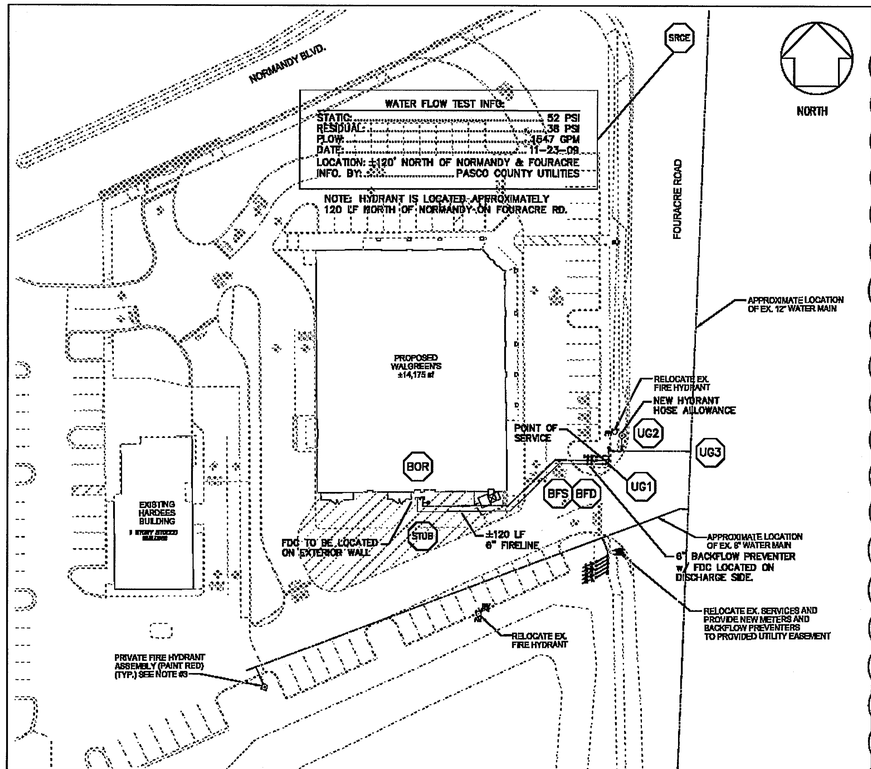
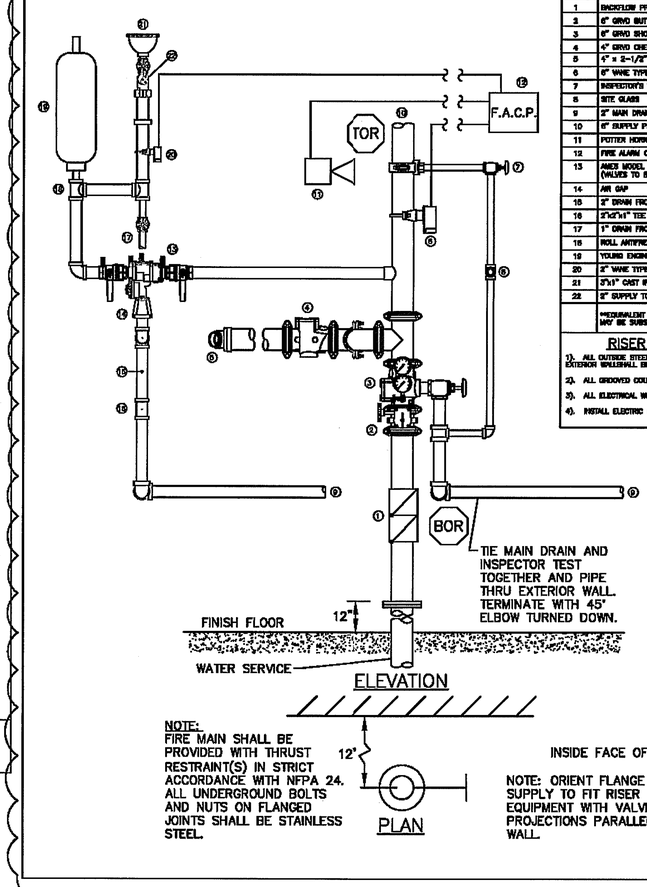


FIRE PROTECTION - SITE PLAN

SCALE: 1" = 40'-0"

