

CITY OF SACRAMENTO

Permit No: 9804168

1231 I Street, Sacramento, CA 95814

Insp Area: 3

Site Address: 1 PACKARD BELL WY SAC

Sub-Type: COM

Parcel No: 0620010018

Housing (Y/N): N

CONTRACTOR

PRO TECH FIRE PROT
5711 FLORIN PERKINS #L1
SACRAMENTO CA 95828

OWNER

UNITED STATES OF AMERICA
8300 FRUITRIDGE RD
SACRAMENTO CA 95826

ARCHITECT

Nature of Work: OVERHEAD FIRE SPRINKLER SYSTEM EXTENSION

CONSTRUCTION LENDING AGENCY: I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name Lender's Address

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class C16 License Number 709152 Date 8/19/98 Contractor Signature Mark Whittaker

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. B & PC for this reason:

Date Owner Signature

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date Applicant/Agent Signature

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

X I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier State Fund Policy Number 002 1971998-0002118

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 8/19/98 Applicant Signature Mark Whittaker

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

**CITY OF SACRAMENTO
APPLICATION FOR BUILDING PERMIT**

**DEVELOPMENT SERVICES DIVISION
PERMIT SERVICES DIVISION**

1231 I Street, Rm. 200
Sacramento, CA 95814 (916) 264-7619 FAX 264-7046

→ Applicant must complete ALL Unshaded areas ←

PC # 6074 AREA # 2

ADDRESS 1 Packard Bell Way Suite Bldg 1 Bay 1
PARCEL # 062-0010-018

<p align="center">CONTACT</p> <p>Name <u>Mike Egge</u> Address _____ Zip _____ Phone <u>388 6254</u> FAX <u>388-5479</u></p>	<p align="center">LICENCED CONTRACTOR Lic No. # <u>709152</u></p> <p>Name <u>Mark Whittaker</u> Pro-Tech Fire Address <u>8540 Younger Creek Dr #2</u> <u>sac</u> Zip <u>95828</u> Phone <u>388-0255</u> FAX <u>388-0487</u></p>
<p align="center">ARCHITECT/ENGINEER</p> <p>Name _____ Address _____ Zip _____ Phone _____ FAX _____</p>	<p align="center">OWNER/TENANT</p> <p>Name <u>Packard Bell</u> Address <u>1 Packard Bell Way</u> Zip _____ Phone _____ FAX _____</p>

→ Will the permittee have any employees on the jobsite? Yes No
→ If yes, WORKER'S COMPENSATION POLICY # State Fund EXPIRATION DATE: 10-1-98

NAME OF INSURANCE COMPANY **RECEIVED**
NATURE OF WORK IN DETAIL: O.H Fire Sprinkler System - Extension
MAY 15 1998 of existing E.S.F.R.
Building Inspection Division

DBA: Packard Bell VALUATION: 7,500

FLOOD STATUS: <u>cond no</u>				S.C.A.T.						
JOB DESCRIPTION		BLDG	SHEL	APT	TI()	REM()	SW	FIRE	ADD	OTH
INSP. DISCIPLINES			BLDG	MECH	PLUMB	ELEC	SITE		FIRE ✓	
# Stories	1st flr Area	Total Area	Use Zone	Occp Group	Const type	Fire Req. Y/N Spr Y Alarm		Fed Code	Vio. File	
B	L	P	M	E	F	S		D	R	

COMMENTS: _____

REGIONAL SANITATION FEES? Yes No HEALTH DEPARTMENT? Yes No

C. C. H.

FEHESFE 1000000 HYDRAULIC ANALYSIS

Date: 06/01/98

FEHESFE

FILE TITLE: RADIANT FLOOR FOR EAST-WEST SPLIT SYS. HIGH BAY
 WATER SUPPLY DATA

SOURCE NODE TAG	STATIC PRESS. (PSI)	RESIDUAL PRESS. (PSI)	FLOW (GPM)	AVAIL. PRESS. @ (PSI)	TOTAL DEMAND (GPM)	REQ'D PRESS. (PSI)
SO1	14.0	25.0	1406.2	24.8	1456.2	5.0

AGGREGATE FLOW ANALYSIS:

TOTAL FLOW AT SOURCE	1456.2 GPM
TOTAL HOSE STREAM ALLOWANCE AT SOURCE	250.0 GPM
OTHER HOSE STREAM ALLOWANCES	0.0 GPM
TOTAL DISCHARGE FROM ACTIVE SPRINKLERS	1206.2 GPM

