

DESIGN DATA: CALCULATION #9
 AREA: NINTH FLOOR DWELLING UNIT
 HAZARD: LIGHT
 OCCUPANCY: RESIDENTIAL
 DENSITY: 10 GPM/FT. 450 SQ. FT.
 NO. SPRINKLERS CALCULATED: 4
 MAX AREA PER SPRINKLER: VARIES
 HOSE ALLOWANCE: 100
 TOTAL WATER REQUIRED: 152.274 GPM
 TOTAL PRESSURE REQUIRED: 78.878 PSI
 SAFETY FACTOR: 101.086 PSI

DESIGN DATA: CALCULATION #7
 AREA: SEVENTH FLOOR DWELLING UNIT
 HAZARD: LIGHT
 OCCUPANCY: RESIDENTIAL
 DENSITY: 10 GPM/FT. 450 SQ. FT.
 NO. SPRINKLERS CALCULATED: 4
 MAX AREA PER SPRINKLER: VARIES
 HOSE ALLOWANCE: 100
 TOTAL WATER REQUIRED: 152.274 GPM
 TOTAL PRESSURE REQUIRED: 70.216 PSI
 SAFETY FACTOR: 109.748 PSI

DESIGN DATA: CALCULATION #5
 AREA: FIFTH FLOOR DWELLING UNIT
 HAZARD: LIGHT
 OCCUPANCY: RESIDENTIAL
 DENSITY: 10 GPM/FT. 450 SQ. FT.
 NO. SPRINKLERS CALCULATED: 4
 MAX AREA PER SPRINKLER: VARIES
 HOSE ALLOWANCE: 100
 TOTAL WATER REQUIRED: 152.274 GPM
 TOTAL PRESSURE REQUIRED: 61.554 PSI
 SAFETY FACTOR: 118.410 PSI

DESIGN DATA: CALCULATION #8
 AREA: EIGHTH FLOOR DWELLING UNIT
 HAZARD: LIGHT
 OCCUPANCY: RESIDENTIAL
 DENSITY: 10 GPM/FT. 450 SQ. FT.
 NO. SPRINKLERS CALCULATED: 4
 MAX AREA PER SPRINKLER: VARIES
 HOSE ALLOWANCE: 100
 TOTAL WATER REQUIRED: 152.274 GPM
 TOTAL PRESSURE REQUIRED: 74.547 PSI
 SAFETY FACTOR: 105.417 PSI

DESIGN DATA: CALCULATION #6
 AREA: SIXTH FLOOR DWELLING UNIT
 HAZARD: LIGHT
 OCCUPANCY: RESIDENTIAL
 DENSITY: 10 GPM/FT. 450 SQ. FT.
 NO. SPRINKLERS CALCULATED: 4
 MAX AREA PER SPRINKLER: VARIES
 HOSE ALLOWANCE: 100
 TOTAL WATER REQUIRED: 152.274 GPM
 TOTAL PRESSURE REQUIRED: 65.885 PSI
 SAFETY FACTOR: 114.079 PSI

