

FIRE PROTECTION SYMBOL LEGEND		FIRE PROTECTION NOTES		FIRE PROTECTION ABBREVIATIONS		APPLICABLE CODES AND STANDARDS		
SYMBOL	DESCRIPTION			SYMBOL	DESCRIPTION			
D	- DRAIN LINE	1.	FINAL INSPECTION AND APPROVAL BY LOCAL FIRE MARSHAL AND ARCHITECT/ENGINEER.	AFF	- ABOVE FINISH FLOOR		ALL WORK CONTAINED WITHIN THESE DOCUMENTS SHALL BE IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL CODES AND STANDARDS INCLUDING, BUT NOT LIMITED TO THE FOLLOWING.	
FDC	- FIRE DEPARTMENT SIAMESE CONNECTION PIPING	2.	SPRINKLER SHOP DRAWINGS AND MATERIAL SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER AND STATE FIRE MARSHAL AND SHALL BE APPROVED PRIOR TO ANY INSTALLATION. ELECTRONIC SUBMITTALS SHALL BE IN A SEARCHABLE FORMAT. DO NOT SUBMIT SCANNED DOCUMENTS.	CONT	- CONTINUATION		1. GEORGIA FIRE PREVENTION CODE, FIFTH EDITION	
FM	- FIRE MAIN	3.	PIPE ROUTING SHOWN IS SCHEMATIC ONLY. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE ANY ADDITIONAL OFFSETS REQUIRED FOR PROPER INSTALLATION AND COORDINATION WITH OTHER TRADES.	DN	- DOWN		2. NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS, 2018 EDITION	
SM	- SPRINKLER MAIN	4.	PIPING IN AREAS WITH EXPOSED STRUCTURE SHALL BE INSTALLED AS HIGH AS POSSIBLE TO ALLOW THE OWNER MAXIMUM USE OF THE SPACE.	DWG	- DRAWING		3. NFPA 24, STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES, 2018 EDITION	
TEST	- FIRE PUMP TEST HEADER PIPING	5.	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING DESCRIPTIONS AND HEIGHTS.	EXIST	- EXISTING		4. NFPA 25, STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS, 2018 EDITION	
X-D	- EXISTING DRAIN LINE	6.	SPRINKLERS ARE TO BE COORDINATED WITH ALL DIFFUSERS, SPEAKERS, LIGHTING FIXTURES AND CEILING SYSTEMS. ALL OTHER TRADES TAKE PRECEDENCE OVER SPRINKLER HEAD LOCATION UNLESS INDICATED OTHERWISE ON DRAWINGS. SPACING OF SPRINKLERS SHALL BE IN ACCORDANCE WITH NFPA 13 AND THE LISTING OF THE SPRINKLER.	F	- DEGREE FAHRENHEIT		5. FM DATA SHEETS 2-0 AND 3-26	
X-FDC	- EXISTING FIRE DEPARTMENT SIAMESE CONNECTION PIPING	7.	SPRINKLER HEADS SHALL BE SYMMETRICALLY LOCATED IN ROOM OR AREA BEING PROTECTED. SPRINKLER LOCATIONS SHALL BE CENTERED IN THE TILE. PROVIDE ARMORER OR SWING JOINT AS REQUIRED.	GPH	- GALLONS PER HOUR			
X-FM	- EXISTING FIRE MAIN	8.	SPRINKLERS IN AREAS WITH EXPOSED STRUCTURE (OBSTRUCTED CONSTRUCTION) SHALL BE INSTALLED WITH DEFLECTOR 1" BELOW THE BOTTOM OF THE BEAM (MAXIMUM 22" BELOW ROOF DECK). EXPOSED BAR JOISTS THAT HAVE SPRAY-ON FIRE PROOFING THAT MAKES THE JOIST SOLID SHALL BE TREATED LIKE A BEAM WITH THE SPRINKLERS 1" BELOW THE BOTTOM OF THE FIRE PROOFING.	GPM	- GALLONS PER MINUTE			
X-SM	- EXISTING SPRINKLER MAIN	9.	SLEEVE AND/OR FIRESTOP ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOORS WITH U/L LISTED ASSEMBLIES. FIRESTOP ASSEMBLIES SHALL BE EQUAL OR EXCEED THE RATING OF THE WALL, CEILING OR FLOOR. SEE ARCHITECTURAL DRAWINGS FOR FINAL FINISHES.	KW	- KILOWATT			
X-TEST	- EXISTING FIRE PUMP TEST HEADER PIPING	10.	PROVIDE SPRINKLER GUARDS ON ALL HEADS IN ELECTRIC ROOMS, TELEPHONE ROOMS, AND ON ANY HEADS LESS THAN 7'-0" ABOVE THE FLOOR.	LBS	- POUNDS			
OR	- CONTROL VALVE W/ TAMPER SWITCH	11.	COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES. ANY PIPING RUN OVER ELECTRICAL SHALL BE REROUTED AT NO ADDITIONAL COST. PIPING ENTERING ELECTRICAL AND COMMUNICATION ROOMS SHALL BE PROVIDED WITH INDICATING TYPE CONTROL VALVE WITH TAMPER SWITCH AND ENTER OVER ENTRY DOOR. SPRINKLER HEADS IN ELECTRICAL AND COMMUNICATION SHALL BE INTERMEDIATE TEMPERATURE.	NC	- NORMALLY CLOSED			
Z	- CHECK VALVE	12.	THE FIRE PROTECTION SYSTEMS AND INFORMATION SHOWN WITHIN THESE DRAWINGS AND THE SPECIFICATIONS, REPRESENT THE DESIGN INTENT OF THE ENGINEER OF RECORD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUBMIT LAYOUT DRAWINGS TO THE AUTHORITY HAVING JURISDICTION FOR PERMITTING AND REVIEW. THE LAYOUT DRAWINGS SHALL BE IN COMPLIANCE WITH NFPA 13, WORKING PLANS.	NIC	- NOT IN CONTRACT			
◇	- FLOW SWITCH	13.	ALL VALVES SHALL BE PROVIDED WITH TAMPER SWITCHES AND ALL ZONES SHALL BE PROVIDED WITH FLOW SWITCHES WIRED TO THE FIRE ALARM SYSTEM.	NO	- NOT TO SCALE			
Y	- FIRE DEPARTMENT CONNECTION (WALL MOUNTED)	14.	NOTIFY OWNER AT LEAST 48 HOURS PRIOR TO INTERRUPTING EXISTING SERVICES. SCHEDULE DISCONNECTING AND TIE-INS TO MINIMIZE DISRUPTION OF SERVICE. SERVICES ARE NOT TO BE LEFT DISRUPTED DURING NON-NORMAL CONTRACTOR WORKING HOURS. IF DISRUPTION IS EXCEEDS 4 HOURS CONTRACTOR SHALL PROVIDE A FIRE WATCH FOR UNTIL ALL SERVICES ARE RESTORED. CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM OWNER FOR INTERRUPTION OF SERVICE.	NTS	- NOT TO SCALE			
Y	- FIRE DEPARTMENT CONNECTION (SIDEWALK SIAMESE)	15.	A MINIMUM CLEARANCE OF 4 INCHES BETWEEN ALL CONDUITS, PIPING AND DUCT WORK THAT ARE PARALLEL OR ADJACENT TO ALL FIRE AND FIRE/SMOKE-RATED WALLS TO FACILITATE THE INSPECTION OF THESE WALL.	PRV	- PRESSURE REDUCING VALVE			
V	- FIRE VALVE CABINET	16.	PROVIDE LIGHTNING PROTECTION ON ALL VTR'S, EXHAUST PIPES, AIR INTAKE PIPES, WATER HEATER FLUE'S AND INTAKES THAT EXTEND OVER 10' ABOVE FINISH ROOF AS REQUIRED BY CODE. COORDINATE WITH ELECTRICAL FOR ADDITIONAL INFORMATION.	PSI	- POUNDS PER SQUARE INCH			
W	- STANDPIPE WITH FIRE DEPARTMENT VALVE			PVC	- POLYVINYL CHLORIDE PIPE			
X	- SPRINKLER DRAIN RISER			RPBP	- REDUCED PRESSURE BACKFLOW PREVENTER			
Y	- COMBINATION RISER			SF	- SQUARE FEET			
Z	- DRAIN VALVE			SH	- SHEET			
AA	- BACKFLOW PREVENTOR			WTR	- WATER			
BB	- BACKFLOW PREVENTOR W/ FDC			ETR	- EXISTING TO REMAIN			
CC	- REVISION REFERENCE							
DD	- DETAIL REFERENCE CALLOUT							
EE	- SHEET SHOWN ON							
FF	- HYDRAULIC CALCULATION NODE							
GG	- PIPE TAG							
HH	- PIPE LENGTH BETWEEN NODES							
II	- CONNECT TO EXISTING							
JJ	- DEMOLISH TO POINT INDICATED							
SPRINKLER HEAD LEGEND								
SYMBOL	STYLE	ORF	TEMP	RESPONSE	K-FAC	FINISH	MFG	MFG
●	SEMI-RECESSED	1/2"	155°	QUICK	5.6	CHROME	VICTAULIC	V2708
⊗	UPRIGHT W/ GUARD	1/2"	155°	QUICK	5.6	BRASS	VICTAULIC	V2704/V2722

