BLOCK 1170 LOT 18, 18.2/18.3 ADDRESS (SITE) _____ PERMIT NO. 2927-93

CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI and VII

I. IDENTIFICATION

1. Proposed Work-site at: BRICK HOSPITAL 425 JACK MARTIN BLVD
2. Name of Owner in Fee: _____ Tel. (____) _____
   Address _____ (street) (municipality) (zip code)
3. Ownership in Fee: Public _____ Private X
4. Principal Contractor: Allied Fire & Safety
   Address 517 GREENGROVE RD NEPTUNE NJ
   License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____
   Federal Emp. No. 221904087 Social Security No. _____
5. Architect or Engineer _____ Tel. (____) _____
   Address _____
6. Responsible Person In Charge of Work _____ Tel. (____) _____

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	$		
2. Electrical			
3. Plumbing			
4. Fire Protection	46		
5. Other			
6. Subtotal	$		
7. Less 20% for State Plan Review	5 —		
8. Subtotal	$		
9. DCA Training Fee	4 —		
10. Subtotal	$		
11. Cert. of Occupancy	20 —		
12. Other			
13. TOTAL	$ 75 —		

VI. BUILDING/SITE CHARACTERISTICS

	(office use only)
1. Number of Stories	
2. Height of Structure ____ ft.	
3. Area—Largest Floor ____ sq. ft.	
4. Building Area—All Floors ____ sq. ft.	
5. Volume of Structure ____ cu. ft.	
6. Construction Classification	
7. Total Land Area Disturbed ____ sq. ft.	
8. Flood Hazard Zone	
9. Base Flood Elevation ____ ft.	
10. Wetlands yes ____ sq. ft.	
no	
11. Fire Grading	
12. Max. Live Load	
13. Max. Occupancy Load	

II. PROPOSED WORK

	Est. Cost
1. ☐ Minor Work (single trade)	
2. ☐ Small Job ($5,000 and no prior approvals)	
3. ☐ New Building	
4. ☐ Addition	
5. ☐ Alteration	
6. ☐ Fire Protection	
7. ☐ Plumbing	
8. ☐ Electrical	
9. ☐ Asbestos Abatement	
10. ☐ Demolition	
TOTAL COSTS	$ 5000

Sprinkler

OPTIONAL (for office use only)

Plans Rec'd By	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Resubmission Dates Rejection	Re-viewer
TL							
					11/4/94		JL

III. DO YOU WANT: (optional) 1. ☐ Partial Releases 2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL-
1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No of dwelling units:
Before Construction ____
After Construction ____
Net gain or loss ____

B. NON-RESIDENTIAL
1. State Specific Use: Hospital
2. Use Group:
3. Change in Use Group, Indicate Former:

LDS BR 10315025

U.C.C. Form F-100A

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

A. ( ) I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

B. ( )I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

C. ( ) I further certify that I will perform or supervise the following work:
C.1. ( ) Building C.2. ( ) Fire Protection
I further certify that I will perform the following work:
C.3. ( ) Electrical C.4. ( ) Plumbing

D. ( )I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION

(to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

(✓ Check if contractor.

Agent Name ALLIED FIRE & SAFETY EQUIPMENT CO, INC

Address 517 GREEN GROVE ROAD

NEPTUNE NJ 07754

Telephone (908) 922-3399

Signature _____ Date 12/15/93

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL Prelimin. Initial	LOCAL APPROVAL Final Date	COUNTY APPROVAL Prelimin. Initial	COUNTY APPROVAL Final Date	REGIONAL APPROVAL Prelimin. Initial	REGIONAL APPROVAL Final Date	STATE APPROVAL Prelimin. Initial	STATE APPROVAL Final Date	COMMENTS
☐ Planning Board							X	X	
☐ Zoning Board			X	X	X	X	X	X	
☐ Sewer Authority							X	X	
☐ Water Authority							X	X	
☐ Fire Department					X	X	X	X	
☐ Police Department			X	X	X	X	X	X	
☐ Health Department					X	X			
☐ Soil Conservation							X	X	
☐ N.J. Dept. of Community Affairs	X	X	X	X	X	X			
☐ N.J. Department of Transportation	X	X	X	X	X	X			
☐ N.J. Dept. of Environmental Protect.	X	X	X	X	X	X			
☐ Utility Dig No.			X	X	X	X	X	X	
☐ Other									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition		Name of Code & Edition			
Building		Energy		Other	
Electrical		Barrier Free			
Plumbing		Flood Hazard			
Fire Protection		As Built Elevation Cert.			
Mechanical		Other			

X. CERTIFICATES ISSUED (office use only)

			DATE EXPIRED
☐ Temporary Certificate of Occupancy	No.		
☐ Temporary Certificate of Occupancy	No.		
☐ Continued Certificate of Occupancy	No.		
☐ Certificate of Occupancy	No.		
☐ Certificate of Approval	No.		

CONSTRUCTION PERMIT

UNIFORM CONSTRUCTION CODE — NEW JERSEY

Date Issued 2-15-93
Control #
Permit # 2227-93

IDENTIFICATION Block 1170	Lot 18, 18.2 & 18.3
Work Site Location 425 [illegible]	Contractor Allied Fire & Safety
	Address 517 [illegible]
Owner in Fee [illegible]	[illegible]
Address 425 [illegible]	Tele. ( )
	Lic. No. or Bldrs. Reg. No. Exp. Date
Tele. ( )	Federal Emp. No.
	or Social Security No.

is hereby granted permission to perform the following work:

[ ] BUILDING [ ] PLUMBING [ ] OTHER
[ ] ELECTRICAL [✓] FIRE PROTECTION

DESCRIPTION OF WORK: Fire Sprinkler

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work $ 5000

CONSTRUCTION OFFICIAL

PAYMENTS (Office Use Only)	
Building	**0005**
Plumbing	0027**
Electrical	BLOCK 0.00
Fire Protection	40 1170 #
Other	P/R 5 LOT 0.00
Other	18-18.2 .8
DCA Training Fee	4 3 #
Cert. of Occ.	20 FIRE 6.00
Other	PLAN RVW 5.00
Total	75 D.C.A. 4.00
Check No.	# 2287 C/O 0.00
Cash	TOTAL 5.00
Collected By:	

