

## CMB Meeting Minutes #171

DATE: May 23, 2014

MEETING DATE: May 21, 2014

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: J. Park (JP), A. Clifford, (AC), J Funghi (JF), A. Hoe (AH), M. Latch (ML), M. Acosta (MA), R. Redmond, (RR), M. Kobler (MK), E. Stassevitch (ES), B. Lebovitz (BL), L. Zurinaga (LZ), B. Ward (BW)

COPIES TO: Attendees: S. Farhangi (SF), M. Henry (MH), S. Tisell (ST), J. Wang (JW), K. Shah (KS), R. Nguyen (RN), J. Xia (JXV), Chow (VC), M. Vilcheck, (MV), S. Jefferis (SJ), S. Espinal (SE), R. Hansen (RH), D. Kuehn (DK)  
File No. M544.1.5.0890

REFERENCE Project No. M544.1, Contract No. 149 Task 1-8.02

SUBJECT: Configuration Management Board Meeting # 171 – Rev. No. 0

### RECORD OF MEETING *(Italicized text indicates status update of open items)*

ITEM #	DISCUSSION	ACTION BY DUE DATE
1-	M. Vilcheck presented for discussion a request to authorize the designer of record CSDG 20 hrs. to perform structural analysis specifically looking at deflection of slurry wall to consider Deletion of Compensation Grouting at the YBM Station at the Olivet and TODCO buildings. The <b>CMB agreed</b> with the additional time related to performing the analysis for a potential credit of bid item 4 - Compensation grouting.	
2-	A. Clifford presented the summary record of negotiations (RON) in support of the negotiated contract change settlement amount between the Contractor and SFMTA for Claim #1 (COR 18) - Permanent End Stops at Moscone Headwalls. The Contractor was directed to install four permanent end stops, one at each corner panel of the Moscone headwalls; not detailed on the contract drawings. The Contractor submitted COR 18 claiming the work requested exceeded the contract documents. SFMTA denied the request and both parties agreed to elevate the issue through the IRL process; no agreement could be reached. On October 31 <sup>st</sup> , 2012 the Contractor submitted claim #1, this was rejected by the City. On November 7th, 2013 Senior Management from SFMTA and BIHJV met to negotiate claim #1. Both parties agreed to the negotiated amount of \$144,000. The <b>CMB agreed</b> to proceed with a CMod to compensate the Contractor for the additional work to install the end stops for Not to Exceed amount of <b>\$144,000 AGREE – CMB 0158</b> . The amount approved represents a reduction of \$25,379 from the Contractor's originally proposed amount of \$169,379. (see attached).	
3-	A. Clifford presented the summary record of negotiations (RON) in support of the negotiated contract change settlement amount between the Contractor and SFMTA for Claim #2 (COR 30, 54, 75) Hazardous Material Cost Impacts. The Contractor submitted	

ITEM #	DISCUSSION	ACTION BY DUE DATE
	<p>COR 30 &amp; COR 54 for additional costs of excavating, handling and disposing of the hazardous materials spoils generated during site development of the Caltrans lease area and trenching to install the temporary electrical substation for TBM power and COR No. 075 costs for the construction and operation of an above-grade temporary spoils containment pit. Merit was denied by SFMTA citing the Program is not obligated to pay for items resulting from the Contractor's means and methods. On September 27<sup>th</sup>, 2013 the Contractor submitted claim #2, this was rejected by the City. On November 7<sup>th</sup>, 2013 Senior Management from SFMTA and BIHJV met to negotiate claim #2. The <b>CMB agreed</b> to proceed with a CMod to compensate the Contractor for the additional cost associated with work in handling, loading, transportation and disposal of the unanticipated discovery of hazardous material for Not to Exceed amount of <b>\$400,000 AGREE – CMB 0159</b>. The amount approved represents a reduction of \$293,467 from the Contractor's originally proposed amount of \$693,467 (see attached).</p>	
4-	<p>A. Clifford presented information for negotiation position for COR 082 - Additional cost for work required for MOS 20" conflict with 16" AWSS @ south headwall. On 04/30/14 the CMB agreed SFMTA should be compensated for reduction of overall waterline to be installed requiring reroute of the waterline. Authorization was given to negotiate a <b>credit</b> for \$25K. Upon further investigation it was determined an additional 25ft of pipe was not accounted for during the previous negotiations. The <b>CMB agreed</b> with the cost associated with the additional work required to install the 20" waterline and to compensate the Contractor for an amount Not to Exceed amount of <b>\$12,000 AGREE – CMB 0160</b>.</p>	
5-	<p>M. Acosta presented PCC09 for approval - Traction Power Cable Downsizing for Stations. The standards for the requirement for traction power feeder cables have been changed, downsizing the requirement from 2.4kV to 2.1kV. This smaller cable meets the design requirement for CSP, which could result in a cost saving. The CMB was in agreement with sending a PCC to the Contractor that includes both the reduction in size of both conduit and cable. Also a conversation should take place with the Contractor to find out what was in their bid, GRS or phenolic conduits.</p>	
6-	<p><b>Action Items Review:</b></p> <p><u>1252 – Outstanding COR's status update</u> - A status update for COR 1, 2, 3, 5,15, 32, 34, 42, 43 62, 65, 67, 69, 91, 92, 96 &amp;115 as addressed at the CN1252 Executive meeting was reviewed. Items have been negotiated and included or will be included in a CMod or a credit to be reconciled at the end of the job (see attached). <b>CLOSED</b></p> <p><u>1252 – Action plan of execution for the Slip Lining Work (Stockton/Columbus)</u> – An action plan to monitor and repair as required was developed and agreed to by the SFPUC. Additional surveying of sewers was done (see attached). <b>CLOSED</b></p> <p><u>1252 – COR #104 - Additional Sewer Slip Lining – SFPUC Response</u> – SFPUC is in agreement with the action plan (see attached). <b>CLOSED</b></p> <p><u>1252 – Slurry Wall Panels – TIA to be sent to BIH – SFMTA's time savings and premium cost saving time</u> – Resolution discussions took place at the 5/20 Executive meeting to for potential offset resolution too took place. <b>CLOSED</b></p> <p><u>1252- BART Load Cell Conference Call</u> - Post meeting update from J. Wang. - A conference call between SFMTA and BART took place to discuss the issue of the prism spikes. The issue has been resolved. <b>CLOSED</b></p>	

**ACTION ITEMS**

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
8	07/24/13	07/24/13	1252 – Breakdown of Bid Item GE-3	AC/MLe	05/21/14	Open
2	08/14/13	08/14/13	1252 – CMod #8 (PSI strength) – Statement of occurrence post meeting record of approval which overrode CMB direction	AC/MLe	05/21/14	Open
1	08/28/13	08/28/13	1252 – Outstanding COR's – status update	AC/MLe	05/21/14	<b>CLOSED</b>
2 & 3	08/28/13	08/28/13	1252 – COR 97 & 98 – gravel encountered action plan from Engineering of Record (DP1)	AC/MLe	05/21/14	Open
5	08/28/13	08/28/13	1252 – Action plan of execution for the Slip Lining Work (Stockton/Columbus)	AC/MLe	05/21/14	<b>CLOSED</b>
4	09/25/13	10/02/13	1252 – COR #104 - Additional Sewer Slip Lining – SFPUC Response	AC/MLe	05/21/14	<b>CLOSED</b>
5	09/25/13	10/02/13	1300 – PCC CTS 0001 - Contractor Cost Proposal	MK	05/21/14	Open
2	10/09/13	10/09/13	1252 – Design Clause - confirmation of existing contract language in CN 1252 and CN 1300 regarding existing conditions related to utilities	JW/AH	05/21/14	Open
1	10/16/13	10/16/13	1252 – COR 102 - Determine if the Contractor received 1251 as built information before they began operations	AC/MLe	05/21/14	Open
1	10/16/13	10/16/13	1252 – COR 102 - Graphic showing the location of the headwalls control line	AC/MLe	05/21/14	Open
3	10/23/13	10/23/13	1252 – PCC 014 - Contractor Cost Proposal	JW/AC	05/21/14	Open
2	11/06/13	11/06/13	1252 - COR 017 – Notify utility of cost as Form B bill update under CN1250 or CN1251	AC/MLe	05/21/14	Open
3	11/06/13	11/06/13	1252 – Slurry Wall Panels – TIA to be sent to BIH – SFMTA's time savings and premium cost saving time	AC/MLe	05/21/14	<b>CLOSED</b>
2	11/13/13	11/13/13	1300 – Setup a meeting with DT to confirm the use to control traffic	BK	05/21/14	Open
NA	11/13/13	11/13/13	1252 – Confirm who is being billed for the use of PCO's at 5 <sup>th</sup> St.	AC/MLe	05/21/14	Open
2	11/20/13	11/20/13	1300 – PCC 00X - PGE Traffic Control - Utility verification letter	MK	05/21/14	Open
7	12/11/13	12/11/13	1252- BART Load Cell - Conference Call	JW	05/21/14	<b>CLOSED</b>
9	12/11/13	12/11/13	1252 - Trend Log Segment Measuring Frequency line item credit (1.3M)	AC/MLe	05/21/14	Open
2	01/08/14	01/08/14	1300 - PCC - Contractor Cost Proposal - Geopobes	RR/ST	05/21/14	Open
4	01/08/14	01/08/14	1300 - PCC - Contractor Cost Proposal - Joint Trench Conduits	MK	05/21/14	Open
4	01/15/14	01/15/14	1300 - CTS confirmation from PG&E of cost for concrete encasement of lines	MK	05/21/14	Open

Meeting adjourned at 6:00pm

These meeting minutes have been prepared by B. Ward and reviewed by E. Stassevitch, and are the preparer's interpretation of discussions that took place. If the reader's interpretation differs, please contact the author in writing within four (4) days of receipt of these minutes.

Signed:  [initials of preparer & reviewer] Date: 23 May 14 [Date review completed]

## Meeting Agenda

**Project No. M544.1, Contract No. CS-149**  
**Program/Construction Management**  
**Configuration Management Board (CMB) Meeting No. 171**  
**May 21, 2014**  
**3:00pm – 5:00pm**  
 Central Subway Project Office  
 821 Howard St. 2<sup>nd</sup> Floor  
 Main Conference Room

**Attendees:**


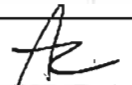


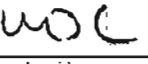
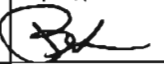
John Funghi		Brad Lebovitz		Luis Zurinaga	
Albert Hoe		Roger Nguyen			
Mark Latch		Richard Redmond			
Eric Stassevitch		Beverly Ward			

1. **1252** - Claim #1 (COR 018) - *Cost update/Approval*
  - Claim #2 (COR 30, 54, 75) - *Cost update/Approval*
  - COR 082 - MOS 20" Conflict with 16" AWSS @ South Headwall - *Revised Cost Approval*  
*Previously discussed at CMB Mtg #168*
  
2. **1300** - DP2 Estimated Cost tracking during Construction - *Information*
  - YBM - Deletion of Comp Group (Olivet and TODCO) - *Addl Analysis/Credit change Discussion*
  - STS - PCC 09 - Traction Power Cable downsizing - *Approval*
  
3. **Trend Log** -
  
4. **Other Business** –

## Meeting Attendance Sheet

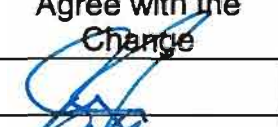


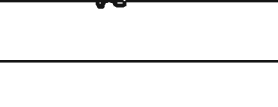
**Project No. M544.1, Contract No. 149**  
**Program/Construction Management**  
**Configuration Management Board Special Meeting No. 171**  
**May 21, 2014**  
**3:00 p.m. – 5:00 p.m.**  
 Central Subway Project Office  
 821 Howard, 2<sup>nd</sup> Floor  
 Main Conference Room

*Deliver Meeting Attendance Sheet with original signatures/Initials to Document Control.*

