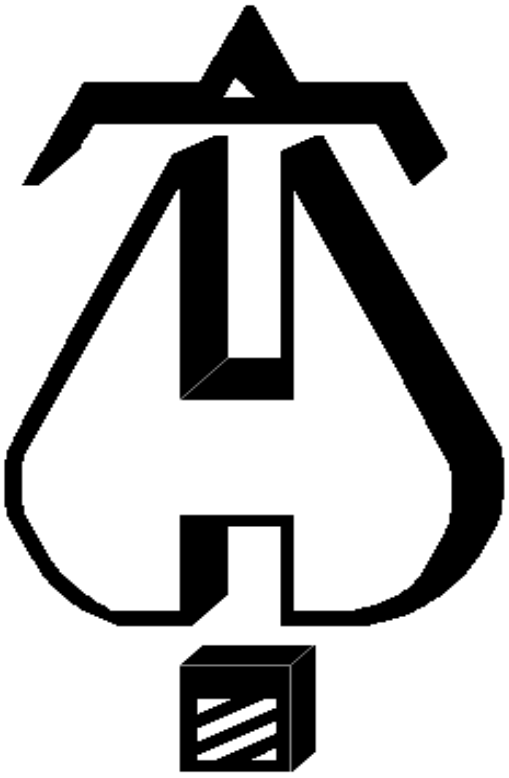

. . . Fire Protection by Computer Design

DEAN & ALLYN, INC.
PO BOX 709
116 LEWISTON ROAD
GRAY, MAINE 04039
207-657-5646

Job Name : UNUM HO1 PC/PRINTER STORAGE ROOM
Building : HO1 ZONE 1 GRD FLOOR PC/PRINTER STORAGE
Location : PORTLAND, MAINE
System : Z1-EH.WX3
Contract : C121125
Data File : UNUM HO1 GROUND Z1-EH.WX3

Hydraulic Design Information Sheet

Name - UNUM HO1 IMPROVEMENTS/RENOVATIONS Date - 02/08/2013
Location - PORTLAND, MAINE
Building - HO1 ZONE 1 GRD FLOOR PC/PRINTER STORAGE System No. - Z1-EH.WX3
Contractor - DEAN & ALLYN, INC. Contract No. - C121125
Calculated By - T. CLARKE Drawing No. -
Construction: ( ) Combustible (X) Non-Combustible Ceiling Height - 9'-4"
Occupancy - PC/PRINTER STORAGE

SYSTEM DESIGN

(X) NFPA 13 ( ) Lt. Haz. Ord.Haz.Gp. ( ) 1 ( ) 2 ( ) 3 (X) Ex.Haz.
( ) NFPA 231 ( ) NFPA 231C ( ) Figure Curve
Other
Specific Ruling Made By Date

Area of Sprinkler Operation	- 2500	System Type	Sprinkler/Nozzle
Density	- 0.20	(X) Wet	Make VIKING
Area Per Sprinkler	- 96	( ) Dry	Model VK300
Elevation at Highest Outlet	- 9'-4"	( ) Deluge	Size 1/2x1/2
Hose Allowance - Inside	- 0	( ) Preaction	K-Factor 5.6
Rack Sprinkler Allowance	- 0	( ) Other	Temp.Rat.155F
Hose Allowance - Outside	- 500		

Note CALC WITH BOOSTER PUMP-26.2 PSI CUSHION

CALCULATION SUMMARY

Flow Required - 1414.8 Press Required - 32.7 AT TEST
C-Factor Used: 120 Overhead 140 Underground

WATER SUPPLY

Water Flow Test:		Pump Data:		Tank or Reservoir:
Date of Test	- SEPT. 2012			Cap. -
Time of Test	-	Rated Cap.	- 750	Elev.-
Static Press	- 67	@ Press	- 50	
Residual Press	- 60	Elev.	- 2	Well
Flow	- 1316			Proof Flow
Elevation	- 2			

Location - HYDRANT #5

Source of Information - BY OWNER

COMMODITY / STORAGE

Commodity N/A Class Location
Storage Ht. Area Aisle W.
Storage Method: Solid Piled % Palletized % Rack

