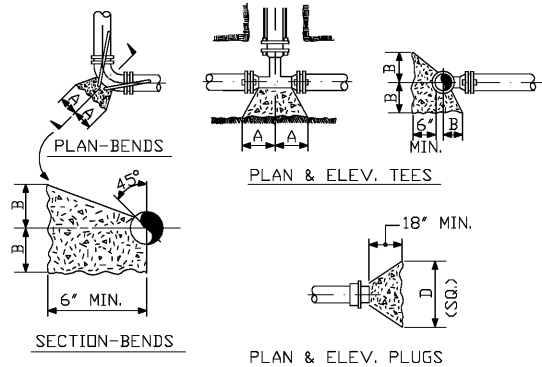


- FIRE PROTECTION SUB-CONTRACTOR SHALL PROVIDE UNDERGROUND MATERIALS AND INSTALLATION SHALL BE SUITABLE FOR A 175 PSI SYSTEM.
- ALL FIRE PROTECTION UNDERGROUND SHALL USE MECHANICAL JOINT CONSTRUCTION ALONG WITH THRUST BLOCKS, DEAD-MAN, AND ROODING TO INSURE JOINT INTEGRITY.
- FIRE PROTECTION SUB-CONTRACTOR SHALL SECURE UNDERGROUND LOCATING SERVICE AND OBTAIN LOCATE TICKET PRIOR TO BEGIN UNDERGROUND EXCAVATION.
- FIRE PROTECTION SUB-CONTRACTOR SHALL COORDINATE UNDERGROUND INSTALLATION WITH OWNER AND LOCAL CITY AUTHORITIES.
- FIRE PROTECTION SUB-CONTRACTOR SHALL OBTAIN ALL REQUIRED APPROVALS AND PERMITS REQUIRED FOR THE UNDERGROUND INSTALLATION FROM LOCAL AND STATE AUTHORITIES HAVING JURISDICTION.
- FIRE PROTECTION SUB-CONTRACTOR SHALL COORDINATE INSTALLATION OF UNDERGROUND WITH MECHANICAL AND ELECTRICAL CONTRACTORS WORK.
- FIRE PROTECTION SUB-CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL PAVED AREAS, HARD SURFACES, PLANTED AND SEEDED AREAS BACK TO ORIGINAL CONDITIONS.

GENERAL UNDERGROUND NOTES

SCALE: NONE



THRUST BLOCKS									
CAST IRON, DUCTILE & CARBON STEEL PIPE									
SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS
	A	B	A	B	A	B	A	B	
6"	24"	15"	12"	15"	9"	11"	17"	15"	32"
8"	33"	18"	17"	20"	12"	14"	23"	20"	42"
10"	42"	23"	21"	24"	15"	18"	30"	23"	51"

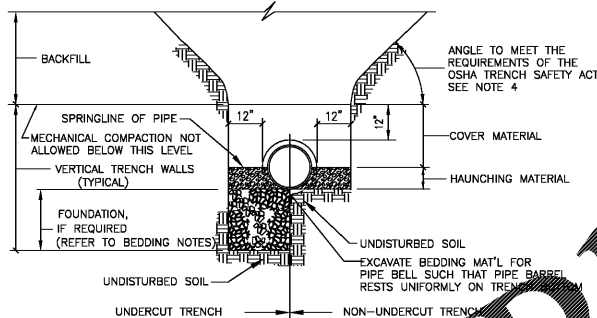
NOTES:

- ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND
- ALL MAINS TO HAVE THRUST BLOCKS AT ALL ELBOWS, TEES, VALVES & PLUGS
- THRUST BLOCK DESIGN BASED ON SOIL RESISTANCE = 2000#/SQ. FT. MIN. LINE PRESS.=300 PSI
- CONTRACTOR SHALL VERIFY SOIL CONDITIONS AND SIZE THRUST BLOCKS FOR 300 PSI SYSTEM ACCORDINGLY
- INFORMATION PRESENTED WITHIN THESE DOCUMENTS IS FOR BASIC GUIDANCE.