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Please enter initials if your name is listed below. Please enter name, affiliation, phone number and email address if your name is not listed below.				
* Acosta, Mike	SFMTA	(415) 701-5282	Mike.Acosta@sfmta.com	
Chow, Vivian	SFMTA	(415) 701-5264	Vivian.chow@sfmta.com	
Clifford, Alex	CSP	(415) 243-0953	Alex.Clifford@sfmta.com	
Farhangi, Shahnam	SFMTA	(415) 554-0721	Shahnam.Farhangi@sfmta.com	
Funghi, John	SFMTA	(415) 701-4299	John.Funghi@sfmta.com	
Haley, John	SFMTA		John.Haley@sfmta.com	
Henry, Melvyn	SFMTA	(415) 701-5719	Melvyn.Henry@sfmta.com	
Hoe, Albert	SFMTA	(415) 701-4289	Albert.Hoe@sfmta.com	
Jefferis, Scott	SFMTA	(415) 238-4679	Richard.Jefferis@sfmta.com	
Kelly, Jim	SFMTA		Jim.Kelly@sfmta.com	
* Kobler, Mike	CSP	(415) 850-4750	Mike.kobler@sfmta.com	
Kuehn, David	STV/PMOC	(510) 464-8053	David.kuehn@stvinc.com	
Latch, Mark	CSP	(415) 701-5294	Mark.Latch@sfmta.com	
Lebovitz, Brad	STV/PMOC	(510) 464-8052	Bradley.lebovitz@stvinc.com	
Nguyen, Roger	SFMTA	(415) 701-4312	Roger.Nguyen@sfmta.com	





GENERAL						
Proposed Change Sponsor: <u>A. Clifford</u>		Received by CMB: <u>05/21/2014</u>				
				(Date)		
Affected Disciplines: <u>Excavation and Ground Support</u>						
_____						
_____						
Impacts of Change <u>Permanent End Stops at Moscone Headwalls</u>						
Claim No. 1 (COR 018) Amount Not To Exceed \$144,000						
<u>Contract(s) Directly Affected by this Proposed Change:</u>						
1250	1251	1252	1253	1254	1255	1256
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
(CP01)	(CP02)	(CP03)	(CP04)	(CP05)	(CP06)	(CP07)
CONFIGURATION MANAGEMENT BOARD APPROVALS						
<i>Signatures</i>						
	Agree with the Change	Disagree with the Change	Date			
Program Director:			<u>5-21-14</u>			
Deputy Program Manager:			<u>5/21/14</u>			
PM Project Services:			<u>21 May 14</u>			
PM Project Construction:			<u>5/21/14</u>			
SFMTA O & M Manager:						
SFMTA Safety and Security						
SFCTA PMO						
Comments						

## CHANGE ORDER REQUEST NUMBER 018

**SFMTA Contract No. 1252**  
CENTRAL SUBWAY TUNNELING

**Contractor:** Barnard Impregilo Healy JV  
420 Fourth Street  
San Francisco, CA 94107

## SUMMARY RECORD OF NEGOTIATIONS

### SCOPE OF WORK:

Additional Work required for installation of endstops at the Moscone slurry wall headwall panels N-1, N-4, S-1 and S-4, as shown on Field Sketches (FS) 1252-079, 080 and 081.

### REASON FOR CHANGE:

SFMTA required that the Contractor (BIHJV) leave end stops at the Moscone headwalls in place at the completion of Contract Number 1252 to provide positive groundwater cut-off during excavation of the Moscone station under Contract Number 1300. Contract 1252 drawings did not contain a design detail for the required end stops.

The SFMTA also required a waterstop for the continuation of the future wall to the west SW panel S-1, and a straight joint (no endstop/waterstop) for the continuation of the future wall to the north from the west end of SW panel S-1.

A Slurry Wall "T-section" is a practical and acceptable way of accomplishing these requirements.

- A. SFMTA Estimate: \$110,984
- B. Contractor's Proposal: \$169,379, as contained in Claim No. 1 proposal dated 08/12/2013
- C. Negotiated Amount: \$144,000

### NEGOTIATION HISTORY:

On August 7<sup>th</sup>, 2012, the Contractor requested clarification (RFI 136.1) regarding the slurry wall (SW) panel/layout configuration and use of wide flange beams for "end stops" at the Moscone (MOS) headwall.

On September 17<sup>th</sup>, 2012, the City provided Clarification (Response to RFI 136.1) confirming that the MOS headwall SW panel layout/configuration is as shown on the Contract drawings and the City provided sketches showing alternate configurations at the MOS SW return walls to accommodate a wide flange beam "end stop" in lieu of the specified (PVC or rubber) waterstop.

On October 31<sup>st</sup>, 2012, the Contractor submitted Change Order Request (COR) No. 018, in the amount of \$135,000, alleging that the City's Clarification to install waterstops or endstops exceeded the requirements of the Contract Documents.

On December 7<sup>th</sup>, 2012, the City provided written determination (SFMTA Letter No. 029) denying COR 018 contending that the Contract documents require that the Contractor provide details of SW panels, including panel joints, waterstops, and endstops to provide positive groundwater cut-off into the MOS excavation. Both parties agreed to follow the Issue Resolution Ladder (IRL) process as formalized in SFMTA Letter No. 036.

On May 17<sup>th</sup>, 2013, a "Level 3" IRL meeting was held. The SFMTA presented their Engineer's Estimate for a cost of approximately \$110,000. The SFMTA offered to split the cost of \$110,000 with the Contractor for a total cost of \$55,000. The SFMTA offer was not accepted.



On June 19<sup>th</sup>, 2013, another “Level 3” IRL meeting was held. The Contractor provided a final settlement number of \$135,000. SFMTA provided a final settlement number of \$65,000. Neither the SFMTA nor the Contractor agreed to the other party’s position during negotiations and no settlement was reached on either merit or quantum.

On July 6<sup>th</sup>, 2013, the Contractor issued a Notice of Potential Claim for COR 018 (BIHJV Letter No. 138), as all parties involved were unable to reach an agreement.

On August 16<sup>th</sup>, 2013, the Contractor submitted a timely, certified and properly documented Claim No. 01, in the amount of \$169,379 claiming the installation of the end stops constituted Additional Work.

On September 27<sup>th</sup>, 2013, Claim No. 01 was rejected by the City in whole (SFMTA Letter No. 227).

On October 4<sup>th</sup>, 2013, the Contractor submitted a timely and proper request for review of Claim No. 01 by the SFTMA Deputy Executive Director (John Funghi) (BIHJV Letter No. 165).

On November 7<sup>th</sup>, 2013, John Funghi (SFMTA) and Jeff Higgins (BIHJV) met to negotiate Contract Claim No. 01. Both parties agreed to an amount of \$144,000 (as contained in the Record of Negotiations section of this Contract Modification). The negotiated amount represents a reduction of \$25,379 from the amount contained in Claim No. 01.

Both parties conclude that the Total Negotiated Amount of \$144,000 to be a fair and reasonable compensation for this work. Costs were not evaluated prior to the Issue Resolution Ladder Process as the SFMTA previously denied Merit for this change.

Some of the key differences between the SFMTA Engineer’s Estimate (EE) and the Contractor’s Proposal (CP) were as follows:

Ref.	Description	Delta	Reason
A	Furnish & Deliver wide flange beams	\$7,809	CP estimated more on site fabrication
B	Install Styrofoam block-outs at beam webs	\$2,462	Different crews, hours, rates, materials
C	Splice and set beams, construct slurry wall T section	\$35,590	Different crews, hours, rates, materials
D	Subsistence and Pay Above Scale	\$3,243	Excluded from EE
E	Contractor Markup, Bonds and Insurance	\$11,940	EE \$20,198 vs CP \$32,138
	<i>Adjustment to EE</i>	(\$2,646)	
	<i>Total Delta</i>	\$58,395	

**Further Detail for Table 1.**

- A. Furnish and deliver wide flange beams. Install Nelson Studs.
  - a. EE includes costs to install the required “Nelson Studs” in the costs to “fabricate and deliver” the wide flange beams. See Bid Item 2000B of the EE. In contrast, the CP separates the cost to install the “Nelson Studs” from the costs to “fabricate and deliver” the wide flange beams into the following activities:
    - i. Item 1: Fabricate and Deliver Steel
    - ii. Item 2: Buy and Install Nelson Studs on End Pile N-1 & S-1
    - iii. Item 6: Install Nelson Studs, pack beam (w/ Styrofoam), splice N-4

iv. Item 7: Install Nelson Studs, pack beam (w/ Styrofoam, splice S-4

The total direct costs included in the EE to “fabricate and deliver” the wide flange with Nelson Studs pre-installed is \$68,276. The CP total costs to “fabricate and deliver” the wide flange beams and install the Nelson studs on-site is approximately \$76,085. For purposes of comparison with the EE, the amount shown for the CP is derived by adding together items 1, 2, 6 and 7 and reducing the amount for installation of Styrofoam and splicing and setting the beams. See attached Cost Analysis spreadsheet for calculations.

The difference of \$7,809 is partly due to the fact that the EE includes costs to Fabricate and deliver Nelson Studs off-site as opposed to the CP which proposes to install “Nelson Studs” on-site. The process of installing Nelson Studs on-site is more costly. The price per pound included in the CP for fabrication and delivery of the wide flange beams with Nelson studs installed on-site is approximately \$1.03/lb. (\$76,085 / 73,270 lbs.). In comparison, the price per pound included in the EE for fabrication and delivery of the wide flange beams with Nelson studs pre-installed is approximately \$.89/lb. (\$68,276 / 76,560 lbs.)

B. Install Styrofoam block-outs at beam webs

- a. The EE separates costs into 1 activity (Bid Item 2000D) to install Styrofoam at the end stops for a total of 5 locations (1 ea. @ panels N-1, N-4 and S-4 & 2 ea. @ panels S1). The CP included costs for the Styrofoam into 3 ea. activities:
  - i. Item 3: Pack beams N-1 & S-1 with Styrofoam
  - ii. Item 6: Install Nelson Studs, pack beam (w/ Styrofoam), splice N-4
  - iii. Item 7: Install Nelson Studs, pack beam (w/ Styrofoam, splice S-4

The total direct costs included in the EE to install Styrofoam at each of the end stops are \$16,282. In comparison, the CP total costs to install Styrofoam are \$18,744. For purposes of comparison with the EE, the amount shown for the CP is derived by adding together items 3, 6 and 7 and reducing the amount for installation of “Nelson Studs” and splicing and setting the beams. See attached Cost Analysis spreadsheet for calculations.

The difference of \$2,462 is due to following:

- a. The EE and CP used different labor crew sizes, hours, rates and configurations.
- b. The EE and CP used different equipment types, hours, rates and quantities.
- c. The EE and CP contained different material unit costs and quantities.

C. Splice and set beams in SW panels and Construct Slurry Wall “T-section”

- a. The EE separates costs into 1 activity (Bid Item 2000D) to install “Install Column” at the end stops for a total of 4 locations (1 ea. @ panels N-1, N-4, S-1 and S-4). The CP included costs for the Styrofoam into 4 ea. activities:
  - i. Item 4: Splice Beams N-1 & S-1 over hole and set
  - ii. Item 5: Extra Bite & concrete at T
  - iii. Item 6: Install Nelson Studs, pack beam (w/ Styrofoam), splice N-4
  - iv. Item 7: Install Nelson Studs, pack beam (w/ Styrofoam, splice S-4

The total direct costs included in the EE to install Styrofoam at the end stops are \$6,226. In comparison, the CP total costs to install Styrofoam \$41,816. For purposes of comparison with the EE, the amount shown for the CP is derived by adding together items 3, 6 and 7 and reducing the amount for installation of Styrofoam and “Nelson Studs”. See attached Cost Analysis spreadsheet for calculations.

The difference of \$35,590 is due to the following:

- a. The EE and CP used different labor crew sizes, hours, rates and configurations.

- b. The EE and CP used different equipment types, hours, rates and quantities.
- c. The EE and CP contained different material unit costs and quantities.

In addition, the EE did not account for the extra bit & concrete required for the construct of the slurry wall “T-section” connection at the “follow-on” panel location for slurry wall panel S-1. The CP included a total of \$22,468 in direct costs required for this work.

D. Subsistence & Pay Above Scale

- a. The CP includes \$3,243 for costs for site supervision subsistence and pay above the prevailing wage scale. The EE does not include these costs as the these costs are not included in the “Cost of Work” as defined by Article 6.04 of the General Provision of the Contract.

E. Contractor Markup/Bonds and Insurance (B&I)

- a. EE uses a straight markup of 20% applied to the total direct costs for overhead and profit. CP applies 15% markup to subcontractor direct costs and 5% to the total subcontractor costs (including subcontractor bond and markup).
- b. EE applies a B&I rate of 2.25% to the total of all direct costs excluding markup for overhead and profit. The CP applies and approved rate of .52% for subcontractor bonds and 1.68% for contractor payment and performance bond & builder's risk insurance to the total of all direct costs including markup for overhead and profit. These rates have been approved by the SFMTA.

