111 NORTH CANAL STREET SUITE 950 CHICAGO, IL 60606-7270
TEL: (312) 930-0070 (800) 444-4554 FAX: (312) 930-0017

June 1, 2004

Oliver Brown, Board President
Menlo Park Fire District
300 Middlefield Rd.
Menlo Park, CA 94025

RE: Public Protection Classification Results
Menlo Park FD, San Mateo County, CA

Dear Mr. Brown:

We wish to thank you and the other community officials for your cooperation during our recent Public Protection Classification (PPC) survey. ISO is the leading supplier of statistical, underwriting, and actuarial information for the property/casualty insurance industry. Most insurers use the PPC classifications for underwriting and calculating premiums for residential, commercial and industrial properties.

ISO has completed its analysis of the structure fire suppression delivery system provided in your community. We would like to report that the resulting classification is a Class 3. Congratulations on your commitment to serve the needs of your community's property owners and residents.

ISO will advise its subscribing insurers of this classification change within the next 30-days and assign an effective date of July 1, 2004. This date allows insurers the necessary lead time to incorporate the Public Protection Classification change into their policy rating systems.

Enclosed is a summary of the ISO analysis of your fire suppression services. If you would like to know how your community's classification could improve, or if you would like to learn about the potential effect of proposed changes to your fire suppression delivery system, please call us at the phone number listed below.

The PPC program is not intended to analyze all aspects of a comprehensive structure fire suppression delivery system program. It is not for purposes of determining compliance with any state or local law, nor is it for making recommendations about loss prevention or life safety.

If you have any questions about your classification, please let us know.

Very truly yours,

Public Protection Classification Dept.

Public Protection Classification Dept.
(800) 930-1677 Ext. 6209

cc: Paul Wilson, Fire Chief
Doug Martini, Water Supt.

Grading Sheet For: Menlo Park FD, California
San Mateo County

Public Protection Class: 3 Surveyed: August, 2003

Feature	Credit Assigned	Maximum Credit
Receiving and Handling Fire Alarms	10.00%	10.00%
Fire Department	30.85%	50.00%
Water Supply	35.60%	40.00%
*Divergence	-5.46%	
Total Credit	70.99%	100.00%

The Public Protection Class is based on the total percentage credit as follows:

Class	%
1	90.00 or more
2	80.00 to 89.99
3	70.00 to 79.99
4	60.00 to 69.99
5	50.00 to 59.99
6	40.00 to 49.99
7	30.00 to 39.99
8	20.00 to 29.99
9	10.00 to 19.99
10	0 to 9.99

*Divergence is a reduction in credit to reflect a difference in the relative credits for Fire Department and Water Supply.

The above classification has been developed for use in property insurance premium calculations.

INSURANCE SERVICES OFFICE, INC.

CLASSIFICATION DETAILS

Graded Area: Menlo Park FD
County: San Mateo State: California
Date Surveyed: August, 2003 Total Credit: 70.99 Class: 3 Pop.: 85000

RECEIVING AND HANDLING FIRE ALARMS

This section of the Fire Suppression Rating Schedule reviews the facilities provided for the general public to report fires, and for the operator on duty at the communication center to dispatch fire department companies to the fires.

	Credit	
	Actual	Maximum
1. Credit for Telephone Service (Item 414)		
This item reviews the facilities provided for the public to report fires, including the listing of fire and business numbers in the telephone directory.	2.00	2.00
2. Credit for Operators (Item 422)		
This item reviews the number of operators on-duty at the communication center to handle fire calls.	3.00	3.00
3. Credit for Dispatch Circuits (Item 432)		
This item reviews the dispatch circuit facilities used to transmit alarms to fire department members.	5.00	5.00
4. Total Credit for Receiving and Handling Fire Alarms:	10.00	10.00
Relative Classification for Receiving and Handling Fire Alarms:	1	

Graded Area: Menlo Park FD
County: San Mateo State: California
Date Surveyed: August, 2003 Total Credit: 70.99 Class: 3 Pop.: 85000

FIRE DEPARTMENT

This section of the Fire Suppression Rating Schedule reviews the engine and ladder-service companies, equipment carried, response to fires, training and available fire fighters.

