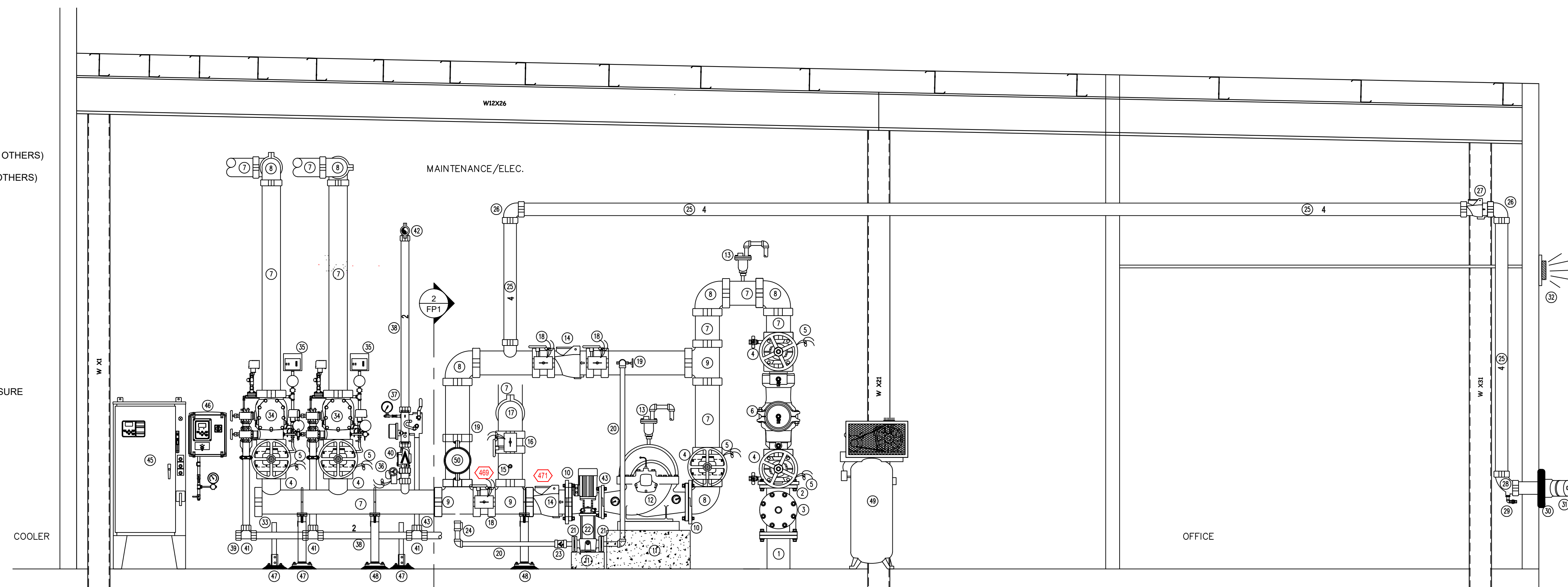
