

635



**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

**FROM:** Human Resources Department

**SUBMITTAL DATE:**  
December 16, 2014

**SUBJECT:** Classification recommendation for a Fire Protection Engineering Associate job classification, amend the salary plan/grade for the Fire Protection Engineer job classification, and amend Ordinance No. 440 pursuant to Resolution No. 440-8988 submitted herewith. [District- All] [Total Cost - \$19,336] [General Fund 56%, Fire Marshal Fees 44%]

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve the addition of a Fire Protection Engineering Associate job classification, amend the salary plan/grade for the Fire Protection Engineer job classification, and amend Ordinance No. 440 pursuant to Resolution No. 440-8988.

**BACKGROUND:**

**Summary**

The following recommendation is the result of a classification request from the Fire Department to develop a new job classification, Fire Protection Engineering Associate, and amend the salary plan/grade for the Fire Protection Engineer classification. The mission of the Fire Department is to protect life, property, and the environment through professionalism, integrity, and efficiency.

Michael T. Stock  
Asst. County Executive Officer/  
Human Resources Director

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost:	POLICY/CONSENT (per Exec. Office)
COST	\$ 19,336	\$ 19,336	\$ 19,336	\$ 19,336	Consent <input type="checkbox"/> Policy <input checked="" type="checkbox"/>
NET COUNTY COST	\$ 10,828	\$ 10,828	\$ 10,828	\$ 10,828	
<b>SOURCE OF FUNDS:</b> General Fund 56% and Fire Marshal Fees 44%				<b>Budget Adjustment:</b> n/a	
				<b>For Fiscal Year:</b> 2014/15	

**C.E.O. RECOMMENDATION:**

**APPROVE**

BY:   
Samuel Wong

County Executive Office Signature

**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Benoît, seconded by Supervisor Jeffries and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended and that Resolution 440-8988 is adopted as recommended.

**Ayes:** Jeffries, Tavaglione, Benoit and Ashley  
**Nays:** None  
**Absent:** None  
**Date:** January 6, 2015  
**xc:** HR, Fire

Kecia Harper-Ihem  
 Clerk of the Board  
 By:   
 Deputy

**Prev. Agn. Ref.:** **District:** ALL **Agenda Number:**

**3-26**

☐ A-30  
☐ 4/5 Vote  
☐ Positions Added  
☐ Change Order

**BACKGROUND:**

**Summary (continued)**

The Fire Department operates with an annual budget of \$196 million, and is comprised of numerous divisions, including the Office of the Fire Marshal. Traditionally, the Department has utilized a Fire Protection Engineer to perform functions such as the review and inspection of technically advanced plan submittals, the evaluation of alternate materials and methods and the advanced analysis and interpretation of codes and standards for fire protection. The Fire Protection Engineer classification requires that incumbents possess a Bachelor's degree in Fire Protection Engineering and two years of professional engineering experience in fire protection. In addition, the incumbent must possess a valid certificate of registration as a Professional Engineer in Fire Protection issued by the California State Board of Registration for Professional Engineers.

In July of 2012, the Department initiated a recruitment to fill the Fire Protection Engineer vacancy. Despite exhaustive recruiting efforts, the Fire Protection Engineer position remains vacant due to an extremely limited pool of candidates that possess the required professional licensure. Given the limited number of qualified candidates, the Fire Protection Engineer classification was designated "Difficult to Recruit" by the Human Resources Department in March of 2014. Designating the Fire Protection Engineer classification as "Difficult to Recruit" was a temporary solution to add an approximate 11% to the top of the salary range, in order to assist the Department in attracting qualified candidates to compete for the position. Over the last year, more than one hundred candidates have applied for the position, and only five of the applicants possessed the required licensure. Of the competitive candidates that were referred for an interview, two candidates were considered for the position, both of which, ultimately withdrew their candidacy. As a result of the unique challenges faced in attracting and retaining qualified Fire Protection Engineer professionals to the County of Riverside, the Fire Department requested that the classification and salary be evaluated.