Contractors' method of applying markup for overhead and profit and bonds and insurance is the correct method and is in accordance with the Contract. See attached Cost Analysis spreadsheet for calculations.

SFMTA:

SFMTA will compensate the contractor in the amount of \$144,000 for this claim.

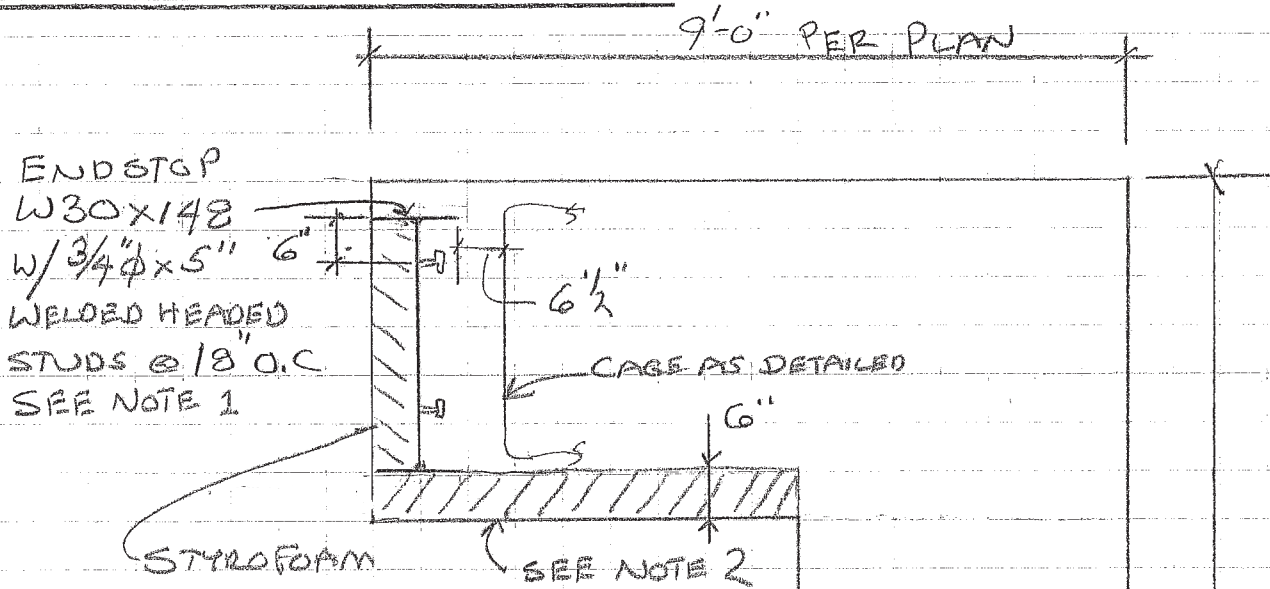
BIHJV:

By: \_\_\_\_\_  
Ben Campbell  
Barnard Impregilo Healy JV  
Date

By: \_\_\_\_\_  
Mun Wei Leong  
Resident Engineer  
Date



END STOP - WF OPTION



**SW Panel N-1, N-4 and S-4**

NOTES:

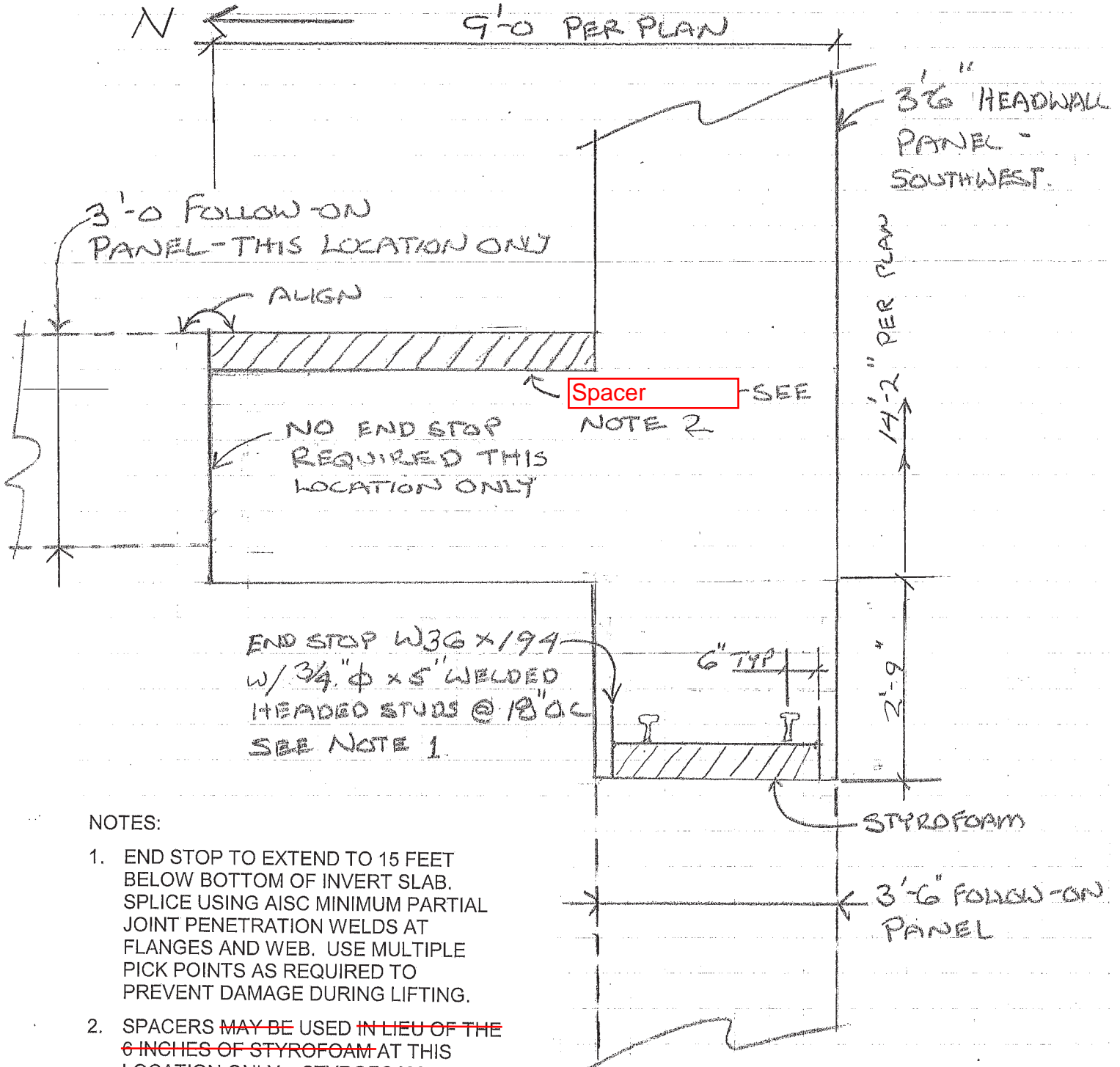
1. END STOP TO EXTEND TO 15 FEET BELOW BOTTOM OF INVERT SLAB. SPLICE USING AISC MINIMUM PARTIAL JOINT PENETRATION WELDS AT FLANGES AND WEB. USE MULTIPLE PICK POINTS AS REQUIRED TO PREVENT DAMAGE DURING LIFTING.
2. SPACERS ~~MAY BE USED IN LIEU OF THE 6 INCHES OF STYROFOAM~~ AT THIS LOCATION ONLY. STYROFOAM BLOCKOUT IS REQUIRED AT END STOP WEB AS SHOWN.

**Field Sketch No. FS 1252-080**  
**COR 018**

TYPICAL CORNER PANEL - WF END STOP  
1/2" = 1'-0"



END STOP - WF OPTION



NOTES:

1. END STOP TO EXTEND TO 15 FEET BELOW BOTTOM OF INVERT SLAB. SPLICE USING AISC MINIMUM PARTIAL JOINT PENETRATION WELDS AT FLANGES AND WEB. USE MULTIPLE PICK POINTS AS REQUIRED TO PREVENT DAMAGE DURING LIFTING.
2. SPACERS ~~MAY BE USED IN LIEU OF THE 6 INCHES OF STYROFOAM~~ AT THIS LOCATION ONLY. STYROFOAM BLOCKOUT IS REQUIRED AT END STOP WEB AS SHOWN.

**Field Sketch No. FS 1252-081**  
**COR 018**

**SW Panel S-1**

SOUTHWEST CORNER - WF END STOPS

1/2" = 1'-0"

SFTMA Engineer's Estimate (EE)				Contractors Estimate (CP)				Cost Difference (CP-EE)	Reason for Difference	Negotiation Position	Negotiated Amount
<b>Furnish and deliver wide flange beams. Install Nelson Studs.</b>											
Bid Item 2000B	Purchase 4 Columns w/ Studs	\$ 68,276		Item 1	Fabricate and deliver steel	\$ 62,943					
				Item 2	Buy & install Nelson Studs on End Pile N-1 & S-1	\$ 5,909					
				Item 6	Install Nelson Studs, pack beam (w/ Styrofoam), splice N-4	\$ 12,688					
				Item 7	Install Nelson Studs, pack beam (w/ Styrofoam), splice S-4	\$ 12,267					
					<b>Adjust Items 6 &amp; 7 for costs not included in "Install Nelson Studs"</b>						
					Use Item 3 - Pack beams N-1 & S-1 with Styrofoam	\$ (8,710)					
					Use Item 4 - Splice beams N-1 & S-1 over hole and set	\$ (9,012)					
<b>Subtotal</b>		<b>\$ 68,276</b>				<b>\$ 76,085</b>	<b>\$ 7,809</b>		EE includes costs to Fabricate and deliver Nelson Studs off-site as opposed to CP which proposes to install Nelson Studs on-site.		
<b>Install Styrofoam block-outs at beam webs</b>											
Bid Item 2000D	Styrofoam Interior Stop - 1 Face	\$ 16,282		Item 3	Pack beams N-1 & S-1 with Styrofoam	\$ 8,710					
				Item 6	Install Nelson Studs, pack beam (w/ Styrofoam), splice N-4	\$ 12,688					
				Item 7	Install Nelson Studs, pack beam (w/ Styrofoam), splice S-4	\$ 12,267					
					<b>Adjust for costs not included in "Install Styrofoam"</b>						
					Use Item 2 - Buy & install Nelson Studs on End Pile N-1 & S-1	\$ (5,909)					
					Use Item 4 - Splice beams N-1 & S-1 over hole and set	\$ (9,012)					
<b>Subtotal</b>		<b>\$ 16,282</b>				<b>\$ 18,744</b>	<b>\$ 2,462</b>		Different mix of labor, equipment and materials used.		
<b>Splice and set beams in SW panels and Construct Slurry Wall "T-section"</b>											
Bid Item 2000F	Install Column	\$ 6,226		Item 4	Splice beams N-1 & S-1 over hole and set	\$ 9,012					
				Item 5	Extra bite & concrete at T	\$ 22,468					
				Item 6	Install Nelson Studs, pack beam (w/ Styrofoam), splice N-4	\$ 12,688					
				Item 7	Install Nelson Studs, pack beam (w/ Styrofoam), splice S-4	\$ 12,267					
					<b>Adjust for costs not included in "Install Columns"</b>						
					Use Item 3 - Pack beams N-1 & S-1 with Styrofoam	\$ (8,710)					
					Use Item 2 - Buy & install Nelson Studs on End Pile N-1 & S-1	\$ (5,909)					
<b>Subtotal</b>		<b>\$ 6,226</b>				<b>\$ 41,816</b>	<b>\$ 35,590</b>		Different mix of labor, equipment and materials used. Also extra bite & concrete also not used in EE estimate.		
	Subsistence & pay above scale	\$ -			Subsistence & pay above scale	\$ 3,243	<b>\$ 3,243</b>		EE does not include Subsistence and "Pay-above scale".		
<b>Total Direct Costs</b>											
					Adjustment for Direct Costs	\$ (2,646)			Adjustment Required due to using Items 2-4 for adjustment/comparison purposes.		
<b>Total Direct Costs</b>		<b>\$ 90,784</b>				<b>\$ 137,241</b>	<b>\$ 49,104</b>				
<b>Contractor Markup/Bonds and Insurance</b>											
	Markup (20% of subtotal)	\$ 18,156			Subcontractor Markup (15% of Subtotal)	\$ 20,586					
					Subcontractor Bond (0.52% of Total)	\$ 821					
	Bonds and Insurance (2.25%)	\$ 2,042			<b>Total Subcontractor Costs</b>	\$ 158,648					
					Contractor Markup (5% of Total Subcontractor Costs)	\$ 7,932					
					Contractor Payment and Performance Bond & Builder's Risk Insurance) (1.68%)	\$ 2,799					
<b>Total Markup, Bonds and Insurance (B&amp;I)</b>		<b>\$ 20,198</b>				<b>\$ 32,138</b>	<b>\$ (20,198)</b>				
<b>Total Amount (Direct Costs + Markups, B&amp;I)</b>											
	Adjustment for rounding	\$ 2									
<b>Total Amount</b>		<b>\$ 110,984</b>				<b>\$ 169,379</b>	<b>\$ (110,984)</b>				

