

HYDROSTATIC TEST

BUILDING SPRINKLER SYSTEM(S) INVOLVED IN THIS SCOPE OF WORK SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH NFPA 13. MOREOVER, THE FOLLOWING TWO (2) HYDROSTATIC TESTS SHALL BE PERFORMED BY THE CONTRACTOR:

1. THE FIRST HYDROSTATIC TEST SHALL BE PERFORMED BY THE CONTRACTOR PRIOR TO START OF SPRINKLER SYSTEM SCOPE OF WORK ("PRE-SCOPE HYDRO TEST"); AND

2. THE SECOND HYDROSTATIC TEST SHALL BE PERFORMED BY THE CONTRACTOR AFTER COMPLETION OF CONTRACT SCOPE OF WORK ("POST-SCOPE HYDRO TEST").

THE HYDROSTATIC TESTS SHALL BE COMPLETED AS FOLLOWS:

WHERE EXISTING SYSTEM AND/OR NEW WORK COMPONENTS CANNOT BE ISOLATED IN ACCORDANCE WITH NFPA 13, TEST SYSTEM TO NORMAL WORKING PRESSURE (140 PSI).

WHERE NEW WORK/SYSTEM CAN BE ISOLATED, TEST SYSTEM TO 200 PSI. ALL HYDROSTATIC TESTING SHALL BE PERFORMED IN ACCORDANCE WITH NFPA 13.

THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR DAMAGE TO CONTENTS OR BUILDING OCCURRING DURING THE PRE-SCOPE HYDRO TEST. PROVIDED ALL COMMERCIALLY REASONABLE MEASURES NECESSARY OR PRUDENT TO PROTECT CONTENTS OR BUILDING COMPONENTS WERE FOLLOWED FOR APPROPRIATE TEST PROCESS, CONTRACTOR SHALL COMPLETE REPAIRS AND /OR REMEDIATION TO EXISTING SYSTEMS REQUIRED AS A RESULT OF DEFICIENCIES IDENTIFIED DURING PRE-SCOPE TESTING AS AN ADDITIONAL SERVICE. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DAMAGE TO CONTENTS OR BUILDING OCCURRING DURING THE "POST-SCOPE HYDRO TEST" PROCEDURE ORIGINATING IN EXISTING OR NEW SYSTEM COMPONENTS. CONTRACTOR SHALL COMPLETE REPAIRS AND /OR REMEDIATION TO EXISTING SYSTEMS REQUIRED AS A RESULT OF DEFICIENCIES IDENTIFIED DURING POST-SCOPE TESTING AT NO ADDITIONAL COST TO WALMART. WHEN CONDUCTING HYDROSTATIC TESTING ON EXISTING SYSTEMS AS REQUIRED BY NFPA 13, CONTRACTOR SHALL TAKE SUCH ACTIONS AS MAY BE NECESSARY TO REDUCE POTENTIAL DAMAGE TO CONTENTS AND BUILDING DURING EXECUTION OF SCOPE OF WORK, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. USE OF LOW CAPACITY PRESSURE PUMP TO INCREASE PRESSURE IN SYSTEM AT INCREMENTAL RATE TO LIMIT SURGES IN SYSTEM AND

2. PROVISION OF WORK STAFF DEDICATED TO MONITORING THE IMPACTED SYSTEM AREA DURING PRESSURE APPLICATION AND DURING HYDROSTATIC TEST FOR SIGNS OF SYSTEM COMPROMISE (MINIMUM 1 PERSON/ 20,000 SQ. FT. AREA); AND

3. MAINTAINING DEDICATED PERSON AT SYSTEM CONTROL VALVE IN CONSTANT COMMUNICATION WITH SYSTEM MONITORS TO SHUT OFF TEST PUMP AND DRAIN SYSTEM IN EVENT OF SYSTEM FAILURE OR LEAK; AND

4. PROVISION OF READY SUPPLIES PRIOR TO START OF TESTING TO FACILITATE DAMAGE MINIMIZATION IN EVENT OF SYSTEM FAILURE (TARPS / PLASTIC SHEETING, WET / DRY VACUUM ETC.); AND

5. COVERING HIGH VALUE EQUIPMENT PRIOR TO TESTING; AND

6. LIMITATION OF TESTING TO ONE SYSTEM AT A TIME; AND

7. TESTING OF SYSTEMS DURING OFF HOURS / OVERNIGHT.

SYMBOL LEGEND

SYMBOL	DESCRIPTION
---	EXISTING BRANCH LINE TO REMAIN
---	EXISTING MAIN LINE TO REMAIN
---	DEMO PIPING
⊗	DEMO SPRINKLERS
⊙	EXISTING OVERHEAD SPRINKLERS
○	EXISTING PENDENT SPRINKLERS
---	BRANCH LINE TO BE INSTALLED
---	MAIN LINE TO BE INSTALLED
---	HYDRAULIC CALCULATION AREA
ⓘ	HYDRAULIC REFERENCE POINT
---	1" OUTLET WITH ARM--OVER TO NEW PENDENT SPRINKLER
---	NEW DRILLED 1" MECHANICAL TEE WITH ARM--OVER TO NEW PENDENT SPRINKLER
---	AIR RELEASE VALVE
---	PLUG EXISTING OUTLET

SHEET INDEX

SHEET NUMBER	SHEET NAME
FP1	FIRE SPRINKLER SITE PLAN
FP2	FIRE SPRINKLER DEMOLITION PLAN NORTH
FP3	FIRE SPRINKLER DEMOLITION PLAN SOUTH
FP4	OVERALL FIRE SPRINKLER UPGRADE PLAN
FP5	FIRE SPRINKLER UPGRADE PLAN NORTH
FP6	FIRE SPRINKLER UPGRADE PLAN SOUTH
FP7	FIRE SPRINKLER DETAILS

PIPE DIMENSION TABLES

REFER TO HYDRAULIC CALCULATIONS FOR PIPE TYPE

NOMINAL SIZE	SCHEDULE 40 INSIDE DIAMETER	SCHEDULE 10 INSIDE DIAMETER
1"	1.049"	1.092"
1 1/4"	1.380"	1.442"
1 1/2"	1.616"	1.682"
2"	2.064"	2.157"
2 1/2"	2.468"	2.635"
3"	3.068"	3.260"
4"	4.026"	4.260"
6"	6.068"	6.357"
8"	8.249"	

OWNER FURNISHED SPRINKLERS AND ACCESSORIES

SYMBOL	SIZE	K-FACTOR	FINISH	MFR	MAKE	S.I.N.	TEMP	STYLE	QTY	SPARE QTY	ESCH STYLE	ESCH FINISH	ESCH QTY
⊙	3/4"	16.8	WHITE	TYCO	K17-231	TY7258	200	PENDENT	938	12	STYLE 30	WHITE	938
⊙	3/4"	16.8	BRASS	TYCO	TY7158	TY7158	155	UPRIGHT	275	6	----	----	----
⊗	3/4"	16.8	BRASS	TYCO	TY7158	TY7158	200	UPRIGHT	10	6	----	----	----
⊗	3/4"	16.8	BRASS	TYCO	TY7158	TY7158	286	UPRIGHT	10	6	----	----	----
⊙	3/4"	11.2	BRASS	TYCO	ELD-231 FRB	TY5131	155	UPRIGHT	350	12	----	----	----
⊙	3/4"	11.2	BRASS	TYCO	ELD-231 FRB	TY5131	200	UPRIGHT	8	6	----	----	----
⊙	3/4"	11.2	BRASS	TYCO	ELD-231 FRB (ON 996)	TY5131	155	UPRIGHT	66	----	----	----	----

SUBSTITUTIONS WILL NOT BE PERMITTED. REFERENCE SPECIFICATIONS APPENDIX B FOR ADDITIONAL INFORMATION.

WHERE SPRINKLERS ARE INSTALLED BELOW OBSTRUCTIONS (REFRIGERATION PIPING, RTUS, CABLE TRAYS, ETC.) THESE SPRINKLERS SHALL BE REPLACED WITH SPRINKLERS MATCHING THE NEW SPRINKLERS BEING INSTALLED AT THE ROOF DECK LEVEL.

* INTERMEDIATE TEMPERATURE SPRINKLERS TO BE FURNISHED BY OWNER FOR INSTALLATION BELOW SKYLIGHTS.

**HIGH TEMPERATURE SPRINKLERS TO BE FURNISHED BY OWNER FOR INSTALLATION AROUND UNIT HEATERS.

THE OWNER WILL FURNISH ONE (1 QTY) SPRINKLER WRENCH (TYPE 38) FOR INSTALLATION PURPOSES FOR THE TY7258 WHEN INSTALLING WITH STYLE 30 ESCUTCHEONS. THE CONTRACTOR IS REQUIRED TO LEAVE THE OWNER FURNISHED SPRINKLER WRENCH INSIDE THE SPARE HEAD CABINET AFTER INSTALLATION HAS BEEN COMPLETED.

THE OWNER WILL FURNISH ADDITIONAL (OWNER-FURNISHED) SPRINKLERS FOR THE SPARES CABINET. INSTALL SPARE SPRINKLER QUANTITY INDICATED ON CONTRACT DOCUMENTS PRIOR TO FIRE PROTECTION CONSULTANT SITE OBSERVATION.

SYSTEM IMPAIRMENT REQUIREMENTS

1. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, VERIFICATION AND PROVISION OF A FIRE WATCH SUBJECT TO THE REQUIREMENTS OF THE LOCAL JURISDICTION. ALL FIRE WATCH COSTS INCURRED AS A RESULT OF THIS PROJECT SHALL BE INCLUDED IN THE PROJECT BUDGET. A SEPARATE LINE ITEM, COORDINATION AND VERIFICATION AS TO WHEN A FIRE WATCH MAY BE NEEDED SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

2. THE GENERAL CONTRACTOR SHALL REQUEST THE STORE MANAGER TO NOTIFY ALARM CENTRAL OF THE SYSTEM(S) BEING SHUT OFF FOR WORK AND THE DURATION OF THE SHUT OFF.

