



## JUNIOR PROJECT ENGINEER

**JC:** EF400  
**PB:** 3  
**FLSA:** Exempt

**BU:** 92 (NR)  
**Created:** May 2019  
**Revised:** June 2019

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

### **DEFINITION**

Under close supervision, assists in design review, construction management, contract support, and coordination with other BART departments on engineering projects.

### **CLASS CHARACTERISTICS**

This is the entry level in the engineering classification series. This classification works under close supervision. As experience and proficiency are gained, incumbents are expected to exercise more independent judgment while performing more diverse and difficult assignments. Incumbents typically are expected to progress to the Engineer classification in 2-3 years. The Junior Engineer class is distinguished from the Engineer level in that the latter is the full journey level in the engineering series.

### **REPORTS TO**

This position reports to the Engineering Manager, Engineering Supervisor, Principal Engineer, and/or his/her 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.
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.

#### **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:**

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

#### **Other Requirements:**

Must possess sufficient mobility to perform field inspections and investigations.

#### **Substitution:**

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:**

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

**Junior Project Engineer**

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**BART EEO-1 Job Group:** 3000 – Engineers  
**Census Code:** 1530 – Miscellaneous Engineers  
**Safety Sensitive:** No