**CMB Change No.: CMB – 159**

**Initial Implementing Change Control Procedure No.: 1252 –COR - 30, 54, 75**

**GENERAL**

Proposed Change Sponsor: A. Clifford Received by CMB: 05/21/2014  
(Date)

Excavation and Support

Impacts of Change Hazardous Material Cost Impacts

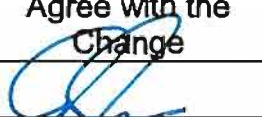

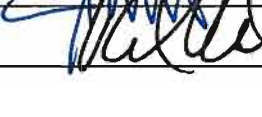
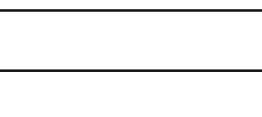
Claim 02 (COR 30, 54, 75) Amount Not To Exceed  
\$400,000

Contract(s) Directly Affected by this Proposed Change:

1250	1251	1252	1253	1254	1255	1256
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
(CP01)	(CP02)	(CP03)	(CP04)	(CP05)	(CP06)	(CP07)

**CONFIGURATION MANAGEMENT BOARD APPROVALS**

*Signatures*

	Agree with the Change	Disagree with the Change	Date
Program Director:			5-21-14
Deputy Program Manager:			5/21/14
PM Project Services:			21 May 14
PM Project Construction:			5/21/14
SFMTA O & M Manager:			
SFMTA Safety and Security			
SFCTA PMO			

Comments

SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

### EVALUATION OF MERIT

#### COR 030

**Recommendation:** Confirm justification of Merit for COR 030, Phase 1 Costs – Hazardous Waste Allowance. There is no time extension requested or recommended for this work.

**Facts:** Spoils from excavations in the Caltrans yard (bounded by Fourth Street, Fifth Street, Harrison Street, and Bryant Street) have been rejected by Class 2 facilities. Excavation and disposal of the spoils was required in order for BIH to install the temporary electrical substation required for TBM power and site power, install site utilities, install best management practices for stormwater pollution prevention (including the installation of the wheel wash required by contract), and construct jet grout spoils and muck disposal pits.

Prior to the off-haul of excavated spoils from the Cal-trans/Contractor's staging yard, the Contractor pre-classified the soil in order to determine landfill acceptance. The contract and the Contractor's disposal facility require testing of all material prior to off-haul. SFDPW-SAR (Site Assessment and Remediation) provided guidance to the Contractor regarding soil sampling and testing protocols. After pre-classification, all excavated materials were placed in separated stockpiles in the Contractor's temporary Materials Classification Area (MCA) in accordance with the contract specifications.

The Contractor employed a 3rd party testing agency to perform soil sampling at various locations within the Caltrans/Contractor's staging yard at known excavation locations. The soil samples were then sent to a lab where analytical reports were generated for each sample. The analytical reports stated the chemical content of the majority of soil samples taken were found to be hazardous.

The additional cost for disposal of the material at the Class 1 facility was significant. The Contractor took the following steps to control cost:

- Reused excavated materials as backfill as much as possible.
- Sampled the soil at depths of 2-feet, 4-feet, 6-feet, and 8-feet in an attempt to isolate an elevation below which clean fill could be found.
- Provided test results consistent with Class 2 to facilities for possible acceptance.

The additional testing to pre-classify the soils in the area significantly reduced the amount of material disposed at the Class 1 facility. Soils in the launch box ramp and in the northeast portion of the site tested as Class 3 or Class 2 (nonhazardous).

The soils at the muck disposal area and the wheel wash area were tested as either Class 2 or Class 1 material. Lead was the pre-dominant element that led to the Class 1 result. The Class 2 disposal facility would not accept any material excavated near the Class 1 areas due to the proximity of Class 1 and Class 2 soils and possibility of cross-contamination. The Class 2 facility responded with the following:

**SFMTA Contract No. 1252**

**Contractor:**

Barnard Impregilo Healy JV (BIH)

- “All material represented by samples 11/8/12-01, 02, 03 cannot be accepted by BSP. The level of contamination and proximity of material to this contamination represents a condition whereby BSP cannot accept the material.” See Figure 8 of COR package.
- “... we will not be able to accept any soil from the area represented by samples 11/8/12 – 01, 02 and 03 at our bay area landfills. Based on the sample results and the proximity of the two types of wastes we do not think that we can be guaranteed of only receiving the non-hazardous soils. The excavation area is too small to be able to separate the non-hazardous soil from the California hazardous soil.” See Figure 10 of COR package.

The Contractor elected to utilize Waste Solutions Group as a disposal company to transfer, transport and dispose of the Class 1 hazardous material due to the fact that Baylands Soil Processing (BSP) and Republic Services (RS) landfills would not accept the excavated materials.

BIH performed far more tests that would typically be performed, with testing at 1 test per 108 cyd. The suggested testing frequency from BPS was equal to 1 test every 1000 cyd. Approximately 20 tests were performed for 2,151 cyd (4,065.7 tons) of hazardous material encountered and disposed of at Class 1 facilities.

Supplemental information: The Contractor also retained an industrial hygienist following the receipt of the analytical results for the soil to determine whether special personal protective equipment would be required to protect workers against airborne contaminants. The industrial hygienist determined no additional equipment to be required. The cost for the industrial hygienist is incidental to the work and is not being reimbursed under this allowance.

**Justification:** The Contractor followed the proper procedures and protocols and legally disposed of the excavated materials. The soil in the Caltrans yard is simply too contaminated to be accepted at Class 2 facilities and therefore must be transported and disposed of as Class 1 hazardous waste. The City Attorney is currently investigating whether the provisions of the lease of the Caltrans Yard provide for reimbursement of cost for disposal of hazardous waste.

The cost is allowed to be paid by bid Item ES-8 – Additional Costs of Hazardous Waste Allowance. As set forth in Specification Section 01 20 00, Price and Payment Procedures, “Estimates for progress payment purposes will be based on the following:

1. The additional cost is defined as  $(A+B) - (C+D)$  where:
  - a. A is the cost to haul material found to contain hazardous material from the Materials Classification Area (MCA) to a landfill certified to receive such material.
  - b. B is the dump fee charged for material found to contain hazardous materials.



**SFMTA Contract No. 1252**

**Contractor:**

Barnard Impregilo Healy JV (BIH)

- c. C is the cost to haul uncontaminated material from the MCA to the Contractor’s regular dump site.
- d. D is any fee for uncontaminated material charged by the Contractor’s regular disposal site.”

$$(A+B) - (C+D): (\$387,633.11 - \$0) - (\$83,500 - \$0) = \$304,133.11$$

Note: Cost of Dump Fees (B) is included in the cost of (A) incurred for Waste Solutions Group to haul and dispose of the hazardous materials. (C) is the number of loads used multiplied by \$500/load as quoted by Economy Trucking to haul and dispose of the non-hazardous materials (See Figure 15 of the COR package). Cost of Dump Fees (D) is included in the cost of (C).

The additional costs for this change are \$304,133.11. In order to keep from exceeding the ES-8 bid item amount of \$200,000 Phase 1 additional costs for encountering hazardous materials were made equal to \$195,000.00 (\$198,276.00 with Contractor Payment & Performance Bonds & Builder’s Risk Insurance). Phase 2 additional costs for encountering hazardous materials are equal to the balance of the additional costs not included in this COR or \$109,133.11 (\$304,133.11 - \$195,000).

Phase 3 will be submitted under a future COR and is estimated to total \$150,000.

An advantage of using the hazardous waste allowance to capture these costs is that no separate payment is to be made for handling, segregating, temporary stockpiling and storage, implementation of best management practices related to temporary stockpiling and storage, or sampling and testing.

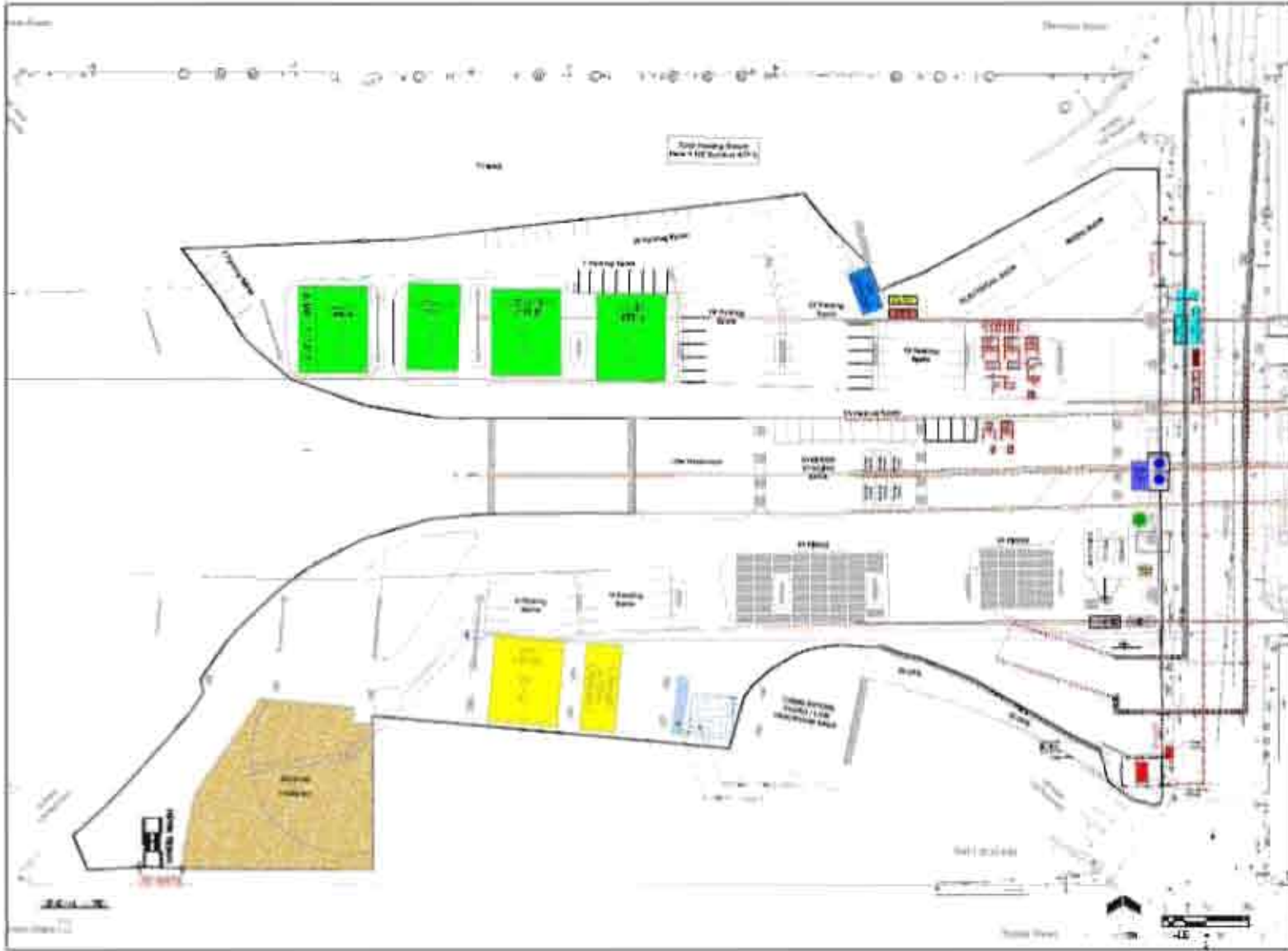
The Launch box and Moscone Station locations have been similarly pre-classified and have been classified as Class 3 so they are not expected to generate additional cost. The UMS Station/Ellis Shaft, Retrieval Shaft, and Tunnel Spoils have not been pre-classified, but based on the investigation conducted for the UMS station contract and the Geotechnical Baseline Report for this contract the excavation of the top ten feet of UMS station may generate additional cost but the other locations are not expected to generate additional cost.

