



Engineering Geologist

Departmental Open

EXAM ID: 6TR27

Department:	Caltrans
Bulletin Release Date:	June 10, 2016
Final Filing Date:	June 30, 2016
Monthly Salary:	\$4,760.00 - \$8,961.00

INTRODUCTION

Caltrans is pleased to announce the posting of the Engineering Geologist examination. Employment from this examination may be offered in all Districts and Sacramento County.

EQUAL EMPLOYMENT OPPORTUNITY

Caltrans is an equal opportunity employer to all, regardless of age, ancestry, color, disability (mental and physical), exercising the right to family care and medical leave, gender, gender expression, gender identity, genetic information, marital status, medical condition, military or veteran status, national origin, political affiliation, race, religious creed, sex (includes pregnancy, childbirth, breastfeeding and related medical conditions), and sexual orientation.

DRUG FREE STATEMENT

It is an objective of the State of California to achieve a drug-free work place. All applicants will be expected to behave in accordance with this objective, as 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?

Candidates who meet the minimum qualifications as stated on this announcement may apply for this examination.

FILING INSTRUCTIONS

Candidates are required to submit: 1) [Standard State Application](#) (STD.678) and 2) [Training and Experience Questionnaire](#).

Applications (STD 678) must be received or postmarked no later than the final filing date. FAXED OR E-MAILED APPLICATIONS WILL NOT BE ACCEPTED. THE EXAMINATION TITLE MUST BE INDICATED ON THE APPLICATION.

***FILE BY MAIL:**

Caltrans
Exam Services (MS 86)
P.O. Box 168036
Sacramento, CA 95816-8036

***FILE IN PERSON:**

Caltrans
Exam Services (MS 86)
1727 30th Street, 1st Floor
Sacramento, CA 95816

***Candidates are responsible for obtaining proof of mailing or submission of their application to Exam Services.**

POSITION STATEMENT

This is the entry, working, and journey level in the series. Incumbents move through the ranges as competency and performance increases.

Range A is the entry and first working level in the class. Incumbents work under close supervision and perform less difficult engineering geologic work.

ELIGIBLE LIST INFORMATION

A Departmental Open list will be established for Caltrans in all Districts and Sacramento County. The 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 the final filing date. You will be required to certify the application indicating that you read, understand, and possess the minimum qualifications required, and that the information provided is true and complete to the best of your knowledge.

MINIMUM QUALIFICATIONS

Education: Equivalent to graduation from college with major work in geology, engineering geology, or a closely related field that includes coursework in geology (Additional qualifying experience may be substituted for the required education on a year-for-year basis.) (Registration as a senior in a recognized institution will admit applicants to the Engineering Geologist examination, but they must produce evidence of graduation or its equivalent before they can be considered eligible for appointment.)

Click on the link below to review the California State Personnel Board class specification which contain the requirements for admittance to the exam:

<http://www.calhr.ca.gov/state-hr-professionals/pages/3756.aspx>

EXAMINATION INFORMATION

This examination will consist of a Training & Experience Evaluation weighted 100%. In order to obtain a position on the eligible list, a minimum score of 70% must be attained.

Click [HERE](#) to access the Training and Experience Evaluation.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of:

1. Stratigraphic, structural, historical, and economic geology as related to civil engineering projects to research, collect, and evaluate existing engineering geological data
2. Investigative techniques and procedures to evaluate surface and subsurface geologic conditions to provide recommendations and technical support in characterizing surface and subsurface conditions
3. Fundamental principles of mineralogy, petrography, hydrogeology, geomorphology, geophysics, and soil mechanics to provide technical expertise for foundation design of engineered structures
4. Photogeology, geological mapping and drafting, and the application of geology to engineering projects to determine the presence and impact of unique geologic formations or paleontological resources
5. Geological literature (e.g., maps, reports, historic aerial photos) to aid in project preparation to conduct and direct drilling explorations to retrieve subsurface materials, samples, and data
6. Subsurface exploration and sampling procedures to provide recommendations and technical support in characterizing surface and subsurface conditions
7. Engineering and geological concepts and principles as they relate to civil engineering projects to support in the development of contract plans and specifications

Skill in:

1. Utilizing current computer applications (i.e., Microsoft Word, Outlook, Excel, etc.) to provide project support in preparing calculations, reports, task orders, and email correspondence

Ability to:

1. Plan and conduct subsurface investigations as related to civil engineering projects to retrieve subsurface materials, samples, and data
2. Work independently or as a team member on project related activities to provide written and verbal recommendations for various phases of transportation projects
3. Make, record, and evaluate observations related to engineering geologic conditions to determine the presence and impact of unique geologic formations or paleontological resources
4. Analyze situations accurately and take effective action to respond to emergencies related to geologic hazards
5. Compile and analyze technical information to provide technical support and recommendations to District and Division of Engineering Services functional units
6. Utilize field equipment (e.g., Brunton compass, GPS, measuring tape, geophysical equipment) to identify geological conditions
7. Prepare written correspondence and technical reports to communicate with staff, outside agencies, and the public
8. Work cooperatively with public agencies, consultants, and contractors to assist in project related issues
9. Laboratory testing procedures for soil and rock as they relate to civil engineering projects to determine the appropriate methods to mitigate geologic hazards
10. Identify and map relevant geologic features (e.g., rock, soil) to characterize a site
11. Interpret maps (e.g., topographic, geologic, fault)
12. Interpret field and laboratory test data and incorporate that information into an analysis of a project site
13. Communicate effectively, both in written and oral form, with project team members and/or supervisors in an accurate, timely, and effective manner to ensure project completion
14. Prioritize and work on multiple tasks simultaneously to ensure timely completion of projects

SPECIAL PERSONAL CHARACTERISTICS

1. Willingness to walk on rough terrain in a variety of hazardous and/or unpleasant field conditions, including near live traffic, wet, rainy, windy, dusty, cold or hot weather
2. Willingness to travel throughout the state to perform field work
3. Willingness to work outside normal work hours when required
4. Willingness to learn new information and techniques to enhance job performance

ADDITIONAL DESIRABLE QUALIFICATIONS

Course work in engineering geology; willingness to travel in performing field work throughout the State; course work and/or experience in environmental engineering, water resource management, hydraulics, and/or hydrogeology; and in addition to registration as a geologist, certification as an engineering geologist or hydrogeologist.

VETERANS' PREFERENCE

Veterans' Preference will be granted in the examination as it does meet the requirements to qualify for Veterans' Preference.

CAREER CREDITS

Career Credits will not be granted in this examination.

CONTACT INFORMATION

For more information regarding this exam, please contact the examination receptionist at (916) 227-7858.

GENERAL INFORMATION

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

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.

Caltrans 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 the ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. 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.

Veterans' Preference: Pursuant to Assembly Bill 372, Veterans' Preference will be awarded as follows, starting January 1, 2014:

1. Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an open examination, shall be ranked in the top rank of the resulting eligibility list.
2. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference.
3. Veterans' Preference is not granted once a person achieves permanent civil service status (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).

Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Veterans' Preference Application (CalHR Form 1093) which is available at <https://jobs.ca.gov/Public/Jobs/Veterans.aspx> or from the CalHR and the Department of Veterans Affairs.

TTY is Telecommunications Device for the Deaf and is reachable only from phones equipped with a TTY Device.

For individuals with disabilities, this document may be available upon request in alternate formats. To obtain an alternate format, please call or write to Caltrans, Office of Examinations and Recruitment Services, P.O. Box 168036, MS 86, Sacramento, CA 95816. Voice (916) 227-7858 California Relay Service: Voice 1-800-735-2922 or TTY 1-800-734-2929.