

FIRE PROTECTION SYMBOL LIST

SYMBOL	DESCRIPTION
	UNION
	ABOVE GROUND PIPING TO BE PROVIDED
	PIPE ELBOW, TURNED UP
	PIPE ELBOW, TURNED DOWN
	PENDENT FIRE SPRINKLER, ON DROP NIPPLE TO BE PROVIDED
	UPRIGHT FIRE SPRINKLER, TO BE PROVIDED
	OUTSIDE STEM AND YOKE GATE VALVE WITH TAMPER SWITCH
	CHECK VALVE
	CONNECT PROVIDED PIPING TO EXISTING PIPING
	ALARM CHECK VALVE
	DUAL CHECK BACK FLOW PREVENTER WITH INLET AND OUTLET OS&Y GATE VALVES.
	FIRE DEPARTMENT CONNECTION (SIAMSE)
	WATER MOTOR GONG

FIRE PROTECTION DESIGN CALCULATION DATA

OCCUPANCY:	MERCANTILE, USE GROUP M (IBC)/ USE GROUP D-0 (FIRE AND PANIC)
HAZARD:	ORDINARY, GROUP 2
DENSITY:	0.20 GPM/SQ.FT.
AREA:	1500 SQ.FT.
AREA PER HEAD:	130 MAX. SQ.FT.
TYPE:	WET PIPE FIRE SPRINKLERS

HYDRANT FLOW TEST INFORMATION

STATIC P.S.I.:	77 PSI
RESIDUAL P.S.I.:	76 PSI
G.P.M. FLOWED :	1838 GPM
DATE:	10/11/2006
LOCATION:	ALLEN AVENUE @ WASHINGTON STREET
FLOW TESTED BY:	PORTLAND WATER DEPARTMENT
ELEVATION:	N/A

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION	MEZZANINE STORAGE
NO. OF SPRINKLERS	14