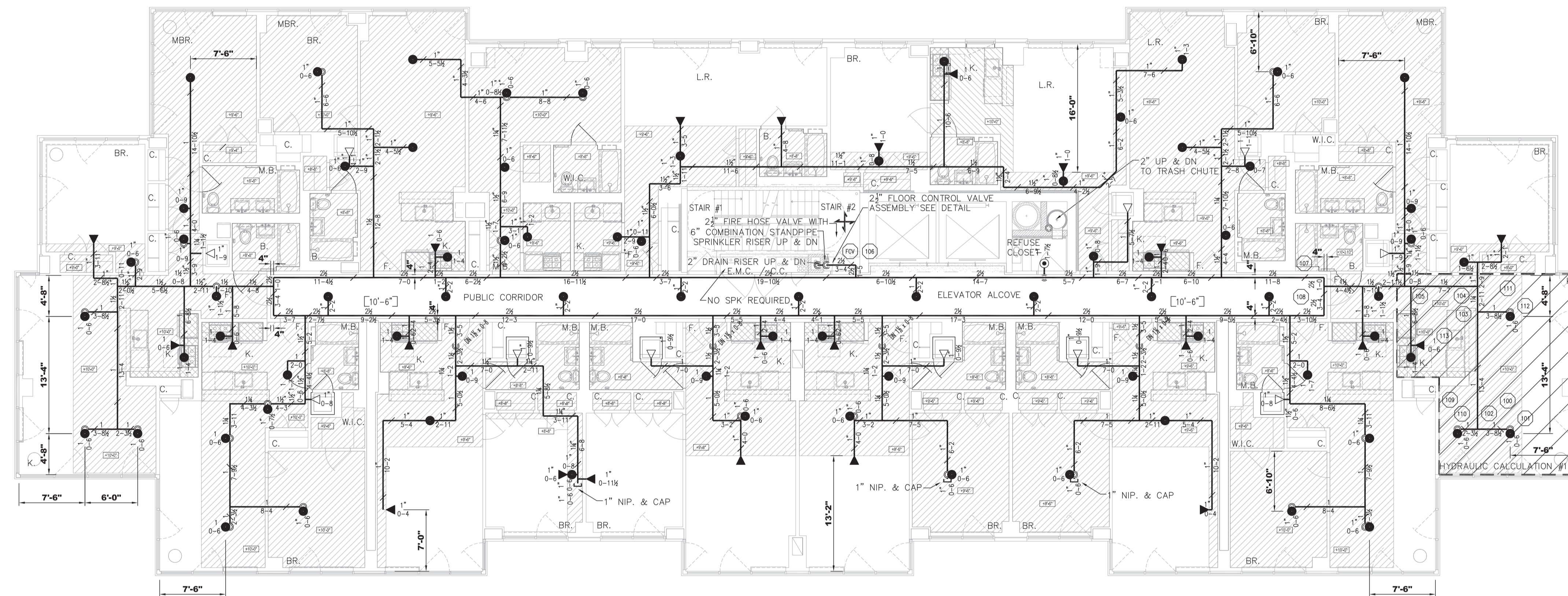
DESIGN DATA: CALCULATION #4
 AREA: FOURTH FLOOR DWELLING UNIT
 HAZARD: LIGHT
 OCCUPANCY: RESIDENTIAL
 DENSITY: 10 GPM/FT. 450 SQ. FT.
 NO. SPRINKLERS CALCULATED: 4
 MAX AREA PER SPRINKLER: VARIES
 HOSE ALLOWANCE: 100
 TOTAL WATER REQUIRED: 152.274 GPM
 TOTAL PRESSURE REQUIRED: 57.223 PSI
 SAFETY FACTOR: 122.741 PSI

