

GENERAL NOTES

- THIS DRAWING IS INTENDED TO SHOW APPROXIMATE AND RELATIVE LOCATIONS OF MATERIALS AND EQUIPMENT. DRAWINGS SHALL NOT BE SCALED TO DETERMINE EXACT POSITIONS AND CLEARANCES. BECAUSE OF THE DIAGRAMMATIC LAYOUT AND SMALL SCALE OF DRAWINGS, NOT ALL RISERS, DROPS, OFFSETS, AND RELATED SPECIALTIES ARE INDICATED. PROVIDE ALL SUCH PIPING, FITTINGS, VALVES, AND SPECIALTIES REQUIRED IN SUCH CASES TO INSURE A COMPLETE AND PROPERLY OPERATING INSTALLATION IN ACCORDANCE WITH CODES AND WITHOUT EXTRA COST TO OWNER. FIRE PROTECTION CONTRACTOR SHALL BE RESPONSIBLE FOR A COMPLETE FIELD SURVEY PRIOR TO DESIGN TO ELIMINATE ANY SPRINKLER OBSTRUCTIONS.
- THE ENTIRE FIRE SPRINKLER SYSTEM INSTALLATIONS SHALL BE IN ACCORDANCE WITH NFPA 13 - 2019 EDITION, NFPA 14 - 2019 EDITION.
- CONTRACTOR SHALL PROVIDE AND PAY ALL FEES AND PERMITS.
- CONTRACTOR SHALL VISIT THE JOB SITE AND OBSERVE ALL EXISTING CONDITIONS.
- FURNISH AND INSTALL PIPE, SPRINKLER HEADS, EQUIPMENT, ETC., REQUIRED FOR THE PROPER FUNCTIONING OF THE WORK INDICATED ON THE PLAN.
- ALL WORK DONE, ALL EQUIPMENT, MATERIALS USED, AND ALL TESTS SHALL BE DONE TO MEET THE APPROVAL OF THE INSURER AS WELL AS LOCAL AUTHORITIES HAVING JURISDICTION.
- ALL NEW SPRINKLERS SHALL BE CENTERED IN THE CEILING TILE IN BOTH DIRECTIONS AS SHOWN ON THE PLANS, UNLESS OTHERWISE NOTED.
- HANGER INSTALLATION SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER TO BE IN COMPLIANCE WITH THE REQUIREMENTS OF NFPA 13 CHAPTER 9. WHERE APPLICABLE, CERTIFICATION SHALL INCLUDE PROTECTION OF PIPING AGAINST EARTHQUAKE AND WIND DAMAGE IN ACCORDANCE WITH NFPA 13 SECTION 9.3.
- CONTRACTOR SHALL PREPARE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS, AT THEIR OWN EXPENSE, SIGNED AND SEALED BY A QUALIFIED ENGINEER LICENSED IN THE STATE OF FLORIDA. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW TO THE ENGINEER AND APPROVING AUTHORITIES PRIOR TO PERFORMANCE OF ANY WORK. SHOP DRAWINGS SHALL SHOW PIPE ROUTING, SPRINKLER LOCATIONS, AND ANY OTHER INFORMATION REQUIRED TO MAKE COMPLETE CONSTRUCTION DOCUMENTS. PROVIDE COPIES OF ALL DOCUMENTATION FOR NEW EQUIPMENT, PIPING, SPRINKLER HEADS, ETC WITH THE SUBMITTAL.
- ALL WORK SHALL BE INSPECTED BY THE INSURER AND ANY LOCAL AUTHORITIES HAVING JURISDICTION. CERTIFIED COPIES OF THESE APPROVALS SHALL BE DELIVERED TO THE OWNER BEFORE FINAL PAYMENT. ALL TESTS SHALL BE WITNESSED BY THE OWNERS'S REPRESENTATIVE.
- SHOULD A CONTRACTOR REQUIRE REMOVAL, RELOCATIONS, REROUTING OF ANOTHER TRADE'S WORK THAT IS NOT INDICATED ON THE DRAWINGS, THE CONTRACTOR REQUIRING SUCH WORK SHALL BE RESPONSIBLE FOR THAT WORK, AND PAY FOR ALL REQUIRED COSTS.
- WALL AND FLOOR PENETRATIONS SHALL BE ACCOMPLISHED BY MECHANICAL MEANS IN MANNER THAT WILL NOT AFFECT THE INTEGRITY OF THE STRUCTURE. AFTER INSTALLATIONS OF PIPING THROUGH THE PENETRATIONS, PACK THE ANNULAR SPACE WITH OAKUM OR FIBROUS GLASS, LEAVING A MINIMUM OF TWO INCHES AT EACH END TO BE FILLED AND FINISHED WITH A 'FIRE BARRIER' MATERIAL EQUAL TO 3M 'PENETRATION SEALING SYSTEM' SUCH AS 'CP-25 CAULK', '303 PUTTY' OR 'FS-195 WRAP'. APPLICATION OF 'FIRE BARRIER' MATERIAL SHALL BE IN ACCORDANCE WITH MANUFACTURE'S STANDARDS AND APPLICABLE CODES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING MATERIALS SUBMITTALS FOR REVIEW TO ARCHITECT FOR PRIOR APPROVAL BEFORE CONSTRUCTION.
- ALL EQUIPMENT, VALVES, ETC. ARE TO BE INSTALLED SO THAT THEY MAY BE ACCESSIBLE FOR SERVICING.
- AFTER THOROUGHLY CLEANING AND FLUSHING, THE ENTIRE SYSTEM SHALL BE HYDROTESTED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13. TEST SHALL BE WITNESSED BY THE OWNERS REPRESENTATIVE AND LOCAL AUTHORITIES HAVING JURISDICTION.
- ALL VALVES SHALL BE U.L. LISTED AND/OR F.M. APPROVED.
- ALL VALVES SHALL BE ELECTRICALLY SUPERVISED.
- FIRE ALARM PANEL TO BE PROVIDED BY ELECTRICAL CONTRACTOR IF REQUIRED.
- PROVIDE A SUPPLY OF SPRINKLERS (6 OF EACH TYPE USED) INSIDE A CABINET TO OWNER UPON COMPLETION OF PROJECT. A SPRINKLER WRENCH SHALL BE PROVIDED. REFER TO SPRINKLER HEAD SCHEDULE FOR SPRINKLER TYPES AND MODEL NUMBERS.
- ALL SPRINKLERS ARE TO BE U.L. LISTED AND/OR F.M. APPROVED.
- CONCEALED PENDANT COVER PLATES SHALL BE COLOR TO MATCH ARCHITECTURAL COLOR SPECIFICATIONS. REFER TO ARCHITECTURAL DRAWINGS FOR MORE INFORMATION. COVER PLATES SHALL NOT BE PAINTED IN FIELD.

SEISMIC DESIGN NOTES

- ALL FIRE PROTECTION EQUIPMENT, PIPING, ETC. SHALL BE INSTALLED IN COMPLIANCE WITH THE 2023 FLORIDA BUILDING CODE-8TH EDITION AND AUTHORITIES HAVING JURISDICTION.
- WHERE VIBRATION AND/OR SEISMIC CONTROLS ARE REQUIRED THE PROVISION OF SAID DEVICES SHALL BE A PART OF THE SCOPE OF WORK. NO ADDITIONAL MONIES SHALL BE DUE TO THE CONTRACTOR FOR THE AFOREMENTIONED WORK.
- ALL VIBRATION AND SEISMIC PROTECTION DEVICES SHALL BE THE PRODUCTS OF A SINGLE MANUFACTURER.
- SUBMIT FOR APPROVAL SHOP DRAWINGS AND CALCULATIONS AND/OR CERTIFICATIONS MEETING THE REQUIREMENTS OF APPLICABLE CODES AND DESIGN STANDARDS. SHOP DRAWINGS AND CALCULATIONS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN FLORIDA.
- SEISMIC PROTECTION DEVICES SHALL MEET PROJECT SPECIFICATIONS AND CODE REQUIREMENTS.