3. THE GENERAL CONTRACTOR SHALL CALL DIRECT TO THE FIRE DEPARTMENT AND ADVISE THAT THE FIRE ALARM SYSTEM IS IN TEST.

4. AT THE END OF EACH NIGHTS WORK, THE GENERAL CONTRACTOR SHALL CALL DIRECT TO THE FIRE DEPARTMENT AND ALARM CENTRAL TO ADVISE WORK IS COMPLETE.

5. A FIRE WATCH SHALL BE REQUIRED WHEN ANY FIRE PROTECTION SYSTEM IS IMPAIRED OR OTHERWISE DOWN FOR ALTERATION PER IFC 2021 EDITION. THE APPROVED FIRE WATCH SHALL BE CONDUCTED BY A DEDICATED, TRAINED WALMART EMPLOYEE WHOSE SOLE RESPONSIBILITY WILL BE TO PERFORM HOURLY PATROLS OF THE PREMISES AND KEEP WATCH FOR FIRES AND WILL NEED TO DOCUMENT THEIR WALK AND REPORT BACK TO THE GENERAL CONTRACTOR AND WALMART MANAGEMENT. THIS PERSON SHALL BE PROVIDED WITH AT LEAST ONE APPROVED MEANS FOR NOTIFICATION TO THE FIRE DEPARTMENT.

6. ONLY (1) ONE SYSTEM IS PERMITTED TO BE SHUT DOWN AT ONE TIME.

7. ANY FIRE DEPARTMENT FEES FOR FAILURE TO FOLLOW PROCEDURES WILL BE AT THE GENERAL CONTRACTORS EXPENSE.

8. REQUIRED MEANS OF EGRESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, DEMOLITION, REMODELING OR ALTERATIONS AND ADDITIONS TO THE WALMART. ALL EXITS SHALL NOT BE BLOCKED, REDUCED OR OTHERWISE IMPAIRED. THE CONTRACTOR IS ALSO REQUIRED TO MAINTAIN THE EXIT ACCESS, THE EXIT AND EXIT DISCHARGE TO THE PUBLIC WAY. TEMPORARY MEANS OF EGRESS ARE ALLOWED.

9. ALL SYSTEMS TO BE LEFT IN SERVICE PRIOR TO THE END OF EACH WORKDAY.

SCOPE OF WORK

1. CONTRACTOR TO FIELD VERIFY EXTENT OF WORK.

2. UPGRADE THE EXISTING FIRE SPRINKLER SYSTEM IN THE GROCERY STOCKROOM, GENERAL MERCHANDISING STOCKROOM, SALES FLOOR AND SEASONAL SHOP TO MEET THE DISCHARGE PRESSURE, HOSE ALLOW DANCE AND MAXIMUM SPRINKLER SPACING AS REFERENCED IN THE PROTECTION CRITERIA LEGEND.

3. THE EXISTING FIRE SPRINKLER SYSTEMS WILL BE MODIFIED AS INDICATED ON THE PROJECT CONTRACT DOCUMENTS. THE SCOPE OF WORK MAY INCLUDE THE MODIFICATION OF EXISTING BRANCHLINES, INSTALLATION OF NEW BRANCHLINES, MODIFICATION OF EXISTING RISERS, THE REMOVAL AND INSTALLATION OF NEW SPRINKLERS, MODIFICATION OF EXISTING MAINS, INSTALLATION OF NEW MAINS, REPLACEMENT OF THE EXISTING BACKFLOW PREVENTOR.

4. ALL NEW PIPING SHALL HAVE HANGERS INSTALLED IN ACCORDANCE TO THE DETAILS LOCATED ON THE FIRE PROTECTION DETAILS SHEET.

5. ALL 1-INCH ARMORERS (IF APPLICABLE) SHALL HAVE A HANGER SECURED TO THE STRUCTURAL STEEL ONLY, NOT TO THE DECK WHEN THE LENGTH EXCEEDS 2'-0" WHERE STATIC PRESSURES ARE UP TO 100 PSI AND 1'-0" WHERE STATIC PRESSURES EXCEEDS 100 PSI.

6. WHEN REQUIRED EARTHQUAKE BRACINGS SHALL BE INSTALLED. REFERENCE EARTHQUAKE BRACING NOTES AND DETAILS LOCATED ON THE FIRE FIRE PROTECTION DETAILS SHEET.

7. CEILING GRID SHALL BE PERMITTED TO BE REMOVED IN AREAS WHERE REQUIRED IN ORDER TO COMPLETE THE WORK. ANY REMOVAL OF CEILING SHALL BE REPLACED WITH NEW MAINS OR LONG DROPS. IN THIS CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING DAMAGED CEILING TILE OR GRID DURING THE INSTALLATION. ALL REMOVED CEILING TILES MUST BE REPLACED AT THE END OF BUSINESS DAY. AREAS LEFT EXPOSED SUCH AS BUT NOT LIMITED TO REMOVED CEILING GRID AND CEILING TILES SHALL NOT BE PERMITTED.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

GENERAL NOTES

1. THE DESIGN SHOWN ON THESE CONTRACT DOCUMENTS HAS BEEN PREPARED FOR APPROVAL BY THE AUTHORITY HAVING JURISDICTION AND TO PROVIDE GUIDANCE FOR BIDDING. SUBMIT COMPLETE FIRE SPRINKLER SHOP DRAWINGS AS REQUIRED BY CONTRACT DOCUMENTS TO THE OWNERS DESIGNATED REVIEWERS. BASE SPRINKLER DESIGN UPON THESE DRAWINGS AND AS REQUIRED BY THE SPECIFICATIONS. SHOP DRAWINGS MUST INCLUDE ELEVATIONS, HANGER LOCATIONS, PIPE LENGTHS, DIMENSIONS, FABRICATIONS METHODS, MATERIAL DATA AND ADDITIONAL INFORMATION NECESSARY TO CLARIFY THE INTENT OF INSTALLATION. CONTRACTOR SHALL PROVIDE FIRE SIZE, SPRINKLER SPACING, AND SYSTEM CONFIGURATION AS SHOWN. ALTERNATE MATERIALS MUST BE SENT TO THE FIRE PROTECTION ENGINEER OF RECORD OR VIA THE RFI PROCESS AND MUST BE APPROVED IN RECORD DOCUMENTS PRIOR TO BID.

2. COORDINATE LOCATIONS OF FIRE PROTECTION COMPONENTS, INCLUDING PRING, ALARMS, DRAINS, TEST POINTS, ETC. WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL CONTRACTORS. THE CONTRACTOR MUST VERIFY ALL DROP DOWNS DISCHARGE MUST BE CONSIDERED DURING SHOP DRAWING PRODUCTION AND INSTALLATION. ADDITIONAL SPRINKLERS MAY BE REQUIRED AT NO ADDITIONAL COST TO THE CONTRACTOR. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

3. CONTRACTOR MUST VISIT THE BUILDING SITE TO DETERMINE THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. BECOME TOTALLY FAMILIAR WITH THE COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

5. NEUTRALIZATION WALLS, IF PROVIDED, ARE SHOWN ON THE ARCHITECTURAL DRAWINGS. REFER TO MECHANICAL DRAWINGS FOR NEUTRALIZATION WALL PENETRATION DETAIL.

6. PENETRATIONS OF "RATED ASSEMBLIES" SHALL BE FIRE STOPPED WITH AN APPROVED MATERIAL PER THE STANDARDS OUTLINED IN NFPA 13.

GENERAL NOTES CONT.

7. THE FIRE PROTECTION ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTORS FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NOR SHALL THEY BE REQUIRED TO SUPERVISE THE CONDUCT OF THE WORK, THE CONSTRUCTION PROCEDURES FOLLOWED BY THE CONTRACTOR, SUBCONTRACTORS, THEIR RESPECTIVE EMPLOYEES OR ANY OTHER PERSON AT THE JOB SITE OTHER THAN THAT OF THE ENGINEERING FIRMS EMPLOYEES.

8. CONTRACTOR MUST REVIEW ALL CONSTRUCTION DOCUMENTS PRIOR TO BID. SHOULD MODIFICATIONS TO THESE PLANS BE NECESSARY TO PROPERLY COORDINATE THE SYSTEM WITH ALL OTHER TRADES, IT WILL BE THE CONTRACTORS RESPONSIBILITY TO OBTAIN APPROVAL OF THE CHANGES FROM BOTH THE AUTHORITY HAVING JURISDICTION AND THE OWNERS DESIGNATED REVIEWER CONSULTANT IN ADDITION TO OBTAINING THE NECESSARY APPROVALS. THE CONTRACTOR MUST MAKE NOTE OF ANY FIELD OR COORDINATION CHANGES ON THE INSTALLATION DRAWINGS, AND THEN MUST PROVIDE A SET OF AS-BUILT DRAWINGS ONCE COMPLETE.

9. CONTRACTOR MUST VERIFY ALL DROP DOWNS LOCATIONS AT EXTERIOR WALLS WITH THE PROJECT MANAGER PRIOR TO INSTALLATION.

10. ALL PIPING MUST BE COORDINATED AND PROPERLY INSTALLED INSIDE THE BAR JOIST.

11. CONTRACTOR SHALL ROUTE PIPING AROUND ALL OBSTRUCTIONS AND PROVIDE SPRINKLER PROTECTION UNDER OBSTRUCTIONS, AS DETAILED IN NFPA 13 STANDARDS AS PART OF THE FIELD COORDINATION AT ALL TIMES OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS. AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT.

12. ALL SPRINKLER DEFLECTOR DISTANCE REQUIREMENTS SHALL BE IN ACCORDANCE TO THE STANDARDS OUTLINED IN NFPA 13.

13. ALL PIPING SHALL BE INSTALLED WITH PROPER CLEARANCE ON ALL SIDES. (CORE DIAMETER EQUAL TO PIPE "2"). ALL CORES SHALL BE COORDINATED WITH STRUCTURAL REINFORCING. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CORING WITH PROPER CLEARANCE AT ALL CMU WALLS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TWO INCH CLEARANCE AROUND ALL PIPING PASSING THROUGH CONCRETE SLABS. THE SPRINKLER CONTRACTOR SHALL FILL ALL CLEARANCES WITH APPROVED MASTIC.

