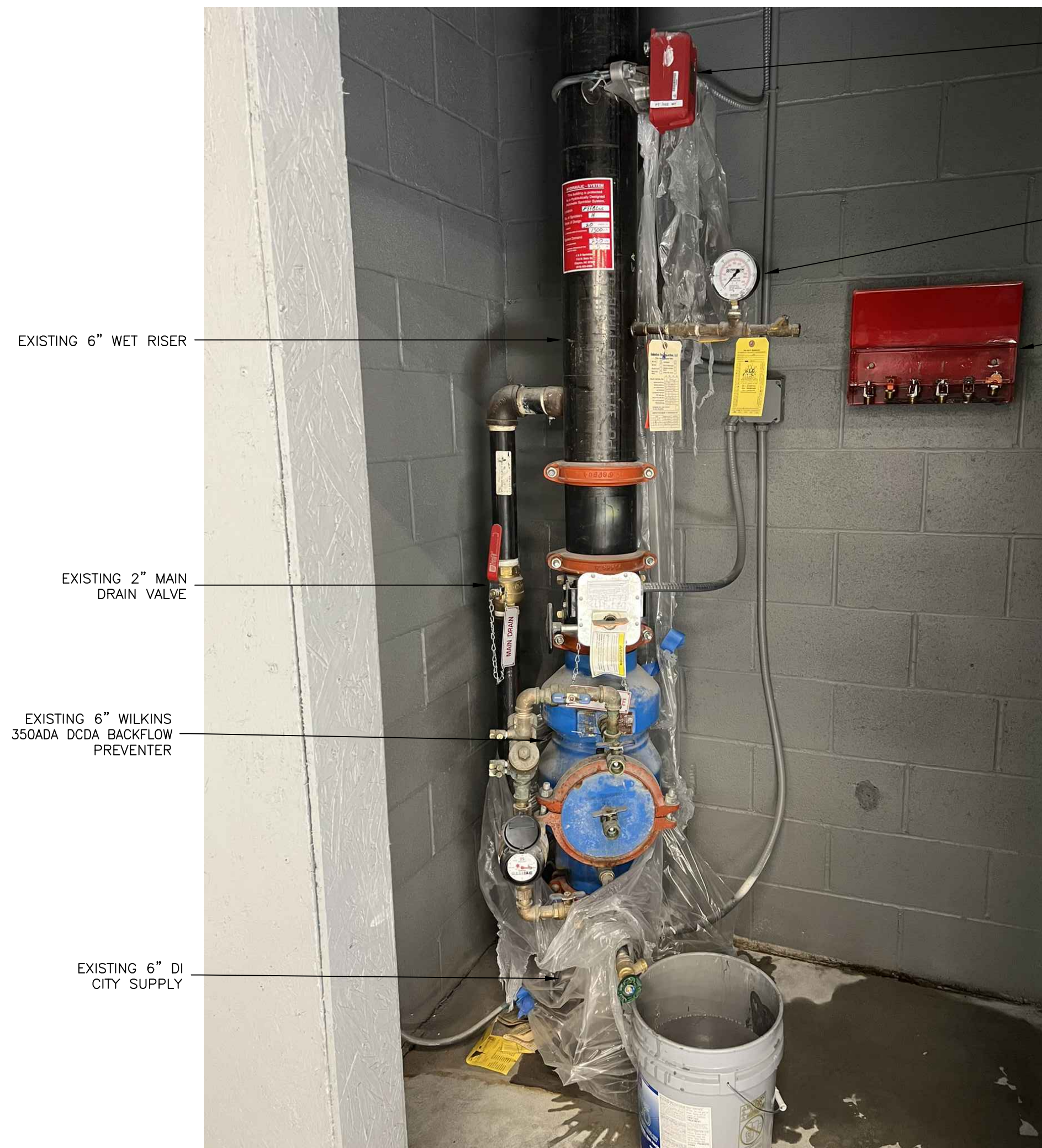


### FIRE PROTECTION SITE PLAN

SCALE: NOT TO SCALE FOR HYDRAULIC REFERENCE ONLY



### EXISTING WET RISER

NOT TO SCALE FOR REFERENCE ONLY

EXISTING 6" FLOW SWITCH

EXISTING PRESSURE GAUGE

EXISTING SPARE SPRINKLER CABINET

### GENERAL NOTES

- SCOPE OF WORK -- TO MODIFY THE EXISTING WET SPRINKLER SYSTEM TO ACCOMMODATE FOR THE NEW HARBOR FREIGHT TENANT FIT UP RENOVATIONS AS SHOWN ON THE PLANS IN COMPLIANCE WITH LOCAL AUTHORITY AND NFPA -- 13.
- ALL UNDERGROUND PIPING, SYSTEM RISER, ZONE CONTROLS, BACKFLOW, CONTROL VALVES AND FLOW SWITCHES ARE TO REMAIN UNDISTURBED.
- ALL NEW 1" PIPING TO BE SCH.40 BLACK STEEL PIPING THREADED AND JOINED BY D.I. FITTINGS AND COUPLINGS.
- ALL NEW 2" PIPING AND LARGER TO BE SCH.10 BLACK STEEL PIPING ROLL GROOVED AND JOINED BY GROOVE TYPE FITTINGS AND COUPLINGS.
- ALL EXISTING MAIN AND BRANCHLINE PIPING TO REMAIN UNDISTURBED UNLESS NOTED OR SHOWN OTHERWISE.
- ALL HANGER ASSEMBLIES SHALL UTILIZE UL/FM LISTED COMPONENTS AND COMPLY WITH NFPA 13.
- IT IS THE RESPONSIBILITY OF THE OWNER TO PROVIDE ADEQUATE HEAT TO PREVENT THE FIRE PROTECTION SYSTEM FROM FREEZING.
- AUXILIARY DRAINS SHALL BE PROVIDED FOR TRAPPED SECTIONS OF THE SPRINKLER SYSTEM EXCEEDING 5 GALLONS.