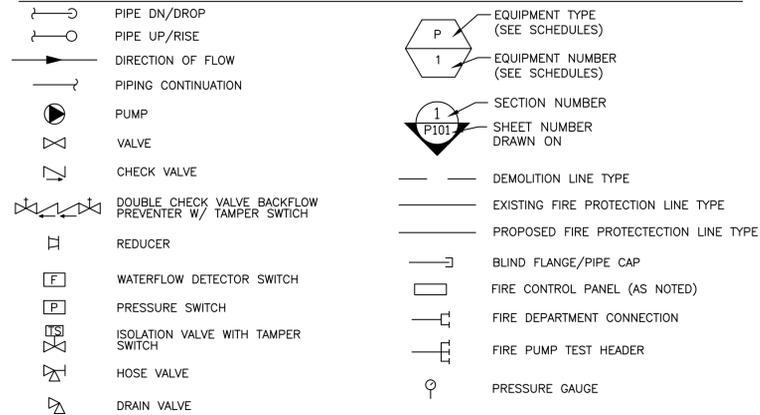
SPRINKLER HEAD SCHEDULE

TYPE	SYMBOL	MANUFACTURER	MODEL	TEMP	NOTES
SIDEWALL	◀	VIKING	VK307	155	
CONCEALED PENDENT	●	VIKING	VK462	155	
STANDARD PENDENT	⊙	VIKING	VK110	155	
UPRIGHT	○	VIKING	VK108	155	
DRY SIDEWALL	◀(D)	VIKING	VK182	155	
DRY BARREL SIDEWALL	◀(DB)	VIKING	VK156	155	
DRY CONCEALED PENDENT	●(D)	VIKING	VK190	155	

SPRINKLER DESIGN CRITERIA

PATTERN	HAZARD	SYSTEM TYPE	DENSITY	REMOTE AREA	HEAD COVERAGE	SPRINKLER TYPE
	LIGHT	WET	0.10 GPM/SF	1,500 SF	225 SF MAX.	PENDANT UNLESS OTHERWISE NOTED
	ORD. GRP 1	WET	0.15 GPM/SF	1,500 SF	130 SF MAX.	PENDANT OR SIDEWALL UNLESS OTHERWISE NOTED

GENERAL SYMBOLS



TYPICAL ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	HP	HORSEPOWER
APPROX	APPROXIMATE	HR	HOUR
BFP-	BACK FLOW PREVENTER- (TYPE)	HZ	HERTZ
BHP	BRAKE HORSEPOWER	JP	JOCKEY PUMP
CL	CENTERLINE	KW	KILOWATT
CO ₂	CARBON DIOXIDE	L	LITER
COMB	COMBINATION	LPM	LITERS PER MINUTE
CONN	CONNECTION	MECH	MECHANICAL
DCH	DRY CHEMICAL	MFR	MANUFACTURER
DEPT	DEPARTMENT	MIN	MINIMUM
DESS	DELUGE SPRINKLER SYSTEM	NO.	NUMBER
DET	DETAIL	NC	NORMALLY CLOSED
DEG	DEGREE	NIC	NOT IN CONTRACT
DEG F	DEGREES FAHRENHEIT	NO	NORMALLY OPEN
DIA	DIAMETER	NTS	NOT TO SCALE
DISC	DISCHARGE	OS&Y	OUTSIDE SCREW AND YOKE
DN	DOWN	PH	PHASE
DR	DRAIN	PIV	POST INDICATOR VALVE
DSP	DRY STANDPIPE	PNTHSE	PENTHOUSE
DSS	DRY SPRINKLER SYSTEM	PRESS	PRESSURE
DWG	DRAWING	PSI	POUNDS PER SQUARE INCH
EA	EACH	PSIG	POUNDS PER SQUARE INCH GAUGE
ELEV	ELEVATION	PSS	PRE-ACTION SPRINKLER SYSTEM
ELEC	ELECTRICAL	OR	QUICK RESPONSE
F	FIRE MAIN	QTY	QUANTITY
FCVA	FLOOR CONTROL VALVE ASSEMBLY	RM	ROOM
FDC	FIRE DEPARTMENT CONNECTION	SPEC	SPECIFICATION
FE	FIRE EXTINGUISHER	SQ FT	SQUARE FOOT
FEC	FIRE EXTINGUISHER CABINET	SQ M	SQUARE METER
FHVC	FIRE HOSE VALVE CABINET	SPKR	SPRINKLER
FHR	FIRE HOSE RACK	SS	STAINLESS STEEL
FHV	FIRE HOSE VALVE	SUCT	SUCTION
FLR	FLOOR	SYS	SYSTEM
FOM	FOAM PUMP	TEMP	TEMPERATURE
FP	FIRE PUMP	TS	TAMPER SWITCH
FPS	FEET PER SECOND	TYP	TYPICAL
FS	FLOW SWITCH	UNO	UNLESS NOTED OTHERWISE
FSCP	FIRE SUPPRESSION CONTROL PANEL	V	VOLTS
FT	FEET	W/	WITH
GA	GAUGE	W/O	WITHOUT
GAL	GALLON	WFS	WATER FLOW SWITCH
GALV	GALVANIZED	WSP	WET STANDPIPE
GPM	GALLONS PER MINUTE	WSS	WET SPRINKLER SYSTEM
HAZ	HAZARDOUS		
HORIZ	HORIZONTAL		

* NOTE: NOT ALL ABBREVIATIONS MAY BE USED

Matlacha Pine Island Fire Control District
Fire Hydrant Flow Test Sheet

Location of Fire Hydrant: Stringfellow & Pine Tree, Stringfellow & Coc

Hydrant I.D. Number: S-285 & S-270

Date Of Test: Tuesday, November 5, 2024

Time Of Test: 1:00:00 PM

Person(s) at Test Site: Barr, Mimbs

Water Supplied By: Greater Pine Island Water Association

Discharge Size: 2.5

Pitot Reading: 18

Actual Flow Of Hydrant: 711.8885908

Static Pressure: 68

Residual Pressure: 42

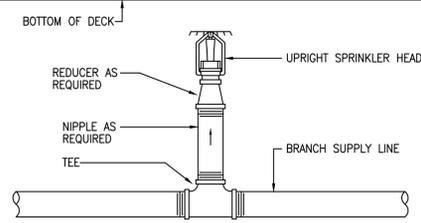
Calculated Flow @ 20 P.S.I. Residual: 991.2807966

Minutes Flowed: 5 Mins

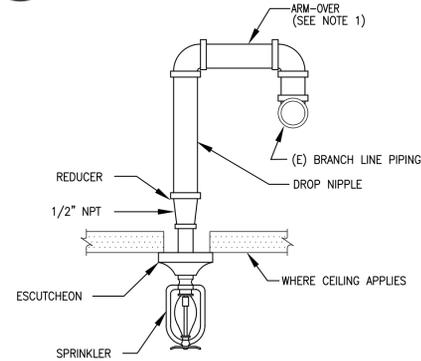
Remarks:

Test Ordered By: TDM Consulting INC.

Tester Signature: [Signature]

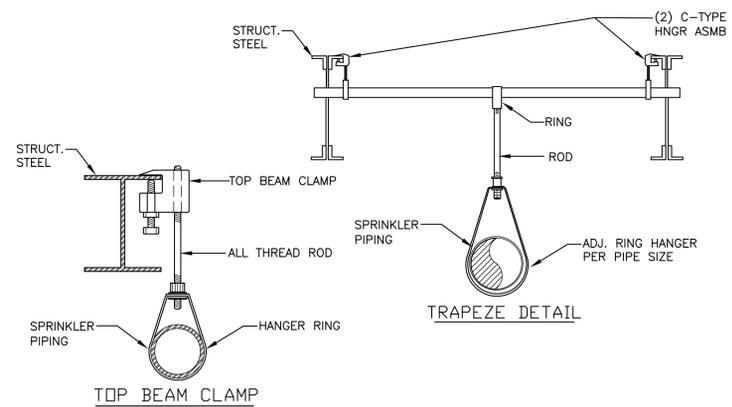


1 UPRIGHT SPRINKLER DETAIL
FPO.1 SCALE: N.T.S.

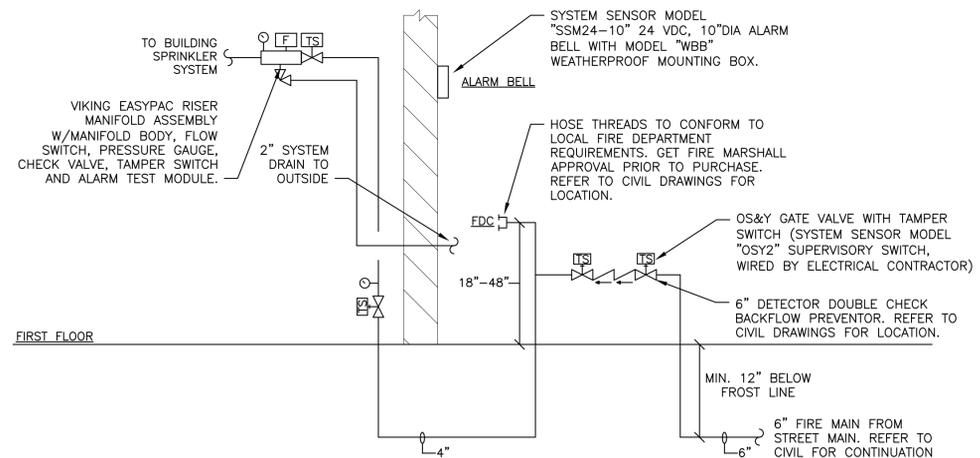


2 PENDANT SPRINKLER ARM OVER DETAIL
FPO.1 SCALE: N.T.S.

NOTE:
1. WHEN ARM-OVER IS MORE THEN 24" INCHES IN LENGTH IT MUST BE SUPPORTED WITH A PIPE HANGER.



