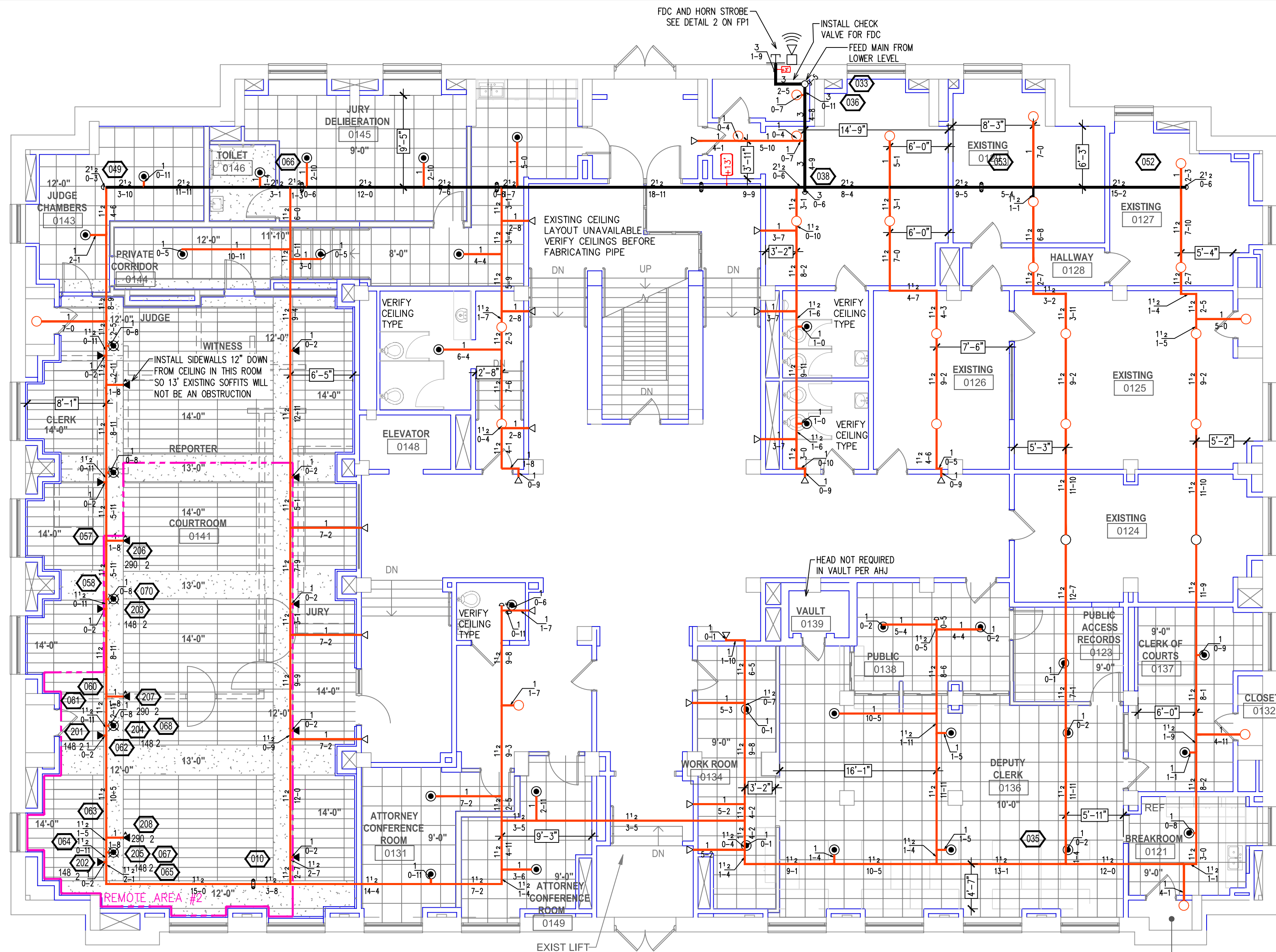


Design Area #2 HAZARD-LIGHT
 Zone: 1 System Type:WET
 Location: COURTROOM

Flowing Outlets:8
 Density: 0.10 Remote Area: 1050
 Flow 299.7 gpm @ 45.0 psi
 Calculation Safety: 1.31 psi
 Includes 100 gpm hose allowance

NOTE:
 1500S.F. REDUCED BY 34% TO 1004 S.F.
 PER NFPA 13 FIG. 11.2.3.2.3.1 DUE TO USE
 OF QUICK RESPONSE SPRINKLERS AND 12"
 CEILING HEIGHT.