CONTACT PERSON: FRANK FEELEY S.I., LAKEVIEW CONSTRUCTION  
TEL: 913-915-4122

### SPRINKLER DESIGN DATA

Project Name:	HARBOR FREIGHT TOOLS	System:	EXISTING WET
Project Street Address:	129 W. CORNELIUS HARNETT BLVD., LILLINGTON, NC 27546	Sys. Sq. Ft.:	15,052 SF (EX.)
Suite:	N/A	Floor:	N/A
Designed by:	REGIONAL FIRE SERVICES OF NC	Phone:	919-212-2722
Occupancy:	MERCANTILE, B, S-1	Hazard:	OH-II
		Building Hgt.:	32'-7"
			WARES

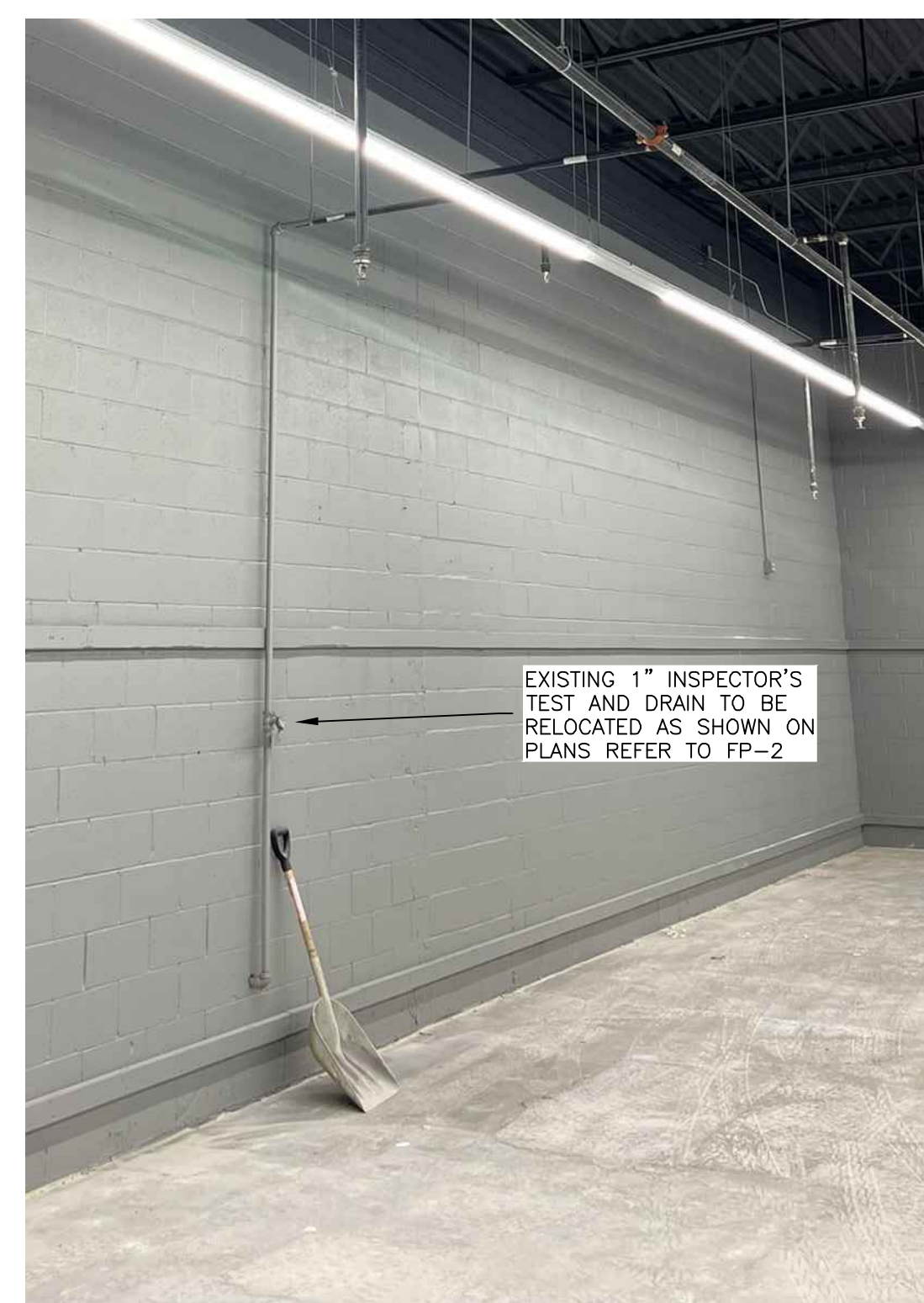
### DESIGN SUMMARY

	System #1
Design Method	CALCS
Design Area #	1
Location	SALES AREA 101
Type of System	WET
Hazard Class	OH-II
Criteria From	NFPA-13
