

HANGER SPACING CHART

TABLE 9.2.2.1 MAXIMUM DISTANCE BETWEEN HANGERS (FT-IN.)

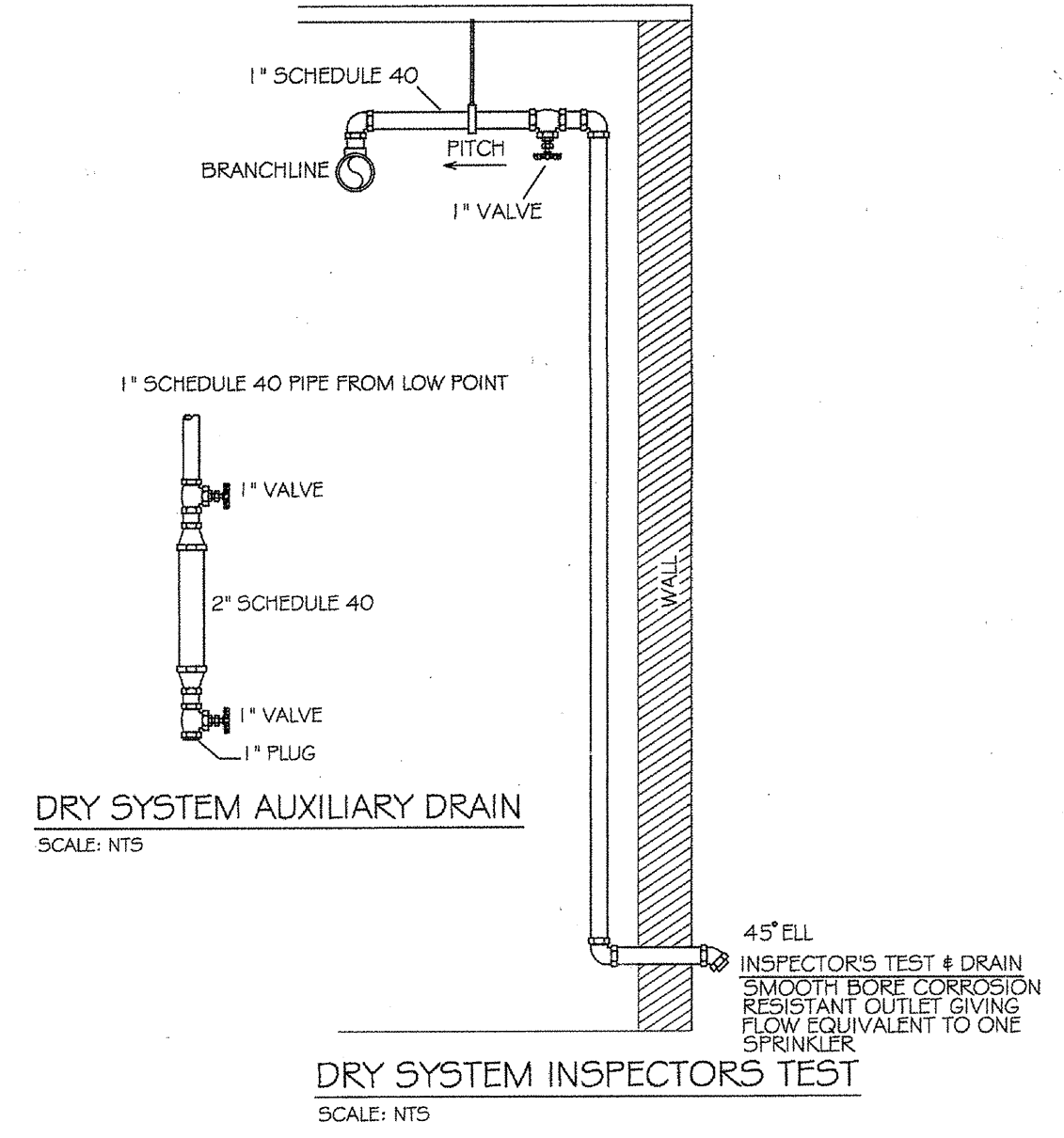
PIPE SIZE (DN)	3/4	1	1-1/4	1-1/2	2	2-1/2	3	4	6
STEEL PIPE	N/A	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0
THREADED LIGHTWALL	N/A	12-0	12-0	12-0	12-0	12-0	N/A	N/A	N/A
COPPER	8-0	8-0	10-0	10-0	12-0	12-0	12-0	15-0	15-0
CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	N/A	N/A