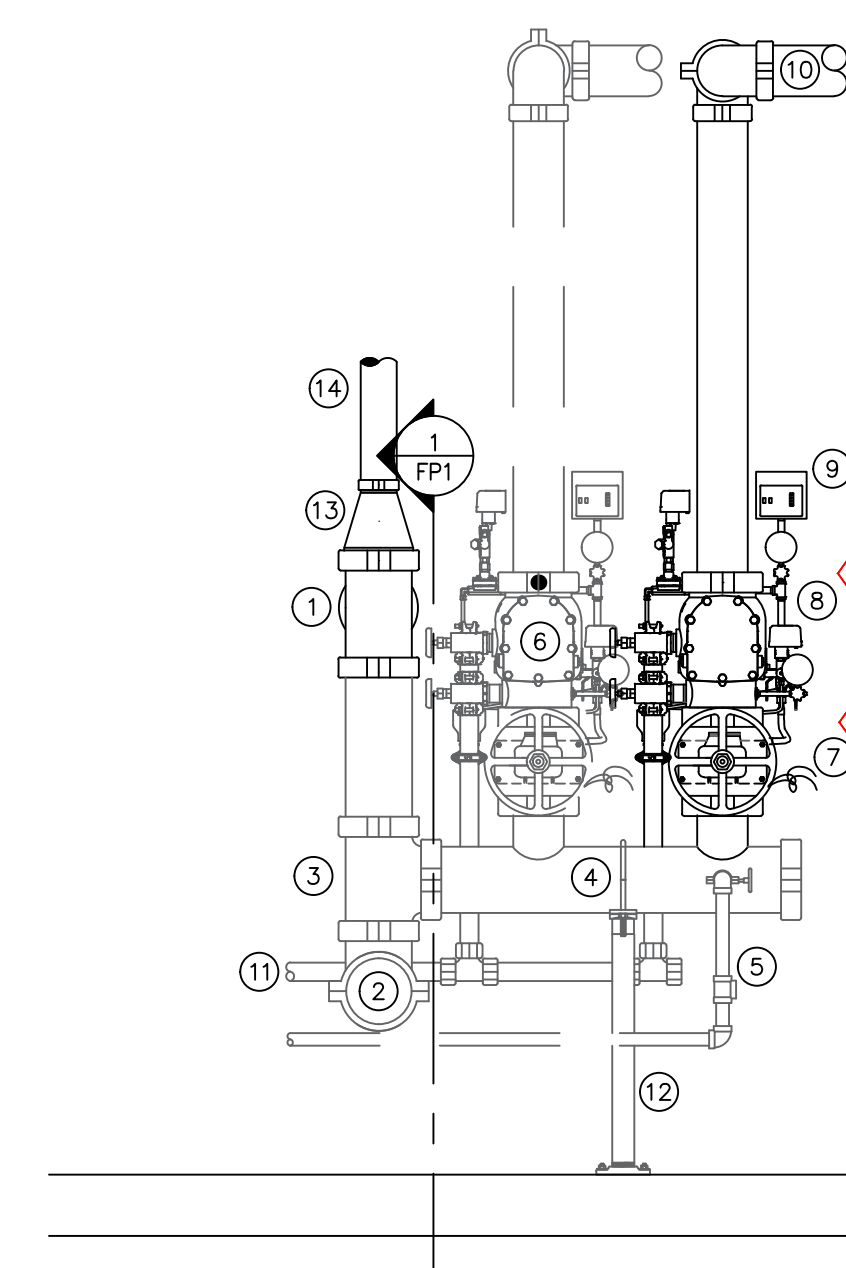