DELEGATED DESIGN NOTES

FIRE PROTECTION CONTRACTOR SHALL DESIGN A FULLY AUTOMATIC WET-PIPE SPRINKLER SYSTEM TO THE CRITERIA SPECIFIED UNDER FIRE PROTECTION DATA THIS SHEET AND THE FOLLOWING DESIGN CRITERIA.

1. PIPING SYSTEM(S) WITH VELOCITIES OVER 30 FT/S SHALL USE THE DARCY-WEISBACH FRICTION LOSS METHOD.
2. HYDRAULIC CALCULATIONS SHALL BE BASED ON DENSITY/AREA METHOD.
3. EXTENDED COVERAGE SPRINKLER HEADS ARE PROHIBITED.
4. MINIMUM PIPE SIZING SHALL BE AS FOLLOWS: LARGER PIPE SIZING SHALL BE PROVIDED (AS DETERMINED BY HYDRAULIC CALCULATIONS) IF REQUIRED AT NO ADDITIONAL COST. BRANCH LINE SIZING SHALL BE ONE TO TWO SPRINKLER HEADS = 1", THREE SPRINKLER HEADS = 1-1/4", FOUR TO SIX HEADS = 1-1/2", SEVEN OR MORE HEADS = 2". SPRINKLER MAINS SHALL BE A MINIMUM OF 3" FOR "LOOP" SYSTEMS, 4" FOR "TREE" SYSTEMS AND 2" HEADERS CONNECTED BY 1-1/2" BRANCH LINES FOR "BROODIE" SYSTEMS.
5. CONSULT AND INCORPORATE OWNERS INSURANCE CARRIER'S REQUIREMENTS INTO SPRINKLER SYSTEM DESIGN.