FIRE SPRINKLER RISER DETAIL



SCALE: NTS

MATERIAL DESCRIPTION

ITEM #	DESCRIPTION
1	BACKFLOW PREVENTION DEVICE AS REQUIRED BY AHJ
2	6" GRVD BUTTERFLY VALVE w/ T.S. (TYCO MODEL BFV-N)
3	6" GRVD SHORGUN 90 CHECK VALVE w/ TRIM (TYCO MODEL CV-17)
4	4" GRVD CHECK VALVE (TYCO MODEL CV-17)
5	4" x 2-1/2" x 2-1/2" WALL MOUNTED FIRE DEPT. CONNECTION
6	6" VANE TYPE FLOW SWITCH (POTTER MODEL "VSR")
7	INSPECTOR'S TEST VALVE WITH GRID RELIEF VALVE
8	SITE GLASS
9	2" MAIN DRAIN PIPING TO EXTERIOR OF BLDG
10	6" SUPPLY PIPING TO WET SYSTEM
11	POTTER HORN / STROBE LOCATED ON EXTERIOR WALL
12	FIRE ALARM CONTROL PANEL
13	AMES MODEL 4000LF REDUCED PRESSURE BACKFLOW DEVICE (VALVES TO BE LOCKED IN OPEN POSITION)
14	AIR GAP
15	2" DRAIN FROM AIR GAP
16	2"x2"x1" TEE PROVIDES 1" DRAIN CONNECTION FROM ANTIFREEZE SYSTEM
17	1" DRAIN FROM ANTIFREEZE SYSTEM
18	WALL ANTIFREEZE SUPPLY AND DRAIN BACK TO WALL
19	YOUNG ENGINEERING MODEL B. DIET-17 BLADDER EXPANSION
20	2" VANE TYPE FLOW SWITCH (POTTER MODEL "VSR")
21	3"x1" CAST IRON REDUCER FOR ANTIFREEZE FILL CUP w/ GLOBE VALVE
22	2" SUPPLY TO ANTIFREEZE SYSTEM

**EQUIVALENT DEVICES, WITH APPROPRIATE LISTINGS, MAY BE SUBSTITUTED FOR MODELS SHOWN ABOVE.

RISER GENERAL NOTES:

1). ALL OUTSIDE STEEL PIPING EXTENDING THROUGH THE EXTERIOR WALLSHALL BE GALVANIZED WITH GALVANIZED FITTINGS.
2). ALL GROOVED COUPLINGS SHALL BE OF THE "RIGID" TYPE.
3). ALL ELECTRICAL WIRING SHALL BE PERFORMED BY OTHERS.
4). INSTALL ELECTRIC BELL ON OUTSIDE WALL.

