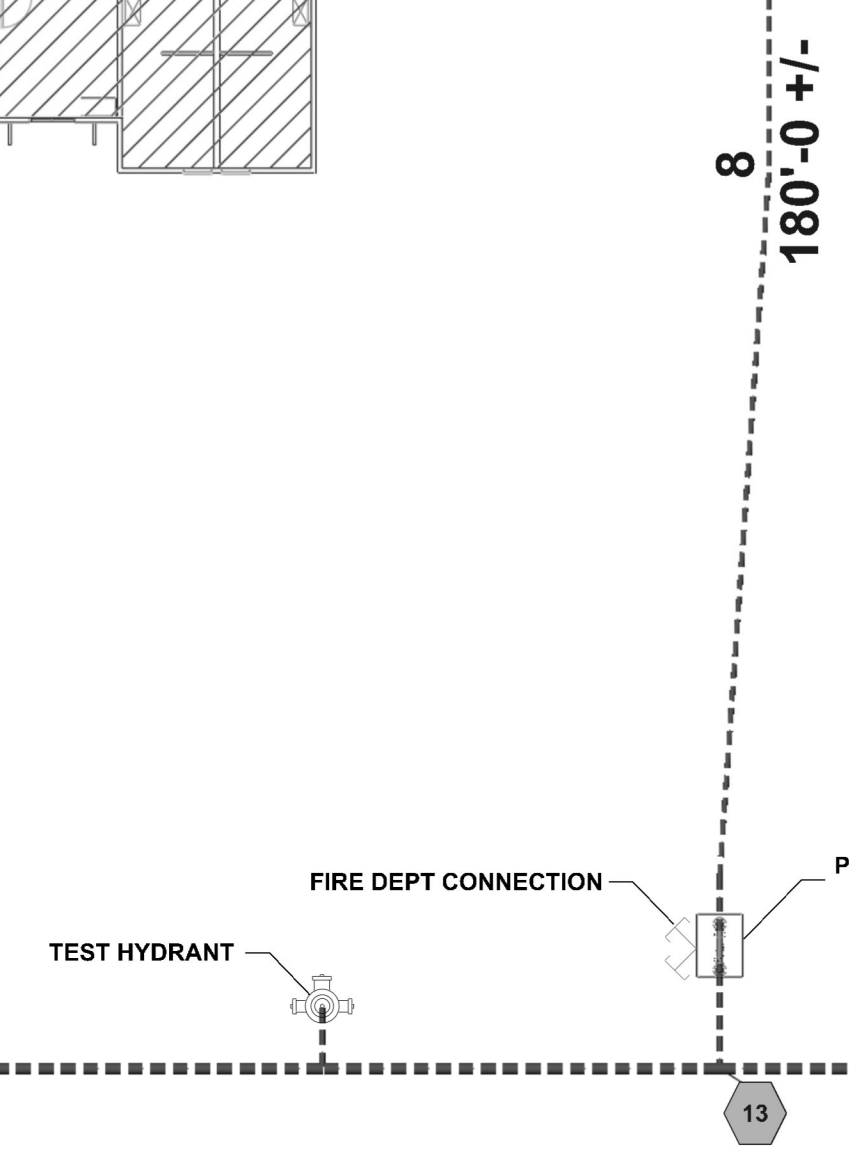
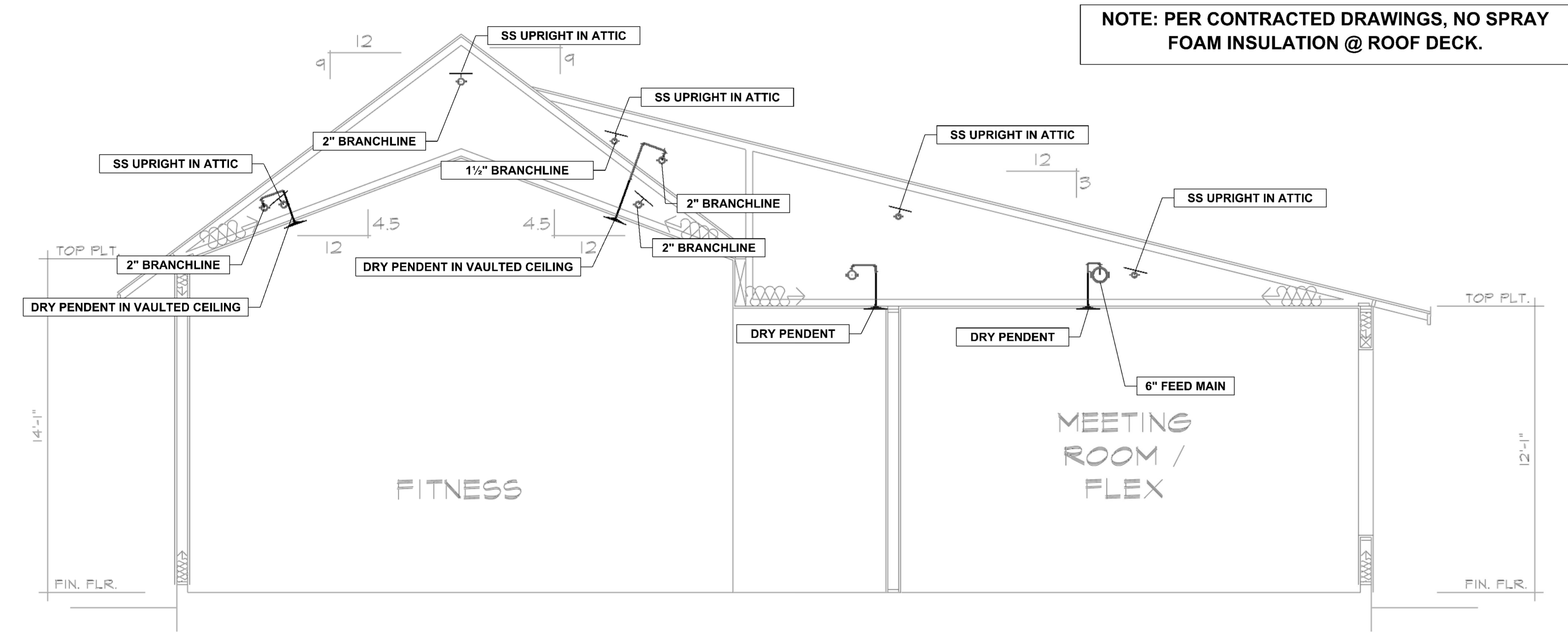