FOURTH - NINTH FLOOR FIRE SPRINKLER PLAN

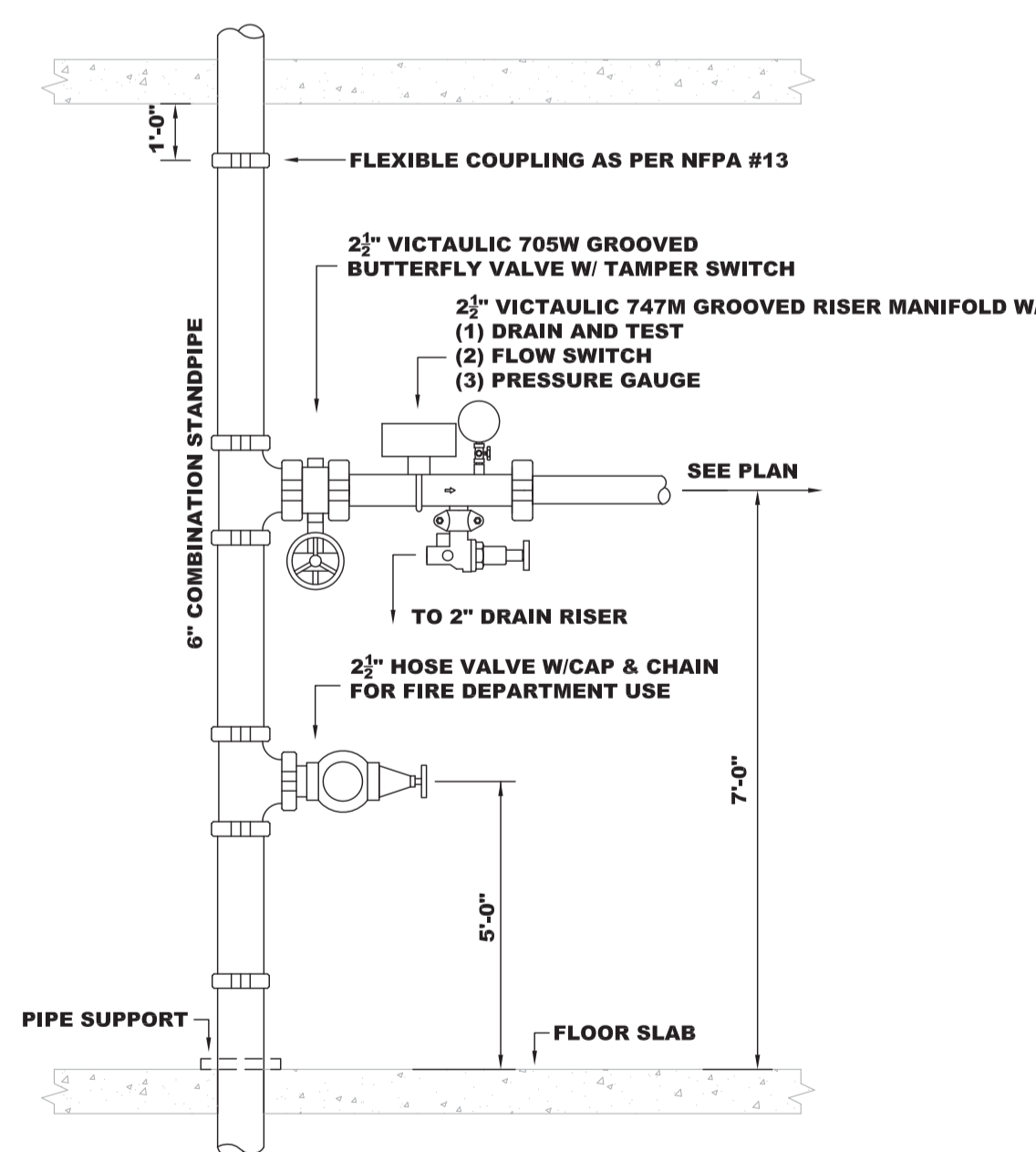
SCALE 1/8"=1'-0"
 * LIGHT HAZARD OCCUPANCY UNLESS OTHERWISE NOTE * ALL PIPE @ 8'-10" A.F.F.
 DENOTES TROWELED FINISH @ UNDERSIDE OF SLAB = 9'-3" A.F.F.
 DENOTES GYP. BD. HUNG CEILING HEIGHT = 8'-8" A.F.F. DENOTES GYP. BD. HUNG CEILING HEIGHT = 8'-0" A.F.F.

SCOPE OF WORK
 CONTRACTOR SHALL INSTALL A NEW WET PIPE FIRE SPRINKLER SYSTEM IN BUILDING OF NON-COMBUSTIBLE OBSTRUCTED CONSTRUCTION.

FIRE SPRINKLER NOTES
 SYSTEM DESIGNED AS PER NFPA #13 1989 EDITION
 91-92 TOTAL SPRINKLER HEADS PER FLOOR W/ DEFLECTORS @ 1"-12" FROM BOTTOM OF CEILING/ DECK & PARALLEL
 9,964 SQ. FT. TOTAL AREA PROTECTED ON WET SYSTEM
 CONTRACTOR SHALL:
 PROVIDE REQUIRED SIGNS & FLUSHING CONNECTIONS.
 CONTRACTORS MATERIAL AND TEST CERTIFICATES FOR ABOVE GROUND AND UNDERGROUND
 PIPE SHALL BE SUBMITTED TO THE FIRE MARSHALL PRIOR TO APPROVAL OF THE INSTALLATION.
 PIPE MATERIAL
 1"-2" SCH. 40 THREADED BLACK STEEL W/ THREADED CAST IRON FITTINGS
 2 1/2" SCH. 10 GROOVED BLACK STEEL W/ GROOVED FITTINGS & MECHANICAL OUTLETS
 6" STANDPIPE SCH. 40 GROOVED BLACK STEEL / GROOVED FITTINGS & MECHANICAL OUTLETS
 ALL DIMENSIONS & ELEVATIONS ARE CENTERLINE OF PIPE & STEEL UNLESS NOTED OTHERWISE



