

**GENERAL NOTES:**

- THE FIRE PROTECTION SYSTEM DESIGN, INSTALLATION AND MATERIALS SHALL CONFORM TO THE FIRE CODE AND AUTHORITIES HAVING JURISDICTION. IN CASE OF CONFLICTS WITH CODES, DRAWINGS, OR SPECIFICATIONS, THE MOST STRINGENT SHALL PREVAIL.
- BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING, AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES.
- THE DRAWINGS WERE PREPARED WITH THE BEST STRUCTURAL AND ARCHITECTURAL INFORMATION AVAILABLE. IT IS UNDERSTOOD THAT EQUIPMENT LOCATIONS AND ROUTING OF PIPING MAY VARY FROM THAT SHOWN ON THE PLANS AS CONSTRUCTION PROCEEDS.
- THESE DRAWINGS DO NOT INCLUDE ALL NECESSARY SAFETY REQUIREMENTS. CONTRACTOR TO COMPLY TO THE SAFETY REQUIREMENTS SET FORTH BY THE LOCAL AUTHORITIES HAVING JURISDICTION.
- THESE DRAWINGS ARE FOR BIDDING PURPOSES ONLY. THEY ARE ESSENTIALLY DIAGRAMMATIC TO THE EXTENT THAT MANY OFFSETS, BENDS, UNIONS, SPECIFIC FITTINGS AND EXACT LOCATIONS ARE NOT INDICATED.
- ALL FIRE PROTECTION WORK SHALL BE INSTALLED SO AS TO AVOID INTERFERENCE WITH ELECTRICAL EQUIPMENT, MECHANICAL EQUIPMENT AND STRUCTURAL FRAMING, SKYLIGHTS, ETC.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CEILING ACCESS PANELS WITH THE ARCHITECTURAL REFLECTED CEILING PLAN AND ELECTRICAL LIGHTING PLAN.
- COORDINATE ALL LOCATIONS, SIZES AND ELEVATIONS OF ALL SLEEVES THROUGH WALLS, BEAMS, SLABS AND FOOTING WITH STRUCTURAL AND ARCHITECTURAL DRAWINGS. ALL PIPES SLEEVING THROUGH BEAMS OR FOOTINGS SHALL HAVE A SLEEVE DIAMETER OF TWO PIPE SIZES OVER THE PIPE PASSING THROUGH THE FOOTING OR PER STRUCTURAL DRAWING. THE MOST STRINGENT SHALL PREVAIL.
- PIPING SUPPORTS. ALL PIPING TO BE SUPPORTED WITH HANGERS AND BRACKETS WHICH PROVIDE ISOLATION FROM FRAMING. CONTACT BETWEEN PIPE AND SUPPORT TO BE LINED WITH PLASTIC OR FELT.
- ALL FLOOR AND WALL PENETRATIONS MUST BE SEALED WATERTIGHT AND VERMIN PROOF.
- FIRE PROTECTION CONTRACTOR SHALL COORDINATE COMPLETE FIRE PROTECTION INSTALLATION AND REQUIREMENTS PRIOR TO SUBMITTING BID WITH ALL LOCAL DISTRICTS AND GOVERNING AUTHORITIES. INCLUDE ALL FINDINGS WITHIN THE BASE BID.
- PROVIDE ALL WORK IN COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL CODES. OBTAIN ALL REQUIRED PERMITS. COORDINATE ALL WORK WITH LOCAL FIRE MARSHAL.
- PROVIDE CUTTING, CORING AND PATCHING OF ALL WALLS, SLABS AND DECKS AS REQUIRED FOR WORK SHOWN. COORDINATE ALL WORK WITH OWNER AND GENERAL CONTRACTOR.
- REFER TO ARCHITECTURAL DRAWINGS AND THE PROJECT SPECIFICATIONS FOR PROJECT PHASING REQUIREMENTS.
- PROVIDE FULL SPRINKLER COVERAGE FOR ALL SPACES WITHIN THE PROJECT AREA IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL CODES, NFPA-13 AND OWNER'S INSURANCE CARRIER/UNDERWRITER.
- PROVIDE FULL SPRINKLER COVERAGE FOR ALL SPACES WITHIN THE PROJECT AREA IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL CODES, NFPA-13 AND OWNER'S INSURANCE CARRIER/UNDERWRITER.
- PROVIDE SPRINKLER SHOP DRAWINGS AND HYDRAULIC CALCULATIONS WITH ALL INFORMATION NOTED BY NFPA-13. DO NOT START ANY WORK UNTIL DRAWINGS AND CALCULATIONS HAVE BEEN APPROVED BY THE PROJECT ENGINEER, OWNER'S AGENTS AND LOCAL FIRE MARSHAL.
- OBTAIN WATER FLOW TEST DATA (PRESSURES AND FLOWS) AS REQUIRED. PROVIDE ALL FLOW TESTS REQUIRED IF CURRENT TEST DATA IS UNAVAILABLE.
- COORDINATE SPRINKLER SYSTEM WITH ALL OTHER TRADES, BUILDING CONDITIONS, ETC. OFFSET SPRINKLER SYSTEM PIPING AS REQUIRED (PROVIDE ALL FITTINGS, CONNECTIONS, ETC.)
- FOR ALL AREAS WITH LAY-IN CEILINGS, PROVIDE SPRINKLERS IN THE CENTER OF CEILING TILES (2x2 PATTERN). REFER TO ARCHITECTURAL PLAN FOR CEILING GRID LAYOUT.
- THE SPRINKLER/FIRE PROTECTION CONTRACTOR SHALL HYDRAULICALLY CALCULATE ALL SPRINKLER SYSTEMS SHOWN ON THE DRAWING AND SHALL SIZE PIPING ACCORDINGLY.
- SUBMITTALS AND SHOP DRAWINGS: AS SOON AS POSSIBLE AND WITHIN 21 DAYS AFTER AWARD OF THE CONTRACT, AND BEFORE THEIR PURCHASE, THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT 6 BOUND BOOKLETS FOR APPROVAL AND CONTAINING A COMPLETE LIST OF MATERIALS, SPECIALTIES AND EQUIPMENT HE IS TO FURNISH FOR THE INSTALLATION. ALL SUBMITTALS SHALL BE MADE AT ONE TIME. NO DEVIATION OF PLUMBING FIXTURES WILL BE ACCEPTED. BASED ON APPROVAL OF ALTERNATE PRIOR TO BID.
- COORDINATE FIRE PROTECTION SYSTEMS WITH WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION.
- ALL EQUIPMENT SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS AND APPLICABLE CODES. PROVIDE ALL FITTINGS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.
- MAINTENANCE LABEL SHALL BE AFFIXED TO ALL FIRE PROTECTION EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED TO OWNER'S REPRESENTATIVE.
- FIRE PROTECTION CONTRACTOR SHALL LAYOUT SPRINKLER SYSTEM. COORDINATE WITH ALL OTHER TRADES, AND SHALL PROVIDE SPRINKLER SHOP DRAWINGS AND HYDRAULIC CALCULATIONS. SPRINKLER PIPING SHALL BE SIZED HYDRAULICALLY.
- SPRINKLERS SHALL BE INSTALLED UNDER FIXED OBSTRUCTIONS OVER 4 FEET WIDE SUCH AS DUCTS, OPEN GRATE FLOORING AND OVERHEAD DOORS.
- COORDINATE WITH ELECTRICAL TRADE PRIOR TO ORDERING ELECTRICALLY OPERATED EQUIPMENT FOR AVAILABLE VOLTAGES AT EQUIPMENT LOCATIONS.
- PIPE SIZE DISCREPANCIES BETWEEN FLOOR PLANS AND RISER DIAGRAMS LARGER PIPE SIZE INDICATED WILL TAKE PRECEDENCE.
- THESE PLANS INDICATE APPROXIMATE ROUGH-INS ONLY FOR EQUIPMENT NOT IN THIS SECTION (N.I.T.S.) EXACT ROUGH-IN DIMENSIONS MUST BE OBTAINED FROM THE EQUIPMENT MANUFACTURER.
- THE FIRE PROTECTION CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR ALL POINTS OF CONNECTION WITH THE GENERAL CONTRACTOR AND OTHER TRADES PRIOR TO BID.
- CONTRACTOR SHALL PROVIDE ALL VALVES AND BACKFLOW PREVENTION DEVICES AS REQUIRED BY STATE AND LOCAL CODES.

