RESOLUTION INCREASING THE AMOUNT OF THE PROFESSIONAL SERVICES CONTRACT WITH MARK THOMAS & COMPANY, INC. BY \$66,841, TO A TOTAL AMOUNT NOT TO EXCEED \$665,022, FOR PLANNING, ENVIRONMENTAL, AND ENGINEERING SERVICES; INCREASING THE AMOUNT OF THE PROFESSIONAL SERVICES CONTRACT WITH S&C ENGINEERS, INC. BY \$130,000, TO A TOTAL AMOUNT NOT TO EXCEED \$550,700, FOR CONSTRUCTION MANAGEMENT SERVICES; INCREASING THE AMOUNT OF THE CONSTRUCTION CONTRACT WITH O.C. JONES & SONS, INC. BY \$348,000, TO A TOTAL AMOUNT NOT TO EXCEED \$2,369,468; AUTHORIZING THE EXECUTIVE DIRECTOR TO MODIFY CONTRACT PAYMENT TERMS AND NON-MATERIAL CONTRACT TERMS AND CONDITIONS FOR ALL THREE CONTRACTS; AND AUTHORIZING AN ADDITIONAL CONSTRUCTION ALLOTMENT OF \$213,800, TO A TOTAL AMOUNT NOT TO EXCEED \$400,800, FOR THE FOLSOM AND FREMONT STREET OFF-RAMP REALIGNMENT PROJECT

WHEREAS, The San Francisco Office of Investment and Infrastructure (OCII) requested that the Transportation Authority, as Congestion Management Agency for San Francisco, be the lead agency in the implementation of the Folsom and Fremont Street Off-Ramp Realignment Project (project); and

WHEREAS, The Folsom Street off-ramp provides a San Francisco exit from the Bay Bridge, currently touching down at Folsom and Fremont Streets; and

WHEREAS, The OCII has an agreement with the California Department of Transportation (Caltrans) to realign the ramp to provide for a more functional intersection consistent with the area's redevelopment plan; and

WHEREAS, On November 19, 2013, the OCII Board approved a Memorandum of

Agreement (MOA) for \$2,883,900 to fully reimburse the Transportation Authority for all project management, administrative, construction management, and construction costs associated with the project; and

WHEREAS, In February 2008, under a previous agreement with OCII, the Transportation Authority awarded a professional services contract to Mark Thomas & Company, Inc. (MTCo) in an amount not to exceed \$300,000 for design services for the project; and

WHEREAS, That contract was subsequently amended five times to a total not to exceed amount of \$598,181 due to expanded scope of service, including construction-phase design support services; and

WHEREAS, In November 2013, the Transportation Authority awarded a professional services contract to S&C Engineers, Inc. (S&CE) for construction management support services for the project, in an amount not to exceed \$420,700; and

WHEREAS, In June 2014, the Transportation Authority awarded a construction contract to O.C. Jones & Sons, Inc. (OCJ) in an amount not to exceed \$1,984,468, with an additional construction allotment of \$187,000; and

WHEREAS, At the outset of the construction phase, the project budget provided in the MOA between OCII and the Transportation Authority was \$2,883,900; and

WHEREAS, During the constructability review, preparation of final construction contract documents, and construction contractor procurement, MTCo, S&CE, and Transportation Authority staff all spent more time than had been anticipated to complete these tasks; and

WHEREAS, The cost of these additional services was \$130,000 for S&CE and \$66,841 for MTCo; and

WHEREAS, The Transportation Authority has entered into agreements totaling \$23,658 with the California Highway Patrol and the San Francisco Public Utilities Commission for services

necessary to the project; and

WHEREAS, The Transportation Authority has also authorized two contract change orders for OCJ for a total of \$37,000 for additional traffic control and removal of man-made buried objects (remnants of concrete piers) discovered during excavation; and