Design Area (sq.ft.)	1500 SF
Sprinkler Spacing(sq.ft.)	256 MAX. (16'x16')
Density	0.20
K-factor	14.0 K
Hose Allowance	250
# Design Sprinklers	8
Special Application Spk.	N/A
Requirement @ BOR	
G.P.M. Req'd	415.070
P.S.I. Req'd	39.825
Requirement @ TEST	
GPM Required	665.073
PSI Required	43.644
Safety factor @ Test	19.92
Dry Sys. Vol. (gal)	N/A

### WATER SUPPLY INFORMATION

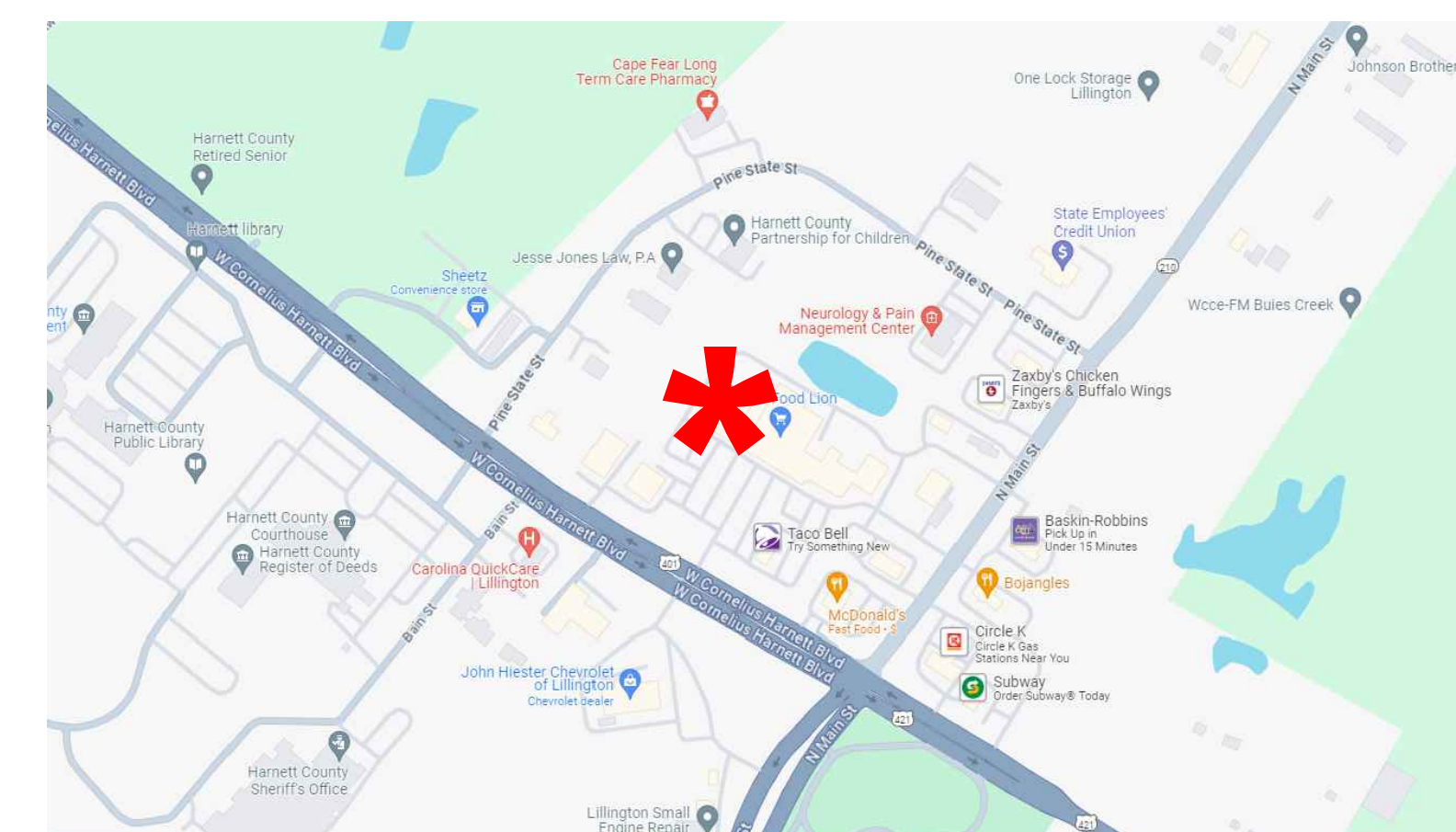
Tested by	REGIONAL FIRE SERVICES OF NC, LLC	Date/Time	05-23-24 @ 9:30 AM	Test Hydrant	4311166
Hydrant Elevation	180' +/-	Flow Hydrant #1	4311166A	Flow Hydrant #2	N/A
Static (PSI)	70	Residual (PSI)	54	Flow (gpm)	1088