3 SPRINKLER PIPE HANGER DETAIL
FPO.1 SCALE: N.T.S.



4 FIRE PROTECTION RISER DIAGRAMS
FPO.1 SCALE: N.T.S.

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SEAL



PROJECT NAME AND ADDRESS

PINE ISLAND FIRE STATION
5015 STRINGFELLOW RD, PINE ISLAND, FL 33956

ISSUES/REVISIONS

NO.	DESCRIPTION	DATE
-	DESIGN DEVELOPMENT	09/06/24
-	PERMIT/BID SET	03/28/25
1	REVISION 1	07/18/25

TITLE

FIRE PROTECTION COVER SHEET

PROJECT SHEET

24026

SCALE

NONE

FPO.1

FIRE PROTECTION SPECIFICATIONS

1. GENERAL

A. THE GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION AND THESE SPECIFICATIONS ARE APPLICABLE OF THIS CONTRACT.

B. ALL APPLICABLE CODES, LAWS AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR WHO SHALL INFORM THE OWNER, PRIOR TO SUBMITTING A PROPOSAL, OF ANY WORK OR MATERIAL WHICH VIOLATES ANY OF THE ABOVE LAWS AND REGULATIONS. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED BY THE CONTRACTOR.

C. INVESTIGATE EACH SPACE THROUGH WHICH EQUIPMENT MUST BE MOVED. WHERE NECESSARY, EQUIPMENT SHALL BE SHIPPED FROM MANUFACTURER IN SECTIONS OF SIZE SUITABLE FOR MOVING THROUGH AVAILABLE RESTRICTIVE SPACES. ASCERTAIN FROM BUILDING OWNER AND TENANT AT WHAT TIMES OF DAY EQUIPMENT MAY BE MOVED ALL AREAS.

D. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT AND REQUIREMENTS OF SYSTEMS AND WORK. PIPE ROUTING IS DOES NOT SHOW ALL OFFSETS, DROPS AND RISES OF RUNS. THE CONTRACTOR SHALL ALLOW IN HIS PRICE FOR ROUTING OF PIPE TO AVOID OBSTRUCTIONS. COORDINATION WITH THE EXISTING SERVICES, INCLUDING THOSE OF OTHER TRADES IS REQUIRED. MAINTAIN HEADROOM AND SPACE CONDITIONS.

E. INSTALL WORK SO AS TO BE READILY ACCESSIBLE FOR OPERATION, MAINTENANCE AND REPAIR. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ACCOMPLISH THIS, BUT CHANGES, WHICH INVOLVE EXTRA COST SHALL NOT BE MADE WITHOUT APPROVAL.

F. THE CONTRACTOR SHALL KEEP ALL EQUIPMENT AND MATERIALS, AND ALL PARTS OF THE BUILDING, EXTERIOR SPACES AND ADJACENT STREETS, SIDEWALKS AND PAVEMENTS, FREE FROM MATERIAL AND DEBRIS RESULTING FROM THE EXECUTION OF THIS WORK. EXCESS MATERIALS WILL NOT BE PERMITTED TO ACCUMULATE EITHER ON THE INTERIOR OR THE EXTERIOR.

G. THE LOCATIONS OF THE NEW SERVICES ARE BELIEVED TO BE AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL VERIFY THE ACTUAL LOCATION OF THESE SERVICES WITH THE CIVIL ENGINEER'S PLANS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCING ANY WORK.

H. SEAL OPENING THROUGH PARTITIONS, WALLS AND FLOORS WITH AN APPROVED NON-SHRINKING FIREPROOF CAULKING OR OTHER APPROVED NONCOMBUSTIBLE MATERIAL.

I. PROVIDE ALL NECESSARY FLASHING AND COUNTER FLASHING TO MAINTAIN THE WATERPROOFING INTEGRITY OF THIS BUILDING AS REQUIRED BY THE INSTALLATION OR REMOVAL OF PIPING AND EQUIPMENT. PROVIDE EQUIPMENT CURBS AS REQUIRED.

J. MATERIALS AND WORKMANSHIP, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.

K. THE WORK IN THE BUILDING SHALL BE DONE WHEN AND AS DIRECTED, AND IN A MANNER SATISFACTORY TO THE OWNER. THE WORK SHALL BE PERFORMED SO AS TO CAUSE THE LEAST POSSIBLE INCONVENIENCE AND DISTURBANCE TO THE PRESENT OCCUPANTS.

L. THE CONTRACTOR'S PROPOSAL FOR ALL WORK SHALL BE PREDICATED ON THE PERFORMANCE OF THE WORK DURING REGULAR WORKING HOURS. WHEN SO DIRECTED, HOWEVER, THE CONTRACTOR SHALL INSTALL WORK IN OVERTIME AND THE ADDITIONAL COST TO BE CHARGED THEREFORE SHALL BE ONLY THE "PREMIUM" PORTION OF THE WAGES PAID.

M. UNLESS OTHERWISE SPECIFICALLY SPECIFIED, INCLUDE ALL CUTTING AND PATCHING OF FLOORS, WALLS, PARTITIONS AND OTHER MATERIALS IN THE EXISTING BUILDING. THE CONTRACTOR SHALL RESTORE THESE AREAS TO ORIGINAL CONDITION.

N. ALL MATERIAL AND EQUIPMENT TO BE NEW UNLESS OTHERWISE NOTED AND SHALL BE IN ACCORDANCE WITH BUILDING STANDARDS.

O. SUBMISSION OF A PROPOSAL SHALL BE CONSTRUED AS EVIDENCE THAT A CAREFUL EXAMINATION OF THE PORTIONS OF THE ENTIRE PROJECT, WHICH AFFECT THIS WORK, AND THE ACCESS TO SUCH SPACES HAS BEEN MADE AND THAT THE CONTRACTOR IS FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT THE EXECUTION OF THE WORK. THE CONTRACTOR IS RESPONSIBLE TO INDICATE ANY DISCREPANCIES BETWEEN THE CONTRACT DRAWINGS AND ACTUAL FIELD CONDITIONS PRIOR TO SUBMITTAL OF BID. SUBMISSION OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH AN EXAMINATION HAS BEEN MADE. LATER CLAIMS SHALL NOT BE MADE FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WHICH COULD HAVE BEEN FORESEEN DURING SUCH AN EXAMINATION. THE ON-SITE INSPECTION SHALL VERIFY EXISTING PIPE SIZES, CLEARANCES, ETC. AND CONDITIONS.

P. INSURANCE: IN ACCORDANCE WITH BUILDING REQUIREMENTS AND SHALL INCLUDE A HOLD HARMLESS CLAUSE FOR OWNER AND ENGINEER.

Q. THE FINAL ACCEPTANCE WILL BE MADE AFTER THE CONTRACTOR HAS ADJUSTED HIS EQUIPMENT, TESTED THE VARIOUS SYSTEMS, DEMONSTRATED THAT IT FULFILLS THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS AND HAS FURNISHED ALL THE REQUIRED CERTIFICATES OF INSPECTION AND APPROVAL.

R. UNDERGROUND MAINS AND LEAD-IN CONNECTIONS TO SYSTEM RISERS SHALL BE FLUSHED IN ORDER TO REMOVE ANY FOREIGN MATERIALS THAT ENTERED THE UNDERGROUND PIPING DURING THE COURSE OF THE INSTALLATION. FOR ALL SYSTEMS, THE FLUSHING SHALL BE CONTINUED UNTIL THE WATER IS CLEAR. UNDERGROUND MAINS AND LEAD-IN CONNECTIONS SHALL BE MADE FOR THE DISPOSAL OF WATER ISSUING FROM TEST OUTLETS.