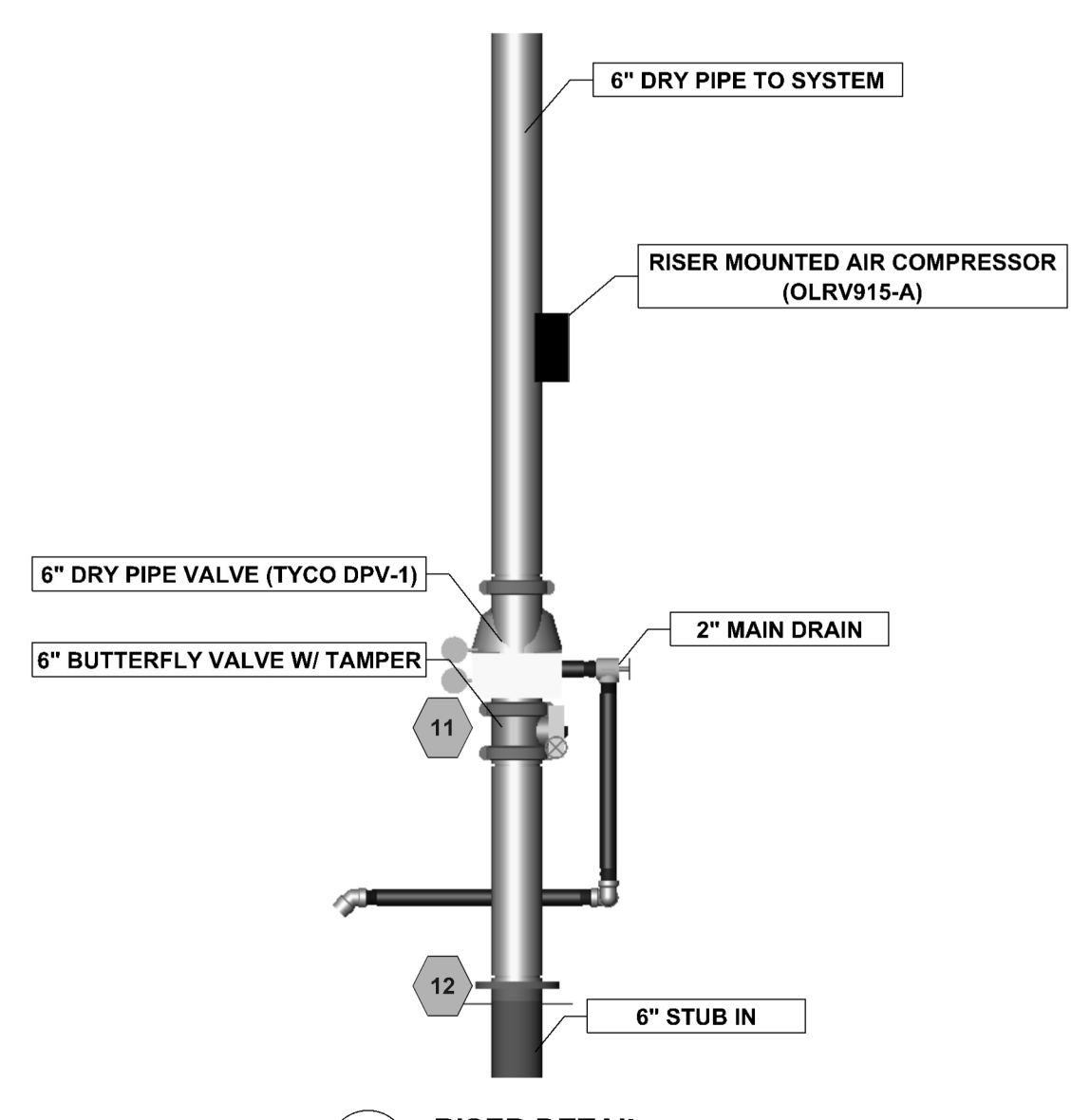
ALTIS SERENITY



SITE PLAN (FOR HYDRAULIC REFERENCE ONLY)
N.T.S.



SECTION VIEW
1/4" = 1 Foot



GENERAL NOTES:

- MATERIALS AND INSTALLATION SHALL COMPLY WITH APPLICABLE NFPA CODES (NFPA 13 2013 EDITION), STATE BUILDING CODE, LOCAL AUTHORITY HAVING JURISDICTION, AND INSURANCE UNDERWRITER'S REQUIREMENTS.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW, UL LISTED FOR THE INTENDED USE AND SHALL BE INSTALLED IN FULL COMPLIANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL NEW SPRINKLER PIPE 1" AND SMALLER IS SCHEDULE-40 BLACK STEEL WITH THREADED ENDS AND FITTINGS. ALL NEW SPRINKLER PIPE 1 1/2" AND LARGER IS SCHEDULE-10 BLACK STEEL WITH GROOVED ENDS AND FITTINGS.
- SPRINKLER HEAD SPACING IS BASED ON THE NFPA STANDARDS FOR LIGHT HAZARD OCCUPANCIES (OFFICE) ALLOWING A MAXIMUM HEAD SPACING OF 225 S.F. PER HEAD.
- LOCATIONS OF PIPING AS SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD.
- THE WATER TEST INFORMATION HAS BEEN PROVIDED BY J&D SPRINKLER COMPANY DATED 12/18/2025 INDICATES THE FOLLOWING...
 STATIC: 101.8 PSI
 RESIDUAL: 64.9 PSI
 FLOW: 969 GPM

SYMBOLS:

- XX DENOTES A HYDRAULIC CALCULATION POINT OF REFERENCE
- DENOTES A HYDRAULIC REMOTE AREA
- DENOTES NEW SPRINKLER PIPE
- DENOTES UNDERGROUND PIPE
- ▲ DENOTES THE RISER LOCATION
- ★ 0'-0" FF L DENOTES PIPE CENTERLINE ELEVATION AFF
- ★ 0'-0" TS L DENOTES PIPE CENTERLINE BELOW TOP OF STEEL
- DENOTES A FIRE DEPARTMENT CONNECTION
