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By _____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION

NOTICE OF POSITION VACANCY
ANNOUNCEMENT NO. **HWY-121-11; JULY 8, 2011**

LAST DAY TO SUBMIT FORMS: JULY 21, 2011

It is the policy of the Department of Transportation to administer its operations without discrimination based on race, sex, sexual orientation, age, religion, color, ancestry, disability, marital status, arrest or court record or politics.

**TITLE: ENGINEER (CIVIL) IV, SR-24, BU-13
Position No. 02499**

**LOCATION: HIGHWAYS DIVISION, PLANNING BRANCH,
ADVANCED PLANNING SECTION, PROJECT PLANNING UNIT A**

REQUIREMENTS:

I. APPLICANTS MUST:

- (a) Be a Department of Transportation (DOT) employee who is a member of the State's civil service.
- (b) As of the last formal appraisal report, have demonstrated satisfactory performance in his/her position; AND
- (c) Meet the minimum qualification requirements of this position (as of the last day to submit forms shown above).

II. REQUIRED FORMS:

DOT 1-022 – Notice of Interest in a Position Vacancy

HRD 315A (Rev. 08/07/2007) – Competitive Internal Recruitment Application

Photocopy of license(s) if required

If you are using education to qualify, submit copies of your college transcript or diploma

- (a) Must be submitted at the following location:

HIGHWAYS DIVISION PERSONNEL OFFICE
869 Punchbowl Street #203
Honolulu, Hawaii 96813

- (b) Must be submitted by **JULY 21, 2011.**

- (1) Forms submitted in person must be received **at the location shown in II(a)** above no later than 4:30 p.m. of the last day to submit forms shown above.
- (2) Forms mailed through the U. S. Postal Service must be postmarked by **midnight of the last day to submit forms shown above.**

POSITION INFORMATION:

I. DUTIES SUMMARY/KNOWLEDGE AND ABILITIES REQUIRED:

Performs difficult and complex professional engineering work in the planning, design, construction, maintenance and/or operation of specialized engineering projects; or plans and conducts research, development, or other work in a specialized engineering field for the purpose of improving, extending or validating precedents, data, methods or techniques; and performs other duties as required.

In addition to the knowledge and abilities indicated at the lower levels, this level requires a thorough knowledge of standard guides, precedents, methods and techniques in the area of specialization and a good working knowledge of established methods and procedures used in related areas; a thorough knowledge of applicable laws, regulations, policies and procedures of the agency and of other sources of information, such as that supplied by other government agencies, private industry and educational institutions.

The ability to function independently, under only general supervision, in performing normal work assignments; modify, adapt and make compromises with standard guides, precedents, methods and techniques; develop effective coordination and secure cooperation with others and plan and prepare complete and comprehensive engineering reports; the ability to supervise and instruct lower-level professional and nonprofessional personnel as required for certain positions.

II. MINIMUM QUALIFICATION REQUIREMENTS: (Excerpted from Class Specifications dated September 25, 2007).

A. Basic Education/Experience Requirements:

All applicants must meet one of the requirements specified in 1, 2 or 3 below:

1. Graduation from a school of engineering in an accredited college or university.

NOTE: For some positions, graduation from an accredited college or university with a degree in physics, mathematics or chemistry may be accepted as qualifying, provided the applicant has had at least fifteen (15) credits in engineering sciences, common to all engineering disciplines; e.g., thermodynamics, statics, electrical science, applied mechanics, engineering drawing, strength of materials, etc.

2. Administrative, professional or technical experience involving the application and knowledge of the fundamental physical and mathematical sciences underlying professional engineering including physics, chemistry, mathematics through integral calculus, and engineering sciences such as statics, dynamics, strength of material, thermodynamics, fluid mechanics and engineering drawing and other specialized courses to one of the branches of engineering. Such experience must be substantially equivalent to the knowledge and understanding gained by completion of a college training leading to a bachelor's degree in engineering; or
3. A combination of college training in engineering and experience mentioned in 2 above substantively equivalent to completion of a college training leading to a bachelor's degree in engineering.

B. Experience Requirement:

Except for the substitutions provided for in this specification, applicants must have had progressively responsible experience of the kind and quality described below.

1. Engineering Experience:

Three (3) years of progressively responsible professional engineering experience which required the knowledge and application of the basic physical and mathematical sciences and the engineering sciences to the solution of theoretical or practical engineering problems.

Examples of qualifying professional engineering experience are as follows:

- a. The development and design of machines, equipment, structures or power, water, communication or transportation systems and facilities or the preparation of development, design or construction specifications for such materials or systems, involving the use of theoretical and applied mechanics, a knowledge of the properties of materials and other appropriate engineering and scientific knowledge and skills.

- b. Original research in one or more branches of engineering, developing engineering applications of physical and other scientific principles.
- c. Administration of engineering programs and projects, involving analysis of requirements for equipment and materials, study of technical feasibility and cost, selection of approach and direction of problem solution.
- d. Interpretation of systems operational requirements in terms of physical facilities and the design and development of standard procedures for efficient operational use or maintenance of such facilities.
- e. Evaluation, investigation, or survey of engineering projects, structures, devices or services.
- f. Such activities as production, construction, regulation and test, when they involve engineering considerations and decisions as important and controlling elements.

Note: In some situations, experience which is not of itself clearly professional engineering experience may be accepted in lieu of "professional" engineering experience. In such cases, the experience must have been preceded by prior "professional" engineering experience and must contribute directly and significantly to the candidate's professional engineering competence. For example, an engineer may be assigned to a management or a computer systems analysis position in preparation for assumption of higher level responsibilities in engineering administration.

At least one (1) year of the required engineering experience must have been experience comparable to the next lower level.

2. Quality of Experience:

Possession of the required number of years of experience will not in itself be accepted as proof of qualification for a position. The applicant's overall experience must have been of such scope and level of responsibility as to conclusively demonstrate that he/she has the ability to perform the duties of the position for which he/she is being considered.

C. Substitutions:

A Master's degree in a pertinent engineering field from a school of engineering in an accredited college or university may be substituted for one (1) year of engineering experience.

D. License Requirement: (*Please attach a copy to your application*)

Applicants must possess a valid license as a professional engineer in the State of Hawaii.

E. Selective Certification Requirement: (*Please attach a copy to your application*)

Possession of a valid State of Hawaii Driver's License, Type 3; at time of application.

F. Tests:

Applicants may be required to qualify on an appropriate examination.

The official source document for determination of minimum qualification requirements, including knowledge, skills and abilities required, is the class specification issued by the Department of Human Resources Development.