- EXISTING FIRE PUMP LEGEND**
- 8" FLANGED UNDERGROUND (BY OTHERS)
  - 8"x8"x8" FLANGED TEE
  - 13-1/2"x2" THREADED REDUCING COMPANION FLANGE (BY OTHERS)
  - 8" GROOVED OSBY GATE VALVE (N.O.)
  - POTTER OSBY GATE TAMPER SWITCH (WIRED BY OTHERS)
  - 8" AMES DOUBLE CHECK DETECTOR ASSEMBLY WITH BY-PASS WATER METER
  - 8" GROOVED VICTAULIC FIRELOCK 90 ELL
  - 8" GROOVED VICTAULIC FIRELOCK TEE
  - 8" GROOVED VICTAULIC VIC-FLANGE ADAPTER STYLE 741 (CLASS 150)
  - CONCRETE PAD (BY OTHERS)
  - NEW AURORA ELECTRIC FIRE PUMP (RATED 90 PSI @ 2,000 GPM)
  - AIR RELIEF VALVE (PIPED TO FLOOR DRAIN)
  - 8" GROOVED VICTAULIC FIRELOCK 717 CHECK VALVE
  - 1/2" NPT OUTLET FOR FIRE PUMP CONTROLLER SENSING LINE
  - 8" GROOVED VICTAULIC FIRELOCK SERIES 707C BUTTERFLY VALVE (N.C.) WITH TAMPER SWITCH (WIRED BY OTHERS)
  - 8" GROOVED VICTAULIC STANDARD TURN 90 ELL
  - 8" GROOVED VICTAULIC FIRELOCK SERIES 705 BUTTERFLY VALVE (N.O.) WITH TAMPER SWITCH (WIRED BY OTHERS)
  - 1-1/4" THREADED BALL VALVE (N.O.) - RELOCATED (SEE RISER DETAIL 2)
  - 1-1/4" SCHEDULE 40 PIPE
  - 4-5/8"x1-1/4" THREADED COMPANION FLANGE
  - 1-1/4" FLANGED AURORA PUM1-11 JOCKEY PUMP (RATED 105 PS @ 110 GPM)
  - 2-1/2" THREADED CHECK VALVE
  - 1/2" NPT OUTLET FOR JOCKEY PUMP CONTROLLER SENSING LINE
  - 4" SCHEDULE 10 PIPE
  - 4" GROOVED VICTAULIC FIRELOCK 90 ELL
  - 4" GROOVED VICTAULIC FIRELOCK 717 CHECK VALVE
  - 4" GROOVED VICTAULIC NO.10-DR ELL
  - 1/2" THREADED BALL DRIP VALVE WITH 1/2" THRD M 90 ELL, 1/2 X CLOSE THRD NIPPLE
  - 4" PLASTIC FDC PLATE "AUTO SPKR"
  - 4" X 2 1/2" X 2 1/2" BRASS SINGLE CLAPPER FIRE DEPARTMENT CONNECTION WITH PLASTIC CAPS
  - 120 VAC EXTERIOR HORN STROBE WITH BACK BOX
  - 8" GROOVED VICTAULIC FIRELOCK CAP
  - 8" GROOVED VICTAULIC SERIES 768N DRY VALVE
  - VIZOR ELECTRONIC ACCELERATOR
  - 2" GROOVED VICTAULIC SERIES 705 BUTTERFLY VALVE (N.O.) WITH TAMPER SWITCH (WIRED BY OTHERS)
  - 2" GROOVED VICTAULIC SERIES 747M RISER CONTROL MODULE WITH 1-1/4" TEST & MAIN DRAIN WITH PRESSURE RELIEF VALVE (SET AT 175 PSI) (PIPED OUTSIDE), PRESSURE GAUGE & FLOW SWITCH (WIRED BY OTHERS)
  - SCHEDULE 10 PIPE
  - 2" GROOVED VICTAULIC FIRELOCK CAP
  - 2" GROOVED VICTAULIC CHECK VALVE
  - 2" GROOVED VICTAULIC FIRELOCK TEE
  - 2" GROOVED VICTAULIC FIRELOCK 90 ELL
  - 2"x1-1/4" GROOVED VICTAULIC REDUCING COUPLING
  - 8"x6" FLANGED CONCENTRIC REDUCER
  - FIRE PUMP CONTROLLER
  - JOCKEY PUMP CONTROLLER
  - 2" PIPE STAND
  - 8" PIPE STAND
  - AIR COMPRESSOR - CASTAIR
  - 8" GROOVED TEE TO PHASE II AND PHASE III DRY VALVES. SEE RISER DETAL 2