( ) Single Row	( ) Conven. Pallet	( ) Auto. Storage	( ) Encap.	
( ) Double Row	( ) Slave Pallet	( ) Solid Shelf	( ) Non	
( ) Mult. Row		( ) Open Shelf		

Flue Spacing Clearance:Storage to Ceiling
Longitudinal Transverse

Horizontal Barriers Provided:

Fitting Legend

Abbrev.	Name	½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24
Bvca	B Fly Vic 705						6	6	7		8	12	14	16	18	19					
E	NFPA 13 90' Standard Elbow	1	2	2	3	4	5	6	7	8	10	12	14	18	22	27	35	40	45	50	61
F	NFPA 13 45' Elbow	1	1	1	1	2	2	3	3	3	4	5	7	9	11	13	17	19	21	24	28
Fsp	Flow Switch Potter VSR	Fitting generates a Fixed Loss Based on Flow																			
G	NFPA 13 Gate Valve	0	0	1	1	1	1	1	1	1	2	2	3	4	5	6	7	8	10	11	13
H	45' Grvd-Vic Elbow #11	0	0	1	1.5	2	2	3	3	3.5	3.5	4.5	5	6.5	8.5	10	18	20	23	25	30
I	90' Grvd-Vic Elbow #10	0	0	2	3	4	3.5	6	5	8	7	8.5	10	13	17	20	23	25	33	36	40
J	90'Tee-Branch Grv Vic #20	0	0	4.5	6	8	8.5	10.8	13	17	16	21	25	33	41	50	65	78	88	98	120
S	NFPA 13 Swing Check	0	0	5	7	9	11	14	16	19	22	27	32	45	55	65					
T	NFPA 13 90' Flow thru Tee	3	4	5	6	8	10	12	15	17	20	25	30	35	50	60	71	81	91	101	121
Y	Mechanical Tee	2	4	5	6	8	10.5	12.5	15.5	0	22	0	0	0	0	0	0	0	0	0	0
Zac	Ames 2000SS	Fitting generates a Fixed Loss Based on Flow																			

Units Summary

Diameter Units	Inches
Length Units	Feet
Flow Units	US Gallons per Minute
Pressure Units	Pounds per Square Inch

Note: Fitting Legend provides equivalent pipe lengths for fittings types of various diameters. Equivalent lengths shown are standard for actual diameters of Sched 40 pipe and CFactors of 120 except as noted with *. The fittings marked with a * show equivalent lengths values supplied by manufacturers based on specific pipe diameters and CFactors and they require no adjustment. All values for fittings not marked with a * will be adjusted in the calculation for CFactors of other than 120 and diameters other than Sched 40 per NFPA.