ISSUED

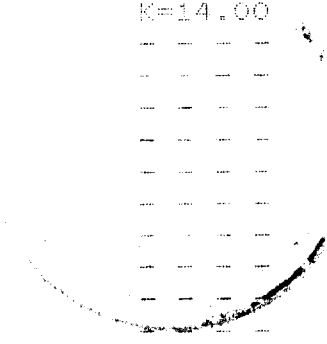
NODE ANALYSIS DATA

NODE TAG	ELEVATION (FT)	NODE TYPE	PRESSURE (PSI)	DISCHARGE (GPM)
1	29.0	--- --	62.8	---
2	28.0	K=14.00	53.5	102.4
3	27.0	K=14.00	51.3	100.3
4	26.0	K=14.00	50.3	99.3
5	25.0	K=14.00	50.0	99.0
6	24.0	--- --	62.8	---
7	23.0	K=14.00	53.7	102.6
8	22.0	K=14.00	51.5	100.4
9	21.0	K=14.00	50.4	99.4
10	20.0	K=14.00	50.1	99.1
11	19.0	--- --	63.6	---
12	18.0	K=14.00	54.2	103.1
13	17.0	K=14.00	52.0	101.0
14	16.0	K=14.00	51.0	99.9
15	15.0	K=14.00	50.7	99.6
16	15.0	--- --	69.6	---
17	15.0	--- --	69.8	---
18	15.0	--- --	70.5	---
TOB	15.0	--- --	94.7	---
BOR	14.0	--- --	98.5	---
TOE-IN	14.0	--- --	98.7	---
LOOP	14.0	--- --	106.1	---
TOBR	14.0	--- --	123.9	---
BOBR	14.0	--- --	133.1	---
251UG	14.0	--- --	134.1	---
P-LEAD	14.0	--- --	135.1	---
P-OUT	14.0	--- --	134.7	---
P-IN	14.0	--- --	2.1	---
TAF	14.0	--- --	4.5	---
SO1	14.0	SOURCE	5.0	1206.2

RECEIVED

MAY 15 1998

Building Inspection Division



Handwritten notes and signatures in the right margin, including a signature that appears to be 'C. C. H.' and some illegible text.

SPRINKLER SYSTEM HYDRAULIC ANALYSIS

Date: 08/10/1986

JOB TITLE: PACKARD BELL BFF TYP EAST-WEST SPLIT SYS. HIGH BAY

PIPE DATA

PIPE TAG	END	ELEV.	NODE	ST	DISC.	Q(GPM)	DIA(IN)	LENGTH	PRESS.	SUM.
	NODES	(FT)	(K)	(PSI)	(GPM)	VEL(FPS)	HW(C)	(FT)	(PSI)	(PSI)
							F.L./FT			
	Pipe: 1					401.0	2.727	PL 17.00	PF	9.2
1		29.0	0.0	22.8	0.0	22.0		120 FTG T	PE	0.0
2		29.0	14.0	57.5	102.4			0.318 TL 29.00	PV	3.3
	Pipe: 2					298.6	2.727	PL 12.00	PF	2.2
2		29.0	14.0	53.5	102.4	16.4		120 FTG ----	PE	0.0
3		29.0	14.0	51.7	100.3			0.184 TL 12.00	PV	1.8
	Pipe: 3					198.3	2.727	PL 12.00	PF	1.0
3		29.0	14.0	51.3	100.3	10.9		120 FTG ----	PE	0.0
4		29.0	14.0	50.3	99.3			0.086 TL 12.00	PV	0.8
	Pipe: 4					99.0	2.727	PL 12.00	PF	0.3
4		29.0	14.0	50.3	99.3	5.4		120 FTG ----	PE	0.0
5		29.0	14.0	50.0	99.0			0.024 TL 12.00	PV	0.2
	Pipe: 5					401.6	2.727	PL 17.00	PF	9.3
6		29.0	0.0	22.9	0.0	22.1		120 FTG T	PE	0.0
7		29.0	14.0	57.7	102.5			0.319 TL 29.00	PV	3.3
	Pipe: 6					299.0	2.727	PL 12.00	PF	2.2
7		29.0	14.0	57.7	102.6	16.4		120 FTG ----	PE	0.0
8		29.0	14.0	51.5	100.4			0.185 TL 12.00	PV	1.8
	Pipe: 7					198.6	2.727	PL 12.00	PF	1.0
8		29.0	14.0	51.5	100.4	10.9		120 FTG ----	PE	0.0
9		29.0	14.0	50.4	99.4			0.087 TL 12.00	PV	0.8
	Pipe: 8					99.1	2.727	PL 12.00	PF	0.3
9		29.0	14.0	50.4	99.4	5.4		120 FTG ----	PE	0.0
10		29.0	14.0	50.1	99.1			0.024 TL 12.00	PV	0.2
	Pipe: 9					403.6	2.727	PL 17.00	PF	9.3
11		29.0	0.0	23.6	0.0	22.2		120 FTG T	PE	0.0
12		29.0	14.0	54.2	103.1			0.322 TL 29.00	PV	3.3
	Pipe: 10					300.5	2.727	PL 12.00	PF	2.2
11		29.0	14.0	54.2	103.1	16.5		120 FTG ----	PE	0.0
13		29.0	14.0	52.0	101.0			0.187 TL 12.00	PV	1.8
	Pipe: 11					199.6	2.727	PL 12.00	PF	1.0
13		29.0	14.0	52.0	101.0	11.0		120 FTG ----	PE	0.0
14		29.0	14.0	51.0	99.9			0.087 TL 12.00	PV	0.8
	Pipe: 12					99.6	2.727	PL 12.00	PF	0.3
14		29.0	14.0	51.0	99.9	5.5		120 FTG ----	PE	0.0
15		29.0	14.0	50.7	99.6			0.024 TL 12.00	PV	0.2
	Pipe: PISNIP-A					-401.0	2.727	PL 4.00	PF	5.1
1		29.0	0.0	22.8	0.0	22.0		120 FTG T	PE	1.7
16		29.0	0.0	22.8	0.0			0.318 TL 16.00	PV	3.3

Date: 06/11/1995

Job TITLE: BACKARD BELL 598 1ST EAST-WEST SPLIT SYS. HIGH BAY
 PIPE DATA (cont.)