S. HYDROSTATIC PRESSURE TESTS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS.

T. FIRE PROTECTION DESIGN CRITERIA IN ACCORDANCE WITH FLORIDA ADMINISTRATIVE CODE NO. 61G15-32.004 (REQUIREMENTS FOR A WATER BASED FIRE PROTECTION SYSTEM).

U. ALL EXTERIOR HEADS TO BE COATED FOR CORROSION PROTECTION.

V. ALL EXPOSED EXTERIOR PIPING TO BE PAINTED FOR CORROSION PROTECTION.

W. ALL PIPE PROVIDED WITH ALLIED ABF COATING (ANTIBACTERIAL FORMULA COATING).

2. SCOPE OF WORK

A. SCOPE OF WORK SHALL CONSIST OF PROVIDING LABOR, MATERIALS, EQUIPMENT, SERVICES AND FEES NECESSARY FOR COMPLETE AND SAFE INSTALLATION IN CONFORMITY WITH THE LOCAL BUILDING CODE AND ALL OTHER APPLICABLE INDUSTRY, NATIONAL AND LOCAL CODES AND AUTHORITIES HAVING JURISDICTION, AS INDICATED ON DRAWINGS AND HEREIN SPECIFIED.

B. THE BASE BUILDING DRAWINGS, PLANS, DETAILS, SPECIFICATIONS AND SPECIFICATION ADDENDA ARE MADE OF THIS CONTRACT AND SHALL APPLY TO ALL WORK UNDER THE CONTRACT UNLESS OTHERWISE AMENDED, MODIFIED, SUPPLEMENTED OR SPECIFIED HEREIN.

C. THE CONTRACTOR SHALL FURNISH A WRITTEN GUARANTEE TO REPLACE OR REPAIR PROMPTLY AND ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED FOR ANY WORKMANSHIP AND EQUIPMENT IN WHICH DEFECTS DEVELOP WITHIN ONE YEAR FROM THE DATE OF FINAL CERTIFICATE FOR PAYMENT AND/OR FROM DATE OF ACTUAL USE OF EQUIPMENT OR OCCUPANCY OF SPACES BY OWNER INCLUDED UNDER THE VARIOUS PARTS OF THE WORK, WHICHEVER DATE IS EARLIER. THIS WORK SHALL BE DONE AS DIRECTED BY THE OWNER. THIS GUARANTEE SHALL ALSO PROVIDE THAT WHERE DEFECTS OCCUR, THE CONTRACTOR WILL ASSUME RESPONSIBILITY FOR ALL EXPENSES INCURRED IN REPAIRING WORK OF OTHER TRADES AFFECTED BY DEFECTS, REPAIRS OR REPLACEMENTS IN EQUIPMENT SUPPLIED BY THE CONTRACTOR.

D. THE CONTRACTOR SHALL GIVE NECESSARY NOTICE, FILE DRAWINGS AND SPECIFICATIONS WITH THE DEPARTMENT HAVING JURISDICTION, OBTAIN PERMITS OR LICENSES NECESSARY TO CARRY OUT THIS WORK AND PAY ALL FEES THEREFORE. THE CONTRACTOR SHALL ARRANGE FOR INSPECTION AND TESTS OF ANY OR ALL PARTS OF THE WORK IF SO REQUIRED BY AUTHORITIES AND PAY ALL CHARGES FOR THE SAME. THE CONTRACTOR SHALL PAY ALL COSTS FOR, AND FURNISH TO THE OWNER BEFORE FINAL BILLING, ALL CERTIFICATES NECESSARY AS EVIDENCE THAT THE WORK INSTALLED CONFORMS WITH ALL REGULATIONS WHERE THEY APPLY TO THIS WORK.

3. SHOP DRAWINGS

A. PRIOR TO THE INSTALLATION OF ANY WORK AND PROCUREMENT OF EQUIPMENT PROVIDE COMPLETE SET OF COORDINATED SHOP DRAWINGS OF ALL NEW AND EXISTING EQUIPMENT, INDICATING CAPACITY DIMENSIONS AND SEQUENCE OF OPERATION FOR WRITTEN APPROVAL BY THE ARCHITECT AND OWNER.

B. INDICATE ON EACH SHOP DRAWINGS SUBMITTED

- 1) PROJECT NAME AND LOCATION.
- 2) NAME OF ARCHITECT AND ENGINEER.
- 3) ITEM IDENTIFICATION.
- 4) APPROVAL STAMP OF PRIME CONTRACTOR.

C. SUBMISSIONS

1) SUBMISSIONS 11 IN. X 17 IN. OR SMALLER: IF THE SUBMISSION IS A CATALOG CUT, THEN THE CONTRACTOR SHALL SUBMIT ONE ORIGINAL AND TWO COPIES. OTHERWISE, HE SHALL SUBMIT THREE COPIES. THE ARCHITECT WILL FORWARD THE ORIGINAL AND ONE COPY (TWO COPIES WHEN NO ORIGINAL IS RECEIVED) TO THE ENGINEER. ALL CATALOG CUTS SHALL BE COMPLETE.

2) SUBMISSIONS LARGER THAN 11 IN. X 17 IN.: SUBMIT TWO PRINTS AND ONE PAPER SEPIA TO THE ARCHITECT. THE ARCHITECT WILL FORWARD ONE PRINT AND THE PAPER SEPIA TO THE OWNER.

D. SUBMIT SHOP DRAWINGS FOR THE FOLLOWING:

- 1) PIPE AND FITTINGS.
- 2) VALVES.
- 3) SPRINKLER HEADS.
- 4) PIPING LAYOUTS.
- 5) HYDRAULIC CALCULATIONS.
- 6) SUPPORTS, HANGERS AND GUIDES.
- 7) FIRE EXTINGUISHERS AND CABINETS.
- 8) PUMPS AND CONTROLS.
- 9) PRE-ACTION SPRINKLER SYSTEM AND EQUIPMENT.
- 10) FIRE HOSE RACK ASSEMBLIES AND CABINETS.
- 11) FIRE PROTECTION EQUIPMENT AND ACCESSORIES.

4. AS-BUILT DRAWINGS AND EQUIPMENT OPERATIONAL INSTRUCTIONS

A. UPON COMPLETION AND ACCEPTANCE OF WORK, CONTRACTOR SHALL FURNISH WRITTEN INSTRUCTIONS AND EQUIPMENT MANUALS AND DEMONSTRATE TO THE OWNER THE PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND APPARATUS FURNISHED UNDER THIS CONTRACT.

B. THESE INSTRUCTIONS SHALL BE TYPED ON 8-1/2 IN. X 11 IN. PAPER AND BOUND IN THREE RING BINDERS WITH CLEAR ACETATE COVERS. CONTRACTOR SHALL GIVE THREE COPIES OF THE INSTRUCTIONS TO THE OWNER AND ONE COPY TO THE ARCHITECT.

C. THE INSTRUCTION BOOKLET SHALL BEAR THE NAME, ADDRESS AND TELEPHONE NUMBER OF THE PROJECT, ARCHITECT AND ENGINEER.

D. REPRODUCIBLE "AS-BUILT" DRAWINGS SHALL BE PROVIDED INDICATING THE AS INSTALLED CONDITIONS OF THE WORK. "AS-BUILT" DRAWINGS SHALL BE PROVIDED TO THE ARCHITECT AFTER COMPLETION OF THE INSTALLATION.

5. GENERAL PROVISIONS FOR FIRE PROTECTION WORK

B. SPECIFICATIONS ARE OF SIMPLIFIED FORM AND INCLUDE INCOMPLETE SENTENCES, WORDS OR PHRASES SUCH AS "THE CONTRACTOR SHALL," "SHALL BE," "FURNISH," "PROVIDE," "A," "THE," AND "ALL" HAVE BEEN OMITTED FOR BREVITY.

C. DEFINITIONS

- 1) "PROVIDE": TO SUPPLY, INSTALL AND CONNECT UP COMPLETE AND READY FOR SAFE AND REGULAR OPERATION THE PARTICULAR WORK REFERRED TO UNLESS SPECIFICALLY OTHERWISE NOTED.
- 2) "INSTALL": TO ERECT, MOUNT AND CONNECT COMPLETE WITH RELATED ACCESSORIES.
- 3) "FURNISH" OR "SUPPLY": TO PURCHASE, PROCURE, ACQUIRE AND DELIVER COMPLETE WITH RELATED ACCESSORIES.
- 4) "WORK": LABOR, MATERIALS, EQUIPMENT, APPARATUS, CONTROLS, ACCESSORIES AND OTHER ITEMS REQUIRED FOR PROPER AND COMPLETE INSTALLATION.
- 5) "CONCEALED": EMBEDDED IN MASONRY OR OTHER CONSTRUCTION, INSTALLED IN FURRED SPACES, WITHIN DOUBLE PARTITIONS OR HUNG CEILINGS, IN TRENCHES, IN CRAWL SPACES, OR IN ENCLOSURES.
- 6) "EXPOSED": NOT INSTALLED UNDERGROUND OR "CONCEALED" AS DEFINED ABOVE.
- 7) "SIMILAR" OR "EQUAL": EQUAL IN MATERIALS, WEIGHT, SIZE, DESIGN AND EFFICIENCY OF SPECIFIED PRODUCT.