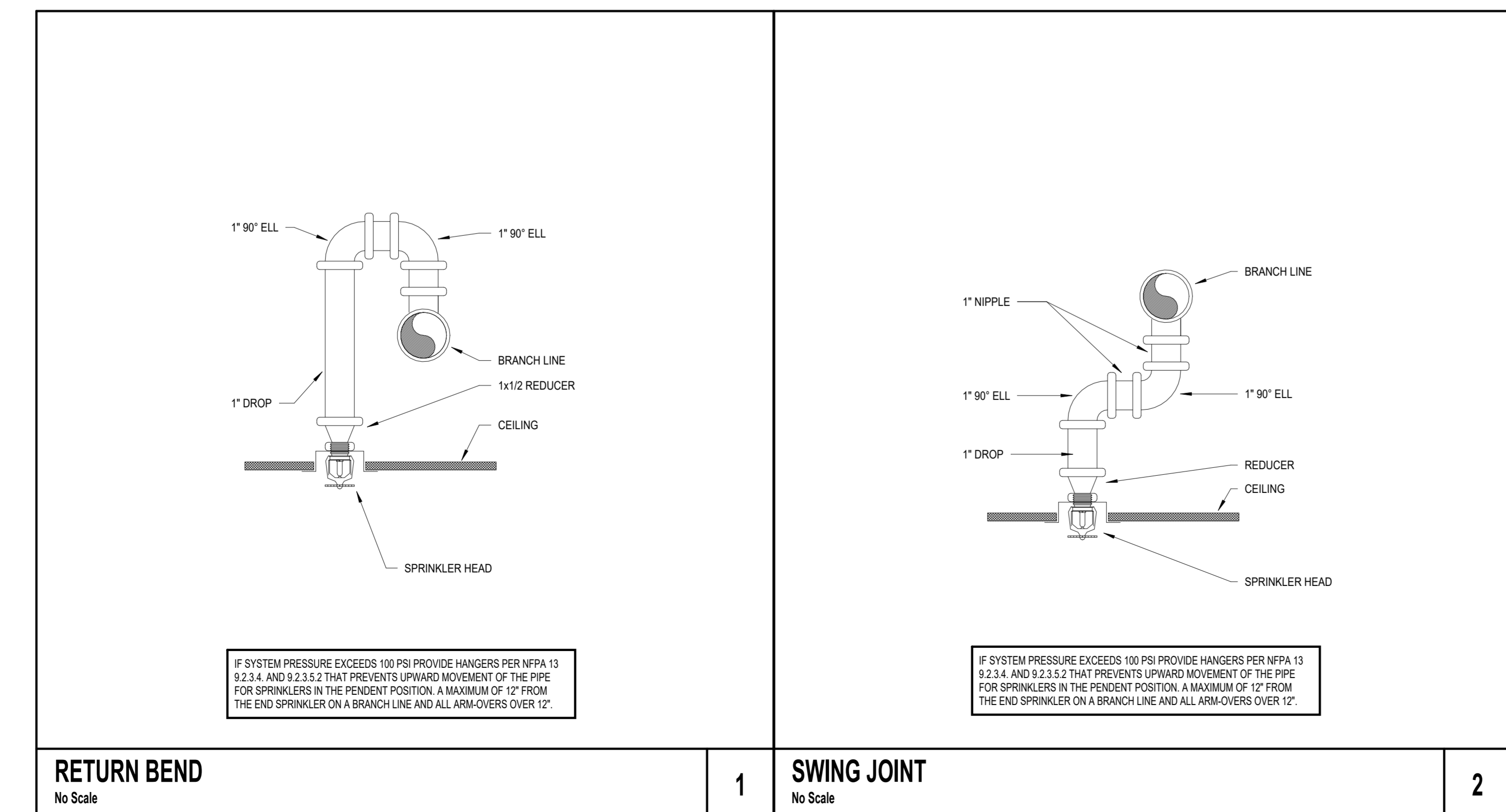
DRAWING INDEX

HAZARD CATEGORY HC-1:

1. DESIGN DENSITY: .10 GPM/SQFT
2. HYDRAULICALLY REMOTE AREA SIZE: 1,500 SQFT. REMOTE AREA SIZE MAY BE REDUCED AS ALLOWED BY NFPA AND OWNER'S INSURANCE UNDERWRITER.
3. SPRINKLER ORIFICE SIZE: 1/2"
4. DURATION OF SUPPLY: 60 MINUTES
5. MAXIMUM COVERAGE PER SPRINKLER HEAD: 225 SQ/FT.
6. HOSE STREAM ALLOWANCE: 250 GPM.

HAZARD CATEGORY HC-2:

1. DESIGN DENSITY: .20 GPM/SQFT
2. HYDRAULICALLY REMOTE AREA SIZE: 2,500 SQFT.
3. SPRINKLER ORIFICE SIZE: 1/2"
4. DURATION OF SUPPLY: 60 MINUTES
5. MAXIMUM COVERAGE PER SPRINKLER HEAD: 130 SQ/FT.
6. HOSE STREAM ALLOWANCE: 250 GPM.



RETURN BEND
No Scale

1 SWING JOINT
No Scale

2

11/26/2024 12:48:33 PM C:\Users\matt.mason\Documents\624196_Grady Cafeteria Redesign_MEP_R24_matt.mason\FKMM.nt DYER BROWN & ASSOCIATES, INC.

FIRE PROTECTION SPECIFICATIONS

1.01 GENERAL:

A. SUBMITTALS:

1. FIRE PROTECTION PRODUCT SUBMITTALS.
2. SPRINKLERS SHALL BE REFERRED TO ON DRAWINGS, SUBMITTALS, AND OTHER DOCUMENTATION, BY THE SPRINKLER IDENTIFICATION OR MODEL NUMBER AS SPECIFICALLY PUBLISHED IN THE APPROPRIATE AGENCY LISTING OR APPROVAL.

