



## ASSISTANT CIVIL ENGINEER

Exam Code: 2FS03

Department:	Forestry & Fire Protection
Final Filing Date:	06/29/2012
Type of Recruitment:	Departmental Promotional
Salary:	MONTHLY-RANGED-SALARY - \$5,276.00 - \$6,409.00
Employment Type:	Permanent Full-time Permanent Part-time Permanent Intermittent Limited Term Full-time Limited Term Part-Time Limited Term Intermittent
Exam Type:	Spot
Location:	Sacramento County

### EEO

An equal opportunity employer to all regardless of race, color, creed, national origin, ancestry, sex, marital status, disability, religious or political affiliation, age, or sexual orientation.

### DRUG FREE STATEMENT

It is an objective of the State of California to achieve a drug-free State work place. Any applicant for State employment will be expected to behave in accordance with this objective, because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service and the special trust placed in public servants.

### WHO SHOULD APPLY?

Applicants who meet the minimum qualifications as stated on this bulletin. This is a Departmental promotional examination for the Department of Forestry and Fire Protection (CAL FIRE).

1. Applicants must have a permanent civil service appointment with the Department of Forestry and Fire Protection as of **June 29, 2012**, the final filing date, in order to participate in this examination; or
2. Must be a current or former employee of the Legislature for two or more consecutive years as defined in Government Code Section 18990; or
3. Must be a current or former non-elected exempt employee of the Executive Branch for two or more consecutive years as defined in Government Code Section 18992; or
4. Must be a person retired from the United States military, honorably discharged from active military duty with a service-connected disability, or honorably discharged from active duty as defined in Government Code Section 18991. [Applicants applying under item 4 must provide a copy of their DD214 or other official discharge documents with their Examination/Employment Application (STD. 678)]

For persons who are interested in applying that meet the criteria for either items 2, 3, or 4 above, and examinations are given by more than one Department for the same classification, you must select one Department in which to compete. Once this selection is made, it cannot be changed for the duration of the promotional list established from the examination in which the person participated. Employees may transfer list eligibility between Departments in the same manner as provided for State civil service employees.

## FILING INSTRUCTIONS

Final File Date: **June 29, 2012**

Examination/Employment Application (STD. 678) is available through the Internet at <http://jobs.ca.gov/Profile/Profile> and at the testing office shown below. Examination/Employment Application (STD. 678) may be submitted by mail or delivered in person.

**Note:** Applications **will not** be accepted via e-mail. DO NOT SUBMIT APPLICATIONS TO THE STATE PERSONNEL BOARD.

### **MAIL:**

Department of Forestry and Fire Protection  
Examination Unit – (Attention: Danielle Greco)  
P.O. Box 944246  
Sacramento, CA 94244-2460

### **SUBMIT IN PERSON:**

Department of Forestry and Fire Protection  
Examination Unit – (Attention: Danielle Greco)  
1300 U Street  
Sacramento, CA 95818

Applications postmarked or personally delivered after the final filing date, **June 29, 2012**, will not be accepted for any reason.

## SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special testing arrangements, mark the appropriate box on the application and/or contact the Department of Forestry and Fire Protection at (916) 445-7824.

## REQUIRED IDENTIFICATION

Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

## SALARY INFORMATION

\$5276 - \$6409

## ELIGIBLE LIST INFORMATION

A Departmental promotional eligible list will be established for the Department of Forestry and Fire Protection. This list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

## REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

All applicants must meet the education and/or experience requirements for this examination by **June 29, 2012**, the final filing date.

**NOTE:** Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

All applications/resumes must include "from" and "to" employment dates (month/day/year), time base, and applicable civil service class titles. Applications/resumes received without this information will be rejected.

## MINIMUM QUALIFICATIONS

Qualifying experience may be combined on a proportionate basis if the requirements stated include more than one pattern and are distinguished as "**Either**" I, "**Or**" II, "**Or**" III, etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to the examination as meeting 100% of the overall experience requirement.

**Experience:** Either

1. One year of experience in the California state service performing the duties of a Junior Civil Engineer. **Or**
2. Two years of civil engineering experience. (A Master's Degree in Civil Engineering may be substituted for the required experience.) (Applicants who are pursuing graduate work toward a master's degree will be admitted to the examination, but must receive the degree before they will be considered eligible for appointment.)

**and**

**Education:** Equivalent to graduation from college with major work in civil engineering. (Possession of a valid certificate as an Engineer-in-Training issued by the California State Board of Registration for Professional Engineers or issued by another jurisdiction and accepted by the California Board in lieu of the first division of the examination as a professional engineer may be substituted for the required education.)

## POSITION DESCRIPTION

An Assistant Civil Engineer, under direction, performs field or office civil engineering work of average difficulty; prepares specifications and estimates for various types of construction projects, including buildings, bridges, roads, wharves, piers, dams, aqueducts, levees, ditches, retaining walls, and similar structures; prepares maps, plans, charts, and diagrams; plans and directs the work of survey parties; makes foundation studies and lays out water mains, sewers, sewage structures, disposal plants, and drainage systems; inspects structures under construction; inspects structures and estimates cost of repairs; determines the hydraulic properties of steam channels and hydraulic structures, analyzes hydrologic data to determine flood frequencies, unit hydrographs and the characteristics of water quality, precipitation, stream flow, and ground water; writes memoranda and prepares reports; may act as leadperson over a group of subordinates; and does other related work.

