

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK



CITY OF PORTLAND

BUILDING PERMIT

This is to certify that
DEAN & ALLYN, INC.
PO BOX 709 - 116 LEWISTON RD
GRAY, ME 04039

For installation at
22 BRAMHALL ST
MAINE MEDICAL CENTER
PAVILION A
5TH FLOOR

Job ID: 2012-08-4605-FAFS

CBL: 053- D-007-001

has permission to renovate sprinkler system

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statues of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of the buildings and structures, and of the application on file in the department.

Notification of inspection and written permission procured before this building or part thereof is lathed or otherwise closed-in. 48 HOUR NOTICE IS REQUIRED.

A final inspection must be completed by owner before this building or part thereof is occupied. If a certificate of occupancy is required, it must be


Fire Prevention Officer

 58
Code Enforcement Officer / Plan Reviewer

THIS CARD MUST BE POSTED ON THE STREET SIDE OF THE PROPERTY
PENALTY FOR REMOVING THIS CARD

BUILDING PERMIT INSPECTION PROCEDURES

Please call 874-8703 or 874-8693 (ONLY)

or email: buildinginspections@portlandmaine.gov

With the issuance of this permit, the owner, builder or their designee is required to provide adequate notice to the city of Portland Inspections Services for the following inspections. Appointments must be requested 48 to 72 hours in advance of the required inspection. The inspection date will need to be confirmed by this office.

- **Please read the conditions of approval that is attached to this permit!! Contact this office if you have any questions.**
- **Permits expire in 6 months. If the project is not started or ceases for 6 months.**
- **If the inspection requirements are not followed as stated below additional fees may be incurred due to the issuance of a "Stop Work Order" and subsequent release to continue.**

Final Fire

The project cannot move to the next phase prior to the required inspection and approval to continue, REGARDLESS OF THE NOTICE OF CIRCUMSTANCES.

IF THE PERMIT REQUIRES A CERTIFICATE OF OCCUPANCY, IT MUST BE PAID FOR AND ISSUED TO THE OWNER OR DESIGNEE BEFORE THE SPACE MAY BE OCCUPIED.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Director of Planning and Urban Development
Jeff Levine

Job ID: 2012-08-4605-FAFS
renovate sprinkler system

For installation at:
22 BRAMHALL ST
MAINE MEDICAL CENTER
PAVILION A
5TH FLOOR

CBL: 053- D-007-001

Conditions of Approval:

Fire

Installation shall be in accordance with NFPA 13. A signed compliance letter will be required.

A separate sprinkler permit is required from the State Fire Marshal's Office.

Sprinkler supervision shall be provided in accordance with NFPA 101, *Life Safety Code*, and NFPA 72, *National Fire Alarm and Signaling Code*.

Sprinkler protection shall be maintained. Where the system is to be shut down for maintenance or repair, the system shall be checked at the end of each day to insure the system has been placed back in service.

The Fire Department will require Knox locking caps on all Fire Department Connections on the exterior of the building.

System acceptance and commissioning must be coordinated with alarm and suppression system contractors and the Fire Department. Call 874-8703 to schedule.

City of Portland, Maine - Building or Use Permit Application

389 Congress Street, 04101 Tel: (207) 874-8703, FAX: (207) 8716

Job No: 2012-08-4605-FAFS	Date Applied: 8/2/2012	CBL: 053- D-007-001	
Location of Construction: 22 BRAMHALL ST - pavillion A - 5 th floor	Owner Name: MAINE MEDICAL CENTER	Owner Address: 22 BRAMHALL ST PORTLAND, ME 04102	Phone:
Business Name:	Contractor Name: DEAN & ALLYN	Contractor Address: P.O. BOX 709 GRAY MAINE 04039	Phone: (207) 657-5646
Lessee/Buyer's Name:	Phone:	Permit Type: FIRE SUPPRESSION SYSTEM	Zone: C-41
Past Use: Hospital - ME MED	Proposed Use: Same: Hospital - to install a fire suppression system in Pavilion A 5 th floor	Cost of Work: \$8,000.00	CEO District:
		Fire Dept: 8/8/12 <input checked="" type="checkbox"/> Approved w/ conditions <input type="checkbox"/> Denied <input type="checkbox"/> N/A	Inspection: Use Group: Type:
		Signature: <i>[Signature]</i> (58)	Signature:
Proposed Project Description: FS on Pavillion A 5th Floor		Pedestrian Activities District (P.A.D.)	
Permit Taken By: Brad		Zoning Approval	