WHEREAS, Several additional change orders are already in preparation for signal plan revisions due to San Francisco Municipal Transportation Agency (SFMTA) and developer comments, staging revisions due to unforeseen complications with SFMTA approval, and storm drain modifications due to field conditions differing from the plans, with the estimated cost of these change orders being \$55,000; and

WHEREAS, During this early stage of construction, excavated materials have been stockpiled on the project site and chemical and material tests were performed in anticipation of reuse of a portion of the material as fill material for the project; and

WHEREAS, Two stockpiles have been found to be contaminated and cannot be re-used; and

WHEREAS, The total cost associated with the testing, containing, and removing of these unforeseen contaminated soils is approximately \$293,000; and

WHEREAS, In order to construct the project, the Transportation Authority has entered into agreements with the California Highway Patrol, the San Francisco Public Utilities Commission, and other agencies; and

WHEREAS, To ensure continued work on the project without delays, the amended project budget includes an additional \$213,800 for additional construction activities cost; and

WHEREAS, Increases to these contracts are contingent on an amendment to the existing MOA with OCII to fully reimburse the Transportation Authority for project management, administrative, construction management, and construction services; and

WHEREAS, The MOA is anticipated to be amended by the Commission on OCII on February 3, 2015; and

WHEREAS, These contract amendments will be 100% reimbursed by OCII and will be included in the Transportation Authority's mid-year budget amendment for Fiscal Year 2014/15; and

WHEREAS, Sufficient funds will be included in future fiscal year budgets to cover the remaining cost of this contract if necessary; and

WHEREAS, At its January 13, 2015 meeting, the Finance Committee reviewed and unanimously recommended approval of the staff recommendation; now, therefore, be it

RESOLVED, That the Transportation Authority hereby increases the amount of the professional Services contract with MTCo by \$66,841, to a total amount not to exceed \$665,022, for planning, environmental, and engineering services; and be it further

RESOLVED, That the Transportation Authority hereby increases the amount of the professional services contract with S&CE by \$130,000, to a total amount not to exceed \$550,700, for construction management services; and be it further

RESOLVED, That the Transportation Authority hereby increases the amount of the construction contract with OCJ by \$348,000, to a total amount not to exceed \$2,369,468; and be it further

RESOLVED, That the Transportation Authority hereby authorizes an additional construction allotment of \$213,800 to a total amount not to exceed \$400,800 for the Folsom and Fremont Street Off-Ramp Realignment Project; and be it further

RESOLVED, That the Executive Director is hereby authorized to negotiate contract payment terms and non-material contract terms and conditions; and be it further

RESOLVED, That for the purposes of this resolution, "non-material" shall mean contract

terms and conditions other than provisions related to the overall contract amount, terms of payment, and general scope of services; and be it further

RESOLVED, That notwithstanding the foregoing and any rule or policy of the Transportation Authority to the contrary, the Executive Director is expressly authorized to execute agreements and amendments to agreements that do not cause the total agreement value, as approved herein, to be exceeded and that do not expand the general scope of services.

## Attachments (2):

- 1. Mark Thomas & Company, Inc. Contract Amendment Scope of Services
- 2. S&C Engineers, Inc. Contract Amendment Scope of Services



The foregoing Resolution was approved and adopted by the San Francisco County Transportation Authority at a regularly scheduled meeting thereof, this 27th day of January, 2015, by the following votes:

Ayes:

Commissioners Avalos, Breed, Campos, Christensen, Cohen, Farrell,

Mar, Tang, Wiener and Yee (10)

Nays:

(0)

Absent:

Commissioner Kim (1)

Scott Wiener

Chair

Date

ATTEST:

Tilly Chang

Executive Director



# MARK THOMAS & COMPANY, INC.

Providing Engineering, Surveying and Planning Services

Prepared November 6, 2014

San Francisco County Transportation Authority County and City of San Francisco (Successor Agency to the SFRA) FOLSOM-FREMONT OFF-RAMP MODIFICATION PROJECT (at Westbound I-80 in San Francisco)