A. QUALITY ASSURANCE

1) QUALITY AND GAUGE OF MATERIALS: NEW, BEST OF THEIR RESPECTIVE KINDS, FREE FROM DEFECTS AND IF APPLICABLE LISTED BY UNDERWRITERS LABORATORIES, INC., AND FACTORY MUTUAL INC. OR BEARING THEIR LABEL. MATERIALS AND EQUIPMENT OF SIMILAR APPLICATION SHALL BE OF SAME MANUFACTURER, EXCEPT AS NOTED.

2) GUARANTEE: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF WORK.

B. PRODUCT DELIVERY, STORAGE AND HANDLING

1) MOVING OF EQUIPMENT: WHERE NECESSARY, SHIP IN CARTED SECTIONS OF SIZE TO PERMIT PASSING THROUGH AVAILABLE SPACES.

2) ACCESSIBILITY: FOR OPERATION, MAINTENANCE AND REPAIR, MINOR DEVIATIONS SHALL BE PERMITTED. CHANGES OF MAGNITUDE OR INVOLVING EXTRA COST ARE NOT PERMISSIBLE WITHOUT REVIEW.

C. BRUSH AND CLEAN WORK PRIOR TO CONCEALING, PAINTING AND ACCEPTANCE. PAINTED EXPOSED WORK THAT IS SOILED OR DAMAGED. CLEAN AND REPAIR TO MATCH ADJOINING WORK BEFORE FINAL ACCEPTANCE. REMOVE DEBRIS FROM INSIDE AND OUTSIDE OF MATERIAL AND EQUIPMENT.

D. FINAL LOCATIONS AND MOUNTING ORIENTATIONS OF ALL VISIBLE FIRE PROTECTION EQUIPMENT BE VERIFIED BY ARCHITECT.

E. ALL ACCESS DOOR LOCATIONS SHALL BE REVIEWED BY ARCHITECT PRIOR TO INSTALLATION.

F. SPRINKLER SYSTEM DESIGN CRITERIA

1) ORDINARY HAZARD OCCUPANCIES: 130 SQ. FT./HEAD MAXIMUM COVERAGE; 0.15/SQ. FT. DENSITY OVER THE MOST REMOTE 1,500 SQ. FT. OF THE SYSTEM.

2) LIGHT HAZARD OCCUPANCIES: 225 SQ. FT./HEAD MAXIMUM COVERAGE; 0.10/SQ. FT. DENSITY OVER THE MOST REMOTE 1,500 SQ. FT. OF THE SYSTEM.

6. PRODUCTS

A. ESCUTCHEONS

1) ALL EXPOSED PIPING PASSING THROUGH WALLS, FLOORS, PARTITIONS AND CEILING SHALL BE PROVIDED WITH CHROME PLATED CAST BRASS ESCUTCHEONS HELD IN PLACE WITH SETSCREWS.

B. GAUGES

1) PROVIDE CENTRAL MODEL 2341 WATER PRESSURE GAUGE WHERE INDICATED ON THE DRAWINGS.

2) SHUT-OFF COCKS SHALL BE PROVIDED BETWEEN GAUGES AND PIPING TO PERMIT GAUGE REMOVAL WHILE SYSTEM IS UNDER PRESSURE.

C. WATER FLOW SWITCH

1) PRESSURE TYPE: PROVIDE POTTER MODEL PS10-2 PRESSURE TYPE FLOW SWITCH WITH TWO SETS OF S.P.D.T. CONTACTS.

2) VANE TYPE: PROVIDE POTTER MODEL VSR-F VANE TYPE WATER FLOW SWITCH WITH RETARD.

D. TAMPER SWITCH

1) OS&Y VALVES: PROVIDE POTTER MODEL PS10-2 PRESSURE TYPE FLOW SWITCH WITH TWO SETS OF S.P.D.T. CONTACTS.

7. VALVES

A. GATE VALVES

1) 2 IN. AND SMALLER: PROVIDE STOCKHAM FIGURE B-133 175 WWP BRONZE OS&Y GATE VALVE WITH THREADED ENDS, ASTM B-62, CLASS 175.

2) 2-1/2 IN. AND LARGER: PROVIDE STOCKHAM FIGURE G-634 174 IRON BODY OS&Y GAGE VALVE WITH FLANGED ENDS, ASTM B-126, RATED 175.

B. CHECK VALVES

1) 2" AND SMALLER: PROVIDE SWING TYPE ALL BRONZE, REGRINDABLE SEAT, RENEWABLE DISC, 175 PSI.

2) 2 1/2" AND LARGER: PROVIDE ASTM-126 IRON BODY WITH COMPOSITION TYPE DISC, UNO.

C. PRESSURE REDUCING VALVES (PRV)

1) 2-1/2 AND 3 IN.: PROVIDE FORD REGULATOR VALVE CORP. FIGURE NO. 33 "33 XOMATIC" ALL BRONZE PRESSURE REDUCING VALVE WITH 33 LB. FLANGED ENDS (REFER TO RISER DIAGRAM FOR PRV SETTING).

2) DOWN STREAM OF EACH PRV, PROVIDE A POTTER ROEMER, FIGURE 4059 3/4 IN. SPRINKLER SYSTEM PRESSURE RELIEF VALVE SET AT 175 PSI.

D. DRAIN VALVES

1) 2 IN. AND SMALLER: PROVIDE STOCKHAM FIGURE B-64 (GLOBE)/B-264 (ANGLE) 200 WWP BRONZE GLOBE VALVE WITH THREADED ENDS.

E. TEST/DRAIN VALVES

1) 1 IN.: PROVIDE G/J INNOVATIONS "SURE-TEST" INSPECTORS TEST AND DRAIN VALVE.

F. ALL FIRE PROTECTION VALVES SHALL BE U.L. LISTED.

G. INSTALLATION

1) ALL VALVES SHALL BE INSTALLED IN THE UPRIGHT VERTICAL OR HORIZONTAL POSITIONS UNLESS OTHERWISE NOTED ON THE DRAWINGS.

2) ALL VALVES SHALL BE INSTALLED IN ACCESSIBLE LOCATIONS TO FACILITATE EASY REMOVAL FOR REPAIR OR REPLACEMENT.

3) THE HAND WHEEL OF ALL FLOOR CONTROL VALVES SHALL NOT EXCEED A HEIGHT OF 7 FT. 0 IN. ABOVE THE FINISHED FLOOR.

8. PIPE AND FITTINGS

A. FOR PIPE SIZES 2" AND SMALLER.

SCHEDULE 40 STANDARD WEIGHT BLACK STEEL PIPE, WELDED OR SEAMLESS, WITH STANDARD FLAT BAND THREADED MALLEABLE IRON COUPLINGS OR RIGID ROLLED GROOVE STANDARD WEIGHT MECHANICAL COUPLINGS.

B. FOR PIPE SIZES 2 1/4" AND LARGER.

SCHEDULE 10 LIGHTWEIGHT BLACK STEEL PIPE, WELDED OR SEAMLESS, WITH RIGID GROOVE STANDARD WEIGHT MECHANICAL COUPLINGS.

C. THE FOLLOWING PRODUCTS ARE NOT ACCEPTABLE:

- 1) FIT PIPING SYSTEM.
- 2) PLAIN END PIPING SYSTEM.
- 3) BOLT LESS COUPLINGS.
- 4) HOOKER FITTINGS.

D. ACCEPTABLE MANUFACTURERS: VICTALULIC CO., STOCKHAM.

9. SPRINKLER HEADS

A. REFER TO SPRINKLER HEAD SCHEDULE ON CONTRACT DRAWINGS.

B. INSTALLATION

1) COORDINATED SPRINKLER HEAD SCHEDULE ON CONTRACT DRAWINGS.