CHECK CHANGE 0023A 02/15/93 75.00 0.00 #:21

U.C.C. Form F-170A

1 WHITE - OFFICE 2 CANARY - TAX ASSESSER 3 PINK - JACKET 4 GOLD - APPLICANT

Existing Hospital

FIRE SUBCODE TECHNICAL SECTION

Date Received
Date Issued 12-15-23
Control #
Permit # 2927-93

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 1170 Lot 18, 18.2 18-3
Work Site Location BRICK HOSPITAL
425 JACK MARTIN BLVD. BRICK, NJ 07024
Owner, in-Fee SAME
Address
Tele. ( )
Contractor Allied Fire & Safety
Address 517 GREEN GROVE ROAD
NEPTUNE NJ 07754
Tele. (908) 922-3399
Lic. No.
Federal Emp. No. 221-904-087 Social Security No.

B. FIRE PROTECTION CHARACTERISTICS

Use Group Present Proposed
Constr. Class. Present Proposed
Heating Systems [ ] New [ ] Existing
Type: [ ] Gas [ ] Oil [ ] Electrical [ ] Solar
[ ] Other
Location:
Total Est. Cost of Fire Prot. Work $ [ ] Other

Sprinklers tied in to Existing Sys

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Plumb. [ ] Elec.
[X] Fire Plans Approved
Date: 12/14/93
Approved by:

SUBCODE APPROVAL:
[ ] CO [ ] CCO [X] CA
Date: 1-4-94
Approved by:

INSPECTIONS: Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Suppression Test			1-4-94	
Fire Alarm Test				
Smoke Test				
Mechanical				
TCO				
Other				
Other				
Other				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

SIGNATURE

D. TECHNICAL SITE DATA

Description of Work

Water Supply Source existing
Method of Valve Supervision
Local Alarm Supervision
Central Supervision
Proprietary Supervision

Flammable Liquid Storage Tanks ( ) Capacity Fuel
Combustible Liquid Storage Tanks ( ) Capacity Fuel
L.P.G. Storage Tanks ( ) Capacity Fuel
L.N.G. Storage Tanks ( ) Capacity Fuel

	Number	FEE (Office Use Only)
Wet Sprinkler Heads	20	46
Dry Sprinkler Heads	—	
TOTAL	20	
Smoke Detectors		
Heat Detectors	N/A	
TOTAL		
Stand Pipes	N/A	
Kitchen Hood Exhaust Systems		
Pre-Engineered Systems		
CO_2 Suppression		
Halon Suppression		
Foam Suppression	N/A	
Dry Chemical		
Wet Chemical		
Gas or Oil Fired Appliance		
OTHER		

Administrative Surcharge $ 46
Paid [ ] Check # Minimum Fee $
Collected by TOTAL FEE $

U.C.C. Form F-140A 1 White=Inspector Copy 2 Canary=Office Copy 3 Pink=Office Copy 4 Gold=Applicant Copy **PRO 105**

ALLIED FIRE & SAFETY EQUIPMENT CO., INC.
517 Green Grove Road
P.O. Box 607
NEPTUNE, NEW JERSEY 07754-0607

(908) 922-3399
FAX (908) 918-8668

LETTER OF TRANSMITTAL

DATE	JOB NO.
12/10/93	3072

ATTENTION: FIRE SUBCode official
RE: BRICK HOSPITAL
425 JACK MARTIN BLVD.

TO BRICKTOWN FIRE INSPECTOR
500 Herbertsville Road
Bricktown, N.J. 08723

WE ARE SENDING YOU ☐ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☒ Prints ☐ Plans ☐ Samples ☐ Specifications
☐ Copy of letter ☐ Change order ☒ hydraulic Calculations

COPIES	DATE	NO.	DESCRIPTION
4	12/3/93	SR1	MAIN LOBBY AREA SPRINKLERS
4	12/10/93	—	Hydraulic Calculations

THESE ARE TRANSMITTED as checked below:

☒ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☐ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____
☐ FOR BIDS DUE _____ 19_____ ☐ PRINTS RETURNED AFTER LOAN TO US

REMARKS Please Call this office with the permit fee's, and return at least one copy of Approved stamped prints and Calculations

Thank You

COPY TO _____

SIGNED: [signature]

If enclosures are not as noted, kindly notify us at once.

S U M M A R Y

O F

H Y D R A U L I C

C A L C U L A T I O N S

F O R

BRICK HOSPITAL (MAIN LOBBY)

RT 549 BRICK N.J

Submitted By

ALLIED FIRE AND SAFETY 517 GREEN GROVE ROAD NEPTUNE NJ 07754

Design Specifications		Water Supply Information		System Demand
Density :	0.100	150.00 psi @	0.00 gpm	76.77 psi
Design Area:	1500.00	120.00 psi @	1000.00 gpm	@
				298.2 gpm
				+ 100.0 gpm Hose

Total Demand: 398.2 gpm @ 76.77 psi

System safety factor: 67.75 psi

Notes: _____

LIUTAS K. JURSKIS, P.E.
CONSULTING ENGINEERS
P.O. BOX 8698 • RED BANK, N.J. 07701
NJ-15429 PA-12317 GA-9288 FLA-41309

List of Fitting Abbreviations
Example: "E2TC" = one Std. Elbow, two Std. Tee , and one Check Va

Code:	Description	Code:	Description	Code:	Description	Code:	Description
A :	Alarm Va	H :	Deluge Val	O :		V :	V.C.Lpl.
B :	Butt'flyVa	I :		P :	P.I.V	W :	
C :	Check Va	J :		Q :		X :	Backflow P
D :	DryPipeVa	K :	Globe Val.	R :	Det.Ck.Va	Y :	Reg.P.Back
E :	Std. Elbow	L :	LongTurnEl	S :		Z :	
F :	45 Elbow	M :	Meter	T :	Std. Tee		
G :	Gate Va	N :		U :			