B. REFERENCES:

1. AMERICAN SOCIETY FOR TESTING MATERIALS (ASTM)
 - A. ASTM A53 - PIPE, STEEL, BLACK AND HOT-DIPPED, ZINC COATED, WELDED, AND SEAMLESS.
 - B. ASTM A126-B - GRAY IRON CASTINGS FOR VALVES, FLANGES, AND PIPE FITTINGS.
 - C. ASTM A153 - ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE.
 - D. ASTM A183 - CARBON STEEL TRACK BOLTS AND NUTS
 - E. ASTM A449 - QUENCHED AND TEMPERED STEEL BOLTS AND NUTS
 - F. ASTM A536 - DUCTILE IRON CASTINGS
 - G. ASTM B16 - FREE-CUTTING BRASS ROD , BAR AND SHAPES FOR USE IN SCREW MACHINES
 - H. ASTM B62 - COMPOSITION BRONZE OR OUNCE METAL CASTINGS.
 - I. ASTM B124 - COPPER AND COPPER ALLOY FORGINGS ROD, BAR, AND SHAPES.
 - J. ASTM B584 - COPPER ALLOY SAND CASTINGS FOR GENERAL APPLICATIONS
 - K. ASTM D-2000 - STANDARD SPECIFICATION SYSTEM FOR RUBBER PRODUCTS IN AUTOMOTIVE APPLICATIONS.
2. AMERICAN WATER WORKS ASSOCIATION:
 - A. AWWA C606 - GROOVED AND SHOULDERED JOINTS
3. NATIONAL FIRE PROTECTION ASSOCIATION:
 - A. NFPA-13 - INSTALLATION OF SPRINKLER SYSTEMS

C. QUALITY ASSURANCE

1. ALL FIRE PROTECTION COMPONENTS (INCLUDING COUPLINGS, FITTINGS, VALVES AND ACCESSORIES) TO BE SUPPLIED BY ONE MANUFACTURER AND SHALL BE CULUS, UL, AND/OR FM GLOBAL APPROVED. GROOVING TOOLS SHALL BE OF THE MANUFACTURER AS THE GROOVED COMPONENTS.

2.01 MATERIALS

A. UNDER GROUND DUCTILE IRON PIPE: PIPE: AWWA DUCTILE IRON PIPE, MINIMUM CLASS 53, GROOVED IN ACCORDANCE WITH AWWA C606. RIGID RADIUS GROOVE DIMENSIONS SHALL BE UTILIZED WHERE FLEXIBILITY IS NEITHER REQUIRED NOR DESIRED. PIPE ENDS SHALL BE FACTORY GROOVED.

1. COUPLINGS: MANUFACTURED IN TWO OR MORE SEGMENTS OF CAST DUCTILE IRON, CONFORMING TO A-536, GRADE 65-45-12. GASKETS SHALL BE PRESSURE-RESPONSIVE SYNTHETIC RUBBER, FLUSHSEAL® TYPE. MECHANICAL COUPLING BOLTS SHALL BE STAINLESS STEEL, CONFORMING TO PHYSICAL PROPERTIES OF ASTM A-183, MINIMUM TENSILE STRENGTH 110,000 PSI (758450 KPA). BASIS OF DESIGN VICTAULIC STYLE 31 OR EQUAL.

2. TRANSITION COUPLINGS: FOR TRANSITION BETWEEN IPS STEEL AND AWWA DUCTILE IRON SIZED PIPE. HOUSINGS CAST WITH OFFSETTING, ANGLE-PATTERN, BOLT PADS. BASIS OF DESIGN VICTAULIC STYLE 307 OR EQUAL.

3. COUPLING GASKETS: SYNTHETIC RUBBER, FLUSHSEAL® CONFIGURATION, CONFORMING TO AWWA PIPE OUTSIDE DIAMETER AND COUPLING HOUSING, MANUFACTURED OF ELASTOMERS AS DESIGNATED IN ASTM D-2000.
 - a. BASIS OF DESIGN VICTAULIC OR EQUAL.

4. FLANGE ADAPTERS: FOR USE WITH AWWA GROOVED END PIPE AND FITTINGS, FOR MATING TO ANSI CLASS 125 FLANGED COMPONENTS. BASIS OF DESIGN VICTAULIC STYLE 341 OR EQUAL.

5. VICTAULIC GROOVED END FITTINGS FOR AWWA DUCTILE IRON PIPE: FITTINGS SHALL BE CAST OF DUCTILE IRON CONFORMING TO A-536, GRADE 65-45-12. FITTINGS CONFORM TO ANSI A21.10/AWWA C-110 FOR CENTER-TO-END DIMENSIONS AND WALL THICKNESS, AND AWWA C-153 FOR WALL THICKNESS. GROOVED ENDS SHALL CONFORM TO AWWA C606.

B. ABOVE GROUND STEEL PIPE (STANDARD HEIGHT/WALL): CARBON STEEL, A-538/A-108B - ROLL OR CUT GROOVED-ENDS AS APPROPRIATE TO PIPE MATERIAL, WALL THICKNESS, PRESSURES, SIZE AND METHOD OF JOINING. PIPE ENDS TO BE GROOVED IN ACCORDANCE WITH MANUFACTURERS CURRENT LISTED STANDARDS CONFORMING TO ANSIAWWA C-606.

C. VICTAULIC MECHANICAL COUPLINGS FOR JOINING CARBON STEEL PIPE

1. MECHANICAL COUPLINGS: MANUFACTURED IN TWO SEGMENTS OF CAST DUCTILE IRON, CONFORMING TO ASTM A-536, GRADE 65-45-12. GASKETS SHALL BE PRESSURE-RESPONSIVE SYNTHETIC RUBBER, GRADE TO SUIT THE INTENDED SERVICE, CONFORMING TO ASTM D-2000. MECHANICAL COUPLING BOLTS SHALL BE ZINC PLATED (ASTM B-633) HEAT TREATED CARBON STEEL TRACK HEAD CONFORMING TO ASTM A-449 AND A-183, MINIMUM TENSILE STRENGTH 110,000 PSI (758450 KPA) BASIS OF DESIGN VICTAULIC OR EQUAL.

a. RIGID TYPE:

1. "INSTALLATION READY" RIGID JOINTS IN SIZES 1-1/4"(DN32) THROUGH 12" (DN300) SIZES. BASIS OF DESIGN VICTAULIC "FIRELOCK" OR EQUAL.
2. HOUSINGS SHALL BE CAST WITH OFFSETTING, ANGLE-PATTERN BOLT PADS TO PROVIDE SYSTEM RIGIDITY AND SUPPORT AND HANGING IN ACCORDANCE WITH NFPA 13.
3. RIGID COUPLINGS SHALL REQUIRE VISUAL PAD-TO-PAD VERIFICATION OF COMPLETE INSTALLATION. TONGUE AND RECESS TYPE COUPLINGS WHICH REQUIRE THE USE OF A TORQUE WRENCH TO ACHIEVE THE EXACT REQUIRED GAP BETWEEN HOUSINGS ARE NOT PERMITTED.