Copy of Water Test Data Included with Calculation



### EXISTING FIRE PROTECTION SYSTEM SITE CONDITIONS

NOT TO SCALE FOR REFERENCE ONLY



### VICINITY MAP

**REGIONAL FIRE SERVICES OF NC**  
3101-310 POPPARDWOOD CT. RALEIGH, NC 27604  
TEL: 919-212-2722 FAX: 919-212-2720  
www.regionalfire.com

**Ajith Zacharias, CET**  
Certified Engineering Tech  
NICET #120860  
Water-Based Systems Layout, Level III

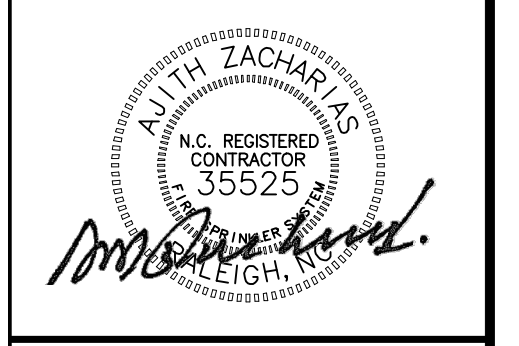
**Ajith Zacharias, CET**  
Certified Engineering Tech  
NICET #120860  
Water-Based Systems Layout, Level III

NFPA-13 2013 NCSB 2016	APPLICABLE CODES:	TYPE OF OCCUPANCY:	CONSTRUCTION TYPE:	FIRE PROTECTION:	PROJECT USE:	BUILDING USE:
		MERCANTILE, B, S-1	I-B	PER NFPA-13	15,052 SF	EXISTING

Symbol	Description	Total For Building	EXISTING
0	NEW WING W/300' (3/4" (6x14.0) S.E.C.C. BRASS (BRONZE) 154' (16"x16")	83	EXISTING
1	NEW WING W/300' (1/2" (4x5.0) D.R. CHROME (RESIN) PENDENT 152'		
2	NEW WING W/300' (1/2" (4x5.0) D.R. CHROME (RESIN) PENDENT 152' (16"x16")		

Drawing Title	EXISTING FP SITE PLAN, DESIGN DATA, NOTES & DETAILS
Project No.	24026
Revisions:	05-23-24
Drawn By	JCH
Scale	AS NOTED
Date	05-13-24

**Job:**  
**HARBOR FREIGHT TOOLS**  
129 W. CORNELIUS HARNETT BLVD.  
LILLINGTON, NC 27546  
**Contractor:**  
LAKEVIEW CONSTRUCTION, LLC  
10505 CORPORATE DRIVE  
PLEASANT PRAIRIE, WI 53158



**Ajith Zacharias, C.E.T.**  
Certified Engineering Technician  
NICET #120860  
Water-Based Systems Layout, Level III

APPLICABLE CODES:	NFPA-13 2013 NFPA 2016
TYPE OF OCCUPANCY:	WAREHOUSE, R. 5-1
CONSTRUCTION TYPE:	I-B
FIRE PROTECTION:	PER NFPA-13
PROJECT QSF:	15,000 SF
BUILDING QSF:	EXISTING

SYMBOL	DESCRIPTION	Number of Sprinklers	
		Total This Project	Existing
○	NEW VIKING VK570 1/2" 14.0K S.R.E.C. 155° BRASS UPRIGHT (16"x16")	73	
○	EXISTING PENDING SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK570 1/2" 14.0K S.R.E.C. 155° BRASS UPRIGHT (16"x16")	73	
○	EXISTING PENDING SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK3021 1/2" 5.6K Q.R. 155° CHROME RECESSED PENDENT	4	
○	EXISTING PENDING SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK800 1/2" 5.6K Q.R.E.C. 155° CHROME RECESSED PENDENT (16"x16")	1	
○	NEW VIKING VK570 1/2" 14.0K S.R.E.C. 155° BRASS UPRIGHT SPRINKLER TO BE ADDED (16"x16")	5	
○	EXISTING TYCO TY6237 1/2" Q.R.E.C. 14.0K 155° PENDENT TO REMAIN AS-IS	2	
⊖	1" PLUG	25	
⊖	1 1/2" PLUG	3	
⊕	MECHANICAL TEE		
X-X	CEILING HEIGHT		
—	NEW SPRINKLER PIPE		
- - -	EXISTING SPRINKLER PIPE		
⊗	EXISTING SPRINKLER PIPE TO BE DEMOED		
[ X-X ]	PIPE ELEVATION REFERENCE		

Drawing Title	Project No.	Drawn By	Scale	Date	EXISTING SPRINKLER PIPING PLAN & SPACING PLANS	
					Plot Date:	Revisions:
EXISTING SPRINKLER PIPING PLAN & SPACING PLANS	24026	JCH	AS NOTED	08-13-24	08-29-24	