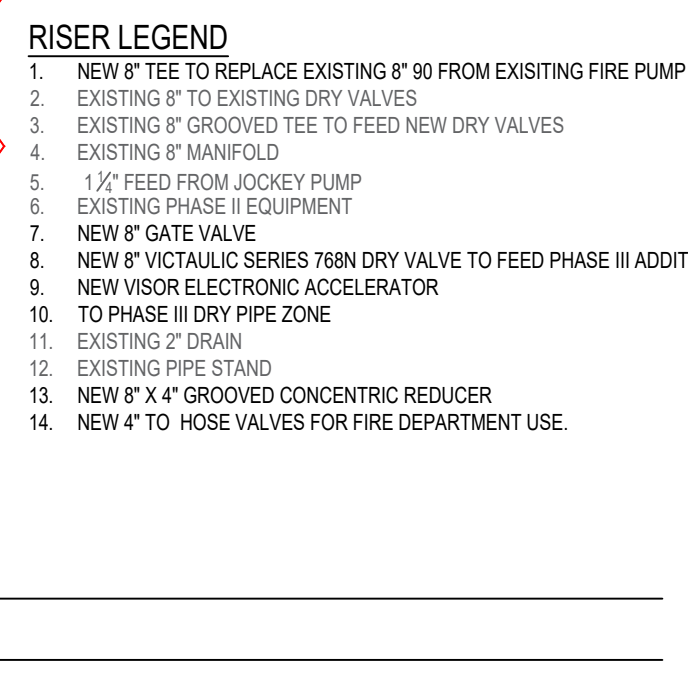


**1 EXISTING FIRE PUMP DETAIL**  
SCALE= 1/2" : 1'-0"

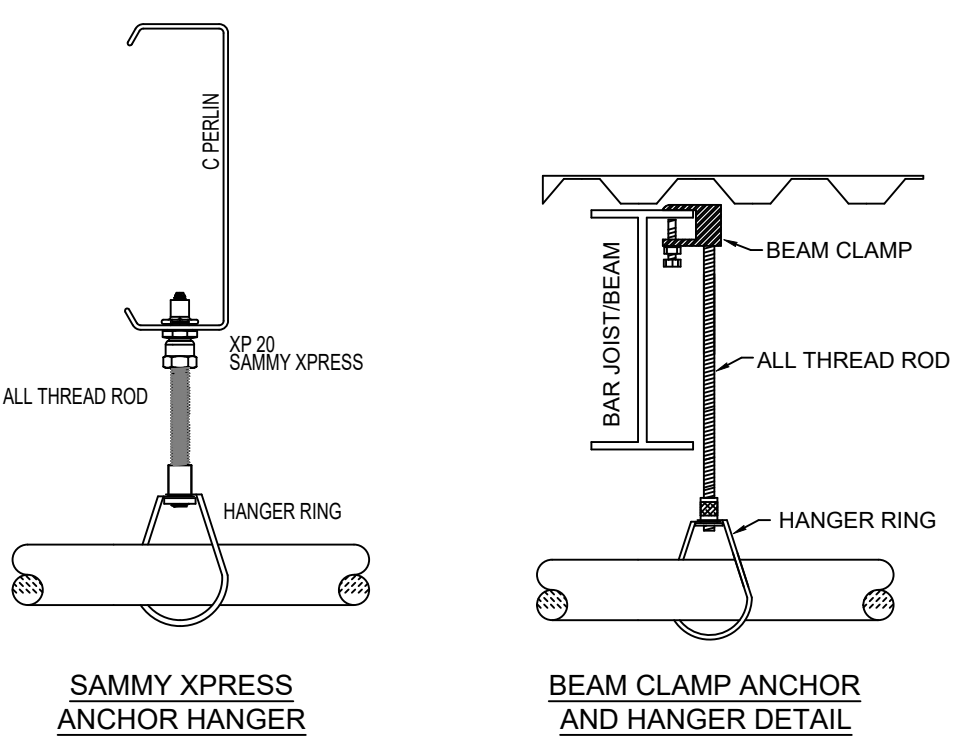
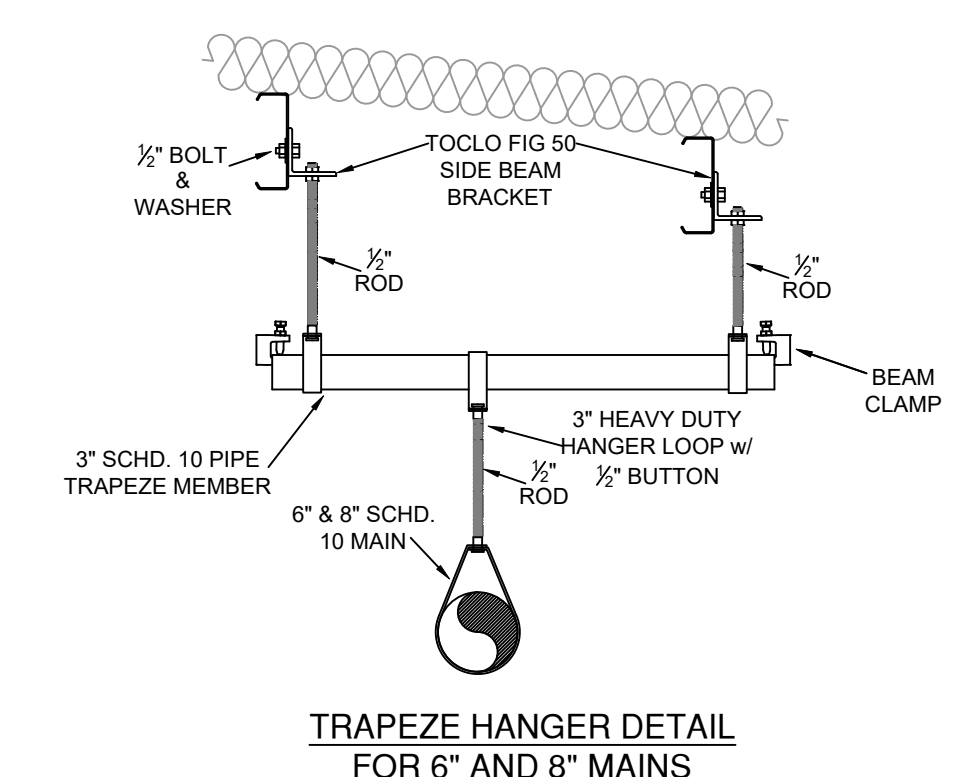
- GENERAL NOTES**
- MINNESOTA STATE BUILDING CODE (2020)
    - OCCUPANCY: S-2 - STORAGE
    - TYPE OF CONSTRUCTION: I-IB
    - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)  
PHASE III ADDITION = 41,329 S.F. (THIS IS TOTAL S.F. INCLUDING NON STORAGE AREAS SUCH AS FORK LIFT AREA, MECH/ELEC. ROOM, ETC. ACTUAL STORAGE FOOTPRINT DOES NOT EXCEED 40,000S.F.)  
EXISTING = 98,930 S.F.  
TOTAL = 139,259 S.F.
  - INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016)
  - SPRINKLER PIPE TYPES: DRY PIPE.
    - 1" BRANCH LINES TO BE THREADED GALV SCHEDULE 40 WITH GALV THREADED FITTINGS
    - 1/2" THROUGH 8" MAIN & BRANCH LINES TO BE GROOVED GALV SCHEDULE 10 WITH PAINTED GROOVED FITTINGS
  - DESIGN CRITERIA
    - ALL AREAS OF THE ADDITION WILL BE DESIGNED AS A DRY PIPE SYSTEM AND WILL UTILIZE THE LP-46 SPECIFIC APPLICATION SPRINKLER. DESIGN WILL BE PER THE SPRINKLER LISTING, NFPA 13 AND FM GLOBAL DATA SHEET 2.0. HIGH TEMP SPRINKLERS WILL BE UTILIZED THROUGHOUT THE ADDITION AS REQUIRED
    - ALL AREAS OF THE ADDITION ARE DESIGNED FOR THE STORAGE OF CLASS I - III COMMODITIES ON OPEN FRAME RACKING.
