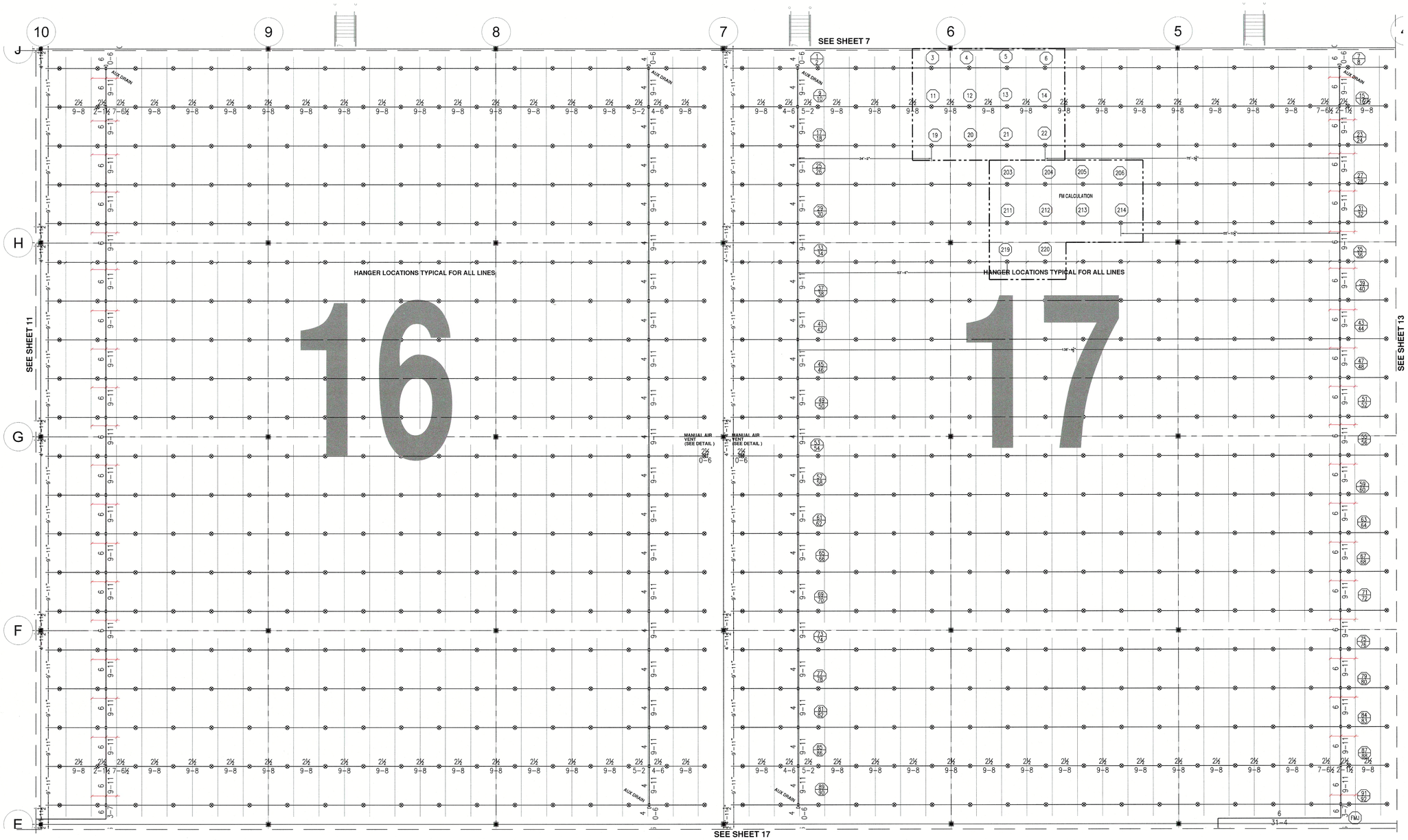
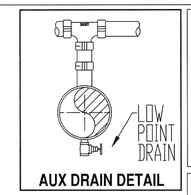
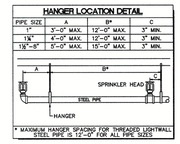