UNDERGROUND THRUST BLOCK DETAILS

SCALE: NONE

- BEDDING NOTES:
 - NORMALLY APPROVED CLEAN BACKFILL MATERIAL WILL BE USED AS A 4-INCH TYPICAL BEDDING UNDER THE PIPE. HOWEVER, WHERE UNSTABLE OR UNSUITABLE MATERIAL EXISTS FOR BEDDING, AS DETERMINED BY THE UTILITY INSPECTOR AND / OR DESIGN ENGINEER, A SUFFICIENT DEPTH OF THE UNSTABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH NOT LESS THAN 6-INCHES NOR MORE THAN 24-INCHES OF ONE OF THE FOLLOWING MATERIALS:
 - APPROVED CLEAN BACKFILL (FROM ADJACENT AREAS)
 - NO. 100 SIZE 5 AGGREGATE (3/8-INCH TO 3/4-INCH)
 - BEDDING COMPACTION OF 95 PERCENT IS REQUIRED WHERE CLEAN BACKFILL MATERIAL IS USED. THEN USING GRAVEL AS BACKFILL, HAND TAMING IS REQUIRED.
 - IF SOLID HARDPAN IS ENCOUNTERED AT THE TRENCH BOTTOM AND NO UNDERCUT (EXCLUDING TEETH DEPTH) HAS BEEN MADE IN THE HARDPAN, NO COMPACTION IS REQUIRED ON THE MATERIAL USED TO BRING THE EXCAVATION TO THE TRENCH BOTTOM.
 - ALL ASPECTS OF THIS BEDDING WORK WILL BE DETERMINED BY THE UTILITY INSPECTOR.
- PERCENT COMPACTION:
 - COMPACTION REQUIREMENTS LISTED BELOW ARE IN PERCENTAGES OF MAXIMUM DENSITY AS DETERMINED BY THE MODIFIED PROCTOR METHOD (ASTM D-1557) UNLESS OTHERWISE SPECIFIED OR APPROVED.
 - 95 PERCENT FOR PIPE BEDDING, EXCEPT FOR THE VARIOUS EXCEPTIONS LISTED IN BEDDING NOTES IN WHICH NON-FORM COMPACTION TEST IS REQUIRED.
 - 95 PERCENT FOR HAUNCHING MATERIAL.
 - 95 PERCENT FOR COVER MATERIAL (6-INCH LIFTS)
 - 85 PERCENT FOR BACKFILL IN ROADWAY AREAS. (12-INCH LIFTS)
 - 90 PERCENT FOR BACKFILL IN ROADWAY AREAS. (12-INCH LIFTS)
- TESTING REQUIREMENTS:
 - LOCATION OF TESTING STATIONS WILL BE RANDOMLY SELECTED AND WITHIN THE FOLLOWING MINIMUM FREQUENCIES: BACKFILL: ONE (1) TEST PER 300 LINEAR FEET OR PORTION THEREOF. TYPICAL ELEVATIONS OF TEST POINTS WILL BE EVERY TWO (2) FEET, STARTING ONE FOOT ABOVE TOP OF PIPE. THE PERCENT (%) OF MAXIMUM DENSITY LISTED ABOVE ARE MINIMUMS AND MUST BE INCREASED AT THE DISCRETION OF THE UTILITY INSPECTOR AND / OR DESIGN ENGINEER.
 - IF ANGLE CANNOT BE MET DUE TO TIGHT WORKING CONDITIONS, TRENCH SHALL BE SHEETED OR A TRENCH BOX UTILIZED.



TYPICAL OPEN CUT DETAIL

SCALE: NONE

SUBMITTAL AND REVIEWS OF CONTRACTOR'S SHOP DRAWINGS AND HYDRAULIC CALCULATIONS - INCLUDE THE FOLLOWING PROCEDURES AND REQUIREMENTS:

FIRE SPRINKLER CONTRACTOR: THE FIRE SPRINKLER CONTRACTOR SHOULD SUBMIT WORKING SHOP DRAWINGS, HYDRAULIC CALCULATIONS, AND PRODUCT DATA TO THE DESIGN ENGINEER OF RECORD - NUMBER OF SETS AS DETERMINED BY THE DESIGN ENGINEER. SHOP DRAWINGS SHOULD INCLUDE AND BE IN ACCORDANCE WITH WORKING PLAN REQUIREMENTS OF CHAPTER 22 OF NFPA 13. PRODUCT DATA SHOULD IDENTIFY ALL EQUIPMENT, AND ACCESSORY SELECTIONS TO BE INSTALLED. THE HYDRAULIC CALCULATIONS AND SHOP DRAWINGS SHOULD BE SIGNED BY THE FIRE SPRINKLER DESIGNER AND INCLUDE THE FIRE SPRINKLER CONTRACTOR (FS) LICENSE NUMBER.