14. PROVIDE FLUSHING CONNECTIONS IN ACCORDANCE WITH THE STANDARDS OUTLINED IN NFPA 13.

15. PROVIDE ALL NECESSARY OFFSETS, RISES OR DROPS IN PIPING AND AUXILIARY DRAINS REQUIRED BY BUILDING CONDITIONS.

16. EXAMINE THE JOB CONDITIONS AND VERIFY ALL MEASUREMENTS, DISTANCES, ELEVATIONS, CLEARANCES, ETC.

17. ARCHITECTURAL AND ELECTRICAL BACKGROUND INFORMATION IS SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO THE CONTRACT DOCUMENTS FOR LOCATIONS, SIZES AND QUANTITIES OF OTHER TRADE WORK.

18. SPRINKLER SPACING SHALL BE PER NFPA 13 UNLESS OTHERWISE NOTED ON PLANS AND/OR PROTECTION CRITERIA LEGEND.

19. INTERFACED SPRINKLER SYSTEM WITH FIRE PROTECTION SUPERVISORY SYSTEM.

20. ALL MATERIALS SHALL BE UL LISTED OR FIRE APPROVED. SPRINKLER PIPE SHALL BE MANUFACTURED TO STANDARDS RECOGNIZED BY NFPA 13. THREADED PIPE SHALL HAVE A CORROSION RESISTANCE RATING OF 1.0 OR GREATER. CRIMP-TYPE COUPLINGS SHALL NOT BE USED. SPRINKLER SYSTEMS SHALL BE PROTECTED FROM CORROSION RESISTANCE RATING OF LESS THAN 1.0 SHALL BE USED ONLY WITH ROLL GROOVE FITTINGS.

21. IF REQUIRED, PROVIDE 24 VOLT AC, ELECTRIC BELL, MODEL NO. PB248, ELECTRIC BELL, BY POTTER ELECTRIC SIGNAL OF ST. LOUIS, MISSOURI, LOCATE AS REQUIRED BY AUTHORITIES HAVING JURISDICTION. PROVIDE NEW DOUBLE POLE VANE TYPE FLOW DETECTOR, MODEL NO. VSR-F, BY POTTER ELECTRIC SIGNAL OF ST. LOUIS, MISSOURI, SET ADJUSTABLE DELAYED SIGNAL AT 30 SECONDS. MOUNT WATER FLOW INDICATORS NO HIGHER THAN 6 FEET ABOVE FINISH FLOOR.

22. ALL SPRINKLER SYSTEMS THAT ARE TO BE MODIFIED SHALL BE HYDROSTATICALLY TESTED PER NFPA 13 PRIOR TO SPRINKLER SYSTEM MODIFICATION AND SHALL BE RE-HYDROSTATICALLY TESTED AFTER COMPLETION OF WORK. REFERENCE HYDROSTATIC BOX NOTE FOR ADDITIONAL INFORMATION.

23. DO NOT HANG OR SUPPORT ANY LOADS OR MAKE ANY ATTACHMENTS TO THE METAL ROOF DECK OR JOIST BRIDGING.

24. SAMMY SCREWS ARE NOT PERMITTED.

25. CONTRACTOR IS TO COORDINATE FINAL SPRINKLER HEAD LOCATIONS AND PIPE ROUTING SUCH THAT THEY DO NOT INTERFERE WITH NOR RECEIVE DAMAGE FROM THE NORMAL OPERATIONS OF THE AREA.

26. WHERE THE DESIGN IS SHOWN TO REPLACE SPRINKLERS IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE SIZE OF THE EXISTING SPRINKLER FITTING PRIOR TO BID. WHEN THE DESIGN SHOWS TO REPLACE PENDENT SPRINKLERS ON THE SALES FLOOR, THE CONTRACTOR IS RESPONSIBLE FOR REPLACING THE EXISTING REDUCING COUPLING IF THE SPRINKLER OUTLET THREAD IS LARGER THAN WHAT IS CURRENTLY INSTALLED. ADDITIONAL OUTLETS WILL BE REQUIRED WHEN THE DESIGN SHOWS 3/4" UPRIGHT SPRINKLERS AND THE EXISTING INSTALLATION IS 1/2". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY FITTING(S) WHEN THE NEW SPRINKLER DIFFERS FROM THE EXISTING SPRINKLERS CURRENTLY INSTALLED.

AIR RELEASE VENT

ONE AIR VENT MUST BE INSTALLED ON ALL WET TYPE FIRE PROTECTION SYSTEMS INCLUDING SYSTEMS NOT AFFECTED BY THE REMODEL SCOPE OF WORK. EACH AIR VENT IS TO BE INSTALLED AT THE HIGHEST POINT OF THE SYSTEM AND PREFERABLY ON THE MAINS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING THE HIGHEST POINT OF EACH SYSTEM AND INSTALLING THE AIR VENT IN AN ACCESSIBLE LOCATION. IF THE AIR VENT IS TO BE INSTALLED ABOVE AN EXISTING CEILING THE CONTRACTOR MUST PROVIDE SIGNAGE PER NFPA 13, REF 4-FP7.

PLACARD INFORMATION

THE FOLLOWING INFORMATION MUST BE SHOWN ON THE PLACARDS FOR EACH UL PERFORMANCE BASE DESIGN. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION. PLACARDS THAT ARE INSTALLED WITH INFORMATION WRITTEN PERMANENT MARKER WILL NOT BE ACCEPTED.

SYSTEM #: X
AREA: X
SPRINKLERS CALCULATED: X
SPRINK END HEAD PRESSURE: X
HOSE DEMAND: X
SYSTEM FLOW DEMAND: X
SYSTEM PRESSURE DEMAND: X
SYSTEM SAFETY FACTOR: X
INSTALLING CONTRACTOR: X

UL PERFORMANCE BASE DESIGN
PROJECT 4788122552, NC27954

Automatic Fire Sprinkler Legend

NOTE: NO O-RING SPRINKLERS ARE TO BE USED ON THIS PROJECT

SYMBOL	THD	MFR	MODEL	S.I.N.	FINISH	ESC	TEMP	K-FAC	TOTAL
⊙	1/2"	TYCO	TY-FRB	TY323	WHITE	RECESSED	155°	5.6	5
⊙	1/2"	TYCO	TY-FRB	TY323	WHITE	401	155°	5.6	1
⊙	**	TYCO	PEND	**	**	NONE	**	**	2
⊙	**	TYCO	PEND	**	**	**	**	**	10

** INDICATES MATCH EXISTING

WHERE SPRINKLERS ARE CALLED OUT TO "MATCH EXISTING," THE CONTRACTOR SHALL PROVIDE SPRINKLERS MANUFACTURED BY TYCO, WHICH ARE EQUIVALENT TO THE EXISTING TO REMAIN SPRINKLERS. SUBSTITUTIONS WILL NOT BE PERMITTED.

GENERAL UNDERGROUND NOTES

1. ALL UNDERGROUND IS SHOWN FOR HYDRAULIC REFERENCE ONLY.

2. SEE CIVIL DRAWINGS FOR EXACT LOCATIONS IF AVAILABLE.

3. NO NEW WORK UNLESS OTHERWISE NOTED.

SEISMIC REQUIREMENTS

THE SPRINKLER CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS PER NFPA 13 "PROTECTION OF PIPING AGAINST DAMAGE WHERE SUBJECT TO EARTHQUAKES". THE SPRINKLER CONTRACTOR MUST ALSO TAKE INTO ACCOUNT THE LIMITATIONS OF THE STRUCTURAL ELEMENTS PRIOR TO SIZING, FASTENING AND/OR LOCATING SEISMIC ASSEMBLIES, RESTRAINTS, ETC. ON THEIR PLANS. STRUCTURAL REQUIREMENTS AND LIMITATIONS MAY BE MORE STRINGENT THAN NFPA.

EXISTING FIRE PUMP ROOM ELEVATION

SCALE: 1/2" = 1'

EXISTING FIRE PUMP ROOM PLAN

SCALE: 1/2" = 1'

FIRE SERVICE SITE PLAN

SCALE: 1" = 100'

WATER SUPPLY INFORMATION

STATIC: 48 PSI
RESIDUAL: 42 PSI AT 1839 GPM

INFORMATION DERIVED FROM WATER REPORT SUPPLIED BY J. MORGAN - TELGAN 04/11/24

EFFECTIVE POINT OF WATER SUPPLY INFORMATION IS: LEAD-IN TAP TO 12" CITY MAIN SEE ADJACENT DETAIL 1/FP1

DATE OF TEST: 04/10/24 @ 8:30 AM
FLOW TEST ELEVATION: ±445' AMSL
BUILDING PAD ELEVATION: ±447' AMSL

WATER SUPPLY INFORMATION IS FURTHER REDUCED PER THE FOLLOWING:

* 10% (5 PSI) SAFETY FACTOR FOR JURISDICTIONAL STANDARDS

WATER SUPPLY TO BE USED FOR FIRE SPRINKLER DESIGN AT EFFECTIVE POINT:

STATIC: 43 PSI
RESIDUAL: 37 PSI AT 1839 GPM

PUMP TEST DATA

DISCHARGE PSI	SUCTION PSI	NET HEAD PSI	FLOW
125	36	89	0
100	24	76	1500
70	11	59	2250

TEST DATE: 07/13/2023
PUMP RATING: 80 PSI @ 1500 GPM
PUMP TYPE: DIESEL

STAMP

PROJECT NAME: WALMART PUYALLUP
STORE NO. 02403-254
310 31ST AVE SE
PUYALLUP, WA 98374
DRAWING TITLE: GENERAL NOTES, DETAILS, SECTION
DRAWING NO.: 12/2024
DATE: 12/2024
SCALE: AS NOTED
DRAWN BY: STREIFL
CHECKED BY: STREIFL
DESIGNED BY: STREIFL
INVESTIGATED BY: STREIFL
REVIEWED BY: STREIFL
APPROVED BY: STREIFL