DESIGN DATA: CALCULATION #10
 AREA: TENTH FLOOR DWELLING UNIT
 HAZARD: LIGHT
 OCCUPANCY: RESIDENTIAL
 DENSITY: 10 GPM/FT. 412 SQ. FT.
 NO. SPRINKLERS CALCULATED: 4
 MAX AREA PER SPRINKLER: VARIES
 HOSE ALLOWANCE: 100
 TOTAL WATER REQUIRED: 152.903 GPM
 TOTAL PRESSURE REQUIRED: 90.251 PSI
 SAFETY FACTOR: 89.732 PSI



FLOOR CONTROL - HOSE VALVE DETAIL

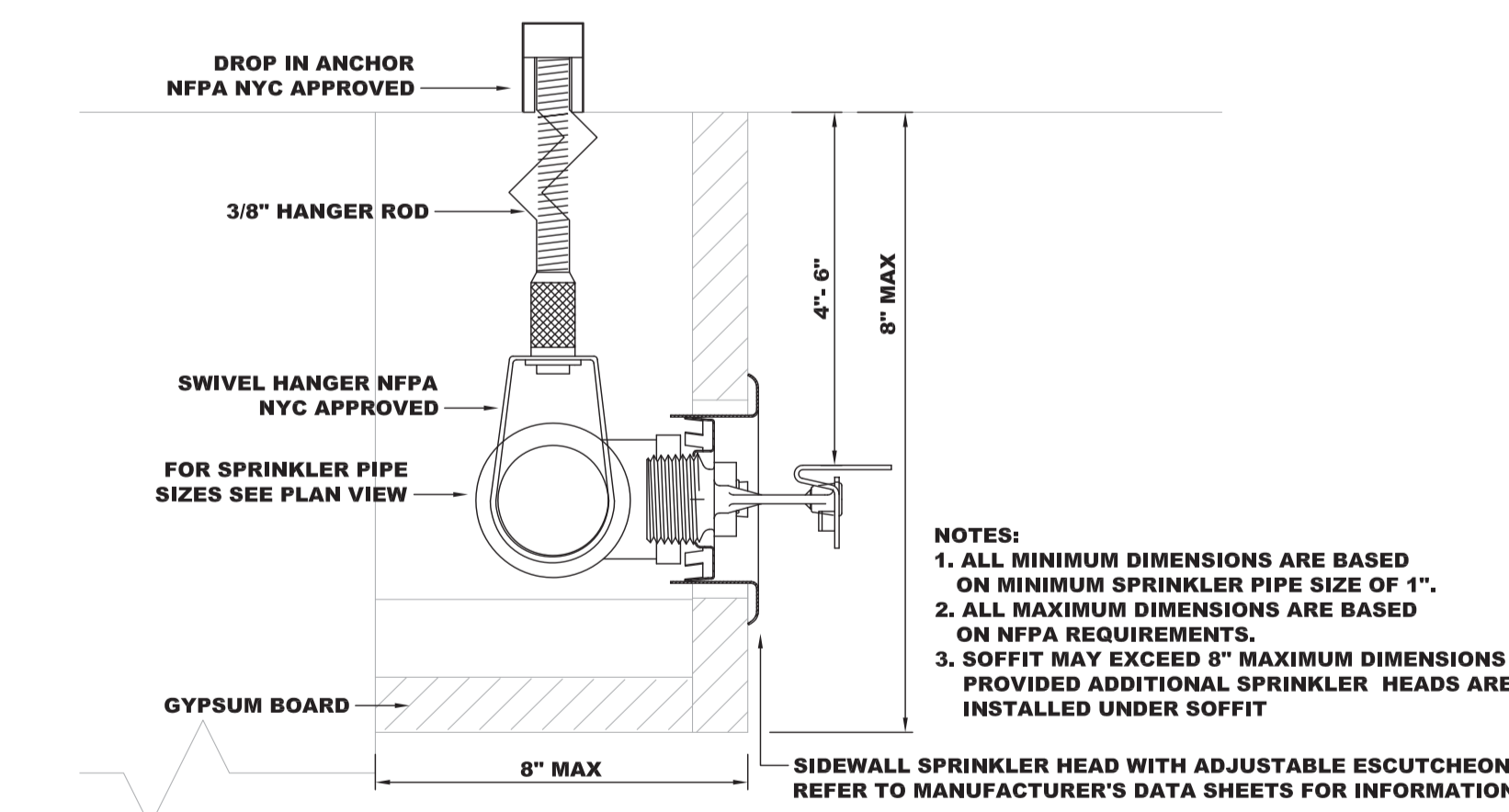
1"-2" SCH. 40 THREADED BLACK STEEL W/ THREADED CAST IRON FITTINGS
 2 1/2" SCH. 10 GROOVED BLACK STEEL W/ GROOVED FITTINGS & MECHANICAL OUTLETS
 6" STANDPIPE SCH. 40 GROOVED BLACK STEEL / GROOVED FITTINGS & MECHANICAL OUTLETS