FIRST LEVEL FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"

CEILING CONFIGURATION TO BE FIELD VERIFIED. SPRINKLER AND PIPING LAYOUT WILL TAKE CEILING COMPONENTS INTO ACCOUNT. PROPER LAYOUT PER NFPA 13 WILL BE INSTALLED AND SHOWN ON AS-BUILT DRAWINGS.

GENERAL NOTES

INTERNATIONAL BUILDING CODE (2015)
 OCCUPANCY: ASSEMBLY TYPE A-3 BUSINESS TYPE B; COURTHOUSE
 TYPE OF CONSTRUCTION: II-B (PROTECTED, NON-COMBUSTIBLE CONSTRUCTION)
 SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 LOWER LEVEL = 9,885 S.F.
 1ST FLOOR = 11,350 S.F.

INSTALLATION STANDARDS:
 SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016)

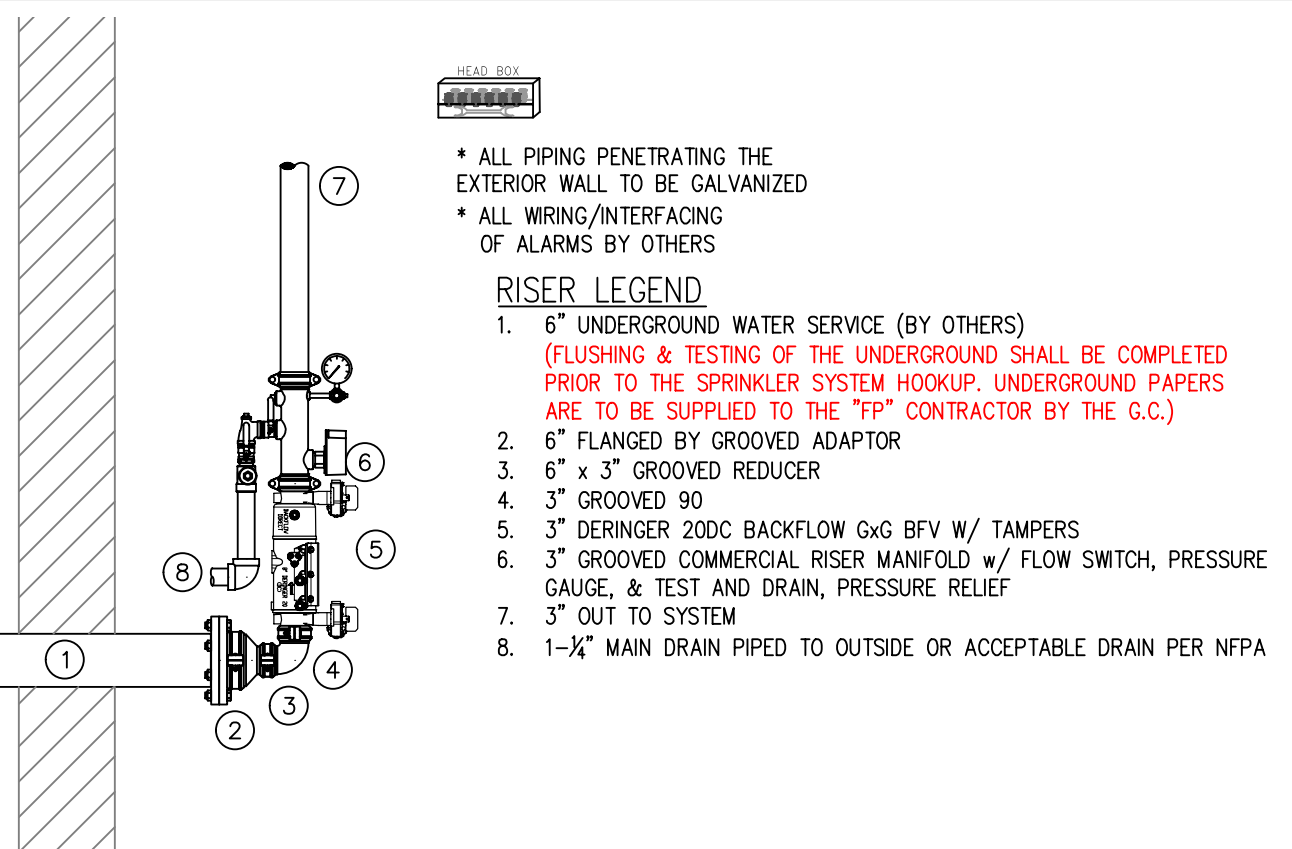
SPRINKLER PIPE TYPES:
 -BASEMENT-
 1" BRANCH LINES TO BE BLK MEGA-THREAD PIPING WITH THREADED FITTINGS
 1 1/2" THROUGH 3" MAIN & BRANCH LINES TO BE BLK MEGA-FLOW PIPING WITH GROOVED FITTINGS
 -FIRST FLOOR-
 1" THROUGH 1 1/2" BRANCH LINES TO BE CPVC PIPING WITH CEMENT FITTINGS
 2" THROUGH 3" MAIN TO BE BLK MEGA-FLOW PIPING WITH GROOVED FITTINGS