2. MECHANICAL COUPLING GASKETS: PRESSURE-RESPONSIVE, SYNTHETIC RUBBER LISTED FOR USE WITH THE HOUSINGS.

3. FLANGE ADAPTERS: FOR USE WITH GROOVED END PIPE AND FITTINGS, FOR MATING TO ANSI CLASS 125 / 150 FLANGES. VICTAULIC STYLE 741 OR 744 [UL, ULC, FM]. FOR MATING TO ANSI CLASS 300 FLANGES USE VICTAULIC STYLE 743 [UL, ULC, FM].

D. FIRE PROTECTION SYSTEMS

1. INSTALLATION-READY** FITTINGS FOR GROOVED END STEEL PIPING IN FIRE PROTECTION APPLICATIONS SIZES NPS 1-1/4 THRU 2 1/2" (DN 32 THRU DN 65). FITTINGS SHALL CONSIST OF A DUCTILE IRON HOUSING CONFORMING TO ASTM A-536, GRADE 65-45-12, WITH INSTALLATION-READY** ENDS. FITTINGS COMPLETE WITH PRELUBRICATED GRADE "E" EPDM TYPE "N" GASKET, AND ASTM A449 ELECTROPLATED STEEL BOLTS AND NUTS. SYSTEM SHALL BE UL LISTED FOR A WORKING PRESSURE OF 300 PSI (2065 KPA) AND FM APPROVED FOR WORKING PRESSURE 365 PSI (2517KPA).

- a. FITTINGS SHALL HAVE A SHORTER CENTER-TO-END DIMENSIONS FOR INSTALLATION IN TIGHT SPACES.
- b. FITTINGS ARE RIGID, FOR DIRECT STAB INSTALLATION WITHOUT FIELD DISASSEMBLY.
- c. BASIS OF DESIGN VICTAULIC OR EQUAL.

- d. FITTING GASKETS: PRESSURE-RESPONSIVE, SYNTHETIC RUBBER LISTED FOR USE WITH THE HOUSINGS.

E. GROOVED END FITTINGS: FITTINGS SHALL BE CAST OF DUCTILE IRON CONFORMING TO ASTM A-536, GRADE 65-45-12 (FIRELOCK®). FORGED STEEL CONFORMING TO ASTM A-234, GRADE WPB 0.375" WALL (0.53 MM WALL), OR FABRICATED FROM STD. WT. CARBON STEEL PIPE CONFORMING TO ASTM A-53, TYPE F, E OR S, GRADE B. FITTINGS PROVIDED WITH AN ALKYD ENAMEL FINISH OR HOT DIP GALVANIZED TO ASTM A-153. ZINC ELECTROPLATED FITTINGS AND COUPLINGS CONFORM TO ASTM B633. [UL, ULC, FM]

F. GROOVED END VALVES

1. BALL VALVES: 350 PSI (2410 KPA), GROOVED OR THREADED ENDS, BRONZE BODY (ASTM B-584 ALLOY 844), STANDARD PORT, CHROME-PLATED BRASS BALL, STAINLESS STEEL STEM, TFE SEATS, BRASS GEARBOX, WITH PRE-WIRED SUPERVISORY SWITCHES. VICTAULIC SERIES 728 FIRELOCK®.

2. BUTTERFLY VALVES: 300 PSI (2065 KPA), GROOVED ENDS, BLACK ENAMEL COATED DUCTILE IRON BODY (ASTM A-536, GRADE 65-45-12), ELECTROLESS-NICKEL COATED DUCTILE IRON DISC, WITH PRESSURE-RESPONSIVE ELASTOMER SEAT AND STAINLESS STEEL STEM. (STEM SHALL BE OFFSET FROM THE DISC CENTERLINE TO PROVIDE COMPLETE 360-DEGREE CIRCUMFERENTIAL SEATING.). COMPLETE WITH WEATHERPROOF ACTUATOR AND PRE-WIRED SUPERVISORY SWITCHES. VICTAULIC SERIES 705 FIRELOCK® OR SERIES 707C FIRELOCK®, VICTAULIC FIRELOCK® SERIES 765 SHALL BE USED FOR HIGH PRESSURE SYSTEMS UP TO 365 PSI CWP.

3. CHECK VALVES:
 - A. 2"(DN50) THROUGH 3"(DN75) SIZES SPRING ASSISTED; BLACK ENAMEL COATED DUCTILE IRON BODY, ASTM A-536, GRADE 65-45-12, NON-SLAM TILTING DISC, STAINLESS STEEL DISC AND SPRING, BRASS SHAFT, 365 PSI (2517 KPA); BASIS OF DESIGN VICTAULIC SERIES 717H OR EQUAL.

4. ALARM CHECK VALVE: [UL, ULC, FM] BLACK ENAMEL COATED DUCTILE IRON BODY CONFORMING TO ASTM A-536, GRADE 65-45-12, ALUMINUM BRONZE CLAPPER, STAINLESS STEEL SPRING AND SHAFT, EPDM SEAL, AND NITRILE SEAT O-RINGS. VALVE INTERNAL PARTS SHALL BE REPLACEABLE WITHOUT REMOVING THE VALVE FROM THE INSTALLED POSITION. WATER WORKING PRESSURE IS 300 PSI. SUITABLE FOR CONSTANT AND VARIABLE PRESSURE SYSTEMS WITH OPTIONAL SERIES 752 RETARD CHAMBER. BASIS OF DESIGN VICTAULIC FIRELOCK® SERIES 751 OR EQUAL.