GENERAL NOTES

1. THIS DRAWING SHALL DEFINE THE LAYOUT OF THE BUILDING SPRINKLER SYSTEM AND SHALL BE THE BASIS OF THE SPRINKLER CONTRACTOR'S SHOP DRAWING AND OTHER DOCUMENTS. IT SHALL BE INCLUDED IN THE CONSTRUCTION DRAWINGS SUBMITTED TO WALGREENS. PROJECT DRAWING FPI & FP2 MUST BE APPROVED BY WALGREENS PRIOR TO ANY FIRE PROTECTION PERMIT APPLICATION SUBMISSION TO THE AUTHORITY HAVING JURISDICTION.
2. THE FIRE PROTECTION CONTRACTOR IS RESPONSIBLE FOR THE HYDRAULIC CALCULATIONS AND CONFIRMING THE PIPE SIZES OF THE FIRE SUPPRESSION SPRINKLER SYSTEM WITH A WATER FLOW TEST NO OLDER THAN SIX (6) MONTHS.
3. THE SCOPE OF WORK SHALL INCLUDE THE FOLLOWING:
   A. THE INSTALLATION AND TESTING OF NEW WET-PIPE AUTOMATIC FIRE SPRINKLER SYSTEMS FOR COMPLETE COVERAGE THROUGHOUT THE ENTIRE BUILDING PER NFPA 13 (2007 EDITION), NFPA 24, THE FLORIDA FIRE PREVENTION CODE & AHJ.
   B. FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE PARTITIONS. FIRE STOPPING SHALL BE OF U.L. LISTED ASSEMBLY.
4. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS IT IS INTENDED THAT A COMPLETE FIRE PROTECTION SYSTEM BE PROVIDED WITH ALL THE NECESSARY EQUIPMENT, APPURTENANCES AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. THE SPRINKLER CONTRACTOR SHALL CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES PRIOR TO INSTALLATION.
5. ELECTRICAL WIRING CONNECTIONS TO ELECTRICAL FIRE PROTECTION DEVICES SHALL BE UNDER THE ELECTRICAL/FIRE ALARM DIVISION.
6. SPRINKLER SYSTEM SHALL BE DESIGNED FOR A MAXIMUM WORKING PRESSURE OF 175 PSI PER NFPA 13.
7. PROVIDE THE SPRINKLER SYSTEM WITH FLUSHING CONNECTIONS PER NFPA 13.
8. SPRINKLER SYSTEM SHALL BE HYDROSTATICALLY TESTED FOR TWO HOURS AT 200 PSI PER NFPA 13.
9. ALL VALVES SHALL HAVE THE PROPER SIGNAGE ATTACHED WITH SUITABLE CHAIN.
10. PIPE HANGERS SHALL BE SPACED AND LOCATED PER NFPA 13 (2007 EDITION).
11. ALL THREADED PIPING SHALL BE SCH 40, ASTM A-135 OR ANSI/ASTM A-53 BLACK STEEL PIPE IN ACCORDANCE WITH NFPA 13.
12. ALL ROLL GROOVED PIPING SHALL BE SCH 10, ASTM A-135 OR ANSI/ASTM A-53 BLACK STEEL PIPE IN ACCORDANCE WITH NFPA 13.
13. ALL PIPE LENGTHS ARE SHOWN CENTER-TO-CENTER UNLESS OTHERWISE NOTED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS SHOWN.
14. ALL SPRINKLERS SHALL BE INSTALLED ACCORDING TO THEIR LISTINGS, SPACING AND OBSTRUCTION REQUIREMENTS.
15. ALL SPRINKLERS INSTALLED BELOW 7'-0" ABOVE FINISHED FLOOR SHALL HAVE A HEAD GUARD INSTALLED TO PREVENT DAMAGE.
16. A NOMINAL QUANTITY OF ADDITIONAL SPRINKLERS MAY BE REQUIRED TO CORRECT FIELD OBSTRUCTIONS (I.E. HVAC DUCT OR EQUIPMENT, ETC.) THE FIRE SPRINKLER CONTRACTOR SHALL INSTALL THE REQUIRED ADDITIONAL HEADS AT NO ADDITIONAL COST TO WALGREENS.
17. A CONTRACTOR'S MATERIAL AND TEST CERTIFICATE SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 13 AND FORWARDED TO THE OWNER'S REPRESENTATIVE.

NOTES IN ACCORDANCE WITH FAC 61G15

61G15-32.003

1. THIS BUILDING IS TO BE PROTECTED BY A WET PIPE AUTOMATIC SPRINKLER SYSTEM. THE FIRE PROTECTION CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE THE PREPARATION AND DESIGN OF THE FIRE PROTECTION SYSTEM LAYOUT DOCUMENTS AND ALL NECESSARY COMPONENTS, SYSTEMS MATERIALS, ASSEMBLIES, EQUIPMENT AND SUPPORT SYSTEMS REQUIRED.
2. THE ACCEPTANCE TESTING OF ALL FIRE PROTECTION SYSTEMS AND COMPONENTS SHALL BE IN ACCORDANCE WITH NFPA 13, 2007 EDITION FOR THE INSIDE (ABOVE GROUND) FIRE SPRINKLER SYSTEM AND WITH NFPA 24, 2007 EDITION FOR THE OUTSIDE (UNDER GROUND) FIRE MAIN.
3. STRUCTURAL SUPPORT SYSTEMS AND STRUCTURAL OPENINGS FOR THIS BUILDING FOR THE FIRE SPRINKLER SYSTEM HAVE BEEN INCORPORATED BY THE STRUCTURAL ENGINEER OF THE PROJECT: ALAN C. GUENTHER, P.E. OF ACG PROFESSIONAL ENGINEERING, INC. THE DEAD LOAD CARRYING CAPACITY OF THE BUILDING FOR THE FIRE SPRINKLER SYSTEM IS 2 PSF. THE LIVE LOAD DOES NOT EXCEED 2 PSF.