PROJECT ENGINEER: THE SPECIFYING ENGINEER (PE) HAS PRIMARY RESPONSIBILITY FOR REVIEW AND APPROVAL OF FIRE SUPPRESSION SYSTEM SHOP DRAWINGS AND HYDRAULIC CALCULATIONS. SPECIFYING ENGINEER REVIEW SHALL DETERMINE COMPLIANCE WITH APPLICABLE CODES AND STANDARDS AND THE PROJECT CONTRACT DOCUMENTATION. AFTER COMPLETING THIS REVIEW, THE SPECIFYING ENGINEER SHALL PROVIDE ONE (1) COPY WITH A SIGNED COVER LETTER, INCLUDING PRINTED REVIEWER NAME, SUMMARIZING THE OUTCOME TO THE STATE CONSTRUCTION OFFICE FOR APPROVAL. IF COMMENTS BY THE DESIGN ENGINEER ARE MINOR IN NATURE, THE ENGINEER MAY, AT THEIR DISCRETION, FORWARD THE SHOP DRAWINGS TO THIS OFFICE IN PARALLEL WITH COMMENT RESOLUTION BY THE FIRE SPRINKLER CONTRACTOR. COMMENTS MADE BY THE DESIGNER SHOULD BE FORWARDED TO THIS OFFICE WITH THE REVIEW PACKAGE INCLUDING COMMENTS FROM PREVIOUS REVIEW ITERATIONS, IF ANY.

ONCE ALL COMMENTS ARE RESOLVED AND APPROVED BY SCO, AN APPROVAL LETTER RELEASING THIS PART OF PROJECT TO ENTER INTO CONSTRUCTION WILL BE SENT TO THE SPECIFYING ENGINEER. NO OTHER PERMITS ARE REQUIRED AFTER THE RECEIPT OF THIS APPROVAL LETTER.

FINAL INSPECTION: AT THE FINAL INSPECTION, THE FIRE SPRINKLER CONTRACTOR SHOULD HAVE FOR REVIEW AND CLOSEOUT DOCUMENTATION ALL PERTINENT NFPA PAPERWORK PROPERLY FILLED OUT ON NFPA FORMS AS APPLICABLE. THE SHOP DRAWING APPROVAL LETTER FROM THIS OFFICE SHOULD BE AVAILABLE. A SET OF AS-BUILT FIRE SPRINKLER SHOP DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BE PLACED IN A WHITE PVC TUBE MARKED 'FIRE SPRINKLER SHOP DRAWINGS' AND SECURELY FIXED IN THE FIRE SPRINKLER RISER ROOM.

SPRINKLER SCHEDULE

- ACOUSTICAL LAY-IN CEILINGS
- WHITE RECESSED HEADS
- SHEETROCK CEILINGS
- WHITE CONCEALED HEADS
- SIDEWALLS
- WHITE RECESSED HEADS IN FINISHED AREAS
- BRASS HEADS IN UNFINISHED AREAS
- EXPOSED AREAS
- BRASS UPRIGHT OR PENDENT HEADS
- CANOPY AREAS
- DRY CHROME PENDENT OR SIDEWALL HEADS.

- INSTALL SPRINKLERS IN ACCORDANCE WITH NFPA-13, SPRINKLER LISTING AND MANUFACTURERS RECOMMENDATIONS.

NOTE: FIRE SPRINKLER SUB-CONTRACTOR TO COORDINATE HEAD LOCATIONS WITH ALL CONDITIONS, MECHANICAL PIPING, ETC. TO PROVIDE COMPLETE UN-OBSTRUCTED COVERAGE. SUB-CONTRACTOR SHALL VISIT SITE, INVESTIGATE CONDITIONS AND PROVIDE ALL REQUIRED HEADS WEATHER OR NOT SHOWN WITHIN THESE PLANS.