TENTH FLOOR FIRE SPRINKLER PLAN

SCALE 1/8"=1'-0"
 * LIGHT HAZARD OCCUPANCY UNLESS OTHERWISE NOTED * ALL PIPE @ 10'-10" A.F.F.
 DENOTES TROWELED FINISH @ UNDERSIDE OF SLAB = 10'-10" A.F.F. DENOTES UNDERSIDE OF LOWER CONCRETE DECK SEE PLAN FOR ELEVATIONS
 DENOTES GYP. BD. HUNG CEILING HEIGHT = 8'-8" A.F.F. DENOTES GYP. BD. HUNG CEILING HEIGHT = 8'-0" A.F.F. UNLESS OTHERWISE NOTED

SCOPE OF WORK
 CONTRACTOR SHALL INSTALL A NEW WET PIPE FIRE SPRINKLER SYSTEM IN BUILDING OF NON-COMBUSTIBLE OBSTRUCTED CONSTRUCTION.

FIRE SPRINKLER NOTES
 SYSTEM DESIGNED AS PER NFPA #13 1989 EDITION
 94 TOTAL SPRINKLER HEADS W/ DEFLECTORS @ 1"-12" FROM BOTTOM OF CEILING/ DECK & PARALLEL
 9,964 SQ. FT. TOTAL AREA PROTECTED ON WET SYSTEM
 CONTRACTOR SHALL:
 PROVIDE REQUIRED SIGNS & FLUSHING CONNECTIONS.
 CONTRACTORS MATERIAL AND TEST CERTIFICATES FOR ABOVE GROUND AND UNDERGROUND
 PIPE SHALL BE SUBMITTED TO THE FIRE MARSHALL PRIOR TO APPROVAL OF THE INSTALLATION.
 PIPE MATERIAL
 1"-2" SCH. 40 THREADED BLACK STEEL W/ THREADED CAST IRON FITTINGS
 2 1/2" SCH. 10 GROOVED BLACK STEEL W/ GROOVED FITTINGS & MECHANICAL OUTLETS
 6" STANDPIPE SCH. 40 GROOVED BLACK STEEL / GROOVED FITTINGS & MECHANICAL OUTLETS



SIDEWALL SPRINKLER IN SOFFIT DETAIL

NOTES:
 1. ALL MINIMUM DIMENSIONS ARE BASED ON MINIMUM SPRINKLER PIPE SIZE OF 1".
 2. ALL MAXIMUM DIMENSIONS ARE BASED ON NFPA REQUIREMENTS.
 3. SOFFIT MAY EXCEED 8" MAXIMUM DIMENSIONS PROVIDED ADDITIONAL SPRINKLER HEADS ARE INSTALLED UNDER SOFFIT