SFCTA Contract No. 07/08-48

# REQUEST FOR ADDITIONAL DESIGN SERVICES FOR CALTRANS APPROVAL OF PS&E AND TO SECURE ENCROACHMENT PERMIT

## Contract Amendment C

The Scope of Work described in SFCTA Contract Amendment C executed in July 31, 2013 involved restarting the final design approval of Folsom-Fremont Off-Ramp Modification Project, which was put on hold less than two years ago in November 2011. The project milestones that were successfully completed before the project was stopped included Caltrans 95% PS&E submittal in May 2011 and Caltrans PID (Project Initiation Document) approval of Permit Engineering Evaluation Report (PEER) on October 2011.

This Scope of Work for Final PS&E Approval anticipated only two (2) milestone submittals to secure the Caltrans Encroachment Permit because the same key design and Caltrans' engineers were still involved with the project and had knowledge of project history. The proposed project milestones submittal to complete PS&E phase was identified as:

- 100% PS&E Package (incorporating Caltrans comments dated May 2011 of 95% PS&E Package)
- Final PS&E Package with Caltrans Encroachment Permit Application

However, Caltrans PS&E Approval as anticipated above took additional effort. Below describes the engineering effort and the project timeline to obtain Caltrans PS&E approval and to secure the Encroachment Permit for Construction.

## 100% PS&E Submittal on 11/12/13

The 100% PS&E Package was submitted on November 12, 2013, which the design team reviewed and incorporated over 100 minor comments from various typical Caltrans functional units (Highway Ops, Electrical Design, Geometric Design, Traffic Safety, Traffic Management, Materials, Structures, Toll Bridge, Maintenance & Toll, Water Quality, Hydraulics and Construction). We also incorporated MTA comments for the traffic signal design.

## Final PS&E Submittal on 1/31/14

Through December 2013, we received Caltrans comments of this 100% PS&E package and received unexpectedly hundred (100) new roadway comments and thirty (30) new structures comments from same Caltrans functional units but different review engineers. These review comments were much more than anticipated. There were no major roadway comments but significant effort to incorporate, address and respond to. However, structures review comments required additional analysis than expected to satisfy Caltrans' reviewers. One of these new comments included addressing differential settlement of the

proposed MSE (Mechanically Stabilized Reinforced Earth) wall along the new alignment of off-ramp. Even though the existing Folsom-Fremont off- ramp embankments are currently retained with similar MSE walls on both sides, we could not prepare appropriate responses that would satisfy the Caltrans structures reviewer. We noted MSE walls are ideal retaining walls types where settlement is expected to occur. To satisfy this review comment, we proposed establishing a monitoring system to track settlement. This monitoring system included installing a nail/shiner within a few of the exterior MSE wall panels and then surveying the locations of these nail/shiners shortly after installation. Caltrans would then monitor any movement in the future. Caltrans also informed the design team that the existing geotechnical report had to update with the new Guidelines for preparing Geotechnical Design Reports for Earth Retaining Systems. Also, as part of this submittal, the design team was coordinating with Block 6&7 developer and incorporating MTA review comments on the traffic signal design.

# Final#01 PS&E Submittal on 3/17/14 and Final#02 PS&E Package on 4/11/14

Through February 2014, we received about sixteen (16) comments from Caltrans on the roadway design and two (2) comments from structures design. The design team incorporated these comments in timely manner and resubmitted Final PS&E for approval on March 17, 2014. Unfortunately, Caltrans had a few additional comments and the design team needed to resubmit entire PS&E package one more time on April 11, 2014 along with SFCTA's signed Encroachment Permit application for construction. Caltrans issued SFCTA the Encroachment Permit for Construction on May 1, 2014.

