



Board Report

File #: 2019-0221, File Type: Contract

Agenda Number: 32.

CONSTRUCTION COMMITTEE MAY 16, 2019

SUBJECT: AIRPORT METRO CONNECTOR PROJECT

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. EXECUTE Modification No.6 for Contract No. PS298340011486 with Gruen Associates, for design (Phase II) and construction support (Phase III) modifications for Site Work, New Shoofly, Rail Platform Revisions and Design Adjustments in the firm fixed amount of \$2,064,031.93 increasing the total contract value from \$17,954,941 to \$20,018,972.93; and
- B. INCREASE Contract Modification Authority (CMA) specific to Contract No. PS298340011486 with Gruen Associates, in correspondence with the increased contract, in the amount of \$3,607,065 , increasing the total authorized CMA amount from \$3,557,979 to \$7,165,044 and authorize the CEO to execute contract modifications within the approved CMA amount.

ISSUE

During the internal review of the 30% Design Documents for the Airport Metro Connector Project (AMC) and coordination with Los Angeles World Airport's (LAWA) Automated People Mover Project (APM), it was determined that the following additional design work was required:

- Design and Documentation of a Temporary Shoofly

Analysis of constructing a new Rail Station on the Crenshaw Line identified multiple concerns in regards to service interruptions required to build a new ground up light rail station during public rail operations. Constructing the entire rail platform, two above grade pedestrian mezzanine crossings and roofing, would require multiple service interruptions, single tracking, and in many cases, complete shutdown of the Crenshaw Line for extended periods to allow for this construction. As the AMC Work would occur shortly after the scheduled opening of the Crenshaw Line, these disruptions and adjustments to the newly opened rail service would be untenable, costly and inefficient. To mitigate these concerns, the installation of a temporary Shoofly was determined by the Project Team and Metro Operations as the most prudent option to maintain full

service as much as possible to the Crenshaw Line while allowing for full access to the future AMC Rail Station area for uninterrupted and more efficient construction. As this work is completely new scope, both the design work and construction support will be additional scope to the different phases of the original contract per the following:

- Additional Services to Original Contract for Design Development Section (Phase II): The design and documentation of Shoofly from conception through the coordination and production of 100% Construction Documents
- Additional Services to Original Contract for Design Support during Construction: Design support by the design consultant during construction and integration to the Crenshaw Line for the new Shoofly

- Site Work

With the addition of the Shoofly, the site work is now required to take place before the construction of the Shoofly, much sooner than originally scheduled. In coordination with both the new Shoofly installation and the intersecting LAWA APM work, the AMC Station project site work components - demolition, environmental remediation, site grubbing and rough grading - requires separation from the original project documents into the development of its own separate design documents to allow for the now-required early construction of the site work. Both the design coordination and construction support for this site work will be additional scope to the different phases of the original contract per the following:

- Additional Services to Original Contract for Design Development Section (Phase II): Additional design documentation of Site Work from 30% documents with the creation of new and separate 100% Construction Documents
- Additional Services to Original Contract for Design Support during Construction: Design support by the design consultant during construction of the Site Work

- Redesign of Rail Platform

The direction to install the Shoofly provided an opportunity for a more detailed analysis for the rail station platforms at the AMC. The original design, required to fit within the Crenshaw Line alignment, landed on a three platform design - one platform outside of each rail and a central one in between. While the three platform design presented interesting opportunities for passenger circulation, there were numerous shortcomings - narrow platforms and vertical circulation

elements, unclear wayfinding, and code implications. In addition, each individual platform required its own canopies, rail communications equipment and other amenities such as map cases and benches, tripling the amount of platform amenities and more importantly, multiplying the amount of maintenance required. With rail service now designed to be diverted to the Shoofly, the platform area was re-analyzed for passenger use and maintenance and operational efficiencies. A design schematic exercise presented a large single central platform which greatly reduced construction and equipment requirements as well as creating a more straightforward customer experience. This exercise proved to save the project over \$10,000,000 in project costs and exponential maintenance costs for the foreseeable future. This design work was required to start from conception and then fully integrated into the main AMC Station set at 60%.

- Additional Design Revisions

With the overall design intent complete at 30%, several 3rd Party agencies expressed concern for the overall appearance and integration of the design with the future APM Station. In an effort to provide a more significant presence of the station, the design team was directed to re-develop key structural components and exterior façade and roofing systems to meet these concerns. This design work was required to start from conception and then fully integrated into the main AMC Station set at 60%.

BACKGROUND

The main purpose of the additional design work is to create solutions that would allow for timely and uninterrupted construction of the final AMC Station project - which will have a Rail Station component - while minimizing potential stoppages to the operations of the Crenshaw Line. However, by the time a final option of a temporary shoofly was confirmed, schedule limitations of various components outside of the AMC Station Project required expedited design and coordination work of the Site Work and Shoofly. There were three specific components that determined the immediate direction to perform this work:

- Restricted project design timeline - As noted above, during the 30% review with various Metro departments, it was determined that the construction of the new Rail Station at AMC would be logistically difficult and disruptive to the Crenshaw Line service without an alternative service option. The first order of work required a thorough review of options for this alternative service in coordination with the Operations Department and Crenshaw project team.

The redesign of the of the central platform and the additional design revisions noted above were also restricted by the same time restrictions, as this work will need to be completed to allow for procurement and mobilization of the project construction by the time the Shoofly is operational.