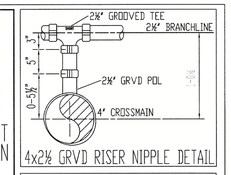


AUX DRAIN DETAIL

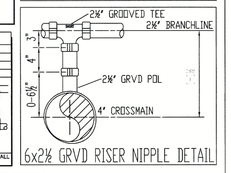
HANGER LOCATION DETAIL			
PIPE SIZE	A	B*	C
1"	3'-0" MAX.	12'-0" MAX.	3" MIN.
1¼"	4'-0" MAX.	12'-0" MAX.	3" MIN.
1½"-8"	5'-0" MAX.	15'-0" MAX.	3" MIN.



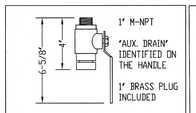
* MAXIMUM HANGER SPACING FOR THREADED LIGHTWALL STEEL PIPE IS 12'-0" FOR ALL PIPE SIZES



4x2½ GRVD RISER NIPPLE DETAIL

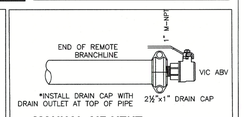


6x2½ GRVD RISER NIPPLE DETAIL



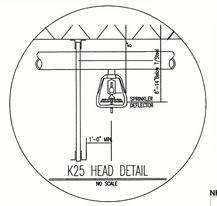
1 AUX. DRAIN GLOBE MODEL AD

NO SCALE



MANUAL AIR VENT

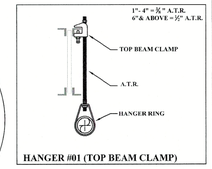
VALVE TO BE LOCATED AT APPROX. HIGH POINT OF EACH NEW SYSTEM



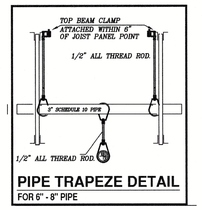
K25 HEAD DETAIL

NO SCALE

1"- 4" = ¾" A.T.R.
6" & ABOVE = ½" A.T.R.



HANGER #01 (TOP BEAM CLAMP)



PIPE TRAPEZE DETAIL

FOR 6" - 8" PIPE

NFPA 13 CALCULATION

HYDRAULIC - SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System.

Location	SYSTEM 17	
No. of Sprinklers	12	
Basis Of Design		
1. END HEAD PRESSURE	40	PSI
2. SPRINKLER K-FACTOR	25.2	
System Demand		
1. GPM DISCHARGE	2141	GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER	132	PSI
Building Information		
1. COMMODITY CLASSIFICATION	CLASS I-IV, CARTONED UNEXPANDED PLASTICS SEE SHEET 1 FOR CRITERIA DETAILS	

**MUST MAINTAIN 36" FROM DEFLECTOR TO TOP OF STORAGE

FM CALCULATION

HYDRAULIC - SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System.

Location	SYSTEM 17- FM	
No. of Sprinklers	10	
Basis Of Design		
1. END HEAD PRESSURE	50	PSI
2. SPRINKLER K-FACTOR	25.2	
System Demand		
1. GPM DISCHARGE	1941	GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER	129	PSI
Building Information		
1. COMMODITY CLASSIFICATION	CLASS I-IV, CARTONED UNEXPANDED PLASTICS SEE SHEET 1 FOR CRITERIA DETAILS	

**MUST MAINTAIN 36" FROM DEFLECTOR TO TOP OF STORAGE

PIPE SIZES FOR SYSTEM 16 BASED ON SYSTEM 17 CALCULATION

SYSTEMS 16&17

SCALE = 3/32" = 1'-0"

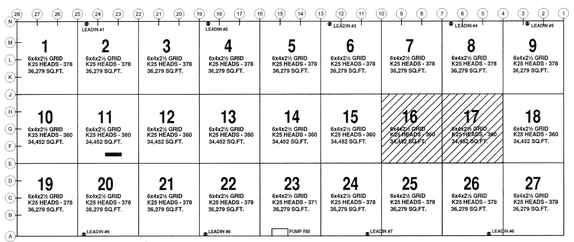
3/32" = 1'-0"