**Change Type:** Bid Item ES-8 - Additional Costs of Hazardous Waste Allowance.

By: \_\_\_\_\_ Date \_\_\_\_\_  
 Sarah Wilson  
 Resident Engineer

\_\_\_\_\_ Date \_\_\_\_\_  
 Configuration Management Board  
 Approval






CONTRACT 125  
CENTRAL SUBWAY TUNNELS

PHASE 3  
New TVE's  
Tunneling



4th St Yard  
Site Layout  
Phase 3

PH-3





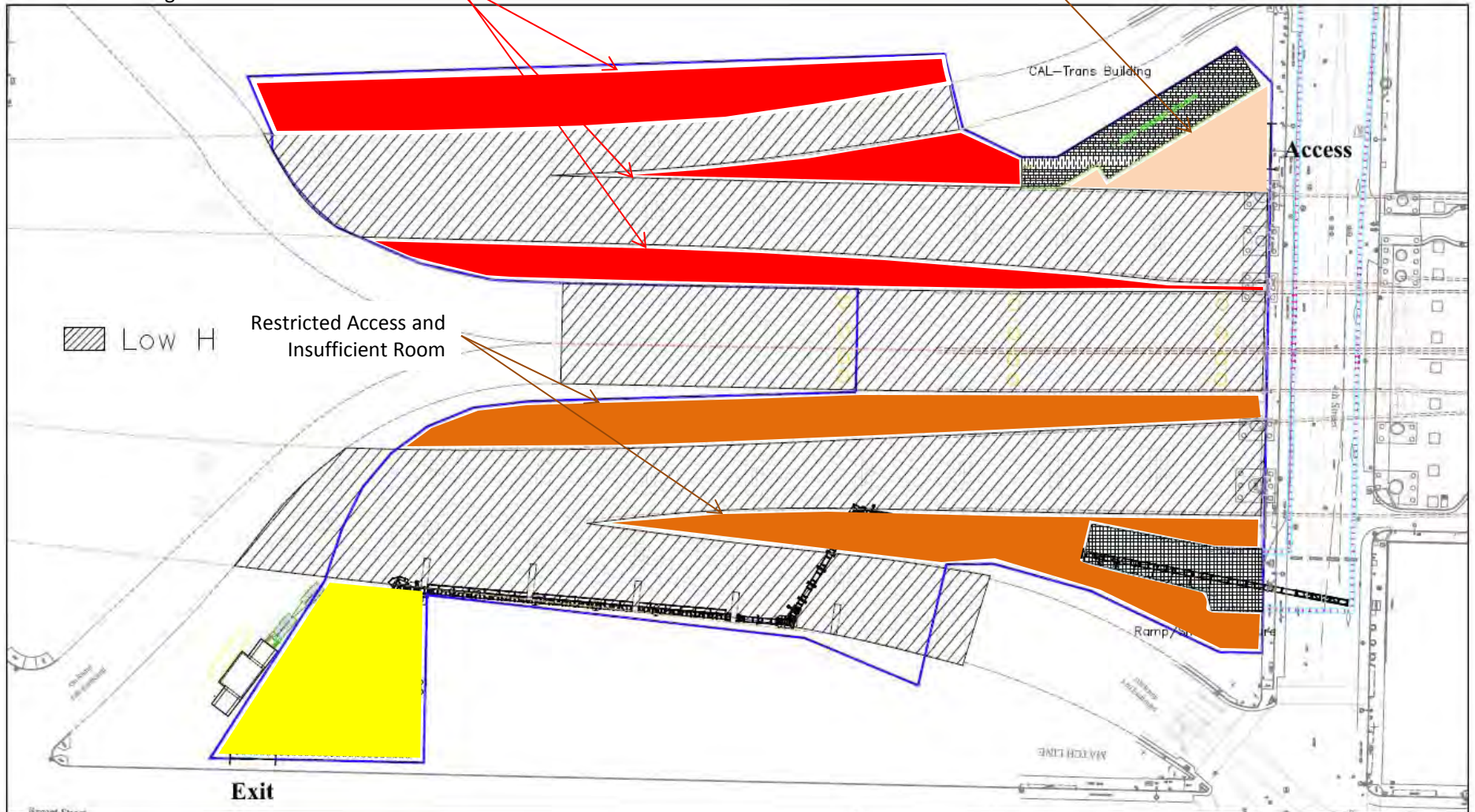






Per Caltrans Agreement,  
Designated as Maintenance Area

Insufficient Room



Low H

Restricted Access and  
Insufficient Room

CAL-Trans Building

Access

Ramp

Exit

MATCHLINE

NO.	DATE	DESCRIPTION

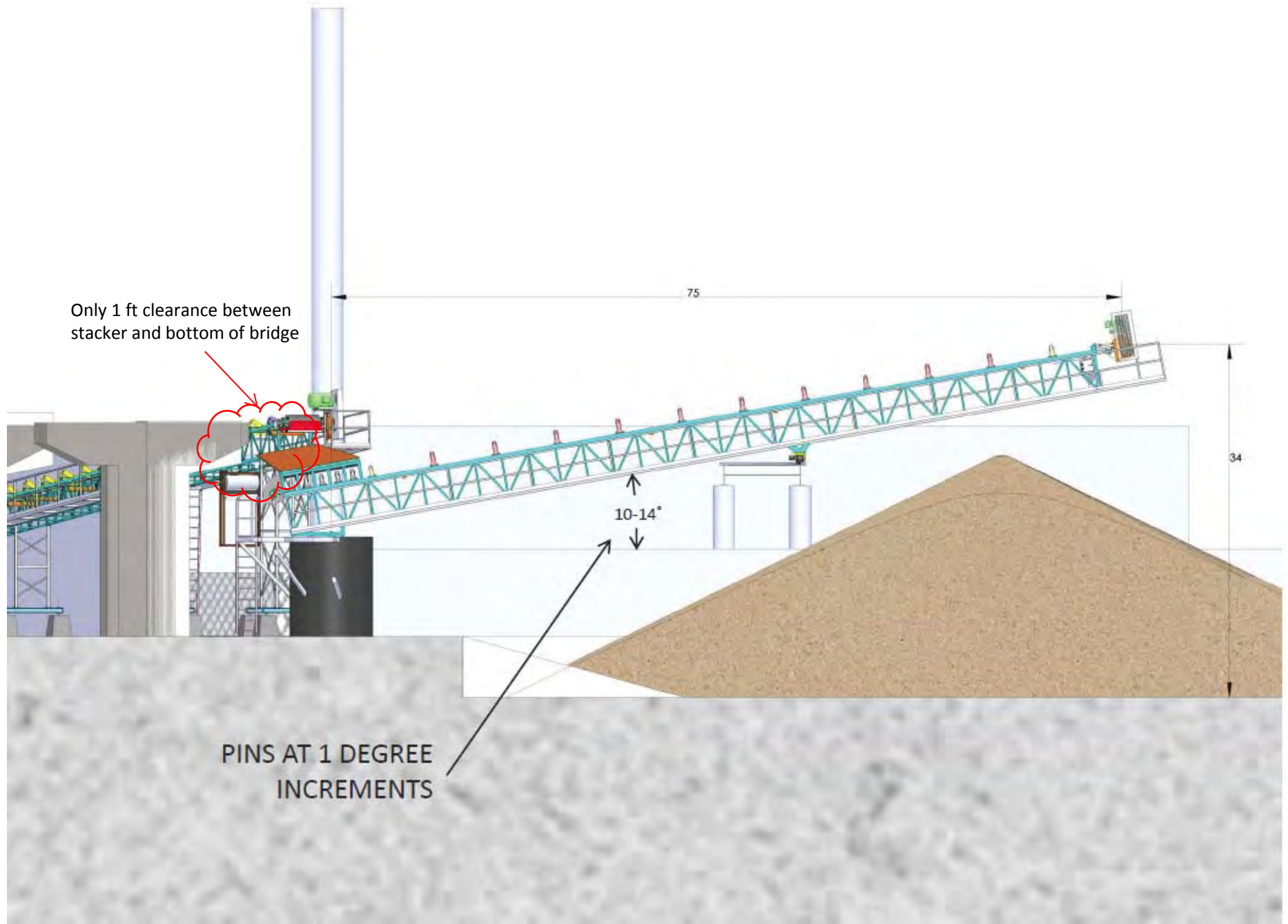


Central Subway Tunnels Project  
0221 Site Low Headroom Areas

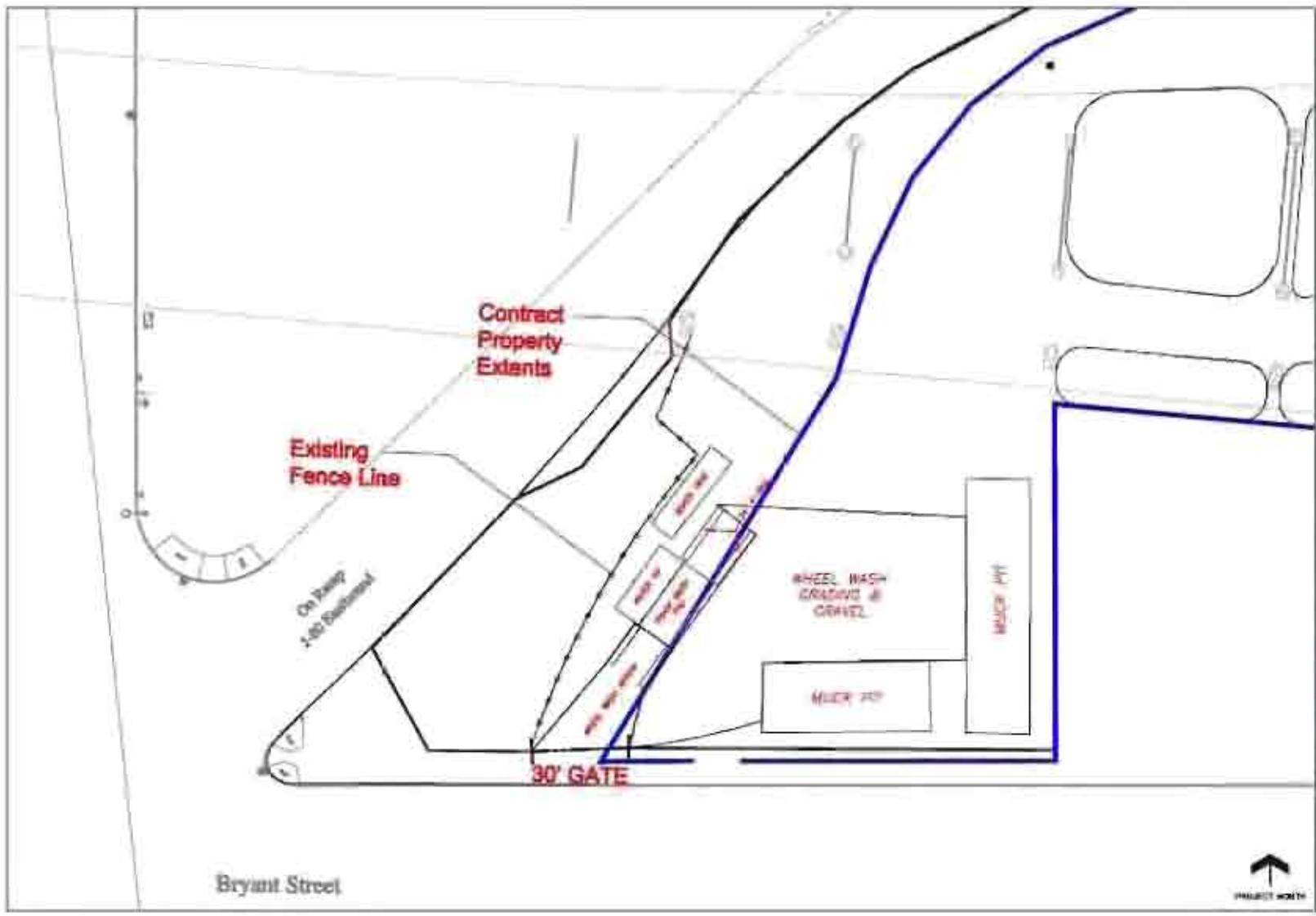
Copyright 2011. All rights reserved. No part of this document may be reproduced in any form or by any means without permission from Bernard Impregilo Healy Joint Venture.	DRG. NO. 022211-01	DATE 08/11	SCALE AS SHOWN	DRG. NO. 0501-Rev A	SHEET 1	REV -0
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DATE	