**CREATION OF A NEW CLASSIFICATION - FIRE PROTECTION ENGINEERING ASSOCIATE:**

Following extensive recruitment efforts to fill the Fire Protection Engineer vacancy and an in depth review of the classification, it has been determined that an entry-level Fire Protection Engineering Associate classification is necessary. The Fire Protection Engineer series will be budgeted at the Fire Protection Engineer level, and the proposed Fire Protection Engineering Associate will be used as an underfill for the Fire Protection Engineer. The creation of an entry-level classification for the series will allow non-licensed candidates to qualify and obtain the required licensure to move into the fully qualified journey-level Fire Protection Engineer classification. The Human Resources Department has examined existing County of Riverside job classifications, but could not identify one that fit the technical and highly specialized needs for a Fire Protection Engineer entry-level classification. Therefore, the Human Resources Department recommends the creation of a new classification, Fire Protection Engineering Associate. A market survey was conducted using benchmark counties (Los Angeles and Santa Clara) and cities (Glendale and Los Angeles) that utilize comparable classifications. Based on the benchmarks with comparable classifications, the median salary for the county benchmarks is \$100,451 annually and \$104,397 annually for the city benchmarks. With the comparable county and city salaries taken into consideration, it is proposed to take the median of the county and city benchmarks, which is \$102,424.

**Fire Protection Engineering Associate:** It is recommended to add the Fire Protection Engineering Associate classification to the Class and Salary Listing at salary plan/grade SEU 693/L12 (\$76,431- \$102,424). The proposed salary for this class is competitive and well aligned with the market rate. The proposed classification specification is attached.

**CLASSIFICATION SALARY INCREASE - FIRE PROTECTION ENGINEER:**

A market salary survey of the Fire Protection Engineer classification was conducted using six California counties (Alameda, Los Angeles, Orange, Santa Clara, Ventura, and San Francisco). The County of Riverside

Fire Protection Engineer classification requires, in part, a valid certificate of registration as a Professional Engineer in Fire Protection. Based on the data collected through the salary survey for comparable Fire Protection Engineer classifications, only the City/County of San Francisco requires that incumbents possess the valid certificate of registration as a Professional Engineer in Fire Protection, and consequently has a higher salary than other counties. The market survey conducted indicates that the market salary median is \$118,835. However, of the counties surveyed, only the City/County of San Francisco has the same licensure needs and requirements as the County of Riverside. The top of the salary range for the Fire Protection Engineer classification for the City/County of San Francisco is \$142,636. With this information taken into consideration, it is proposed that the City/County of San Francisco salary rate be considered in addition to the neighboring County of Orange, to determine the salary benchmark. Considering top of the salary range for the County of Orange at \$119,662, and the rate for the City/County of San Francisco at \$142,636, the median is \$131,149. Therefore, the current salary plan/grade for the Fire Protection Engineer is below the market rate, based on the requirements. It is therefore recommended that the salary range be increased to \$131,149. The proposed salary plan/grade is competitive and more accurately reflects the market rate, given the state licensure requirements. An increase to the Fire Protection Engineer salary range will allow the Department to better attract and retain highly qualified Fire Protection Engineer professionals.

**Fire Protection Engineer:** It is recommended to grant the Fire Protection Engineer classification an approximate 11.8% salary increase from salary plan/grade DTS 677/L20 (\$70,511 - \$117,337) to salary plan/grade SEU 714/L12 (\$97,829 - \$131,149). There is currently no incumbent in this single-position classification.

**Impact on Residents and Businesses**

This request will enable the Fire Department to attract and retain qualified Fire Protection Engineer professionals to fill the Fire Protection Engineer or Fire Protection Engineering Associate classification, thereby allowing the Department to better meet the needs of the Office of the Fire Marshal. As a result, the Fire Department will be better positioned to protect the lives and property of Riverside County residents.

**Additional Fiscal Information**

The potential total cost of \$19,336 is fully funded in Fire Department's FY 14/15 budget and will be included in any future proposed budgets. The Fire Department estimates expending \$9,668 in FY 14/15 and it is dependent upon when the position is filled.