**Job:** HARBOR FREIGHT TOOLS  
129 W. CORNELIUS HARNETT BLVD.  
LILLINGTON, NC 27546

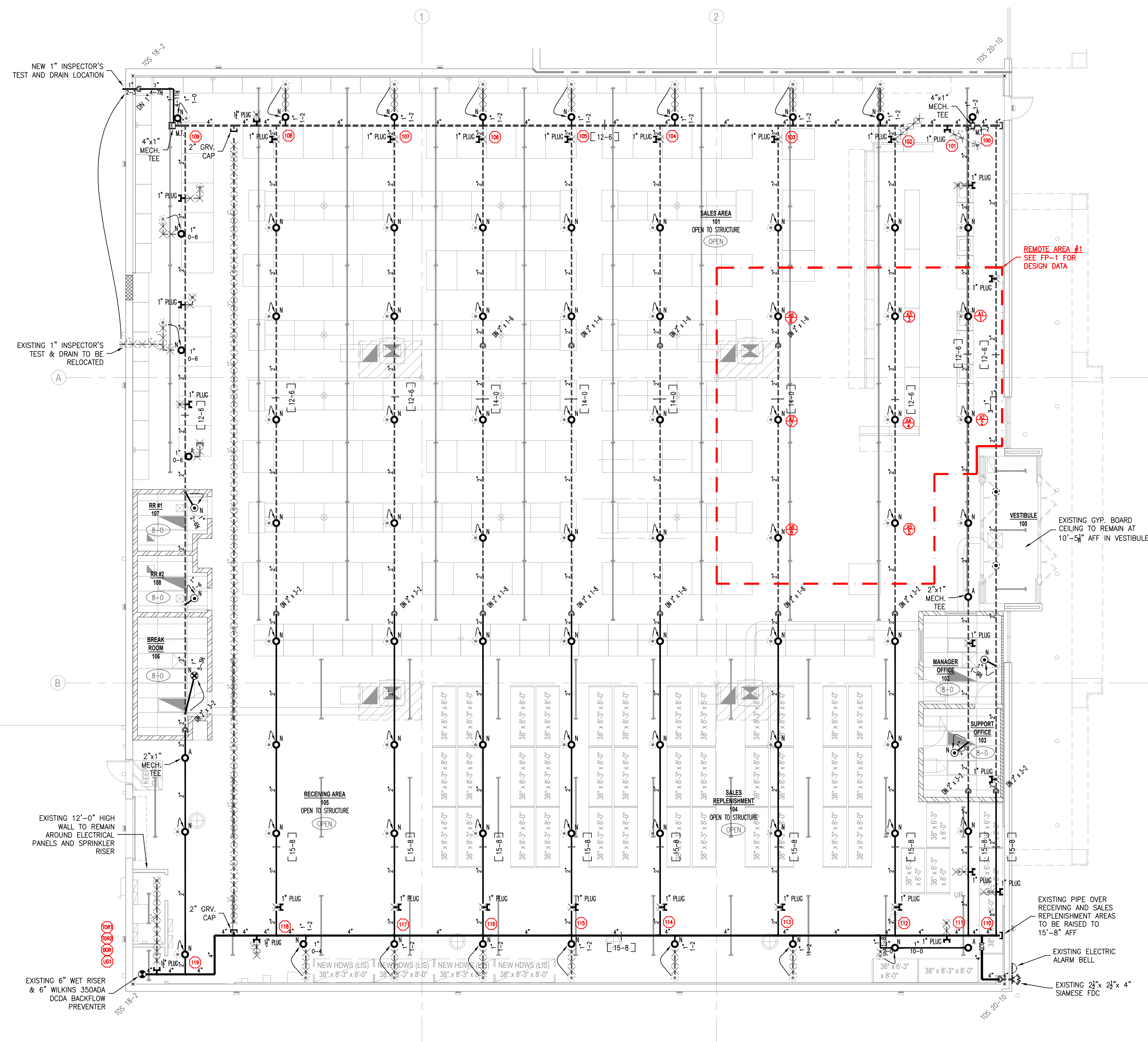
**Contractor:** LAKEVIEW CONSTRUCTION, LLC  
10505 CORPORATE DRIVE  
PLEASANT PRAIRIE, WI 53158