**SECTION 220100 - BASIC REQUIREMENTS**

- PROVIDE ALL CUTTING, CORING, PATCHING AND PAINTING OF WALLS, FLOOR SLABS AND CEILINGS AS REQUIRED FOR WORK SHOWN.
- TEST ALL PIPING PER ALL APPLICABLE CODES AND STANDARDS.
- PROVIDE SUBMITTALS FOR ALL EQUIPMENT PRIOR TO ORDERING.
- ALL WORK SHALL CONFORM TO ALL APPLICABLE CODES AND STANDARDS.
- SLEEVE AND SEAL ALL PIPE PENETRATIONS THROUGH WALLS, PROVIDE FIRESTOPPING AT ALL FIRE AND SMOKE WALL PENETRATIONS.
- APPLY AND INSTALL MATERIALS, EQUIPMENT, AND SPECIALTIES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. CONFLICTS BETWEEN THE MANUFACTURER'S INSTRUCTIONS AND THE CONTRACT DOCUMENTS SHALL BE REFERRED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION.
- THE DRAWINGS ARE DIAGRAMMATIC, UNLESS DETAILED DIMENSIONED DRAWINGS ARE INCLUDED. DRAWINGS SHOW APPROXIMATE LOCATIONS OF EQUIPMENT, AND FIXTURES. EXACT LOCATIONS ARE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR CONSTRUCTION SAFETY AT ALL TIMES AND PROVIDE, AS PART OF CONTRACT, ALL TRENCH OR BUILDING SHORING, SCAFFOLDING, SHIELDING, DUST/FUME PROTECTION, MECHANICAL/ELECTRICAL PROTECTION, SPECIAL GROUNDING, SAFETY RAILINGS, BARRIERS, AND OTHER SAFETY FEATURE REQUIRED TO PROVIDE SAFE CONDITIONS FOR ALL WORKMEN AND SITE VISITORS.