5. DRY SYSTEM CHECK VALVE: [CULUS, FM] LOW DIFFERENTIAL, LATCHED CLAPPER DESIGN, BLACK ENAMEL COATED DUCTILE IRON BODY CONFORMING TO ASTM A-536, GRADE 65-45-12, ALUMINUM BRONZE CLAPPER, STAINLESS STEEL SPRING AND SHAFT, PEROXIDE CURED EPDM DIAPHRAGM, EPDM SEAL, BRASS SEAT, AND NITRILE SEAT O-RINGS. VALVE INTERNAL PARTS SHALL BE REPLACEABLE WITHOUT REMOVING THE VALVE FROM THE INSTALLED POSITION. VALVE SHALL BE EXTERNALLY RESETTABLE. REQUIRED AIR PRESSURE IS 13 PSI. WATER WORKING PRESSURE IS 300 PSI. BASIS OF DESIGN VICTAULIC FIRELOCK® NXT SERIES 768 OR EQUAL.

6. PREACTION VALVE: LOW DIFFERENTIAL, LATCHED CLAPPER DESIGN, BLACK ENAMEL COATED DUCTILE IRON BODY CONFORMING TO ASTM A-536, GRADE 65-45-12, ALUMINUM BRONZE CLAPPER, STAINLESS STEEL SPRING AND SHAFT, PEROXIDE CURED EPDM DIAPHRAGM, EPDM SEAL, BRASS SEAT, AND NITRILE SEAT O-RINGS. VALVE INTERNAL PARTS SHALL BE REPLACEABLE WITHOUT REMOVING THE VALVE FROM THE INSTALLED POSITION. VALVE SHALL BE EXTERNALLY RESETTABLE. WATER WORKING PRESSURE IS 300 PSI. DOES NOT REQUIRE A SEPARATE CHECK VALVE DOWNSTREAM OF PREACTION VALVE. BASIS OF DESIGN VICTAULIC FIRELOCK® NXT SERIES 789 OR EQUAL.

- a. OPTIONAL ACCESSORIES:
 - AIR MAINTENANCE TRIM ASSEMBLY: CONSISTING OF A PRESSURE REDUCING AIR REGULATOR, STRAINER, BRASS RESTRICTOR, SPRING LOADED IN LINE CHECK VALVES, AND ASSOCIATED PIPING COMPONENTS.
 - SERIES 7C7 COMPRESSOR PACKAGE: CONSISTING OF A RISER-MOUNTED COMPRESSOR, SERIES 757P AIR MAINTENANCE DEVICE AND FLEXIBLE HOSES FOR INSTALLATION. AVAILABLE WITH EITHER A 1/6 HP COMPRESSOR FOR AN UP TO 400 GALLON SYSTEM USING ONLY A SOLENOID VALVE AND NO AUTO-VENT, OR A 1/3 HP COMPRESSOR FOR AN UP TO 750 GALLON SYSTEM USING ONLY A SOLENOID VALVE AND NO AUTO-VENT.
 - ALARM PRESSURE SWITCH: SYSTEM SENSOR MODEL "EPS" OR EQUAL.

- G. SPRINKLER HEADS: DIE-CAST BRASS FRAME TO 65-30, BRONZE [UPRIGHT] [PENDANT] DEFLECTOR, BERYLLIUM NICKEL SPRING, WITH STAINLESS STEEL LODGEMENT SPRING AND TEFLON TAPE SEAL. GLYCERIN FILLED GLASS BULB, RATED FOR WORKING PRESSURE TO 175 PSI. BODY SHALL BE COATED. THE SPRINKLER BODY SHALL BE CAST WITH HEX SHAPED WRENCH BOSS TO REDUCE THE RISK OF DAMAGE DURING INSTALLATION. (SPRINKLERS SHALL NOT CONTAIN RUBBER O-RINGS.) QUICK OR STANDARD RESPONSE TYPE. BASIS OF DESIGN VICTAULIC OR EQUAL.

1. GUARDS AND ESCUTCHEONS: GUARDS AND ESCUTCHEONS SHALL BE LISTED, SUPPLIED, AND APPROVED FOR USE WITH THE SPRINKLER BY THE SPRINKLER MANUFACTURER.

2. CONCEALED PENDANT SPRINKLER FOR CLEAN ROOM APPLICATIONS PROVIDED WITH COVER PLATE AND WHITE NITRILE SEALING GASKET TO PREVENT DEBRIS FROM ENTERING THE PROTECTED AREA.

3. IN LIEU OF RIGID PIPE OFFSETS OR RETURN BENDS FOR SPRINKLER DROPS, THE VICTAULIC VICFLEX™ MULTIPLE-USE FLEXIBLE STEEL SPRINKLER DROP SYSTEM (WITH CAPTURED COUPLING STYLE 108) MAY BE USED TO LOCATE SPRINKLERS AS REQUIRED BY FINAL FINISHED CEILING TILES AND WALLS. THE DROP SYSTEM SHALL CONSIST OF A BRAIDED TYPE 304 STAINLESS STEEL FLEXIBLE TUBE, ZINC PLATED STEEL MALE THREADED NIPPLE OR VICTAULIC FIRELOCK IGS GROOVE STYLE 108 COUPLING FOR CONNECTION TO BRANCH-LINE PIPING, AND A ZINC PLATED STEEL REDUCER WITH A FEMALE THREAD FOR CONNECTION TO THE SPRINKLER HEAD. BASIS OF DESIGN VICTAULIC.