2) INSTALL SPRINKLER HEADS IN THE CENTER OF CEILING TILES AND IN A TRUE AXIS LINE IN BOTH DIRECTIONS WITH A MAXIMUM DEVIATION OF 1/2 IN. PLUS OR MINUS FROM THE AXIS LINE AS ESTABLISHED BY THE ARCHITECT FOR USE OF ALL TRADES. AT THE COMPLETION OF THE INSTALLATION, REMOVE AND REINSTALL ANY HEADS FOUND TO EXCEED THE ABOVE-MENTIONED TOLERANCE. INSTALL FLUSH PLATE SPRINKLER HEADS WITHIN MANUFACTURER'S TOLERANCES. PRIOR TO INSTALLATION OF FLUSH PLATES, NOTIFY CONSULTING ENGINEER FOR VERIFICATION OF INSTALLATION. ANY HEADS FOUND OUT OF TOLERANCE SHALL BE REMOVED AND REINSTALLED.

10. PIPING SUPPORTS

A. SUPPORT ALL PIPING FROM BUILDING CONSTRUCTION BY PROVIDING INSERTS, BEAM CLAMPS, STEEL FISHPLATES (IN CONCRETE FILL ONLY), AND ACCEPTABLE BRACKETS. SUBMIT ALL METHODS FOR REVIEW.

B. PROVIDE ADDITIONAL FRAMING WHERE BUILDING CONSTRUCTION IS INADEQUATE. SUBMIT FOR REVIEW.

C. SUSPEND HORIZONTAL PIPING.

1) SUPPORT ALL PIPING INDEPENDENTLY FROM STRUCTURE USING HEAVY IRON-HINGED TYPE HANGERS, SIMILAR TO GRINNEL CLEVIS NO. 260.

2) PROVIDE ELECTROPLATED SOLID BAND HANGERS SIMILAR TO AUTO-GRIP, FOR TWO-IN. AND SMALLER PIPE.

3) PROVIDE WALL BRACKETS FOR ALL SUPPORTED PIPING, AND PROVIDE PIPE SADDLES FOR FLOOR-MOUNTED PIPING.

4) SUSPEND PIPING FROM INSERTS, USING BEAM CLAMPS WITH RETAINING CLAMP OR LOCKNUT, STEEL FISH PLATES, CANTILEVER BRACKETS OR OTHER ACCEPTED MEANS. BEAM CLAMPS SHALL BE SIMILAR TO GRINNEL FIGURES 61, 67, 131, OR 225.

5) SUSPEND PIPING BY RODS WITH DOUBLE NUTS.

6) PROVIDE ADDITIONAL STEEL FRAMING AS REQUIRED AND ACCEPTED WHERE OVERHEAD CONSTRUCTION DOES NOT PERMIT FASTENING HANGER RODS IN REQUIRED LOCATIONS.

7) MAXIMUM HANGER SPACING AS INDICATED.

- A. PIPE 1 IN. AND SMALLER SHALL BE EVERY 8 FEET.
- B. PIPE 1-1/4 IN. AND LARGER SHALL BE EVERY 10 FEET.

8) VERTICAL PIPING

A. PROVIDE EXTENSION PIPE CLAMPS BOLTED TO BARE PIPE ON EACH SIDE AND BEARING EQUALLY ON STRUCTURE OR WELDED TO BEAM. PROVIDE SPACING AS INDICATED.

(1) THREADED AND PIPING GROOVED PIPING SHALL BE SUPPORTED AT EVERY OTHER FLOOR LEVEL, AT A MAXIMUM OF 25 FEET ON CENTERS.

D. EXPANSION ANCHORS

1) PROVIDE SMOOTH WALL, NON-SELF-DRILLING INTERNAL PLUG EXPANSION TYPE ANCHORS CONSTRUCTED OF AISC 12L14 STEEL AND ZINC PLATED IN ACCORDANCE WITH FED. SPEC. 11-A-325 TYPE 1, CLASS 3.

2) DO NOT EXCEED 1/4 OF AVERAGE VALVES FOR A SPECIFIC ANCHOR SIZE USING 2000 PSIG (13,800 KPA) CONCRETE ONLY, FOR MAXIMUM WORKING LOADS.

3) PROVIDE SPACING AND INSTALL ANCHORS IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

4) EXPANSION ANCHORS SHALL BE U.L. LISTED AND SIMILAR TO HILTI HDI.

11. INSTALLATION

A. DURING CONSTRUCTION, PROPERLY CAP ALL LINES AND EQUIPMENT NOZZLES SO AS TO PREVENT THE ENTRANCE OF DIRT, DEBRIS, ETC.

B. EACH SYSTEM OF PIPING SHALL BE FLUSHED (FOR THE PURPOSE OF MOVING DIRT, DEBRIS, ETC., FROM THE PIPING) FOR AS LONG A TIME AS REQUIRED TO THOROUGHLY CLEAN THE SYSTEM.

12. TESTS

A. FIRE PROTECTION SYSTEM PIPING SHALL BE HYDROSTATICALLY AT A PRESSURE OF 200 PSI FOR A DURATION OF TWO HOURS WITHOUT A LOSS IN PRESSURE.

B. DEFECTS DISCLOSED BY THE TESTS SHALL BE REPAIRED OR REPLACED TESTS SHALL BE REPEATED AS DIRECTED UNTIL ALL WORK IS PROVEN SATISFACTORY.

C. TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO THE BUILDING AND ITS CONTENTS AS A RESULT OF SUCH TESTS. REPAIR ANY DAMAGE CAUSED.

D. ARRANGE AND COORDINATE TESTS WITH OWNER 48 HOURS IN ADVANCE. NOTIFY ENGINEER AND ARCHITECT OF TEST DATE AND TIME.

E. THE PRE-ACTION SPRINKLER SYSTEM SHALL BE TESTED FOR COMPLIANCE WITH THE SEQUENCE OF OPERATION PROVIDED ON THE DRAWINGS.

A. PRE-ACTION OF SYSTEMS, SUBSYSTEMS, AND EQUIPMENT AND TRAINING IN OPERATION AND MAINTENANCE OF SYSTEMS, SUBSYSTEMS, AND EQUIPMENT.