- DUE TO SMALL SCALE OF DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, CHANGES IN ELEVATION, ETC. VERIFY FINAL LOCATIONS FOR ROUGH-INS WITH FIELD MEASUREMENTS AND WITH THE EQUIPMENT BEING CONNECTED. VERIFY EXACT LOCATION AND ELEVATIONS AT WORK SITE PRIOR TO ANY ROUGH IN WORK. DO NOT SCALE PLANS. IF FIELD CONDITIONS, DETAILS, CHANGES IN EQUIPMENT OR SHOP DRAWING INFORMATION REQUIRE A SIGNIFICANT CHANGE TO THE ORIGINAL DOCUMENTS, CONTACT THE OWNER'S REPRESENTATIVE FOR APPROVAL BEFORE PROCEEDING. ALL EQUIPMENT LOCATIONS SHALL BE COORDINATED WITH OTHER TRADES TO ELIMINATE INTERFERENCE WITH REQUIRED CLEARANCES FOR EQUIPMENT MAINTENANCE AND INSPECTIONS.
- PROVIDE REQUIRED SUPPORTS, BEAMS, ANGLES, HANGERS, RODS, BASES, BRACES, AND OTHER ITEMS TO PROPERLY SUPPORT CONTRACT WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL REQUIRED REMOVAL WORK, CORING, CUTTING AND PATCHING WITH THE OWNER'S ASBESTOS MANAGEMENT PLAN. PRIOR TO PERFORMING SUCH WORK IDENTIFY AREAS CONTAINING ASBESTOS. NOTIFY THE OWNER SO THAT THEY MAY MAKE ARRANGEMENTS FOR ABATEMENT AND/OR CONTAINMENT PRIOR TO WORK PROCEEDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING ALL AREAS WHERE ASBESTOS IS RELEASED DUE TO THE FAILURE TO COORDINATE WITH THE ASBESTOS MANAGEMENT PLAN. REFER TO DIVISION 1 SECTIONS FOR FURTHER REQUIREMENTS.
- COMPLETELY REMOVE ALL PIPING AND OTHER DEVICES ASSOCIATED WITH THE EQUIPMENT NOT TO BE REUSED IN THE NEW WORK. THIS INCLUDES ALL PIPE, VALVES, FITTINGS, INSULATION AND ALL HANGERS, INCLUDING THE TOP CONNECTION AND ANY FASTENINGS TO BUILDING STRUCTURAL SYSTEMS. SEAL ALL OPENINGS, AFTER REMOVAL OF EQUIPMENT, PIPES AND OTHER PENETRATIONS IN ROOF, WALLS, FLOORS, IN AN APPROVED MANNER AND IN ACCORDANCE WITH PLANS AND SPECIFICATIONS WHERE SPECIFICALLY COVERED. STRUCTURAL INTEGRITY OF THE BUILDING SYSTEM SHALL BE MAINTAINED. REFERENCE SHALL ALSO BE MADE TO THE ARCHITECTURAL, STRUCTURAL, MECHANICAL, SITE, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL FACILITIES TO BE DEMOLISHED OR HANDLED.
- INCLUDE IN BID ALL LABOR, MATERIALS, TOOLS, PLANT, TRANSPORTATION, EXCAVATION, EQUIPMENT, INSURANCE, TEMPORARY PROTECTION, PERMITS, TAXES AND ALL NECESSARY AND RELATED ITEMS REQUIRED TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS SHOWN AND DESCRIBED.
- APPLY FOR AND OBTAIN ALL REQUIRED PERMITS AND INSPECTIONS. INCLUDE COSTS FOR ALL FEES AND CHARGES WITHIN BID.

**SECTION 220190 - ELECTRIC WIRING**

- PROVIDE "CONTROL" WIRING CIRCUITS FOR EQUIPMENT AND ASSOCIATED CONTROL DEVICES. CONTROL WIRING INCLUDES 120 VOLT AND LOWER WIRING FOR CONTROL SIGNALS DIRECTING EQUIPMENT OPERATION.
- PROVIDE CERTAIN "POWER" WIRING AS CALLED FOR. POWER WIRING INCLUDES 120 VOLT AND HIGHER BRANCH CIRCUIT WIRING REQUIRED FOR EQUIPMENT OPERATION.
- ASSISTANCE, AS REQUIRED AND COORDINATION WITH DIVISION 26, "ELECTRIC".