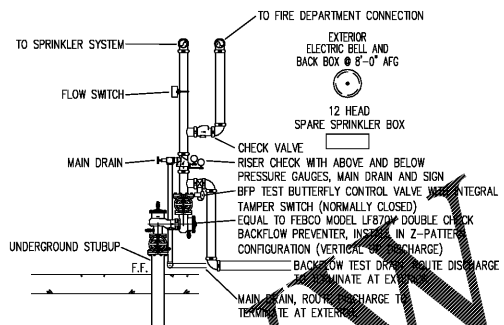
DESIGN CRITERIA

- SPRINKLER HEADS SHALL BE SPACED IN ACCORDANCE WITH NFPA-13 AND THE MANUFACTURERS APPROVAL LISTING.
- SPRINKLER HEAD SPACING SHALL NOT EXCEED 225 SQ. FT. PER HEAD FOR LIGHT HAZARD OCCUPANCIES.
- SPRINKLER HEAD SPACING SHALL NOT EXCEED 130 SQ. FT. PER HEAD FOR ORDINARY HAZARD OCCUPANCIES.
- DESIGN DENSITY AS INDICATED OR PER CODE WHICHEVER IS MORE STRINGENT.
- F.P. SUB-CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS VERIFYING THE DESIGN CRITERIA FOR EACH HAZARD WITHIN FACILITY.
- PRIOR TO HYDRAULIC CALCULATIONS, OBTAIN CURRENT (WITHIN 6 MONTHS) FIRE FLOW DATA (GPM AND PRESSURE) FROM NEAREST WATER SUPPLY. EITHER CONDUCT A TEST WITNESSED BY OR OBTAIN ONE FROM THE BUILDING OR FIRE OFFICIAL. THE F.P. SUB-CONTRACTOR SHALL BEAR ALL COST ASSOCIATED WITH A CURRENT TEST. NEITHER IS THE ENGINEER, OWNER OR G.C. RESPONSIBLE FOR PROVIDING THIS DATA OR PROVIDE EXTRA COMPENSATION.
- WATER FLOW TEST INFORMATION REQUIRED TO BE OBTAINED AND SHOWN ON THE SPRINKLER SHOP DRAWINGS BY THE F.P. SUB-CONTRACTOR SHALL INCLUDE STATIC HYDRANT LOCATION, FLOW HYDRANT LOCATION, ELEVATION RELATIVE TO BUILDING FINISH FLOOR OF EACH HYDRANT AND TEST RESULTS.
- F.P. SUB-CONTRACTOR SHALL TERMINATE THE HYDRAULIC CALCULATIONS AT THE CITY TEST HYDRANT MINIMUM. INDICATE ON DRAWINGS ALL UNDERGROUND PIPE AND FITTINGS BOTH NEW AND EXISTING.
- F.P. SUB-CONTRACTOR TO PROVIDE SHELL SPRINKLER SYSTEM THROUGHOUT THE BUILDING, EXCEPT FOR CORE AREAS WHERE FINAL SPRINKLERS SHALL BE INSTALLED IN FINISH CEILINGS.

FIRE PUMP SCHEDULE ALTERNATE #G-1

- ELECTRIC FIRE PUMP
- 75 PSI @ 750 GPM EQUAL TO 1/2" GPM PER 100' OF RISE. FIRE PUMP SYSTEM WITH PUMP HOUSE SHALL BE LISTED AND/OR FM APPROVED FOR FIRE SUPPRESSION. ELECTRICAL CHARACTERISTICS SHALL BE 50HP, 480V/3PH/60HZ, 3550 RPM. FIRE PUMP SHALL BE FURNISHED WITH SERVICE RATED REDUCED VOLTAGE START CONTROLLER AND TRANSFER SWITCH.
- THE FIRE PUMP SHALL BE FURNISHED WITH THE FOLLOWING ACCESSORIES AS STANDARD:
- 1. CASING RELIEF VALVE
 - 2. DIAL SUCTION AND DISCHARGE GAUGES
 - 3. CENTRIC SUCTION REDUCER (IF REQUIRED)
 - 4. CENTRIC DISCHARGE INCREASER (IF REQUIRED)
 - 5. HOSE VALVE TRIP HEADER
 - 6. FIRE DEPARTMENT CONNECTION
 - 7. ONE (1) HOSE VALVE WITH 2" NPT
 - 8. WITH CHAINS AND CHAINS FOR THE ABOVE HOSE VALVES
 - 9. FLOWMETER
- ELECTRIC JOCKEY PUMP
- 85 PSI @ 5 GPM EQUAL TO GOULDS GM. 7 STAGE ELECTRIC JOCKEY PUMP. ELECTRICAL CHARACTERISTICS SHALL BE 3/4 HP - 3500 RPM, 480V/3PH/60HZ WITH TEFC 1 NEMA FRAME.