Calcs By: DF Checked: _____ 12/10/99

Summary of Sprinkler and Hose Flows

Job No: BRICK HOSPITAL (MAIN LOBBY)

Design density: .10

Supplied flow and pressure is based on 76.77 psi available at supply
(144.54 psi is actually available)

Ref. Pt.	PRESSURE Pt	Pv	Pn	K Factor	FLOW Actual	Minimum	Percent Excess	Ref. Pt.
A01	24.05		24.05	5.60	27.4	14.8	85.1%	A01
A02	21.93		21.93	5.60	26.2	14.8	77.0%	A02
A03	19.80		19.80	5.60	24.9	18.2	36.8%	A03
A04	18.01		18.01	5.60	23.8	18.2	30.8%	A04
A05	12.14		12.14	5.60	19.5	18.2	7.1%	A05
A06	10.61		10.61	5.60	18.3	18.2	0.5%	A06
A07	19.61		19.61	5.60	24.8	18.2	36.3%	A07
A08	17.84		17.84	5.60	23.6	18.2	29.7%	A08
A09	12.02		12.02	5.60	19.4	18.2	6.6%	A09
A10	10.51		10.51	5.60	18.2	18.2	0.0%	A10
B01	23.73		23.73	0.00	72.0	72.0	0.0%	B01

WATER CURTAIN

Calcs By: DF Checked:_____ 12/10/93

Ser:*310303* Hypercalc Program by Crowley Design Group, (215)-337-7060

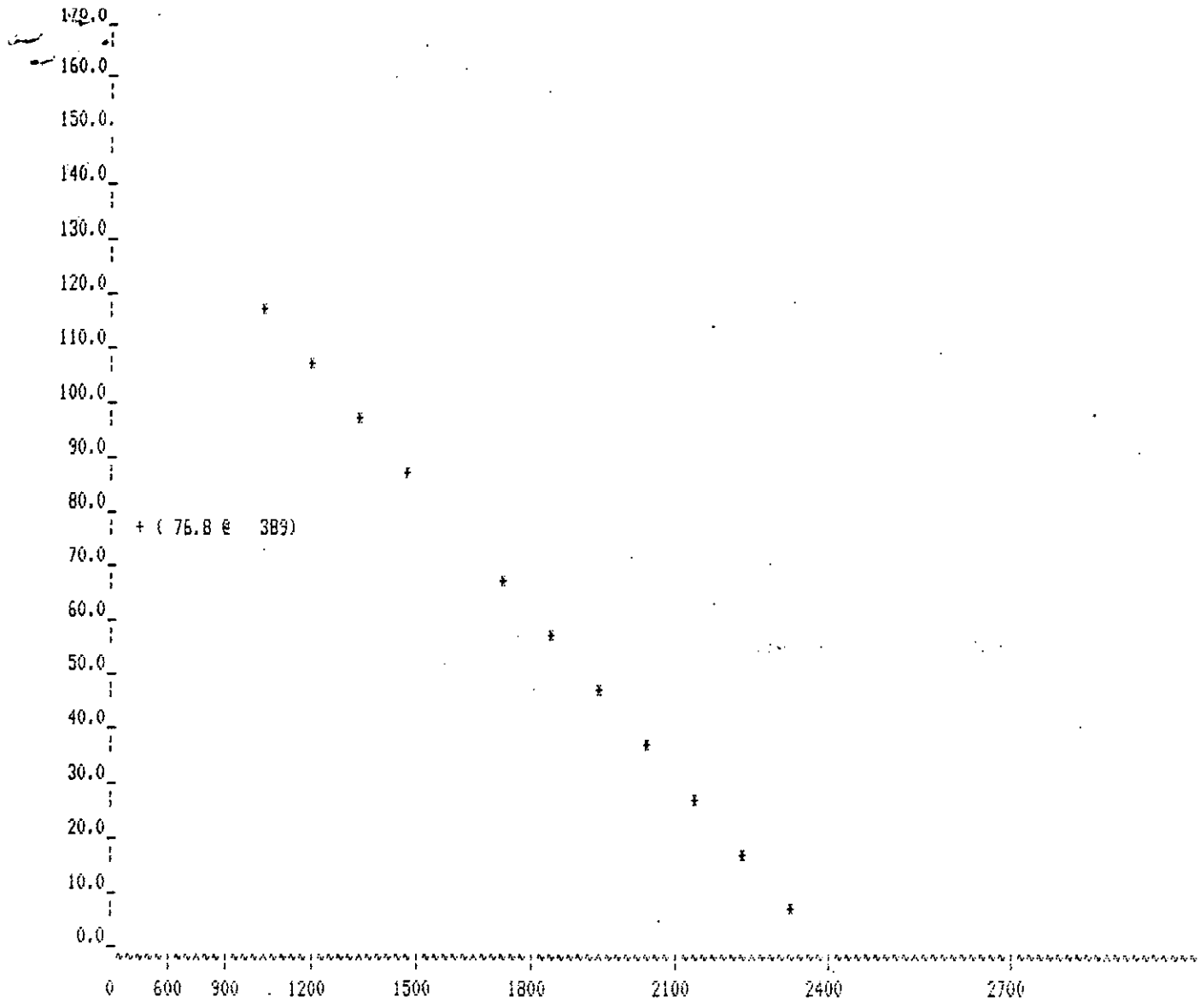
Flow and Pressure Summary

Job No: BRICK HOSPITAL (MAIN LOBBY)