      - ROOF HEIGHT LOWER THAN 30' HYDRAULICALLY CALCULATED TO MAINTAIN A MINIMUM END HEAD PRESSURE OF 10PSI WITH 25 HEADS FLOWING. MAXIMUM HEAD SPACING 12'-0" WITH A MAXIMUM COVERAGE AREA OF 100SF PER SPRINKLER
  - 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
    - DRY SYSTEM PIPE SLOPE INSTALLATION: SPRINKLER MAINS TO BE 1/8" PER 10 FEET IN REFRIGERATED AREAS PER 8.16.2.3.3. SPRINKLER BRANCH LINES TO BE 1/2" PER 10 FEET
    - DRY SYSTEM CAPACITY: 2,992 GAL.
  - STORAGE CRITERIA
    - CLASS III PALLETIZED CHEESE STORED IN OPEN FRAME RACKING.
    - STORAGE HEIGHT NOT TO EXCEED 28' WHILE MAINTAINING 36" CLEARANCE FROM TOP OF PRODUCT TO THE SPRINKLER HEAD.
    - PROTECTION OF ENCAPSULATED, PLASTICS OR SOLID SHELVING STORAGE EXCLUDED.
  - SYMBOLS USED ON DRAWINGS:
    - 4.920 PIPE ELEVATION A.F.F.
    - 4.922 PIPE ELEVATION BELOW B.O.D.
    - (LH) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
    - (HJ) HYDRAULIC CALCULATION JUNCTION POINT
  - SCOPE OF WORK:
    - INSTALL ONE DRY PIPE SYSTEM TO PROTECT ALL AREAS OF THE ADDITION. DRY PIPE SYSTEM WILL HAVE AN ELECTRONIC ACCELERATOR AND BE WIRED (BY OTHERS) TO PRE-START THE FIRE PUMP PRIOR TO DRY VALVE ACTIVATION
    - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016)