DESIGN CRITERIA:
 LIGHT AREAS DESIGNED TO DELIVER 0.10 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
 ORDINARY I AREAS DESIGNED TO DELIVER 0.15 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
 REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 11.2.3.2.3

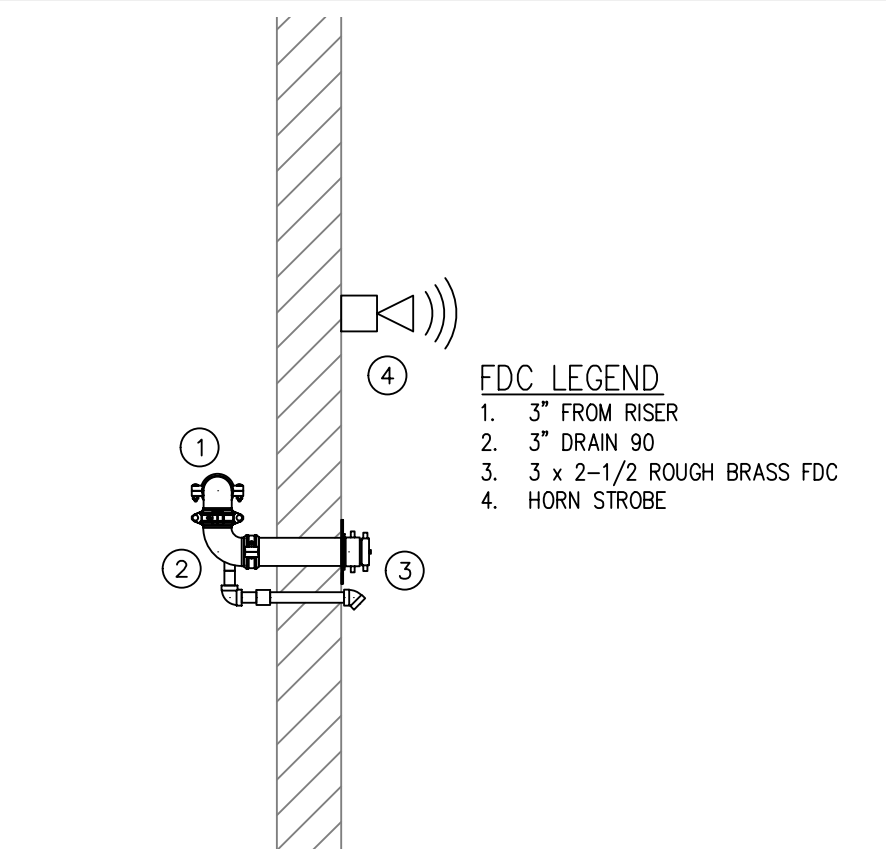
NOTES:
 ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2016) - SEE PLAN FOR HANGING REQUIREMENTS