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SEAL



PROJECT NAME AND ADDRESS

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ISSUES/REVISIONS

NO.	DESCRIPTION	DATE
-	DESIGN DEVELOPMENT	09/06/24
-	PERMIT/BID SET	03/28/25
1	REVISION 1	07/18/25

TITLE

FIRE PROTECTION SPECIFICATIONS

PROJECT

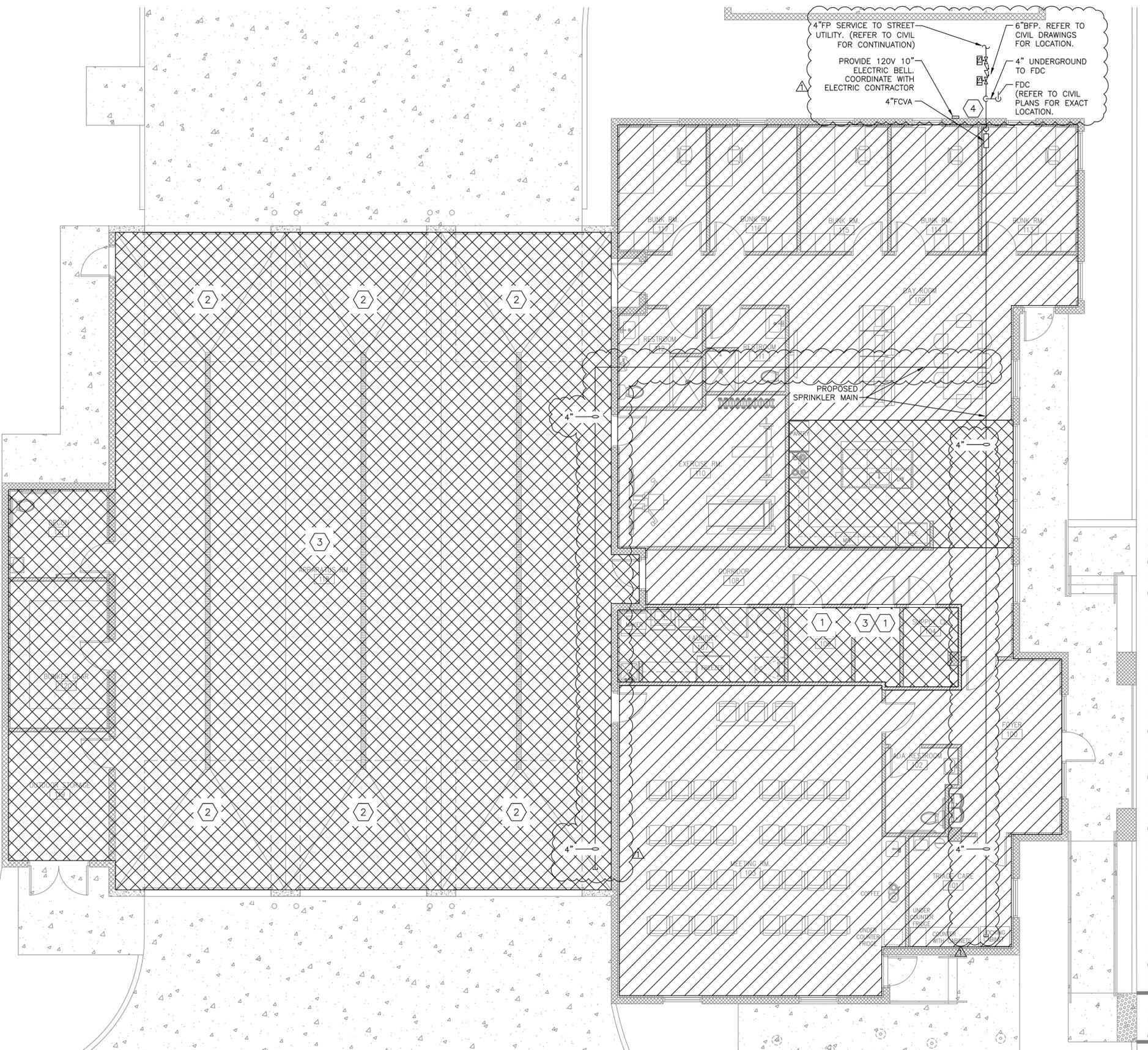
24026

SCALE

NONE

SHEET

FPO.2



GENERAL NOTES:

- REFER TO FP-0.1 FOR FIRE PROTECTION NOTES, LEGENDS AND ABBREVIATIONS.
- REFER TO SCHEDULES AND FIRE PROTECTION DETAILS PERTAINING TO THIS PROJECT.
- CONTRACTOR SHALL PROVIDE ALL REQUIRED PIPING, VALVES, & APPURTENANCES TO PROVIDE A COMPLETE WORKING SYSTEM.
- ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND SHALL MAINTAIN ALL CLEARANCES (INSTALLATION AND MAINTENANCE) AS NOTED WITHIN THE WRITTEN INSTRUCTIONS.
- ALL PENETRATIONS OF FIRE RATED CONSTRUCTION SHALL MAINTAIN THE FIRE RATING OF THE ASSEMBLY AS PER THE FLORIDA BUILDING CODE.
- COORDINATE FIRE ALARM RELATED INSTALLATION WITH ELECTRICAL CONTRACTOR AND DESIGN DRAWINGS.
- ALL VALVES SHALL BE INSTALLED ACCESSIBLE.
- ALL PIPE SIZES REPRESENTED ON THE DRAWINGS AND RISER DIAGRAMS ARE FOR REFERENCE ONLY. CONTRACTOR SHALL DETERMINE THE REQUIRED SIZE PER HYDRAULIC CALCULATIONS. COORDINATE WITH LOCAL FIRE DEPARTMENT FOR FDC SIZE.
- WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLES ACCUMULATE.
- WHERE UNDERGROUND WATER MAINS AND HYDRANTS ARE TO BE PROVIDED, THEY SHALL BE FURNISHED, INSTALLED, COMPLETED, AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
- CUTTING AND WELDING SHALL COMPLY WITH THE NFPA.
- SEPARATE PERMITS ARE REQUIRED FOR THE FIRE ALARM AND SPRINKLER SYSTEMS.
- ALL COMBUSTIBLE CONCEALED SPACES SHALL BE PROVIDED WITH SPRINKLERS.
- SPRINKLER SYSTEM COMPONENTS SHALL BE INSTALLED TO MAINTAIN REQUIRED CLEARANCE FROM THE SPRAYED INSULATION.
- DO NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS OR EQUIPMENT.

FIRE PROTECTION KEYNOTES:

- FIRE PROTECTION CONTRACTOR SHALL NOT INSTALL ANY PIPING OVER ELECTRICAL PANELS OR EQUIPMENT IN THIS ROOM.
- FIRE PROTECTION CONTRACTOR TO PROVIDE SPRINKLER COVERAGE BELOW APPARATUS BAY VEHICLE DOORS IN ACCORDANCE WITH NFPA 13.
- PROVIDE INTERMEDIATE TEMPERATURE (200°F) SPRINKLER
- WET SYSTEM RISER. SIZE OF SYSTEM RISER SHALL BE DETERMINED BY HYDRAULICALLY CALCULATING MOST REMOTE/DEMANDING AREAS OF SPRINKLER SYSTEM USING FLOW TEST PERFORMED AT PEAK HOURS OF WATER USAGE. A SAFETY MARGIN WITH AN EXCESS RESIDUAL OF 10 PSI SHALL BE CALCULATED TO ALLOW FOR FUTURE GROWTH IN THE AREA AND/OR FLUCTUATIONS IN THE AVAILABLE SUPPLY. SEE SYSTEM RISER DETAIL SHEET FOR REQUIRED COMPONENTS. COORDINATE LOCATION AND PIPE ROUTING WITH MECHANICAL CONTRACTOR. PROVIDE INSPECTOR'S TEST ON FIRE RISER. CONTRACTOR SHALL PAINT FOR FIRE RISER CLEARANCE BOUNDARY ON FLOOR.

PIPE SIZES AND LOCATIONS SHOWN ARE FOR REFERENCE ONLY. CONTRACTOR SHALL DETERMINE REQUIRED SIZE PER HYDRAULIC CALCULATIONS. COORDINATE WITH LOCAL FIRE DEPARTMENT FOR FDC SIZE.

61G15-32.004 COMPLIANCE NOTES:

