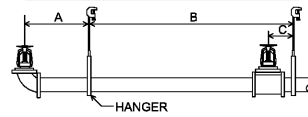


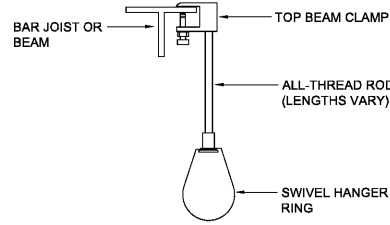
STEEL PIPE HANGER LOCATION DETAIL			
PIPE SIZE	A	B	C
1"	3'-0" MAX	12'-0" MAX	3" MIN
1 1/4"	4'-0" MAX	12'-0" MAX	3" MIN
1 1/2"-8"	5'-0" MAX	15'-0" MAX	3" MIN



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 60" FOR 1 1/2" PIPE OR LARGER.

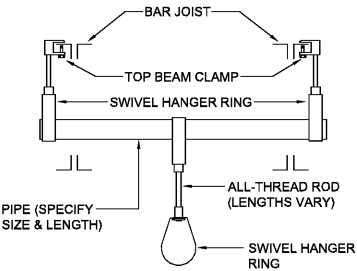
THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMOR TO A SPRINKLER, SPRINKLER DROP, OR SPRIG-UP SHALL NOT EXCEED 24".

**PIPE HANGER SCHEDULE**



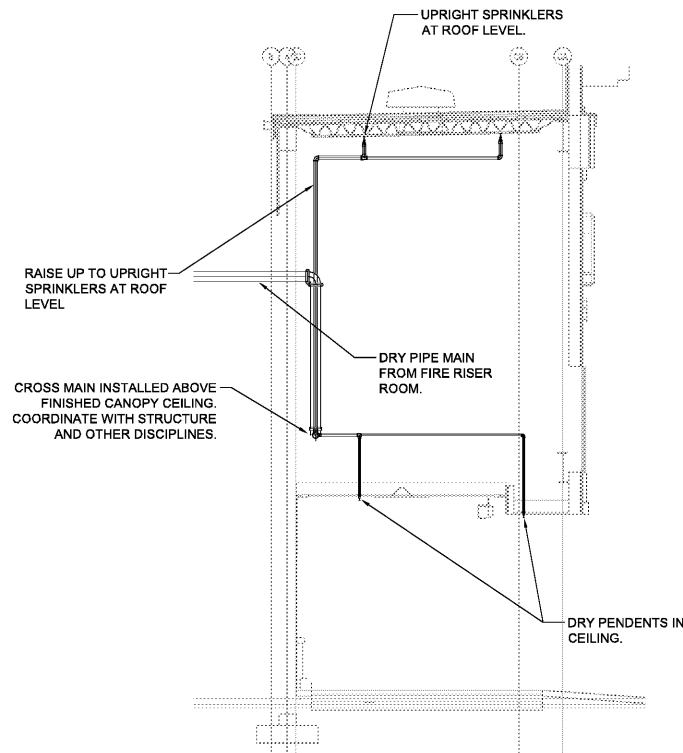
ALL-THREAD ROD SIZES FOR PIPE UP TO 4" IN DIAMETER, 3/8" ROD TO BE USED FOR 6" & 8" DIAMETER PIPE, 1/2" ROD TO BE USED. BRANCH LINE PIPE MAY HANG FROM THE BOTTOM OF STEEL. ALL CROSS MAIN PIPING SHALL HANG TO THE TOP OF STEEL.

**BAR JOIST/BEAM HANGER DETAIL**

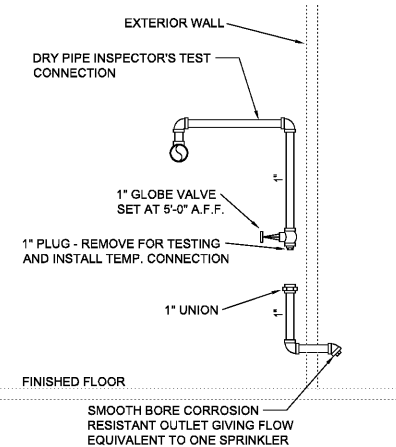


BRANCH LINE PIPE MAY HANG FROM THE BOTTOM OF STEEL. ALL CROSS MAIN PIPING SHALL HANG TO THE TOP OF STEEL.