**SECTION 221900 - IDENTIFICATION**

- PIPING/INSULATION WITH OUTSIDE DIAMETER OF 5-7/8 INCHES AND LESS: PROVIDE ACRYLIC PLASTIC WRAP-AROUND TYPE MARKERS WITH DIRECTIONAL FLOW ARROWS, UV RESISTANCE AND LEGEND PRINTED FOUR (4) TIMES FOR 360 DEGREE VISIBILITY. MAKE: SETON "SETMARK" SNAP-ON WRAP AROUND TYPE PIPE MARKERS.
- PIPING/INSULATION WITH OUTSIDE DIAMETER OF 6 INCHES AND GREATER: PROVIDE ACRYLIC PLASTIC STRAP-ON TYPE MARKERS WITH DIRECTIONAL FLOW ARROWS, UV RESISTANCE AND LEGEND PRINTED TWO (2) TIMES MINIMUM. MAKE: SETON "SETMARK" STRAP-ON WRAP AROUND TYPE PIPE MARKERS.
- VALVE TAGS SHALL BE STANDARD BRASS TAGS, 2" DIAMETER WITH 1/2" HIGH NUMERALS. IDENTIFY ALL PLUMBING SERVICES WITH 1/4" LETTERS ABOVE THE VALVE NUMBER ("PLB."), ATTACH TO VALVES USING BRASS "JACK" CHAIN AND BRASS "S" HOOK. MAKE: SETON STYLE NO. M4507 TAGS, STYLE NO. 16182 CHAIN AND STYLE NO. 16195, 6 AND 7 NO. HOOKS.
- PROVIDE VALVE CHART FOR ALL VALVES PROVIDED AS A PART OF THIS PROJECT. FRAME AND PLACE UNDER CLEAR GLASS. HANG IN MECHANICAL ROOM OR IN LOCATION AS DIRECTED BY THE OWNER.

**SECTION 220600 - PIPING SYSTEMS**

- REFER TO PIPING MATERIAL SCHEDULE.
- ALL PIPING AND FITTINGS USED ON THIS PROJECT SHALL BE NEW AND MARKED WITH MANUFACTURER'S NAME, AND SHALL COMPLY WITH ALL APPLICABLE ASTM AND ANSI STANDARDS.
- SLEEVE SHALL BE SCHEDULE 40 BLACK STEEL PIPE SLEEVES, TWO PIPE SIZES LARGER THAN THE PIPE, FOR STRUCTURAL SURFACES. PROVIDE FOR PIPES PASSING THROUGH FLOORS, WALLS OR CEILINGS. NOT REQUIRED FOR EXISTING FLOORS WHICH ARE CORE-DRILLED, EXCEPT WHERE FLOOR IS WATERPROOFED. EXTEND 1/8 IN. ABOVE FINISHED FLOOR IN FINISHED AREAS. IN ABOVE GRADE MECHANICAL ROOMS AND OTHER AREAS WITH FLOOR DRAINS USE STEEL PIPE SLEEVES 2 IN. ABOVE FLOOR. USE STEEL PIPE SLEEVES IN BEARING WALL, STRUCTURAL SLABS, BEAMS AND OTHER STRUCTURAL SURFACES, AND WHERE CALLED FOR. SLEEVES SHALL BE AS SMALL AS PRACTICAL, CONSISTENT WITH INSULATION, SO AS TO PRESERVE FIRE RATING. FILL ABANDONED SLEEVES WITH CONCRETE. PROVIDE RUBBER GROMMET SEALS FOR PIPES PASSING THROUGH DUCTS OR AIR CHAMBERS OR BUILT-UP HOUSINGS.
- SEAL EXTERIOR WALLS, BELOW GRADE, AND ABOVE BASEMENT OR VAULT FLOOR: SYNTHETIC RUBBER MATERIAL WITH ZINC PLATED BOLTS. MAKE: "LINK-SEAL" SERIES 200, 300 OR 400, PYROPAC.
- PIPING SHALL NOT BE SUPPORTED BY WIRES, BAND IRON, CHAINS, OR FROM OTHER PIPING, NOR BY VERTICAL EXPANSION BOLTS. SUPPORT PIPING WITH INDIVIDUAL HANGERS FROM CONCRETE INSERTS, WELDED SUPPORTS, OR BEAM CLAMPS OF PROPER CONFIGURATION AND LOADING DESIGN REQUIREMENTS FOR EACH LOCATION; REPLACE IF NOT SUITABLE. FOLLOW MANUFACTURER'S SAFE LOADING RECOMMENDATIONS. SUSPEND WITH RODS OF SUFFICIENT LENGTH FOR SWING, USING PROPER DIAMETER ROD FOR PIPE SIZE. PROVIDE ADDITIONAL STRUCTURAL STEEL MEMBERS, HAVING ONE COAT RUSTPROOF PAINT, WHERE REQUIRED FOR PROPER SUPPORT. PROVIDE OVERSIZED HANGERS WHERE INSULATION/SUPPORTS MUST PASS BETWEEN PIPE AND HANGER. PROVIDE CONTINUOUS SUPPORT OR EXTRA SUPPORTS FOR PLASTIC PIPE PER MANUFACTURER'S REQUIREMENTS. HANGERS, WHEN ATTACHED TO JOISTS, SHALL ONLY BE PLACED AT THE TOP OR BOTTOM CHORD PANEL POINT. ONLY CONCENTRIC TYPE HANGERS ARE PERMISSIBLE. "C" TYPE NOT PERMITTED ON JOISTS. PROVIDE RISER CLAMPS FOR EACH RISER AT EACH FLOOR. USE TRAPEZE HANGERS WHERE A GROUP OF PIPING CAN BE INSTALLED.