- SPRINKLER SYSTEM(S) LAYOUT SHALL BE SUBMITTED BY A STATE OF FL LICENSED FIRE PROTECTION CONTRACTOR. BUILDING SHALL BE FULLY SPRINKLED BY A WET PIPE SPRINKLER SYSTEM. CONTRACTOR SHALL LAYOUT AND PROVIDE AUTOMATIC WET PIPE FIRE SPRINKLER SYSTEM COMPLIANT WITH ALL APPLICABLE CODES SET FORTH BY THE AUTHORITY HAVING JURISDICTION (AHJ). DISCHARGE FROM INDIVIDUAL SPRINKLERS IN THE HYDRAULICALLY MOST REMOTE/DEMANDING AREA SHALL BE HYDRAULICALLY CALCULATED TO NOT LESS THAN 10 PSI SAFETY FACTOR FOR GROWTH OR FLUCTUATIONS IN THE SUPPLY PRESSURE TO THE SPRINKLER SYSTEM AS APPROVED BY THE LOCAL AHJ. FIRE SPRINKLER SYSTEM SHALL INCLUDE MATERIALS, ACCESSORIES, AND EQUIPMENT INSIDE AND OUTSIDE THE BUILDING TO PROVIDE A COMPLETE AND READY FOR USE SPRINKLER SYSTEM. CONTRACTOR SHALL LAYOUT AND PROVIDE EACH SYSTEM TO GIVE FULL CONSIDERATION TO BLIND SPACES, PIPING, ELECTRICAL EQUIPMENT, DUCTS, HVAC EQUIPMENT, PLUMBING EQUIPMENT, ACCESS SPACE NEEDED FOR MAINTENANCE OF EQUIPMENT AND OTHER CONSTRUCTION AND EQUIPMENT IN ACCORDANCE WITH DETAILED WORKING DRAWINGS TO BE SUBMITTED FOR APPROVAL. CONTRACTOR SHALL LOCATE SPRINKLER HEADS IN A CONSISTENT PATTERN WITHIN THE CEILING GRID, LIGHTS, DIFFUSERS, REGISTERS, GRILLES, AND ARCHITECTURAL FEATURES. DEVICES AND EQUIPMENT UTILIZED FOR FIRE PROTECTION SERVICES SHALL BE U.L. LISTED AND F.M. APPROVED FOR USE IN A WET SPRINKLER PIPE SYSTEM.
- THE AUTOMATIC FIRE SUPPRESSION SYSTEM SHALL BE TESTED IN ACCORDANCE WITH ALL NOTABLE VERSIONS OF THE NFPA INCLUDING NFPA 13 AND NFPA 25.
- REFER TO HYDRAULIC DESIGN DATA LEGEND ON FP0.1 FOR HAZARD CLASSIFICATIONS AND REQUIRED DENSITIES. REFER TO FP0.1 AND FP0.2 FOR ALL RELEVANT CODES.
- ALL SPRINKLER PIPING SHALL BE ADEQUATELY SUPPORTED.
- THE "POINT OF SERVICE" SHALL BE CONSIDERED THE VALVE ON THE DOUBLE DETECTOR CHECK VALVE ASSEMBLY LOCATED AT THE NORTH EAST CORNER OF THE BUILDING.
- THE INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA 13, 2019 EDITION.
- HAZARD CLASSIFICATIONS SHALL BE FOR EACH ROOM OR AREA AS NOTED ON PLAN WITH THE HATCHES RESPECTIVELY.
- LIGHT HAZARD DESIGN APPROACH: THE SPRINKLER SYSTEM SHALL BE SUPPLIED BY A WET SPRINKLER RISER. THE WET SPRINKLER MAINS, BRANCH PIPING, FITTINGS AND SPRINKLERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SHALL BE UL LISTED. SPRINKLERS SHALL HAVE A K-FACTOR OF 5.6 AND BE PROVIDED WITH SPRINKLER HEAD GUARDS WHERE EXPOSED TO POSSIBLE DAMAGE. SPRINKLERS SHALL BE RATED AT 155 DEGREES UNLESS OTHERWISE NOTED ON PLAN. MAXIMUM SPRINKLER HEAD SPACING SHALL NOT EXCEED 225 SQUARE FEET WITH A 0.1 DENSITY. THE SPRINKLER CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS. 1500 SQUARE FEET SHALL BE CALCULATED WHEN PERFORMING HYDRAULIC CALCULATIONS WITH REQUIRE REMOTE AREA INCREASES OR ALLOWABLE DECREASES AS PER THE NFPA.
- ORDINARY HAZARD DESIGN APPROACH: THE SPRINKLER SYSTEM SHALL BE SUPPLIED BY A WET SPRINKLER RISER. THE WET SPRINKLER MAINS, BRANCH PIPING, FITTINGS AND SPRINKLERS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SHALL BE UL LISTED. SPRINKLERS SHALL HAVE A K-FACTOR OF 5.6 AND BE PROVIDED WITH SPRINKLER HEAD GUARDS WHERE EXPOSED TO POSSIBLE DAMAGE. SPRINKLERS SHALL BE RATED AT 155 DEGREES UNLESS OTHERWISE NOTED ON PLAN. MAXIMUM SPRINKLER HEAD SPACING SHALL NOT EXCEED 130 SQUARE FEET WITH A 0.15 DENSITY. THE SPRINKLER CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS. 1500 SQUARE FEET SHALL BE CALCULATED WHEN PERFORMING HYDRAULIC CALCULATIONS WITH REQUIRE REMOTE AREA INCREASES OR ALLOWABLE DECREASES AS PER THE NFPA.
- AN EXISTING 12" WATER MAIN IS ROUTED IN STRINGFELLOW ROAD. A PROPOSED 6" SITE FIRE SERVICE LINE SHALL CONNECT TO THE WATER MAIN. THE 6" SITE FIRE MAIN IS PROPOSED TO RUN A TOTAL OF 750' THROUGHOUT THE SITE TO SERVE (2) 6" PRIVATE FIRE HYDRANTS AND ALSO SUPPLY THE PROPOSED 4" FIRE SERVICE TO THE BUILDING. THE BUILDING 4" FIRE MAIN TAPS OFF THE PROPOSED 6" SITE FIRE SERVICE AT THE NORTH EAST CORNER OF THE BUILDING AND IS PROVIDED WITH A DOUBLE DETECTOR CHECK ASSEMBLY FOR BACKFLOW PREVENTION. THE BUILDING SUPPLY MAIN IS ROUTED APPROXIMATELY 30' TO THE BUILDING FROM THE 6" SITE FIRE SERVICE.
- FLOW TEST DATA CAN BE FOUND ON DRAWING FP0.1. CONTRACTOR SHALL PROVIDE A HARD COPY OF CURRENT FLOW TEST IF SHOP DRAWINGS ARE SUBMITTED IN EXCESS OF 150 DAYS OF FLOW TEST.
- ALL VALVES WITH POTENTIAL TO CONTROL WATER SUPPLY SHALL HAVE A RED TAMPER PROOF COVER WHICH WILL ACTIVATE AN ALARM OR TROUBLE SIGNAL WHEN ADJUSTED.
- LEE COUNTY UTILITIES AND GREATER PINE ISLAND WATER ASSOCIATION WERE CONTACTED AND ARE NOT AWARE OF ANY MICROBIAL INDUCED CORROSION.
- A DOUBLE DETECTOR CHECK VALVE ASSEMBLY IS ANTICIPATED. THE MAXIMUM PRESSURE DROP FOR A 4" DOUBLE DETECTOR CHECK VALVE ASSEMBLY PER LEE COUNTRY UTILITIES ACCEPTABLE MANUFACTURERS IS 12 PSI.
- ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS SHALL BE NEW U.L. LISTED AND FM APPROVED. A YARD FIRE DEPARTMENT CONNECTION IS PROVIDED. REFER TO PLANS FOR LOCATION.
- IT IS ANTICIPATED A FIRE PUMP IS NOT REQUIRED BASED ON THE FLOW TEST PROVIDED AND THE DEMANDS OF THE BUILDING. FIRE SPRINKLER CONTRACTOR SHALL CONFIRM WITH HYDRAULIC CALCULATIONS. IT IS ANTICIPATED FIRE WATER STORAGE IS NOT REQUIRED BASED ON ESTIMATED DEMAND.

ESTIMATE OF SYSTEM DEMAND: Q (GPM)
 $Q = \text{DENSITY} \times \text{REMOTE AREA} \times \text{OVERAGE FACTOR} + \text{HOSE STREAM} = \text{MINIMUM GPM}$
OVERAGE FACTOR:
 LIGHT HAZARD: 1.2
 ORDINARY HAZARD: 1.3

REMOTE AREA 1: APPARATUS BAY
 DENSITY: ORDINARY HAZARD GROUP 0.15 GPM/SF
 REMOTE AREA: 1500 SF
 OVERAGE FACTOR: 1.3

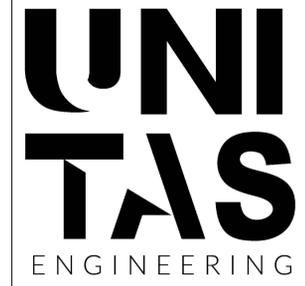
$Q = 0.15 \text{ (GPM/SF)} \times 1500 \text{ (SF)} \times 1.3 + 250 \text{ (GPM)} = 542.5 \text{ GPM}$

REMOTE AREA 2: BUNK ROOMS/DAY ROOM/RESTROOM/EXERCISE ROOM
 DENSITY: ORDINARY HAZARD GROUP 0.10 GPM/SF
 REMOTE AREA: 1500 SF
 OVERAGE FACTOR: 1.2

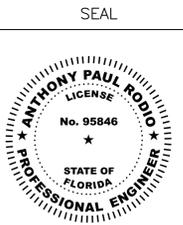
$Q = 0.10 \text{ (GPM/SF)} \times 1500 \text{ (SF)} \times 1.2 + 100 \text{ (GPM)} = 280 \text{ GPM}$

THE ABOVE LOCATION IS BASED ON A REMOTE AREA OF 1500 SF. CONTRACTOR HAS THE OPTION TO REDUCE THE REMOTE AREA IN ACCORDANCE WITH NFPA 13, 11.2.3.2.3.1.

- FIRE SPRINKLER CONTRACTOR SHALL SUBMIT OWNER'S CERTIFICATE WITH SHOP DRAWINGS CLEARLY DEFINING STORAGE CONFIGURATION OF THE SPACE FOR THE CURRENT AND FUTURE USE OF THE PROPERTY, AS REQUIRED BY THE CODES AND STANDARDS SET FORTH IN 61G15.



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ISSUES/REVISIONS		
NO.	DESCRIPTION	DATE
-	DESIGN DEVELOPMENT	09/06/24
-	PERMIT/BID SET	03/28/25
1	REVISION 1	07/18/25

TITLE	
FIRE PROTECTION FLOOR PLAN	
PROJECT	SHEET
24026	FP1.0
SCALE	AS NOTED

1 FIRE PROTECTION FLOOR PLAN
 FP1.0 SCALE: 3/16" = 1' 0"