TOP OF STEEL HIGH POINT = 49'-8½" @ COL. G

TOP OF STEEL LOW POINT= 41'-7" @ COL. A&N

ALL 2½" LINES TO BE 8" FROM TOP OF STEEL UNLESS NOTED OTHERWISE
ALL 4" MAINS TO BE 1'-8½" FROM TOP OF STEEL UNLESS NOTED OTHERWISE
ALL 6" MAINS TO BE 1'-9½" FROM TOP OF STEEL UNLESS NOTED OTHERWISE

ALL BAY DOORS ARE VERTICAL LIFT AND DO NOT REQUIRE ADDITIONAL HEADS



KEY PLAN

NOT TO SCALE

SEISMIC DESIGN CATEGORY 'B', SEISMIC BRACING NOT REQUIRED

USE GROUP: S-1

CONSTRUCTION TYPE: II-B

AREA OF WORK: 963,100 SQ.FT.

PROJECT NAME: NY145 BROOKFIELD SUFFERN

PROJECT LOCATION: SUFFERN NY

TIM SURMAN PROFESSIONAL ENGINEER NY PE LIC.# 107503

SIGNATURE:

DATE SIGNED: 2/8/24

STATE OF NEW YORK * TIMOTHY SURMAN * 107503 LICENSED PROFESSIONAL ENGINEER

HYDROSTATIC TEST TO BE CONDUCTED AT 225 PSI

STANDARD DRAWING SYMBOLS					
	DENOTES CENTERLINE OF PIPE ABOVE FINISH FLOOR.		FIRE HOSE VALVE		
	DENOTES CENTERLINE OF PIPE BELOW TOP OF STEEL.		FIRE HYDRANT		
	DENOTES CENTERLINE OF PIPE BELOW BOTTOM OF JOIST		ELECTRIC BELL		
	DENOTES CENTERLINE OF PIPE BELOW BOTTOM OF BEAM.		FLOW SWITCH		
	DENOTES CENTERLINE OF PIPE BELOW THE CEILING.		FIRE DEPT. CONN.		
	DENOTES HANGER		AUXILIARY DRAIN		
	DENOTES CEILING HEIGHT		PRESSURE GAUGE		
	HYDRAULIC CALC. REF. POINT		HOSEN		
	GROOVE COUPLING				
	GROOVE CHECK VA.				
	FIRE HOSE VALVE CABINET				
	HYDRAULIC DATA STICKER				

TYPICAL HANGER ASSEMBLIES BY NUMBER			
01	TOP BEAM CLAMP (TBC)	08A	SAMMY SWC-20 SIDE CONCRETE
01A	WIDE MOUTH TOP BEAM CLAMP	09	SAMMY CST-20 STRAIGHT WOOD
01B	INVERTED TOP BEAM CLAMP	09A	SAMMY SWC-20 SIDE WOOD
01C	INVERTED WIDE MOUTH TBC	10	
01D	TBC w/CLEVIS RING	10B	SAMMY SWDR-516 SIDE STEEL
01E	TBC w/ 8" RETAINING STRAP	11A	EYE SOCKET
01S	TBC w/ 12" RETAINING STRAP	12	
04	ROD, RING	13A	U-HOOK HANGER
04A	ROD, RING, NUTS & WASHER	14	STRUT NUT, ROD & RING
04C	CLEVIS HANGER w/ROD	15	
06	CONCRETE/HILTI DROP IN ANCHOR	16	Z-PURLIN CLAMP
07	HILTI SHOT & STUD	17	SAMMY DSTR.75 STRAIGHT LIGHT WEIGHT STEEL
08	SAMMY CST-20 STRAIGHT CONCRETE	18	SAMMY SWDL516 SIDE, HEAVY WEIGHT STEEL