### LEGEND

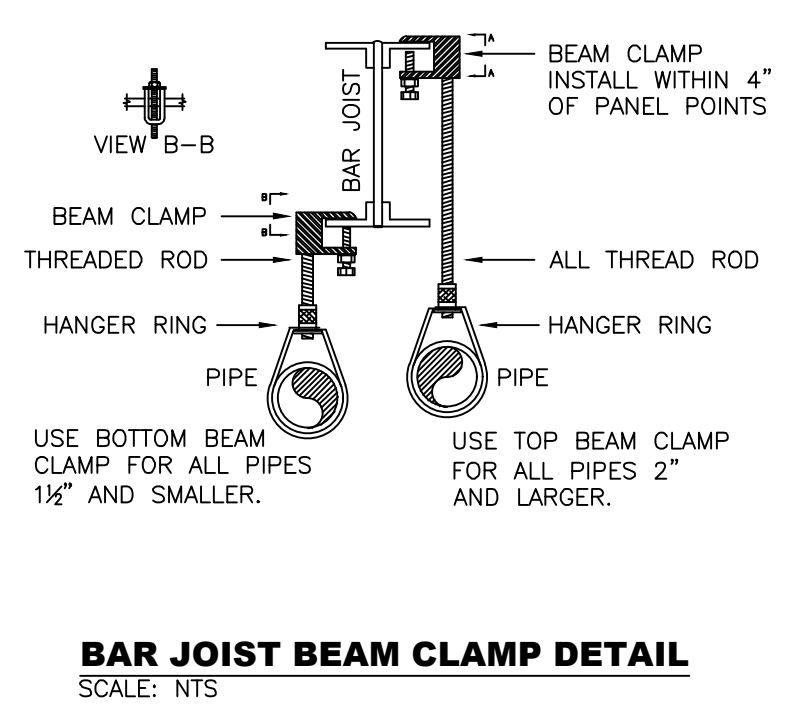
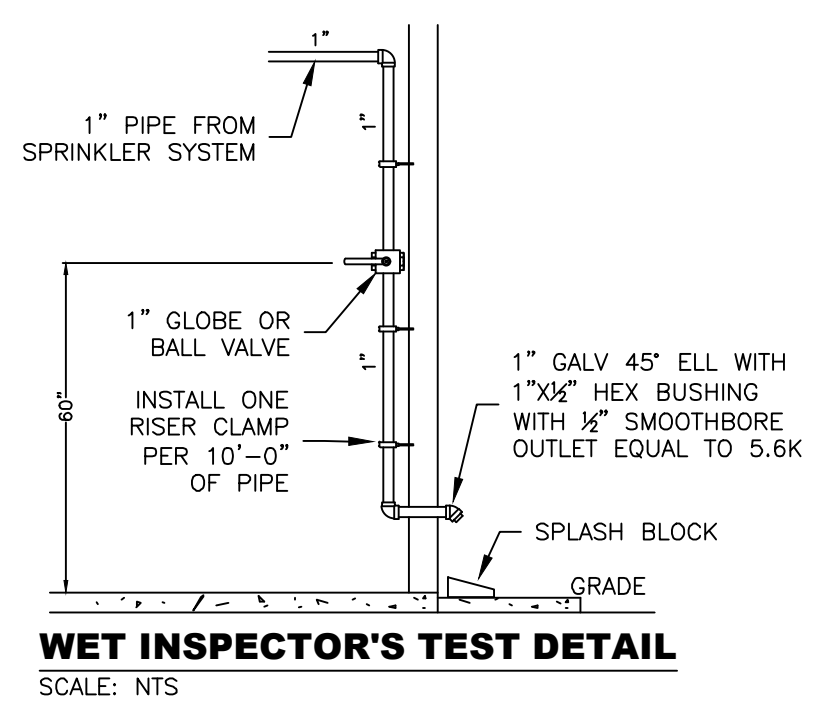
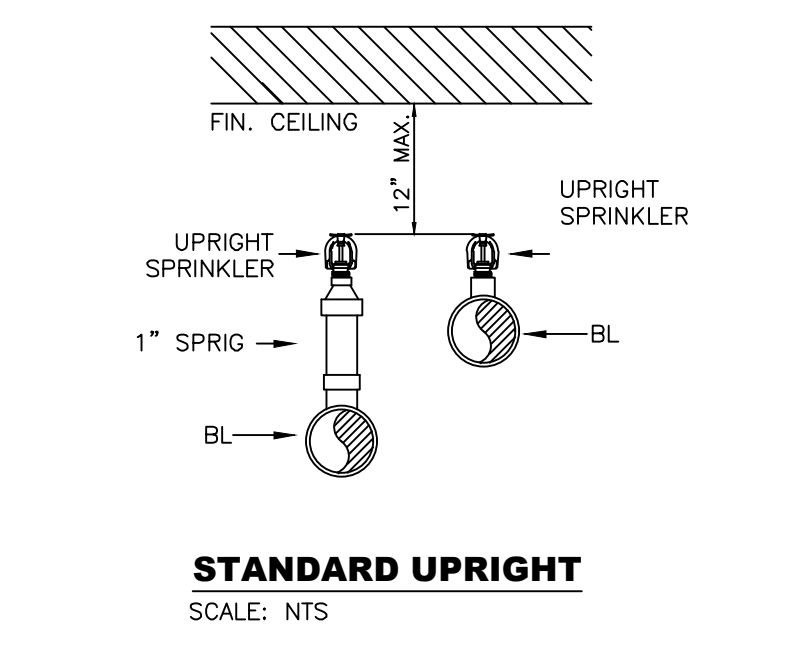
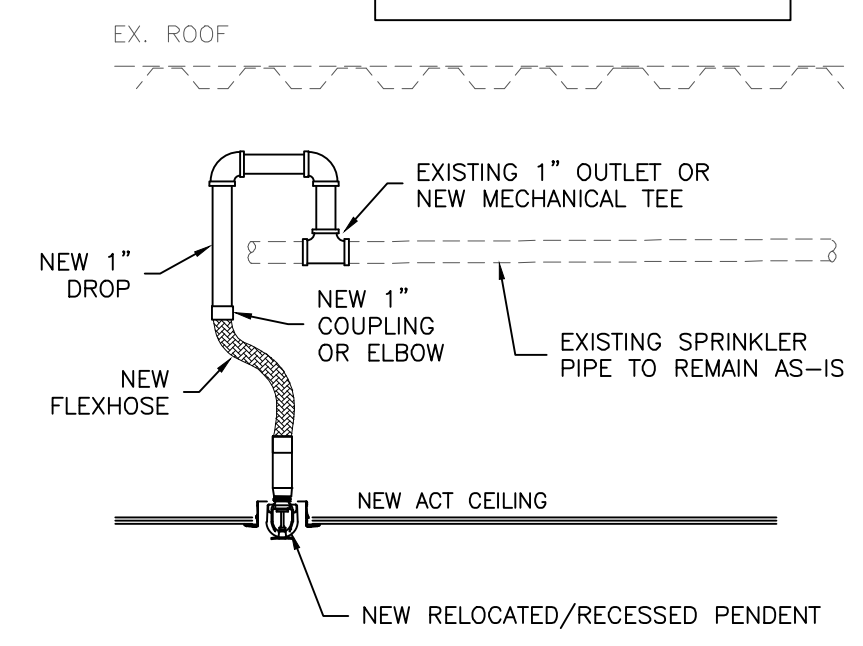
SYMBOL	DESCRIPTION	QTY
○	EXISTING PENDING SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK570 1/2" 14.0K S.R.E.C. 155° BRASS UPRIGHT (16"x16")	73
○	EXISTING PENDING SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK3021 1/2" 5.6K Q.R. 155° CHROME RECESSED PENDENT	4
○	EXISTING PENDING SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK800 1/2" 5.6K Q.R.E.C. 155° CHROME RECESSED PENDENT (16"x16")	1
○	NEW VIKING VK570 1/2" 14.0K S.R.E.C. 155° BRASS UPRIGHT SPRINKLER TO BE ADDED (16"x16")	5
○	EXISTING TYCO TY6237 1/2" Q.R.E.C. 14.0K 155° PENDENT TO REMAIN AS-IS	2
⊖	1" PLUG	25
⊖	1 1/2" PLUG	3
⊕	MECHANICAL TEE	
X-X	CEILING HEIGHT	
—	NEW SPRINKLER PIPE	
- - -	EXISTING SPRINKLER PIPE	
⊗	EXISTING SPRINKLER PIPE TO BE DEMOED	
[ X-X ]	PIPE ELEVATION REFERENCE	