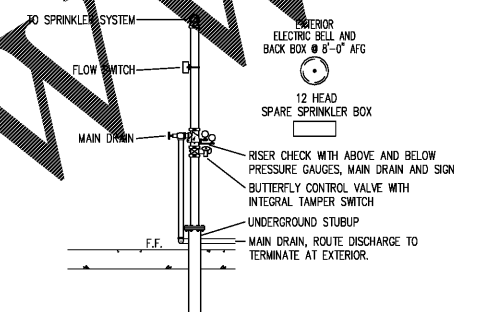
NOTE: THE PUMPS SHALL CONFORM TO LOCAL AHJ, SCO AND NFPA 20 LATEST EDITION FOR THE INSTALLATION OF VERTICAL IN-LINE FIRE PUMPS.



BASE BID RISER DETAIL

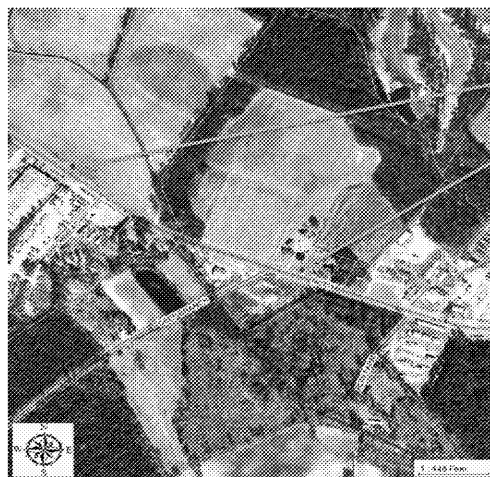
SCALE: NONE

NOTE: BASE BID RISER DETAIL IS NOT AN ALTERNATE #G-1 IS ACCEPTED.



ALTERNATE #G-1 RISER DETAIL

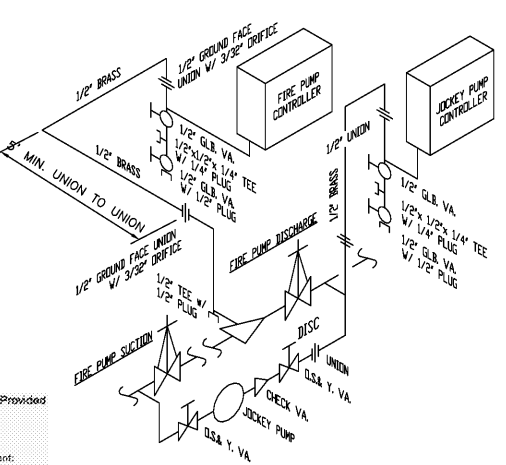
SCALE: NONE



WATER FLOW TEST SITE MAP

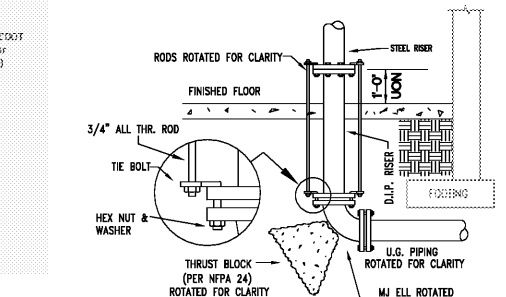
SCALE: NONE

CONTRACTOR SHALL DETERMINE AND VERIFY ALL ELEVATIONS BETWEEN TEST LOCATION AND BUILDING. THIS INFORMATION SHALL BE INCLUDED IN THE HYDRAULIC CALCULATIONS.



FIRE PUMP SENSING LINE DETAIL

SCALE: NONE (ALTERNATE #G-1)



UNDERGROUND STUB-UP SCHEMATIC

SCALE: NONE (ALTERNATE #G-1)