- DENOTES A FREE STANDING FIRE DEPARTMENT CONNECTION
- DENOTES A FIRE HYDRANT

Sprinkler Design Data

Project Name:	ALTIS SERENITY	System:	DRY
Project Street Address:	325 STREAMSIDE TERRACE	Floor:	-
Suite:	-	Design Height:	-
Designed By:	TWC	Phone:	919-553-2356
Occupancy:	OFFICE	Hazard:	LIGHT HAZARD

Design Summary

Design Method	1	2	3
Design Method	CALCULATED	CALCULATED	CALCULATED
Design Area #	REMOTE AREA #1	REMOTE AREA #2	REMOTE AREA #3
Location	FITNESS	ATTIC	ATTIC
Type of System	DRY	DRY	DRY
Hazard Class	LIGHT HAZARD	LIGHT HAZARD	LIGHT HAZARD
Criteria From	NFPA 13 (2013)	NFPA 13 (2013)	NFPA 13 (2013)
Design Area	2,560FT ²	2,414 FT ²	7 HEADS
Sprinkler Spacing	225FT ²	120 FT ²	120 FT ²
Density	10 GPM / FT ²	10 GPM / FT ²	10 GPM / FT ²
K-factor	5.6	8	8
Flow Allowance	100 GPM	100 GPM	100 GPM
# Design Sprinklers	27	18	7
Special Application Sp.			
Equipment @ 15/30			
G.P.M. Req'd	639.79	618.18	271.44
P.S.I. Req'd	34.660	22.104	45.969
Equipment @ TEST			
GPM Required	739.79	718.18	371.44
PSI Required	51.104	47.412	61.481
Safety Factor @ Test	+26.289 (33.1%)	+33.187 (41.2%)	+34.048 (25.6%)
Dry Sys. Volume (gal)	699.91	699.91	699.91

Water Supply Information

Tested by	J&D SPRINKLER	Date/Time	12/18/2025	Pressure Hydrant	-
Hydrant Elevation	-	Flow Hydrant # 1	-	Flow Hydrant # 2	-
Static (PSI)	101.8 PSI	Residual (PSI)	64.9 PSI	Flow (gpm)	969 GPM

Copy of Water Test Data Included with Calculation is required.