REVISIONS

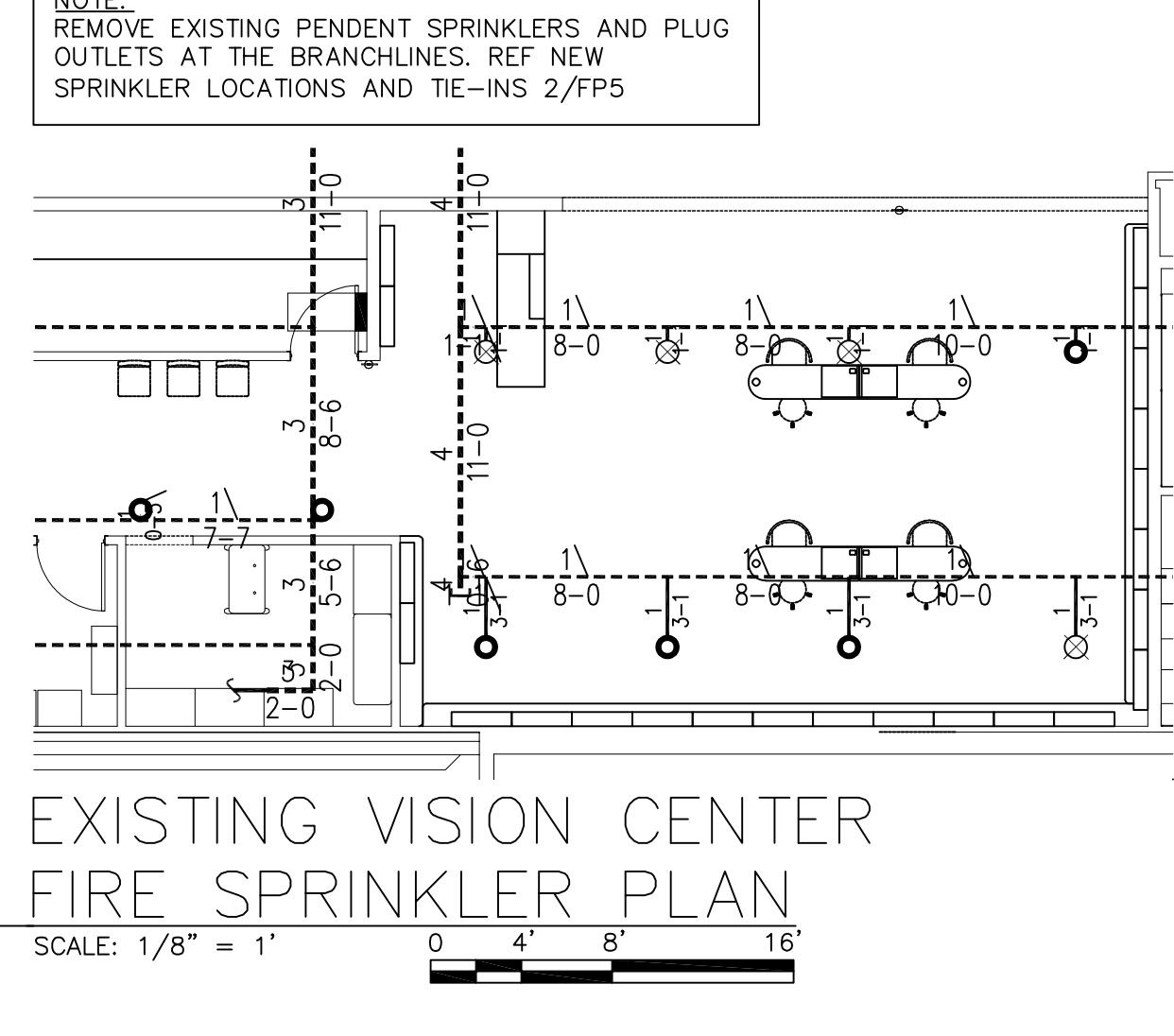
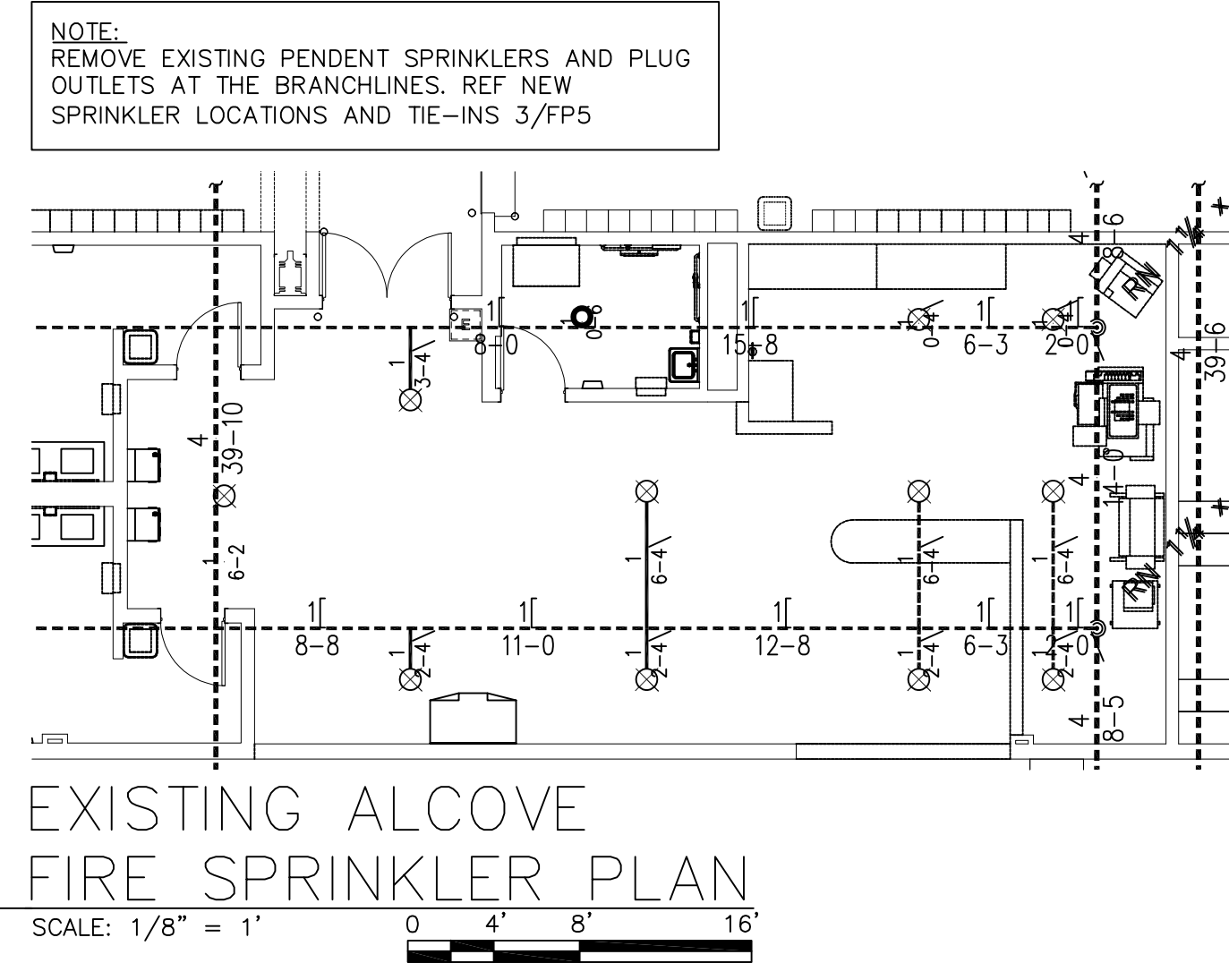
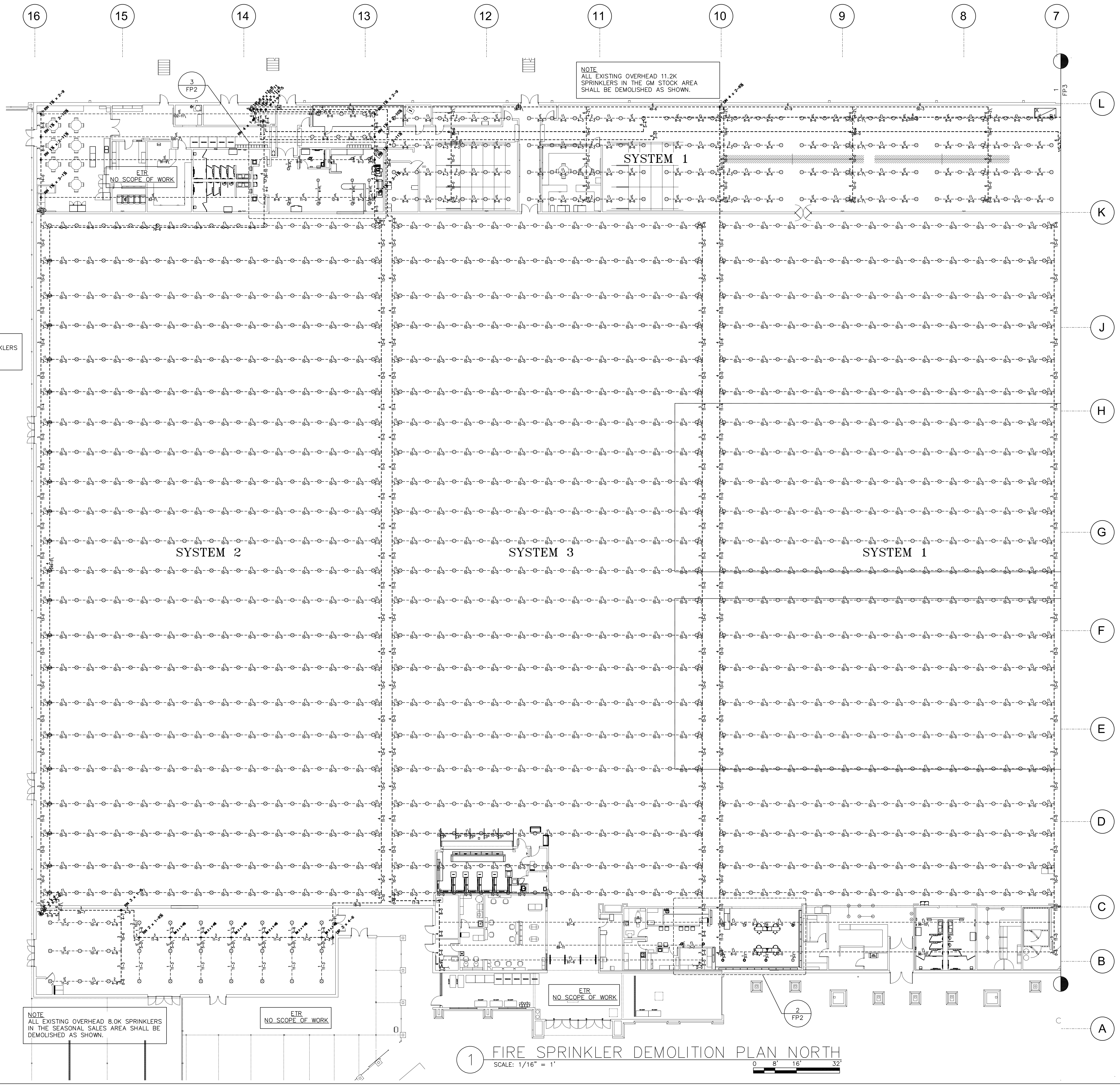
SYMBOL	LEGEND
	GROOVED FITTING OR COUP.
	2-WAY EARTHQUAKE BRACE
	LAT BRACE + LONG BRACE
	O-RISERS / CHANGE IN ELEV.
	GENERAL HANGER LOCATION
	UNION
	WET SYSTEM RISER
	DRY SYSTEM RISER
	BALL VALVE