PIPE TAG	END	ELEV.	NOI.	PT	Q (GPM)	DIA (IN)	LENGTH	PRESS.	
NODES	(FT)	(K)	(PSI)	(GPM)	VEL (FPS)	HW (C)	(FT)	SUM.	
						F.L./FT		(PSI)	
	Pipe: MAIN-A								
16		25.0	0.0	29.6	0.0	6.4	120 FTG	----	PE 0.0
20		25.0	0.0	69.8	0.0		0.016 TL 12.00		PV 0.3
	Pipe: RISER-B								
6		29.0	0.0	60.9	0.0	22.1	120 FTG	T	PE 1.7
17		25.0	0.0	29.8	0.0		0.319 TL 16.00		PV 3.0
	Pipe: MAIN-B								
17		25.0	0.0	69.8	0.0	12.9	120 FTG	----	PE 0.0
18		25.0	0.0	70.8	0.0		0.057 TL 12.00		PV 1.1
	Pipe: RISER-C								
11		29.0	0.0	67.8	0.0	22.2	120 FTG	T	PE 1.7
21		25.0	0.0	70.8	0.0		0.322 TL 16.00		PV 3.3
	Pipe: BULK								
19		25.0	0.0	70.8	0.0	13.4	120 FTG	4ET	PE 0.0
70F		25.0	0.0	84.7	0.0		0.050 TL 286.00		PV 1.2
	Pipe: RISER								
10F		25.0	0.0	84.7	0.0	13.4	120 FTG	ETDG	PE 9.1
80F		4.0	0.0	85.8	0.0		0.050 TL 95.00		PV 1.2
	Pipe: RISERFEED								
80F		4.0	0.0	98.5	0.0	12.2	120 FTG	2E2T	PE -4.3
71E-IN		14.0	0.0	98.7	0.0		0.040 TL 115.00		PV 1.0
	Pipe: TIE-IN								
71E-IN		14.0	0.0	98.7	0.0	30.4	120 FTG	T	PE 0.0
LOOP		14.0	0.0	106.1	0.0		0.366 TL 20.25		PV 6.2
	Pipe: LOOP-1								
LOOP		14.0	0.0	106.1	0.0	6.2	120 FTG	4ET2B	PE 0.0
70BF		14.0	0.0	133.9	0.0		0.011 TL1566.00		PV 0.3
	Pipe: LOOP-2								
LOOP		14.0	0.0	106.1	0.0	6.0	120 FTG	8ET2B	PE 0.0
70BF		14.0	0.0	133.9	0.0		0.011 TL1677.00		PV 0.2
	Pipe: BLDGRISR								
70BF		14.0	0.0	122.9	0.0	7.2	120 FTG	2ECB	PE 7.8
80BF		4.0	0.0	133.1	0.0		0.011 TL 121.00		PV 0.4
	Pipe: BLDGLEAD								
80BF		4.0	0.0	133.1	0.0	7.6	150 FTG	T	PE 0.0
151UG		4.0	0.0	134.1	0.0		0.008 TL 127.89		PV 0.4
	Pipe: MIDWAYUG								
251UG		4.0	0.0	134.1	0.0	3.4	150 FTG	----	PE 0.0
251EAS		4.0	0.0	135.1	0.0		0.001 TL 950.00		PV 0.1

Date: 06/10/1996

PROJECT: SACCHARI TOWER BLDG FOR EAST-WEST SPLIT SYS. HIGH BAY
 CURR DATA (cont.)

PIPE TAG	END	ELSV. (FT)	NO. (K)	PRST	MISC. (GPM)	Q (GPM)	DIA (IN)	HW (C)	LENGTH (FT)	PRESS. (PSI)	SUB.
	NODES							F.L./FT			
Pipe: PUMPLEAD						-1206.2	10.140	PL	70.00	PF	1.3
P-LEAD	4.1	0.0	175.1	0.0	4.5	120	FTG	6ETCB		PE	-1.7
P-OUT	4.2	0.0	179.1	0.0		0.004	TL	326.00		PV	0.2
Pipe: PUMP											
P-IN	4.1	0.0	175.1	0.0							
P-OUT	4.2	0.0	179.1	0.0							
						Rating:	2500.0	gpm @	140.0	psi	
						Avail.:	1206.1	gpm @	140.0	psi	
						Req'd.:	1206.1	gpm @	132.6	psi	
Pipe: TAP						-1206.2	10.140	PL	85.00	PF	0.7
P-TAP	4.1	0.0	175.1	0.0	4.8	150	FTG	5EG		PE	1.7
P-AP	4.2	0.0	179.1	0.0		0.003	TL	258.77		PV	0.2
Pipe: SOURCE						-1206.2	8.071	PL	1.00	PF	0.5
P-S	4.1	0.0	175.1	0.0	7.6	140	FTG	TG		PE	0.0
P-O	4.2	SRCE	179.1	(N/A)		0.009	TL	52.87		PV	0.4