	Credit	
	Actual	Maximum
1. Credit for Engine Companies (Item 513)		
This item reviews the number of engine companies and the hose equipment carried.	8.54	10.00
2. Credit for Reserve Pumpers (Item 523)		
This item reviews the number of reserve pumpers, their pump capacity and the hose equipment carried on each.	0.85	1.00
3. Credit for Pump Capacity (Item 532)		
This item reviews the total available pump capacity.	5.00	5.00
4. Credit for Ladder-Service Companies (Item 549)		
This item reviews the number of ladder and service companies and the equipment carried.	4.50	5.00
5. Credit for Reserve Ladder-Service Companies (Item 553)		
This item reviews the number of reserve ladder and service trucks, and the equipment carried.	0.24	1.00

Graded Area: Menlo Park FD
County: San Mateo State: California
Date Surveyed: August, 2003 Total Credit: 70.99 Class: 3 Pop.: 85000

FIRE DEPARTMENT
(continued

	Credit	
	Actual	Maximum
6. Credit for Distribution (Item 561)		
This item reviews the percent of the built-upon area of the city which has an adequately-equipped, responding first-due engine company within 1.5 miles and an adequately-equipped, responding ladder-service company within 2.5 miles.	2.96	4.00
7. Credit for Company Personnel (Item 571)		
This item reviews the average number of equivalent fire fighters and company officers on duty with existing companies.	7.32	15.00+
8. Credit for Training (Item 581)		
This item reviews the training facilities and their use.	1.44	9.00
9. Total Credit for Fire Department:	30.85	50.00+
Relative Classification for Fire Department:	4	

+ This indicates that credit for manning is open-ended, with no maximum credit for this item.

Graded Area: Menlo Park FD
County: San Mateo State: California
Date Surveyed: August, 2003 Total Credit: 70.99 Class: 3 Pop.: 85000

WATER SUPPLY

This section of the Fire Suppression Rating Schedule reviews the water supply system that is available for fire suppression in the city.

	Credit	
	Actual	Maximum
1. Credit for the Water System (Item 616)		
This item reviews the supply works, the main capacity and hydrant distribution.	31.88	35.00
2. Credit for Hydrants (Item 621)		
This item reviews the type of hydrants, and method of installation.	1.92	2.00
3. Credit for Inspection and Condition of Hydrants (Item 631)		
This item reviews the frequency of inspections of hydrants and their condition	1.80	3.00
4. Total Credit for Water Supply:	35.60	40.00
Relative Classification for Water Supply:	2	

PUBLIC PROTECTION CLASSIFICATION

IMPROVEMENT STATEMENTS
FOR
Menlo Park FD
San Mateo County, California

Prepared by
INSURANCE SERVICES OFFICE, INC.
111 North Canal St., Ste 950, Chicago, IL 60606
312-930-0070 FAX 800-711-6431

The following statements are based upon the criteria contained in our Fire Suppression Rating Schedule and upon conditions in Menlo Park FD, California during August, 2003. They indicate the performance needed to receive full credit for the specific item in the Schedule, and the quantity you have provided. Partial improvement will result in receiving a partial increase in the credit. These statements relate only to the fire insurance classification of your fire district. They are not for property loss prevention or life safety purposes and no life safety or property loss prevention recommendations are made.

RECEIVING AND HANDLING FIRE ALARMS

Total credit for Receiving and Handling Fire Alarms (Item 440)

Actual = 10.00%; Maximum = 10.00%

FIRE DEPARTMENT

Credit For Engine Companies (Item 513).

Actual = 8.54%; Maximum = 10.00%

For maximum credit in the Schedule, 7 engine companies are needed in your fire district.
These are calculated as follows:

3 for the Basic Fire Flow of 3500 gpm.

4 additional for the size of the area served.