- a. CAPTURED COUPLING IGS GROOVE STYLE 108: SINGLE-BOLT, CONSISTING OF TWO DUCTILE IRON HOUSINGS, GRADE E "EPDM" GASKET, AND A ZINC ELECTROPLATED STEEL BOLT AND NUT CONFORMING TO ASTM A449. UNION JOINTS SHALL BE PROVIDED FOR EASE OF INSTALLATION. THE FLEXIBLE DROP SHALL ATTACH TO THE CEILING GRID USING A ONE-PIECE OPEN GATE SERIES AB1 OR AB2 BRACKET. THE BRACKET SHALL ALLOW INSTALLATION BEFORE THE CEILING TILE IS IN PLACE. THE BRAIDED DROP SYSTEM IS UL LISTED FOR SPRINKLER SERVICES TO 175 PSI AND FM APPROVED TO 200 PSI.

- b. ALL HOSES SHALL BE FACTORY-PRESSURE TESTED TO 400 PSI. (2760 KPA).
- c. AB6 BRACKET ASSEMBLY, FOR USE IN COLD STORAGE APPLICATIONS WITH BASIS OF DESIGN VICTAULIC OR EQUAL.

3.01 EXECUTION:

A. INSTALLATION:

1. PIPE ENDS SHALL BE CLEAN AND FREE FROM INDENTATIONS, PROJECTIONS AND ROLL MARKS IN THE AREA FROM PIPE END TO GROOVE.
2. THE GASKET STYLE AND ELASTOMERIC MATERIAL (GRADE) SHALL BE VERIFIED AS SUITABLE FOR THE INTENDED SERVICE AS SPECIFIED.

3. DO NOT INSTALL SPRINKLERS THAT HAVE BEEN DROPPED, DAMAGED, OR SHOW A VISIBLE LOSS OF FLUID. NEVER INSTALL SPRINKLERS WITH CRACKED BULBS. SPRINKLER BULB PROTECTOR SHALL BE REMOVED BY HAND AFTER INSTALLATION. DO NOT USE TOOLS OR ANY OTHER DEVICE(S) TO REMOVE THE PROTECTOR THAT COULD DAMAGE THE BULB IN ANY WAY.

B. TRAINING:

1. FACTORY TRAINED FIELD REPRESENTATIVE SHALL PROVIDE ON-SITE TRAINING FOR CONTRACTOR'S FIELD PERSONNEL IN THE USE OF GROOVING TOOLS, APPLICATION OF GROOVE, AND PRODUCT INSTALLATION .