FIGURE A.9.2.3.4 DISTANCE FROM SPRINKLER TO HANGER

NOTE: WHEN PRESSURES EXCEED 100 PSI FOR THE UNLAPSPACED LENGTH BETWEEN THE SPRINKLER IN A TENDRY ROOM OR SHIP WARD, AND THE LAST HANGER ON THE BRANCH LINE SHALL NOT BE GREATER THAN 15 INCHES FOR STEEL PIPE.

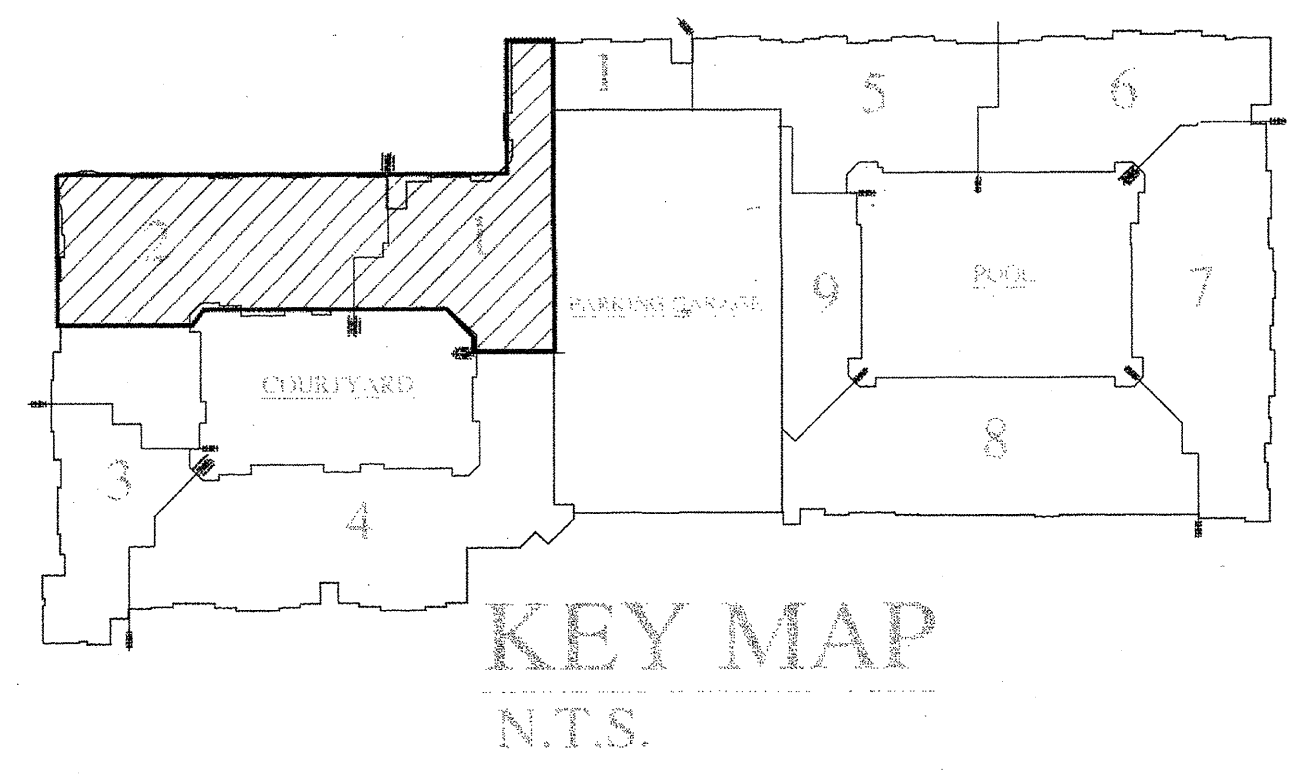
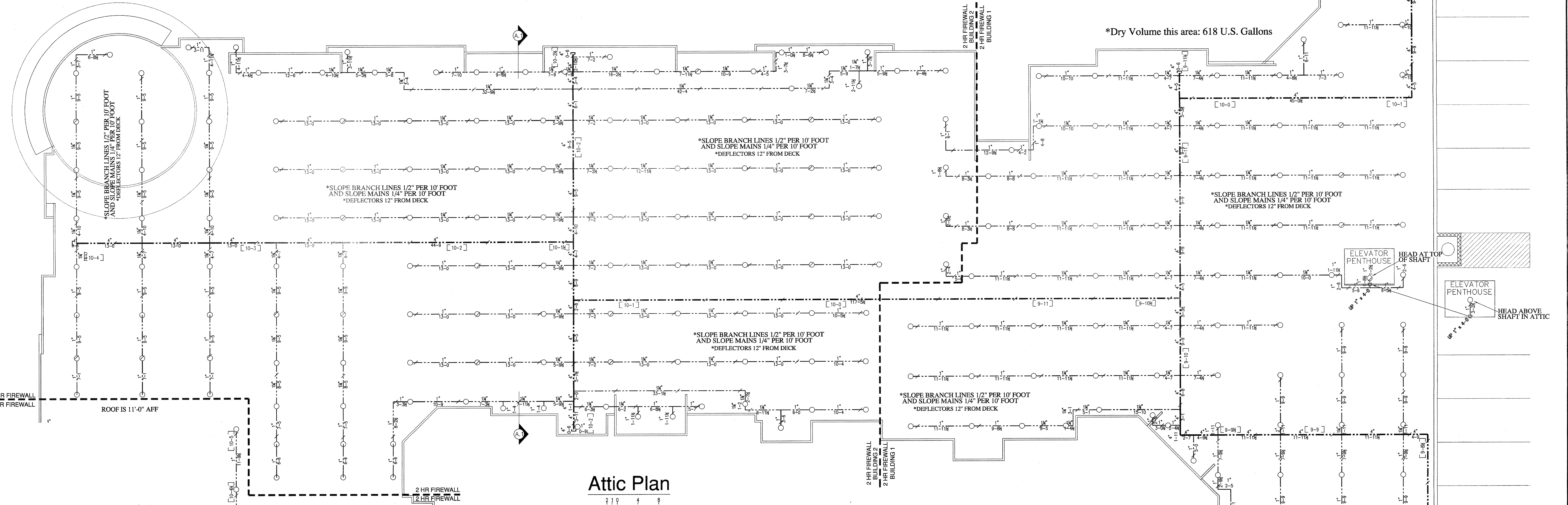
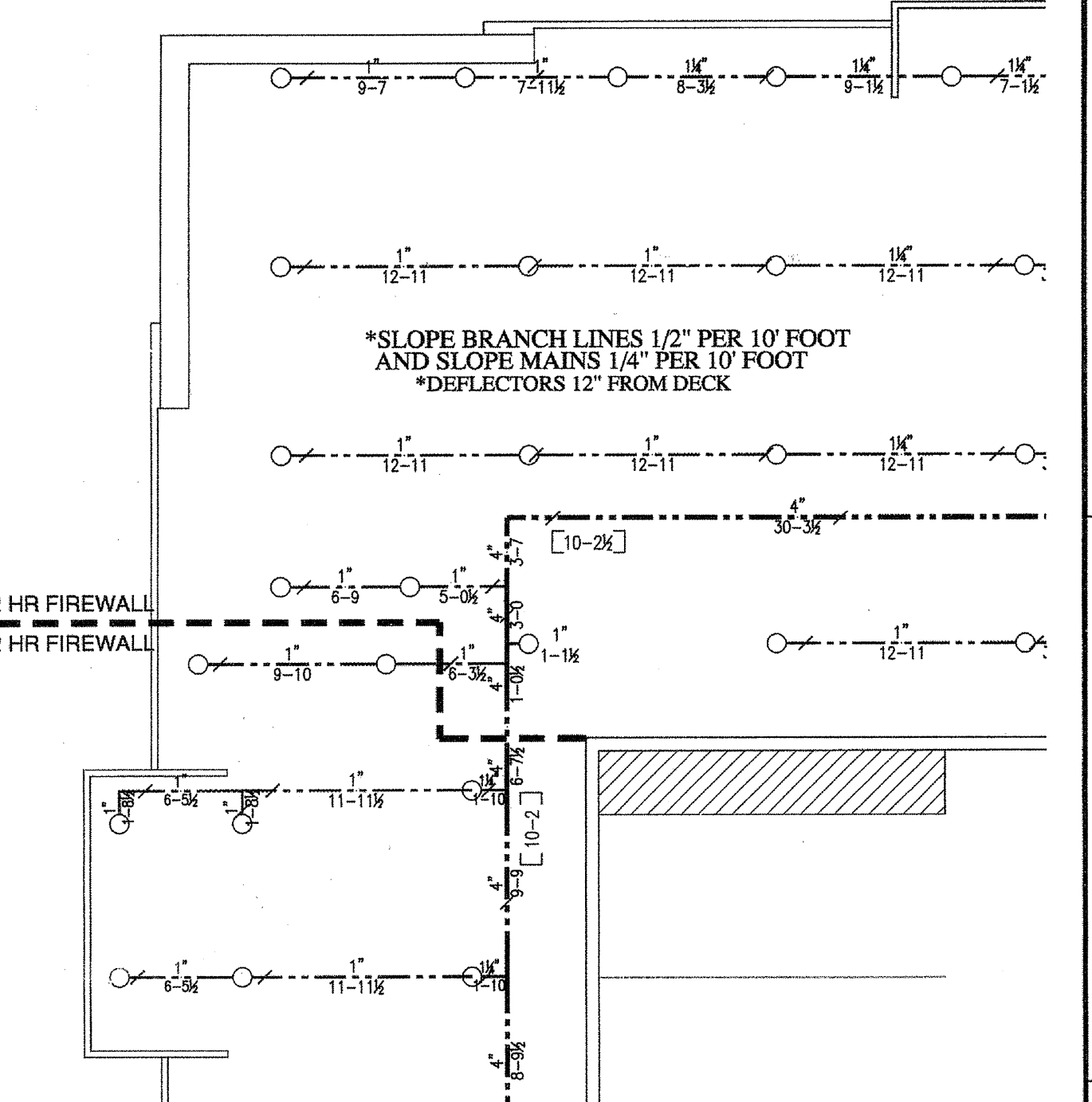