**ATTACHMENTS:**

- A. Resolution No. 440-8988
- B. Fire Protection Engineering Associate Classification Specification
- C. Local County Benchmark Salary Survey for the Fire Protection Engineering Associate
- D. Local City Benchmark Salary Survey for the Fire Protection Engineering Associate
- E. Local County Benchmark Salary Survey for the Fire Protection Engineer

RESOLUTION NO. 440-8988

BE IT RESOLVED by the Board of Supervisors of the County of Riverside, State of California, in regular session assembled on January 6, 2015, that pursuant to Section 3(a)(iv) of Ordinance No. 440, the Assistant County Executive Officer/Human Resources Director is authorized to amend the Class and Salary Listing of Ordinance No. 440, operative the beginning of the pay period following approval, as follows:

<u>Job Code</u>	<u>+/-</u>	<u>Class Title</u>	<u>Salary Plan/Grade</u>
37885	+	Fire Protection Engineering Associate	SEU 693/L12


BE IT FURTHER RESOLVED that pursuant to Section 8(c) of Ordinance No. 440, the Assistant County Executive Officer/Human Resources Director is authorized to amend the Class and Salary Listing of Ordinance No. 440, operative at the beginning of the pay period following the date of approval, as follows:

<u>Job Code</u>	<u>Class Title</u>	<u>From Salary Plan/Grade</u>	<u>To Salary Plan/Grade</u>
37877	Fire Protection Engineer	DTS 677/L20	SEU 714/L12

ROLL CALL:

Ayes: Jeffries, Tavaglione, Benoit and Ashley  
Nays: None  
Absent: None

The foregoing is certified to be a true copy of a resolution duly adopted by said Board of Supervisors on the date therein set forth.

KECIA HARPER-IHEM, Clerk of said Board  
By  Deputy

/kc  
11/21/2014  
440 Resolutions\KC

# **ATTACHMENT B**



COUNTY OF RIVERSIDE  
Established Date: Jan 8, 2015  
Revision Date: Jan 8, 2015

## **FIRE PROTECTION ENGINEERING ASSOCIATE**

Class Code: 37885

### **SALARY RANGE**

\$36.74 - \$49.24 Hourly  
\$5,879.30 - \$7,878.76 Monthly  
\$76,431.00 - \$102,424.00 Annually

### **CLASS CONCEPT:**

Under general direction, performs professional fire protection engineering duties and building plans checking to ensure fire protection devices and systems are in compliance with applicable codes and regulations; may provide technical guidance to other fire prevention classifications; and perform other related duties as required.

Incumbents of positions in the classification are not registered engineers in California, and underfill the Fire Protection Engineer. This is a fully qualified working level characterized by the requirement for independently performing the full scope of fire protection engineering or providing technical direction and guidance to fire prevention personnel related to fire protection engineering issues. Fire protection engineering differs from other engineering classifications in its specialized emphasis on fire protection engineering, and from technical fire safety job classes in its requirement for possession of advanced knowledge of fire protection engineering principles and practices.

The Fire Protection Engineering Associate class is a natural progression underfill for the Fire Protection Engineer class. Incumbents will promote to the Fire Protection Engineer class within one year as a Fire Protection Engineering Associate after receiving a satisfactory performance evaluation, and meeting the educational requirements including obtaining a valid certification of registration as a Professional Engineer issued by the California State Board of Professional Engineers. Failure to meet these requirements will result in incumbents being returned to their former County classification in accordance with the Memorandum of Understanding or new hires being released prior to the end of their probationary period.

### **REPRESENTATION UNIT:** Professional

### **EXAMPLES OF ESSENTIAL DUTIES:**

(Depending on the area of assignment, duties may include, but are not limited to, the following)

- Conduct comprehensive technical and professional plan reviews for fire resistive requirements for conformance with applicable federal, State, and local laws, codes, and regulations concerning fire protection and life safety.
- Serve as a technical advisor to architects, engineers, developers, contractors and building owners in interpreting and enforcing fire protection requirements, fire and life safety codes, regulations and standards.
- Review performance-engineering submittals and evaluate using good engineering practices, fire modeling or other means to determine equivalency to the adopted codes.

