



**Board Report**

**File #:** 2019-0818, **File Type:** Contract

**Agenda Number:** 18.

**OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE  
FEBRUARY 20, 2020**

**SUBJECT: CAPITAL IMPROVEMENT PROJECTS FOR METRO RAIL AND FACILITY  
INFRASTRUCTURE**

**ACTION: APPROVE RECOMMENDATIONS**

**RECOMMENDATION**

CONSIDER:

A. FINDING that awarding a design-build delivery method, pursuant to Public Utilities Code Section 130242(b), will achieve for Metro certain private sector efficiencies through the integration of design, project work and components at Metro rail facilities and in Metro light rail vehicles in Los Angeles County as defined by the supply and install projects listed in Attachment A.

Approval requires a two-thirds affirmative vote;

B. AUTHORIZING the Chief Executive Officer to award the competitively bid design-build contracts to the lowest responsive, responsible bidder, pursuant to Public Utilities Code Section 130051.9(c)

**ISSUE**

The Maintenance and Engineering department has a wide range of capital improvement and State of Good Repair (SGR) projects that need to be completed in the coming years. PUC Section 130242 requires a finding by a two-thirds vote of the Board to use the design-build project delivery method.

**BACKGROUND**

Metro is authorized to enter into design-build contracts pursuant to Public Utilities Code Section 130242, however recommendation A requires Board approval. Public Utilities Code Section 130242 et seq. allows for the award of contracts for a design-build delivery to a responsible bidder whose bid is responsive and lowest price.

The projects listed in Attachment A are mostly supply and installation contracts that may have a small percentage of design work to accommodate the installation that may be required due to the variability

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between manufacturers. To minimize the risk to project schedule, staff is seeking Board approval to use the design-build project delivery method for the projects listed in Attachment A, as appropriate. All the projects listed in Attachment A are projects that are part of the Maintenance and Engineering Capital Program.

## **DISCUSSION**

Design-build is a method of project delivery through which Metro contracts directly with a single entity that is responsible for both design and the necessary subsequent services for project delivery. The primary benefit of the design-build process is a shortened project schedule where the design builder is able to begin work, including supply and installation activities, while the design is being completed. This approach delivers the project ahead of a traditional design-bid-build approach and therefore, should result in a lower total project cost. Other benefits include a reduction in the number of changes and claims from multiple prime contractors, additional efficiencies in design innovation, project management, administration and coordination.

Metro has successfully utilized design-build contracts on various projects in its capital program. The design-build approach offers the following benefits:

- A single point of responsibility for design, supply, and installation.
- Functional specifications are provided that may promote more open competition
- Risk for design is shifted to the design/build contractor; therefore, changes related to design may be minimized
- Schedule efficiencies and significant time savings may be achieved because supply and installation services may proceed while design is being finalized
- Administrative costs can be saved due to combining the solicitation process for the design and related work program activities; saving project management and engineering resources while work is performed to complete the project; and minimize contractor-generated changes resulting in a reduced contract closeout time

These contracts will be awarded to the lowest price responsive, responsible bidder meeting the requirements set forth in the invitation for bids.

## **DETERMINATION OF SAFETY IMPACT**

The recommended action of a design-build delivery method will keep the projects on schedule and allow several safety related projects to be completed in a timely manner which will enhance Metro's ability to provide service that is safe and reliable.

## **FINANCIAL IMPACT**

This action is to approve the use of a design-build contract delivery method; therefore, there is no financial impact. Upon contract award, funds for this effort are included in the project scope of work and Life of Project (LOP) budgets reflected in Attachment 1 to this report. Since this effort will be performed in multiple years, the Project Manager and Chief Operations Officer will ensure that the

balance of funds are budgeted in future fiscal years.

#### Impact to Budget

No financial impact at this time. Current funding for the projects shown in Attachment 1 include PA35%. This and other eligible funding sources will be allocated to the projects given approved funding guidelines and provisions.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

Approval of this recommendation supports the following Metro Strategic Plan Goals:

1. Provide high-quality mobility options that enable people to spend less time traveling.
2. Provide responsive, accountable, and trustworthy governance within the Metro organization.

Use of design-build delivery will help will improve safety, service, and reliability to provide a world-class transportation system that enhances quality of life for all who live, work, and play within LA County.

### **ALTERNATIVES CONSIDERED**

Projects could be accomplished utilizing consultants to prepare separate designs or with designs prepared by staff for bid and construction. However, staff does not recommend this approach for the projects listed in Attachment A. There are distinct advantages which yield a cost savings for having a contractor be responsible for design aspects and construction of a project. These include streamlined tasks for construction management, work milestones, mobilization, project schedule, and quality assurance.

The Construction Manager/General Contractor (CM/GC) project delivery method was also considered. However, this approach requires Metro to enter into a separate services contract to hire a Construction Manager to facilitate with the constructability of a project. During the design phase, the Construction Manager works with the project owner with input regarding schedule, pricing, and phasing for the construction execution. At substantial design completion, the owner and the Construction Manager negotiate a price for the construction of the project. If this price is acceptable to both parties, a contract is executed for construction services, and the Construction Manager becomes the General Contractor. According to Federal Highway Administration guidelines, CM/GC project delivery method are best suited for projects that have public involvement, right-of-way and utility issues, or projects with complex components that require innovation or "thinking out of the box." Nonetheless, the projects listed in Attachment A are State of Good Repair (SGR) projects with defined scopes that do not make them good candidates for CM/GC delivery method.

### **NEXT STEPS**

Design-build contract solicitation and award for the projects will be pursued in FY 20 and future fiscal years.

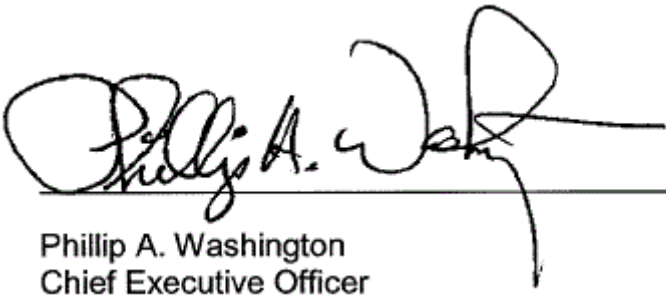
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**ATTACHMENTS**

Attachment A - Candidate Projects for Design-Build Project Delivery

Prepared by: Errol Taylor, Senior Executive Officer, Maintenance and Engineering, (213) 922-3227  
Marshall Epler, DEO Systems Engineering, (213) 617-6232  
Geyner Paz, Senior Administrative Analyst, (626) 733-5457

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108



Phillip A. Washington  
Chief Executive Officer

**Projects for Design-Build Delivery**

Supply & Installation Wayside Pantograph Inspection System

Supply & Installation of Vertical Transportation Monitoring – Software

Supply & Installation of Vertical Transportation Monitoring – Infrastructure

Supply & Installation of Blue Light Call Stations

Supply & Installation of Red Line Train to Wayside Communications

Supply & Installation of CCTV System

Supply & Installation of Red Line Tunnel Intrusion Detection

Supply & Installation of Replacement Radio System

Supply & Installation of Blue Line ETS Replacement System