Fire Pump Data

Rated G.P.M.	Rated Pressure	Headerpower
---	---	---
Design/Discharge	Chain Pressure	Style of pump
Combined Discharge	150%/5% Flow (section)	150%/5% Flow (gpm)

Certified pump curve required.

If Storage is Greater than 12 Feet Complete Commodity Storage Information

Commodity Description	Storage Height	Clearance							
Commodity Class	Open/Closed	Wet/Dry							
Stable/Unstable	System								
Figure #	Curve #	Density	Area	Clear Factor	Area Factor	Dry Density	Design	Minimum Design	Final Design
Initial	---	---	---	---	---	---	---	---	---
Sees	---	---	---	---	---	---	---	---	---
Other	---	---	---	---	---	---	---	---	---

In system compliant with Chapter 21 (IPC) In storage area beyond, rack, and pile plus included?

HANGER INSTALLATION REQUIREMENTS

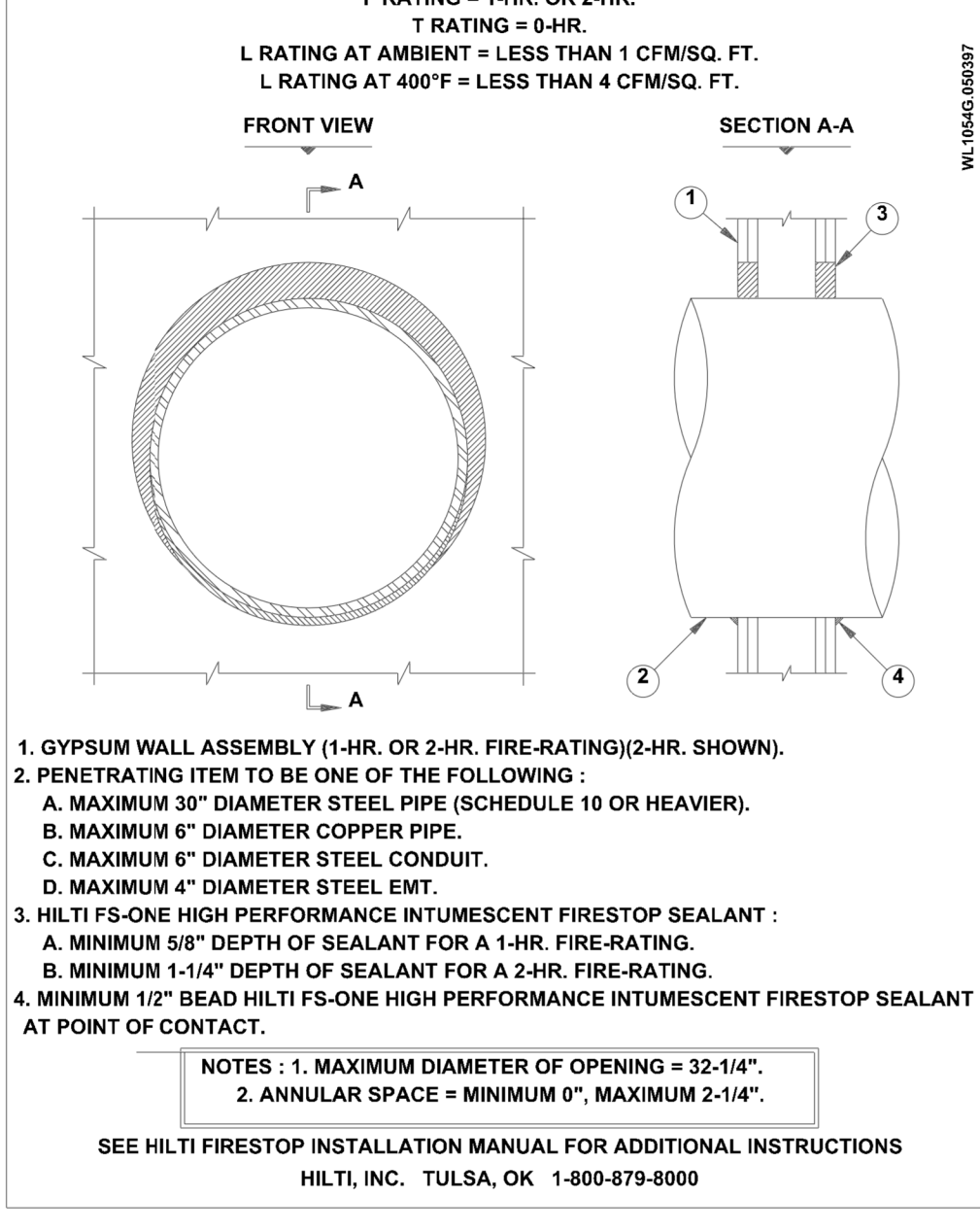
NOMINAL PIPE SIZE	MAXIMUM DISTANCE BETWEEN HANGERS								
	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"
BLAZEMASTER CPVC	5' 0"	6' 0"	6' 0"	7' 0"	8' 0"	9' 0"	10' 0"	N/A	N/A
TRACABLE LIGHTWALL	N/A	12' 0"	12' 0"	12' 0"	12' 0"	12' 0"	12' 0"	N/A	N/A
STEEL PIPE (10/40)	N/A	12' 0"	12' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"