Elev. ft.	REF. POINT		Flow gpm		Pt psi	Pf psi	Pe psi	Pt psi	REF. POINT	Elev. ft.	FRICTION LOSS CALCULATIONS Length	Fitting	Length	Total	Pf/ft	Diam	C	Flow	Velocity fps
0.00	100	>>	298.2	>>	76.77	-0.50	-3.47	72.80	102	8.00	29.00	ACG3ET	139.00	168.00	0.003	6.357	120	298.2	3.0
8.00	102	>>	298.2	>>	72.80	-0.13	-6.08	66.60	104	22.00	14.00	2E	28.00	42.00	0.003	6.357	120	298.2	3.0
22.00	104	>>	298.2	>>	66.60	-1.68	-0.87	64.06	106	24.00	28.00	T3E6	52.00	80.00	0.021	4.260	120	298.2	6.7
24.00	106	>>	298.2	>>	64.06	-0.67	-5.21	58.18	108	36.00	12.00	T	20.00	32.00	0.021	4.260	120	298.2	6.7
36.00	108	>>	298.2	>>	58.18	-10.41	0.00	47.77	110	36.00	105.00	T2E6	30.00	135.00	0.077	3.260	120	298.2	11.4
36.00	110	>>	298.2	>>	47.77	-22.18	0.00	25.59	112	36.00	60.00	T5E	42.00	102.00	0.217	2.635	120	298.2	17.5
36.00	112	>>	244.5	>>	25.59	-1.81	0.00	23.78	114	36.00	6.00	E	6.00	12.00	0.151	2.635	120	244.5	14.3
36.00	112	>>	53.7	>>	25.59	-1.30	0.00	24.29	119	36.00	5.00	T	8.00	13.00	0.100	1.610	120	53.7	8.4
36.00	114	>>	172.5	>>	23.78	-0.63	0.00	23.15	116	36.00	8.00			8.00	0.079	2.635	120	172.5	10.1
36.00	114	>>	72.0	>>	23.78	-0.05	0.00	23.73	B01	36.00	1.00			1.00	0.051	2.067	120	72.0	6.9
36.00	116	>>	86.1	>>	23.15	-0.22	0.00	22.93	118	36.00	10.00			10.00	0.022	2.635	120	86.1	5.0
36.00	116	>>	86.5	>>	23.15	-3.15	0.00	20.00	120	36.00	5.00	T	8.00	13.00	0.243	1.610	120	86.5	13.6
36.00	118	>>	86.1	>>	22.93	-3.12	0.00	19.81	123	36.00	5.00	T	8.00	13.00	0.240	1.610	120	86.1	13.5
36.00	119	>>	27.4	>>	24.29	-0.23	0.00	24.05	A01	36.00	1.00			1.00	0.234	1.049	120	27.4	10.2
36.00	119	>>	26.2	>>	24.29	-2.36	0.00	21.93	A02	36.00	9.00	E	2.00	11.00	0.215	1.049	120	26.2	9.7
36.00	120	>>	61.6	>>	20.00	-1.81	0.00	18.19	121	36.00	14.00			14.00	0.129	1.610	120	61.6	9.7
36.00	120	>>	24.9	>>	20.00	-0.20	0.00	19.80	A03	36.00	1.00			1.00	0.195	1.049	120	24.9	9.2
36.00	121	>>	37.8	>>	18.19	-5.92	0.00	12.27	122	36.00	14.00			14.00	0.423	1.049	120	37.8	14.0
36.00	121	>>	23.8	>>	18.19	-0.18	0.00	18.01	A04	36.00	1.00			1.00	0.179	1.049	120	23.8	8.8
36.00	122	>>	19.5	>>	12.27	-0.12	0.00	12.14	A05	36.00	1.00			1.00	0.125	1.049	120	19.5	7.2
36.00	122	>>	18.3	>>	12.27	-1.65	0.00	10.61	A06	36.00	13.00	E	2.00	15.00	0.110	1.049	120	18.3	6.8
36.00	123	>>	61.3	>>	19.81	-1.79	0.00	18.01	124	36.00	14.00			14.00	0.128	1.610	120	61.3	9.6
36.00	123	>>	24.8	>>	19.81	-0.19	0.00	19.61	A07	36.00	1.00			1.00	0.194	1.049	120	24.8	9.2
36.00	124	>>	37.6	>>	18.01	-5.86	0.00	12.15	125	36.00	14.00			14.00	0.419	1.049	120	37.6	13.9
36.00	124	>>	23.6	>>	18.01	-0.18	0.00	17.84	A08	36.00	1.00			1.00	0.177	1.049	120	23.6	8.8
36.00	125	>>	19.4	>>	12.15	-0.12	0.00	12.02	A09	36.00	1.00			1.00	0.123	1.049	120	19.4	7.2
36.00	125	>>	18.2	>>	12.15	-1.64	0.00	10.51	A10	36.00	13.00	E	2.00	15.00	0.109	1.049	120	18.2	6.7

Calcs By: DF Checked:_____ 12/10/93

Ser:*310303* Hypercalc Program by Crowley Design Group, (215)-337-7060



Pressure vs. Flow

150.00	0.00
120.00	1000.00
0	2386.83

BRICK HOSPITAL (MAIN LOBBY)
RT 549
BRICK N. J

Job Number:
12/10/93

S U M M A R Y

O F

H Y D R A U L I C

C A L C U L A T I O N S

F O R

BRICK HOSPITAL (MAIN LOBBY)

RT 549 BRICK N.J

Submitted By

ALLIED FIRE AND SAFETY 517 GREEN GROVE ROAD NEPTUNE NJ 07754

Design Specifications		Water Supply Information		System Demand
Density :	0.100	150.00 psi @	0.00 gpm	76.77 psi
Design Area:	1500.00	120.00 psi @	1000.00 gpm	@
				298.2 gpm
				+ 100.0 gpm Hose

Total Demand: 398.2 gpm @ 76.77 psi

System safety factor: 67.73 psi

Notes: _____

LIUTAS K. JURSKIS, P.E.
CONSULTING ENGINEERS
P.O. BOX 8698 • RED BANK, N.J. 07701
NJ-15429 PA-12317 GA-9236 FLA-41309

List of Fitting Abbreviations
Example: "E2TC" = one Std. Elbow, two Std. Tee , and one Check Va