## EXAMINATION INFORMATION

Qualifications Appraisal Interview: It is anticipated that interviews will be held during **July/August 2012**.

The examination will consist of a qualifications appraisal interview weighted 100%. The interview will include a number of predetermined job-related questions. In order to obtain a position on the eligible list, a minimum rating of 70% must be attained. **CANDIDATES WHO DO NOT APPEAR FOR THE INTERVIEW WILL BE DISQUALIFIED.**

## KNOWLEDGE AND ABILITIES

**Scope:**

**Knowledge of:**

1. The practices of civil engineering in order to accomplish engineering tasks (e.g., design, construction support, design review).
2. Civil engineering principles (e.g., structural theory, soil mechanics, design of concrete, wood, steel and masonry structures, fluid dynamics) in order to accomplish engineering tasks (e.g., design, construction support, design review).
3. Plans (e.g., building, site, electrical, mechanical) in order to obtain information to aid in the completion of the construction process.
4. Civil engineering principles (e.g., structural theory, soil mechanics, design of concrete, wood, steel, and masonry structures, hydrology, fluid dynamics) necessary to advise Departmental personnel on technical issues in accordance with established engineering practices.
5. Industry terminology (e.g., "as-built", earthwork, topographic) in order to accomplish engineering tasks (e.g., design, construction support, design review).

6. Industry procedures (e.g., gathering data, problem solving, reporting results) in order to accomplish engineering tasks (e.g., design, construction support, design review).
7. Maps (e.g., topographic, hydrologic, quadrangle) in order to complete the design of improvement plans for civil engineering projects (e.g., roadway designs, fire stations, Emergency Command Centers).
8. Hydrology (e.g., site drainage, ground water, flood control) in order to accomplish engineering tasks (e.g., design, construction support, design review).
9. Hydraulics (e.g., gravity flow, pressurized system) as it applies to sewer and water distribution systems design in order to accomplish engineering tasks (e.g., design, construction support, design review).
10. Project management techniques (e.g., Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), Gantt charts) in order to efficiently manage project timelines.
11. Construction practices (e.g., safety, hazardous materials and disposal, storm water pollution prevention, air pollution control) in order to complete the design and construction process.
12. Surveying (e.g., topographic maps, setting grades, construction staking) in order to accomplish engineering tasks (e.g., design, construction support, design review).

**Ability to:**

1. Draft plans in order to present information and direction for a wide variety of engineering related activities.
2. Interpret maps to obtain information needed (e.g., roadway designs, grading plans, fire station designs) to complete the design process.
3. Read and comprehend written materials (e.g., memos, regulations, policies) in order to apply information and determine an appropriate course of action to complete assigned tasks.
4. Analyze engineering reports, plans, and specifications in order to obtain information and provide direction on various projects in design or construction (e.g., fire stations, Emergency Command Centers, air attack bases).
5. Read and interpret engineering reports, plans, and specifications to obtain information and provide direction on various projects in construction (e.g., fire stations, Emergency Command Centers, air attack bases).
6. Analyze situations accurately and take effective, appropriate action in situations, in order to minimize interruptions to business operations, while ensuring a safe and healthy work environment.
7. Effectively communicate verbally to obtain and disseminate information.
8. Perform technical research work and make detailed analysis in order to complete the design process.
9. Inspect construction projects to achieve quality assurance.
10. Make presentations to a wide variety of audiences (e.g., technical and non-technical staff, control agencies) to effectively convey information.

## VETERANS PREFERENCE

Veterans' preference credits are not granted in promotional examinations.

## CAREER CREDITS

Career credits are not granted in promotional examinations.

## CONTACT INFORMATION

Department of Forestry and Fire Protection  
P.O. Box 944246  
Sacramento, California 94244-2460  
(916) 445-7824

TDD is Telecommunications Device for the Deaf and is reachable only from phones  
equipped with a TDD Device  
1 (800) 735-2929 (TT/TDD) 1 (800) 735-2922 (Voice)  
STS is Speech-to-Speech Service for persons with a speech disability and is reachable at  
1 (800) 854-7784 (California) or 1 (800) 947-8642 (Nationwide)

## DISCLAIMER

Please click on the link below to review the official California State Personnel Board class specification:

<http://spb.ca.gov/jobs/resources/jobspecs.htm>

## GENERAL INFORMATION

**For an examination with a written feature**, it is the candidate's responsibility to contact the Department of Forestry and Fire Protection, (916) 445-7824, three days prior to the written test date if he/she has not received his/her notice of appointment.

**For an examination without a written feature**, it is the candidate's responsibility to contact the Department of Forestry and Fire Protection three weeks after the final filing date if he/she has not received his/her notice.