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
601B	9.333	5.6	18.37	na	24.0	0.3	80	7.0
601A	9.75		19.17	na				
608B	9.333	5.6	11.76	na	19.2	0.3	64	7.0
608A	9.75		12.61	na				
622B	9.333	5.6	26.45	na	28.8	0.3	96	7.0
622A	9.75		27.65	na				
632B	9.333	5.6	26.45	na	28.8	0.3	96	7.0
632A	9.75		28.29	na				
601	9.75	K = K @ 601A	22.1	na	25.77			
602	9.75	K = K @ 601A	22.14	na	25.79			
603	9.75	K = K @ 601A	22.32	na	25.9			
604	9.75	K = K @ 601A	22.65	na	26.08			
605	9.75	K = K @ 601A	23.22	na	26.41			
606	9.75	K = K @ 601A	24.21	na	26.97			
607	9.75	K = K @ 601A	25.62	na	27.74			
608	9.75	K = K @ 608A	12.79	na	19.33			
609	9.75	K = K @ 608A	12.87	na	19.4			
610	9.75	K = K @ 608A	13.23	na	19.66			
611	9.75	K = K @ 608A	13.88	na	20.14			
612	9.75	K = K @ 608A	15.03	na	20.96			
613	9.75	K = K @ 608A	17.06	na	22.33			
614	9.75	K = K @ 608A	20.02	na	24.19			
615	9.75	K = K @ 601A	22.31	na	25.89			
616	9.75	K = K @ 601A	22.35	na	25.91			
617	9.75	K = K @ 601A	22.53	na	26.02			
618	9.75	K = K @ 601A	22.86	na	26.21			
619	9.75	K = K @ 601A	23.44	na	26.53			
620	9.75	K = K @ 601A	24.44	na	27.1			
621	9.75	K = K @ 601A	25.86	na	27.87			
622	9.75	K = K @ 622A	27.65	na	28.8			
623	9.75	K = K @ 622A	27.67	na	28.81			
624	9.75	K = K @ 622A	27.76	na	28.85			
625	9.75	K = K @ 622A	27.91	na	28.93			
626	9.75	K = K @ 622A	28.17	na	29.07			
627	9.75	K = K @ 622A	28.62	na	29.3			
628	9.75	K = K @ 622A	29.27	na	29.63			
629	9.75	K = K @ 622A	35.58	na	32.67			
630	9.75	K = K @ 622A	35.97	na	32.85			
631	9.75		37.14	na				
632	9.75	K = K @ 632A	35.66	na	32.33			
633	9.75	K = K @ 632A	36.04	na	32.5			
634	9.75	K = K @ 632A	35.69	na	32.35			
635	9.75	K = K @ 632A	36.07	na	32.52			
636	9.75		37.21	na				
666	9.75		38.8	na				
667	9.75		38.81	na				
668	9.75		38.85	na				
657	9.75		31.49	na				
658	9.75		31.51	na				
659	9.75		31.55	na				
660	9.75		31.78	na				
661	9.75		32.01	na				
662	9.75		32.36	na				
663	9.75		33.42	na				
664	9.75		33.87	na				
665	9.5		38.84	na				
673	9.5		40.11	na				

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
678	9.5		42.29	na				
679	9.5		43.44	na				
680	9.75		46.78	na				
TR1	5.833		57.42	na				
BR1	2.0		61.48	na				
PO	2.0		62.54	na				
PI	2.0		45.48	na				
FF	1.0		50.87	na				
UG1	-7.0		57.95	na	500.0			
UG2	-7.0		60.89	na				
UG3	-7.0		62.06	na				
TEST	2.0		59.0	na				

The maximum velocity is 21.08 and it occurs in the pipe between nodes 614 and 659

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
601B	24.00	1.049	1T	5.0	0.417	18.367		K Factor = 5.60
to		120.0		0.0	5.000	-0.181		
601A	24.0	0.1824		0.0	5.417	0.988		Vel = 8.91
	0.0							
	24.00					19.174		K Factor = 5.48
608B	19.20	1.049	1E	2.0	1.583	11.755		K Factor = 5.60
to		120.0	1T	5.0	7.000	-0.181		
608A	19.2	0.1207		0.0	8.583	1.036		Vel = 7.13
	0.0							
	19.20					12.610		K Factor = 5.41
622B	28.80	1.049	1T	5.0	0.417	26.449		K Factor = 5.60
to		120.0		0.0	5.000	-0.181		
622A	28.8	0.2555		0.0	5.417	1.384		Vel = 10.69
	0.0							
	28.80					27.652		K Factor = 5.48
632B	28.80	1.049	1E	2.0	0.917	26.449		K Factor = 5.60
to		120.0	1T	5.0	7.000	-0.181		
632A	28.8	0.2555		0.0	7.917	2.023		Vel = 10.69
	0.0							
	28.80					28.291		K Factor = 5.41
601	25.76	2.157		0.0	7.125	22.099		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
602	25.76	0.0062		0.0	7.125	0.044		Vel = 2.26
602	25.80	2.157		0.0	8.000	22.143		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
603	51.56	0.0225		0.0	8.000	0.180		Vel = 4.53
603	25.89	2.157		0.0	6.875	22.323		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
604	77.45	0.0476		0.0	6.875	0.327		Vel = 6.80
604	26.09	2.157		0.0	7.000	22.650		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
605	103.54	0.0814		0.0	7.000	0.570		Vel = 9.09
605	26.41	2.157		0.0	8.000	23.220		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
606	129.95	0.1239		0.0	8.000	0.991		Vel = 11.41
606	26.97	2.157		0.0	8.000	24.211		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
607	156.92	0.1758		0.0	8.000	1.406		Vel = 13.78
607	27.74	2.157	1T	12.307	12.438	25.617		K Factor @ node 601A
to		120.0		0.0	12.307	0.0		
657	184.66	0.2375		0.0	24.745	5.876		Vel = 16.21