SYMBOLS USED ON DRAWINGS:
 (RISER) PIPE ELEVATION A.F.F.
 (RISER) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 (JUNCTION) HYDRAULIC CALCULATION JUNCTION POINT
 12'-0" CEILING HEIGHT

SCOPE OF WORK:
 PRAIRIE SONS TO INSTALL NEW FIRE SPRINKLER RISER IN BASEMENT WITH A SINGLE WET ZONE.
 EXISTING BUILDING - BASEMENT AND FIRST FLOOR TO BE SPRINKLERED AT THIS TIME PER LOCAL AHJ.
 FULL PLANS NOT AVAILABLE - FIELD SURVEY TO BE COMPLETED TO VERIFY PROPER COVERAGE AND ANY CONFLICTS BEFORE PIPE IS FABRICATED.
 BASEMENT AND FIRST FLOOR OF BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016).



1 RISER DETAIL
 SCALE: 1/2" = 1'-0"

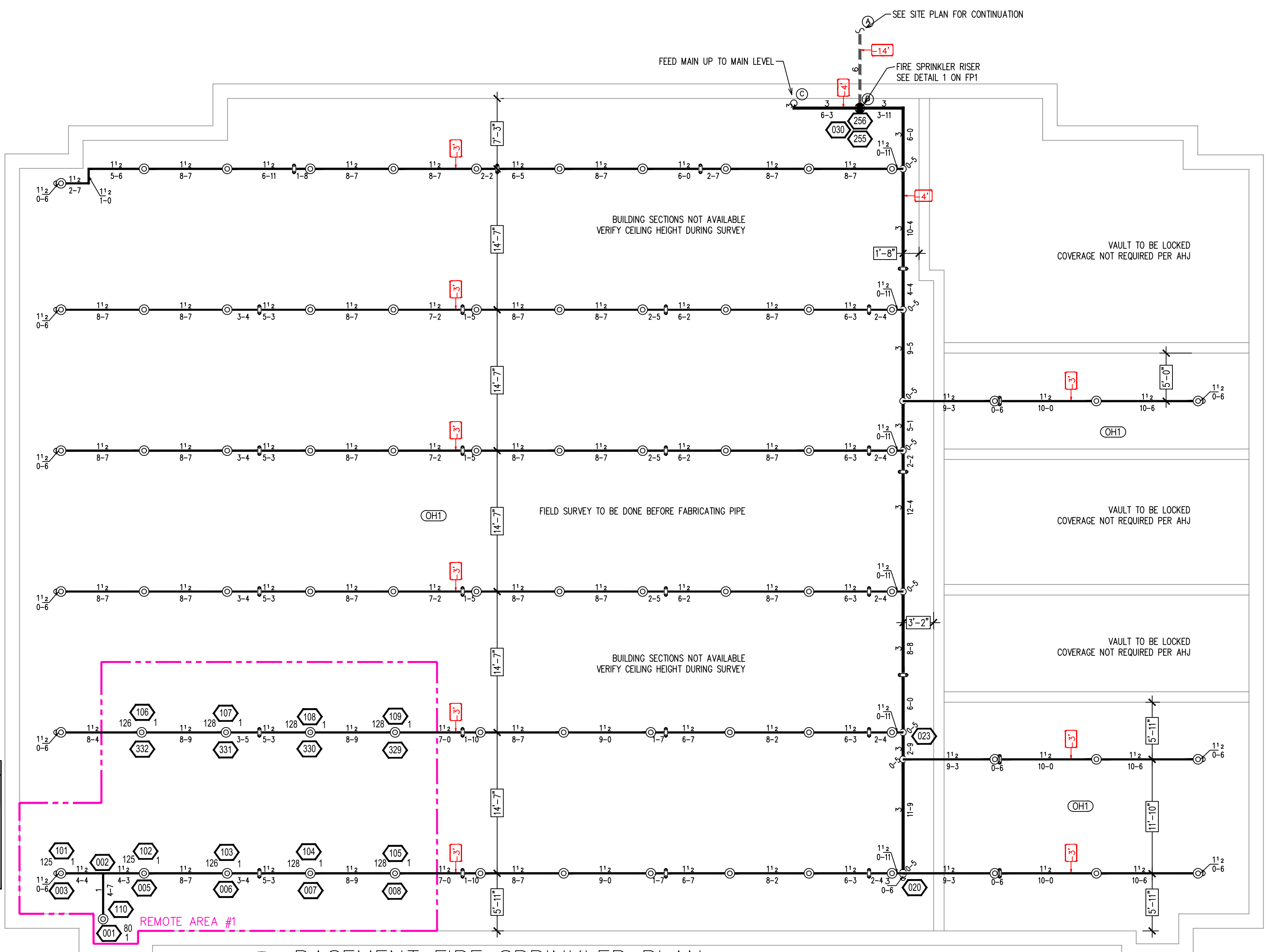


2 FDC DETAIL
 SCALE: 1/2" = 1'-0"

Design Area #1 HAZARD-ORD 1
 Zone: 1 System Type:WET
 Location: BASEMENT

Flowing Outlets:10
 Density: 0.15 Remote Area: 1068
 Flow 467.2 gpm @ 47.9 psi
 Calculation Safety: 8.9 psi
 Includes 250 gpm hose allowance

NOTE:
 1500S.F. REDUCED BY 32% TO 1008 S.F.
 PER NFPA 13 FIG. 11.2.3.2.3.1 DUE TO USE
 OF QUICK RESPONSE SPRINKLERS AND 12"
 CEILING HEIGHT.



BASEMENT FIRE SPRINKLER PLAN
 SCALE: 1/8" = 1'-0"

SEE SITE PLAN FOR CONTINUATION

FEED MAIN UP TO MAIN LEVEL

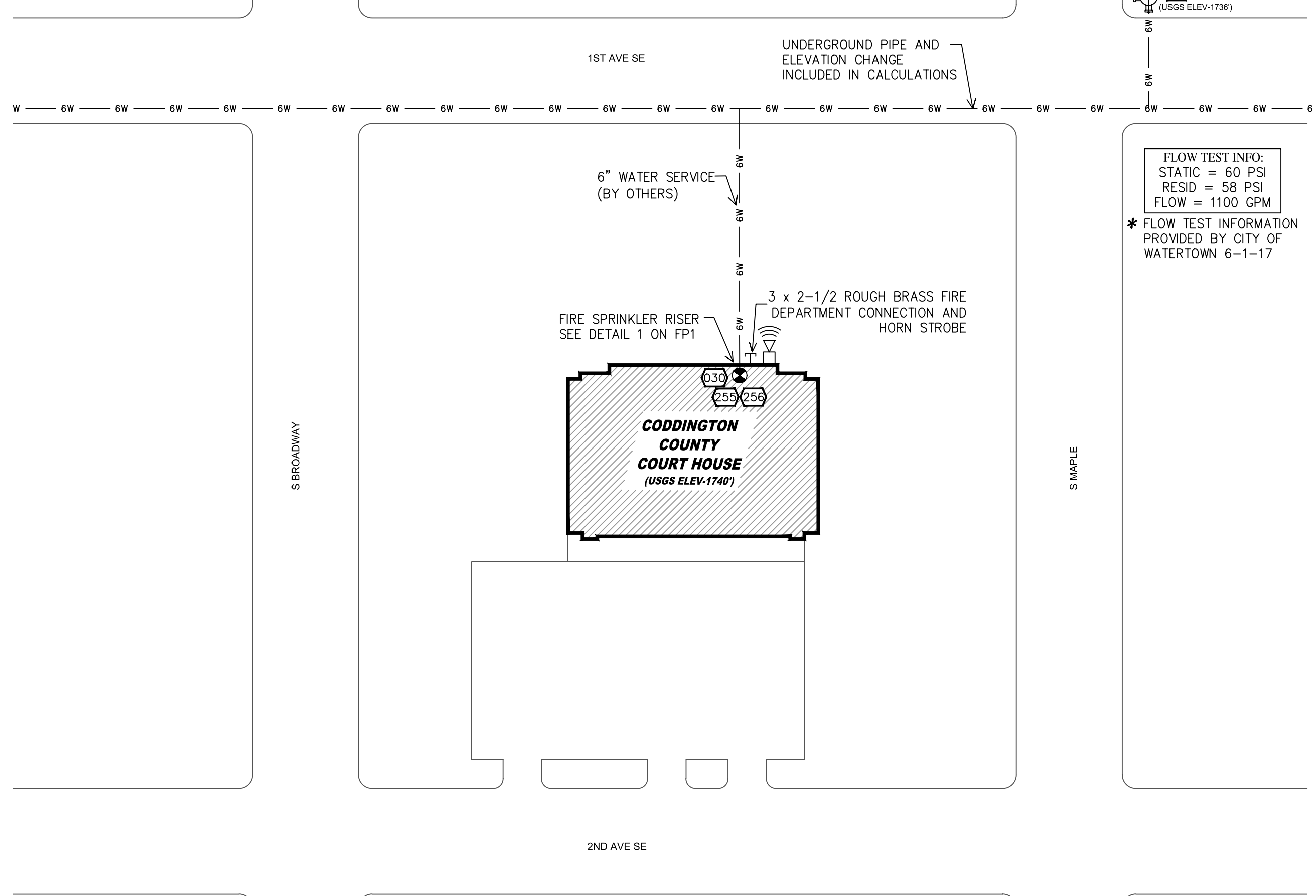
FIRE SPRINKLER RISER SEE DETAIL 1 ON FP1