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



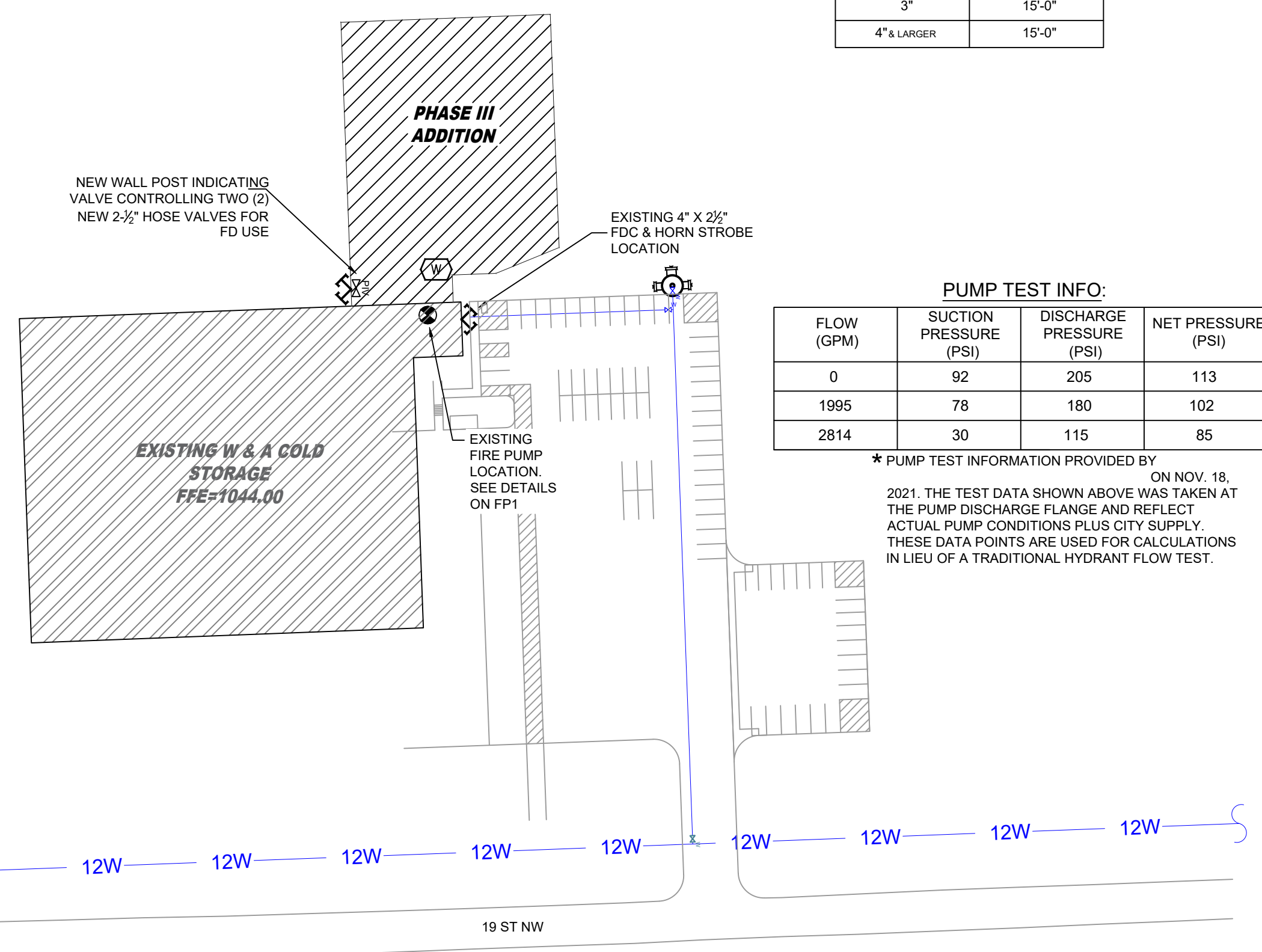
**EVAPORATOR DETAIL**  
SCALE= 1/2" : 1'-0"



**HANGER DETAILS**

**NFPA 13 STEEL PIPE HANGER SPACING**  
(HEIGHT LIGHT WALL THROUSING)

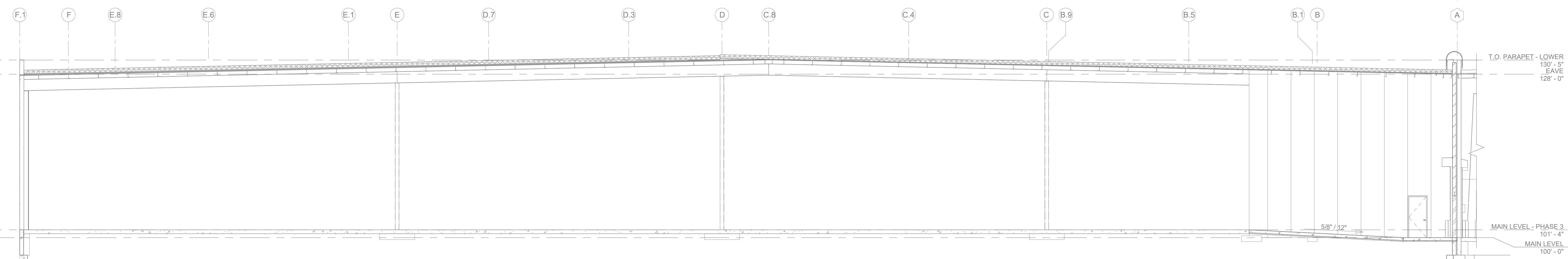
NOMINAL SIZE inches	MAX SPACING feet
1"	12'-0"
1-1/4"	12'-0"
1-1/2"	15'-0"
2"	15'-0"
2-1/2"	15'-0"
3"	15'-0"
4" & LARGER	15'-0"



**SITE PLAN**  
N.T.S.

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#
497	UPR	BRASS	212	25.20	1"	V4603	VICTAUL	V4603	
4	UPR	BRASS	200	5.60	1/2"	TY313	Typo	TY-FRB	
501	TOTAL								