61G15-32.004(9)

4. THE FIRE SPRINKLER POINT OF SERVICE FOR THE NEW PROJECT PER F.S. 633.02(17) IS AT THE DISCHARGE SIDEOF THE PROPOSED BACKFLOW PREVENTOR, AS INDICATED ON THE CIVIL SITE DOCUMENTS PROVIDED BY THE CIVIL ENGINEER.
5. THE SPACE SHALL BE PROTECTED BY A WET-PIPE SPRINKLER SYSTEM INSTALLED IN ACCORDANCE WITH THE 2007 EDITION OF NFPA 13, 2007 FLORIDA FIRE PREVENTION CODE, 2007 FLORIDA BUILDING CODE, CHAPTER 9 AND APPLICABLE LOCAL AND STATE REQUIREMENTS.
6. THE OCCUPANCY CLASSIFICATION OF THIS FACILITY PER NFPA 13, 2007 EDITION ARE LISTED BELOW IN THE "WATER DENSITIES AND SPRINKLER SPECIFICATIONS" NOTES SECTION LISTED ON THIS SHEET.
7. THE DESIGN APPROACH FOR THIS FACILITY PER NFPA 13, 2007 EDITION IS LISTED BELOW IN THE "WATER DENSITIES AND SPRINKLER SPECIFICATIONS" NOTES SECTION LISTED ON THIS SHEET.
8. THE WATER SUPPLY IS THE EXISTING 12" CIRCULATING WATER MAIN LOCATED ON FOURAKER ROAD. A NEW 6" FIRE MAIN WILL SUPPLY THIS PROJECT.
9. A FIRE HYDRANT FLOW TEST WAS CONDUCTED ON 11-23-09 AT 120 FT. NORTH OF FOURACRE RD & NORMANDY AVE. THE RESULTS ARE AS FOLLOWS: A STATIC PRESSURE OF 52 PSI, A RESIDUAL PRESSURE OF 38 PSI AT 1,647 GPM FLOW. CIVIL ENG. PROVIDED
10. THE FIRE SPRINKLER RISER FLOW SWITCH WITH ELECTRIC BELL SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM.
11. THERE ARE NO KNOWN CONDITIONS THAT WOULD INDICATE MIC IS PRESENT IN THE WATER SYSTEMS OF THIS JURISDICTION AS UNUSUAL PIPE FAILURES HAVE NOT BEEN KNOWN TO OCCUR.
12. THE BACKFLOW PREVENTER AND METERING ASSEMBLY SHALL BE A 6" INCH DOUBLE DETECTOR WITH BY-PASS METER PER LOCAL REQUIREMENTS AND BE LISTED FOR USE WITH A FIRE PROTECTION SYSTEM AS PER THE REQUIREMENTS OF NFPA. THE MAXIMUM PRESSURE LOSS FOR THE BACKFLOW PREVENTOR SHALL BE 9 PSI.
13. ALL FIRE PROTECTION COMPONENTS SHALL CONFORM TO NFPA STANDARDS AND BE UL LISTED. THE FIRE PROTECTION CONTRACTOR'S SUBMITTALS SHALL NOT DEVIATE FROM THE DESIGN PARAMETERS. THE FIRE PROTECTION CONTRACTOR SHALL PREPARE THE SYSTEM LAYOUT DOCUMENTS WITHIN THE PARAMETERS STATED AND SHALL OBTAIN A REVIEW FOR VERIFICATION OF CONFORMITY TO THESE GUIDELINES BY THE ENGINEER OF RECORD.

TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH CHAPTER 61G15-32 OF THE FLORIDA ADMINISTRATIVE CODE.

FWH Architects, Inc.
3336 Grand Blvd. Suite 102
Holiday, Florida 34690
Ph. 727. 815. 3336
Fax 727. 815. 3337
LIC. NO. AR 0009893

PROJECT TYPE

DRAWINGS/SPECIFICATIONS BY:
☐ WALGREENS' CONSULTANT
■ LANDLORD'S CONSULTANT

CONSTRUCTION WORK BY: (UNLESS NOTED OTHERWISE)
☐ WALGREENS' CONTRACTOR
■ LANDLORD'S CONTRACTOR (TURNKEY CONSTRUCTION)