You have 7 engine companies in service.
These are calculated as follows:

86 percent for Engine E 1 because of insufficient equipment.
85 percent for Engine E 2 because of insufficient equipment.
85 percent for Engine E 3 because of insufficient equipment.
85 percent for Engine E 4 because of insufficient equipment.
85 percent for Engine E 5 because of insufficient equipment.
85 percent for Engine E 6 because of insufficient equipment.
85 percent for Engine E 77 because of insufficient equipment.

Credit For Reserve Pumpers (Item 523).

Actual = 0.85%; Maximum = 1.00%

For maximum credit in the Schedule, 1 fully-equipped reserve pumper is needed. You have 1 reserve pumper.
This is calculated as follows:

86 percent for Engine E 102 because of insufficient equipment.

Credit For Ladder Service (Item 549).

Actual = 4.50%; Maximum = 5.00%

For maximum credit in the Schedule, 1 ladder company is needed in your fire district.

This is calculated as follows:

1 ladder company due to method of operation.

You have 1 ladder company
This is calculated as follows:

89 percent for Ladder T 1 because of insufficient equipment.

Credit For Reserve Ladder Service (Item 553).

Actual = 0.24%; Maximum = 1.00%

For maximum credit in the Schedule, 1 fully-equipped reserve ladder truck is needed.
You have 1 reserve ladder truck.
This is calculated as follows:

23 percent for Ladder R 1 because of insufficient equipment and insufficient ladder testing and insufficient ladder length.

Credit For Distribution (Item 561).

Actual = 2.96%; Maximum = 4.00%

For maximum credit in the Schedule, all sections of the fire district with hydrant protection should be within 1½ miles of a fully-equipped engine company and 2½ miles of a fully-equipped ladder, service, engine-ladder or engine-service company. The distance to be measured along all-weather roads.

Credit For Company Personnel (Item 571).

Actual = 7.32%; Maximum = 15.00%

An increase in the on-duty company personnel by one person will increase the fire department credit by 0.31.

Credit For Training (Item 581).

Actual = 1.44%; Maximum = 9.00%

For maximum credit in the Schedule, the training program should be improved. You received 16 percent credit for the current training program and the use of facilities.

For maximum credit in the Schedule, pre-fire planning inspections of each commercial, industrial, institutional and other similar-type building should be made twice a year by company members. Records of the inspections should include complete and up-to-date notes and sketches.

Total credit for Fire Department (Item 590)

Actual = 30.85%; Maximum = 50.00%

WATER SUPPLY

Credit For the Water Supply (Item 616).

Actual = 31.88%; Maximum = 35.00%

For maximum credit in the Schedule, the needed fire flows should be available at each location in the fire district. Needed fire flows of 2500 gpm and less should be available for 2 hours, 3000 and 3500 gpm for 3 hours and all others for 4 hours. See the attached table for an evaluation of fire flow tests made at representative locations in your fire district.

All AWWA standard hydrants within 1000 feet of a building, measured as hose can be laid by

apparatus, are credited; 1000 gpm for hydrants within 300 feet; 670 gpm for 301 to 600 feet; and 250 gpm for 601 to 1000 feet. Credit is reduced when hydrants lack a pumper outlet, and is further reduced when they have only a single 2½-inch outlet.

Credit For Hydrants (Item 621).

Actual = 1.92%; Maximum = 2.00%

For maximum credit in the Schedule, all hydrants should: have a pumper outlet, have a 6-inch or larger branch connection, have a 5-inch or larger barrel or a 5-inch or larger foot valve.

Credit For Inspection and Condition of Hydrants (Item 631).

Actual = 1.80%; Maximum = 3.00%

For maximum credit in the Schedule, all hydrants should be inspected twice a year, the inspection should include operation and a test at domestic pressure. Records should be kept of the inspections. Hydrants should be conspicuous, well located for use by a pumper, and in good condition.