**SECTION 223300 - SPRINKLER SYSTEM**

- INSTITUTIONAL SPRINKLER HEADS:** PROVIDE FLUSH-TYPE INSTITUTIONAL SPRINKLER HEADS LISTED FOR TAMPER-RESISTANT AND LIGATURE-RESISTANT APPLICATIONS. HEADS SHALL BE FULLY RECESSED OR FLUSH WITH CEILING/WALL CONSTRUCTION WITH NO EXPOSED OR PROTRUDING ELEMENTS.  
  
SPRINKLERS SHALL BE UL LISTED FOR INSTITUTIONAL/SECURE ENVIRONMENTS AND COMPLY WITH NFPA 13.  
  
PROVIDE MANUFACTURER'S STANDARD PROTECTIVE COVER PLATE OR HOUSING DESIGNED TO PREVENT TAMPERING, VANDALISM, OR ATTACHMENT POINTS.  
  
STANDARD PENDENT, UPRIGHT, SIDEWALL, OR DECORATIVE CONCEALED SPRINKLER HEADS ARE NOT PERMITTED.  
  
COORDINATE INSTALLATION WITH CEILING TYPE AND ENSURE PROPER TEMPERATURE RATING, RESPONSE TYPE, AND COVERAGE CLASSIFICATION PER HAZARD.  
  
BASIS OF DESIGN: INSTITUTIONAL, LIGATURE-RESISTANT SPRINKLER SUCH AS TYCO LFI INSTITUTIONAL SERIES OR VIKING INSTITUTIONAL RECESSED/FLUSH SERIES.
- RISER CHECK VALVE EQUAL TO TYCO CV-1FR (SIZE AS NOTED ON PLANS).
- FIRE PROTECTION VALVES SHALL BE UL LISTED AND FM APPROVED AND LABELED FOR INTENDED FIRE PROTECTION SERVICE. SPRINKLER SYSTEMS 175 PSI WWP: STAMPED/CAST ON BODY. GATE VALVES SHALL BE OS&Y PATTERN, IBBT, FLANGED ENDS, 200 PSI WWP, RESILIENT WEDGE DISC 2-1/2 IN. AND UP; BRONZE BODY, THREADED ENDS 2 IN. AND SMALLER. STOCKHAM #B-133 (2 IN. AND LESS), STOCKHAM #G-610 (2-1/2 IN. AND UP), BUTTERFLY/BALL CONTROL VALVES SHALL BE WITH PROVISION TAMPER SWITCH. IRON OR BRONZE BODY; MILWAUKEE "BUTTERBALL" (2 IN. AND LESS), GRINNELL #770FP OR GRUVLOK (2-1/2 IN. AND UP); CHECK VALVES: SWING TYPE RUBBER FACED, IBBM, FLANGED/WATER/GROOVED ENDS 2-1/2 IN. AND UP; BRONZE BODY, THREADED ENDS 2 IN. AND SMALLER, GRINNELL #3315 (2 IN. AND LESS), GRINNELL #780FP (2-1/2 IN. AND UP), TRIM, DRAIN AND TEST VALVES: BALL, PLUG, ANGLE OR GLOBE TYPE, BRONZE BODY, THREADED ENDS, UL LISTED.
- PRESSURE GAUGES SHALL BE EQUAL TO VIKING MODEL 01934A WITH 1/4" NPT MALE BOTTOM CONNECTION
- ELECTRIC TAMPER SWITCHES SHALL BE EQUAL TO POTTER ELECTRIC MODEL OSYSU-A FOR OS&Y VALVES AND MODEL PIVSU-A FOR POST INDICATOR AND BUTTERFLY VALVES.

**APPLICABLE CODES:**

- THE INTERNATIONAL FIRE CODE.
- NFPA 13D: INSTALLATION OF SPRINKLER SYSTEMS ONE AND TWO FAMILY DWELLING AND MANUFACTURED HOMES.
- NFPA 25: RECOMMENDED PRACTICE FOR THE INSPECTION, TESTING AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS.