BASIS OF DESIGN

1. DENSITY	0.2 GPM/SQ. FT
2. DESIGN AREA OF DISCHARGE	1500 SQ. FT

SYSTEM DEMAND

1. WATER FLOW RATE	259.28 GPM
2. RESIDUAL PRESSURE @ BASE OF RISER	25.78 PSI

HYDRAULIC SYSTEM

THIS BUILDING IS PROTECTED BY A HYDRAULICALLY DESIGNED AUTOMATIC SPRINKLER SYSTEM

LOCATION	SALES FLOOR
NO. OF SPRINKLERS	18

BASIS OF DESIGN

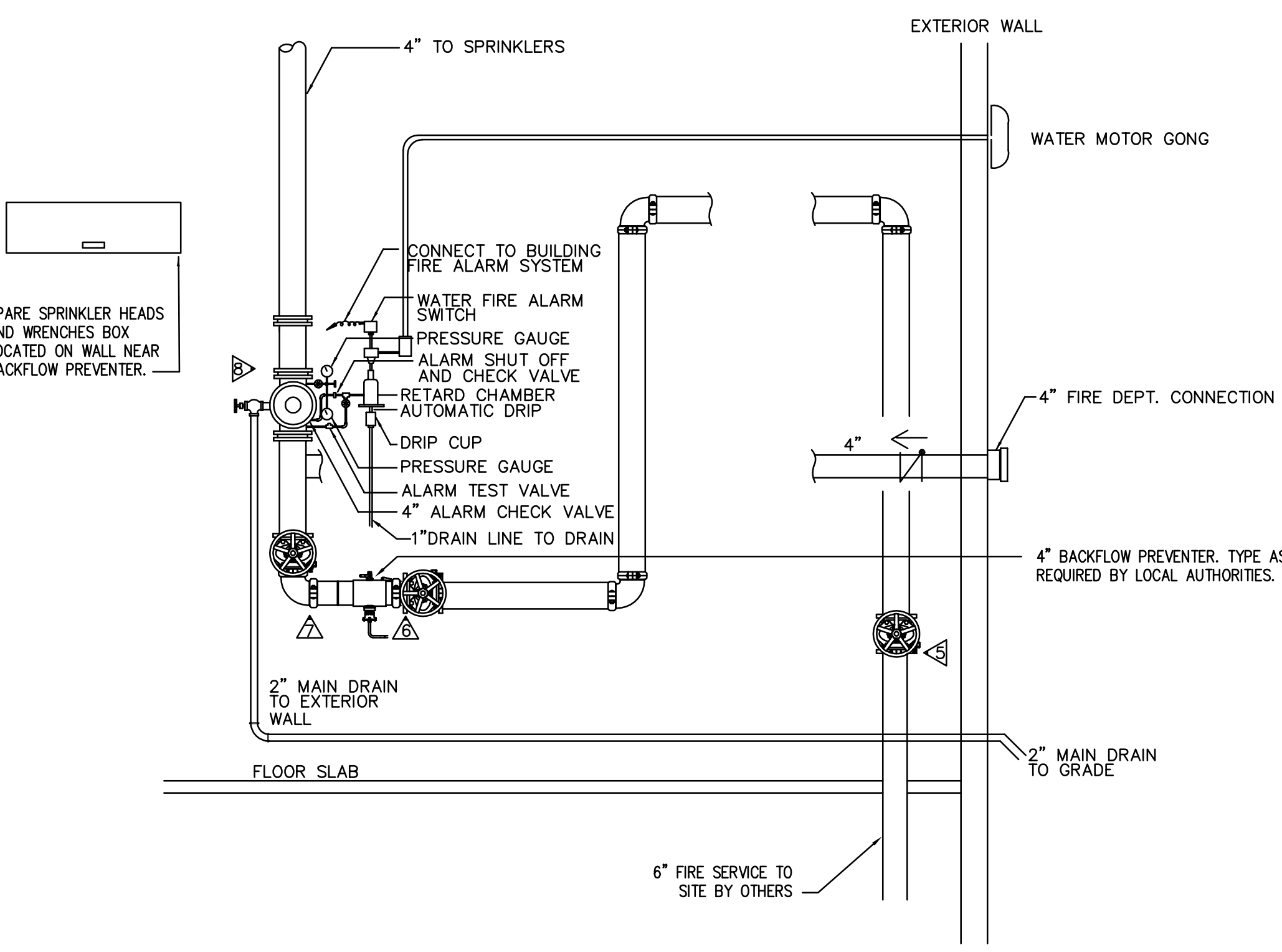
1. DENSITY	0.2 GPM/SQ. FT
2. DESIGN AREA OF DISCHARGE	1500 SQ. FT