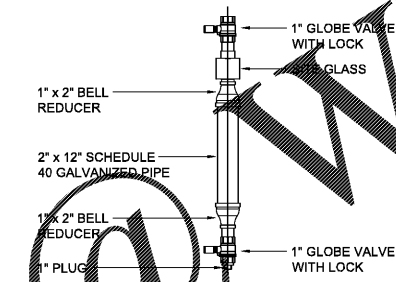
**TRAPEZE HANGER DETAIL**



**SECTION 1**  
SCALE: 1/4" = 1'-0"

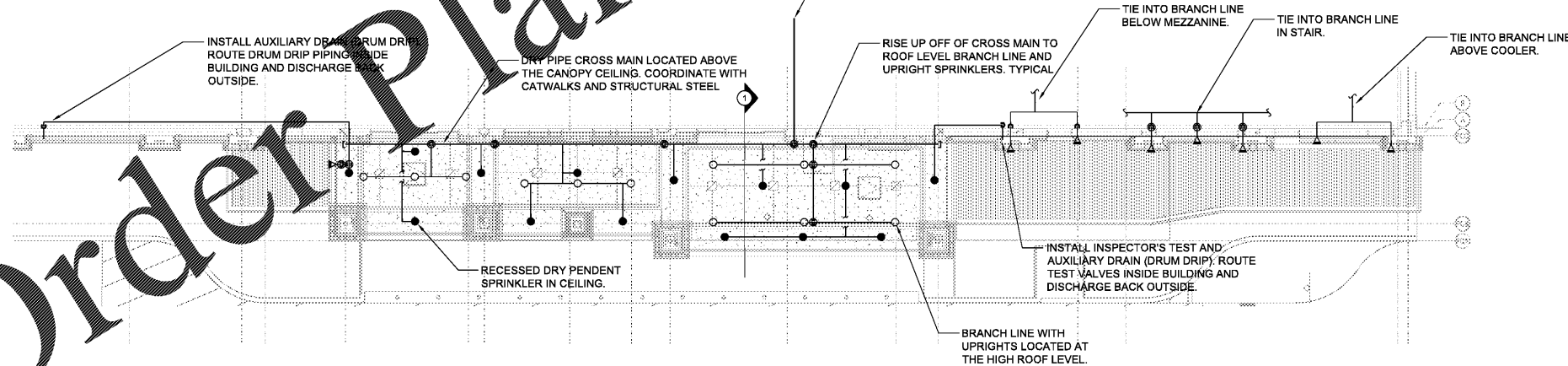


**DRY INSPECTOR'S TEST DETAIL**

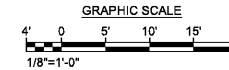
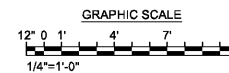


**AUXILIARY DRAIN DETAIL**

TIE INTO THE PUBLIX DRY PIPE SPRINKLER SYSTEM RISER LOCATED AT THE BACK OF THE STORE. SEE PUBLIX FIRE PROTECTION PLANS FOR CONTINUATION. COORDINATE DRY PIPE VOLUME WITH PUBLIX TO DETERMINE THE COMPRESSOR SIZE. FIRE SPRINKLER CONTRACTOR TO OBTAIN A FLOW TEST AND HYDRAULICALLY CALCULATE THIS CANOPY SYSTEM TO DETERMINE PIPE SIZES.



Sprinkler Head Schedule				
Symbol	Count	Thread	K-Factor	Description
○	12	1/2"	5.8	VIKING VK100 1/2 STANDARD RESPONSE 200° BRASS UPRIGHT
●	14	1"	5.8	VIKING VK168 1/2 S-24 00 161° WHITE RECESSED DRY PENDENT
◄	7	1"	5.8	TYCO TY3351 3R 1/2 175° WHITE HORIZONTAL SIDEWALL
33 = Total Number of Heads This Floor				