# **ADDITIONAL SERVICES REQUEST**

Compensation of the scope changes to respond to Caltrans additional PS&E review comments and for Final PS&E approval to secure the Encroachment Permit has been computed on an hourly (time and materials) basis, based on the Charge Rate Schedule (Old Effective April 2, 2007) attached hereto with a not-to-exceed total fee, as follows:

| Assistant Engineer | 60.0 hrs @ \$ 109.00/hr | \$ 6,540  |
|--------------------|-------------------------|-----------|
| Associate Engineer | 80.0 hrs @ \$ 133.00/hr | 10,640    |
| Project Engineer   | 40.0 hrs @ \$ 195.00/hr | 7,800     |
| Project Manager    | 20.0 hrs @ \$ 205.00/hr | 4,100     |
| Subtotal           |                         | \$ 29,080 |

#### b) MSE Retaining Wall Design Revisions

| AGS                 |                          | \$ 3,825  |
|---------------------|--------------------------|-----------|
| Assistant Engineer  | 80.0 hrs @ \$ 109.00/hr  | 8,720     |
| Structural Engineer | 110.0 hrs @ \$ 105.00/hr | 11,550    |
| Structural Manager  | 12.0 hrs @ \$ 243.00/hr  | 2,916     |
| Subtotal            |                          | \$ 27,011 |

### c) Traffic Signal Design Revisions and Coordination

| CHS Consulting Group |                         | \$<br>8,600  |
|----------------------|-------------------------|--------------|
| Associate Engineer   | 10.0 hrs @ \$ 133.00/hr | 1,330        |
| Project Manager      | 4.0 hrs @ \$ 205.00/hr  | 820          |
| Subtotal             |                         | \$<br>10,750 |

#### TOTAL FOR ADDITIONAL SERVICES

# Additional Scope of Work

for

S&C Engineers, Inc.

# Folsom and Fremont Street Off-Ramp Realignment Project

Contract No. 13/14-23

November 26, 2014

## PRE-CONSTRUCTION RELATED ACTIVITIES

## PC-1 - Merging of Caltrans and SFDPW Specifications

The Project consists of work within both the City of San Francisco and Caltrans right-of-way. The work on Fremont Street, although mostly within the Caltrans right-of-way, is required to comply with the standards of the San Francisco Department of Public Works (SFDPW) as well as Caltrans' standards. During the constructability review, S&C Engineers identified the SFDPW standards, which were incorporated into the project specifications by reference, were in conflict with the Caltrans standard specifications that formed the basis of the specifications. In order to avoid potential disputes and unnecessary changes and delays during the Project, S&C Engineers devoted significant effort reviewing SFDPW's specifications and working with SFDPW and Caltrans to reach agreement on mutually acceptable requirements. Based upon the agreed upon requirements, S&C Engineers developed project specifications to merge the requirements of SFDPW and Caltrans into a single specification.

During this effort, SFDPW provided updated specifications which required additional effort to review the updated requirements and perform further editing of the project specifications.

Estimated Additional Cost: 56 hours @ \$189/hr = \$10,584

### PC-2 - Incorporation of Additional City, SFMTA and SFPUC Requirements

During the constructability review, S&C Engineers identified numerous requirements of the City, SFMTA and SFPUC that were not incorporated into the specifications. These requirements primarily included permits such as the City's Street Space Permit, Excavation Permit and Nighttime Noise Permit; SFMTA's Special Traffic Permit; and SFPUC's Construction Site Runoff Control Permit. S&C Engineers investigated the specific permit requirements and prepared specifications to incorporate these into the project specifications.

Estimated Additional Cost: 56 hours @ \$189/hr = \$10,584

# PC-3 - Incorporation of Transbay Transit Center Mitigation Monitoring and Reporting Program Requirements

As part of the Transbay Redevelopment, the Project is required to comply with the Federal Environmental Impact Report (FEIR) and the Mitigation, Monitoring and Reporting Program (MMRP) requirements in the TJPA CEQA document. The FEIR and MMRP requirements were incorporated into the contract documents by reference. However, it was determined that the FEIR and MMRP requirements, as written, were non-enforceable as many of the requirements were not pertinent to the Project and were written as guidelines as opposed to specific enforceable requirements. At the request of the SFCTA, S&C Engineers drafted language to incorporate the applicable requirements into the project as contract specifications.