NOTES:

1. Calculations were performed by the HASS 5.8.0 computer program under license no. 8038521 granted by HRS Systems, Inc. 2190 Peachwood Dr., N.E. Atlanta, GA 30345

2. The system has been balanced to provide an average imbalance at each node of 0.010 gpm and a maximum imbalance at any node of 0.144 gpm.

3. Velocity pressures are printed for information only, and are not used in balancing the system. Maximum water velocity is 30.4 ft/sec at pipe TIE-IN.

4. PIPE FITTINGS TABLE

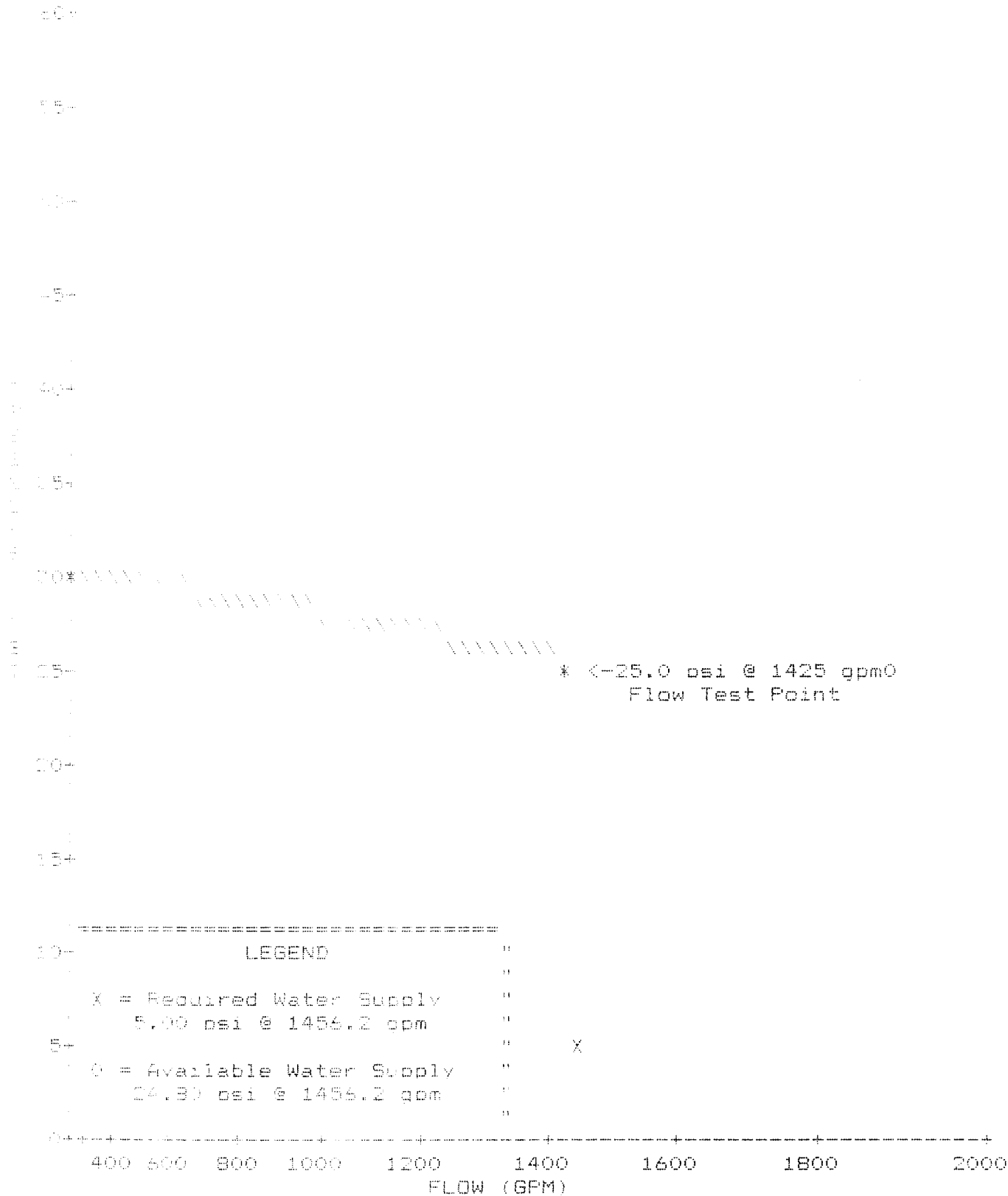
Pipe Table Name: STANDARD.PIP

PAGE: A MATERIAL: S40 HWC: 120

Diameter (in)	Equivalent Fitting Lengths in Feet								
	E Ell	T Tee	L Lng Ell	C ChkVlv	B BfyVlv	G GatVlv	A AlmChk	D DPVlv	
4.026	10.00	20.00	6.00	22.00	12.00	2.00	20.00	10.00	
5.047	12.00	25.00	8.00	27.00	9.00	2.00	21.00	15.00	
6.065	14.00	30.00	9.00	32.00	10.00	3.00	28.00	19.00	
8.071	18.00	35.00	13.00	45.00	12.00	4.00	35.00	27.00	
10.140	22.00	50.00	15.00	55.00	19.00	5.00	40.00	29.00	
12.090	27.00	60.00	18.00	65.00	21.00	6.00	49.00	35.00	

Date: 08/20/1995

LOCATION: HARVARD BELL ESPP - EYE EAST-WEST SPLIT SYS. HIGH BAY
 IN - 18" SUPPLY CURVE



P.C. 6076

SPRINKLER SYSTEM HYDRAULIC ANALYSIS

Date: 06/10/1998

PBEHESFR

JOB TITLE: PACKARD BELL ESFR TYP EAST-WEST SPLIT SYS. HIGH BAY

WATER SUPPLY DATA