CONTRACT 122  
CENTRAL SUBWAY TUNNELS

PROPERTY LINE  
COMPARISON



4th St Yard  
Property  
Line  
Comparison

SCALE	

Bryant Street



**COR 030 - FREQUENCY OF SOIL SAMPLING VS. HAZARDOUS WASTE DISPOSAL**

<b>BIH SOIL SAMPLE TEST QTY</b>	<b>BIH SOIL SAMPLE TEST DESCRIPTION</b>	<b>WASTE SOLUTIONS INVOICE</b>	<b>WASTE HAUL-OFF QTY (TONS)</b>	<b>WASTE HAUL-OFF QTY (CY)</b>	<b>TESTING FREQUENCY (1 Test per 108 CY)</b>
1	02-15-02 (site 01) @ 2' depth	Invoice No. 2012 - 394	3,744	1,981	<b>108</b>
2	02-15-02 (site 02) @ 4' depth				
3	02-15-02 (site 03) @ 4' depth				
4	02-15-02 (site 04) @ 4' depth				
5	11-08-12 (site 01-02) @ 2' depth				
6	11-08-12 (site 01-04) @ 4' depth				
7	11-08-12 (site 01-06) @ 6' depth				
8	11-08-12 (site 01-08) @ 8' depth				
9	11-08-12 (site 02-02) @ 2' depth				
10	11-08-12 (site 02-04) @ 4' depth				
11	11-08-12 (site 02-06) @ 6' depth	Invoice No. 2012-429	321	170	
12	11-08-12 (site 02-08) @ 8' depth				
13	11-08-12 (site 03-02) @ 2' depth				
14	11-08-12 (site 03-04) @ 4' depth				
15	11-08-12 (site 03-06) @ 6' depth				
16	11-08-12 (site 03-08) @ 8' depth				
17	11-08-12 (site 04-02) @ 2' depth				
18	11-08-12 (site 04-04) @ 4' depth				
19	11-08-12 (site 04-06) @ 6' depth				
20	11-08-12 (site 04-08) @ 8' depth				
<b>TOTAL</b>			<b>4,066</b>	<b>2,151</b>	<b>20 Test</b>



# Considerations

- There is no other feasible location for placement of the muck bin due to overhead clearance restrictions, limited access points, and shaft access structure.
- A good day of tunneling would generate approximately 2800 cy.
  - Considering 200' of advance and 15% swell
- Capacity of muck bin is estimated at 1800 cy.
- Disposal facility hours are 6 am – 4 pm. Anticipated tunneling hours are 6 am – 2 am
  - ½ of the muck generated (~1400 cy) could need to be stockpiled in the muck facility daily.
  - There is insufficient space to have a separate location to store and test muck on site.
  - Testing frequency greatly exceeded that which was necessary to dispose of material (almost 10X).
- The wheel wash is required per our specifications 01 57 19 1.07 and environmental documents. Locating the wheel wash within the original site location would have required additional excavation to achieve required depth of the muck bin to maintain required capacity to avoid being muck bound.
- Temporary facilities are part of the Work, and the payment provisions for excavating, handling and disposing of excavated material found to contain hazardous material applies to this aspect of the Work just as does other provisions covering the Work (ie. general provisions, environmental controls, etc.)
- Similar reasoning applies to jet grout spoils handling facilities. Trucks dump liquid spoil return into temporary pits to set-up/cure (8 hrs). Spoils are then loaded into trucks off-hauled for disposal. Only have capacity for one day of jet grouting.



**GENERAL**

Proposed Change Sponsor: A. Clifford Received by CMB: 05/21/2014  
(Date)

Affected Disciplines: Utility  
\_\_\_\_\_  
\_\_\_\_\_

Impacts of Change **MOS 20" Conflict with 16" AWSS @ South Headwall**

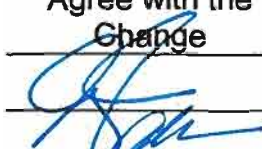



Change Order Request (COR 082) Amount Not To Exceed  
\$12,000

Contract(s) Directly Affected by this Proposed Change:

1250	1251	1252	1253	1254	1255	1256
1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input checked="" type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>	6 <input type="checkbox"/>	7 <input type="checkbox"/>
(CP01)	(CP02)	(CP03)	(CP04)	(CP05)	(CP06)	(CP07)

**CONFIGURATION MANAGEMENT BOARD APPROVALS**

*Signatures*

	Agree with the Change	Disagree with the Change	Date
Program Director:			5-21-14
Deputy Program Manager:			5/21/14
PM Project Services:			21 May 14
PM Project Construction:			5/21/14
SFMTA O & M Manager:			
SFMTA Safety and Security			
SFCTA PMO			

**Comments**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**EVALUATION OF MERIT****COR 082:**

**Recommendation:** Accept partial justification of Merit for COR 082, for additional work required to reroute a 20" waterline, per the SFMTA's response to Request for Information (RFI) No. 155. Recommend compensating the Contractor for 3 additional days of work and the additional material cost for the additional AWSS fittings to complete the waterline at the new alignment. A credit is also due for 65 feet of 20" waterline not required to be installed per the original alignment required by Contract. There is no time extension requested or recommended for this work.

**Facts:** The Contractor could not install the 20" waterline per the Contract Water Distribution (WD) drawings due to a conflict with existing joint trench utilities located on Folsom Street, east of the intersection of 4th and Folsom Streets. The existing joint trench did not allow an opening for the waterline to cross through.

The Contractor submitted RFI No. 155 suggesting three (3) alternative alignments to reroute the waterline due to this conflict. The SFMTA allowed the Contractor to proceed with the installation alignment labeled 'option #1' in RFI No. 155. The modified alignment ran adjacent to an existing AT&T vault and required hand excavation of a hole underneath an existing gas main for the waterline to cross through. The revised alignment also reduced the overall length of waterline required to be installed by approximately 65 feet.

During installation of the waterline, per the revised alignment, the close proximity of existing utilities (see attached field sketch 1252-085) required that the Contractor utilize hand excavation methods and additional shoring. The Contractor's is claiming an additional two (2) days of work related to these additional excavation activities.

The Contractor claimed that the revised alignment required the use of a welded joint at the point of connection as opposed to the mechanical joint shown in the Contract drawings per the original alignment. The Contractor claimed the connection method lengthened the time required for SFWD's installation; therefore, additional SFWD support work was required to be performed by the Contractor. The Contractor's is claiming an additional three (3) days of work related to this additional SFWD support work.

The revised waterline alignment crossed an AWSS line at two (2) locations as opposed to the one (1) crossing shown in the original alignment. Additionally, the new alignment was in close proximity to a new AWSS trench excavated by the Contractor. As a result the Contractor was required to utilize hand excavation methods and additional shoring in order to protect the existing facilities. Additionally, the second crossing required the installation of an additional bell and stop collar. The Contractor's is claiming two (2) additional days of work related to these additional AWSS installation activities.

**Justification:** The waterline could not be installed in its original location due to conflicts with the existing joint trench. Installation of the line per the WD drawings would have



**SFMTA Contract No. 1252**

**Contractor:**

Barnard Impregilo Healy JV (BIH)

likely resulted in impacts to the project schedule and change order costs exceeding those associated with the additional work described herein. Revision to the waterline alignment was necessary in order to complete the work.

The installation of the 20" waterline resulted in additional work not originally contemplated. SFMTA Project Staff reviewed the additional durations contained in COR 082 to determine if they were fair and reasonable. The following is a summary of their findings:

- **Additional Excavation:** From the SFMTA Daily Inspection Reports (DIRs) (see attachment 082-A), the Contractor began excavating the waterline trench on March 12<sup>th</sup>, 2013 and completed excavation on March 22<sup>nd</sup>. Some excavation was also performed on the 25<sup>th</sup> and 26<sup>th</sup>. Additionally, on the 25<sup>th</sup> and 26<sup>th</sup>, the Contractor's subcontractor (Asbestos Management Group) was on site performing asbestos abatement on the point of connection for the existing waterline. The DIR confirms that the Contractor took five (5) days to complete the excavation of the waterline trench. The RE also confirms if the Contractor had performed the excavation in the original alignment, the Contractor would only have encountered 1 of the 2 crossings indicated in the contract documents. The Contractor requested an additional two (2) days of excavation time to hand excavate under the crossing to install the pipe. Based on a proportion of (5) days to perform the excavation, the RE believes the additional two (2) days requested by the Contractor to perform the excavation is justified.
- **Additional SFWD Support Work:** The Specifications allow five (5) days for the SFWD to perform their connection work. SFMTA records indicate that the SFWD performed the connection work on April 29<sup>th</sup> and completed the tie-in on April 30<sup>th</sup>. The Contractor was able to complete backfilling the tie-ins in the following two (2) days. As such, the RE does not believe the additional duration for three (3) working days claimed by the Contractor is justified.
- **Additional AWSS Installation Work:** The Contractor was required to install an AWSS line as part of the Contract work, however, due to the new alignment of the 20" waterline a utility there was a conflict between the two lines (see attached field sketch 1252-085). Detail 3 of drawing WD-004 indicates how the Contractor is to install a utility crossing; however, the Contract Documents are not explicit on how payment is to be made for a utility crossing. As such, the RE recommends compensating the Contractor for installation of additional materials required for the utility crossing of the AWSS.

Also, according to the SFMTA DIRs, the installation of the AWSS pipe took 4 days to complete (the DIRs indicate the Contractor started work on March 27<sup>th</sup> and completed work on April 3<sup>rd</sup>, but do not indicate if the Contractor worked on March 28<sup>th</sup> or 29<sup>th</sup>). At the north headwall, the Contractor took 3 days to complete installation of the waterline. Using the north headwall as a measured mile, it would appear that the Contractor was impacted by one (1) day due to the additional utility crossing. As such, the RE recommends compensating the Contractor for the additional material costs and one (1) additional day of work.

# central subway

Connecting people. Connecting communities.


SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

**Change Type:** Unforeseen Conditions

By:

  
Mun Wei Leong  
Acting Resident Engineer

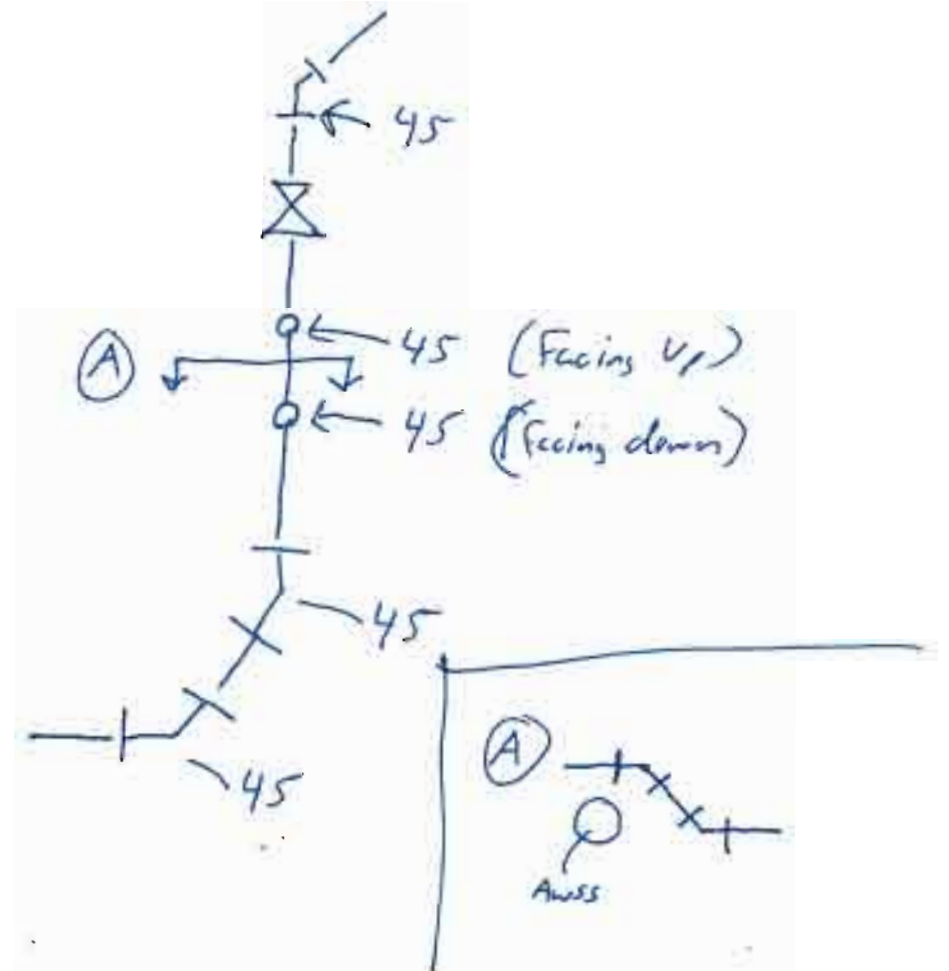
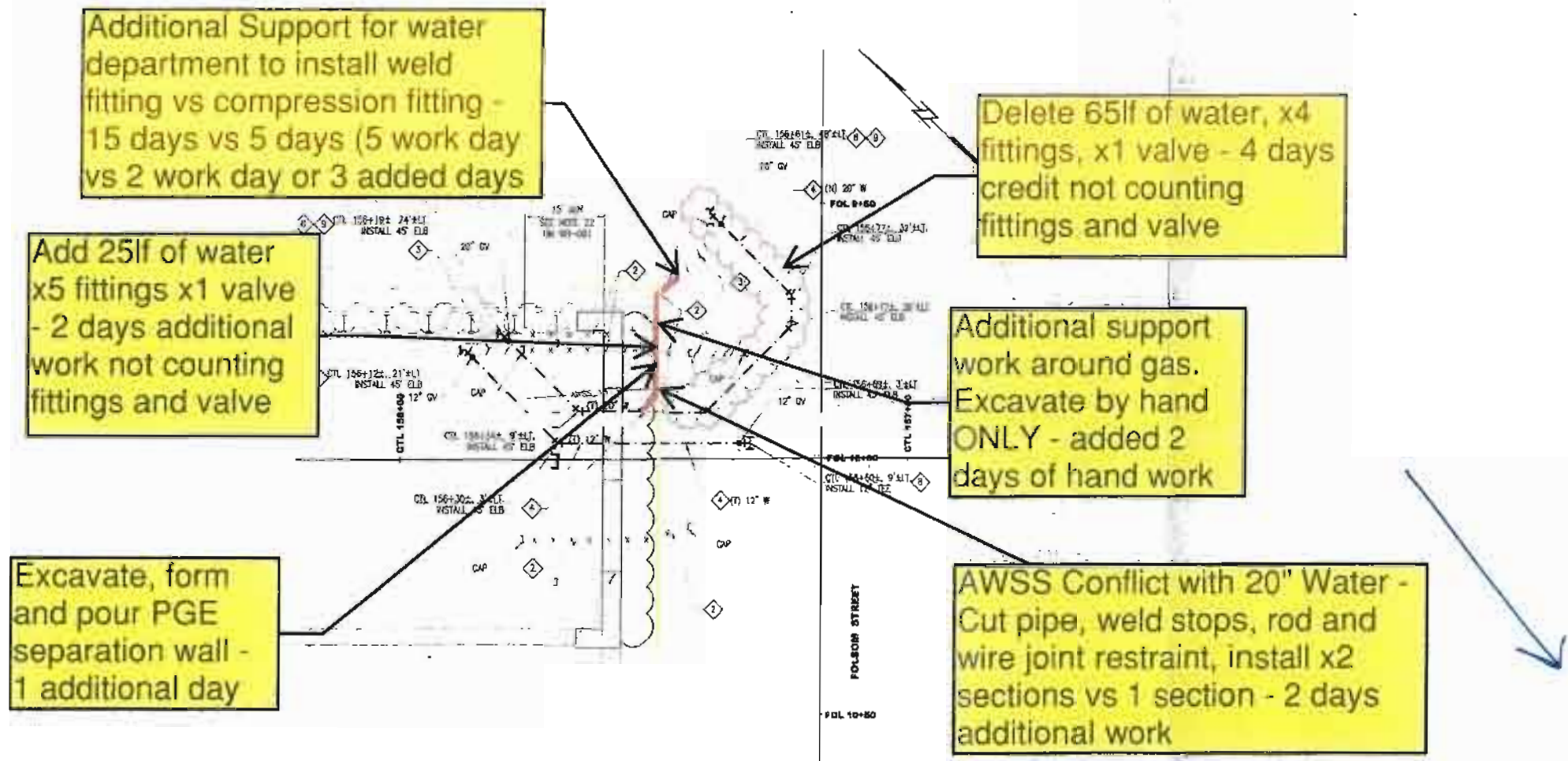
*HE CLIFFORD FOR*

Date

  
Configuration Management Board  
Approval

*4-30-14*

Date





Additional Support for water department to install weld fitting vs compression fitting - 15 days vs 5 days (5 work day vs 2 work day or 3 added days)

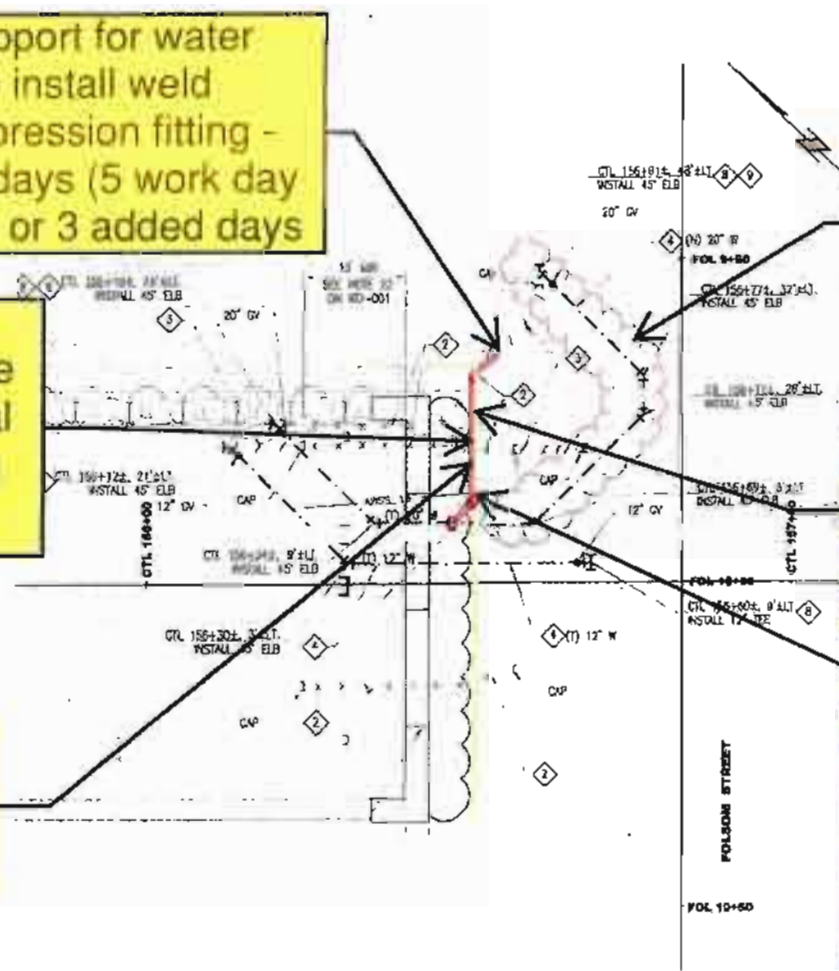
Add 25lf of water x5 fittings x1 valve - 2 days additional work not counting fittings and valve

Delete 65lf of water, x4 fittings, x1 valve - 4 days credit not counting fittings and valve

Additional support work around gas. Excavate by hand ONLY - added 2 days of hand work

AWSS Conflict with 20" Water - Cut pipe, weld stops, rod and wire joint restraint, install x2 sections vs 1 section - 2 days additional work

Excavate, form and pour PGE separation wall - 1 additional day





## CMB Meeting Minutes #168

DATE: May 02, 2014

MEETING DATE: April 30, 2014

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: J. Park (JP), A. Clifford, (AC), J Funghi (JF), A. Hoe (AH), R. Nguyen (RN), M. Latch (ML), R. Redmond, (RR), J. Wang (JW), E. Stassevitch (ES), B. Lebovitz (BL)B. Ward (BW), L. Zurinaga (LZ)

COPIES TO: Attendees: S. Farhangi (SF), M. Henry (MH), S. Tisell (ST), K. Shah (KS), J. Xia (JX) M. Acosta (MA), V. Chow (VC), M. Kobler (MK),M. Vilcheck,(MV), S. Jefferis (SJ), S. Espinal (SE), R. Hansen (RH), D. Kuehn (DK)  
File No. M544.1.5.0890

REFERENCE Project No. M544.1, Contract No. 149 Task 1-8.02

SUBJECT: Configuration Management Board Meeting # 168 – Rev. No. 0

### RECORD OF MEETING *(Italicized text indicates status update of open items)*

ITEM #	DISCUSSION	ACTION BY DUE DATE
1	J. Wang presented a follow on presentation for the Board members not present at last week's meeting of PCC05 proposal cost to have the 1300 Contractor perform estimating services of the Chinatown Plaza over the CTS headhouse. PCC 05 directs the Contractor to perform construction-estimating support to SFMTA designer at regular intervals during design process on T&M basis (see attached). The constructability review will be funded by related SFMTA Capital Improvement Funds. The Board concurred with the cost associated with construction estimating support for a Not to Exceed amount of <b>\$75K AGREE – CMB 0154</b> . Recommending the proposed contract change is re-written to clearly delineate the Contractor's scope and task deliverables.	
2	A. Clifford presented merit and cost comparison sheet to request negotiation position for COR 82 - MOS 20" Conflict with 16" AWSS at South Headwall. The Contractor could not install the 20" waterline required per the contract drawings due to a conflict with the existing joint trench utilities located on Folsom at the intersection of 4th Street. The Contractor submitted revised alignment to reroute the waterline. The new alignment required hand excavation to be done underneath an existing gas main to cross through the waterline. The new alignment reduces the overall waterline required by 65 feet. <b>The CMB agreed to partial merit for costs associated with additional work required to reroute the 20" waterline. The Board also agreed SFMTA should be compensated for the reduction of overall waterline to be installed and should negotiate with the Contractor a credit for an amount no less than \$25K.</b>	
3	A. Clifford presented for considering a budget revision for DP2 Design Services during	

**FINDING OF FACTS**

Contract No. 1300 Stations, Surface, Track and Systems Date 05-21-2014  
 PCC No. 0009 Program-wide (CTS,UMS,YBM,STS)  
 PCC Title Traction Power Cable Downsizing  
 PCC Initiator Mike Acosta / Sanford Pong Dept. CM

<b>Description of PCC:</b> Change 750 KCMIL traction power feeder cable rating from 2.4kV to 2kV.
<b>Reason/Need for PCC:</b> A smaller cable for traction power feeders was adopted by the Agency on a recent project, Sunset Tunnel Project. This smaller-sized cable meets the design requirement to serve the Central Subway traction power demand. The Program will realize savings by using the smaller cable.
<b>Location/Station:</b> UMS Package (~8,500 LF within station and surface), CTS Package (~11,800 LF within station), YBM Package (~11,000 LF within station), STS Package (~94,000 LF within tunnel and surface), Spare Cable (~8,700 LF)
<b>Configuration Control Analysis:</b> This is strictly a material change in this PCC and does not alter the intent of the contract which is to provide traction power distribution for running of the LRVs and trolley buses.
<b>Recommended Action:</b> Recommend to approve for merit and issue PCC to the contractor to obtain a cost proposal.
<b>Estimate:</b> Rough order of magnitude estimate is \$491,000 based on supplier quotations. A detailed estimate is forthcoming.
<b>Spec. Ref.:</b> 34 22 00 Traction Power Cables, Paragraphs 2.01, 2.02
<b>Drawing Nos.:</b> 1. <u>1300 CTS:</u> CTS-1254 TP-series drawings 2. <u>1300 UMS:</u> UMS-1253 TP-series drawings 3. <u>1300 YBM:</u> YBM-1255 TP-series drawings 4. <u>1300 STS:</u> STS-1256 TP-series drawings
<b>Attachments:</b> 1. Revised Specification Section 34 22 00 Traction Power Cables, Paragraphs 2.01, 2.02