STORE		BUILDING	
NEW.....	■	NEW.....	■
REMODELING...	☐	EXISTING.....	☐
RELOCATION...	☐	NEW SHELL ONLY	☐
OTHER.....	☐		

STANDARD ABBREVIATIONS

AB	Alarm Bell	GR	Grooved
AC	Air Compressor	GT	Groove to Thread
ACT	Acoustical Ceiling Tile	GV	Gate Valve
ACV	Alarm Check Valve	GWB	Gypsum Wall Board
AF	Antifreeze	HAD	Heat Activated Device
AFF	Above Finished Floor	HGR	Hanger
ALV	Alarm Valve	HP	Horsepower
AMD	Air Maintenance Device	IE	Invert Elevation
AS	Automatic Sprinkler	IW	Industrial Risk Insurers
ATR	All Thread Rod	ISO	Insurance Services Office
AUX	Auxiliary	ITC	Inspector Test Connection
AV	Angle Valve	JST	Joist
BBBM	Below Bottom of Beam	JT	Joint
BBSDK	Below Bottom of Deck	LB	Pound
BFP	Backflow Preventer	LTE	Long Turn Elbow
BFV	Butterfly Valve	LW	Lightweight Pipe
BHT	Ball Heat Tee	MAX	Maximum
BIV	Butterfly Indicating Valve	MIN	Minimum
BJ	Box Joint	ML	Module Line
BLDG	Building	MAS	No Automatic Sprinklers
BM	Beam	NC	Non Combustible
BOR	Base of Riser	NFPA	National Fire Protection Assoc.
BV	Butterfly Valve	NIC	Not In Contract
CC	Center to Center	NRS	Non Rising Stem
CFM	Cubic Feet per Minute	NTS	Not to Scale
CG	Center to Groove	OHD	Overhead Door
CI	Centerline	OSY	Outside Screw and Yoke
COL	Column	PE	Plain End
CPLG	Coupling	P.E.	Professional Engineer
CR	Cross	PEND	Pendant
CRL	Cotton Rubber Lined	PIV	Post Indicator Valve
CU	Cubic Feet	POL	Pipe-O-Let
CV	Check Valve	PS	Pressure Switch
DC	Double Check	PSI	Pounds per Square Inch
DCV	Detector Check Valve	PVC	Poly Vinyl Chloride
DDC	Double Detector Check	QOD	Quick Opening Device
DELV	Deluge Valve	QR	Quick Response
DIP	Ductile Iron Pipe (CL 50 UNLS)	R C	Riser Clamp
DIA	Diameter	RC	Reducer Coupling
DN	Down	RN	Riser Nipple
DPV	Dry Pipe Valve	RP	Reduced Pressure
DRYV	Dry Valve	RPM	Revolutions per Minute
DW	Drywall	SCH	Schedule
E	90°Elbow	SF	Square Foot
E45	45°Elbow	SPKR	Sprinkler
EL	Elevation	STR	Strainer
ELEV	Elevation	TEE	Tee
ELL	90°Elbow	TBC	Top Beam Clamp
F/CL	Floor to Centerline Dimension	TEMP	Temperature
FDC	Fire Department Connection	TG	Thread to Groove
FDV	Fire Department Valve	TH	Trapeze Hanger
FE	Fire Extinguisher	THR	Threaded
FEC	Fire Extinguisher Cabinet	THW	CPThreaded Cap
FHC	Fire Hose Cabinet	TOM	Top of Main
FHRK	Fire Hose Rack	TOR	Top Of Riser
FHRL	Fire Hose Reel	TR	Trees
FL	Floor	TS	Tamper Switch
FL	Friction Loss	TT	Thread to Thread
FLG	Flange	TW	Thin Wall Pipe per NFPA
FLR	Floor	UL	Underwriters Lab
FM	Factory Mutual	UNO	Unless Noted Otherwise
FV	Fire Valve	UPR	Upright
FVC	Fire Valve Cabinet	VA	Valve
GAL	Gallon	V.I.F.	Verify In Field
GB	Glass Bulb	WCV	Water Check Valve
GBV	Grooved Butterfly Valve	WD	Wood
GD	Groove to Center	WF	Wide Flange Beam
GRC	Grooved Reducing Coupling	WFD	Water Flow Detector
GR CP	Grooved Cap	WFS	Water Flow Switch
GR CPLG	Grooved Coupling	WMO	Water Motor Gong
GRD	Ground	WOG	Welded Outlet - Grooved
GS	Groove to Groove	WOT	Welded Outlet - Threaded
GLV	Globe Valve	WO	Welded Outlet
GOL	Groove-O-Let	WT	Weight
GPM	Gallons per Minute		

1	01.08.10	REVISED PER COJ PLAN REVIEW COMMENTS
2	02.05.10	REVISED PER WGS 1ST REVIEW COMMENTS
3	04.05.10	REVISED PER WGS 2ND REVIEW COMMENTS

NO.	DATE	DESCRIPTION

REVISIONS

CERTIFICATION AND SEAL

I HEREBY CERTIFY THAT THIS PLAN AND SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA AS SIGNIFIED BY MY HAND AND SEAL.