<p>1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.</p> <p>2. Building Permits do not include plumbing, septic or electrical work.</p> <p>3. Building permits are void if work is not started within six (6) months of the date of issuance. False informatin may invalidate a building permit and stop all work.</p>	Special Zone or Reviews <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetlands <input type="checkbox"/> Flood Zone <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan ___ Maj ___ Min ___ MM Date: 08/3/12	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date:	Historic Preservation <input checked="" type="checkbox"/> Not in Dist or Landmark <input type="checkbox"/> Does not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date:
	CERTIFICATION		

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the appication is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE



C-41 extend 8/2/12
13

Water-Based Fire Suppression System Permit

If you or the property owner owes real estate or property taxes or user charges on any property within the city, payment arrangements must be made before permits of any kind are accepted.

A 2012-08-4605-FARS

Installation address: 22 Bram Hall St CBL: 053 D007

Exact location: (within structure) PAVILLION A 5th FL

Type of occupancy(s) (NFPA & ICC): HOSPITAL

Building owner: ME HEALTH / ME MEDICAL

Managing Supervisor (RMS): DANA STEWART License No: 262

Supervisor phone: 207-657-5646 E-mail: DNAARVAEZ@DEANANDALLYN.COM

Installing contractor: DEAN & ALLYN License No: _____

Contractor phone: 657-5646 E-mail: DNAARVAEZ@DEANANDALLYN.COM

The suppression work to be done will be: New: Renovation: Addition to existing system:

This is an amendment to an existing permit: Yes: NO: Permit no: _____

NFPA Standard this system is designed to: 13 Edition: _____

*Non-NFPA systems are not allowed for use within the City of Portland.

RECEIVED
AUG 02 2012
Dept. of Building Inspections
City of Portland Maine

Download a new copy of this document from www.portlandmaine.gov/fire for every submittal. Attach all working documents and complete approved submittals as may be required by the State Fire Marshal's Office on electronic PDF's in addition to full sized plans.

Contractor shall verify location and type of all FDCs shall be approved in writing by the Fire Prevention Bureau.

COST OF WORK:	<u>\$ 8000</u> <u>7,326</u>
PERMIT FEE:	<u>100</u>
(\$10 PER \$1,000 + \$30 FOR THE FIRST \$1,000)	

Submit all information to the Building Inspections Department, 389 Congress Street, Room 315, Portland, Maine 04101.

Prior to acceptance of any fire protection system, a complete commissioning and acceptance test must be coordinated with all fire system contractors and the Fire Department, and proper documentation of such test(s) provided.

All installation(s) must comply with NFPA and the Fire Department Technical Standard(s).

Applicant signature: [Signature] Date: 8/1/12



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Receipts Details:

Tender Information: Check , Check Number: 13082
Tender Amount: 100.00

Receipt Header:

Cashier Id: bsaucier
Receipt Date: 8/2/2012
Receipt Number: 46630

Receipt Details:

Referance ID:	7482	Fee Type:	BP-Constr
Receipt Number:	0	Payment Date:	
Transaction Amount:	100.00	Charge Amount:	100.00
Job ID: Job ID: 2012-08-4605-FAFS - FS on Pavillion A 5th Floor			
Additional Comments: 22 Bramhall			

Thank You for your Payment!