Code:	Description	Code:	Description	Code:	Description	Code:	Description
A :	Alarm Va	H :	Deluge Val	O :		V :	Vic.Upl.
B :	Butt'flyVa	I :		P :	P.I.V	W :	
C :	Check Va	J :		Q :		X :	Backflow P
D :	DryPipeVa	K :	Globe Val.	R :	Det.Ck.Val	Y :	Red.P.Back
E :	Std. Elbow	L :	LongTurnEl	S :		Z :	
F :	45 Elbow	M :	Meter	T :	Std. Tee		
G :	Gate Va.	N :		U :			

Calcs By: DF Checked: _____ 12/10/93

Ser:*310303* Hypercalc Program by Crowley Design Group, (215)-337-7060

Summary of Sprinkler and Hose Flows

Job No: BRICK HOSPITAL (MAIN LOBBY)

Design density: .10

Supplied flow and pressure is based on 76.77 psi available at supply
(144.54 psi is actually available)

Ref. Pt.	PRESSURE Pt	Pv	Pn	K Factor	FLOW Actual	Minimum	Percent Excess	Ref. Pt.
A01	24.05		24.05	5.60	27.4	14.8	85.1%	A01
A02	21.93		21.93	5.60	26.2	14.8	77.0%	A02
A03	19.80		19.80	5.60	24.9	18.2	36.8%	A03
A04	18.01		18.01	5.60	23.8	18.2	30.8%	A04
A05	12.14		12.14	5.60	19.5	18.2	7.1%	A05
A06	10.61		10.61	5.60	18.3	18.2	0.5%	A06
A07	19.61		19.61	5.60	24.8	18.2	36.3%	A07
A08	17.84		17.84	5.60	23.6	18.2	29.7%	A08
A09	12.02		12.02	5.60	19.4	18.2	6.6%	A09
A10	10.51		10.51	5.60	18.2	18.2	0.0%	A10
B01	23.73		23.73	0.00	72.0	72.0	0.0%	B01

WATER CURTAIN

Calcs By: DF Checked:_____ 12/10/93

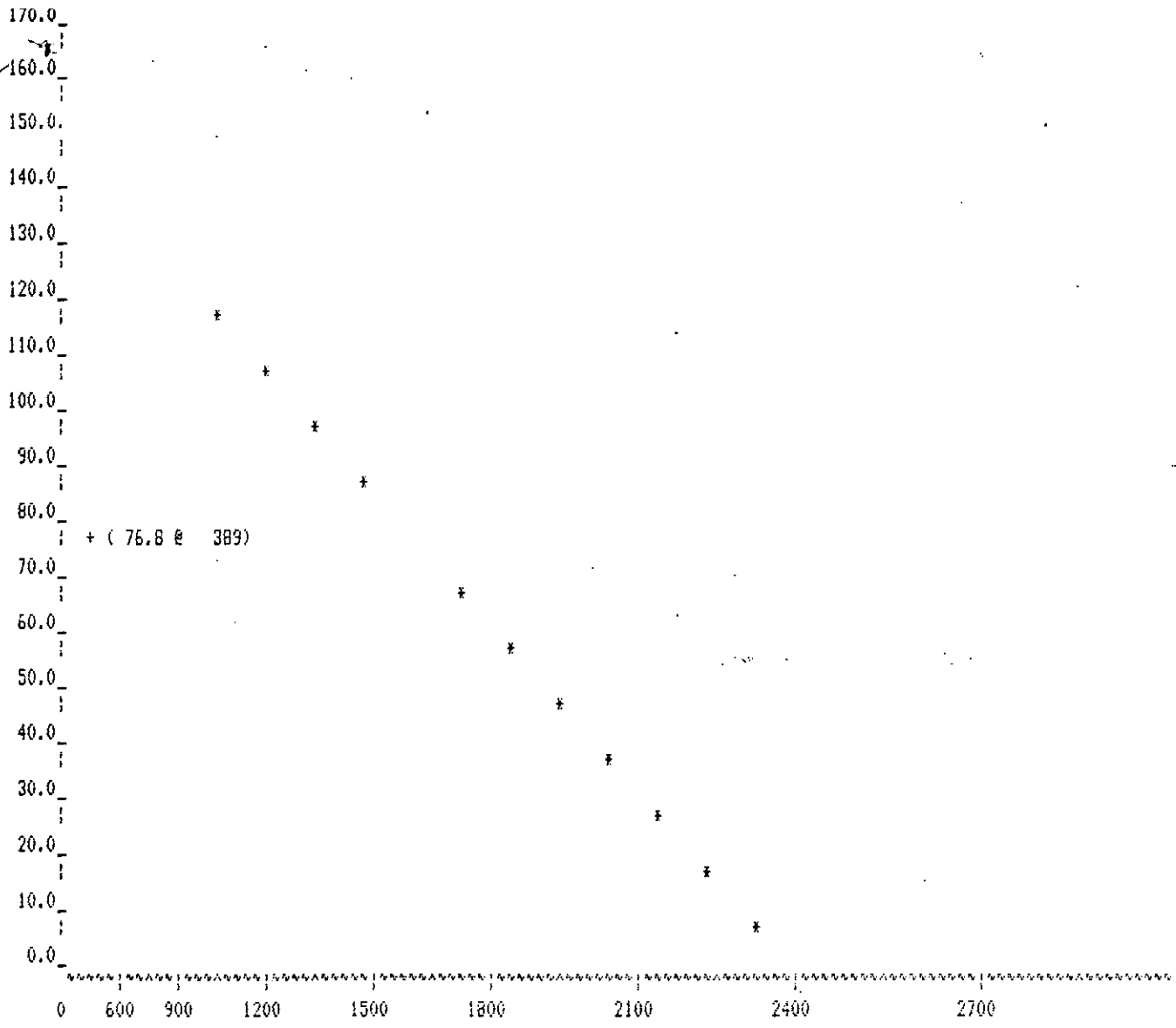
Ser:*310303* Hypercalc Program by Crowley Design Group, (215)-337-7060