100 PSI STATIC PRESSURE ON SYSTEM REQUIRES UP-LIFT RESTRAINT WITHIN 12 INCHES HORIZONTALLY OF HEAD FOR ARMCHANGERS AND END OF BRANCHLINE
 THE UNSUPPORTED LENGTH BETWEEN THE END SPRINKLER AND THE LAST HANGER ON THE LINE SHALL NOT EXCEED 36" FOR 1" PIPE, 48" FOR 1 1/4" PIPE AND 80" FOR 1 1/2" PIPE OR LARGER
 THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMCHANGER TO A SPRINKLER, SPRINKLER DROP, OR SPRIG-UP SHALL NOT EXCEED 24"

TRAPEZE INSTALLATION REQUIREMENTS

SPAN OF TRAPEZE (Schedule 10)	NOMINAL PIPE SIZE SUPPORTED							
	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"
1 FT. 0 IN.	1"	1"	1"	1"	1"	1"	1-1/4"	1-1/4"
2 FT. 0 IN.	1"	1"	1"	1"	1"	1"	1-1/4"	1-1/4"
3 FT. 0 IN.	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	1-1/2"	1-1/2"	2"
4 FT. 0 IN.	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2-1/2"
5 FT. 0 IN.	2"	2"	2"	2"	2"	2"	2-1/2"	2-1/2"
6 FT. 0 IN.	2"	2"	2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
7 FT. 0 IN.	2"	2"	2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
8 FT. 0 IN.	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"
9 FT. 0 IN.	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"	4"
10 FT. 0 IN.	2-1/2"	2-1/2"	2-1/2"	2-1/2"	2-1/2"	3"	3"	4"

METAL PIPE THROUGH GYPSUM WALL ASSEMBLY



(PER NFPA 13) N.T.S.

1" valve
2" x 12" Nipple or equivalent
1" valve
1" Nipple and Cap or Plug

DRY SYSTEM AUXILIARY DRAIN
NO SCALE

FOR 6" TO 8" PIPE SIZES

1" x 12" Under Unobstructed Construction (Typical) STANDARD SPRINKLERS
1" x 12" EYE ROD SOCKET