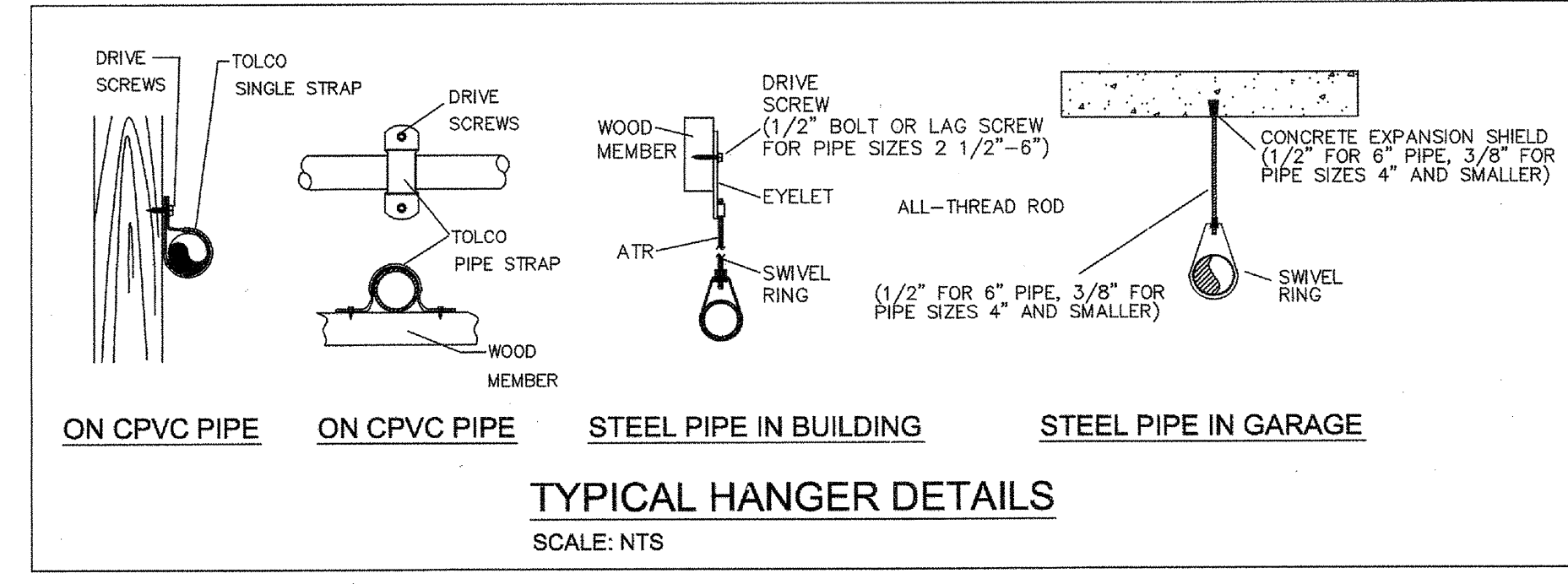
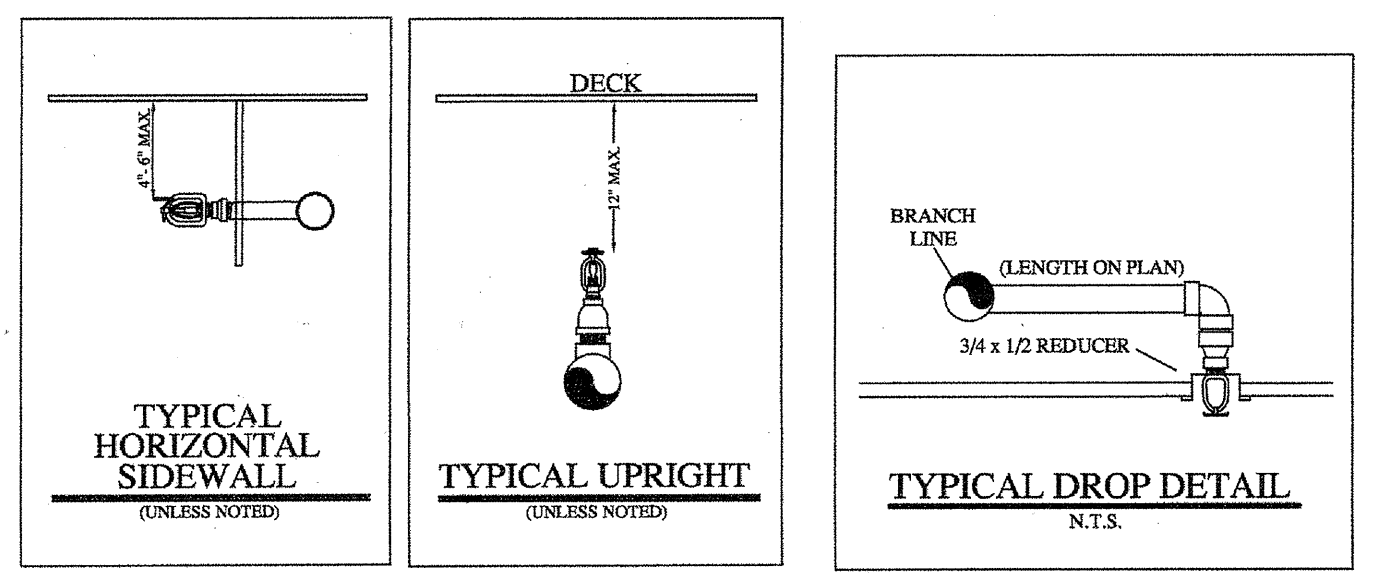
TABLE 9.1.2.1 HANGER ROD SIZES