- May serve as contract Fire Marshal and develop, implement, and supervise the localized fire prevention program and local service operations while maintaining program consistency across jurisdictions.
- Classifies chemicals per the Fire Code, builds and updates a chemical classification database, and develops related technical guidance material.
- Research chemicals, regulations, laws, and legal cases utilizing databases, reference books, texts, manufacturer information, and/or other related resources.
- Coordinate program activities with the Fire Department Hazardous Materials Response Team, Fire Prevention Division, and the County Environmental Health Hazardous Materials section.
- Develop, document, and implement a variety of safety programs; research the application of codes, techniques and equipment to ensure compliance with applicable regulations and standards; provide interpretations to staff and coordinates issues with staff; and perform other related activities.
- Coordinate with other agencies on analyses, laws, regulations, guidance documents, implementation, and plans to improve fire and life safety protection and to assist in maintaining consistency across jurisdictions.
- Evaluate existing buildings and buildings under construction to ensure compliance with various fire codes and regulations.
- Conduct engineering tests and evaluations of complex systems and/or device requirements required or necessary for proper fire and life safety within buildings and specialized facilities.
- Provide technical support for plan review and inspection staff evaluating smoke control systems and fire protection designs for high rack storage, flammable liquids and other hazardous material storage and use, as well as other issues requiring application of construction codes and National Fire Protection Association (NFPA) standards at an advanced level.
- Disseminate information regarding new technological developments impacting the Fire Department activities and procedures; maintains high technical standards within the department.
- Prepare and present public information and educational presentations on fire protection engineering and fire code related issues.
- Assist and participate in training Fire Department personnel in all aspects of fire protection and inspection.
- Participate in code development at national, state and local levels through monitoring of changes to construction codes and standards, developing change proposals, consensus building with stakeholders and presenting at public hearings (travel and committee membership is required).
- Represent the Fire Department as an expert witness in cases of criminal or civil litigation resulting from the performance of its duties.
- May function as team leader on special projects.
- Perform other duties of a similar nature or level.

**RECRUITING GUIDELINES:**

Education: A Bachelor's degree from an accredited college or university in Fire Protection Engineering or related field.

AND

Possession of a valid certification as an Engineer-in-Training issued by the California State Board of Engineers.

Experience: One year of professional engineering experience in fire protection and the ability to obtain a valid certification of registration as a Professional Engineer in Fire Protection issued by the California State Board of Registration for Professional Engineers within the probationary period. Failure to meet these requirements will result in incumbents being returned to their former County classification in accordance with the Memorandum of Understanding or new hires being released prior to the end of their probationary period.

Knowledge of: Advanced fire protection engineering concepts; modern fire safety protection systems; complex building design and construction; chemical process operations, chemical hazards, and chemical facility security measures; performance based code design concepts; risk assessment and consequence analysis techniques; systems engineering principles; safety requirements and implications; Fire Department organization, operations and public management; project management principles; applicable federal, State, and local laws, codes, and regulations; fire protection principles, standards and practices; fire inspection methods; plan review methods; building and fire code requirements as they relate to construction for fire protection and fire apparatus access; permit tracking and word processing software programs; strong verbal and interpersonal skills; report writing methods; complex mathematical concepts; customer service principles.

Ability to: Accurately review and interpret construction plans and specifications; visually recognize potential fire safety hazards and determine acceptable alternatives by applying engineering concepts and principles; evaluate and determine the acceptability of plans and specifications for complex fire protection systems and/or buildings and develop an effective course of action; coordinate activities with multiple stakeholders; classify chemicals; research regulations, laws, and legal cases; analyze data, recognize problems and develop recommended policies and procedures; conduct inspections, technical reviews, and audits; provide technical support and guidance on fire and chemical hazards; build databases; provide clear, concise, expert testimony in legal cases; perform difficult and specialized inspections; enforce codes and standards with tact and impartiality; prepare clear, concise, and complete reports, written correspondence and documentation; maintain records; handle multiple tasks simultaneously; make accurate data entries and use automated inspection and time labor information using a personal computer; comprehend and utilize advanced fire protection engineering software; establish and maintain effective and tactful working relationships with fellow employees and the general public; provide quality customer service; make public presentations.