GENERAL NOTES		NOTES TO THE OWNER		ABBREVIATIONS		SYMBOL LEGEND		NUMBER OF SPRINKLERS		AS-BUILT 06/04/2010							
1. ALL PIPE LOCATIONS ARE TO BE FIELD MEASURED PRIOR TO FABRICATION AND INSTALLATION BY FIRE SPRINKLER CONTRACTOR.	2. ALL DIMENSIONS SHOWN ARE CENTER TO CENTER.	3. HIGH TEMPERATURE HEADS ARE TO BE INSTALLED WHERE REQUIRED.	4. ALL PIPE AND HANGERS ARE TO BE INSTALLED AS PER NFPA #13.	5. HANGERS ARE TO BE U.L. LISTED AND FM APPROVED.	6. SEE PLAN VIEW FOR COMPLETE GENERAL NOTES.	1. THE FIRE SPRINKLER SYSTEM MUST BE MAINTAINED AND TESTED REGULARLY BY YOU OR YOUR AGENTS ARE IN ACCORDANCE WITH NFPA.	2. YOU SHALL MAINTAIN SUFFICIENT HEAT THROUGHOUT THE PREMISES TO PREVENT THE FIRE SPRINKLER SYSTEM FROM FREEZING.	3. YOU SHALL INFORM TENANTS OF PROPER CARE NECESSARY TO MAINTAIN THE SYSTEM.	4. IF THE CONSTRUCTION OR OCCUPANCY IS ALTERED IN ANY WAY, THE FIRE SPRINKLER SYSTEM WILL HAVE TO BE UPDATED ACCORDINGLY.	DESCRIPTION	TEMP	FINISH	NYC-MEAB	K-FACT	NPT	QTY	
UOS-UNDERSIDE OF SLAB	RR-RISER NIPPLE	[10'-0"]	PIPE ELEVATION AFF	[+12"]	ELEVATION BELOW TOP OF STEEL	[+]	SWAY BRACE	TYCO TY-FRL RECESSED PENDENT QUICK RESPONSE	165	WHITE	ME412-04-E	5.6	1/2"	10			
BIS-BELOW TOP OF STEEL	CS-CENTERLINE	105	ELEVATION TOP OF STEEL	[+]	FIRE DEPT CONNECTION	[+]	ELECTRIC BELL	TYCO RFI CONCEALED PENDENT QUICK RESPONSE	155	WHITE	ME433-01-E	5.6	1/2"	300			
AFF-AFTER FINISH FLOOR	OC-ON CENTER	[+]	RISE UP / DOWN	[+]	FLOW SWITCH	[+]	TYCO TY-B PENDENT STANDARD RESPONSE	200	BRASS	ME434-01-E	5.6	1/2"	4				
TOR-TOP OF RISER	NIC-NOT IN CONTACT	[+]	RISER / STANDPIPE	[+]	FIRE HYDRANT	[+]	TYCO TY-FRL SIDEWALL QUICK RESPONSE	165	WHITE	ME412-04-E	5.6	1/2"	126				
BR-BOTTOM OF RISER	SLV-SLEEVE	[+]	NEW PIPE	[+]	CEILING HEIGHT	[+]	TYCO TY-FRL SIDEWALL QUICK RESPONSE	212	WHITE	ME412-04-E	5.6	1/2"	77				
	WATER FLOW TEST INFORMATION		EXISTING PIPE	[+]	HYDRAULIC REFERENCE POINT	[+]	TYCO TY-FRL EX COV SIDEWALL QUICK RESPONSE	165	WHITE	ME412-04-E	5.6	1/2"	99				
By: NYC DEP	STATIC: 87 PSI																
DATE: 05-08-2007	RESIDUAL: 85 PSI																
TIME: 9:00 AM	FLOW: 500 GPM																

CONTRACTOR: _____

PROJECT: **795 COLUMBUS AVENUE RESIDENTIAL/RETAIL NEW YORK, NY**

AS-BUILT 06/04/2010
 DRAWING TITLE: FOURTH - TENTH FLOOR FIRE SPRINKLER PLAN
 CONTRACT NO: FS09-0004
 DRAWN BY: P.J.H.
 DATE: 08-10-2009

REVISIONS:

#	DATE	DESCRIPTION
1	09-21-2009	REVISED AS PER I.M. ROBBINS CONSULTING ENGINEERS
2	02-15-2010	REVISED AS PER I.M. ROBBINS CONSULTING ENGINEERS
3	04-21-2010	REVISED AS PER I.M. ROBBINS CONSULTING ENGINEERS

GHW ARCHITECTS LLP

PJH FIRE SPRINKLER DESIGN, L.L.C.
 36 GINGER COURT, BUILDING 3, SUITE 36
 EATONTOWN, NJ 07724-1869
 TELEPHONE: 732-440-4657
 FACSIMILE: 732-440-4658
 WWW.PJHFIRESPRINKLERDESIGN.COM

NFPA MEMBER

SHEET SP-007.03