Flow and Pressure Summary

Job No: BRICK HOSPITAL (MAIN LOBBY)

Elev. ft.	REF. POINT		Flow gpm		Pt psi	Pf psi	Pe psi	Pt psi	REF. POINT	Elev. ft.	FRICTION LOSS CALCULATIONS Length	Fitting	Length	Total	Pf/ft	Diam	C	Flow	Velocity fps
0.00	100	>>	298.2	>>	76.77	-0.50	-3.47	72.80	102	8.00	29.00	ACG3ET	139.00	168.00	0.003	6.357	120	298.2	3.0
8.00	102	>>	298.2	>>	72.80	-0.13	-6.08	66.60	104	22.00	14.00	2E	28.00	42.00	0.003	6.357	120	298.2	3.0
22.00	104	>>	298.2	>>	66.60	-1.68	-0.87	64.06	106	24.00	28.00	T3E6	52.00	80.00	0.021	4.260	120	298.2	6.7
24.00	106	>>	298.2	>>	64.06	-0.67	-5.21	58.18	108	36.00	12.00	T	20.00	32.00	0.021	4.260	120	298.2	6.7
36.00	108	>>	298.2	>>	58.18	-10.41	0.00	47.77	110	36.00	105.00	T2E6	30.00	135.00	0.077	3.260	120	298.2	11.4
36.00	110	>>	298.2	>>	47.77	-22.18	0.00	25.59	112	36.00	60.00	T5E	42.00	102.00	0.217	2.635	120	298.2	17.5
36.00	112	>>	244.5	>>	25.59	-1.81	0.00	23.78	114	36.00	6.00	E	6.00	12.00	0.151	2.635	120	244.5	14.3
36.00	112	>>	53.7	>>	25.59	-1.30	0.00	24.29	119	36.00	5.00	T	8.00	13.00	0.100	1.610	120	53.7	8.4
36.00	114	>>	172.5	>>	23.78	-0.63	0.00	23.15	116	36.00	8.00			8.00	0.079	2.635	120	172.5	10.1
36.00	114	>>	72.0	>>	23.78	-0.05	0.00	23.73	B01	36.00	1.00			1.00	0.051	2.067	120	72.0	6.9
36.00	116	>>	86.1	>>	23.15	-0.22	0.00	22.93	118	36.00	10.00			10.00	0.022	2.635	120	86.1	5.0
36.00	116	>>	86.5	>>	23.15	-3.15	0.00	20.00	120	36.00	5.00	T	8.00	13.00	0.243	1.610	120	86.5	13.6
36.00	118	>>	86.1	>>	22.93	-3.12	0.00	19.81	123	36.00	5.00	T	8.00	13.00	0.240	1.610	120	86.1	13.5
36.00	119	>>	27.4	>>	24.29	-0.23	0.00	24.05	A01	36.00	1.00			1.00	0.234	1.049	120	27.4	10.2
36.00	119	>>	26.2	>>	24.29	-2.36	0.00	21.93	A02	36.00	9.00	E	2.00	11.00	0.215	1.049	120	26.2	9.7
36.00	120	>>	61.6	>>	20.00	-1.81	0.00	18.19	121	36.00	14.00			14.00	0.129	1.610	120	61.6	9.7
36.00	120	>>	24.9	>>	20.00	-0.20	0.00	19.80	A03	36.00	1.00			1.00	0.195	1.049	120	24.9	9.2
36.00	121	>>	37.8	>>	18.19	-5.92	0.00	12.27	122	36.00	14.00			14.00	0.423	1.049	120	37.8	14.0
36.00	121	>>	23.8	>>	18.19	-0.18	0.00	18.01	A04	36.00	1.00			1.00	0.179	1.049	120	23.8	8.8
36.00	122	>>	19.5	>>	12.27	-0.12	0.00	12.14	A05	36.00	1.00			1.00	0.125	1.049	120	19.5	7.2
36.00	122	>>	18.3	>>	12.27	-1.65	0.00	10.61	A06	36.00	13.00	E	2.00	15.00	0.110	1.049	120	18.3	6.8
36.00	123	>>	61.3	>>	19.81	-1.79	0.00	18.01	124	36.00	14.00			14.00	0.128	1.610	120	61.3	9.6
36.00	123	>>	24.8	>>	19.81	-0.19	0.00	19.61	A07	36.00	1.00			1.00	0.194	1.049	120	24.8	9.2
36.00	124	>>	37.6	>>	18.01	-5.86	0.00	12.15	125	36.00	14.00			14.00	0.419	1.049	120	37.6	13.9
36.00	124	>>	23.6	>>	18.01	-0.18	0.00	17.84	A08	36.00	1.00			1.00	0.177	1.049	120	23.6	8.8
36.00	125	>>	19.4	>>	12.15	-0.12	0.00	12.02	A09	36.00	1.00			1.00	0.123	1.049	120	19.4	7.2
36.00	125	>>	18.2	>>	12.15	-1.64	0.00	10.51	A10	36.00	13.00	E	2.00	15.00	0.109	1.049	120	18.2	6.7

Calcs By: DF Checked: _____ 12/10/93



Pressure vs. Flow

150.00	0.00
120.00	1000.00
0	2386.83

BRICK HOSPITAL (MAIN LOBBY)
RT 549
BRICK N. J

Job Number =
12/10/93

S U M M A R Y

O F

H Y D R A U L I C

C A L C U L A T I O N S

F O R

BRICK HOSPITAL (MAIN LOBBY)

RT 549 BRICK N.J

Submitted By

ALLIED FIRE AND SAFETY 517 GREEN GROVE ROAD NEPTUNE NJ 07754

Design Specifications		Water Supply Information		System Demand
Density :	0.100	150.00 psi @	0.00 gpm	76.77 psi
Design Area:	1500.00	120.00 psi @	1000.00 gpm	@
				298.2 gpm
				+ 100.0 gpm Hose