**OTHER REQUIREMENTS:**

License/Certificate: Possession of a valid California Driver's License.

Possession of a valid certification as an Engineer-in-Training issued by the California State Board of Engineers.

**PRE-EMPLOYMENT:**

All employment offers are contingent upon successful completion of both a pre-employment physical exam, including a drug/alcohol test, and a criminal background investigation, which involves fingerprinting. (A felony or misdemeanor conviction may disqualify the applicant from County employment).

**PROBATIONARY PERIOD:**

As an Approved Local Merit System, all County of Riverside employees, except those serving "At Will," are subject to the probationary period provisions as specified in the applicable Memorandum of Understanding, County Resolution, or Salary Ordinance. Temporary and Per Diem employees serve at the pleasure of the agency/department head.



# **ATTACHMENT C**

# External Market Survey Data

## County Fire Protection Engineer Associate

Riv Co Class Code: 37885

Jurisdiction	Title	Base Salary
Los Angeles County	Fire Prevention Engineer Assistant II	\$83,720 FPE license or Civil Engineering degree & 1 yr FPE ex or 5 yr FPE exp
Santa Clara County	Fire Protection Engineer Associate	\$117,182 Bachelor's degree, or EIT and 6 yrs FPE exp, FPE license desired

County Survey Mean: \$100,451  
County Survey Median: \$100,451

### Riverside County

\$0

Dollar difference from mean: -\$100,451

Percentage difference from mean: #DIV/0!

Dollar difference from median: -\$100,451

Percentage difference from median: #DIV/0!

#### Notes:

Run Date: 07/31/14

Date Prepared/Revised: 09/15/14

By: Jessica Urban

# **ATTACHMENT D**

# External Market Survey Data

## City Fire Protection Engineer Associate

Riv Co Class Code: 37885

Jurisdiction	Title	Base Salary
City of Glendale	Fire Protection Engineer Associate	\$93,516 Bachelor's degree, EIT may substitute for degree
City of Los Angeles	Fire Protection Engineer Associate	\$115,278 Bachelor's degree, EIT may substitute for degree
Riverside County		
	County Survey Mean:	\$104,397
	County Survey Median:	\$104,397
		\$0
	Dollar difference from mean:	-\$104,397
	Percentage difference from mean:	#DIV/0!
	Dollar difference from median:	-\$104,397
	Percentage difference from median:	#DIV/0!

### Notes:

Run Date: 07/31/14

Date Prepared/Revised: 09/15/14

By: Jessica Urban

# **ATTACHMENT E**

# External Market Survey Data

## County Fire Protection Engineer

Riv Co Class Code: 37877

Jurisdiction	Title	Base Salary
Alameda County	Fire Department Plan Checker	\$118,008 Assoc Degree & 5yr of code compliance and Plan Chec/Exam Cert
Los Angeles County	Fire Prevention Engineer	\$88,824 FPE license or engineering degree & 3yr FPE work
Orange County	Fire Safety Engineer	\$119,662 Bachelor's degree & 2yr of FPE work, FPE license desired
Santa Clara County	Fire Protection Engineer	\$133,075 Bachelor's degree or EIT, FPE desired
Ventura County	Fire Systems Engineer	\$104,956 Undergrad coursework, EIT & 3yrs of FPE ex
San Francisco County	Fire Protection Engineer	\$142,636 Bachelor's degree, 6 yrs of FPE exp, & FPE required

County Survey Mean: \$117,860

County Survey Median: \$118,835

### Riverside County

Fire Protection Engineer

\$117,337

Dollar difference from mean: -\$523

Percentage difference from mean: -0.4%

Dollar difference from median: -\$1,498

Percentage difference from median: -1.3%

**Notes:** Riverside County MQ's - FPE license required, bachelor's desired, 2 years of FPE exp. San Bernardino County contracts Fire Protection Engineering services and therefore does not utilize the classification.

Run Date: 07/31/14

Date Prepared/Revised: 09/15/14

By: Jessica Urban