### WALL LEGEND

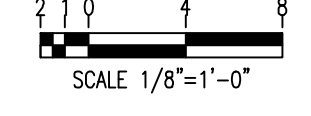
SYMBOL	DESCRIPTION
▨	NEW FULL HEIGHT WALL
▩	NEW MASONRY WALL INFILL
▭	EXISTING WALL

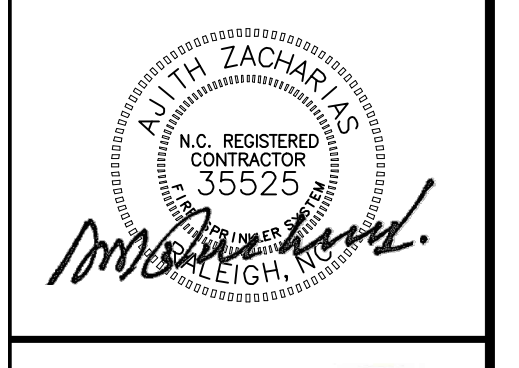


NOTE:  
ADD 1" PIPE WITH CAP WHERE NEEDED FOR HANGER SUPPORT



### EXISTING SPRINKLER SYSTEM PIPING PLAN





**Ajith Zacharias, CET**  
 Certified Engineering Technician  
 NICET #120860  
 Water-Based Systems Layout, Level III

APPLICABLE CODES:	NFPA-13, 2013 NFPA-2016
TYPE OF OCCUPANCY:	WAREHOUSE, R. 5-1
CONSTRUCTION TYPE:	I-B
FIRE PROTECTION:	PER NFPA-13
PROJECT GSI:	15,000 SF
BUILDING GSI:	EXISTING

SYMBOL	DESCRIPTION	EXISTING
▨	NEW FULL HEIGHT WALL	
▩	NEW MASONRY WALL INFILL	
—	EXISTING WALL	

Drawing Title	SPRINKLER SPACING PLAN	
	Project No.	05-239-24
Drawn By	JCH	AS NOTED
Date	05-13-24	