SYSTEM DEMAND

1. WATER FLOW RATE	414.09 GPM
2. RESIDUAL PRESSURE @ BASE OF RISER	46.54 PSI

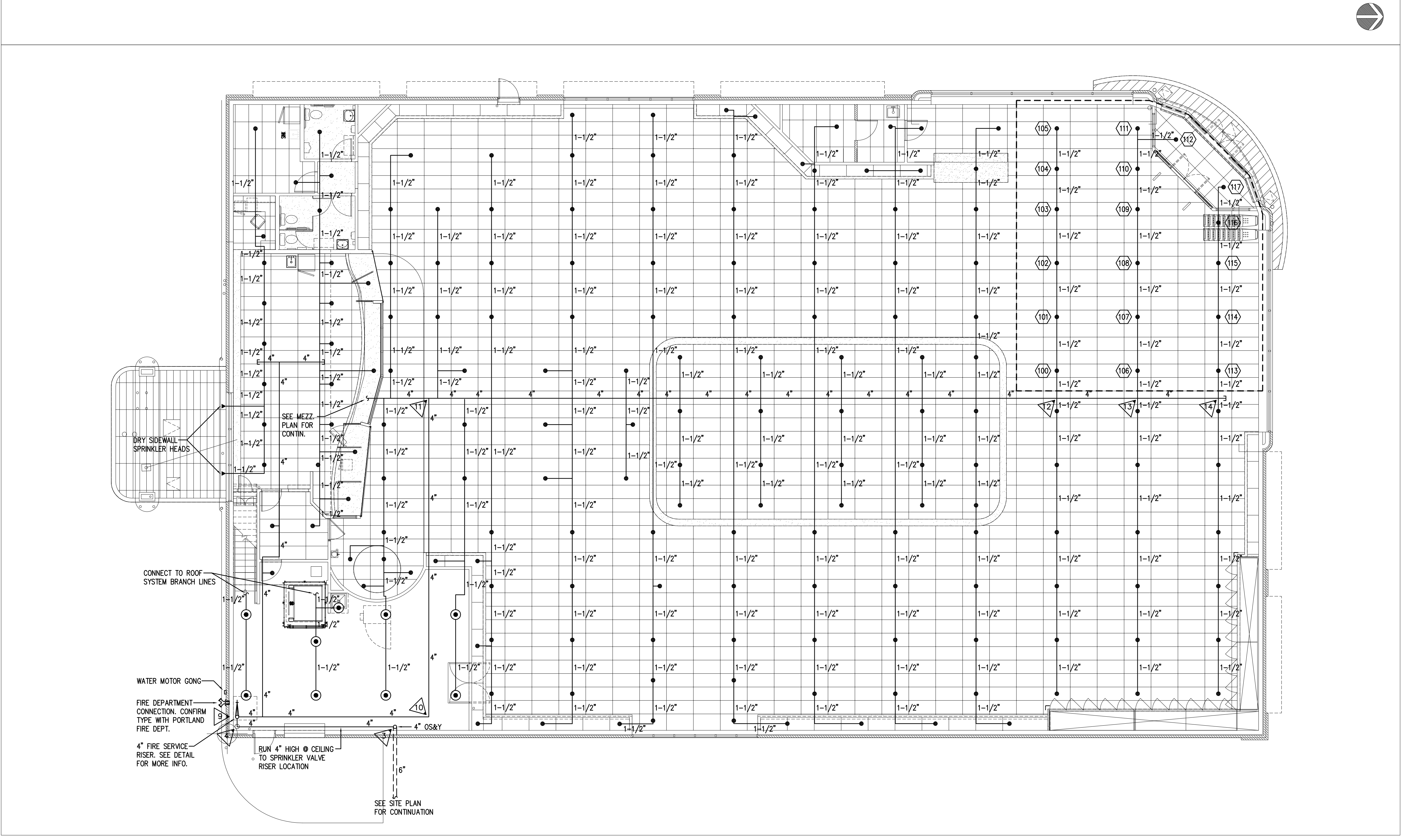
NOTES:

