13 AND LOCAL CODES.
- REFER TO PLAN SHEETS AND HAZARD CLASSIFICATION LEGEND FOR HAZARD CLASSIFICATION OF EACH ROOM OR AREA.
- THE NEW SYSTEMS SHALL BE HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13.
 LIGHT HAZARD: 0.10 GPM/SF, MAX 225 SF PER HEAD, 15 FT MAX NOMINAL SPACING, ORDINARY TEMPERATURE RATING HEADS.
 ORDINARY HAZARD GROUP 1: 0.15 GPM/SF, MAX 130 SF PER HEAD, 15 FT MAX NOMINAL SPACING, INTERMEDIATE TEMPERATURE RATING HEADS.
 ORDINARY HAZARD GROUP 2: 0.20 GPM/SF, MAX 130 SF PER HEAD, 15 FT MAX NOMINAL SPACING, INTERMEDIATE TEMPERATURE RATING HEADS.
 FOR ADDITIONAL REQUIREMENTS, REFER TO DESIGN CRITERIA NOTES ON THIS SHEET.
- THE POINT OF SERVICE CONNECTION IS A NON-CIRCULATING MAIN.
- REFER TO DESIGN CRITERIA NOTES ON THIS SHEET FOR FLOW TEST DATA.
- REFER TO WET PIPE RISER DETAIL FOR VALVE AND SUPERVISION REQUIREMENTS.
- MICROBIAL INDUCED CORROSION IS NOT ANTICIPATED IN THIS PROJECT.
- REFER TO CIVIL SITE UTILITY DRAWINGS FOR BACKFLOW PREVENTER. MAXIMUM DESIGN PRESSURE DROP SHALL NOT EXCEED 2 PSI.
- REFER TO DIVISION 21 SPECIFICATIONS FOR QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL FIRE PROTECTION COMPONENTS.
- NO FIRE PUMP IS REQUIRED.
- NO ON SITE FIREWATER STORAGE TANK IS REQUIRED.
- REFER TO CIVIL DRAWINGS FOR FORWARD FULL TEST PROVISIONS.



FIRE PROTECTION SITE PLAN

SCALE: 1" = 40'-0"

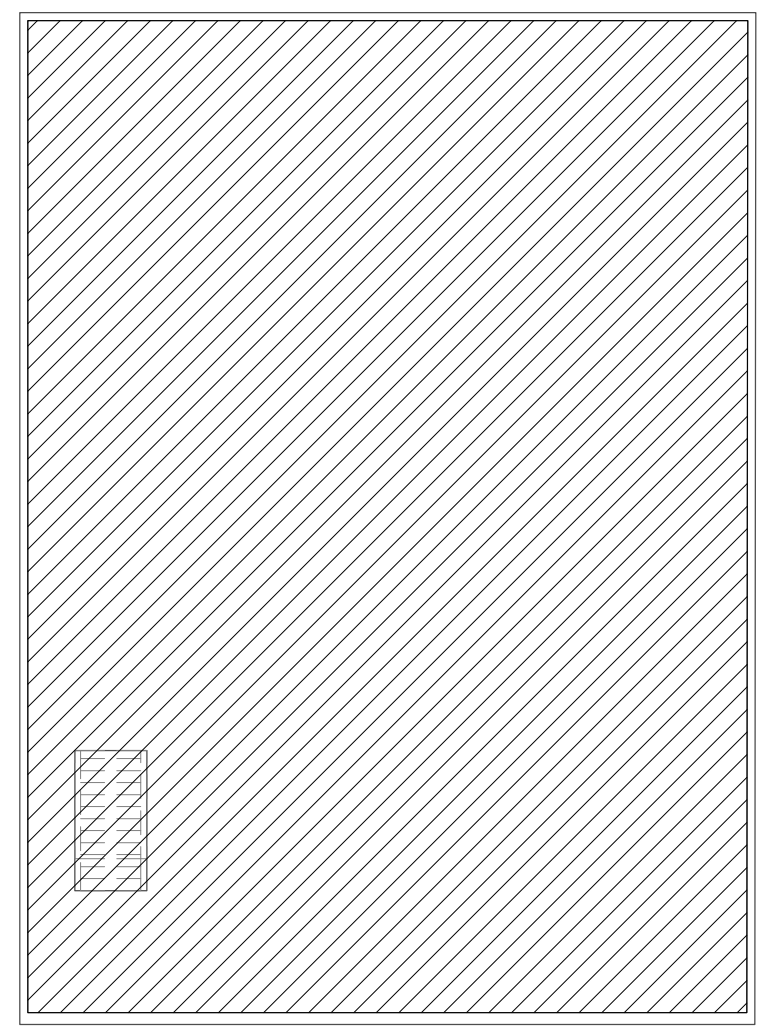
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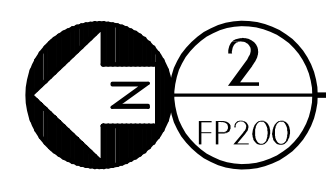
HAZARD CLASSIFICATION	
	LIGHT HAZARD
	ORDINARY HAZARD GROUP 1
	ORDINARY HAZARD GROUP 2