ABBREVIATIONS
ALL = ALL THREAD ROD CBR = CRACK SURE ROD TBE = TOP OF BEAM TGB = THROUGH GROOVE CG = CRACK GROUND RP = REINFORCED POLISHED RM = ROOF MANIFOLD NG = NOT TO CONTRACT UN = UNLESS OTHERWISE NOTED

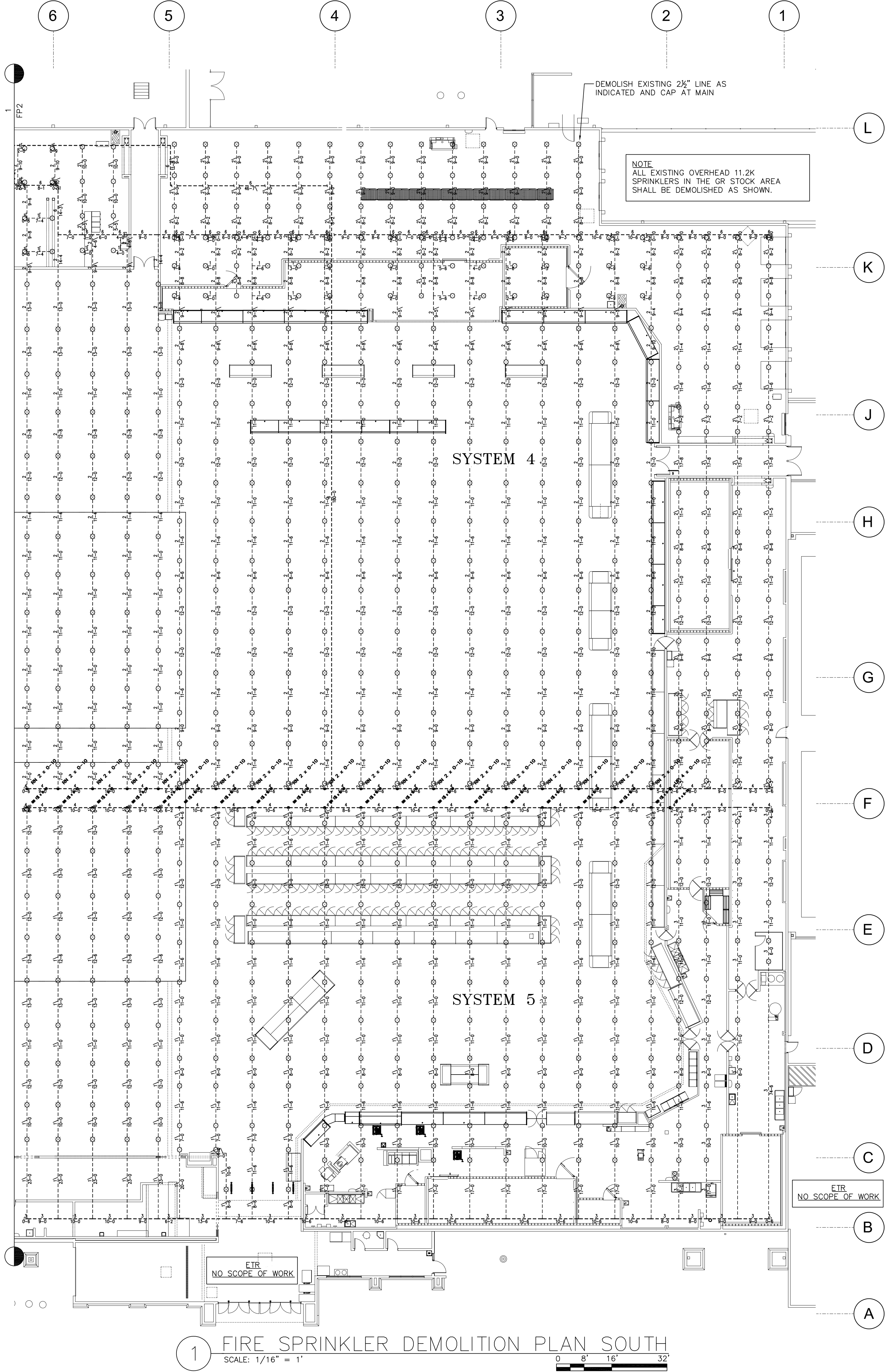
DRAWING	CONTENTS
1 OF 7	FIRE SPRINKLER SITE PLAN
2 OF 7	FIRE SPRINKLER DEMO PLAN NORTH
3 OF 7	FIRE SPRINKLER DEMO PLAN SOUTH
4 OF 7	OVERALL FIRE SPRINKLER UPGRADE PLAN
5 OF 7	FIRE SPRINKLER UPGRADE PLAN NORTH
6 OF 7	FIRE SPRINKLER UPGRADE PLAN SOUTH
7 OF 7	FIRE SPRINKLER DETAILS

STAMP

PROJECT NAME WALMART PUYALLUP STORE NO. 02403-254	DATE 12/20/24
310 31ST AVE SE PUYALLUP, WA 98374	DRAWN BY STRELL
DRAWING TITLE FIRE SPRINKLER DEMO PLAN NORTH	DATE 12/20/24
DATE 12/20/24	DRAWN BY STRELL



1 FIRE SPRINKLER DEMOLITION PLAN NORTH
SCALE: 1/16" = 1'



NOTE:
ALL EXISTING OVERHEAD 8.0K SPRINKLERS
IN THE OM SALES AREA SHALL BE
DEMOLISHED AS SHOWN.

NOTE:
ALL EXISTING OVERHEAD 11.2K
SPRINKLERS IN THE GR STOCK AREA
SHALL BE DEMOLISHED AS SHOWN.

CONTACT: ANDREW WARDENBESCHER, P.E. MS ST20
TEL: (206) 851-0030 FAX: (206) 851-8535
WWW.FRESHIELD.COM
WA STATE LICENSE # FRES002025

PROJECT NAME
WALMART PUYALLUP
STORE NO. 02403-254

310 31ST AVE SE
PUYALLUP, WA 98374

DRAWING TITLE
FIRE SPRINKLER DEMO PLAN SOUTH

DATE: 12/2024 CONTRACT: 3749 DWG NAME: FP3 DWG # 3 OF 7
SCALE: AS NOTED
DRAWN BY: STREULLI

STAMP

APPROVALS
☒ PUYALLUP
☐ OTHER

DRAWING CONTENTS

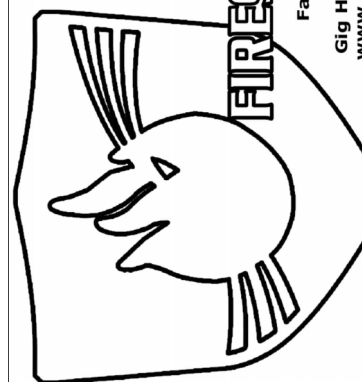
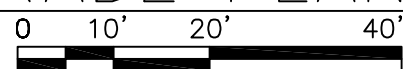
DRAWING

ABBREVIATIONS

SYMBOL LEGEND

REVISIONS

1 OVERALL FIRE SPRINKLER UPGRADE PLAN
SCALE: 1" = 20'



PUYALLUP, WA 98374
DRAWING TITLE
OVERALL FIRE SPRINKLER PLAN

CONTACT: ANDREW MORENO/FIRESHIELD, INC. TEL: (253) 851-0030 5202 OLYMPIC DRIVE NW STE201 WA. STATE, FIRE #1024C5 FAX: (253) 851-9782 GIG HARBOR, WA 98135 DRAWN BY: STREULI SCALE: AS NOTED DWG #: 3749 CONTRACT: 12/2024 DATE:	APPROVALS: <input type="checkbox"/> PAY ALLUP <input type="checkbox"/> ARCHITECT <input type="checkbox"/> OTHER 4 OF 7
---	--

EXP-01
NORTHWOOD STATE
LABORATORY
1000 N. W. 1st St.
Tallahassee, FL 32304
904-644-2444
www.nwstatelab.com