**SPRINKLER SYSTEM DESCRIPTION:**

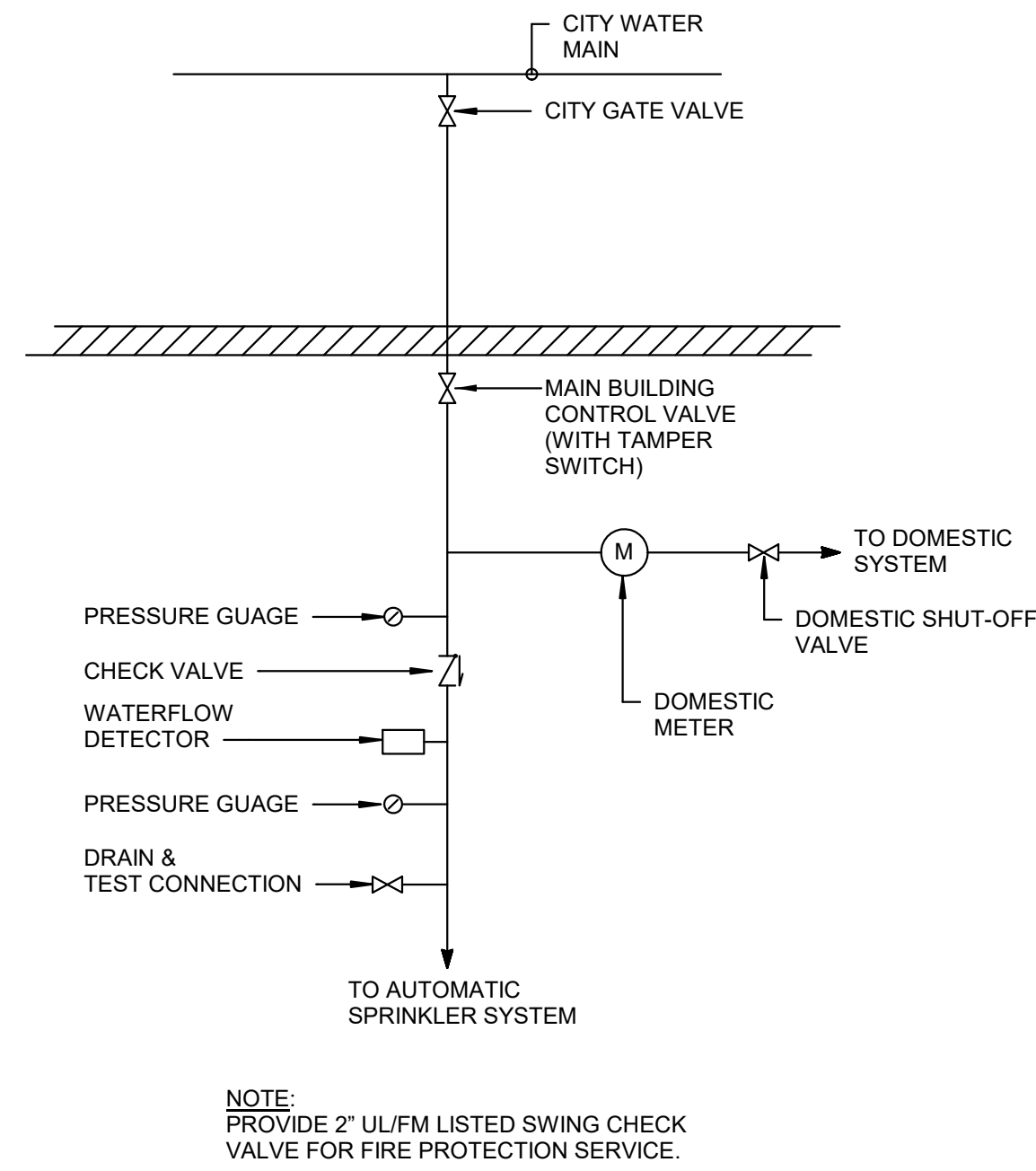
- THE FIRE PROTECTION SYSTEM SHALL BE A WET PIPE AUTOMATIC SPRINKLER SYSTEM ARRANGED TO PROPERLY PROTECT ALL SPACES AS INDICATED.

**CLASSIFICATION OF OCCUPANCIES:**

1. LIGHT HAZARD:		
WATER DENSITY:	0.10 GPM/SQ. FT.	
HYDRAULIC REMOTE AREA:	1500 SQ. FT.	
COMBINED HOSE DEMAND:	100 GPM	
2. ORDINARY GROUP I:		
WATER DENSITY:	0.15 GPM/SQ. FT.	
HYDRAULIC REMOTE AREA:	1500 SQ. FT.	
COMBINED HOSE DEMAND:	250 GPM	

**SYSTEM PROTECTION AREA LIMITATIONS:**

LIGHT HAZARD:	52,000 SQ. FT.
ORDINARY HAZARD:	52,000 SQ. FT.



**1 COMBINED WATER SERVICE SCHEMATIC**

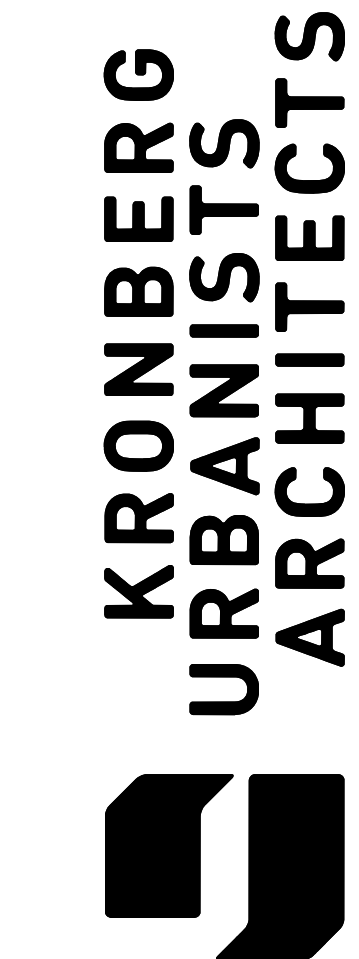
EXHIBIT "B" - PIPING MATERIALS (FIRE PROTECTION) (NOTES AT END OF EXHIBIT "B")			
SERVICE	PIPE MATERIAL	FITTINGS	CONNECTIONS
SPRINKLER (WET)	SCHEDULE 40, BLACK STEEL 2" AND SMALLER	MALLEABLE OR DUCTILE IRON	THREADED
	SCHEDULE 40 CPVC 1 1/4" AND SMALLER	SCHEDULE 40 CPVC	SOLVENT WELDED
	SCHEDULE 80 CPVC 1 1/2" - 2"	SCHEDULE 80 CPVC	SOLVENT WELDED
FIRE SERVICE	SCHEDULE 10, BLACK STEEL 2 1/2" AND LARGER	MALLEABLE OR DUCTILE IRON	ROLL GROOVED MECHANICAL TYPE COUPLINGS
	DUCTILE IRON W/CEMENT LINING	BELL & SPIGOT	MECHANICAL OR GROOVED RUBBER GASKET

