

JUNIOR PROJECT ENGINEER

BU: 92 (NR) **PB:** 3 **Created:** June 2019

FLSA: Exempt

Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are <u>not</u> intended to reflect all duties performed within the job.

DEFINITION

Under close supervision, performs a variety of entry-level professional duties including assists in design review, construction management, contract support, and coordination with other BART departments on engineering projects; assists with critical engineering decisions using various engineering principals; performs related duties as required

CLASS CHARACTERISTICS

This is the professional entry level classification in the electrical engineering series. Positions at this level work perform entry level tasks and duties and is typically used as a training level classification for incumbents with limited or no directly related work experience. The Junior Project Engineer classification is distinguished from the Project Engineer level in that the latter is the full journey level in the engineering series.

REPORTS TO

Engineering Manager, Engineering Supervisor, Principal Engineer or designee.

EXAMPLES OF DUTIES – Duties include, but are not limited to, the following:

- 1. Performs a variety of entry level professional engineering duties in the assigned division, including engineering specifications, computer systems applications, preliminary cost estimates, engineering drawings, calculations and analyses.
- 2. Conducts field inspections and investigations.
- 3. Tracks and reports project deliverables.
- 4. Develops and implements processes and procedures for projects.
- 5. Assists in preparing engineering designs, specification costs and quantity estimates for engineering construction projects.

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- 6. Procures materials for projects; coordinates with vendors; acquires quotes.
- 7. Analyzes and resolves computer systems malfunctions.
- 8. Assists Project Managers and Engineers in resolving any engineering issues maintenance encounters.
- 9. Conducts special studies and prepares a variety of reports and correspondence.

QUALIFICATIONS

Knowledge of:

- Basic principles and practices of the engineering discipline to which assigned
- Appropriate sources of engineering information
- Computer applications as applied to the solution of engineering problems
- Engineering materials, equipment and methods
- BART procurement process

Skill/Ability to:

- Apply basic engineering principles and practices to the solution of engineering problems
- Conduct engineering studies and evaluations and write clear and concise reports
- Analyze technical problems, including those involving computer hardware and software
- Learn engineering division procedures and applicable laws, codes and regulations
- Interpret and prepare drawings and specifications
- Learn to prepare construction and/or installation cost estimates
- Keep accurate records
- Follow proper protocol and procedures
- Participate in the review of vendor drawings, plans, specification, and other documents
- Establish and maintain effective working relationships with those contacted in the course of the work

MINIMUM QUALIFICATIONS

Education:

Bachelor's degree in engineering or a closely related field from an accredited college or university.

Substitution:

Professional experience as outlined above may be substituted for the education on a year-for- year basis. A college degree is preferred.

WORKING CONDITIONS

Environmental Conditions:

Office environment; field environment; exposure to computer screens.

Physical Conditions:

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May require maintaining physical condition necessary for walking, standing or sitting for prolonged periods of time.

BART EEO-1 Job Group: 3000 – Engineers

Census Code: 1530 – Miscellaneous Engineers

Safety Sensitive: No