**FIRE PROTECTION DESIGN NOTES**

- THE FIRE SPRINKLER CONTRACTOR SHALL PREPARE DETAILED WORKING PLANS IN ACCORDANCE WITH NFPA 13, 2013 EDITION, CHAPTER 22. THE FIRE PROTECTION SYSTEM LAYOUT SHALL FOLLOW THE DESIGN GUIDELINES SET FORTH IN THESE FIRE PROTECTION ENGINEERING DOCUMENTS.
- THE FIRE SPRINKLER CONTRACTOR SHALL OBTAIN THE ACCEPTANCE TESTS FROM THE LOCAL AUTHORITY. THE ACCEPTANCE TEST FOR THE OVERHEAD SPRINKLER SYSTEM PIPING SHALL BE IN ACCORDANCE WITH NFPA 13, 2013 EDITION, CHAPTER 24, SECTION 24.1 USING THE MATERIAL AND TEST CERTIFICATE FOR ABOVEGROUND PIPING IN FIGURE 24.1.
- THE POINT OF SERVICE IS INDICATED AT THE BACKFLOW PREVENTER ASSEMBLY. AT THIS POINT, THE SYSTEM IS DEDICATED SOLELY FOR FIRE PROTECTION PURPOSES. NO DOMESTIC WATER SHALL BE TAKEN FROM THE SYSTEM BEYOND THIS POINT FOR OTHER PURPOSES.
- THE FOLLOWING ARE APPLICABLE STANDARDS:  
INTERNATIONAL BUILDING CODE, 2015 EDITION  
INTERNATIONAL FIRE CODE, 2015 EDITION  
NFPA 13, 2013 EDITION, INSTALLATION OF SPRINKLER SYSTEMS  
NFPA 101, 2015 EDITION, LIFE SAFETY CODE  
NFPA 24, 2013 EDITION, STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES.  
NFPA 25, 2014 EDITION, INSPECTION, TESTING AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS.
- FRONT CANOPY, CANOPY CEILING AREA EMPLOYS STANDARD RESPONSE, STANDARD SPRAY WHITE RECESSED DRY PENDENT TYPE SPRINKLERS WITH A 155°F TEMPERATURE RATING AND A K-FACTOR OF 5.6 OR GREATER. ABOVE CANOPY CEILING AREAS THAT ARE ACCESSIBLE SHALL USE 200°F RATED, STANDARD RESPONSE BRASS UPRIGHT SPRINKLER HEADS WITH A 5.6 K-FACTOR OR GREATER. THE SYSTEM SHALL HAVE A DESIGN DENSITY OF 0.18 GPM/FT² FOR A REMOTE AREA OF 2,500 FT². MAXIMUM SPRINKLER HEAD PROTECTION AREA IS LIMITED TO 130 FT²/HEAD. THE DESIGN AREA SHALL BE INCREASED BY 30% FOR A DRY PIPE SYSTEM.
- WATER SUPPLY: THE PUBLIX FIRE SPRINKLER SYSTEMS ARE SUPPLIED BY AN 8" FIRE LINE.
- FLOW TEST DATA: THE FLOW TEST USED IN THE CALCULATIONS WAS CONDUCTED ON THE 12-INCH WATER LINE ON TATTERSALL BLVD. STATIC AND RESIDUAL PRESSURES WERE TAKEN FROM THE HYDRANT DIRECTLY EAST OF THE SITE ON TATTERSALL BLVD. SOUTH OF THE INTERSECTION WITH TATTERSALL DR. STATIC READING WAS 208psi, RESIDUAL READING WAS 194psi FLOWING 708gpm. THIS TEST WAS TAKEN ON 04/27/18 AT 1:45pm CDT. COEFFICIENT OF 0.80 WAS USED. THERE WILL BE A PRESSURE REDUCING VALVE SET AT 110psi LOCATED ON THE 8" WATER LINE LEADING TO THE BUILDING.
- VALVE AND ALARM REQUIREMENTS: ALL CONTROL VALVES ON SPRINKLER RISERS AND FIRE PROTECTION BACKFLOW PREVENTERS SHALL HAVE A TAMPER SWITCH. THE FLOW SWITCH SHALL BE SET TO NOT ALARM WITH MINOR CITY WATER PRESSURE FLUCTUATIONS. HOWEVER, THE FLOW OF ONE SPRINKLER HEAD SHALL PRODUCE AN ALARM CONDITION BY TRIPPING THE FLOW SWITCH. ALL FLOW AND TAMPER SWITCHES SHALL BE CONNECTED TO THE BUILDING FIRE ALARM PANEL. FLOW SWITCHES SHALL ALSO SOUND THE ELECTRIC ALARM BELL ON THE OUTSIDE WALL. FIRE SPRINKLER CONTRACTOR SHALL VERIFY AND TEST PER NFPA 13.
- THE LOCAL WATER PURVEYOR IS REQUESTED TO ADVISE THE ENGINEER IF RECORD IF CONDITIONS EXIST IN THEIR WATER SUPPLY THAT COULD LEAD TO MIC, SO THAT THE ENGINEER CAN DESIGN CONNECTIVE MEASURES. THERE ARE NO KNOWN MIC CONDITIONS IN THE LOCAL WATER SYSTEM.
- BACKFLOW PREVENTER AND TAMPERING SPECIFICATIONS SHALL MEET OR EXCEED REQUIREMENTS OF THE LOCAL WATER AUTHORITY.
- WALL AND INTERIOR FIRE PROTECTION COMPONENTS: PRODUCT DATA SHEETS SHALL BE SUBMITTED BY THE SPRINKLER CONTRACTOR ALONG WITH THEIR SHOP DRAWINGS. ALL FIRE PROTECTION DEVICES AND COMPONENTS SHALL BE UL LISTED AND FM APPROVED.