Norwood Leonard Fields
5040-8244-C Level 5
Friedrich, Inc.
FRSFDQUC

Matthew Noble

12/18/2024

ABBREVIATIONS	
BOJ	= BOTTOM OF JOIST
BB	= BOTTOM OF BEAM
BOD	= BOTTOM OF DECK
BOT	= TOP OF BEAM
TOS	= TOP OF STEEL
AFB	= ABOVE FINISH FLOOR
NFS	= FACE OF WALL
NTS	= NOT TO SCALE
PRV	= PRESSURE RED. VALVE
RM	= ROOF MANIFOLD
SP	= STANDPIPE
NC	= NOT IN CONTRACT
DD	= DITO
UON	= UNLESS OTHERWISE NOTED
ATR	= ALL
CSR	= CROSS
TOE	= THRU
TBE	= THRU BEAM
T&O	= THRU & OVER
F&O	= FLAT & OVER
GG	= GROUND
GP	= GROUND PIP.
BL	= BRASS
XM	= CROS
GL	= GROUND LEVEL
BZ	= BURN
RE	= REST

REVISIONS

HYDRAULIC DESIGN	
SYSTEM #1:	AREA #1 GM SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	8 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR1:	453.96 GPM
DEMAND PRESSURE @ BR1:	42.123 PSI
CALC FILE:	SYST1 SALES 9

HYDRAULIC DESIGN	
SYSTEM #1:	AREA #1 GM SALES
SPRINKLERS CALCULATED:	4 SPRINKLERS
MINIMUM PRESSURE:	11 PSI
AREA OF DISCHARGE:	4 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR1:	222.93 GPM
DEMAND PRESSURE @ BR1:	29.271 PSI
CALC FILE:	SYST1 SALES 4

HYDRAULIC DESIGN	
SYSTEM #1:	AREA #2 GM STOCK
SPRINKLERS CALCULATED:	12 SPRINKLERS
MINIMUM PRESSURE:	7 PSI
AREA OF DISCHARGE:	12 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR1:	628.59 GPM
DEMAND PRESSURE @ BR1:	24.219 PSI
CALC FILE:	SYST1 STOCK 12

HYDRAULIC DESIGN	
SYSTEM #1:	AREA #2 GM STOCK
SPRINKLERS CALCULATED:	2 SPRINKLERS
MINIMUM PRESSURE:	12 PSI
AREA OF DISCHARGE:	2 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR1:	121.28 GPM
DEMAND PRESSURE @ BR1:	26.470 PSI
CALC FILE:	SYST1 STOCK 2

HYDRAULIC DESIGN	
SYSTEM #2:	AREA #3 GM SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	8 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR2:	453.93 GPM
DEMAND PRESSURE @ BR2:	37.398 PSI
CALC FILE:	SYST2 SALES 9

HYDRAULIC DESIGN	
SYSTEM #2:	AREA #3 GM SALES
SPRINKLERS CALCULATED:	4 SPRINKLERS
MINIMUM PRESSURE:	11 PSI
AREA OF DISCHARGE:	4 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR2:	222.89 GPM
DEMAND PRESSURE @ BR2:	28.011 PSI
CALC FILE:	SYST2 SALES 4

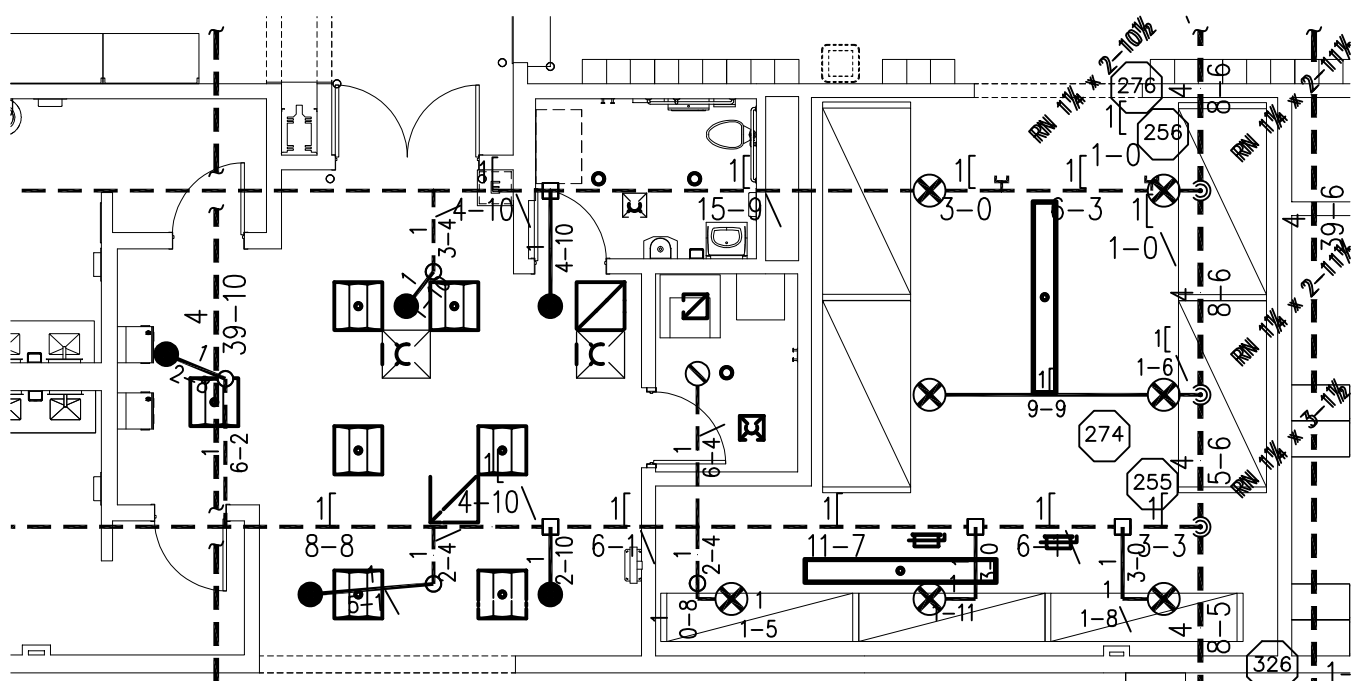
HYDRAULIC DESIGN	
SYSTEM #2:	AREA #4 SEASONAL SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	18 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR2:	483.09 GPM
DEMAND PRESSURE @ BR2:	54.233 PSI
CALC FILE:	SYST2 SEASONAL 9

HYDRAULIC DESIGN	
SYSTEM #2:	AREA #4 SEASONAL SALES
SPRINKLERS CALCULATED:	2 SPRINKLERS
MINIMUM PRESSURE:	30 PSI
AREA OF DISCHARGE:	2 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR2:	133.67 GPM
DEMAND PRESSURE @ BR2:	45.037 PSI
CALC FILE:	SYST2 SEASONAL 2

HYDRAULIC DESIGN	
SYSTEM #3:	AREA #5 GM SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	8 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR3:	452.21 GPM
DEMAND PRESSURE @ BR3:	45.463 PSI
CALC FILE:	SYST3 SALES 9

HYDRAULIC DESIGN	
SYSTEM #3:	AREA #5 GM SALES
SPRINKLERS CALCULATED:	4 SPRINKLERS
MINIMUM PRESSURE:	11 PSI
AREA OF DISCHARGE:	4 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR3:	223.03 GPM
DEMAND PRESSURE @ BR3:	30.234 PSI
CALC FILE:	SYST3 SALES 4

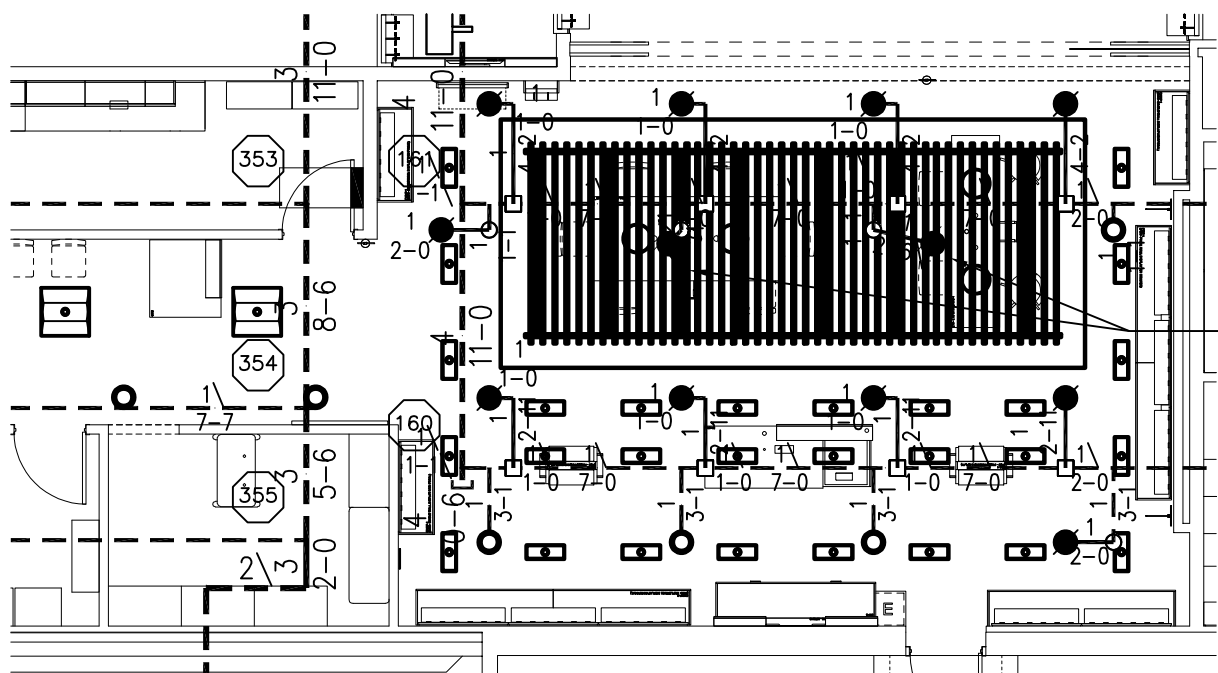
NOTE:
ALCOVE/MOTHER'S ROOM
ORDINARY HAZARD GROUP 2 - 0.20 GPM/FT²
DESIGNED PER NFPA 13 2019 EDITION. INSTALL
NEW SPRINKLER AS SHOWN AT THE REMODELED
ALCOVE/NEW MOTHER'S ROOM PER NFPA 13 AND
STATE AND LOCAL ORDINANCES. USE EACH
EXISTING OUTLET FOR ONE NEW ARMOR TO NEW
SPRINKLER LOCATION UNLESS HYDRAULICALLY
CALCULATED. CONTRACTOR TO INSTALL
MECHANICAL TEE FOR ADDITIONAL OUTLETS
REQUIRED.
REF 1/FP7 FOR HANGER DETAIL.