SOURCE NODE TAG	STATIC PRESS. (PSI)	RESID. PRESS. (PSI)	FLOW @ (GPM)	AVAIL. PRESS. (PSI)	TOTAL DEMAND (GPM)	REQ'D PRESS. (PSI)
RDC	30.0	25.0	1425.0	24.8	1456.2	5.0

AGGREGATE FLOW ANALYSIS:

TOTAL FLOW AT SOURCE	1456.2 GPM
TOTAL HOSE STREAM ALLOWANCE AT SOURCE	250.0 GPM
OTHER HOSE STREAM ALLOWANCES	0.0 GPM
TOTAL DISCHARGE FROM ACTIVE SPRINKLERS	1206.2 GPM

NODE ANALYSIS DATA

NODE TAG	ELEVATION (FT)	NODE TYPE	PRESSURE (PSI)	DISCHARGE (GPM)
1	29.0	- - - -	62.8	- - -
2	29.0	K=14.00	53.5	102.4
3	29.0	K=14.00	51.3	100.3
4	29.0	K=14.00	50.3	99.3
5	29.0	K=14.00	50.0	99.0
6	29.0	- - - -	62.9	- - -
7	29.0	K=14.00	53.7	102.6
8	29.0	K=14.00	51.5	100.4
9	29.0	K=14.00	50.4	99.4
10	29.0	K=14.00	50.1	99.1
11	29.0	- - - -	63.6	- - -
12	29.0	K=14.00	54.2	103.1
13	29.0	K=14.00	52.0	101.0
14	29.0	K=14.00	51.0	99.9
15	29.0	K=14.00	50.7	99.6
16	25.0	- - - -	69.6	- - -
17	25.0	- - - -	69.8	- - -
18	25.0	- - - -	70.5	- - -
TOR	25.0	- - - -	84.7	- - -
BOF	4.0	- - - -	98.5	- - -
TIE-IN	14.0	- - - -	98.7	- - -
LOOP	14.0	- - - -	106.1	- - -
TOBR	14.0	- - - -	123.9	- - -
BOBR	-4.0	- - - -	133.1	- - -
251UG	-4.0	- - - -	134.1	- - -
F-LEAD	-4.0	- - - -	135.4	- - -
F-OUT	0.0	- - - -	134.7	- - -
F-IN	0.0	- - - -	2.1	- - -
TAP	-4.0	- - - -	4.5	- - -
RDC	-4.0	SOURCE	5.0	1206.2

RECEIVED

MAY 15 1998

Building Inspection Division

ISSUED

AUG 13 1998

CITY OF SACRAMENTO
DEVELOPMENT SERVICES DIV.