FIELD SURVEY TO BE DONE BEFORE FABRICATING PIPE

VULT TO BE LOCKED COVERAGE NOT REQUIRED PER AHJ

VULT TO BE LOCKED COVERAGE NOT REQUIRED PER AHJ

VULT TO BE LOCKED COVERAGE NOT REQUIRED PER AHJ



SITE PLAN
 SCALE: 1" = 50'-0"

APPROVAL STAMP
 FIRE PREVENTION DIVISION

IMPORTANT:

IN LOCATIONS SUBJECT TO FREEZING CONDITIONS, IT IS THE OWNERS RESPONSIBILITY TO PROVIDE HEAT THROUGHOUT THE WET PIPE SYSTEM AREAS AND IN ENCLOSURES FOR DRY PIPE, DELUGE AND OTHER TYPE OF VALVES CONTROLLING WATER SUPPLIES OF SPRINKLER SYSTEMS

THIS DRAWING AND THE INFORMATION AND DESIGN APPLICATION HEREIN CONTAINED IS THE PROPERTY OF PRAIRIE SONS INC. AND IS LOANED UPON THE EXPRESS CONDITIONS THAT THE SAME BE RETURNED TO PRAIRIE SONS INC. UPON REQUEST. ALL INFORMATION HEREIN CONTAINED SHALL BE TREATED AS CONFIDENTIAL. NO REPRODUCTION OF THIS DRAWING OR ANY PART THEREOF SHALL BE MADE WITHOUT THE WRITTEN CONSENT OF PRAIRIE SONS INC.