REMODELED ALCOVE/NEW MOTHER'S
ROOM & STORAGE FIRE SPRINKLER PLAN

SCALE: 1/8" = 1'

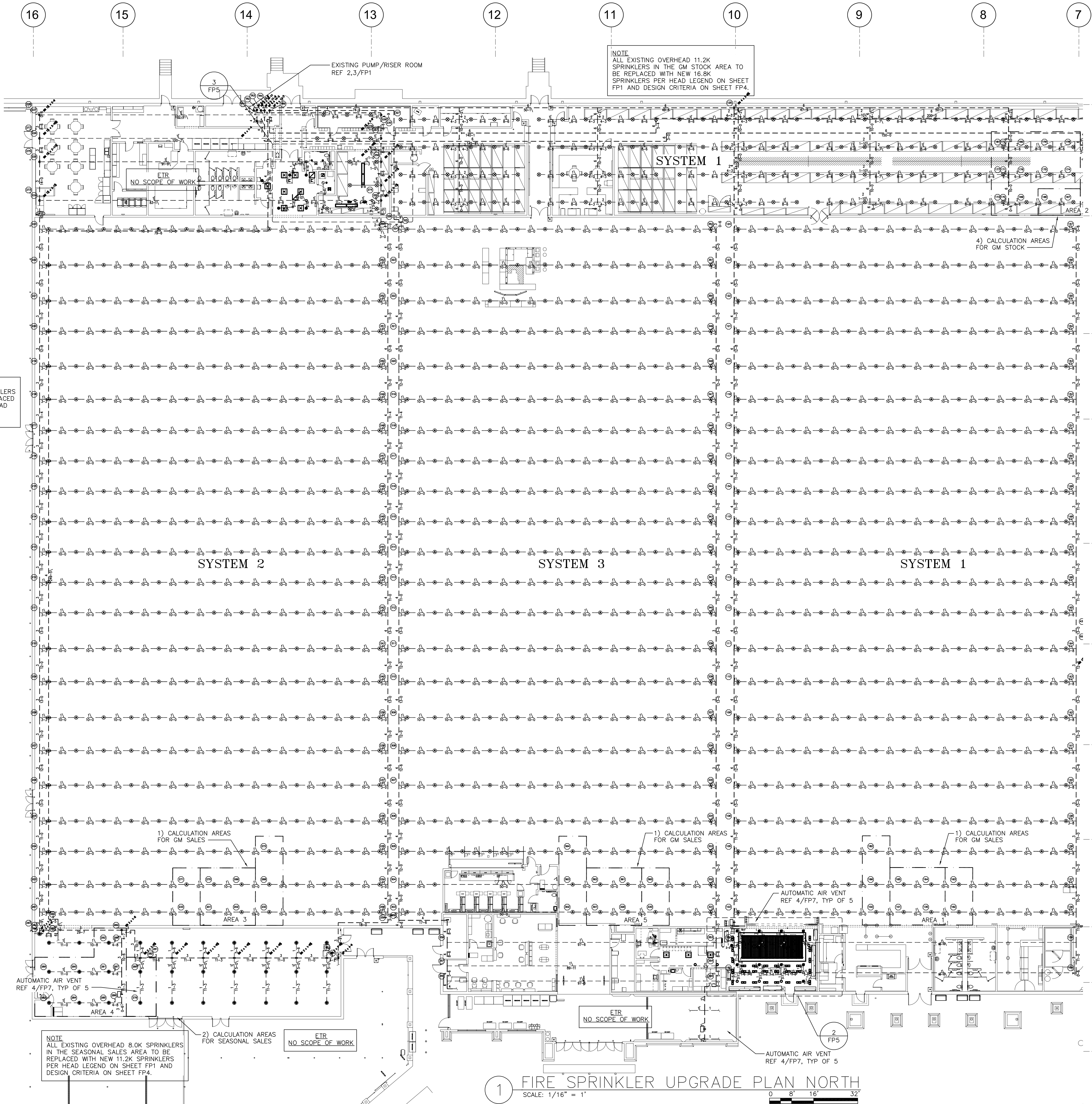
NOTE:
VISION CENTER
ORDINARY HAZARD GROUP 2 - 0.20 GPM/FT²
DESIGNED PER NFPA 13 2019 EDITION. INSTALL
NEW SPRINKLER AS SHOWN AT THE REMODELED
VISION CENTER PER NFPA 13 AND STATE AND
LOCAL ORDINANCES. USE EACH EXISTING OUTLET
FOR ONE NEW ARMOR TO NEW SPRINKLER
LOCATION UNLESS HYDRAULICALLY CALCULATED.
CONTRACTOR TO INSTALL MECHANICAL TEE FOR
ADDITIONAL OUTLETS REQUIRED.
REF 1/FP7 FOR HANGER DETAIL.



REMODELED VISION CENTER
FIRE SPRINKLER PLAN

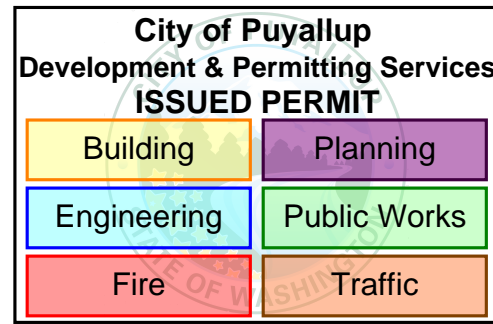
SCALE: 1/8" = 1'

NOTE:
ALL EXISTING OVERHEAD 8.0K SPRINKLERS
IN THE GM SALES AREA TO BE REPLACED
WITH NEW 16.9K SPRINKLERS PER HEAD
LEGEND ON SHEET FP1 AND DESIGN
CRITERIA ON SHEET FP4.



1 FIRE SPRINKLER UPGRADE PLAN NORTH

SCALE: 1/16" = 1'



REVISIONS

SYMBOL LEGEND

ABBREVIATIONS

DRAWING

DRAWING CONTENTS

DRAWING NAME

STAMP

PROJECT NAME
WALMART PUYALLUP
STORE NO. 02403-254
310 31ST AVE SE
PUYALLUP, WA 98374
DRAWING TITLE
FIRE SPRINKLER UPGRADE PLAN
DATE
12/2024
SCALE
AS NOTED
DRAWN BY
STREULI

HYDRAULIC DESIGN	
SYSTEM #4:	AREA #0 GR RECEIVING
SPRINKLERS CALCULATED:	13 SPRINKLERS
MINIMUM PRESSURE:	7 PSI
AREA OF DISCHARGE:	12 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	658.8 GPM
DEMAND PRESSURE @ BR4:	26.134 PSI
CALC FILE:	SY54 GR REC 12+1

ADDITIONAL SPRINKLER INCLUDED IN REMOTE AREA PER NFPA 13 SECTION 24.1.8.2

HYDRAULIC DESIGN	
SYSTEM #5:	AREA #10 GR STOCK
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	21 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR5:	463.71 GPM
DEMAND PRESSURE @ BR5:	42.836 PSI
CALC FILE:	SY55 GR STOCK 8+1

ADDITIONAL SPRINKLER INCLUDED IN REMOTE AREA PER NFPA 13 SECTION 24.1.8.2

HYDRAULIC DESIGN	
SYSTEM #4:	AREA #0 GR RECEIVING
SPRINKLERS CALCULATED:	2 SPRINKLERS
MINIMUM PRESSURE:	12 PSI
AREA OF DISCHARGE:	2 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	118.69 GPM
DEMAND PRESSURE @ BR4:	26.032 PSI
CALC FILE:	SY54 GR REC 2

HYDRAULIC DESIGN	
SYSTEM #4:	AREA #7 GR STOCK
SPRINKLERS CALCULATED:	8 SPRINKLERS
MINIMUM PRESSURE:	21 PSI
AREA OF DISCHARGE:	8 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	411.32 GPM
DEMAND PRESSURE @ BR4:	36.671 PSI
CALC FILE:	SY54 GR STOCK 8

HYDRAULIC DESIGN	
SYSTEM #4:	AREA #7 GR STOCK
SPRINKLERS CALCULATED:	2 SPRINKLERS
MINIMUM PRESSURE:	30 PSI
AREA OF DISCHARGE:	2 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	122.74 GPM
DEMAND PRESSURE @ BR4:	44.668 PSI
CALC FILE:	SY54 GR STOCK 2

HYDRAULIC DESIGN	
SYSTEM #4:	AREA #8 GM SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	8 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	439.50 GPM
DEMAND PRESSURE @ BR4:	28.530 PSI
CALC FILE:	SY54 GM SALES 9

HYDRAULIC DESIGN	
SYSTEM #4:	AREA #8 GM SALES
SPRINKLERS CALCULATED:	2 SPRINKLERS
MINIMUM PRESSURE:	11 PSI
AREA OF DISCHARGE:	2 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	223.25 GPM
DEMAND PRESSURE @ BR4:	27.589 PSI
CALC FILE:	SY54 GM SALES 4

HYDRAULIC DESIGN	
SYSTEM #4:	AREA #9 GR SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	18 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	435.61 GPM
DEMAND PRESSURE @ BR4:	34.727 PSI
CALC FILE:	SY54 GR SALES 9