Estimated Additional Cost: 16 hours @ \$189/hr = \$3,024

## PC-4 - Editing of the Division I and II Specifications

The contract specifications are based upon the Caltrans 2010 Standard Specifications. The Division I and II specifications in the Caltrans Standard Specifications address the administrative and legal requirements of the Contract, but are based upon processes and requirements unique to Caltrans. S&C Engineers was requested by the SFCTA to prepare the "boilerplate" language to modify the requirements in the Caltrans Division I and II specifications to incorporate SFCTA's and OCII's administrative and legal requirements.

Estimated Additional Cost: 48 hours @ \$189/hr = \$9,072

#### PC-5 - Bid book

S&C Engineers' original cost proposal included only a constructability review of the contract documents. However, S&C Engineers was requested by SFCTA to assist with the preparation of the Bid Book.

Estimated Additional Cost: 24 hours @ \$189/hr = \$4,536

# PC-6 - Development of SBE Requirements

OCII imposed an SBE goal for the project, based upon OCII's SBE policy. OCII proposed that their policy be incorporated into the Contract by reference. However, upon reviewing the policy, S&C determined that the policy, as written, contained non-enforceable language which was not suitable for incorporation into the Contract. Therefore, S&C Engineers re-drafted OCII's SBE policy in the form of an enforceable specification. This effort required a thorough review of OCII's SBE policies, meetings with SFCTA and OCII to clarify the essential elements of the SBE policy, and drafting appropriate specification language.

Estimated Additional Cost: 24 hours @ \$189/hr = \$4,536

## PC-7 - Review of the Contractor's SBE good faith efforts

The lowest bidder did not achieve the 50% SBE goal. However, the bidder submitted extensive documentation to demonstrate they performed a good faith effort to achieve the established goal. Therefore, prior to awarding the Contract to the low bidder, it was necessary to determine the criteria for evaluating the Contractor's good faith effort and review the submitted documentation to verify that the Contractor's documented efforts demonstrated a good faith effort based upon this criteria. A review of the good faith efforts of the non-successful bidders was also performed for comparison purposes. A report of the findings was also prepared for consideration by SFCTA and OCII.

#### **Estimated Additional Cost:**

S&C Engineers: 20 hours @ \$189.00/hr = \$3,780 Paul Pendergast: 5 hours @ \$193.80/hr = \$ 969 Total: \$4,749

## **CONSTRUCTION RELATED ACTIVITIES**

## C-1 - Additional Public Outreach Efforts

Due to the SFCTA's concerns regarding potential impacts to traffic during the implementation of the initial closure of the Folsom Off-Ramp, additional efforts beyond those originally contemplated were devoted to public outreach to ensure the public was properly notified of the upcoming work and the resulting impacts to traffic. Additional efforts included preparation and distribution of flyers to drivers at the Folsom Off-Ramp, outreach to local businesses and agencies not contemplated in the original outreach plan, and coordination for posting advance

notification to drivers. S&C Engineers also provided staff to distribute flyers to MUNI riders due to the required relocation of a MUNI stop necessitated by the temporary closure of the Folsom Off-Ramp during construction.

#### **Estimated Additional Cost:**

Inspectors: 16 hours @ \$123.59/hr = \$1,977.44Resident Engineer: 12 hours @ \$189.00/hr = \$2,268.00

Total: \$4,245.44

# C-2 - Signal Changes

Upon meeting with the Block 6 developer to coordinate the work between the projects, it was identified that the planned location of Signal Pole B and the controller and battery back-up cabinet conflicted with the planned Block 6 improvements. Additional changes were made to the signal system to address Caltrans and SFMTA requirements. Additional time was expended for attending meetings, reviewing the Block 6 plans, preparing correspondence related to addressing these conflicts, preparing exhibits showing the conflict and possible alternatives, reviewing the revised plans for addressing the conflicts and obtaining Caltrans and SFMTA concurrence for the changes. Additional time will be required for developing a cost estimate for the work, reviewing the Contractor's cost proposal, negotiating a cost for the changes, preparing a change order and administering the changed work.