GENERAL PROJECT NOTES

- ALL WIRING TO BE BY OTHERS
- ALL CONTROL VALVES TO BE SUPERVISED IN THE OPEN POSITION
- PIPING TO BE TESTED AT 200 PSI FOR 2 HOURS
- A HYDRAULIC NAMEPLATE TO BE INSTALLED AT EACH RISER PER NFPA 13
- SIGNS TO BE INSTALLED PER NFPA 13, INSPT, TEST, DRAINS, CONTROL VALVES,...
- ALL FIRE RATED WALLS TO BE FIRESAFED PER MANUFACTURERS RECOMMENDATIONS
- SPRINKLERS IN CEILING TILE ARE TO BE CENTERED
- PAINTING OF SPRINKLER SYSTEM AND COMPONENTS TO BE BY OTHERS, IF REQUIRED
- COVERING OF HEADS AND REMOVAL OF SUCH TO BE BY OTHERS, IF REQUIRED
- MAINS WITH CAPS TO BE USED FOR FLUSHING CONNECTIONS PER NFPA 13
- NO FIELD WELDING IS TO BE PERFORMED ON THE SPRINKLER SYSTEM
- HOODS OR SHIELDS REQUIRED IN ELECTRICAL ROOMS TO BE BY OTHERS
- SPRINKLER SHALL MAINTAIN A MINIMUM OF 18" FROM DEFLECTOR TO TOP OF STORAGE
- FDC IS TO BE NO MORE THAN 48" ABOVE GRADE TO CENTER.

SPRINKLER HEAD LEGEND

NO.	SYMBOL	DESCRIPTION	REMARKS
131	PEND CHROME	155 5.60 1/2"	RA1414 RELIABLE FTFR56 SEMI-RECESSED 2
119	SIDE CHROME	155 5.60 1/2"	RA1435 RELIABLE FTFR56 N/A 2
13	UPR BRASS	155 5.60 1/2"	RA1425 RELIABLE FTFR56 N/A 2
76	UPR BRASS	200 5.60 1/2"	RA1425 RELIABLE FTFR56 N/A 2
15	PEND WHITE	165 5.60 1/2"	RA3415 RELIABLE G6 CONCEALED 2
10	SIDE WHITE	165 5.60 1/2"	RA5035 RELIABLE G6 CONCEALED 2
14	SIDE WHITE	165 8.00 1/2"	RA4762 RELIABLE G6 CONCEALED 2
24	UPR BRASS	155 5.60 1/2"	RA1425 RELIABLE FTFR56 N/A 2
172	TOTAL		

HANGER NOTES

ALL PIPE SHALL BE SUPPORTED IN ACCORDANCE WITH NFPA 13

- UP TO 4" PIPE USE 3/8" DIA ROD
- 5", 6", AND 8" PIPE USE 1/2" DIA ROD
- 10" AND 12" PIPE USE 3/4" DIA ROD

USED THIS PROJECT

PIPE SIZE	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
STEEL PIPE (EXCEPT LATERAL)	84	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
STEEL LATERAL	84	12-0	12-0	12-0	12-0	12-0	12-0	84	84	84

PIPE INTERNAL DIAMETER SCHEDULE

PIPE TYPE	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
SCR 10	N/A	N/A	1.082	2.375	2.615	3.26	4.26	6.57	8.249
SCR 40	1.019	1.38	1.61	2.067	2.169	3.068	4.026	6.065	8.071
SCR 7	N/A	1.53	1.74	2.215	2.747	3.316	4.316	N/A	N/A
SI - 80.3	1.04	1.452	1.695	2.14	N/A	N/A	N/A	N/A	N/A

Symbol	Description	NO.	Revision	Date
(RISER)	Riser			
(JUNCTION)	Hydraulic Calculation Junction			
(RISER)	Elev. Below ROOF DECK			
(RISER)	Elev. Above Finished Floor			
(RISER)	Ceiling Height			
(RISER)	Denotes Hanger Location			
(RISER)	Common Connection Point			
(RISER)	Rise up or down			
(RISER)	Electrical Light			
(RISER)	Room Hazard Classification			
(RISER)	Sprinkler Head Cage			

Project Mgr: RR
 Drawn By: CG
 Scale: 1/8" = 1'-0"
 Date: 6/12/18

Job: **CODDINGTON COUNTY CH**
 14 FIRST AVENUE SOUTHEAST
 WATERTOWN, SD 57201

Contractor: **PRAIRIE SONS INC.**
 PLUMBING FIRE PROTECTION
 HEATING & COOLING
 1117 EAST ASH STREET
 BRANDON, SOUTH DAKOTA 57005
 PH (605) 582-8111 • FAX (605) 582-8618

Contract #: ---
 Date: 6/12/18
 NORTH ARROW

FP 1 of 1