- LAWA APM (Los Angeles World Airport's Automated People Mover) - From its inception, the

AMC Station Project has faced critical coordination and schedule integration with the LAWA APM as this rail system will be constructed and eventually, operated within the AMC Station area. By the time Metro made the decision to pursue the Shoofly, the two agencies had already determined that working concurrently on the same site would be unsafe, more costly and inefficient. With the new Shoofly scope, additional coordination was required with LAWA while mitigating delays to both their design and final construction schedules. As the LAWA APM project is also time and cost sensitive, timely direction to proceed was required to minimize Metro's exposure to delays and claims this coordination required.

- Crenshaw Line Coordination - The last component was synchronization with the Crenshaw/LAX Line and Southwest Yard. Initial coordination with the Crenshaw Line team showed potential scheduling conflicts as the original schedule for the Shoofly work coincided with critical testing dates for the main line. With this understanding, both the Project Team and Metro Operations worked to mitigate potential shutdowns and related bus bridging to the Crenshaw Line during the construction and eventual tie-in of the Shoofly. The best method determined was to expedite the completion of the Shoofly design documents to allow for an early start of the Shoofly construction to provide schedule flexibility and slot the Shoofly work into the Crenshaw Line and Southwest Yard at the most reasonable and least disruptive times.

Understanding these conditions, which did not allow for a lengthy procurement process for the design and production of documents, Gruen Associates was directed to proceed immediately with the design work for the Shoofly, Site Work, Platform reconfiguration, and Design upgrades to maintain critical coordination and schedule. This Board action would allow this additional work to be ratified into the contract as additional scope. The design consultant's familiarity with all aspects of the project provided immeasurable time and cost savings and allowed for the design work to coincide and eventually integrate into the main body of the design work on schedule.

DISCUSSION

Direction to Proceed with the Site Work and Shoofly Design

In order to provide these design services and meet critical milestone schedule points, staff seeks a contract modification to augment the design and engineering services with Gruen Associates. Based on the revised construction schedule and design support needs during bidding and construction, staff is recommending the additional services through FY21.

DETERMINATION OF SAFETY IMPACT

The installation of a Shoofly will ensure that the Crenshaw Line service will maintain safe and uninterrupted passage throughout the adjacent construction of the AMC Rail Station. In addition, with full and uninterrupted access to the Crenshaw Line Right-of-Way, the construction means and methods will follow more typical industry standards, requiring less complicated and safer construction

equipment and procedures next to - instead of within - an operating rail line. This Board action will have no impact on established safety standards.

FINANCIAL IMPACT

This project is funded on a fiscal year basis under Project number 860303 Airport Metro Connector Project (AMC), cost center 8510, under various accounts including Professional/Technical Services and ROW acquisitions. The project is authorized to expend up to a cumulative amount of \$116.0 million through the FY19 period. Approval of the recommendations will add funding to the existing design consultant contract through FY21. This is a multi-year project requiring expenditure authorizations in fiscal year increments until a Board Authorized Life of Project Budget is adopted. It is the responsibility of the Project Manager and Chief Program Management Officer to budget for this project in future fiscal years.

Impact to Budget

Through FY19, the sources of funds for the recommended actions are Measure M 35% and Cap & Trade Transit and Intercity Rail Capital Program (TIRCP). There is no impact to Operations eligible funding. No other funds were considered.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

This action directly supports the Project which is consistent with Metro's Strategic Plan Goals. The Strategic Plan goal is to enhance communities and lives through mobility and access to opportunity. By increasing capacity at the station, better integrating rail service to the APM, and creating a more intuitive and efficient passenger experience, the Project seeks to better connect residents to a wider range of regional employment, educational, and cultural opportunities.

ALTERNATIVES CONSIDERED

The Board may choose not to approve the contract modifications. This alternative is not recommended as the current design would greatly affect Crenshaw Line Operations shortly after its opening with service interruptions, single tracking and shut downs along with severely extended and costly construction delays to coordinate with these rail service stoppages. In addition, not proceeding with these modifications would further complicate coordination with the APM Project along with unnecessary maintenance service and associated costs for future multiple AMC Station components.

Similarly, not authorizing the Contract Modification for Gruen Associates is also not recommended since rejecting this modification would result in an inadequate design and engineering support during the construction of a very complex project with an aggressive design and construction schedule.

NEXT STEPS

Upon Board approval, staff will execute Modification No. PS298340011486 with Gruen Associates, for additional design, design development, production of documents and construction support for the additional scope of the Shoofly, Site Work, Central Rail Platform and Station Design Revisions.

ATTACHMENTS

- Attachment A - Procurement Summary
- Attachment B - Contract Modification/Change Order Log
- Attachment C - DEOD Summary

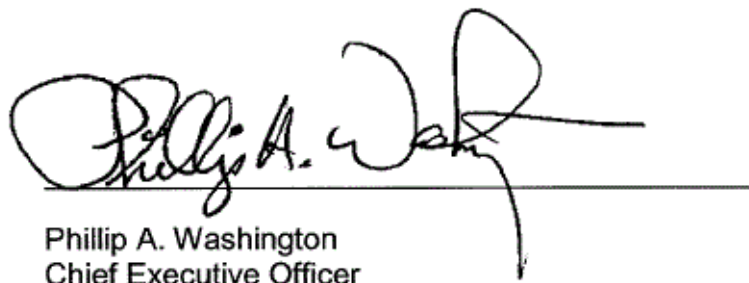
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