**If a candidate's notice** of oral interview or performance test fails to reach him/her three days prior to their scheduled appointment due to a verified postal error, he/she will be rescheduled upon written request.

**Examination Locations:** When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. However, locations of interviews or performance evaluations may be limited or extended as conditions warrant.

**Applications are available** at <http://jobs.ca.gov/Profile/Profile>, State Personnel Board offices, local offices of the Employment Development Department and the testing Department on this job bulletin.

**If you meet the requirements** stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

**The testing Department** reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the classification. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history and fingerprinting may be required.

**Eligible Lists:** Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) Departmental promotional, 3) multi-Departmental promotional, 4) service-wide promotional, 5) Departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

**Promotional Examinations Only:** Competition is limited to employees who have a permanent civil service appointment and military veterans that meet all the minimum qualifications. Under certain circumstances, other employees may be allowed to compete under provisions of Rules 234, 235, and 235.2. State Personnel Board Rules 233, 234, 235, 235.2, and 237 contain provisions regarding civil service status and eligibility for promotional examinations. These rules may be reviewed at Departmental personnel offices, at the State Personnel Board office, or [www.jobs.ca.gov](http://www.jobs.ca.gov).

**If High School Equivalence is Required:** Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing the General Educational Development (GED) Test; 2) completion of 12 semester units of college work; 3) certification from the State Department of Education, a local school board, or high school authorities that the candidate is considered to have education equivalent to graduation from high school; 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.

**Veterans' Preference Points:** California Law (Government Code 18971-18978) allows the granting of Veterans' Preference Points in open entrance and open, non-promotional entrance examinations. Veterans' Preference Points will be added to the final score of all competitors who are successful in these types of examinations, and who qualify for, and have requested these points by mail. **In open (only)** entrance examinations, Veterans' Preference Points are granted as follows: 10 points for veterans, widows, and widowers of veterans, and spouses of 100% disabled veterans (5 points for widows, widowers, and spouses if the veteran was in the National Guard); and 15 points for disabled veterans. **In open, non-promotional** entrance examinations, Veterans' Preference Points are granted as follows: 10 points for veterans and 15 points for disabled veterans. Employees who have achieved permanent State civil service status are not eligible to receive Veterans' Preference Points. "Permanent State civil service status" means the status of an employee who is lawfully retained in his/her position after completion of the applicable probationary period. This includes permanent intermittent, part-time, and full-time appointments. In addition, individuals who at any time achieved permanent State civil service status and subsequently resigned, or were dismissed from State civil service are not eligible to receive Veterans' Preference Points. Veteran status is verified by the State Personnel Board (SPB). Directions to apply for Veterans' Preference Points are on the Veterans' Preference Application (STD. Form 1093), which is available at [www.spb.ca.gov](http://www.spb.ca.gov) or from the State Personnel Board, 801 Capitol Mall, Sacramento, CA 95814, and the Department of Veterans Affairs.

**Career Credits:** In open, non promotional examinations, career credits are granted to: 1) State employees with permanent civil service status, 2) full-time employees of the State who are exempt from State civil service pursuant to the provisions of Section 4 of Article VII of the California Constitution, and who meet all qualification requirements specified by the Board and have 12 consecutive months of service in an exempt position, and 3) individuals who have served one full year in, or are graduates of, the California Conservation Corps (eligibility shall expire 24 months after graduation from the California Conservation Corps). Three points are added to the final test score of those candidates who meet the above criteria, and who are successful in the examination. Such examinations cannot be for managerial positions described in Government Code Section 3513. Competitors not currently employed in State civil service who have mandatory reinstatement rights may also be eligible for career credits, but they must explain their service status in the appropriate section of the Examination/Employment Application. (STD. 678) (Section 4 of Article VII of the California Constitution is posted at the State Personnel Board, 801 Capitol Mall, Sacramento, CA 95814).

**Felony Disqualification:** You are disqualified from being employed as a peace officer if: 1) you have been convicted of a felony in California or any other State; 2) you have been convicted of any offense in any other State which would have been a felony if committed in California; 3) you have been charged with a felony and adjudged by a superior court to be mentally incompetent; 4) you have been adjudged addicted or in danger of becoming addicted to narcotics, convicted, and committed to a State institution. If you have been convicted of a felony, you may be allowed to participate in this examination if your conviction(s): 1) has/have been sealed under Penal Code Section 851.7, 851.8, 1203.45, or Health and Safety Code Section 11361.5; 2) has/have been expunged or is/are expugnable pursuant to Health and Safety Code Section 11361.5 regarding marijuana offenses; 3) was/were stipulated or designated to be a lesser included offense of marijuana possession under Health and Safety Code Section 11557 or 11366.

**Confidentiality and Security:** Pursuant to Government Code Sections 19680(c) and 19681(b) it is unlawful to copy and/or furnish confidential examination material for the purpose of either improving or injuring the chances of any person or to obtain examination questions or other examination material before, during, or after an examination. Every person violating these provisions is guilty of a misdemeanor, and adverse action will be pursued. This may result in the person being barred from competition in future examinations, withheld from certification lists, or cancellation of eligibility for employment in State civil service.