**SPRINKLER HEAD LEGEND**



**A BUILDING SECTION**  
SCALE= 1/8" : 1'-0"

**GENERAL NOTES**

- SYSTEMS INSTALLED PER NFPA 13 (2016 EDITION) AND STATE FIRE MARSHAL'S OFFICE (S.F.M.) LISTING. U.L. LISTED MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE (NPS) UNLESS OTHERWISE NOTED.
- SHORT RADIUS FITTINGS: SPRING HAS WELDED OUTLETS & GROOVED ALL WELDING PER NFPA 13 (2016) TO BE PER APPROVED SHOP DRAWINGS. CONTRACTOR TO BE FIELD REASURED PRIOR TO FABRICATION AND INSTALLATION BY SPRINKLER CONTRACTOR.
- HIGH TEMPERATURE HEADWARE TO BE FIELD LOCATED WHERE REQUIRED. HANGERS ARE TO BE FIELD INSTALLED AND APPROVED.
- ELECTRICAL WORK, ALARM DETECTION AND SUPERVISORY BY OWNER. CONSULT ELECTRICAL CONTRACTOR FOR TESTING AND RECORDS.

NO.	REVISIONS	DATE	APPROVAL STAMPS

NO.	REVISIONS	DATE	APPROVAL STAMPS

**FIRE PROTECTION PLAN**

**W.A. COLD STORAGE PHASE III**

**19TH ST. NW**

**ROCHESTER, MN 55904**

Contract No: **C22-12**

Drawing Date: 06/29/2022

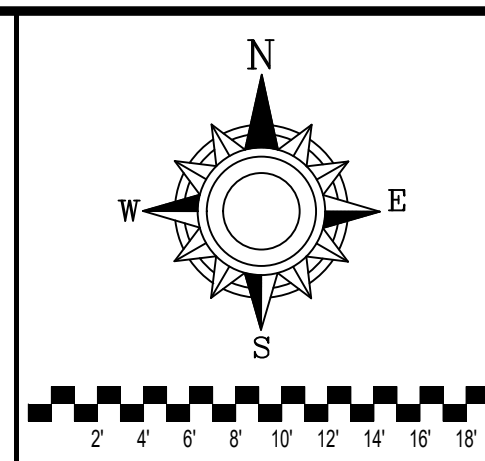
Scale: 1/8" = 1'-0"

Drawn By: AMM

Approval By: STATE FIRE MARSHAL DIV.

SHEET NO. **FP 1 of 2**





- GENERAL NOTES**
- SYSTEM INSTALLED PER NFPA 13 (2016 EDITION) AND STATE FIRE MARSHAL'S APPROVED LIST.
  - MINIMUM PIPE SIZE SHALL BE 1" NOMINAL PIPE SIZE (NPS).
  - SHORT RADIUS FITTINGS SHALL BE WELDED OR GROOVED END FITTINGS.
  - ALL WELDING SHALL BE PER NFPA 54 (2021 EDITION) TO BE PERMITTED WITHOUT APPROVED SHOP DRAWINGS.
  - CONDUIT SHALL BE PERMITTED TO BE USED FOR WIRING PROVIDED IT IS INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC).
  - HIGH TEMPERATURE HEADERS TO BE FIELD WELDED WHERE REQUIRED.
  - HEADERS SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC).
  - HANDS ON TO BE USED FOR ALL WELDING AND FABRICATION.
  - ELECTRICAL WIRING, ALARM DETECTION AND SUPERVISORY BY OWNER.
  - WET TEST PIPE FROM FREEZING.

**APPROVAL STAMPS**

NO.	REVISIONS	DATE

**FIRE PROTECTION PLAN**

**W.A. COLD STORAGE  
PHASE III  
19TH ST. NW  
ROCHESTER, MN 55904**

Contract No: **C22-12**

Design Area #: 1 HAZARD: ESRF

Zone: 1 System Type: DRY

Location: WAREHOUSE

Flowing Outlets: 25

Head PSI: 10 Remote Area: 1788

Req. @ Pump Discharge (BOR):