FIRE PROTECTION NOTES

- THE INFORMATION GIVEN HEREIN AND ON THE PLANS IS AS EXACT AS COULD BE SECURED FOR BIDDING PURPOSES, AND ITS ACCURACY IS NOT GUARANTEED. THE FIRE SPRINKLER SUB-CONTRACTOR IS RESPONSIBLE FOR EXAMINING BOTH THE EXISTING AND NEW JOB CONDITIONS AND VERIFYING ALL MEASUREMENTS, DISTANCES, ELEVATIONS, CLEARANCES, PIPE SIZES, ETC. BEFORE STARTING THE WORK.
- THE PLANS ARE DIAGRAMMATIC AND ITEMS SHOWN MAY NEED TO BE SHIFTED IN ANY DIRECTION. PLANS ARE FOR THE PURPOSE OF CONVEYING THE INTENT OF THE OVERALL SYSTEM DESIGN STRATEGY. IT IS THE RESPONSIBILITY OF THE NICET LEVEL III FIRE SYSTEMS DESIGNER TO INCORPORATE ALL REQUIRED ELEMENTS FOR A COMPLETE DESIGN AND INSTALLATION WHETHER OR NOT SHOWN WITHIN THESE PLANS AND SPECIFICATIONS.
- THE DESIGN, MATERIALS, AND INSTALLATION SHALL BE IN ACCORDANCE WITH NFPA-13, NFPA-72, NFPA-2001, MANUFACTURERS RECOMMENDATIONS, APPLICABLE STATE AND LOCAL CODES, OWNERS INSURANCE UNDERWRITER, AND ALL LOCAL AUTHORITIES HAVING JURISDICTION.
- THE FIRE SPRINKLER SUB-CONTRACTOR IS RESPONSIBLE FOR PROVIDING DESIGN, SHOP DRAWINGS, AND HYDRAULIC CALCULATIONS INCLUDING BUT NOT LIMITED TO ALL ITEMS WHICH APPLY AS NOTED IN NFPA-13 SECTION 'DESIGN PLANS'. DRAWINGS AND CALCULATIONS SHALL BE THE SIGNATURE OF AN INDIVIDUAL WITH NICET LEVEL III CERTIFICATION IN THE SPRINKLER CATEGORY.
- THE FIRE SPRINKLER SUB-CONTRACTOR IS RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS AND HYDRAULIC CALCULATIONS TO ALL AUTHORITIES HAVING JURISDICTION, INCLUDING BUT NOT LIMITED TO THE LOCAL FIRE MARSHAL, INSURANCE UNDERWRITER, AND THE OWNER.
- SPRINKLER HEADS INSTALLED IN CEILING TILES SHALL BE LOCATED IN THE CENTER OF TILE, NOT ON THE REFLECTED CEILING PLANS CONTAINED IN THE CONTRACT DOCUMENTS, AND COORDINATED WITH THE CEILING CONTRACTOR.
- THE FIRE SPRINKLER SUB-CONTRACTOR SHALL PROVIDE ALL NECESSARY OFFSETS, RISES AND DROPS IN PIPING, AND AUXILIARY DRAINS AS REQUIRED BY BUILDING CODES, WHETHER SHOWN ON PLANS OR NOT.
- ALL SPRINKLER SYSTEM AND ASSOCIATED COMPONENTS SHALL BE BRACED FOR SEISMIC CONDITIONS AS OUTLINED IN ASCE-07 AND INFORMATION INDICATED ELSEWHERE WITHIN THESE DOCUMENTS. THE SEISMIC DESIGN IS DELEGATED TO NFPA REQUIREMENTS PROVIDED BY THE CONTRACTOR. REFER TO THE APPENDIX B AND STRUCTURAL DRAWINGS FOR DESIGN CATEGORY AND IMPORTANCE FACTORS. THE FIRE SPRINKLER SUB-CONTRACTOR SHALL CONSULT THE APPENDIX-B OF THE CONTRACT DOCUMENTS. PROVIDE AND INSTALL SEISMIC RESTRAINT FOR ALL PIPING, CONDUIT & EQUIPMENT IN ACCORDANCE WITH REQUIREMENTS OF NFPA, SPECIFICATIONS AND THE STANDARD BUILDING CODE.
- THE FIRE SPRINKLER SUB-CONTRACTOR SHALL OBTAIN A WATER FLOW TEST AS OUTLINED IN "DESIGN CRITERIA", BEFORE STARTING THE SPRINKLER SHOP DRAWINGS.
- THE FIRE SPRINKLER SUB-CONTRACTOR SHALL HYDROSTATICALLY TESTED ALL NEW FIRE PROTECTION PIPING ABOVE GROUND IN ACCORDANCE WITH NFPA-13.
- CUTTING AND PATCHING OF ANY CONDITIONS INCLUDING FLOORS, WALLS AND CEILINGS REQUIRED FOR THE INSTALLATION OF THE FIRE PROTECTION SYSTEM IS THE RESPONSIBILITY OF THE FIRE SPRINKLER SUB-CONTRACTOR. ALL WORK SHALL BE COORDINATED WITH ALL TRADES.