JAMES M. CURTIS #37912
29775 BAYSEAD ROAD
DADE CITY, FL 33523
PH. 813-299-7211
FAX. 352-588-1198

PROJECT NAME
STORE #13450
SWC OF FOURAKER & NORMANDY
JACKSONVILLE, FLORIDA

DRAWING TITLE
FIRE PROTECTION
NOTES / DETAILS

DATE: 11.20.09	WALGREENS STORE NO. 13450	DRAWING NO.	
DRAWN BY: SS	SCALE: AS NOTED	FP1	
REVIEWED BY: JC	RELEASED TO CONSTRUCTION	FWH PROJECT NO. 0913	

HYDRAULIC - SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System.

Location: REMOTE AREA #1
No. of Sprinklers: 15 (REQUIRED)

Basis of Design
1. DENSITY: 0.20 GPM/SQ. FT.
2. DESIGNED AREA DISCHARGE: 1500 SQ. FT.

System Demand
1. GPM DISCHARGE: 464.6 GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER: 38.0 PSI

SALES AREA

HYDRAULIC - SYSTEM

This building is protected by a Hydraulically Designed Automatic Sprinkler System.

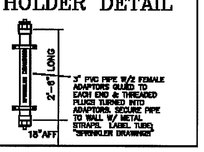
Location: REMOTE AREA #2
No. of Sprinklers: 12

Basis of Design
1. DENSITY: 0.38 GPM/SQ. FT.
2. DESIGNED AREA DISCHARGE: 1000 SQ. FT.

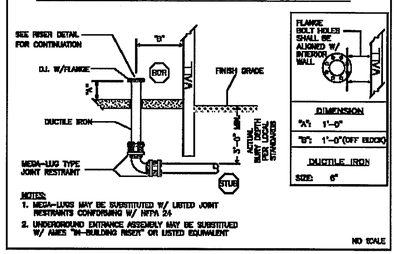
System Demand
1. GPM DISCHARGE: 441.2 GPM
2. RESIDUAL PRESSURE AT THE BASE OF THE RISER: 37.0 PSI

STORAGE AREA

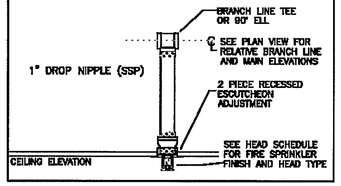
DOCUMENT HOLDER DETAIL



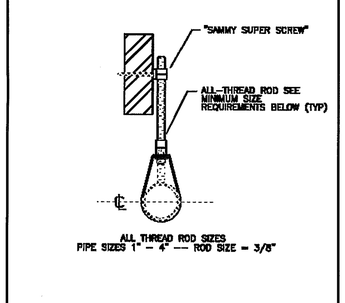
DETAIL OF UNDERGROUND ENTRANCE



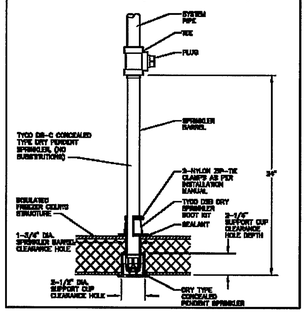
TYP. RECESSED PENDENT



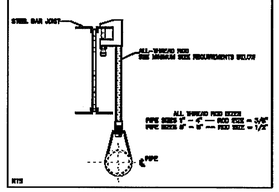
"SAMMY SUPER SCREW" ATTACHMENTS W/RING HANGER FOR WOOD JOIST



TYCO MODEL "DS-C" DRY PENDENT SPRINKLER (STORE COOLERS)



TOP BEAM CLAMP WITH RING HANGER



INSTALLATION NOTES

1. SPRINKLERS ARE NOT REQUIRED TO BE PLACED IN THE CENTER OF ACOUSTIC TILES. SPRINKLERS LESS THAN 7 FEET ABOVE FINISHED FLOOR SHALL BE PROTECTED WITH GUARDS. NO SPRINKLER PIPING SHALL BE EXPOSED IN SPACES WITH FINISHED CEILINGS.
2. WALGREENS SHALL LOCATE THE FIELD-DRILLED HOLES FOR DRY PENDENT SPRINKLERS WITHIN COOLER/FREEZER ROOF PANELS. PROVIDE SWING JOINTS AT DROPS ABOVE COOLER CONSTRUCTION TO ALIGN WITH DRY PENDENT SPRINKLER LOCATIONS.
3. ALL SPRINKLERS SHALL BE INSTALLED WITH MANUFACTURER'S WRENCH AND/OR MANUFACTURER REQUIRED METHOD DESIGNATED FOR THAT PARTICULAR SPRINKLER. ANY SPRINKLER INSTALLED WITH OTHER MEANS OR DAMAGED IN ANY MANNER SHALL BE REPLACED AT NO COST TO WALGREENS.
4. THE INSTALLATION OF THE SPRINKLER PIPING ABOVE THE CEILING SHALL NOT RESTRICT THE INSTALLATION OR REMOVAL OF LIGHT FIXTURES, SPEAKERS OR OTHER SIMILAR ITEMS.