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
	0.0							
	184.66					31.493		K Factor = 32.91
608	19.33	1.682		0.0	7.125	12.786		K Factor @ node 608A
to		120.0		0.0	0.0	0.0		
609	19.33	0.0122		0.0	7.125	0.087		Vel = 2.79
609	19.40	1.682		0.0	8.000	12.873		K Factor @ node 608A
to		120.0		0.0	0.0	0.0		
610	38.73	0.0444		0.0	8.000	0.355		Vel = 5.59
610	19.67	1.682		0.0	6.875	13.228		K Factor @ node 608A
to		120.0		0.0	0.0	0.0		
611	58.4	0.0948		0.0	6.875	0.652		Vel = 8.43
611	20.14	1.682		0.0	7.000	13.880		K Factor @ node 608A
to		120.0		0.0	0.0	0.0		
612	78.54	0.1639		0.0	7.000	1.147		Vel = 11.34
612	20.96	1.682		0.0	8.000	15.027		K Factor @ node 608A
to		120.0		0.0	0.0	0.0		
613	99.5	0.2540		0.0	8.000	2.032		Vel = 14.37
613	22.33	1.682		0.0	8.000	17.059		K Factor @ node 608A
to		120.0		0.0	0.0	0.0		
614	121.83	0.3695		0.0	8.000	2.956		Vel = 17.59
614	24.19	1.682	1T	9.9	12.438	20.015		K Factor @ node 608A
to		120.0		0.0	9.900	0.0		
659	146.02	0.5165		0.0	22.338	11.537		Vel = 21.08
	0.0							
	146.02					31.552		K Factor = 26.00
615	25.89	2.157		0.0	7.125	22.308		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
616	25.89	0.0063		0.0	7.125	0.045		Vel = 2.27
616	25.91	2.157		0.0	8.000	22.353		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
617	51.8	0.0226		0.0	8.000	0.181		Vel = 4.55
617	26.02	2.157		0.0	6.875	22.534		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
618	77.82	0.0480		0.0	6.875	0.330		Vel = 6.83
618	26.21	2.157		0.0	7.000	22.864		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
619	104.03	0.0821		0.0	7.000	0.575		Vel = 9.13
619	26.53	2.157		0.0	8.000	23.439		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
620	130.56	0.1250		0.0	8.000	1.000		Vel = 11.46
620	27.10	2.157		0.0	8.000	24.439		K Factor @ node 601A
to		120.0		0.0	0.0	0.0		
621	157.66	0.1772		0.0	8.000	1.418		Vel = 13.84

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
621	27.87	2.157	1T	12.307	12.438	25.857		K Factor @ node 601A
to		120.0		0.0	12.307	0.0		
660	185.53	0.2395		0.0	24.745	5.927		Vel = 16.29
	0.0							
	185.53					31.784		K Factor = 32.91
622	28.80	2.635		0.0	7.125	27.652		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
623	28.8	0.0029		0.0	7.125	0.021		Vel = 1.69
623	28.81	2.635		0.0	8.000	27.673		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
624	57.61	0.0104		0.0	8.000	0.083		Vel = 3.39
624	28.85	2.635		0.0	6.875	27.756		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
625	86.46	0.0220		0.0	6.875	0.151		Vel = 5.09
625	28.94	2.635		0.0	7.000	27.907		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
626	115.4	0.0376		0.0	7.000	0.263		Vel = 6.79
626	29.06	2.635		0.0	8.000	28.170		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
627	144.46	0.0569		0.0	8.000	0.455		Vel = 8.50
627	29.31	2.635		0.0	8.000	28.625		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
628	173.77	0.0801		0.0	8.000	0.641		Vel = 10.22
628	29.63	2.635	1T	16.474	12.438	29.266		K Factor @ node 622A
to		120.0		0.0	16.474	0.0		
662	203.4	0.1071		0.0	28.912	3.097		Vel = 11.97
	0.0							
	203.40					32.363		K Factor = 35.75
629	32.67	1.682		0.0	12.000	35.584		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
630	32.67	0.0324		0.0	12.000	0.389		Vel = 4.72
630	32.85	1.682		0.0	9.917	35.973		K Factor @ node 622A
to		120.0		0.0	0.0	0.0		
631	65.52	0.1173		0.0	9.917	1.163		Vel = 9.46
631	0.0	1.682	1T	9.9	4.333	37.136		
to		120.0		0.0	9.900	0.0		
666	65.52	0.1173		0.0	14.233	1.669		Vel = 9.46
	0.0							
	65.52					38.805		K Factor = 10.52
632	32.33	1.682		0.0	12.000	35.656		K Factor @ node 632A
to		120.0		0.0	0.0	0.0		
633	32.33	0.0318		0.0	12.000	0.381		Vel = 4.67