- ELECTRIC PANELS NEAR SPRINKLER HEADS SHALL BE PROVIDED WITH 16 GAUGE GALVANIZED STEEL BAFFLES AS APPROVED BY LOCAL AUTHORITIES.
- CONTRACTOR TO SUBMIT WORKING DRAWINGS IN ACCORDANCE WITH NFPA 13.
- ENTIRE FIRE PROTECTION SYSTEM TO BE INSTALLED IN ACCORDANCE WITH NFPA 13, 24, AUTHORITY HAVING JURISDICTION, AND OWNER'S INSURANCE AGENT.
- UNLESS OTHERWISE INDICATED, PROVIDE A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM, INCLUDING ALL NECESSARY MATERIAL, LABOR AND EQUIPMENT.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH THE STATE AND LOCAL GOVERNING CODES.
- THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL, AND CONNECT COMPLETELY."
- CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF MECHANICAL EQUIPMENT WITH DIVISION 16.
- BEFORE SELECTING MATERIAL AND EQUIPMENT, AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT AND CLEARANCES.
- BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH:
 - NFPA 13
 - INTERNATIONAL BUILDING CODE
 - AUTHORITIES HAVING JURISDICTION
 - OWNER'S INSURANCE COMPANY
- PROVIDE SEISMIC BRACING OF ALL FIRE PROTECTION PIPING IN ACCORDANCE WITH NFPA 13 AND THE 2003 INTERNATIONAL BUILDING CODE.
- FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION OF PROVIDED EQUIPMENT.
- ARRANGE PIPING TO FACILITATE FLUSHING, PROVIDE READILY REMOVABLE STEEL FITTINGS AT ENDS OF ALL MAINS.
- ALL PENETRATIONS THROUGH CONCRETE SHALL BE CORE DRILLED.
- ALL FIRE PROTECTION CONTROL VALVES ARE TO BE PROVIDED WITH TAMPER SWITCHES.
- CONTRACTOR IS TO COORDINATE SPRINKLER PIPE ROUTING AND WORKING DRAWINGS WITH ALL EXISTING DIFFUSERS, DUCTS, PIPES, STRUCTURAL ELEMENTS, CEILING GRIDS AND HEIGHTS, DOOR HEIGHTS, ELECTRICAL & LIGHTING ELEMENTS, AND ALL OTHER EXISTING ITEMS IN THE BUILDING HIDDEN AND/OR VISIBLE. PIPING AND SPRINKLER LOCATIONS SHOWN ON DRAWINGS ARE SCHEMATIC ONLY. ADJUST SPRINKLERS AS NECESSARY TO MEET FIELD CONDITIONS AT NO EXTRA COST.
- INSTALL ALL PIPING WITH PROVISIONS FOR COMPLETE DRAINAGE. WET-PIPE SPRINKLER SYSTEMS MAY BE INSTALLED LEVEL AND NOT PITCHED.
- RETAIN ALL PIPE CUTOFF DISKS. ATTACH DISKS TO CORRESPONDING PIPE JOINT FOR INSPECTION. AFTER INSPECTION REMOVE AND DISPOSE OF ALL DISKS.
- THE FIRE PROTECTION SUBCONTRACTOR IS RESPONSIBLE TO PROVIDE A COMPLETE SET OF WORKING DRAWINGS IN ACCORDANCE WITH NFPA 13. THE DRAWINGS SHALL BE IN COMPLIANCE WITH THE REQUIREMENTS OF THE STATE FIRE MARSHAL AND SHALL BE APPROVED BY THE CONTRACTORS RESPONSIBLE MANAGING SUPERVISOR, WHO WILL PREPARE THE DRAWINGS AND HYDRAULIC CALCULATIONS FOR SUBMISSION.
- ALL EQUIPMENT SHALL BE UNDERWRITER'S LABORATORY LISTED AND/OR FACTORY MUTUAL APPROVED.
- SPRINKLER SUBCONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH REQUIREMENTS OF THE STATE FIRE MARSHAL AND THE STATE FIRE SPRINKLER LAW.
- LOCATION OF FIRE DEPARTMENT CONNECTION TO BE COORDINATED WITH THE PORTLAND FIRE DEPARTMENT.
- SPRINKLER SUBCONTRACTOR SHALL COMPLY WITH THE LOCAL ORDINANCES AND REGULATIONS OF THE CITY OF PORTLAND.