FIRE HAZARD CLASSIFICATION INFORMATION

1. THE BULK OF MERCHANDISE IS RECEIVED DETRASHED IN PLASTIC TOTES WITH THE EXCEPTION OF BULK ITEMS SUCH AS PAPER GOODS WHICH ARE RECEIVED IN THEIR ORIGINAL CORRUGATED CARDBOARD BOXES. BULK ITEMS COMPRISE NOT GREATER THAN 10% BY WEIGHT, OF THE DELIVERY.
2. ITEMS RECEIVED IN TOTES ARE IMMEDIATELY PLACED ON SALES FLOOR WITH EXCESS PRODUCT STORED IN THE STOCK ROOM. PLASTIC TOTES ARE EMPTIED, STACKED AND AS A GENERAL RULE, PLACED IN AN EXTERIOR CORRAL FOR RETURN TO THE DISTRIBUTION CENTER UPON THE NEXT STORE DELIVERY. ITEMS THAT CAN NOT BE IMMEDIATELY PLACED ON THE SALES FLOOR ARE ALSO STORED IN THE STOCK ROOM.
3. PRODUCTS STORED ARE CLASS III, WITH MINIMAL EXCEPTIONS OF CLASS IV, SUCH AS LEVEL 2 AEROSOLS AND PRODUCTS CONTAINING GROUP A AND GROUP B PLASTICS.
4. THE BULK OF GROUP A PLASTIC STORED IS PACKAGING AND LIMITED PLASTIC PARTS. THE PERCENTAGE BY WEIGHT OF UNEXPANDED PLASTIC IS LESS THAN 10% WITH NO APPRECIABLE VOLUME OF EXPANDED PLASTICS. IN ACCORDANCE WITH IFC SECTION 2303.7.4 AND FIGURE 2303.7.4 THE PRODUCTS STORED MEET A CLASS IV COMMODITY CLASSIFICATION.
5. COMMODITIES STORED IN HIGH-PILED REMOTE AREA ARE CLASS I THROUGH IV, NON-ENCAPSULATED. SPRINKLER DESIGN IS BASED ON CLASS IV, WORST CASE AS ALL CLASS IV AS DEFINED IN IFC 2303.2 THROUGH 2303.6, IN A MIXED ARRAY.
6. STORAGE CONFIGURATION IS FLOOR SUPPORTED, METAL, SINGLE-ROW OR WALL RACKS WITH METAL SHELVING WITH GREATER THAN 50% OPENINGS ALIGNED WITH AISLES AS DEFINED ON WALGREEN FIXTURE PLAN.
7. NO FORKLIFTS ARE UTILIZED AND ALL STOCK IS HAND PLACED. THE STOCK ROOM IS SECURED AT ALL TIMES AND IS ACCESSIBLE ONLY TO STAFF AND STAFF SUPERVISED VISITORS.

WATER DENSITIES AND SPRINKLER SPECIFICATIONS

GENERAL SALES:
SPRINKLERS IN THE GENERAL SALES AREA SHALL PROVIDE A DENSITY OF 0.20 GPM PER SF CALCULATED OVER THE MOST HYDRAULICALLY DEMANDING 1,500 SF (OR 5 SPRINKLERS MINIMUM) PER NFPA 13, 2007 EDITION, ORDINARY HAZARD GROUP II (FIGURE 11.2.3.2.1.1 & SECTION 11.2.3.2.2.3). SPRINKLERS SHALL BE SERIES ED-11 OR EC-14, 155 F/68C EXTENDED COVERAGE ORDINARY HAZARD RECESSED PENDENT, STYLE 40, IN WHITE POLYESTER FINISH PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP 220. SPRINKLERS SHALL BE SPACED AT A MAXIMUM OF 16 FEET ON CENTER, COORDINATED PER CEILING PLAN.

PHARMACY & PATIENT SEATING:
SPRINKLERS IN THE PHARMACY & PATIENT SEATING AREAS SHALL PROVIDE A DENSITY OF 0.20 GPM PER SF PER NFPA 13, 2007 EDITION, ORDINARY HAZARD GROUP II (FIGURE 11.2.3.2.1.1). SPRINKLERS SHALL BE SERIES TY-FRB, RECESSED, STANDARD COVERAGE (130 SF MAXIMUM SPACING), QUICK RESPONSE, 155F/68C SPRINKLER ESCUTCHEON PLATE SHALL BE WHITE FINISH, PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP171.