Total Demand: 398.2 gpm @ 76.77 psi

System safety factor: 67.75 psi

Notes: _____

LIUTAS K. JURSKIS, P.E.
CONSULTING ENGINEERS
P.O. BOX 8698 • RED BANK, N.J. 07701
NJ-15429 PA-12317 GA-9236 FLA-41309

List of Fitting Abbreviations
Example: "E2TC" = one Std. Elbow, two Std. Tee , and one Check Va

Code:	Description	Code:	Description	Code:	Description	Code:	Description
A :	Alarm Va	H :	Deluge Val	O :		V :	Vic.Lpl.
B :	Butt'flyVa	I :		P :	P.I.V	W :	
C :	Check Va	J :		Q :		X :	Backflow P
D :	DryPipeVa	K :	Globe Val.	R :	Det.Ck.Va	Y :	Reg.P.Back
E :	Std. Elbow	L :	LongTurnEl	S :		Z :	
F :	45 Elbow	M :	Meter	T :	Std. Tee		
G :	Gate Va	N :		U :			

Calcs By: DF Checked: _____ 12/10/93

[redacted]mmary of Sprinkler and Hose Flows

Job No: BRICK HOSPITAL (MAIN LOBBY)

Design density: .10

Supplied flow and pressure is based on 76.77 psi available at supply
(144.54 psi is actually available)

Ref. Pt.	PRESSURE Pt	Pv	Pn	K Factor	FLOW Actual	Minimum	Percent Excess	Ref. Pt.
A01	24.05		24.05	5.60	27.4	14.8	85.1%	A01
A02	21.93		21.93	5.60	26.2	14.8	77.0%	A02
A03	19.80		19.80	5.60	24.9	18.2	36.8%	A03
A04	18.01		18.01	5.60	23.8	18.2	30.8%	A04
A05	12.14		12.14	5.60	19.5	18.2	7.1%	A05
A06	10.61		10.61	5.60	18.3	18.2	0.5%	A06
A07	19.61		19.61	5.60	24.8	18.2	36.3%	A07
A08	17.84		17.84	5.60	23.6	18.2	29.7%	A08
A09	12.02		12.02	5.60	19.4	18.2	6.6%	A09
A10	10.51		10.51	5.60	18.2	18.2	0.0%	A10
B01	23.73		23.73	0.00	72.0	72.0	0.0%	B01

WATER CURTAIN

Calcs By: DF Checked:_____ 12/10/93

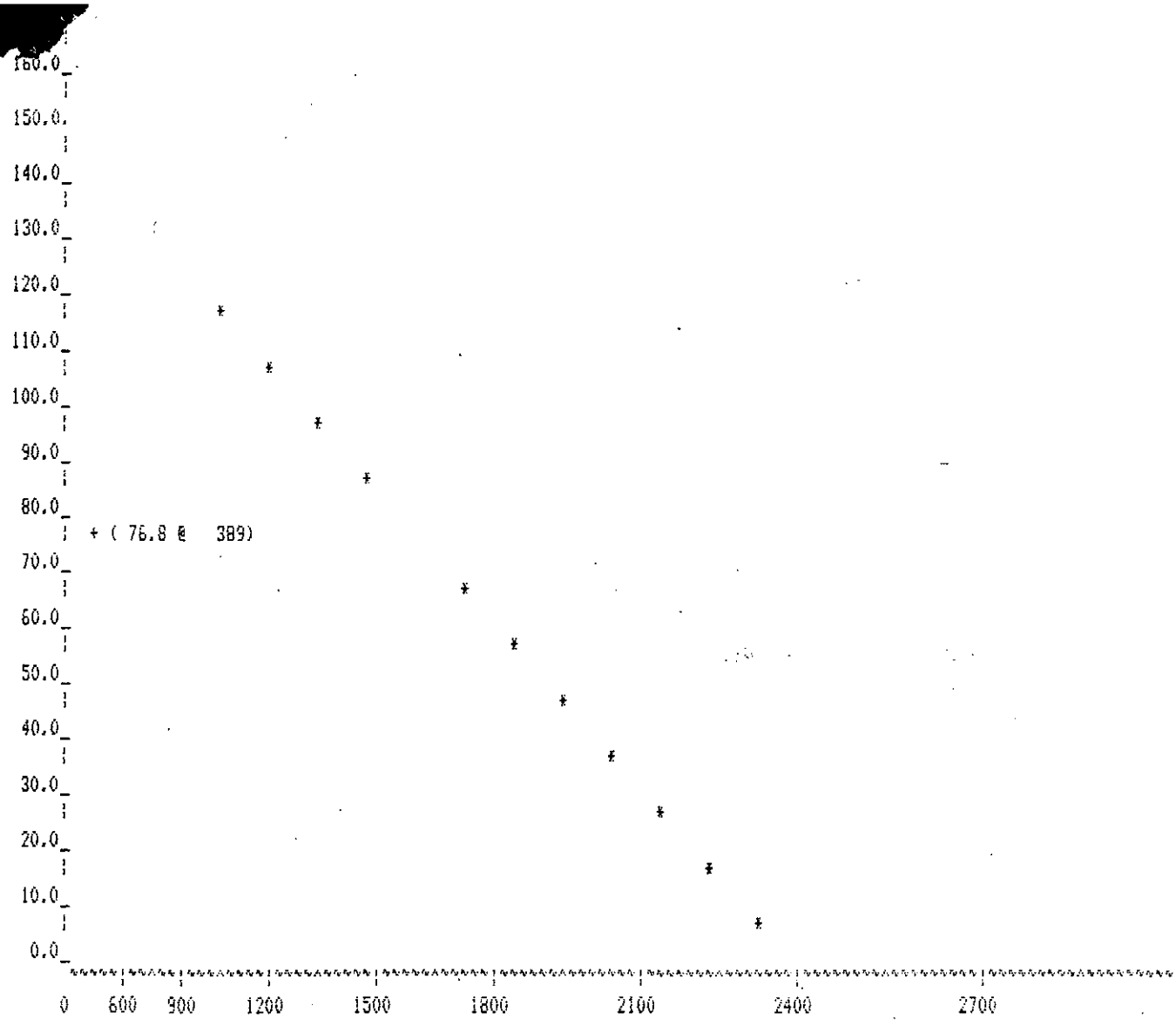
Ser:*310303* Hypercalc Program by Crowley Design Group, (215)-337-7060

