



Memorandum

Date: 01.08.15 **RE:** Finance Committee
January 13, 2015

To: Finance Committee: Commissioners Cohen (Chair), Wiener (Vice Chair), Christensen, Farrell, Tang and Avalos (Ex Officio)

From: Lee Saage – Deputy Director for Capital Projects *LS*

Through: Tilly Chang – Executive Director *TC*

Subject: **ACTION** – Recommend 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 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

Summary

As the Congestion Management Agency for San Francisco, the Transportation Authority is the lead agency in the implementation of the Folsom and Fremont Street Off-Ramp Realignment Project (project), implementing the project on behalf of the San Francisco Office of Investment and Infrastructure (OCII), Successor Agency to the Redevelopment Agency. Under agreements with OCII, we have entered into contracts with Mark Thomas & Company, Inc. (MTCO) for engineering design services, S&C Engineers, Inc. (S&CE) for construction management support services, and O.C. Jones & Sons, Inc. (OCJ) for construction services. Additional effort by both MTCO and S&CE was needed to complete the design phase, and constructability review, secure the Encroachment Permit from the California Department of Transportation, contractor procurement, and construction oversight. Further, the unforeseen discovery of contaminated soil on the project site necessitates a substantial increase to the construction contract budget that exceeds the original project reserve amount. We recommend that all three contracts be amended to account for the additional efforts required. Increases to these contracts are contingent on an amendment to our existing Memorandum of Agreement with OCII to fully reimburse the Transportation Authority for project management, administrative, construction management, and construction services. This agreement is anticipated to be amended by the Commission on OCII on January 20, 2015. **We are seeking a recommendation to increase 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; increase 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; increase 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; authorize the Executive Director to modify contract payment terms and non-material contract terms and conditions for all three contracts; and authorize 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.**

BACKGROUND

The San Francisco Office of Investment and Infrastructure (OCII), Successor Agency to the Redevelopment Agency, 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). This project is a major component of the Streetscape and Open Space Plan for the Transbay Redevelopment Project Area. The Folsom Street off-ramp provides a San Francisco exit from the Bay Bridge, currently touching down at Folsom and Fremont Streets. 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. The reconfigured ramp will be parallel to the Fremont Street exit while remaining within the existing right-of-way.

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. In February 2008, under a previous agreement with OCII, we 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. 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. In November 2013, we 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. In June 2014, we 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.

DISCUSSION

At the outset of the construction phase, the project budget provided in the MOA between OCII and the Transportation Authority was \$2,883,900. We authorized \$2,590,454 in contracts and agreements and set aside \$106,565 for Transportation Authority costs for staff time, legal consultation, and other project-related costs, with the remaining \$186,881 to be used for agreements that had not yet been negotiated with the California Highway Patrol, the San Francisco Public Utilities Commission, and other agencies, as well as for potential change orders to the construction contract. The construction phase was initiated in August 2013 with procurement of the construction management consultant, who performed the constructability review and assisted us with preparation of the final construction contract documents. The construction contract was awarded in June 2014. On-site work was initiated in September 2014 with the closure of the Folsom leg of the off-ramp, which was accomplished with minimal impact to traffic. Construction of the project is generally on schedule. However, due to weather delays, construction is anticipated to be completed by May 2015.

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. The additional constructability review was due to the significant differences between the Caltrans 2006 standards, upon which the pre-2013 plans and specifications were based, and the 2010 standards with which the project was required by Caltrans to conform. This necessitated that we completely revise the boiler plate language for the contracting portion of the Special Provisions. Extensive coordination with San Francisco Public Works was also required regarding its construction specifications, which also differ significantly from the Caltrans specifications. Both of these required the assistance of S&CE staff. Upon reviewing the submittals from the contractor, additional effort by S&CE has been needed to ensure submittals meet the 2010 Caltrans Standards. Further, MTCO performed additional work to secure project approval from Caltrans,

including responding to unexpected comments from new Caltrans reviewers, an additional full submittal to all Caltrans functional groups, extensive coordination with Caltrans structural reviewers, a full update of the Geotechnical Design Reports, and coordination with area developers as requested by OCII. The costs of these additional services are \$130,000 for S&CE and \$66,841 for MTCO.