Estimated Additional Cost: 56 hours @ \$189/hr = \$10,584

## C-3 - Coordination with Block 6 Developer and TJPA

It was originally contemplated that the work would be completed prior to any significant work associated with the Block 6 development and that access by the Block 6 developers would not impact the Project. However, construction work for Block 6 began prior to the beginning of work on the Project. The Block 6 contractor also established an access point for their project and occupied the sidewalk within the work limits on Fremont Street. This required additional time to meet with and coordinate the work of the Project with the Block 6 developer. Additionally, coordination with TJPA was required to arrange for their extended use of Block 8 to perform geotechnical site investigation. The need to coordinate with the Block 6 developer will be ongoing throughout the Project in order to prevent impacts to both projects.

Estimated Additional Cost: 24 hours @ \$189/hr - \$4,536

## C-4 - Attendance at Additional Meetings

Due to the proximity of the work to the Transbay Transit Center Project, S&C Engineers attends the bi-weekly Transbay bi-weekly traffic coordination meetings, as needed, to keep the Transbay Transit Center Project and the Block 6 development project informed of potential impacts resulting from this project and to coordinate the work between the various projects. Additionally, S&C Engineers has been requested by Caltrans to attend the weekly Caltrans Bay Bridge Traffic Coordination Meetings, as needed, to coordinate the traffic control for the Project with the various other ongoing Bay Bridge construction projects.

Estimated Additional Cost: 12 meetings @ 2 hrs each = 24 hrs 24 hours @ \$189/hr = \$4,536.00

#### C-5 - Additional coordination with Golden Gate Transit and SFMTA

During the work it was determined that there is an active Golden Gate Transit (GGT) bus stop on Fremont Street within the limits of the Project. Due to the location of the bus stop, the SFMTA would not permit the Transportation Authority to fully implement the portion of the Stage 1 traffic handling shown on the Plans which will eliminate the dedicated bus/taxi lane on Fremont Street where the existing bus stop is located. Additional effort was expended to develop alternatives to address SFMTA's concerns regarding the Stage 1 traffic handling. The preferred alternative is to relocate the existing GGT bus stop another location on Fremont Street currently occupied by parking meters. This alternative is moving forward. However, additional effort remains to coordinate the bus stop relocation with GGT and the SFMTA.

Estimated Additional Cost: 32 hours @ \$189/hr = \$6,048.00

## C-6 - Multiple Reviews of Submittals

Numerous submittals have required multiple reviews due to incorrect information. In order to avoid delays to the beginning of the work and enable as much work as possible to proceed before the onset of rain, S&C Engineers also expended effort to assist the Contractor in finalizing critical submittals, such the Erosion Control Plan which was required to be approved by SFPUC prior to the start of work.

Estimated Additional Cost: 32 hours @ \$189/hr = \$6,048.00

## C-7 - Preparation of Structure Inspection Quality Management Plan (SIQMP)

When preparing the budget for the construction management costs, it was S&C Engineers' understanding that Caltrans was not going to require a SIQMP for the Project. However, we were informed by Caltrans in October that an SIQMP is required. In addition to additional costs incurred to prepare the SIQMP, monthly reports are required to be submitted to Caltrans in conjunction with the SIQMP.

Estimated Additional Cost: 44 hours @ \$189/hr = \$8,316

### C-8 – Subcontractor Substitutions and Subletting

Additional effort has been expended to resolve the unauthorized substitution of the temporary fencing subcontractor and subletting of work by an SBE subcontractor to non-SBE second tier subcontractors.

Estimated Additional Cost: 12 hours @ \$189/hr = \$2,268

#### C-9 – Contaminated Soil

The presence of contamination in the stockpiled soil excavated within the project has been identified. It is unknown at this time what additional effort will be required to address this. However, it is recommended at this time that an amount of \$5,000 be allocated to address this.