FIRE PROTECTION SPECIFICATIONS

1. DO NOT SCALE DRAWING(S).
2. ALL PIPE NOTED AS: GO=GROOVED END TO CENTER, GG = GROOVED END TO GROOVED END; INDICATES ACTUAL PIPE "CUT" LENGTHS. (U.O.N.)
3. DESIGN, INSTALLATION & MATERIALS TO BE PER N.F.P.A. #13 2016
4. HANGERS & ATTACHMENTS TO BE U.L. LISTED & SPACING PER N.F.P.A. #13 2016
5. ALL NEW PIPING SHALL BE HYDROSTATICALLY TESTED AT 225 PSI FOR 2 HOURS W/ NO VISIBLE SIGN OF LEAKAGE.
6. THE OWNER SHALL PROVIDE A MINIMUM OF 40° F TO PREVENT SPRINKLER PIPE FROM FREEZING.
7. CONTRACTOR SHALL PROVIDE THE OWNER, INSURANCE CO., & THE PROPER CITY OFFICIALS WITH COPIES OF THE MATERIAL & TEST CERTIFICATES.
8. ALL FLOW AND TAMPERS SHALL BE SUPERVISED IN ACCORDANCE WITH NFPA 72. THIS WORK IS TO BE DONE BY OTHERS AND IS NOT PART OF S A COMUNALE CONTRACT.

MATERIAL SPECIFICATIONS							
Note:1" Pipe is	GRID/GRID MAIN	GRID/GRID LINE	MAIN LINES	SUPPLY THE FOLLOWING	Yes/No	REVISIONS	
Sch 40 A53 (uno)				American Made (Domestic)	N	NO.	DESCRIPTION
Sch 40 A53 Black				Smith-Cooper Fittings	N		
Sch 10 Thinwall	X			Smith-Cooper Couplings	N		
Sch 7		X		Firelock Fittings	Y		
Sch 40 Galvanized				Firelock Couplings	Y		
Sch 10 Galvanized				Standard Vic/Central Pkg	N		
Weld-O-Lets Thrd		X		Head Wrenches	Y		
Weld-O-Lets Grv	X			Spare Head Cabinet	Y		
Weld-O-Lets Buff				Top Beam Clamps	Y		
Cast Iron Fittings				Concrete Inserts	N		
Galvanized Fittings				Sammy Screws	N		
Malleable Pkgs 150#				Pipe/Strut/Angle Iron	N		
Malleable Pkgs 300#				Can Heads be any brand?	Y		
Cpvc				Fit Fittings	N		
Number of Welds				Hangers Cut Length	Y		
Cut Lengths				Hangers Center to Center	Y		
Center to Center	X	X		FM Approved Material Only	N		

PENDENT SPRINKLERS SHALL BE INSTALLED PER THE SPACING DICTATED BY APPROPRIATE CODES AND SHALL BE ALIGNED WITHIN NORMAL FABRICATION TOLERANCES, BUT WILL NOT NECESSARILY BE CENTERED IN CEILING TILES.

SPRINKLER LEGEND						
SYMBOL	QTY.	DESCRIPTION	SIN#	THD.	K=	TEMP
⊗	720	VICTAULIC FL-QR/ST/ESFR ESFR BRASS PENDENT	V4804	1"	25.2	165°
	720	TOTAL SPRINKLERS THIS PAGE	10206	TOTAL SPRINKLERS ON ENTIRE PROJECT		

S.A. COMUNALE CO. INC.

FIRE PROTECTION CONTRACTORS

2900 NEWPARK DR BARBERTON, OHIO 44203 330-706-3040 FAX: 330-861-0960
CLEVELAND: 440-684-9325 COLUMBUS: 614-291-7001 CINCINNATI: 513-874-4268
FREMONT: 419-334-3841 PHILADELPHIA, PA: 856-848-4666 YOUNGSTOWN: 330-856-4440
MARION 740-383-6789 WASHINGTON, DC 410-768-1931 READING, PA: 610-670-3960

NY154 BROOKFIELD SUFFERN– BUILDING 1

25 OLD MILL ROAD SUFFERN, NY 20901

ESFR SYSTEMS 16 AND 17

DATE	SCALE	DRAWN	JOB NO.	DWG. NO.
01.11.24	3/32" = 1'-0"	SARAH CAREW	51718093	12 OF 18