



Board Report

File #: 2018-0066, File Type: Contract

Agenda Number: 34.

CONSTRUCTION COMMITTEE APRIL 12, 2018

SUBJECT: SYSTEMS ENGINEERING AND SUPPORT SERVICES

ACTION: AWARD PROFESSIONAL SERVICES CONTRACT

RECOMMENDATION

AUTHORIZE:

- A. the Chief Executive Officer to award a Task Order (TO) based seven-year cost plus fixed fee contract plus three one-year options, Contract No. AE47810E0128, to SECOTrans (Joint Venture of LTK Engineering Services, NBA Engineering Inc., Pacific Railway Enterprises Inc., and Ramos Consulting Services, Inc) for systems engineering and support services for design of rail and transit projects;
- B. an initial two year not-to-exceed amount of \$28,932,000 for Task Orders issued through Fiscal Year 2020; and
- C. the Chief Executive Officer to execute individual Task Orders and changes within the Board approved not-to-exceed amount for the contract.

ISSUE

Staff seeks to award a Systems Engineering and Support Services contract to assist Metro in the delivery of voter approved Measures R, M, and other Board approved Capital Improvement projects. The recommended action will provide contracting authority for Task Orders issued during the initial two years, FY's 2019 and 2020. Staff intends to return to the Board every two years to request additional contract funding as conditions and project requirements warrant.

DISCUSSION

With the approval of Measure M, the Twenty-Eight by '28 Plan, the ongoing implementation of the Measure R program, and required State of Good Repair initiatives, staff is seeking to engage a Systems Engineering Consultant (SEC) to provide a broad range of systems engineering design and related support services to supplement current Systems Engineering department resources.

Term

Due to the intensive system integration requirements and length of time needed to deliver major capital improvement projects, it is very inefficient and disruptive to change a systems engineering consultant during project delivery. The recommended Systems Engineering and Support Services term will provide greater continuity, consistency and less disruption by implementing a base seven (7) year contract with three (3) one-year options.

Scope

An experienced SEC provides a singular systems engineering team, and associated sub-specialties, with the necessary resources to assist in the planning, development, and delivery of Metro's aggressive schedule of projects for the next decade. The SEC will be capable of applying and withdrawing resources as the workload of projects fluctuates over time. The SEC has the extensive experience and capability to support the complete project lifecycle; from the conceptual phase to final design and construction.

Other Considerations

The challenge presented by the simultaneous implementation of numerous projects is to ensure the integration and standardization of the systems elements within and across the current Metro system. Consistent development and design is necessary to ensure that the required integration is achieved with respect to civil and electrical infrastructure, vehicles, control systems, communications, operations, maintenance, security, training, etc.

With a singular SEC design team supporting Metro, the standardization of design, construction and functionality of systems elements will keep Metro's long term interest of system interoperability and safety at the forefront. A fully-integrated network requires a consistency of systems design and not a collection of potentially incompatible independent designs arising from separate projects. This approach has been implemented successfully in other transit agencies nationwide and the benefits of full systems standardization include:

- Interoperability and efficient maintainability
- Improved commercial viability
- Reduced spares requirements
- Reduced training requirements
- Flexibility to adapt to changing circumstances

The SEC will provide some or all of the systems engineering services for current/future rail and bus transit projects, and other capital improvement projects, including, but not limited to, the following:

- East San Fernando Valley Transit Corridor
- Gold Line Eastside Phase 2 Extension
- Green Line South Bay Rail Extension
- West Santa Ana Transit Corridor

- Sepulveda Pass Transit Corridor
- Vermont Transit Corridor
- Orange Line BRT Improvements
- Westside Purple Line Extension Section 2 & 3
- Metro Blue Line (MBL) Re-signaling Project
- Metro Blue Line (MBL) Systems Upgrades
- Metro Green Line (MGL) Systems Upgrades
- Operations Control Center
- Gold Line Foothill Extension 2B

DETERMINATION OF SAFETY IMPACT

The use of a consistent systems design process has a positive benefit during the construction and subsequent operations of Metro's Rail and Bus transit network.

FINANCIAL IMPACT

Task Orders (TO) with a detailed scope of work shall be issued for each project or system element that requires systems engineering support. The vast majority of funds will be provided by the respective individual project life of project (LOP) funds for which the support work is required. A portion of the proposed contract workscope will require an annual budget allotment for conceptual and preliminary work to be funded through an annual overhead fund. The FY19 and FY20 allotment under recommendation B will initially require a not to exceed amount of \$1,500,000 dollars. Annual overhead allotments beyond FY20 shall not exceed 5% of actual task orders issued for future fiscal years. Aside from the annual allotment, the recommendations for this item have no financial impacts beyond what the Board authorizes through the annual budget adoption and/or LOP budget approval. Upon approval of Recommendation B, the FY19 budget will be amended to allow for up to \$1,000,000 in overhead funds and engineering support activities.

Staff will return to the Board every two years to request additional contract authorization as project needs arise in order to accurately estimate the anticipated level of required resources. On an annual basis, the Project Managers, Cost Center Managers, and Chief Program Management Officer will be responsible for budgeting costs in future years.

Impact to Budget

Upon approval of this action, up to \$1,000,000 will be funded in FY19 to initiate project support efforts. Any additional funding for TOs issued under this action will be provided by the specific project requiring the services. The source for these funds are projects' funding plans and may consist of federal and/or state grants as well as local funds. Many state-of-good repair and capital improvement projects are funded with local funding sources that are eligible for rail and bus operations.

ALTERNATIVES CONSIDERED

The Board may reject the recommendation, proposed duration, or initial funding authorization. Staff does not recommend these alternatives. The use of a qualified SEC allows the agency to secure highly technical expertise without the necessary increase in Metro long term labor costs. Further, by providing for an overall term of seven years plus up to three additional option years, an integrated and consistent network design serves Metro's interests. Finally, by limiting the initial funding to two years, greater accuracy of project scope and cost requirements can be provided to the Board on a two year basis.

NEXT STEPS

Upon Board approval, staff will complete the process to award and execute the contract. Specific task orders will be subsequently issued on an as needed basis.

ATTACHMENTS

Attachment A - Procurement Summary

Attachment B - DEOD Summary

Prepared by:

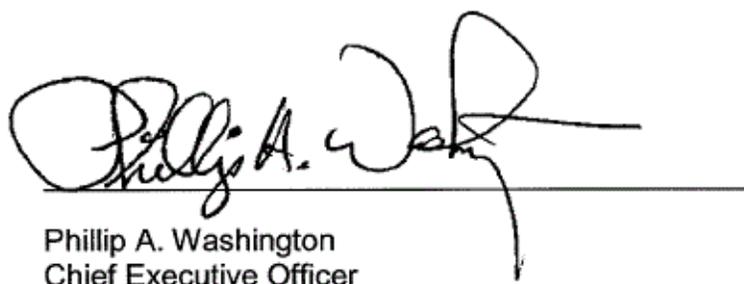
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