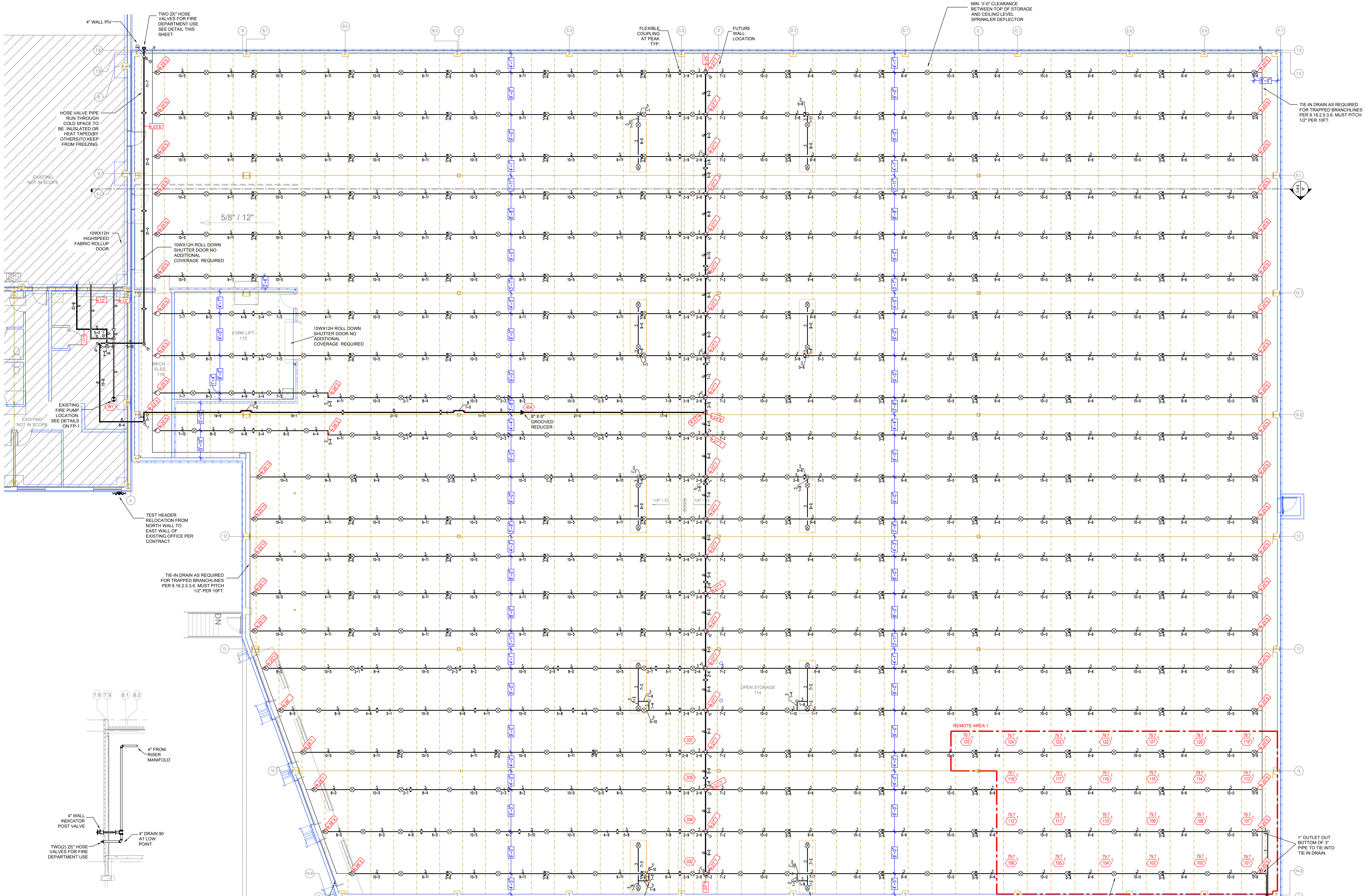
Flow: 2789 gpm @ 105.3 psi

Calculation Safety: 12 psi

Includes 500 gpm Hose allowance

**SPRINKLER HEAD LEGEND**

SYM	QTY	POSITION	FINISH	TEMP	K	INP	SIN	MFG	MODEL#
⊗	497	UPR	BRASS	212	25.20	1"	V4603	VICTAUL	V4603
○	4	UPR	BRASS	200	5.00	1/2"	TY313	TYCO	TY-FRB
	501	TOTAL							



**HOSE VALVE DETAIL**  
SCALE= 1/2" : 1'-0"

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

**SPRINKLER HEAD LEGEND**

SYM	QTY	POSITION	FINISH	TEMP	K	INP	SIN	MFG	MODEL#
⊗	497	UPR	BRASS	212	25.20	1"	V4603	VICTAUL	V4603
○	4	UPR	BRASS	200	5.00	1/2"	TY313	TYCO	TY-FRB
	501	TOTAL							

**SPRINKLER HEAD LEGEND**