... Fire Protection by Computer Design

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

Job Name : MMC LIBRARY
Drawing : 1 OF 1
Location : PORTLAND, MAINE
Remote Area : WX1
Contract : C121091
Data File : C1091 MMC LIBRARY.WX1

HYDRAULIC CALCULATIONS
for

Project name: MMC LIBRARY
Location: PORTLAND, MAINE
Drawing no: 1 OF 1
Date: 08/01/2012

Design

Remote area number: WX1
Remote area location: 5TH FLOOR-PAVILLION C
Occupancy classification: LIGHT HAZARD
Density: .1 - Gpm/SqFt
Area of application: 1500 - SqFt
Coverage per sprinkler: 148 - SqFt
Type of sprinklers calculated: K=5.6
No. of sprinklers calculated: 17
In-rack demand: 0 - GPM
Hose streams: 100 - GPM
Total water required (including hose streams): 425.375 - GPM @ 100.981 - Psi
Type of system: WET
Volume of dry or preaction system: N/A - Gal

Water supply information

Date:
Location: RICHARDS WING FIRE PUMP
Source:

Name of contractor: DEAN & ALLYN, INC.
Address: PO BOX 709 / 116 LEWISTON ROAD / GRAY, MAINE 04039
Phone number: 207-657-5646
Name of designer: T CLARKE
Authority having jurisdiction: MSFMO

Notes: (Include peaking information or gridded systems here.) WATER SUPPLY INFO IS BASED ON THE FIRE PUMP RATING ONLY, WITH NO CITY SUPPLY ADDED. STATIC PRESSURE FROM CITY SUPPLY IS 65 PSI.

Fittings Used Summary

DEAN & ALLYN, INC.
MMC LIBRARY

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Date 08/01/2012

Fitting Legend		½	¾	1	1¼	1½	2	2½	3	3½	4	5	6	8	10	12	14	16	18	20	24	
Abbrev.	Name																					
B	NFPA 13 Butterfly Valve	0	0	0	0	0	6	7	10	0	12	9	10	12	19	21	0	0	0	0	0	0
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	61
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	121

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.

Pressure / Flow Summary - STANDARD

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Date 08/01/2012

Node No.	Elevation	K-Fact	Pt Actual	Pn	Flow Actual	Density	Area	Press Req.
501	79.5	5.6	7.0	na	14.82	0.1	148	7.0
502	79.5	5.6	7.39	na	15.22	0.1	148	7.0
503	81.5	5.6	9.84	na	17.57	0.1	148	7.0
504	81.5	5.6	8.07	na	15.91	0.1	148	7.0
505	81.5	5.6	8.08	na	15.92	0.1	148	7.0
506	81.5	5.6	8.48	na	16.3	0.1	148	7.0
507	81.5	5.6	9.05	na	16.85	0.1	148	7.0
508	79.5	5.6	9.85	na	17.58	0.1	148	7.0
509	81.5	5.6	9.86	na	17.58	0.1	148	7.0
510	81.5	5.6	11.65	na	19.11	0.1	148	7.0
511	80.5	5.6	11.86	na	19.29	0.1	148	7.0
512	80.5	5.6	11.47	na	18.97	0.1	148	7.0
513	80.5	5.6	12.21	na	19.57	0.1	148	7.0
514	80.5	5.6	20.16	na	25.15	0.1	148	7.0
515	81.5	5.6	14.9	na	21.62	0.1	148	7.0
516	81.5	5.6	16.18	na	22.53	0.1	148	7.0
517	81.5	5.6	31.46	na	31.41	0.1	148	7.0
521	82.5		6.6	na				
522	82.5		7.49	na				
524	82.5		8.32	na				
525	82.5		8.88	na				
507T	82.5		9.14	na				
528	82.5		10.07	na				
529	82.5		11.3	na				
531T	82.5		12.74	na				
532	82.5		12.1	na				
533	82.5		13.51	na				
536	82.5		16.72	na				
538	82.5		34.0	na				
523	82.0		10.49	na				
526	82.0		12.2	na				
527	82.0		13.2	na				
530	82.0		15.24	na				
531	82.0		15.35	na				
534	82.0		18.14	na				
535	82.0		21.1	na				
537	82.0		22.62	na				
539	82.0		37.24	na				
540	82.0		37.26	na				
541	82.0		48.42	na	100.0			
MR	0.0		96.29	na				
PUMP	0.0		100.98	na				