- ALL EXPOSED FIRE PROTECTION PIPING IN CLOSETS, STARWELLS, MECHANICAL ROOMS ETC., SHALL BE PAINTED BY THE FIRE SPRINKLER SUB-CONTRACTOR. SPRINKLER HEADS SHALL BE PROTECTED FROM FIELD PAINTING.
- PROJECT PHASING SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, PHASING PLANS, JOB CONDITIONS AND OWNER DIRECTIONS.
- ALL ARM-OVERS TO BE 1" UNLESS NOTED OTHERWISE.
- A COMPLETE AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED IN ALL SPACES.
- THE F.P. SUBCONTRACTOR SHALL PROVIDE A BACKFLOW PREVENTER ASSEMBLY IN ACCORDANCE WITH UTILITY COMPANY REGULATIONS.
- ALL COMPONENTS USED IN THE SPRINKLER SYSTEM SHALL BE UL APPROVED.
- THE DESIGN SHALL INCLUDE AN OUTLINE OF ALL DUCTWORK, LIGHTS, AND OTHER OBSTRUCTIONS (DO NOT ROUTE PIPING THROUGH THE DUCTWORK) TO SHOW PROPER INSTALLATION OF ALL SPRINKLER WORK. THE GENERAL CONTRACTOR SHALL COORDINATE CLEARANCES WITH THE SPRINKLER PIPING, AND ALL TRADES AFFECTED SHALL "SIGN OFF" ON THE DESIGN PRIOR TO FABRICATION OR INSTALLATION.
- SPRINKLERS IN UNHEATED OR AREAS SUBJECT TO FREEZING SHALL BE PROTECTED FROM FREEZING.
- PROVIDE ALL REQUIRED DEVICES AND COMPONENTS, FOR INTER-LOCK WRING WITH THE ALARM BELL OR CENTRAL STATION MONITORING, WHERE REQUIRED BY THE BUILDING OFFICIAL.
- ALL PIPE, FITTINGS, HANGERS, SPRINKLERS, EQUIPMENT, ETC. SHALL CONFORM WITH "BUY AMERICA" 49 U.S.C. 5323(j) AND 49 CFR PART 661, SHALL BE OF DOMESTIC MANUFACTURE OR ORIGIN.
- PROVIDE SPRINKLER PROTECTION UNDER CANOPIES.
- THE FIRE SPRINKLER SUB-CONTRACTOR SHALL OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND PROVIDE FIRE SPRINKLER PROTECTION BASED ON THE INFORMATION INCLUDED WITHIN THE COMPLETE SET OF DOCUMENTS AND SPECIFICATIONS.
- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO SHOW THE DESIGN INTENT AS COORDINATED WITH THE OWNERS NEEDS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL DESIGN AND SHOP DRAWINGS BASED ON THE INTENT INDICATED. THESE DOCUMENTS ARE NOT INTENDED TO SHOW ALL REQUIRED ITEMS AND DESIGN ISSUES. THE CONTRACTORS BID SHALL INCLUDE ALL REQUIRED ITEMS FOR A FULLY FUNCTIONAL SYSTEM. ANY ERRORS OR OMISSIONS WITHIN THESE DOCUMENTS MUST BE BROUGHT TO THE ENGINEERS ATTENTION AND RESOLVED BEFORE BID. NO ADDITIONAL COSTS WILL BE ACCEPTED AFTER BID.
- APPLICABLE STANDARDS AND CODES:
 - 2013 NFPA-13 "STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS"
 - 2013 NFPA-24 "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES"
 - 2013 NFPA-72 "NATIONAL FIRE ALARM AND SIGNALING CODE"
 - 2012 NC BUILDING CODE
 - 2012 NC FIRE PREVENTION CODE
 - 2014 NC SCO WATER BASED FIRE PROTECTION SYSTEMS GUIDELINES AND POLICIES

FIRE PROTECTION SHEET INDEX:

- FP0.1 NOTES AND DETAILS - FIRE PROTECTION
- FP1.0 GROUND LEVEL FLOOR PLAN - FIRE PROTECTION
- FP1.1 MEZZANINE LEVEL FLOOR PLAN - FIRE PROTECTION
- FP2.1 ALTERNATE #1 - FIRE PUMP - FIRE PROTECTION

BIDDING DOCUMENTS

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PROJECT TITLE / DESCRIPTION: LUMBERTON EQUIPMENT SHOP NCDOT HIGHWAY DIVISION 6

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872 NC 711 HIGHWAY LUMBERTON, NORTH CAROLINA 28380