**FIRE PROTECTION GENERAL NOTES**

- FIRE PROTECTION DESIGN IS FOR THE PUBLIX CANOPY AT TATTERSALL PARK, HOOVER, ALABAMA.
- THIS NEW STORE FRONT CANOPY WILL BE ATTACHED TO THE RETAIL MERCANTILE GROCERY STORE, WITH STEEL BAR JOIST, METAL TRUSS AND BEAM FRAMING. THE FRONT CANOPY STRUCTURE IS PROTECTED BY A DRY-PIPE SPRINKLER SYSTEM AND WILL BE SUPPLIED FROM THE GROCERY STORE DRY PIPE SPRINKLER SYSTEM RISER.
- OCCUPANCY: BELOW CANOPY CEILING - ORDINARY HAZARD GROUP 2 INCREASED PER PUBLIX REQUIREMENTS. ABOVE CANOPY CEILING - LIGHT HAZARD INCREASED PER PUBLIX REQUIREMENTS.
- HYDRAULIC DESIGN DATA:  
BELOW CANOPY CEILING: 0.18 gpm/sq.ft. OVER THE MOST REMOTE 2,500sq.ft. SYSTEM MAX 130sq.ft. PER SPRINKLER.  
ABOVE CANOPY CEILING: 0.10 gpm/sq.ft. OVER THE MOST REMOTE 2,500sq.ft. SYSTEM MAX 130sq.ft. PER SPRINKLER.
- SYSTEM PRESSURE AND FLOW REQUIREMENTS AT BASE OF RISER (BOR) (ESTIMATED):  
SYSTEM #1-CANOPY 0.18 gpm/sq.ft. 600 GPM @ 40 PSI @ BOR (ESTIMATED)  
O.S. HOSE ALLOWANCE 250 GPM  
850 GPM @ CITY CONNECTION (ESTIMATED)
- ALL MATERIALS, FABRICATION AND INSTALLATION SHALL TO BE IN ACCORDANCE WITH NFPA 13, 2013, FACTORY MUTUAL STANDARDS, AND THE AUTHORITY HAVING JURISDICTION.
- ALL THREADED PIPING 1" THROUGH 2" SHALL BE GALVANIZED SCHEDULE 40 PIPE. ALL PIPING 2 1/2" THROUGH 6" SHALL BE GALVANIZED SCHEDULE 40 PIPE OR HEAVIER. ALL EXPOSED AREA PIPING, FITTINGS, HANGERS AND DEVICES SHALL BE GALVANIZED AND EXCEPTORS. AND SPRINKLERS IN EXPOSED AREAS SHALL BE CORROSION RESISTANT.
- LOCATION OF HORIZONTAL SPRINKLER PIPING: BRANCH LINE SHOULD BE LOCATED 12"± BELOW EXPOSED STEEL BAR JOISTS IN AREAS OF EXPOSED STRUCTURE. CROSS MAINS TO BE LOCATED BELOW EXPOSED STEEL BEAMS IN AREAS OF EXPOSED STRUCTURE. OTHER AREAS 12"± ABOVE CEILING (NOT TO CONFLICT WITH LIGHT FIXTURES AND HVAC RETURN GRILLS).
- UPRIGHT SPRINKLERS TO BE LOCATED BETWEEN 1" AND 12" BELOW ROOF DECK OR PER NFPA 13, 2013 EDITION.
- SPRINKLER HEAD SPACING IS PER NFPA 13, 2013 EDITION AND PUBLIX DESIGN REQUIREMENTS.
- FIRE SPRINKLER CONTRACTOR SHALL VISIT THE SITE AND VERIFY ALL CONDITIONS BEFORE ANY FABRICATION AND INSTALLATION HAS BEGUN.
- FIRE SPRINKLER CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES THAT MAY COME INTO CONFLICT BEFORE ANY INSTALLATION. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR REVIEW.
- FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL DIMENSIONS WHILE PREPARING THE SHOP DRAWINGS. (WORKING PLANS PER NFPA 13). FIRE SPRINKLER CONTRACTOR SHALL ALSO OBTAIN A NEW FLOW TEST AND PERFORM HYDRAULIC CALCULATIONS BASED ON THE CRITERIA SET IN THESE DOCUMENTS TO VERIFY CURRENT PIPE SIZES ARE ADEQUATE.
- THE FOLLOWING ARE ACCEPTABLE SPRINKLER HEAD MATERIAL MANUFACTURERS:  
RELIABLE  
TYCO  
VICTAULIC  
VIKING
- SPRINKLER SYSTEMS, INCLUDING ALL ASSOCIATED FIRE PROTECTION SIGNALS, SHALL BE SUPERVISED BY AN APPROVED CENTRAL, PROPRIETARY, AUXILIARY, OR REMOTE STATION SYSTEM IN ACCORDANCE WITH NFPA.
- ALL PENETRATIONS THROUGH RATED WALLS AND FLOORS TO BE PATCHED AS NECESSARY TO MAINTAIN WALL RATINGS.
- FIRE PROTECTION SHOP DRAWINGS, HYDRAULIC CALCULATIONS, AND MATERIAL DATA SUBMITTALS ARE TO BE SUBMITTED TO ENGINEER OF RECORD AND PUBLIX FOR REVIEW AND APPROVAL. PARTIAL SUBMITTALS WILL NOT BE ACCEPTED.
- ALL FIRE SPRINKLER COMPONENTS ARE TO BE RATED FOR THE MAXIMUM SYSTEM WORKING PRESSURE TO WHICH THEY ARE EXPOSED IN ACCORDANCE WITH NFPA 13, 2013 EDITION, SECTION 6.1.3.
- ALL FIRE SPRINKLER COMPONENTS SHALL BE U.L. AND F.M. APPROVED.
- A CURRENT FLOW TEST (NO OLDER THAN 6 MONTHS) SHALL BE OBTAINED BY FIRE SPRINKLER CONTRACTOR PRIOR TO PERMITTING. HYDRAULIC CALCULATIONS SHALL BE PERFORMED WITH FLOW TEST TO VERIFY SYSTEM DEMAND CAN BE PROVIDED BY THE LOCAL WATER PROVIDER.
- TOTAL SQUARE FOOTAGE COVERED BY EACH SPRINKLER SYSTEM:  
PUBLIX SYSTEM FRONT CANOPY (WET SYSTEM) - 2,000sq.ft.

1925 Prospect Ave.  
Orlando, FL 32814  
P (407) 661-9100  
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Architects & Engineers

CLIENT NAME  
**White Development Company**  
1801 South Keene Road  
Clearwater, Florida 33756

PROJECT NAME  
**Publix @ Tattersall Park**  
NEC of U.S. Highway 280 & Highway 119  
Hoover, Alabama

SHEET TITLE  
**Fire Protection Plan**

Revision Schedule		Date	
A	100% Public Submission	06/07/18	
B	Final Submission	01/08/19	
C	Issued for Bids & Permit	1/22/19	

PROJECT NO. 218000  
DATE 07/26/18  
DRAWN BY  
CHECKED BY  
DESIGNED BY

G & P Engineering LLC  
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