PIPE SIZE

TRAPEZE HANGER
NO SCALE

2" AND SMALLER PIPE DIAMETER

MIN. 1 1/2"
MIN. 3"
WOOD BEAM/JOIST
WOOD SAMMY SIDEWINDER
NO SCALE

1" TEE W/ PLUG

TYP. NIPPLE 1" x VARIES EXCEPT AS NOTED ON PLAN
1" x 0-2 NIPPLE
BRANCHLINE
CEILING
1/2" QUICK RESPONSE DRY SSP

TYP. RETURN BEND DETAIL
NO SCALE

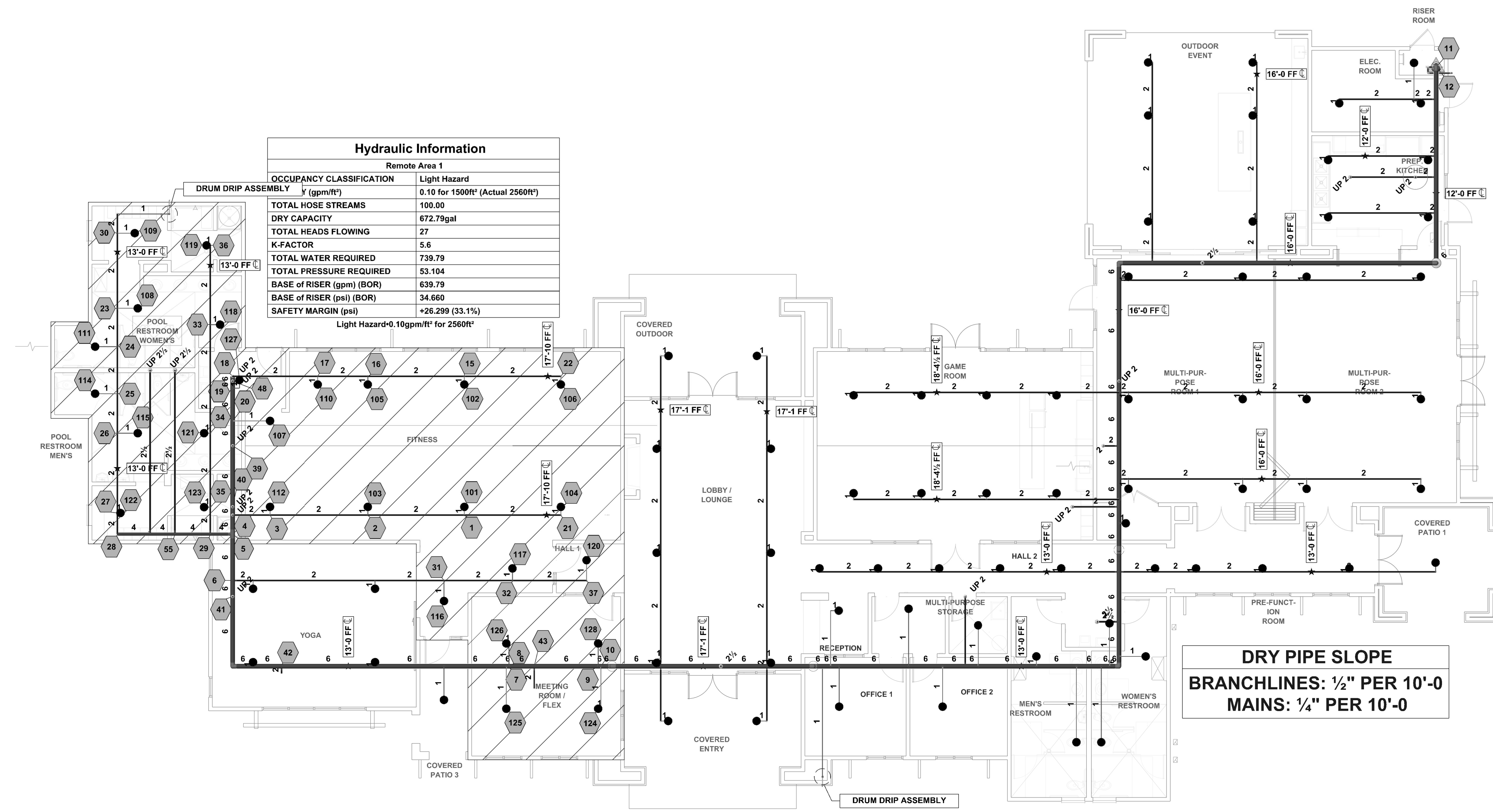
FROM END OF BRANCHLINE

1" GLOBE VALVE
1" PLUG
SMOOTH BORE CORROSION RESISTANT OUTLET GIVING FLOW EQUIVALENT TO ONE SPRINKLER
45° GALV. ELBOW
1" UNION W/ 1/2" RESTRICTED ORIFICE

DRY INSPECTORS TEST DETAIL
NO SCALE

Note: To minimize condensation of water in the drop to the test connection, provide a nipple-up off of the branchline.
 DRY TEST CONNECTION (PER NFPA 13)