Total credit for Water Supply (Item 640)

Actual = 35.60%; Maximum = 40.00%

FIRE FLOW TESTS

Menlo Park FD, California

Tests witnessed on August 19, 2003

Test No.	Needed Fire Flow† gpm	Limited By Supply Works, gpm	Limited by Distribution Mains (flow tests), gpm	Limited By Hydrant Spacing, gpm
1	3500			
2†	6000		5700	
2A	1000			
3†	5000		3800	
3A	3000			
4†	5500		3700	
4A	3000			
5	3500		3000	
6	1000			
7	1500			
8	1750			

9	1000			
10	3000		2000	
11	2500			
12	3000			
13	3500			
14	3000			
15	3000		2600	
16	3000		2800	
17	3500		3300	
18	2500			
19	1000			
20	1000			
21	1000			
22	1000			
23	3000		2000	
24†	5000		4600	
24A	1000			
25†	4500			
25A	1750			
26†	4500			
26A	1000			
27	3500			
28	1000			
29	3000		2000	
30	3500		3000	
31†	5000		3600	
31A	2500			
32	3000			
33	3000	892	2900	
34	1000	850		
35	2500			
36	2500			
37	3000		2200	
38	2250		2200	
39	1000			

†Needed fire flows exceeding 3500 gpm are not considered in determining the classification of the municipality

INSURANCE SERVICES OFFICE, INC.

HYDRANT FLOW DATA SUMMARY

City CALIFORNIA WATER SERVICE CO.

County San Mateo State California Witnessed by Insurance Services Office, Inc. Date August 19, 2003

TEST NO.	TYPE DIST.*	TEST LOCATION	SERVICE	FLOW - GPM $Q=(29.83(C(d^2)p^{0.5}))$ INDIVIDUAL HYDRANTS			TOTAL	PRESSURE PSI STATIC	PRESSURE PSI RESID.	FLOW -AT 20 PSI $Q_R=Q_T(h_R^{0.54}/h_T^{0.54})$ NEEDED **	FLOW -AT 20 PSI AVAIL.	REMARKS***
1	Comm	Haven & Marsh	lower 200	2370	2120		4490	128	46	3500	5200	
2	Comm	Adams Ave @ Adams Ct	lower 200	2390			2390	90	76	6000	5700	
2A	Comm	Adams Ave @ Adams Ct	lower 200	2390			2390	90	76	1000	5700	
3	Comm	Edison & 4th	lower 200	1750			1750	80	66	5000	3800	
3A	Comm	Edison & 4th	lower 200	1750			1750	80	66	3000	3800	
4	Comm	Willow & Middlefield	lower 200	1500	1460		2960	78	40	5500	3700	
4A	Comm	Willow & Middlefield	lower 200	1500	1460		2960	78	40	3000	3700	
5	Comm	Encinal W. of Middlefield	lower 200	950			950	72	66	3500	3000	
6	Res	James & James Way	lower 200	840	840		1680	88	68	1000	3300	
7	Comm	Middlefield & 7th	lower 200	1750			1750	80	66	1500	3800	
8	Comm	El camino Real & Buckingham	lower 200	530	530		1060	82	62	1750	2000	
9	Res	Atherton & O'Dell Place	lower 200	840	840		1680	78	72	1000	5700	
10	Comm	Ravenswood & Noel	lower 200	1060			1060	65	51	3000	2000	
11	Comm	El Camino Real & Roble	lower 200	1910			1910	76	64	2500	4400	
12	Comm	Oak Grove & University	lower 200	1910			1910	68	54	3000	3700	
13	Comm	Middle & Yale	lower 200	1210	1810		3020	68	42	3500	4200	

THE ABOVE LISTED NEEDED FIRE FLOWS ARE FOR PROPERTY INSURANCE PREMIUM CALCULATIONS ONLY AND ARE *NOT* INTENDED TO PREDICT THE MAXIMUM AMOUNT OF WATER REQUIRED FOR A LARGE SCALE FIRE CONDITION. THE AVAILABLE FLOWS ONLY INDICATE THE CONDITIONS THAT EXISTED AT THE TIME AND AT THE LOCATION WHERE TESTS WERE WITNESSED.