SPRINKLER SYSTEM HYDRAULIC ANALYSIS

Date: 05/10/1994

JOB TITLE: PACKARD BELL ESFR TYP EAST-WEST SPLIT SYS. HIGH BAY

PIPE DATA

PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q(GPM)	DIA(IN)	LENGTH	PRESS.	SUM.
NODES	(FT)	(K)	(PSI)	(GPM)	VEL(FPS)	HW(C)	(FT)	(PSI)		
						F.L./FT				
	Pipe: 1					401.0	2.727	PL 17.00	PF	9.2
1		29.0	0.0	62.8	0.0	22.0	120	FTG T	PE	0.0
2		29.0	14.0	53.5	102.4		0.318	TL 29.00	PV	3.3
	Pipe: 2					298.6	2.727	PL 12.00	PF	2.2
2		29.0	14.0	53.5	102.4	16.4	120	FTG ----	PE	0.0
3		29.0	14.0	51.3	100.3		0.184	TL 12.00	PV	1.8
	Pipe: 3					198.3	2.727	PL 12.00	PF	1.0
3		29.0	14.0	51.3	100.3	10.9	120	FTG ----	PE	0.0
4		29.0	14.0	50.3	99.3		0.086	TL 12.00	PV	0.8
	Pipe: 4					99.0	2.727	PL 12.00	PF	0.3
4		29.0	14.0	50.3	99.3	5.4	120	FTG ----	PE	0.0
5		29.0	14.0	50.0	99.0		0.024	TL 12.00	PV	0.2
	Pipe: 5					401.6	2.727	PL 17.00	PF	9.3
5		29.0	0.0	62.9	0.0	22.1	120	FTG T	PE	0.0
6		29.0	14.0	53.7	102.6		0.319	TL 29.00	PV	3.3
	Pipe: 6					299.0	2.727	PL 12.00	PF	2.2
6		29.0	14.0	53.7	102.6	16.4	120	FTG ----	PE	0.0
7		29.0	14.0	51.5	100.4		0.185	TL 12.00	PV	1.8
	Pipe: 7					198.6	2.727	PL 12.00	PF	1.0
7		29.0	14.0	51.5	100.4	10.9	120	FTG ----	PE	0.0
8		29.0	14.0	50.4	99.4		0.087	TL 12.00	PV	0.8
	Pipe: 8					99.1	2.727	PL 12.00	PF	0.3
8		29.0	14.0	50.4	99.4	5.4	120	FTG ----	PE	0.0
10		29.0	14.0	50.1	99.1		0.024	TL 12.00	PV	0.2
	Pipe: 9					403.6	2.727	PL 17.00	PF	9.3
11		29.0	0.0	63.6	0.0	22.2	120	FTG T	PE	0.0
12		29.0	14.0	54.2	103.1		0.322	TL 29.00	PV	3.3
	Pipe: 10					300.5	2.727	PL 12.00	PF	2.2
12		29.0	14.0	54.2	103.1	16.5	120	FTG ----	PE	0.0
13		29.0	14.0	52.0	101.0		0.187	TL 12.00	PV	1.8
	Pipe: 11					199.6	2.727	PL 12.00	PF	1.0
13		29.0	14.0	52.0	101.0	11.0	120	FTG ----	PE	0.0
14		29.0	14.0	51.0	99.9		0.087	TL 12.00	PV	0.8
	Pipe: 12					99.6	2.727	PL 12.00	PF	0.3
14		29.0	14.0	51.0	99.9	5.5	120	FTG ----	PE	0.0
15		29.0	14.0	50.7	99.6		0.024	TL 12.00	PV	0.2
	Pipe: RISNIP-A					-401.0	2.727	PL 4.00	PF	5.1
1		29.0	0.0	62.8	0.0	22.0	120	FTG T	PE	1.7
16		29.0	0.0	69.5	0.0		0.318	TL 16.00	PV	3.3

SPRINKLER SYSTEM HYDRAULIC ANALYSIS

Date: 05/10/1996

JOB TITLE: PACKARD BELL ESFR TYP EAST-WEST SPLIT SYS. HIGH BAY

PIPE DATA (cont.)