PIPE SIZE	DIAM. OF ROD	PIPE SIZE	DIAM. OF ROD
UP TO AND INCLUDING 4"	3/8"	6 AND 8	1/2"



SLEEVE SCHEDULE

PIPE SIZE	SLEEVE DIA.
1"	2"
1-1/4"	2"
1-1/2"	2-1/2"
2"	3"
2-1/2"	4"
3"	5"
4"	6"
5"	8"
6"	8"
8"	10"



- #### LEGEND:
- SYSTEM RISER
 - 4" X 2 1/2" X 2 1/2" F.D.C.
 - VERTICAL PIPE (UP or DN)
 - HYDRAULIC NODE POINT
 - REMOTE AREA OUTLINE
 - 2 1/2" HOSE VALVE
 - BUTTERFLY VALVE
 - HANGERS (SIZE VARIES)
 - CEILING ELEVATION
 - PIPE ELEVATION

- #### GENERAL NOTES:
- Ranger Fire's work shall consist of all necessary labor and material to design and install new automatic fire sprinkler systems in the referenced (9) Apartment Buildings and attached Parking Garage.
 - Ranger Fire excludes all electrical and ceiling work.
 - All design and installation shall conform to NFPA 13, 13R, 14, 20, & the City of Addison requirements.
 - All material to be UL/FM approved for fire services.
 - All new plastic piping shall be Schedule 40 CPVC with CPVC plastic fittings (u.o.n.). All steel piping shall be Black Sch. 10 with grooved fittings for the mains and Black Sch. 40 with threaded fittings for the branchlines.
 - Owner or tenant is responsible for maintaining adequate heat to prevent the system from freezing (Min. 40 degrees F.).
 - Sprinkler equipment room and equipment components shall be properly identified.
 - Install signage on sprinkler equipment room door stating "Sprinkler Valve Room" in at least 4 inches in height.
 - All hangers shall be in accordance with NFPA 13 requirements.
 - All systems shall be tested at 200 psi for 2 hours and witnessed by a representative of the Addison Fire Department. Any leaks shall be repaired.
 - The system has been hydraulically calculated per NFPA 13, 13R, 14, & 20 requirements.
 - Install Black steel piping in Parking Garage.

RESIDENTIAL BUILDING INFO

OCCUPANCY: R-2/A-3
GROSS BLDG AREA: 424,139 S.F.
TYPE OF CONSTRUCTION: V-A

GARAGE BUILDING INFO

OCCUPANCY: S-2
GROSS BLDG AREA: 181,834 S.F.
TYPE OF CONSTRUCTION: 2-B

I have reviewed these plans and certify that they comply with the adopted NFPA standards.

Ranger Fire, Inc.
1000 South Main Street
Suite 150
Grapevine, Texas 76051
Phone: 817-410-9070
SCR-0590

RME SIGNATURE: *[Signature]*
PRINTED RME NAME: Matthew B. Claxton
RME NUMBER: 0778 DATE: 7-31-12

AS-BUILT SUBMITTAL OTHER

AS-BUILT

RANGER FIRE, INC.
920 SOUTH MAIN STREET
GRAPEVINE, TEXAS 76051
PHONE: 817-410-9070
TEXAS LICENSE: 0590

AS-BUILT SUBMITTAL OTHER

CONFIDENTIALITY STATEMENT
This drawing is the property of Ranger Fire, Inc. and is intended for the use of the project for which it was prepared. It is not to be used for any other project without the written consent of Ranger Fire, Inc. The original version of this drawing is the property of Ranger Fire, Inc.

REVISIONS:

REV #	DATE	BY

GENERAL CONTRACTOR: KELLER SPRINGS LOFTS
OWNER: KELLER SPRINGS LOFTS
DRAWN BY: C. ALEXANDER
CHECKED BY: C. ALEXANDER
DATE: 04-01-12
DWG. # FP 22 OF 30

CONTRACT # 11-05 DESCRIPTION: ATTIC SYSTEM