**NOTES FOR EXHIBIT B**

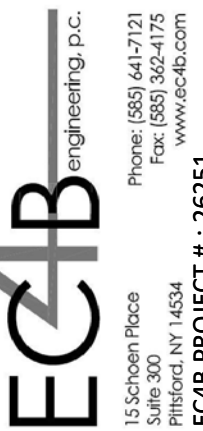
- NOTE 1:** USE GALVANIZED STEEL PIPE AND FITTINGS FOR ALL ABOVEGROUND EXTERIOR LOCATIONS PASSING THROUGH EXTERIOR WALLS AND WHERE CALLED FOR.
- NOTE 2:** ALL EXPOSED PIPING WITHIN FINISHED AREAS SHALL BE PAINTED WITH A PRIMER COAT AND TWO FINISH COATS. COLOR PER THE ARCHITECT/OWNER.
- NOTE 3:** CPVC PIPING TO BE USED IN LIGHT HAZARD OCCUPANCY AREAS ONLY.

FIRE PROTECTION SYMBOLS LIST	
SYMBOL	DESCRIPTION
	NEW TO EXISTING CONNECTION
	REMOVE TO THIS POINT
	PIPING TO BE REMOVED
	EXISTING PIPING
	NEW PIPING
	PIPE CONTINUATION (SINGLE LINE)
	PIPE CONTINUATION (DOUBLE LINE)
	BREAK
	DIRECTION OF FLOW
	CAP OR PLUG
	DROP CONNECTION
	ELBOW UP
	ELBOW DOWN
	PRESSURE GAGE
	CHECK VALVE
	BUTTERFLY VALVE
	PUMP
	BACKFLOW PREVENTER
	SHUT OFF VALVE WITH TAMPER SWITCH (TS)
	FLOW SWITCH (FS)
	DRY PIPE VALVE
	ALARM CHECK VALVE
	FIRE DEPARTMENT CONNECTION (FDC)
	FIRE HYDRANT
	PENDENT SPRINKLER HEAD
	SEMI-RECESSED SPRINKLER HEAD
	UPRIGHT SPRINKLER HEAD
	CONCEALED SPRINKLER HEAD
	SIDEWALL SPRINKLER HEAD
	360 DEGREE PENDENT/UPRIGHT NOZZLE
	180 DEGREE SIDEWALL NOZZLE
	SMOKE DETECTOR (IONIZATION)
	SMOKE DETECTOR (PHOTOELECTRIC)
	INTELLIGENT LOGIC CONTROL PANEL
	GRAPHIC/REMOTE ANNUNCIATOR/UNIT PANEL
	MANUAL PULL STATION (NOVEC 1230 SYSTEM)
	ABORT SWITCH (NOVEC 1230 SYSTEM)
	STROBE UNIT (NOVEC 1230 SYSTEM)
	HORN/STROBE UNIT (NOVEC 1230 SYSTEM)
	ELECTRIC MOTOR BELL (NOVEC 1230 SYSTEM)