***Comm = Commercial; Res = Residential.**

****Needed is the rate of flow for a specific duration for a full credit condition. Needed Fire Flows greater than 3,500 gpm are not considered in determining the classification of the city when using the Fire Suppression Rating Schedule.**

INSURANCE SERVICES OFFICE, INC.

HYDRANT FLOW DATA SUMMARY

City CALIFORNIA WATER SERVICE CO.

County San Mateo State California Witnessed by Insurance Services Office, Inc. Date August 19, 2003

TEST NO.	TYPE DIST.*	TEST LOCATION	SERVICE	FLOW - GPM $Q=(29.83(C(d^2)p^{0.5}))$ INDIVIDUAL HYDRANTS			TOTAL	PRESSURE PSI STATIC	PRESSURE PSI RESID.	FLOW -AT 20 PSI $Q_R=Q_T(h_R^{0.54}/h_P^{0.54})$ NEEDED **	FLOW -AT 20 PSI AVAIL.	REMARKS***
14	Comm	Santa Cruz & Seymour	upper 400	1130	1370		2500	60	32	3000	3000	
15	Comm	White Oak & Oak Knoll	upper 400	1140			1140	86	72	3000	2600	
16	Comm	Alameda De Las Pulgas	upper 400	1210	1400		2610	120	30	3000	2800	
17	Comm	Valparaiso & Arbor	upper 400	1090			1090	58	53	3500	3300	
18	Comm	El Camino Real & Alejandra	lower 200	2670			2670	72	42	2500	3600	
19	Res	Faxon & Elema	upper 400	650	670		1320	64	42	1000	1900	
20	Res	Selby & Coghlin Ln	upper 400	900			900	68	56	1000	1900	
21	Res	Ridgeview & La Mesa	upper 400	1910			1910	112	62	1000	2700	
22	Res	W Selby & Sequoia	upper 400	1210			1210	70	48	1000	1900	
23	Comm	Selby & Serrano	upper 400	1660			1660	76	35	3000	2000	
24	Comm	Sand Hill & Addison Wesley	upper 400	2260			2260	72	58	5000	4600	
24A	Res	Sand Hill & Addison Wesley	upper 400	2260			2260	72	58	1000	4600	
25	Comm	Sand Hill Creek Road & Sharon Park	upper 400	2990			2990	146	128	4500	8600	
25A	Comm	Sand Hill Creek Road & Sharon Park	upper 400	2990			2990	146	128	1750	8600	
26	Comm	Santa Cruz & Mielke	lower 200	1530			1530	70	66	4500	6000	
26A	Res	Santa Cruz & Mielke	lower 200	1530			1530	70	66	1000	6000	

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27	Comm	Scott & Campbell	lower 200	1690	1860		3550	128	46	3500	4100	
28	Res	Coleman & Arlington	lower 200	950			950	72	66	1000	3000	
29	Comm	Laurel & Melke	lower 200	1060			1060	65	51	3000	2000	
30	Comm	Pope & Elm	lower 200	950			950	72	66	3500	3000	
31	Comm	Hamilton & Modoc	lower 200	1500			1500	132	110	5000	3600	
31A	Comm	Hamilton & Modoc	lower 200	1500			1500	132	110	2500	3600	
32	Comm	Constitution Dr	lower 200	1460			1460	130	105	3000	3300	
33	Comm	O'Connor @ School	O'Connor Tract	920			920	70	64	3000	2900	(C)-(892 gpm)
34	Res	Garden & Oakwood	Palo Alto Park	1140			1140	76	20	1000	1100	(B)-(850 gpm)
35	Comm	Ralmor & Albertini	East Palo Alto	1890			1890	90	75	2500	4300	
36	Comm	Bay Road & Demeter	East Palo Alto	1690			1690	86	62	2500	2900	
37	Comm	Pulgas & O'Connor	East Palo Alto	1690			1690	92	48	3000	2200	
38	Comm	Euclid & Bell	East Palo Alto	1690			1690	86	46	2250	2200	
39	Res	O'Connor & Manhattan	East Palo Alto	1370			1370	82	34	1000	1600	

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