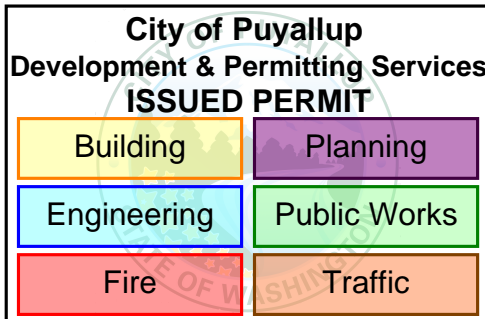
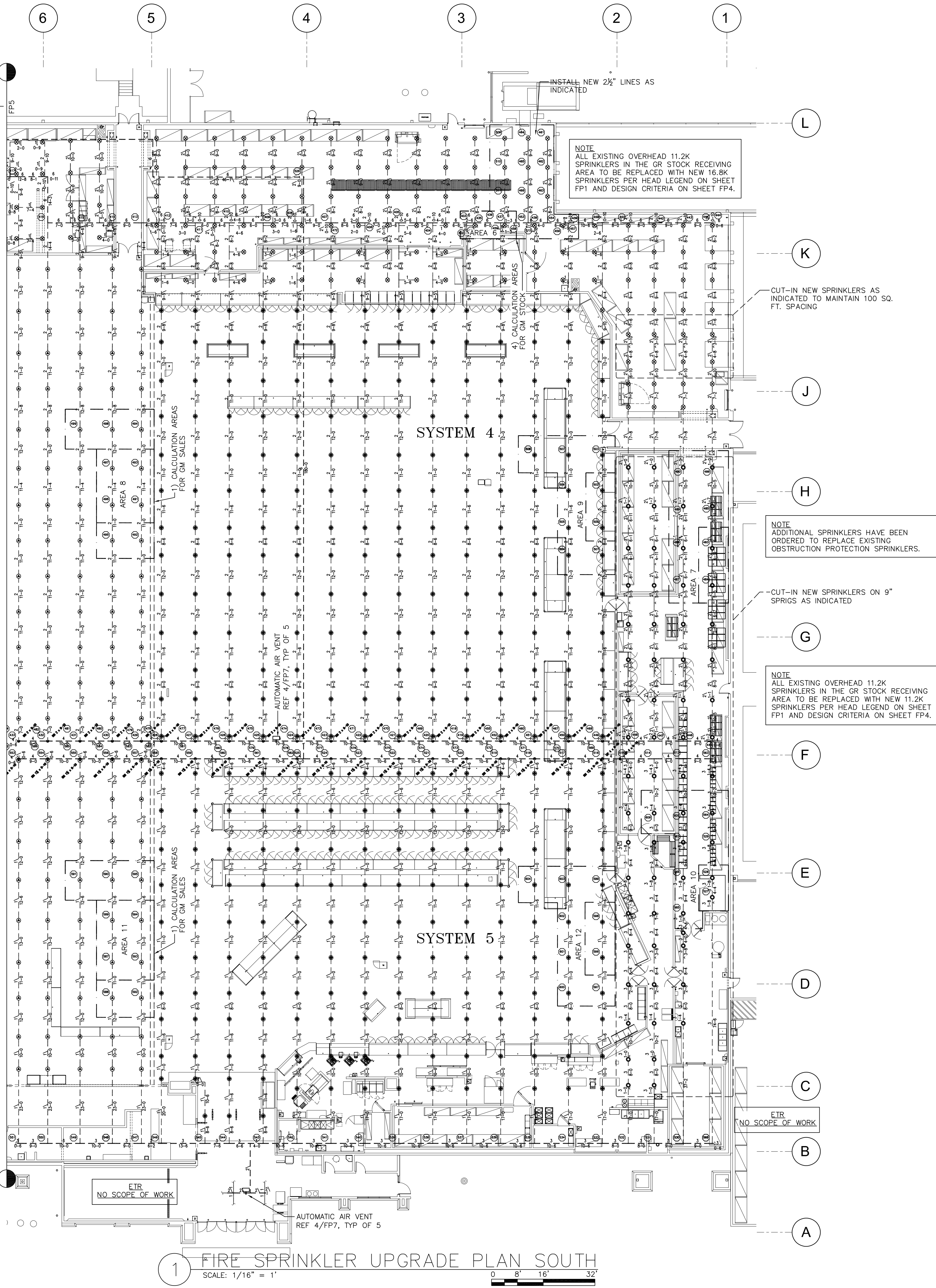
HYDRAULIC DESIGN	
SYSTEM #4:	AREA #9 GR SALES
SPRINKLERS CALCULATED:	2 SPRINKLERS
MINIMUM PRESSURE:	30 PSI
AREA OF DISCHARGE:	2 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR4:	122.75 GPM
DEMAND PRESSURE @ BR4:	40.062 PSI
CALC FILE:	SY54 GR SALES 2

HYDRAULIC DESIGN	
SYSTEM #5:	AREA #11 GM SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	8 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR5:	453.09 GPM
DEMAND PRESSURE @ BR5:	41.073 PSI
CALC FILE:	SY55 GM SALES 9

HYDRAULIC DESIGN	
SYSTEM #5:	AREA #11 GM SALES
SPRINKLERS CALCULATED:	4 SPRINKLERS
MINIMUM PRESSURE:	11 PSI
AREA OF DISCHARGE:	4 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR5:	223.31 GPM
DEMAND PRESSURE @ BR5:	33.325 PSI
CALC FILE:	SY55 GM SALES 4

HYDRAULIC DESIGN	
SYSTEM #5:	AREA #12 GR SALES
SPRINKLERS CALCULATED:	9 SPRINKLERS
MINIMUM PRESSURE:	18 PSI
AREA OF DISCHARGE:	9 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR5:	446.01 GPM
DEMAND PRESSURE @ BR5:	46.946 PSI
CALC FILE:	SY55 GR SALES 9

HYDRAULIC DESIGN	
SYSTEM #5:	AREA #12 GR SALES
SPRINKLERS CALCULATED:	2 SPRINKLERS
MINIMUM PRESSURE:	30 PSI
AREA OF DISCHARGE:	2 SPRINKLERS
HOSE ALLOWANCE:	250 GPM
SPRINKLER SYSTEM DEMAND @ BR5:	122.75 GPM
DEMAND PRESSURE @ BR5:	45.222 PSI
CALC FILE:	SY55 GR SALES 2

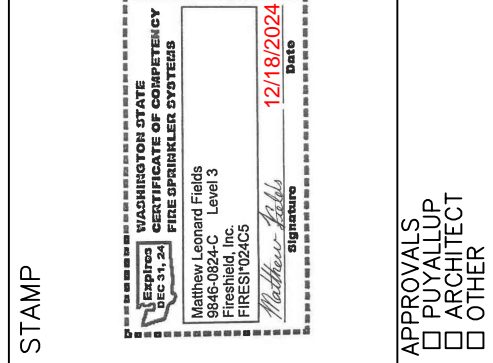


REVISIONS

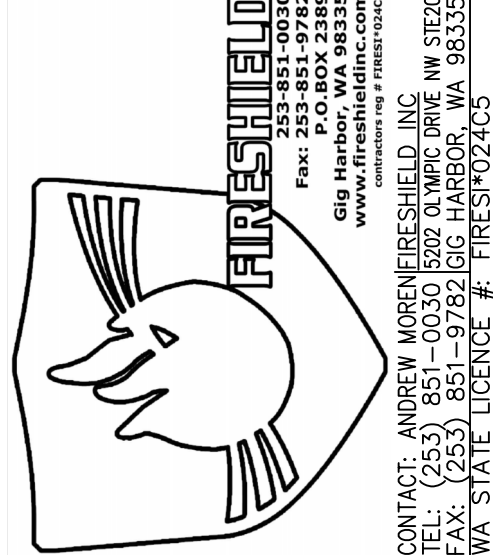
SYMBOL LEGEND	
	1 GROOVED FITTING OR COUP.
	2 2-WAY EARTHQUAKE BRACE
	3 LAT BRACE + LONG BRACE
	4 CHECK VALVE
	5 FIRE DEPT CONNECTION
	6 GENERAL HANGER LOCATION
	7 FIRE HYDRANT
	8 FLOW SWITCH
	9 WET SYSTEM RISER
	10 DRY SYSTEM RISER
	11 BALL VALVE

ABBREVIATIONS	
BO = BOTTOM OF JOIST	BO = BOTTOM OF JOIST
CCR = CROSSLING CROWN ROD	CCR = CROSSLING CROWN ROD
BOB = BOTTOM OF BEAM	BOB = BOTTOM OF BEAM
TBE = TOP OF BEAM	TBE = TOP OF BEAM
FG = FACE OF FINISH FLOOR	FG = FACE OF FINISH FLOOR
AW = ABOVE FINISH FLOOR	AW = ABOVE FINISH FLOOR
FW = FACE OF WALL	FW = FACE OF WALL
PR = PRESSURE RED. VALVE	PR = PRESSURE RED. VALVE
RM = ROOF MANIFOLD	RM = ROOF MANIFOLD
FL = FLOOR	FL = FLOOR
NC = NOT IN CONTRACT	NC = NOT IN CONTRACT
DO = DITTO	DO = DITTO
UN = UNLESS OTHERWISE NOTED	UN = UNLESS OTHERWISE NOTED
BOB = BACK TO BACK	BOB = BACK TO BACK
BL = BL. RESTRAINT	BL = BL. RESTRAINT

DRAWING CONTENTS	
FP1	FIRE SPRINKLER SITE PLAN
FP2	FIRE SPRINKLER DEMO PLAN NORTH
FP3	FIRE SPRINKLER DEMO PLAN SOUTH
FP4	OVERALL FIRE SPRINKLER UPGRADE PLAN
FP5	FIRE SPRINKLER UPGRADE PLAN NORTH
FP6	FIRE SPRINKLER UPGRADE PLAN SOUTH
FP7	FIRE SPRINKLER DETAILS



PROJECT NAME	WALMART PUYALLUP STORE NO. 02403-254
310 31ST AVE SE PUYALLUP, WA 98374	
DRAWING TITLE	FIRE SPRINKLER UPGRADE PLAN
SOUTH	
DATE	12/2024
CONTRACT	3749
SCALE	AS NOTED
DRAWN BY	STRELLI
CHECKED BY	STRELLI
APPROVED BY	STRELLI



CONTACT: ANDREW WINES
TEL: (206) 851-0000
FAX: (206) 851-0000
WWW.WINENGINEERING.COM

