Sprinkler Design Data

Project Name:	Example Design Data
Project Street Address:	1234 Main Street, Raleigh, NC 27602
Suite:	
Designed By:	S.E. Berry
Occupancy:	Merchantile/ Storage

	Building D
Bldg. Sq. Ft.:	127,000
Ceiling Height:	18'
Total Bldg. Hgt.:	34'-6"
Floor#:	first
Phone:	919 796-9731
Hazard:	Ordinary Hazard 2/ High Piled Storage

Design Summary

	System #	System #	System #	System #	System #
Design Method	Area/ Density	Special Design	Area/ Density		
System Id. No.	System 1	System 2	System 3		
Location	Sales Floor	Warehouse	Loading Dock		
Type of System	Wet	ESFR	Dry System		
Hazard Class	OH 2	Group IV	OH 2		
Criteria From	Area Density Curve	7-9.5.1.1/cut sheet	Area Density Curve		
Design Area	2500	1200	1950		
K-Factor	8.1	25.2	7.8		
Spacing of heads	12 x 10	10 x 10	12 x 10		
Density	Sprinkler Area	Sprinkler Area	Sprinkler Area		
Hose Allowance	250	250	250		
#Design Sprinklers	21 spks	12 spks	17 spks		
Dry Sys. Vol. in Gal.s			738 gal.		
Reqmts @ Source					
G.P.M. Req'd	568.8 gpm	1345.7 gpm	427.4 gpm		
P.S.I. Req'd	62.8	54.0	59.7		
Safety Factor @ Source					
P.S.I.	14.7 psi	19.8 psi	10.8 psi		

Water Supply Information

Tested by	MR./MRS. P.E	Date/Time	5-24-22 1:00 PM
Hydrant Elevation	220	Flow Hydrant	1299 Main St.
Static	95 psi	Residual	90 psi

Test Hydrant	1234 Main at gate
Pressure Zone	495
Flow	1540 gpm

Copy of Water Test Data Included with Calculation is required

Fire Pump Data

Rated G.P.M.	1500	Rated Pressure	70 psi	Diesel Hp.
Electric Volts	460	Boost Pressure		Discharge Hp.
Residual(psi)	x	Flow(gpm)	x	Combined G.P.M.
Combined Static	x	Combined Residual		Suction Node
				Discharge Node

If Storage is Greater than 12 Feet Complete Commodity Storage Design Information

Commodity Description									
Commodity Class									
Stable/Unstable									

		Density		Height Factor	Clear Factor	Array Factor	Dry Penalty	Design	Minimum Design	Final Design
		Area								
Initial										
Secon -dary										

Figure #	Curve #

Storage Height	Storage Type (Rack,Bin,Pile)
Open/Close Array	Wet/Dry System
	Clearance

CITY OF RALEIGH FIRE DEPARTMENT
FIRE PROTECTION DIVISION
310 WEST MARTIN ST. RALEIGH, NC 27602

DESCRIPTION: SPRINKLER DESIGN DATA

REVISIONS: 5-1-2017

DATE: 5/1/06

DRAWING NO. FP-1