SEALS

REVISIONS

OWNER + LOCATION
GRADY HEALTH
80 JESSE HILL JR DRIVE

PROJECT
CAFETERIA RENOVATION

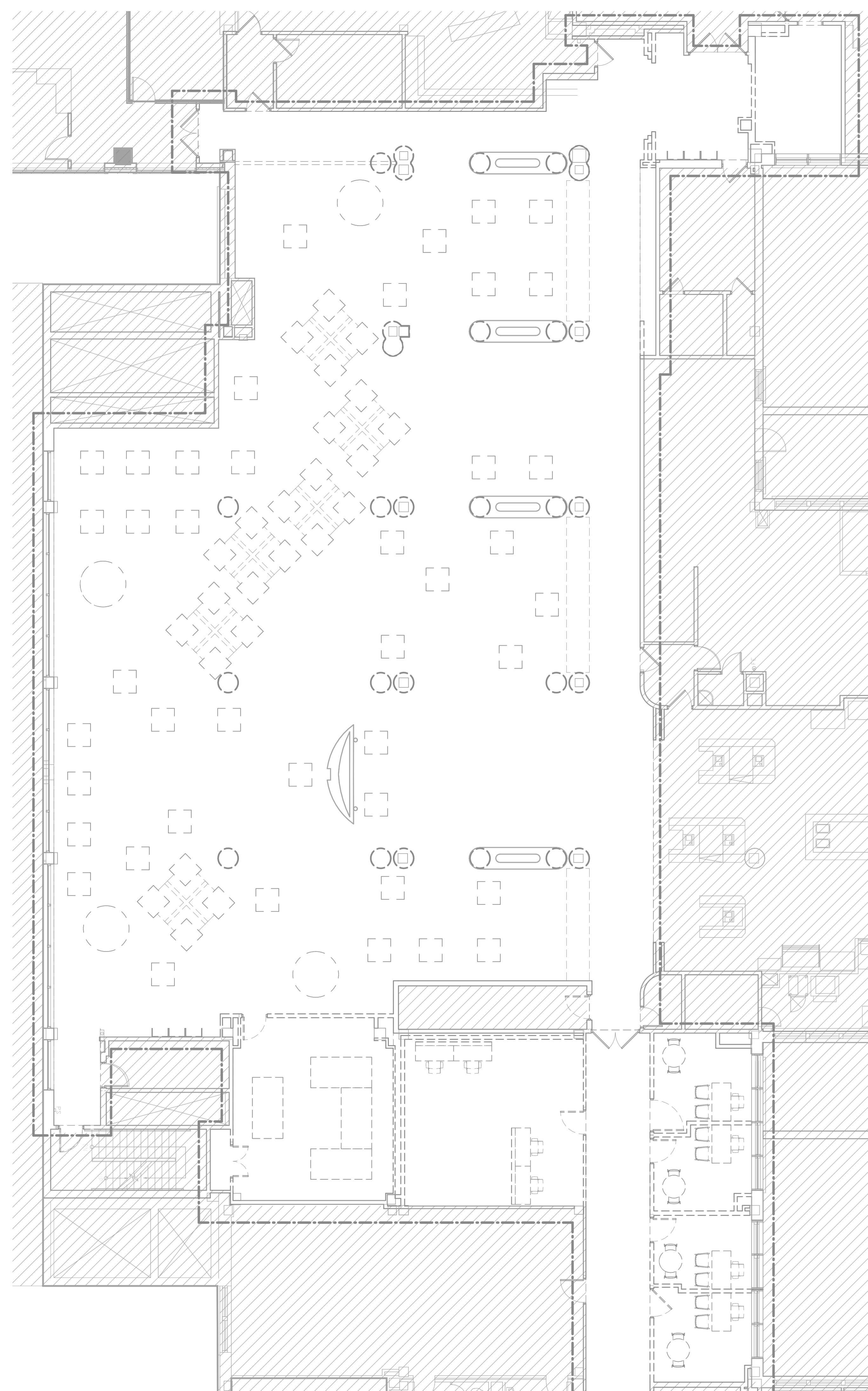
PHASE
PROGRESS BID SET

DATE **11/26/2024** JOB NUMBER **24.0128**

SHEET NAME
**SECOND FLOOR
DEMOLITION PLAN**

SHEET NUMBER

FP1.01



FIRE PROTECTION DEMOLITION NOTES:
1. DEMOLISH HEADS IN CONSTRUCTION AREA. TURN UP HEADS FOR CONSTRUCTION WORK.
2. MODIFY PIPING AS REQUIRED FOR NEW WORK PLAN.

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DYER BROWN & ASSOCIATES, INC.

SEALS

REVISIONS

OWNER + LOCATION
 GRADY HEALTH
 80 JESSE HILL JR DRIVE

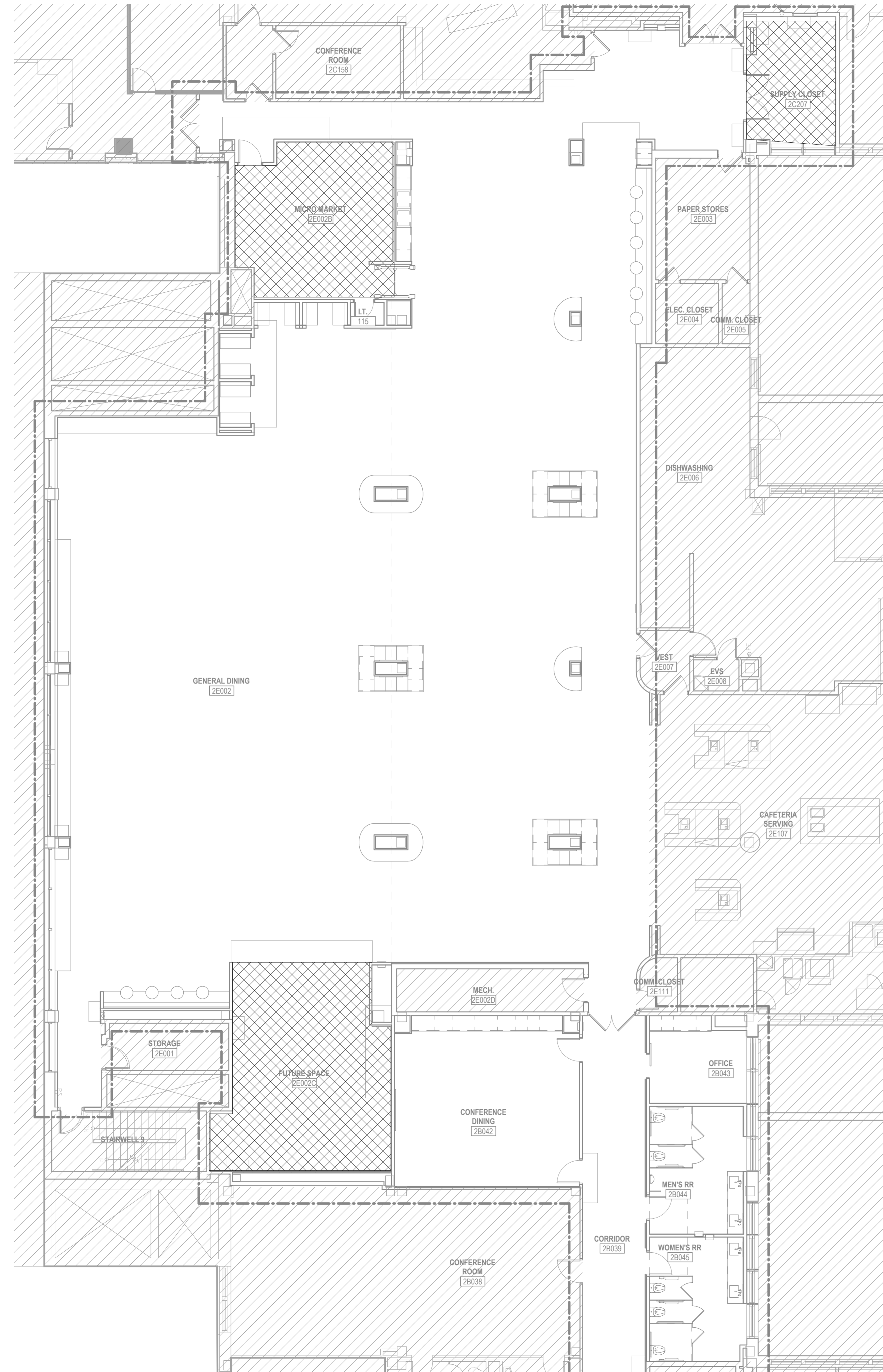
PROJECT
CAFETERIA RENOVATION

PHASE
PROGRESS BID SET

DATE **11/26/2024** JOB NUMBER **24.0128**

SHEET NAME
SECOND FLOOR PLAN

SHEET NUMBER
FP2.01



FIRE PROTECTION LEGEND:

- HAZARD CATEGORY HC-1 - DESIGN WITH A DENSITY OF 0.10 GPM PER SQUARE FOOT AND A MAXIMUM COVERAGE AREA OF 225 SQUARE FOOT.
- HAZARD CATEGORY HC-2 - DESIGN WITH A DENSITY OF 0.20 GPM PER SQUARE FOOT AND A MAXIMUM COVERAGE AREA OF 130 SQUARE FOOT.

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DYER BROWN & ASSOCIATES, INC.

1 SECOND FLOOR PLAN
 1/8" = 1'-0"