Estimated Additional Cost: \$5,000

### C-10 - Allocation for Miscellaneous Additional Work

Due to the nature of construction, unanticipated additional work of a minor nature is unavoidable. Therefore, for budgetary purposes, it is recommended that an additional \$5,000 be allocated to cover minor additional costs as the need arises.

#### **WEATHER-RELATED IMPACTS**

## W-1 - Extended Performance Period and Additional Costs due to Weather Impacts

S&C Engineers' original cost proposal contemplated construction on the Project beginning in mid-April 2014 and completion of the Project by December 15, 2014. Based upon the preliminary project schedule prepared by S&C Engineers, it was anticipated that the majority of the earthwork activities that would be impacted by rain would have been completed prior to the beginning of the wet season.

Due to various issues beyond the control of SFCTA and S&C Engineers, the advertisement of the Project was delayed by several months. This has resulted in the work being performed during the wet season, which will subject the work to delays due to rain. The extent of weather-related impacts to the project cannot be ascertained in advance. However, a reasonable estimate of weather-related delays for budgetary purposes can be assumed to be five days per month.

Based upon the above, it is anticipated that work on the Project may be extended by a period of approximately 20 working days due to weather impacts. This will extend the performance period of S&C Engineers accordingly and will require additional work to address weather-related issues, review the site for compliance with stormwater pollution prevention requirements, and address potential non-compliance issues.

#### **Estimated Additional Cost:**

Resident Engineer: 20 days x 4 hrs = 80 hours

80 hours @ \$189/day = \$15,120

Inspector: 20 days x 8 hrs = 160 hours

160 hours @ \$123.59 =  $\frac{19,774}{}$ 

Total: \$34,894

See attached summary of costs on next page



# Additional Scope of Work for S&C Engineers, Inc.

November 26 ,2014

| Pre-Cor    | struction Phase  | Est   | imated Cost |    | Totals    |
|------------|--|-------|-------------|----|-----------|
| PC 1       | Merging of the Caltrans and SFDPW specifications into the special provisions | \$    | 10,584.00   |    |           |
| PC 2       | Incorporation of City, SFMTA and SFPUC Requirements                          | \$    | 10,584.00   |    |           |
| PC 3       | Mitigation requirements  | \$    | 3,024.00    |    |           |
| PC 4       | Preparation of the Division I specifications                                 | \$    | 9,072.00    |    |           |
| PC 5       | Bid book   | \$    | 4,536.00    |    |           |
|            | Total Additional Pre-Construction Co   | osts: |             | \$ | 37,800.00 |
|            | ction Phase  |       |             |    |           |
| C1         | Additional public outreach efforts   | \$    | 4,245.44    |    |           |
| C2         | Signal Changes   | \$    | 10,584.00   |    |           |
| C3         | Additional coordination with Block 6 and TJPA                                | \$    | 4,563.00    |    |           |
| C4         | Additional Meetings  | \$    | 4,536.00    |    |           |
| <b>C</b> 5 | Additional coordination with GGT, SFMTA.                                     | \$    | 6,048.00    |    |           |
| C6         | Multiple re-reviews of submittals  | \$    | 6,048.00    |    |           |
| C7         | Prepare Caltrans Structure Inspection Quality Management Plan (SIQMP)        | \$    | 8,316.00    |    |           |
| C8         | Subcontractor Substitutions and Subletting                                   | \$    | 2,268.00    |    |           |
| <b>C</b> 9 | Contaminated Soil  | \$    | 5,000.00    |    |           |
| C10        | Miscellaneous Costs  | \$    | 5,000.00    | _  |           |
|            | Total Additional Construction-Related Co                                     | osts: |             | \$ | 56,608.44 |
| Weathe     | er Related   |       |             |    |           |
| W-1        | Extended Performance Period and Additional Costs due to Weather Impacts      |       |             | \$ | 34,894.00 |

Total Estimated Additional Costs: \$ 129,302.44