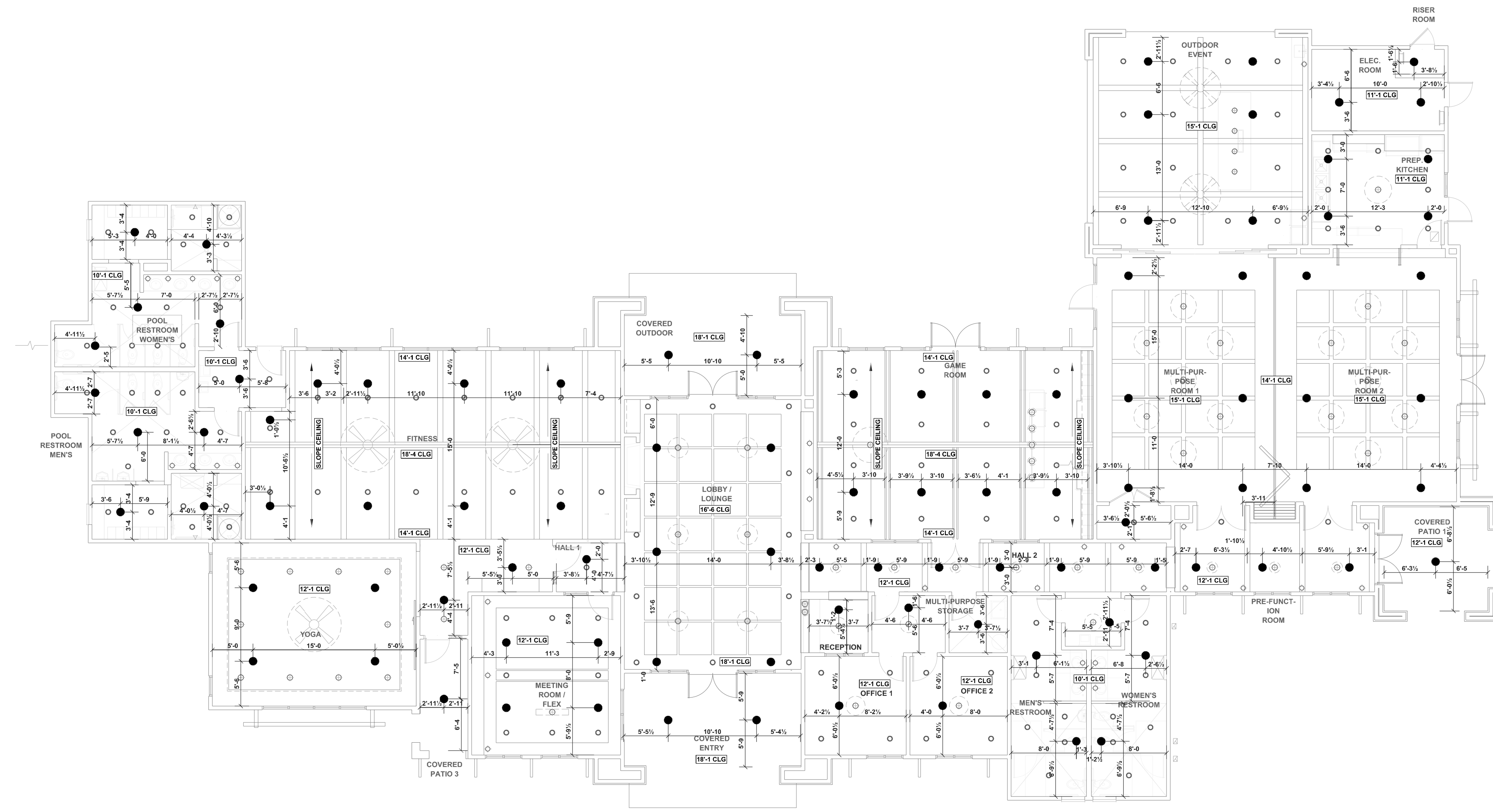
ALTIS SERENITY CLUBHOUSE
 325 STREAMSIDE TERRACE
 FLOUQUAY-VARINA, NC 27526
 J & D SPRINKLER CO., INC.
 315 W. MAIN ST., CLAYTON, NC 27520
 PHONE: (919) 553-2356 FAX: (919) 359-0622
 SHEET TITLE: NOTES AND DETAIL
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 2013 J & D Sprinkler Co., Inc.
 DANA GRAHAM
 NC # 16286FS CERT # 71075
 NICET LEVEL III
 JASON GRAHAM
 NC # 16286FS CERT # 121842
 NICET LEVEL III
 REVISION:
 NO. DATE
 Date: 01/05/2026
 Scale: 1/8" = 1'-0"
 Job Number: BW25327
 Drawn By: TWC
 Sheet Number: FP-1 OF 3
 30X42



DRY PIPE SLOPE
 BRANGLINES: 1/8" PER 10'-0"
 MAINS: 1/4" PER 10'-0"

LOWER PIPING PLAN
 1/8" = 1 Foot

Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
●	Victaulic	V3814	FL-QR/DRY	96	5.6	Pendent	1	Quick	Chrome	155°F	NEW DRY
				Total = 96							



REFLECTED CEILING PLAN
 1/8" = 1 Foot

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NC # 16289FS CERT # 71075
 NICET LEVEL III
 JASDN GRAHAM
 NC # 62289FS CERT # 121842
 NICET LEVEL III

REVISION:
 NO. DATE

Date:
 01/05/2026

Scale:
 1/8"=1'-0"
 0 10'