PIPE TAG	END	ELEV.	NOZ.	PT	DISC.	Q(GPM)	DIA(IN)	LENGTH	PRESS.
	NODES	(FT)	(K)	(PSI)	(GPM)	VEL(FPS)	HW(C)	(FT)	SUM.
							F.L./FT		(PSI)
	Pipe: MAIN-A					-401.0	5.047	PL 12.00	PF 0.2
16		25.0	0.0	69.6	0.0	6.4	120	FTG ----	PE 0.0
17		25.0	0.0	69.8	0.0		0.016	TL 12.00	PV 0.3
	Pipe: RISNIP-B					-401.6	2.727	PL 4.00	PF 5.1
16		29.0	0.0	62.9	0.0	22.1	120	FTG T	PE 1.7
17		25.0	0.0	69.8	0.0		0.319	TL 16.00	PV 3.3
	Pipe: MAIN-B					-802.6	5.047	PL 12.00	PF 0.7
17		25.0	0.0	69.8	0.0	12.9	120	FTG ----	PE 0.0
16		25.0	0.0	70.5	0.0		0.057	TL 12.00	PV 1.1
	Pipe: RISNIP-C					-403.6	2.727	PL 4.00	PF 5.2
11		29.0	0.0	63.6	0.0	22.2	120	FTG T	PE 1.7
18		25.0	0.0	70.5	0.0		0.322	TL 16.00	PV 3.3
	Pipe: BULK					-1206.2	6.065	PL 200.00	PF 14.2
18		25.0	0.0	70.5	0.0	13.4	120	FTG 4ET	PE 0.0
TOP		25.0	0.0	84.7	0.0		0.050	TL 286.00	PV 1.2
	Pipe: RISER					-1206.2	6.065	PL 16.00	PF 4.7
TOP		25.0	0.0	84.7	0.0	13.4	120	FTG ETCG	PE 9.1
BOF		4.0	0.0	98.5	0.0		0.050	TL 95.00	PV 1.2
	Pipe: RISRFEED					-1206.2	6.357	PL 27.00	PF 4.6
BOF		4.0	0.0	98.5	0.0	12.2	120	FTG 2E2T	PE -4.3
TIE-IN		14.0	0.0	98.7	0.0		0.040	TL 115.00	PV 1.0
	Pipe: TIE-IN					-1206.2	4.026	PL 0.25	PF 7.4
TIE-IN		14.0	0.0	98.7	0.0	30.4	120	FTG T	PE 0.0
LOOP		14.0	0.0	106.1	0.0		0.366	TL 20.25	PV 6.2
	Pipe: LOOP-1					-614.3	6.357	PL1460.00	PF 17.8
LOOP		14.0	0.0	106.1	0.0	6.2	120	FTG 4ET2B	PE 0.0
TOBR		14.0	0.0	123.9	0.0		0.011	TL1566.00	PV 0.3
	Pipe: LOOP-2					-592.0	6.357	PL1515.00	PF 17.8
LOOP		14.0	0.0	106.1	0.0	6.0	120	FTG 8ET2B	PE 0.0
TOBR		14.0	0.0	123.9	0.0		0.011	TL1677.00	PV 0.2
	Pipe: BLDGRISR					-1206.2	8.249	PL 28.00	PF 1.3
TOBR		14.0	0.0	123.9	0.0	7.2	120	FTG 2ECB	PE 7.8
BOBR		-4.0	0.0	133.1	0.0		0.011	TL 121.00	PV 0.4
	Pipe: BLDGLEAD					-1206.2	8.071	PL 75.00	PF 1.0
BOBR		-4.0	0.0	133.1	0.0	7.6	150	FTG T	PE 0.0
251UG		-4.0	0.0	134.1	0.0		0.008	TL 127.89	PV 0.4
	Pipe: MIDWAYUG					-1206.2	12.090	PL 850.00	PF 1.0
251UG		-4.0	0.0	134.1	0.0	3.4	150	FTG ----	PE 0.0
R-LEAD		-4.0	0.0	135.1	0.0		0.001	TL 850.00	PV 0.1

Date: 06/10/1996

JOB TITLE: PACKARD BELL ESFR TYP EAST-WEST SPLIT SYS. HIGH BAY

PIPE DATA (cont.)

PIPE TAG	Q(GPM)	DIA(IN)	LENGTH	PRESS.
END	VEL(FPS)	HW(C)	(FT)	SUM.
NODES	(FT)	(K)	(PSI)	(GPM)
				F.L./FT
				(PSI)
Pipe: PUMPLEAD	-1206.2	10.140	PL 70.00	PF 1.3
P-LEAD	-4.0	0.0	135.1 0.0 4.8	120 FTG 6ETCB PE -1.7
P-OUT	0.0	0.0	134.7 0.0	0.004 TL 326.00 PV 0.2
Pipe: PUMP			FIRE PUMP	Rating: 2500.0 gpm @ 140.0 psi
P-IN	0.0	0.0	2.1 0.0	Avail.: 1206.1 gpm @ 140.0 psi
P-OUT	0.0	0.0	134.7 0.0	Req'd.: 1206.1 gpm @ 132.6 psi
Pipe: TAP	-1206.2	10.140	PL 85.00	PF 0.7
P-IN	0.0	0.0	2.1 0.0 4.8	150 FTG 5EG PE 1.7
TAP	-4.0	0.0	4.5 0.0	0.003 TL 258.77 PV 0.2
Pipe: SOURCE	-1206.2	8.071	PL 1.00	PF 0.5
TAP	-4.0	0.0	4.5 0.0 7.6	140 FTG TG PE 0.0
POC	-4.0	SRCE	5.0 (N/A)	0.009 TL 52.87 PV 0.4

NOTES:

- (1) Calculations were performed by the HASS 5.8.0 computer program under license no. 503D827 granted by HRS Systems, Inc. 2193 Ranchwood Dr., N.E. Atlanta, GA 30345
- (2) The system has been balanced to provide an average imbalance at each node of 0.010 gpm and a maximum imbalance at any node of 0.144 gpm.
- (3) Velocity pressures are printed for information only, and are not used in balancing the system. Maximum water velocity is 30.4 ft/sec at pipe TIE-IN.