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
633	32.51	1.682	1T	9.9	14.250	36.037		K Factor @ node 632A
to		120.0		0.0	9.900	0.0		
667	64.84	0.1150		0.0	24.150	2.777		Vel = 9.36
	0.0							
	64.84					38.814		K Factor = 10.41
634	32.35	1.682		0.0	12.000	35.689		K Factor @ node 632A
to		120.0		0.0	0.0	0.0		
635	32.35	0.0318		0.0	12.000	0.382		Vel = 4.67
635	32.52	1.682		0.0	9.917	36.071		K Factor @ node 632A
to		120.0		0.0	0.0	0.0		
636	64.87	0.1151		0.0	9.917	1.141		Vel = 9.37
636	0.0	1.682	1T	9.9	4.333	37.212		
to		120.0		0.0	9.900	0.0		
668	64.87	0.1151		0.0	14.233	1.638		Vel = 9.37
	0.0							
	64.87					38.850		K Factor = 10.41
666	65.52	4.26		0.0	7.625	38.805		
to		120.0		0.0	0.0	0.0		
667	65.52	0.0012		0.0	7.625	0.009		Vel = 1.47
667	64.83	4.26		0.0	8.000	38.814		
to		120.0		0.0	0.0	0.0		
668	130.35	0.0045		0.0	8.000	0.036		Vel = 2.93
668	64.87	4.26	2H	9.217	63.792	38.850		
to		120.0	2I	18.434	56.619	0.108		
673	195.22	0.0096	1Y	28.968	120.411	1.153		Vel = 4.39
	0.0							
	195.22					40.111		K Factor = 30.82
657	184.66	4.26		0.0	1.917	31.493		
to		120.0		0.0	0.0	0.0		
658	184.66	0.0083		0.0	1.917	0.016		Vel = 4.16
658	0.0	4.26		0.0	4.917	31.509		
to		120.0		0.0	0.0	0.0		
659	184.66	0.0087		0.0	4.917	0.043		Vel = 4.16
659	146.02	4.26		0.0	9.167	31.552		
to		120.0		0.0	0.0	0.0		
660	330.68	0.0253		0.0	9.167	0.232		Vel = 7.44
660	185.52	4.26		0.0	3.917	31.784		
to		120.0		0.0	0.0	0.0		
661	516.2	0.0580		0.0	3.917	0.227		Vel = 11.62
661	0.0	4.26		0.0	6.083	32.011		
to		120.0		0.0	0.0	0.0		
662	516.2	0.0579		0.0	6.083	0.352		Vel = 11.62