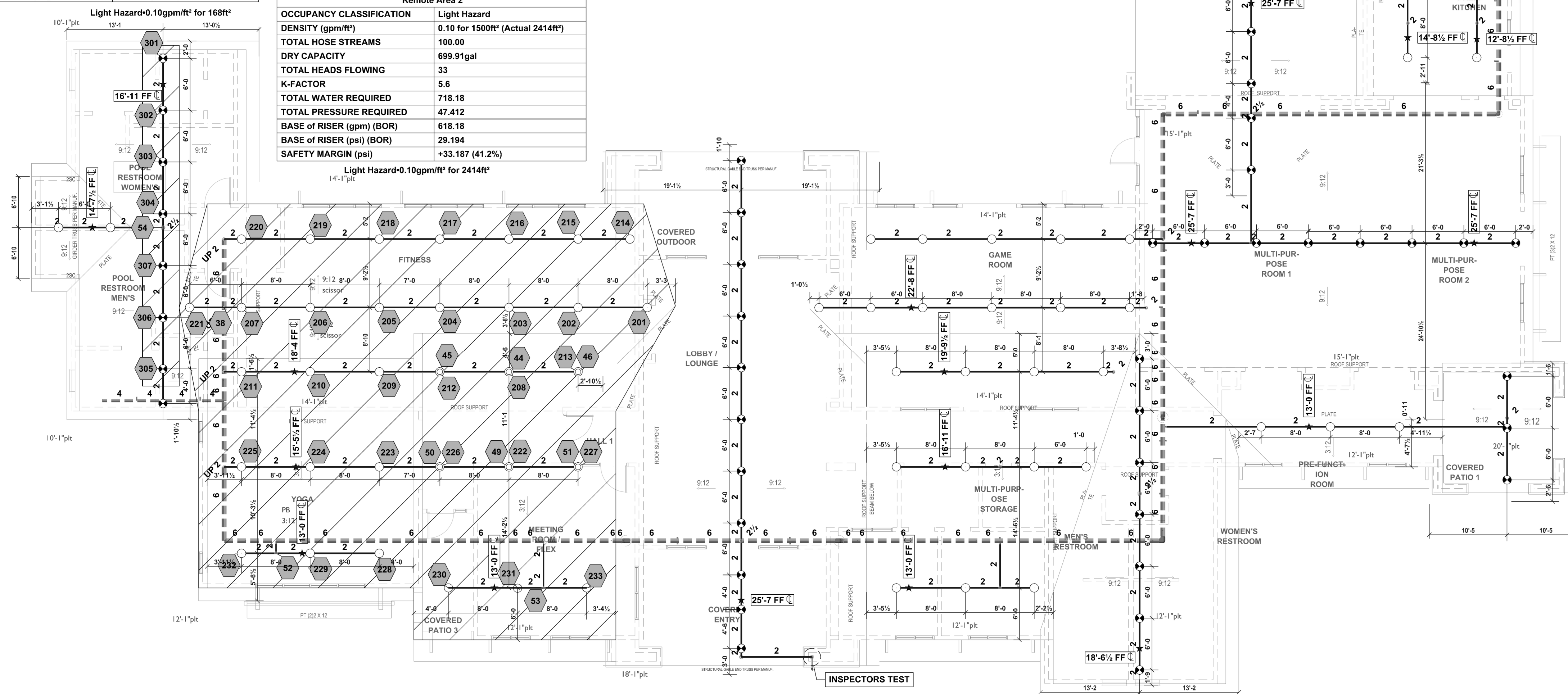
Job Number:
 BW25327

Drawn By:
 TWC

Sheet Number
 FP-2 OF 3

Hydraulic Information	
Remote Area 3	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft ²)	0.10 for 1500ft ² (Actual 168ft ²)
TOTAL HOSE STREAMS	100.00
DRY CAPACITY	699.91gal
TOTAL HEADS FLOWING	7
K-FACTOR	8
TOTAL WATER REQUIRED	371.44
TOTAL PRESSURE REQUIRED	61.491
BASE OF RISER (gpm) (BOR)	271.44
BASE OF RISER (psi) (BOR)	45.969
SAFETY MARGIN (psi)	+34.048 (35.6%)

Hydraulic Information	
Remote Area 2	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft ²)	0.10 for 1500ft ² (Actual 2414ft ²)
TOTAL HOSE STREAMS	100.00
DRY CAPACITY	699.91gal
TOTAL HEADS FLOWING	33
K-FACTOR	5.6
TOTAL WATER REQUIRED	718.18
TOTAL PRESSURE REQUIRED	47.412
BASE OF RISER (gpm) (BOR)	618.18
BASE OF RISER (psi) (BOR)	29.194
SAFETY MARGIN (psi)	+33.187 (41.2%)



45005-115" = 1'-0"

ATTIC PIPING PLAN
1/8" = 1 Foot

Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
◆	Viking	VK682	V-BB	44	8	Upright	1/2	Quick	Brass	200°F	NEW B2B (≤ 60' ROOF SPAN)
○	Victaulic	V2704	FL-QR	60	5.6	Upright	1/2	Quick	Brass	200°F	NEW
○	Victaulic	V2704	FL-QR	6	5.6	Upright	1/2	Quick	Brass	200°F	NEW UR ON SPRIG
				Total = 110							

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NC # 16289FS CERT # 71075
NICET LEVEL III
JASDN GRAHAM

NC # 42269FS CERT # 121842
NICET LEVEL III

REVISION:
NO. DATE

Date:
01/05/2026

Scale:
1/8" = 1'-0"

Job Number:
BW25327

Drawn By:
TWC

Sheet Number
FP-3 OF 3