The maximum velocity is 28.11 and it occurs in the pipe between nodes 537 and 540

Final Calculations - Hazen-Williams

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Date 08/01/2012

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	***** Notes *****
501 to 521	14.82	1.049 120.0 0.0747	3E	6.0 0.0 0.0	6.000 6.000 12.000	7.000 -1.299 0.896		K Factor = 5.60 Vel = 5.50
	0.0 14.82					6.597		K Factor = 5.77
502 to 522	15.22	1.049 120.0 0.0785	2E 1T	4.0 5.0 0.0	8.917 9.000 17.917	7.386 -1.299 1.407		K Factor = 5.60 Vel = 5.65
	0.0 15.22					7.494		K Factor = 5.56
503 to 523	17.57	1.049 120.0 0.1024	3E	6.0 0.0 0.0	2.500 6.000 8.500	9.841 -0.217 0.870		K Factor = 5.60 Vel = 6.52
	0.0 17.57					10.494		K Factor = 5.42
504 to 524	15.91	1.049 120.0 0.0852	2E	4.0 0.0 0.0	3.958 4.000 7.958	8.071 -0.433 0.678		K Factor = 5.60 Vel = 5.91
	0.0 15.91					8.316		K Factor = 5.52
505 to 525	15.92	1.049 120.0 0.0853	2E 1T	4.0 5.0 0.0	5.458 9.000 14.458	8.081 -0.433 1.233		K Factor = 5.60 Vel = 5.91
	0.0 15.92					8.881		K Factor = 5.34
506 to 507T	16.30	1.049 120.0 0.0891	1E	2.0 0.0 0.0	10.333 2.000 12.333	8.476 -0.433 1.099		K Factor = 5.60 Vel = 6.05
	0.0 16.30					9.142		K Factor = 5.39
507 to 507T	16.85	1.049 120.0 0.0947	1T	5.0 0.0 0.0	0.500 5.000 5.500	9.054 -0.433 0.521		K Factor = 5.60 Vel = 6.26
	0.0 16.85					9.142		K Factor = 5.57
508 to 528	17.58	1.049 120.0 0.1024	3E	6.0 0.0 0.0	8.792 6.000 14.792	9.851 -1.299 1.515		K Factor = 5.60 Vel = 6.53
	0.0 17.58					10.067		K Factor = 5.54
509 to 529	17.58	1.049 120.0 0.1025	2E 1T	4.0 5.0 0.0	9.250 9.000 18.250	9.859 -0.433 1.871		K Factor = 5.60 Vel = 6.53