Flow and Pressure Summary

Job No: BRICK HOSPITAL (MAIN LOBBY)

Elev. ft.	REF. POINT		Flow gpm	Pt psi	Pf psi	Pe psi	Pt psi	REF. POINT	Elev. ft.	FRICTION LOSS CALCULATIONS Length	Fitting	Length	Total	Pf/ft	Diam	C	Flow	Velocity fps
0.00	100	>>	298.2	>> 76.77	-0.50	-3.47	72.80	102	8.00	29.00	ACG3ET	139.00	168.00	0.003	6.357	120	298.2	3.0
8.00	102	>>	298.2	>> 72.80	-0.13	-6.08	66.60	104	22.00	14.00	2E	28.00	42.00	0.003	6.357	120	298.2	3.0
22.00	104	>>	298.2	>> 66.60	-1.68	-0.87	64.06	106	24.00	28.00	T3EG	52.00	80.00	0.021	4.260	120	298.2	6.7
24.00	106	>>	298.2	>> 64.06	-0.67	-5.21	58.18	108	36.00	12.00	T	20.00	32.00	0.021	4.260	120	298.2	6.7
36.00	108	>>	298.2	>> 58.18	-10.41	0.00	47.77	110	36.00	105.00	T2EG	30.00	135.00	0.077	3.260	120	298.2	11.4
36.00	110	>>	298.2	>> 47.77	-22.18	0.00	25.59	112	36.00	60.00	T5E	42.00	102.00	0.217	2.635	120	298.2	17.5
36.00	112	>>	244.5	>> 25.59	-1.81	0.00	23.78	114	36.00	6.00	E	6.00	12.00	0.151	2.635	120	244.5	14.3
36.00	112	>>	53.7	>> 25.59	-1.30	0.00	24.29	119	36.00	5.00	T	8.00	13.00	0.100	1.610	120	53.7	8.4
36.00	114	>>	172.5	>> 23.78	-0.63	0.00	23.15	116	36.00	8.00			8.00	0.079	2.635	120	172.5	10.1
36.00	114	>>	72.0	>> 23.78	-0.05	0.00	23.73	B01	36.00	1.00			1.00	0.051	2.067	120	72.0	6.9
36.00	116	>>	86.1	>> 23.15	-0.22	0.00	22.93	118	36.00	10.00			10.00	0.022	2.635	120	86.1	5.0
36.00	116	>>	86.5	>> 23.15	-3.15	0.00	20.00	120	36.00	5.00	T	8.00	13.00	0.243	1.610	120	86.5	13.6
36.00	118	>>	86.1	>> 22.93	-3.12	0.00	19.81	123	36.00	5.00	T	8.00	13.00	0.240	1.610	120	86.1	13.5
36.00	119	>>	27.4	>> 24.29	-0.23	0.00	24.05	A01	36.00	1.00			1.00	0.234	1.049	120	27.4	10.2
36.00	119	>>	26.2	>> 24.29	-2.36	0.00	21.93	A02	36.00	9.00	E	2.00	11.00	0.215	1.049	120	26.2	9.7
36.00	120	>>	61.6	>> 20.00	-1.81	0.00	18.19	121	36.00	14.00			14.00	0.129	1.610	120	61.6	9.7
36.00	120	>>	24.9	>> 20.00	-0.20	0.00	19.80	A03	36.00	1.00			1.00	0.195	1.049	120	24.9	9.2
36.00	121	>>	37.8	>> 18.19	-5.92	0.00	12.27	122	36.00	14.00			14.00	0.423	1.049	120	37.8	14.0
36.00	121	>>	23.8	>> 18.19	-0.18	0.00	18.01	A04	36.00	1.00			1.00	0.179	1.049	120	23.8	8.8
36.00	122	>>	19.5	>> 12.27	-0.12	0.00	12.14	A05	36.00	1.00			1.00	0.125	1.049	120	19.5	7.2
36.00	122	>>	18.3	>> 12.27	-1.65	0.00	10.61	A06	36.00	13.00	E	2.00	15.00	0.110	1.049	120	18.3	6.8
36.00	123	>>	61.3	>> 19.81	-1.79	0.00	18.01	124	36.00	14.00			14.00	0.128	1.610	120	61.3	9.6
36.00	123	>>	24.8	>> 19.81	-0.19	0.00	19.61	A07	36.00	1.00			1.00	0.194	1.049	120	24.8	9.2
36.00	124	>>	37.6	>> 18.01	-5.86	0.00	12.15	125	36.00	14.00			14.00	0.419	1.049	120	37.6	13.9
36.00	124	>>	23.6	>> 18.01	-0.18	0.00	17.84	A08	36.00	1.00			1.00	0.177	1.049	120	23.6	8.8
36.00	125	>>	19.4	>> 12.15	-0.12	0.00	12.02	A09	36.00	1.00			1.00	0.123	1.049	120	19.4	7.2
36.00	125	>>	18.2	>> 12.15	-1.64	0.00	10.51	A10	36.00	13.00	E	2.00	15.00	0.109	1.049	120	18.2	6.7

Calcs By: DF Checked: _____ 12/10/93



Pressure vs. Flow

150.00	0.00
120.00	1000.00
0	2386.83

BRICK HOSPITAL (MAIN LOBBY)
RT 549
BRICK N. J

Job Number:
12/10/93