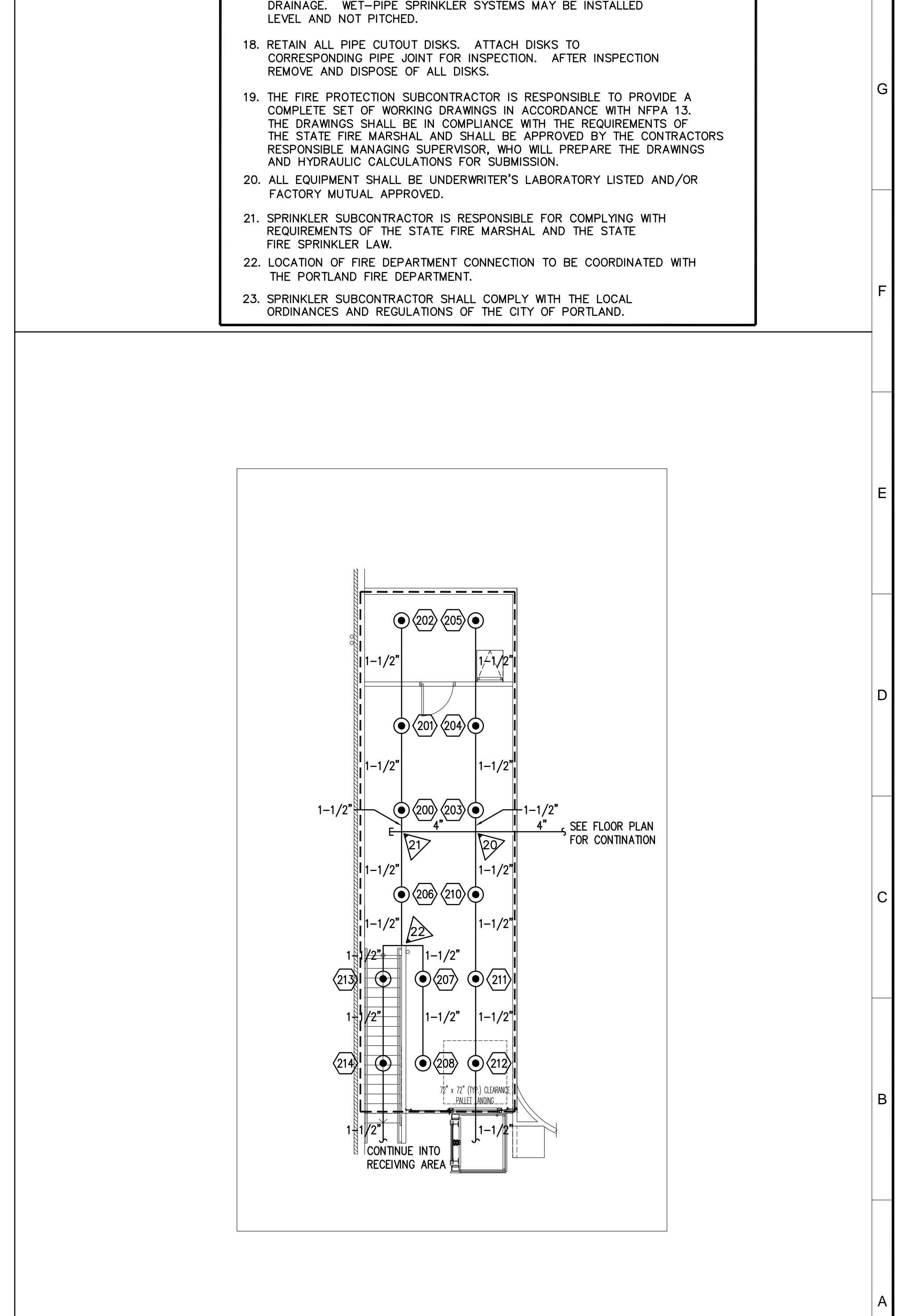


H1 FIRE SERVICE RISER
NTS

H5 HYDRANT FLOW TEST AND SYMBOLS
NTS



A1 FIRE SUPPRESSION FLOOR PLAN
1/8" - 1'-0"



A13 FIRE SUPPRESSION MEZZANINE PLAN
1/8" - 1'-0"



RITE AID STORE #4122
WASHINGTON & ALLEN AVENUE
PORTLAND, MAINE



REVISIONS
No. Date Desc.
Drawn Checked Approved
Project No. 0525
Date: 11-30-06
Title: **FIRE PROTECTION PLAN**
Sheet No. **FP-101**