SERVICE AREAS & PHOTO:
SPRINKLERS IN SERVICE AREAS SHALL PROVIDE A DENSITY OF 0.10 GPM PER SF PER NFPA 13, 2007 EDITION, LIGHT HAZARD (FIGURE 11.2.3.2.1.1). SPRINKLERS SHALL BE SERIES TY-FRB, RECESSED, STANDARD COVERAGE (225 SF MAXIMUM SPACING), QUICK RESPONSE, 155F/68C SPRINKLER. ESCUTCHEON PLATE SHALL BE WHITE FINISH, PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP 171.

GENERAL STOCK:
SPRINKLERS IN THE GENERAL STOCK AREA SHALL PROVIDE A DENSITY OF 0.33 GPM PER SF CALCULATED OVER THE ENTIRE STOCK AREA, BASED ON NFPA 13, 2007 EDITION, FIGURE 16.2.1.3.2 AND FIGURE 16.2.1.3.2(d) CURVE "G" (0.68 GPM/SF OVER 2,000 SF). DENSITY IS REDUCED PER NFPA 13 FIGURE 16.2.1.3.4.1 TO 0.55 GPM/SF = 80% = 0.346 GPM/SF, ROUNDED UP TO 0.35 GPM/SF.) SPRINKLERS SHALL BE SERIES ELO-231B, STANDARD RESPONSE, 286F/141C BRASS FINISH SPRINKLER PER TYCO FIRE & BUILDING PRODUCTS DATA SHEET TFP 342.

NO IN-RACK SPRINKLERS ARE USED. CEILING SPRINKLER DEFLECTORS SHALL BE LOCATED 1" TO 12" FROM ROOF DECK PER NFPA 13(8.6.4.1.1.1.). A MINIMUM CLEARANCE OF 18" FROM DEFLECTOR TO TOP OF PILE SHALL BE MAINTAINED PER NFPA 13(8.6.6.1.). SPRINKLERS ARE PLACED OVER AISLES.

SPRINKLER HEADS - BASIS OF DESIGN

MANUF.	MODEL	TYPE	RESPONSE	"K"	ORIFICE	NPT	MANUFACTURER SPKR ID #	TEMP.	FINISH	SYMBOL	QTY.	COMMENTS
TYCO	ED-14	EXT. COV. REC. PEND.	STANDARD	14.0	0.70	3/4"	TY5237	155°F	WHITE		53	MAXIMUM SPACING OF 15'-0 BY 15'-0 -- LISTED EQUIVALENT HEADS MAY BE SUBSTITUTED (ADD 2 SPARE HEADS)
TYCO	RF-8	CONCEALED	QUICK	5.6	1/2	1/2"	TY3531	155°F	WHITE		21	LISTED EQUIVALENT HEADS MAY BE SUBSTITUTED (ADD 2 SPARE HEADS)
TYCO	TY-FRB	UPRIGHT	QUICK	5.6	1/2	1/2"	TY3131	200°F	BRASS		89	POSITION DEFLECTOR WITHIN 12" OF DECK -- LISTED EQUIVALENT HEADS MAY BE SUBSTITUTED (ADD 2 SPARE HEADS)
TYCO	ELO-231B	UPRIGHT	STANDARD	11.2	17/32	3/4"	TY5151	286°F	BRASS		13	LISTED EQUIVALENT HEADS MAY BE SUBSTITUTED (ADD 2 SPARE HEADS)
TYCO	RF-8	CONCEALED	QUICK	5.6	1/2	1/2"	TY3531	200°F	WHITE		17	LISTED EQUIVALENT HEADS MAY BE SUBSTITUTED (ADD 2 SPARE HEADS)
TYCO	DS-C	CONCEALED DRY PENDENT	STANDARD	5.6	1/2	1"	TY3666	200°F	CHROME		3	LISTED EQUIVALENT HEADS MAY BE SUBSTITUTED (ADD 2 SPARE HEADS)
												FIELD VERIFY LENGTH BEFORE ORDERING
												*** PER WALGREENS SPEC, WRE THE ONE DRY SPRINKLER TO PIPING ABOVE FREEZER
PROVIDE CABINETS, SPARE HEADS & HEAD WRENCHES FOR EACH HEAD TYPE PER NFPA 13 - EX