During the last few months we have entered into agreements totaling \$23,658 with the California Highway Patrol and the San Francisco Public Utilities Commission for services necessary to the project. We have 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. 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. The estimated cost of these change orders is \$55,000.

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 re-use of a portion of the material as fill material for the project. However, two stockpiles have been found to be contaminated and cannot be re-used. One stockpile has been classified as non-hazardous contaminated material due to oil contamination. This material must be off-hauled to an appropriate disposal site. A second stockpile has been classified as California Hazardous Material due to lead contamination. We presume this contamination is due to aerially deposited lead. A third area has not yet been excavated but preliminary testing suggests it also may be lead-contaminated. Working with Caltrans staff, the lead-contaminated material is likely going to be off-hauled to a Caltrans project site where it can be appropriately encapsulated within the fill embankment of that project. The total cost associated with the testing, containing, and removing of these unforeseen contaminated soils is approximately \$293,000.

Change Orders Budget: 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. In addition, construction projects are constantly dealing with unforeseen circumstances, thus project sponsors must always prepare for the unexpected. In addition to the change orders already issued or impending, there may be other change orders needed as the project progressed. To ensure continued work on the project without delays, the amended project budget includes an additional \$213,800 for additional construction activities cost. This estimate is over and above the construction allotment of \$187,000 previously approved through Resolution 14-84.

Funding: All project expenditures will be 100% reimbursed by OCII per the MOA with OCII for the project. The recommended amendment of the aforementioned contracts is contingent on an amendment to the MOA, which is anticipated to be approved by the OCII Commission on January 20, 2015.

Small Business Enterprise (SBE) and Disadvantaged Business Enterprise (DBE) Participation: For the Design Services Contract, we established a DBE goal of 25%. The MTCO team met that goal for design services, however with the extension of the contract to include construction-phase engineering services the expected DBE participation has dropped to 24%.

For the Construction Management Services contract, we established a SBE/DBE goal of 100%. The S&CE team has met that goal and anticipates meeting that goal with the requested contract amendment.

For the Construction Contract, at the direction of OCII, we established a SBE goal of 50%. The bid submitted by OCJ was approved by both the Transportation Authority and OCII with a SBE commitment 38.34%. It is expected that, since most of the additional services will be performed by SBE subcontractors, OCJ will exceed this commitment.

ALTERNATIVES

1. Recommend 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 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, as requested.
2. Recommend 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 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, with modifications.
3. Defer action, pending additional information or further staff analysis.

CAC POSITION

The CAC last met on December 3 for its combined November/December meeting. The subject request was not presented to the CAC for consideration at its December meeting since costs and impacts of the contaminated materials discovery were still underway.

FINANCIAL IMPACTS

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. The project is expected to be completed within Fiscal Year 2014/15. Sufficient funds will be included in future fiscal year budgets to cover the remaining cost of this contract if necessary.

RECOMMENDATION

Recommend 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 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.

Attachments (2):

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



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:

a) Roadway Design Revisions

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		\$ 8,600
Associate Engineer	10.0 hrs @ \$ 133.00/hr	1,330
Project Manager	4.0 hrs @ \$ 205.00/hr	820
Subtotal		\$ 10,750

TOTAL FOR ADDITIONAL SERVICES \$ 66,841

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 = \$1,977.44
Resident Engineer:	12 hours @ \$189.00/hr = <u>\$2,268.00</u>
	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	=	<u>\$19,774</u>
		Total:	\$34,894

See attached summary of costs on next page



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

November 26 ,2014

Pre-Construction Phase		Estimated 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 Costs:			\$ 37,800.00

Construction Phase		Estimated Cost	Totals
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	
C5	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	
C9	Contaminated Soil	\$ 5,000.00	
C10	Miscellaneous Costs	\$ 5,000.00	
Total Additional Construction-Related Costs:			\$ 56,608.44

Weather Related		Estimated Cost	Totals
W-1	Extended Performance Period and Additional Costs due to Weather Impacts		\$ 34,894.00

Total Estimated Additional Costs: \$ 129,302.44