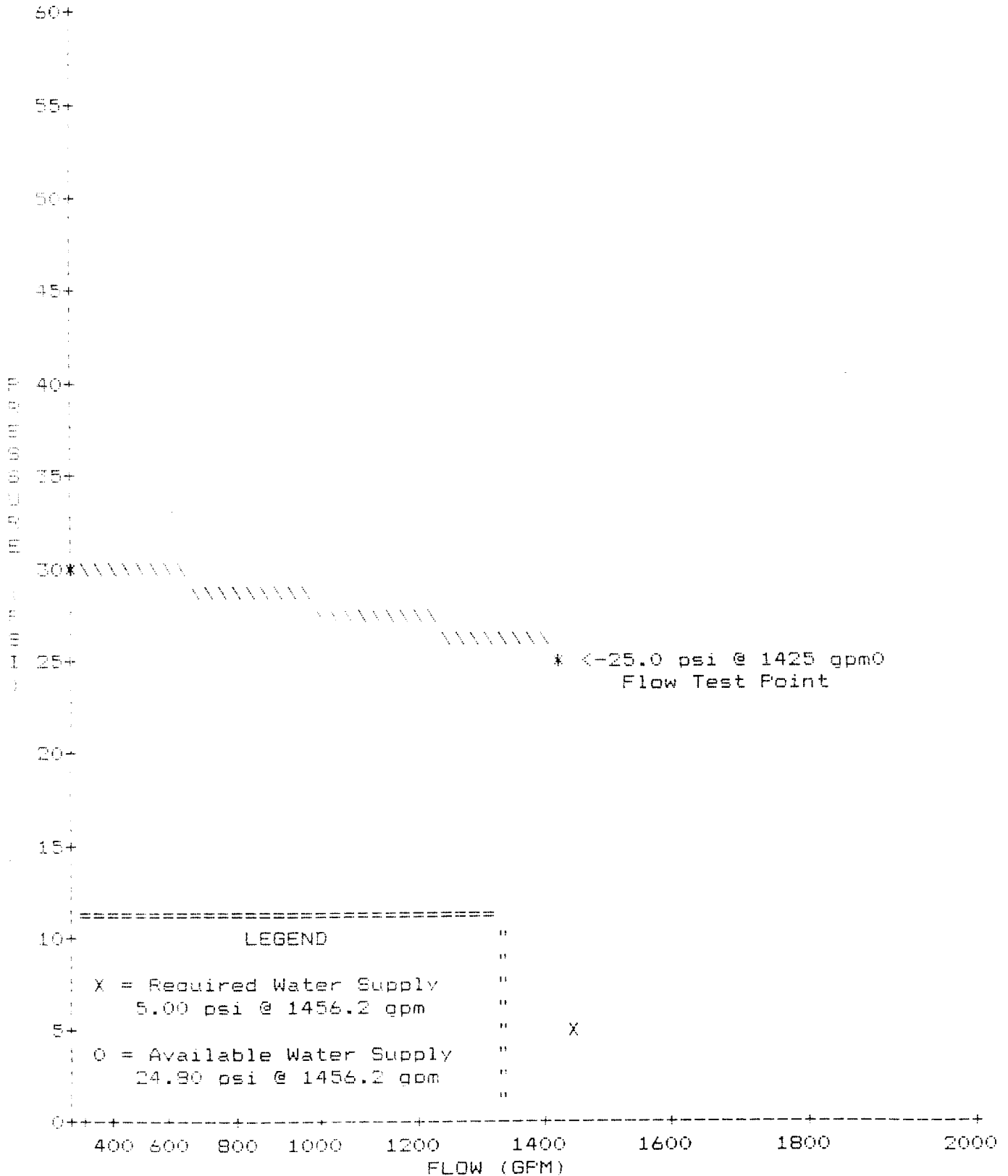
(4) PIPE FITTINGS TABLE

Pipe Table Name: STANDARD.PIP

PAGE: A Diameter (in)	MATERIAL: S40 HWC: 120 Equivalent Fitting Lengths in Feet							
	E El1	T Tee	L LnqEl1	C ChkV1v	B BfyV1v	G GatV1v	A AlmChk	D DPV1v
4.026	10.00	20.00	6.00	22.00	12.00	2.00	20.00	10.00
5.047	12.00	25.00	8.00	27.00	9.00	2.00	21.00	15.00
6.065	14.00	30.00	9.00	32.00	10.00	3.00	28.00	19.00
8.071	18.00	35.00	13.00	45.00	12.00	4.00	35.00	27.00
10.140	22.00	50.00	16.00	55.00	19.00	5.00	40.00	29.00
12.090	27.00	60.00	18.00	65.00	21.00	6.00	49.00	35.00

Date: 06/10/1996

JOB TITLE: PACKARD BELL ESFR TYP EAST-WEST SPLIT SYS, HIGH BAY
 WATER SUPPLY CURVE



MEMORANDUM

Sacramento Fire Department

To: BUILDING DEPARTMENT

Date: 8/28/98

From: Gordon Duncan,
Fire Marshal

Subject: FIRE SYSTEM INSPECTION

A final inspection of the newly installed fire system at:

#1 Packers Bell way Building #1 Bay #1

has been conducted by Inspector Lee

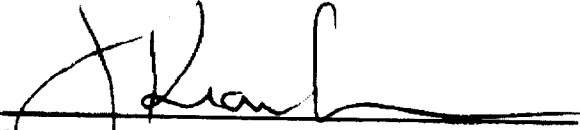
on 8/28/98.

98-04168-C
Permit Number

8400 ~~#~~
Square Footage

TI
Type Inspection

The system is acceptable by this department.


By: Ross L. Woodman,
Fire Prevention Officer II

98-179
F. D. Reference Number