Final Calculations - Hazen-Williams

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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 17.58					11.297			K Factor = 5.23	
510 to 531T	19.11	1.049 120.0	1E 1T	2.0 5.0	5.792 7.000	11.646 -0.433			K Factor = 5.60	
	19.11	0.1196		0.0	12.792	1.530			Vel = 7.09	
	0.0 19.11					12.743			K Factor = 5.35	
511 to 531T	19.29	1.049 120.0	2E 1T	4.0 5.0	5.375 9.000	11.861 -0.866			K Factor = 5.60	
	19.29	0.1216		0.0	14.375	1.748			Vel = 7.16	
	0.0 19.29					12.743			K Factor = 5.40	
512 to 532	18.97	1.049 120.0	3E	6.0 0.0	6.625 6.000	11.474 -0.866			K Factor = 5.60	
	18.97	0.1180		0.0	12.625	1.490			Vel = 7.04	
	0.0 18.97					12.098			K Factor = 5.45	
513 to 533	19.57	1.049 120.0	2E 1T	4.0 5.0	8.375 9.000	12.208 -0.866			K Factor = 5.60	
	19.57	0.1250		0.0	17.375	2.172			Vel = 7.26	
	0.0 19.57					13.514			K Factor = 5.32	
514 to 535	25.15	1.049 120.0	1E 1T	2.0 5.0	1.000 7.000	20.163 -0.650			K Factor = 5.60	
	25.15	0.1988		0.0	8.000	1.590			Vel = 9.34	
	0.0 25.15					21.103			K Factor = 5.47	
515 to 536	21.62	1.049 120.0	1E	2.0 0.0	13.000 2.000	14.901 -0.433			K Factor = 5.60	
	21.62	0.1503		0.0	15.000	2.254			Vel = 8.03	
	0.0 21.62					16.722			K Factor = 5.29	
516 to 536	22.53	1.049 120.0	1T	5.0 0.0	1.000 5.000	16.182 -0.433			K Factor = 5.60	
	22.53	0.1622		0.0	6.000	0.973			Vel = 8.36	
	0.0 22.53					16.722			K Factor = 5.51	
517 to 538	31.41	1.049 120.0	1E 1T	2.0 5.0	2.917 7.000	31.457 -0.433			K Factor = 5.60	
	31.41	0.2999		0.0	9.917	2.974			Vel = 11.66	
	0.0									

Final Calculations - Hazen-Williams

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Date 08/01/2012

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	***** Notes *****
	31.41					33.998		K Factor = 5.39
521 to 522	14.82	1.049 120.0		0.0 0.0	12.000 0.0	6.597 0.0		Vel = 5.50
522 to 523	14.82	0.0748		0.0	12.000	0.897		Vel = 5.50
522 to 523	15.22	1.049 120.0	1E 1T	2.0 5.0	3.083 7.000	7.494 0.217		Vel = 11.15
	30.04	0.2760		0.0	10.083	2.783		Vel = 11.15
	0.0 30.04					10.494		K Factor = 9.27
524 to 525	15.91	1.049 120.0		0.0 0.0	6.625 0.0	8.316 0.0		Vel = 5.91
525 to 526	15.91	0.0853		0.0	6.625	0.565		Vel = 5.91
525 to 526	15.92	1.049 120.0	1E 1T	2.0 5.0	3.083 7.000	8.881 0.217		Vel = 11.82
	31.83	0.3073		0.0	10.083	3.099		Vel = 11.82
	0.0 31.83					12.197		K Factor = 9.11
507T to 527	33.15	1.049 120.0	1T	5.0 0.0	6.583 5.000	9.142 0.217		Vel = 12.31
	33.15	0.3314		0.0	11.583	3.839		Vel = 12.31
	0.0 33.15					13.198		K Factor = 9.12
528 to 529	17.58	1.049 120.0		0.0 0.0	12.000 0.0	10.067 0.0		Vel = 6.53
529 to 530	17.58	0.1025		0.0	12.000	1.230		Vel = 6.53
529 to 530	17.58	1.049 120.0	1E 1T	2.0 5.0	3.083 7.000	11.297 0.217		Vel = 13.05
	35.16	0.3694		0.0	10.083	3.725		Vel = 13.05
	0.0 35.16					15.239		K Factor = 9.01
531T to 531	38.40	1.049 120.0	1T	5.0 0.0	0.500 5.000	12.743 0.217		Vel = 14.26
	38.4	0.4349		0.0	5.500	2.392		Vel = 14.26
	0.0 38.40					15.352		K Factor = 9.80
532 to 533	18.97	1.049 120.0		0.0 0.0	12.000 0.0	12.098 0.0		Vel = 7.04
533 to 534	18.97	0.1180		0.0	12.000	1.416		Vel = 7.04
533 to 534	19.57	1.049 120.0	1E 1T	2.0 5.0	3.083 7.000	13.514 0.217		Vel = 14.31
	38.54	0.4378		0.0	10.083	4.414		Vel = 14.31