NOTE: NOT ALL SYMBOLS ARE NECESSARILY USED ON THIS PROJECT



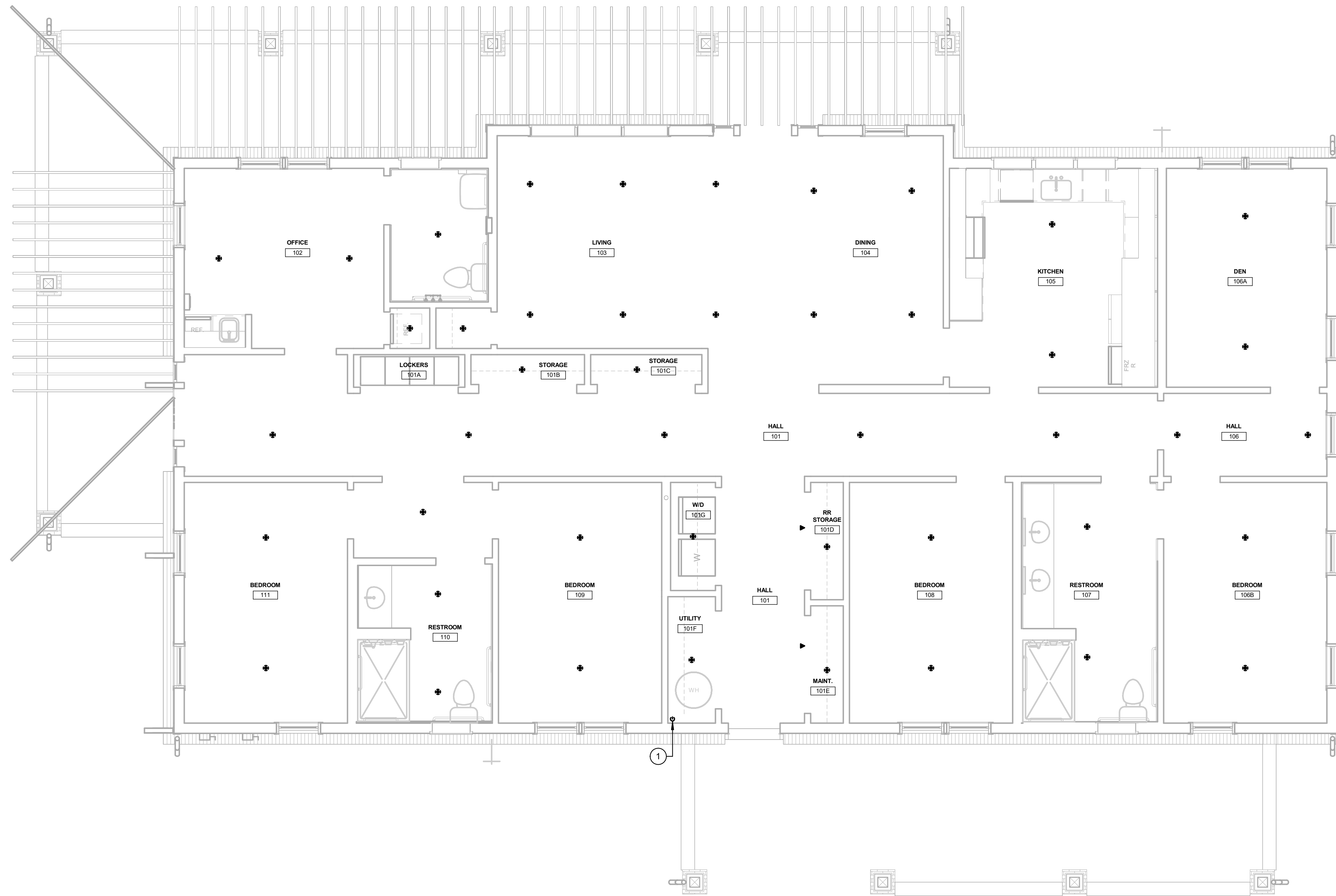
CLARATEL CARE HOMES  
3053 WESLEY CHAPEL RD  
DECATUR, GA 30034



Mark	Date	Description

Project ID	2572
Drawn By	WAB
Checked By	NMG

Sheet Title  
**LEGEND, SPECIFICATIONS & NOTES**  
Drawing No.  
**FP-0.1**



**1** FIRST FLOOR PLAN  
1/4" = 1'-0"

**NOTE:**  
PROVIDE INSTITUTIONAL (TAMPER-RESISTANT, LIGATURE-RESISTANT) SPRINKLER HEADS IN ALL AREAS. HEADS SHALL BE SPECIFICALLY LISTED FOR INSTITUTIONAL/SECURE APPLICATIONS. STANDARD OR CONCEALED SPRINKLER HEADS ARE NOT ACCEPTABLE. SUBMIT PRODUCT DATA FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

**NOTE:**  
THIS BUILDING SHALL BE PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM PER NFPA 13D

**GENERAL NOTES:**

- A. COORDINATE ALL SPRINKLER MAINS, BRANCHES AND HEAD LOCATIONS WITH ALL OTHER TRADES.
- B. THE FIRE PROTECTION CONTRACTOR SHALL HYDRAULICALLY CALCULATE ALL SPRINKLER SYSTEMS AND SHALL SIZE THE PIPING ACCORDINGLY.
- C. FIRE PROTECTION CONTRACTOR TO COORDINATE COLOR(S) OF ALL CONCEALED SPRINKLER HEAD(S) WITH OWNER/ARCHITECT PRIOR TO ORDERING.
- D. WHERE MAXIMUM CEILING TEMPERATURES CAN EXCEED 100 DEGREES PROVIDE SPRINKLER HEAD(S) WITH TEMPERATURE RATINGS PER NFPA.
- E. WHERE CEILINGS ARE SLOPED: REFER TO NFPA 13D FOR PROPER SPACING AND COVERAGE.
- F. SPRINKLER PROTECTION IS NOT REQUIRED IN ATTICS, FLOOR OR CEILING SPACES AND GARAGES PER NFPA 13D.

**DRAWING NOTES:**

- ① 2" COMBINED WATER SERVICE. REFER TO WATER SERVICE SCHEMATIC ON DRAWING FP-0.1

Mark	Date	Description

Project ID	2572
Drawn By	WAB
Checked By	NMG
Sheet Title	

FIRST FLOOR PLAN

Drawing No.  
**FP-2.1**