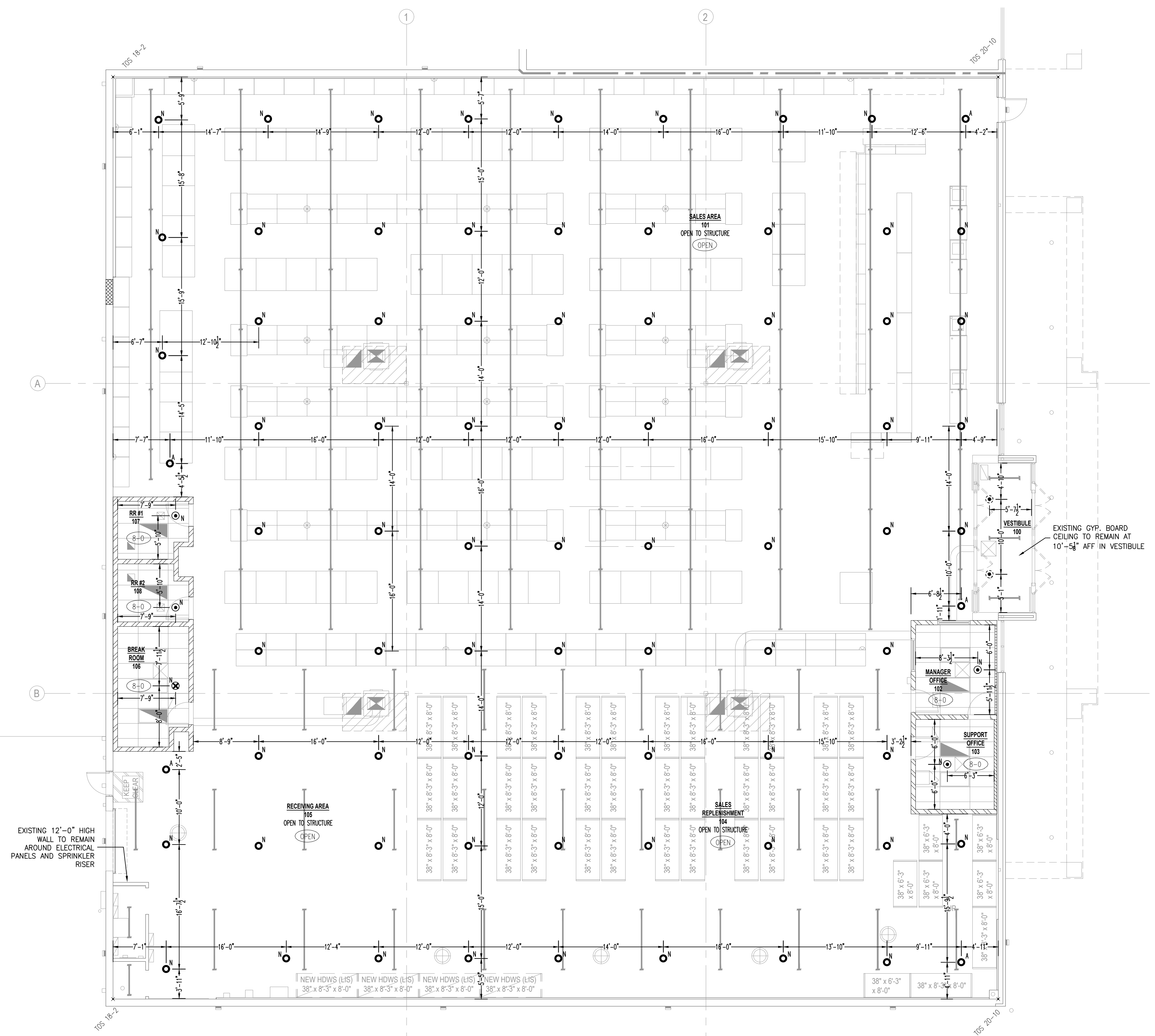
**Job:**  
**HARBOR FREIGHT TOOLS**  
 129 W. CORNELIUS HARNETT BLVD.  
 LILLINGTON, NC 27546  
**Contractor:**  
 LAKEVIEW CONSTRUCTION, LLC  
 10505 CORPORATE DRIVE  
 PLEASANT PRAIRIE, WI 53158

### LEGEND

SYMBOL	DESCRIPTION	QTY
⊙	EXISTING PENDENT SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK570 1/2" 14.0K S.R.E.C. 155° BRASS UPRIGHT (16"x16")	73
⊙	EXISTING PENDENT SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK3021 1/2" 5.6K Q.R. 155° CHROME RECESSED PENDENT	4
⊙	EXISTING PENDENT SPRINKLER TO BE RELOCATED AND REPLACED WITH NEW VIKING VK600 1/2" 5.6K Q.R.E.C. 155° CHROME RECESSED PENDENT (16"x16")	1
⊙	NEW VIKING VK570 1/2" 14.0K S.R.E.C. 155° BRASS UPRIGHT SPRINKLER TO BE ADDED (16"x16")	5
⊙	EXISTING TYCO TY6237 1/2" Q.R.E.C. 14.0K 155° PENDENT TO REMAIN AS-IS	2
⊖	1" PLUG	25
⊖	1 1/2" PLUG	3
⊕	MECHANICAL TEE	
(X-X)	CEILING HEIGHT	
—	NEW SPRINKLER PIPE	
- - -	EXISTING SPRINKLER PIPE	
-X-X-X-X-	EXISTING SPRINKLER PIPE TO BE DEMOED	
[ X-X ]	PIPE ELEVATION REFERENCE	

### WALL LEGEND

SYMBOL	DESCRIPTION
▨	NEW FULL HEIGHT WALL
▩	NEW MASONRY WALL INFILL
—	EXISTING WALL



### SPRINKLER SPACING PLAN