Final Calculations - Hazen-Williams

DEAN & ALLYN, INC.
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Date 08/01/2012

Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv.	Ln.	Pipe Ftnng's Total	Pt Pe Pf	Pt Pv Pn	*****	Notes	*****
	0.0 38.54									
						18.145			K Factor = 9.05	
536 to 537	44.14	1.049 120.0	1E 1T	2.0 5.0 0.0	3.083 7.000 10.083	16.722 0.217 5.676				Vel = 16.39
	0.0 44.14									
						22.615			K Factor = 9.28	
538 to 539	31.41	1.049 120.0	1E 1T	2.0 5.0 0.0	3.083 7.000 10.083	33.998 0.217 3.023				Vel = 11.66
	0.0 31.41									
						37.238			K Factor = 5.15	
523 to 526	47.60	1.38 120.0		0.0 0.0 0.0	10.000 0.0 10.000	10.494 0.0 1.703				Vel = 10.21
526 to 527	31.83	1.61 120.0		0.0 0.0 0.0	4.833 0.0 4.833	12.197 0.0 1.001				Vel = 12.52
527 to 530	33.15	1.61 120.0		0.0 0.0 0.0	5.167 0.0 5.167	13.198 0.0 2.041				Vel = 17.74
530 to 531	35.16	2.067 120.0		0.0 0.0 0.0	0.583 0.0 0.583	15.239 0.0 0.113				Vel = 14.13
531 to 534	38.40	2.067 120.0		0.0 0.0 0.0	9.417 0.0 9.417	15.352 0.0 2.793				Vel = 17.80
534 to 535	38.54	2.067 120.0		0.0 0.0 0.0	7.042 0.0 7.042	18.145 0.0 2.958				Vel = 21.48
535 to 537	25.14	2.067 120.0		0.0 0.0 0.0	2.958 0.0 2.958	21.103 0.0 1.512				Vel = 23.89
537 to 540	44.15	2.067 120.0	1T	10.0 0.0 0.0	11.208 10.000 21.208	22.615 0.0 14.649				Vel = 28.11
	0.0 293.97									
						37.264			K Factor = 48.16	
539 to 540	31.41	3.068 120.0	1T	15.0 0.0 0.0	0.708 15.000 15.708	37.238 0.0 0.026				Vel = 1.36

Final Calculations - Hazen-Williams

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Hyd. Ref. Point	Qa Qt	Dia. "C" Pf/Ft	Fitting or Eqv. Ln.	Pipe Ftng's Total	Pt Pe Pf	Pt Pv Pn	***** Notes *****
540 to 541	293.96 325.37	3.068 120.0 0.1218	1B 10.0 2E 14.0 1S 16.0 1T 15.0	36.625 55.000 91.625	37.264 0.0 11.158		Vel = 14.12
541 to MR	100.00 425.37	4.026 120.0 0.0532	0.0 0.0 0.0	232.000 0.0 232.000	48.422 35.514 12.349		Qa = 100 Vel = 10.72
MR to PUMP	0.0 425.37	6.065 120.0 0.0072	0.0 0.0 0.0	649.000 0.0 649.000	96.285 0.0 4.696		Vel = 4.72
	0.0 425.37					100.981	K Factor = 42.33

Water Supply Curve (C)

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Pump Data:

P1 - Pump Churn Pressure : 114.4
 P2 - Pump Rated Pressure : 104
 P2 - Pump Rated Flow : 500
 P3 - Pump Pressure @ Max Flow : 67.6
 P3 - Pump Max Flow : 750

Demand:

D1 - Elevation : 34.431
 D2 - System Flow : 325.375
 D2 - System Pressure : 100.981
 Hose (Demand) : 100
 D3 - System Demand : 425.375
 Safety Margin : 6.735