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
662	203.40	4.26		0.0	9.917	32.363		
to		120.0		0.0	0.0	0.0		
663	719.6	0.1069		0.0	9.917	1.060		Vel = 16.20
663	0.0	4.26		0.0	4.188	33.423		
to		120.0		0.0	0.0	0.0		
664	719.6	0.1070		0.0	4.188	0.448		Vel = 16.20
664	0.0	4.26	2I	18.434	22.458	33.871		
to		120.0	1H	4.608	23.042	0.108		
665	719.6	0.1069		0.0	45.500	4.865		Vel = 16.20
665	0.0	4.26		0.0	11.854	38.844		
to		120.0		0.0	0.0	0.0		
673	719.6	0.1069		0.0	11.854	1.267		Vel = 16.20
673	195.22	6.357	1J	31.433	60.271	40.111		
to		120.0		0.0	31.433	0.0		
678	914.82	0.0237		0.0	91.704	2.176		Vel = 9.25
678	0.0	6.357	1J	31.433	17.042	42.287		
to		120.0		0.0	31.433	0.0		
679	914.82	0.0237		0.0	48.475	1.151		Vel = 9.25
679	0.0	6.357	1J	31.433	14.229	43.438		
to		120.0	1Bvca	17.603	89.271	0.892		* Fixed loss = 1
680	914.82	0.0237	1Fsp	0.0	103.500	2.455		Vel = 9.25
			1S	40.235				
680	0.0	6.357	12I	150.881	225.833	46.785		
to		120.0		0.0	150.881	1.696		
TR1	914.82	0.0237		0.0	376.714	8.940		Vel = 9.25
TR1	0.0	6.357	1Fsp	0.0	3.833	57.421		
to		120.0	1Bvca	17.603	55.323	2.660		* Fixed loss = 1
BR1	914.82	0.0237	1T	37.72	59.156	1.404		Vel = 9.25
BR1	0.0	6.357	2I	25.147	19.479	61.485		
to		120.0		0.0	25.147	0.0		
PO	914.82	0.0237		0.0	44.626	1.059		Vel = 9.25
	0.0							
	914.82					62.544		K Factor = 115.68
System Demand Pressure						62.544		
Safety Margin						26.226		
Continuation Pressure						88.770		
Pressure @ Pump Outlet						88.770		
Pressure From Pump Curve						-43.290		
Pressure @ Pump Inlet						45.481		
PI	0.0	6.357	2I	25.147	7.250	45.481		
to		120.0	1Zac	0.0	25.147	4.624		* Fixed loss = 4.191
FF	914.82	0.0237		0.0	32.397	0.769		Vel = 9.25

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	******* Notes ******
FF	0.0	6.16	2E	40.168	90.667	50.874		
to		140.0	1T	43.037	83.205	3.465		
UG1	914.82	0.0208		0.0	173.872	3.615		Vel = 9.85
UG1	500.00	8.27	2F	28.468	174.667	57.954		Qa = 500
to		140.0	1G	6.326	90.148	0.0		
UG2	1414.82	0.0111	1T	55.354	264.815	2.940		Vel = 8.45
UG2	0.0	8.27	1T	55.354	50.000	60.894		
to		140.0		0.0	55.354	0.0		
UG3	1414.82	0.0111		0.0	105.354	1.170		Vel = 8.45
UG3	0.0	8.27	1T	55.354	13.167	62.064		
to		140.0	1G	6.326	61.680	-3.898		
TEST	1414.82	0.0111		0.0	74.847	0.831		Vel = 8.45
	0.0							
	1414.82					58.997		K Factor = 184.20

City Water Supply:
- C1 - Static Pressure : 67
- C2 - Residual Pressure: 60
- C2 - Residual Flow : 1316

City Water Adjusted to Pump Inlet for Pf - Elev - Hose Flow
- A1 - Adjusted Static: 61.110
- A2 - Adj Resid : 50.08 @ 750
- A3 - Adj Resid : 38.223 @ 1125

Pump Data:
- P1 - Pump Churn Pressure : 56
- P2 - Pump Rated Pressure : 50
- P2 - Pump Rated Flow : 750
- P3 - Pump Pressure @ Max Flow : 32.5
- P3 - Pump Max Flow : 1125
- City Residual Flow @ 0 = 4461.84
- City Residual Flow @ 20 = 3683.69
- City Water @ 150% of Pump = 61.76

Demand:
- D1 - Elevation : 3.357
- D2 - System Flow : 914.82
- D2 - System Pressure : 62.544
- Hose (Demand) :
- D3 - System Demand : 914.82
- Hose (Adj City) : 500
- Safety Margin : 26.226