GENERAL NOTES

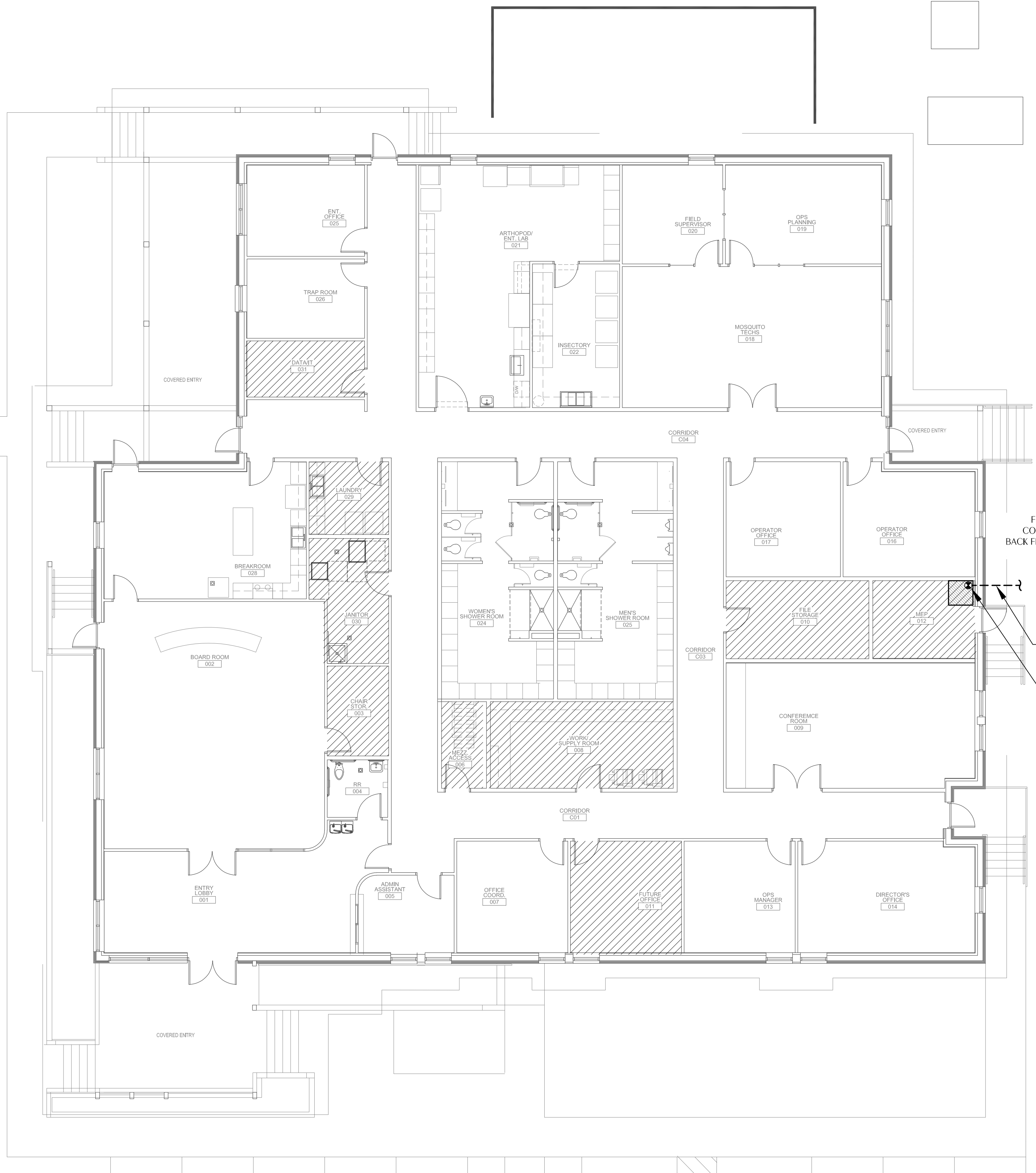
1. CAREFUL COORDINATION WITH ALL TRADES MUST BE DOCUMENTED WITH SHOP DRAWINGS.
2. REFER TO CIVIL FOR FIRE DEPARTMENT CONNECTION ON BACKFLOW PREVENTOR.
3. ATTIC IS COMBUSTIBLE CONSTRUCTION AND INSULATED. THE ATTIC SHALL BE SPRINKLED BY WET PIPE SYSTEM. THE HAZARD CLASSIFICATION SHALL BE LIGHT HAZARD.
4. THE CONCEALED AREA UNDER THE MEZZANINE IS COMBUSTIBLE CONSTRUCTION. THIS AREA SHALL BE SPRINKLED BY WET PIPE SYSTEM. THE HAZARD CLASSIFICATION SHALL BE LIGHT HAZARD.



FIRE DEPARTMENT CONNECTION IS ON BACKFLOW PREVENTER, REFER TO CIVIL



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



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

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