Recommended by: Mike Acosta, Resident Engineer (SFMTA Representative) Date \_\_\_\_\_

Concur in Principle: Ben Volberding, Project Contract Administrator (SFMTA Representative) Date \_\_\_\_\_

**PROPOSED CONTRACT CHANGE**

Contract No. 1300 Stations, Surface, Track and Systems Date 05-xx-2014  
 PCC No. 0009 Program-wide (CTS,UMS,YBM,STS)  
 PCC Title Traction Power Cable Downsizing  
 PCC Initiator Mike Acosta / Sanford Pong Dept. CM

<p><b>Description of PCC:</b>                  Change 750 KCMIL traction power feeder cable rating from 2.4KV to 2KV.</p>
<p><b>Spec. Ref.:</b>                  34 22 00 Traction Power Cables, Paragraphs 2.01, 2.02</p>
<p><b>Drawing Nos.:</b>                  1. <u>1300 CTS: CTS-1254 TP-series drawings</u>                  2. <u>1300 UMS: UMS-1253 TP-series drawings</u>                  3. <u>1300 YBM: YBM-1255 TP-series drawings</u>                  4. <u>1300 STS: STS-1256 TP-series drawings</u></p>
<p><b>Attachments:</b>                  1. Revised Specification Section 34 22 00 Traction Power Cables, Paragraphs 2.01, 2.02</p>
<p>The Contractor shall submit a cost proposal and time extension proposal in accordance with General Provisions Section 6.02 B and Section 7.02 B.</p>

Recommended by: \_\_\_\_\_ Date \_\_\_\_\_  
 Mike Acosta, Resident Engineer (SFMTA Representative)

Concur in Principle: \_\_\_\_\_ Date \_\_\_\_\_  
 Ben Volberding, Project Contract Administrator (SFMTA Representative)

# Cable Supplier Quotations

## 2.4kV Cable

**THE OKONITE COMPANY**  
 QUALITY CABLES SINCE 1878  
 ONE ANNABEL LANE  
 SUITE 212  
 SAN RAMON CA 94583  
 (925) 830-0801  
 FAX: (925) 830-0954  
 E-MAIL: SANFRANCISCO@OKONITE.COM

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QUOTATION PREPARED for: \_\_\_\_\_ 3/12/2013

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OKONITE REFERENCE: 64-30208 CUSTOMER REFERENCE: \_\_\_\_\_

ITEM	QUANTITY	DESCRIPTION	NET WEIGHT 1000 FT	SHIP WEIGHT	PRICE 1000 FT
PRICES QUOTED ARE SUBJECT TO METALS ESCALATION, DE-ESCALATION IN ACCORDANCE WITH ITEM EXPIRATION DATE.					
ALL DELIVERY IS SUBJECT TO PRIOR SALE AND BACKLOG WHEN SCHEDULED AT THE SHIPPING FACILITY.					
001	142,406'	1/C 750 61X COPPER -SS- 155 OKOGUARD EPR - 125 OKOCLEAR-TS - SEQ PRINT - 2.4KV SERIAL NUMBER = 21748	3110	478554	\$17620
					EXPIRES 4/10/13
		METAL WEIGHT LBS PER 1000 FT: COPPER 2316			
		<del>SPECIAL MANUFACTURED ITEM</del>			
		APPROX O.D. INCHES 1.617			
		REELS: 56 @ 2500 76X36X40 NR (REEL WIDTH 44.0) 1 @ 2406 72X36X36 NR (REEL WIDTH 440.0)			
		SPECS: SPEC 34 22 00 2.01A			
		FOR AUTHORIZED STOCK ONLY, REEL AND CUT CHARGES WILL APPLY FOR LENGTHS 500 FEET OR LESS.			

(CONTINUED) PAGE 1

## 2.0kV Cable

**THE OKONITE COMPANY**  
 QUALITY CABLES SINCE 1878  
 ONE ANNABEL LANE  
 SUITE 212  
 SAN RAMON CA 94583  
 (925) 830-0801  
 FAX: (925) 830-0954  
 E-MAIL: SANFRANCISCO@OKONITE.COM

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QUOTATION PREPARED for: \_\_\_\_\_ 12/14/2012

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OKONITE REFERENCE: 64-20798 CUSTOMER REFERENCE: SF MUNI RAILWAY

ITEM	QUANTITY	DESCRIPTION	NET WEIGHT 1000 FT	SHIP WEIGHT	PRICE 1000 FT
PRICES ARE VALID FOR ESTIMATING PURPOSES ONLY.					
PRICES QUOTED ARE SUBJECT TO METALS ESCALATION, DE-ESCALATION IN ACCORDANCE WITH ITEM EXPIRATION DATE.					
001	50,000'	1/C 750 CLASS B COPPER C-RD - 090 OKOGUARD EPR - 065 OKOCLEAR-TS - 2KV SERIAL NUMBER = 11640	2620	140330	\$14289
					EXPIRES 1/12/13
		METAL WEIGHT LBS PER 1000 FT: COPPER 2316			
		METAL BASE: (SEE BASIS IN ESCALATION SECTION) COPPER 3.747000			
		<del>SPECIAL MANUFACTURED ITEM</del>			
		APPROX C.D. INCHES 1.232			
		OKONITE PRODUCT CODE: 113-24-2587			
		REELS: 10 @ 5000 90X45X42 NR (REEL WIDTH 54.0)			
		FOR AUTHORIZED STOCK ITEMS ONLY, REEL AND CUT CHARGES WILL APPLY FOR LENGTHS 500 FEET OR LESS.			
		F.O.B. SHIPPING POINT			
		TERMS: NET 30 DAYS			

(CONTINUED) PAGE 1



# Present at 9/4/13 CMB Meeting

PCC - Potential Credits

Ref	Work Package	PCC Title	What (Description of PCC)	Why (Reason for Requesting PCC)	Where (Location/Station)	When (Occurrence date, action date, potential time impact)	How (Recommendation of Action)	Estimate (Summary of Engr Est w/ attachment)	
CR-1	1254R	PG&E Sacramento Ductbank (Deletion) and Replace with PG&E new infrastructure service	Delete ductbank on Sacramento.	PG&E modified their infrastructure service in the vicinity of CTS, resulting in deletion of the PG&E power ductbank on Sacramento St.	CTS	Part of NTP-1 (Special Provisions)	PCC (potential credit)	TBD	Form B cost?
CR-2	1253, 1254R, 1255	Water Mist System over combined Pre-Action and FM200 systems	Design/Build Water Mist system in lieu of the combined Pre-Action and FM200 systems.	With the use of FM200 system, SFFD requires a pre-action system for positive suppression. SFFD will accept an alternate system of water mist. The contractor will have one fewer system to test and commission. The water mist system provides better asset protection. There was inadequate time at end of FD to space proof water mist pump equipment layout.	UMS, CTS, YBM		Propose as VE (potential credit)	TBD	via Div 01 VE
CR-3	1253, 1254R, 1255	Downsizing Traction Power Cables and Phenolic Conduits	Change traction power cable size from 2.4KV to 2KV, and thereby reduce size of phenolic conduit from 5" to 4".	A smaller cable for traction power was adopted by the agency on a recent project. This smaller-sized cable meets the design requirement to serve the Central Subway traction power demand. The Program will realize savings by using the smaller cable, and from the associated smaller sized conduits.	UMS, CTS, YBM, STS		PCC (potential credit)	\$1.2M savings	Estimate done
CR-4	1254R	Bulbout at Jade Galore	Construct sidewalk bulbout at Jade Galore	Constructing NE bulbout will avoid construction cost and scope to the subsidewalk basement to accommodate street mounted facility elements at CTS	NE Corner of Washington and Stockton - along Stockton.	Confirm w/TPC Baseline Schedule. Could be early (NTP-1) or late in construction with street restoration.	PCC (potential credit)	Cost Savings	

## TRACTION POWER FEEDER CABLE COST COMPARISON

No.	Description	Qty (LF)	2.4 kV Cable		2.0 kV Cable		Cost Savings
			Unit cost (\$/LF)	Cost	Unit cost (\$/LF)	Cost	
1	750 KCMIL Feeder Cable - CTS (Station)	11,800	\$17.62	\$207,916	\$14.29	\$168,622	\$39,294
2	750 KCMIL Feeder Cable - UMS (Station and Surface)	8,500	\$17.62	\$149,770	\$14.29	\$121,465	\$28,305
3	750 KCMIL Feeder Cable - YBM (Station)	11,000	\$17.62	\$193,820	\$14.29	\$157,190	\$36,630
4	750 KCMIL Feeder Cable - STS (Tunnel and Surface)	94,000	\$17.62	\$1,656,280	\$14.29	\$1,343,260	\$313,020
5	750 KCMIL Spare Feeder Cable	8,700	\$17.62	\$153,294	\$14.29	\$124,323	\$28,971
		134,000		\$2,361,080		\$1,914,860	\$446,220

Subtotal of Cost Savings	\$446,220
10% Contractor Markup Credit	\$44,622
<b>TOTAL COST SAVINGS</b>	<b>\$490,842</b>
<b>TOTAL COST SAVINGS</b>	<b>Say \$491,000</b>

■ Items shaded in yellow are believed to have been addressed at CN1252 Executive Management Meeting.

■ Items shaded in green are believed to have been overtaken by events.

**ACTION ITEMS**

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
8	07/24/13	07/24/13	1252 – Breakdown of Bid Item GE-3	AC/MLe	04/09/14	Open
2	08/14/13	08/14/13	1252 – CMod #8 (PSI strength) – Statement of occurrence post meeting record of approval which overrode CMB direction	AC/MLe	04/09/14	Open
1	08/28/13	08/28/13	1252 – Outstanding <b>CLOSED</b> status update	AC/MLe	04/09/14	Open
2 & 3	08/28/13	08/28/13	1252 – COR 97 & 98 – gravel encountered action plan from Engineering of Record (DP1)	AC/MLe	04/09/14	Open
5	08/28/13	<del>08/28/13</del> 9/11/13	1252 – Action plan of execution for the Slip Lining Work (Stockton/Columbus) <b>CLOSED</b>	AC/MLe	04/09/14	Open
4	09/25/13	10/02/13	1252 – COR #104 - Additional Sewer Slip Lining – SFPUC Response <b>CLOSED</b>	AC/MLe	04/09/14	Open
5	09/25/13	10/02/13	1300 – PCC CTS 0001 - Contractor Cost Proposal	MK	04/09/14	Open
2	10/09/13	10/09/13	1252 – Design Clause - confirmation of existing contract language in CN 1252 and CN 1300 regarding existing conditions related to utilities	JW/AH	04/09/14	Open
1	10/16/13	10/16/13	1252 – COR 102 - Determine if the Contractor received 1251 as built information before they began operations	AC/MLe	04/09/14	Open
1	10/16/13	10/16/13	1252 – COR 102 - Graphic showing the location of the headwalls control line	AC/MLe	04/09/14	Open
3	10/23/13	10/23/13	1252 – PCC 014 - Contractor Cost Proposal	JW/AC	04/09/14	Open
4	<del>10/23/13</del> 30	<del>10/23/13</del> 30	1252 – COR 05 - Revisit IRL process with Contractor <b>CLOSED</b>	RR	04/09/14	Open
2	11/06/13	11/06/13	1252 - COR 017 – Notify utility of cost as Form B bill update under CN1250 or CN1251	AC/MLe	04/09/14	Open
3	11/06/13	11/06/13	1252 – Slurry Wall Panels – TIA to be sent to BIH – SFMTA’s time savings and the time cost saving time <b>CLOSED</b>	AC/MLe	04/09/14	Open
2	11/13/13	11/13/13	1300 – Setup a meeting with DT to confirm the use to control traffic	BK	04/09/14	Open
NA	11/13/13	11/13/13	1252 – Confirm who is being billed for the use of PCO’s at 5 <sup>th</sup> St.	AC/MLe	04/09/14	Open
2	11/20/13	11/20/13	1300 – PCC 00X - PGE Traffic Control - Utility verification letter	MK	04/09/14	Open
7	12/11/13	12/11/13	1252- BART Load Cell <b>CLOSED</b> Conference Call	JW	04/09/14	Open
9	12/11/13	12/11/13	1252 - Trend Log Segment Measuring Frequency line item credit (1.3M)	AC/MLe	04/09/14	Open
10	12/11/13	12/11/13	1252 - Precast Tunnel Liner Test - Contractor's Rpt. <b>CLOSED</b>	ML	04/09/14	Open
2	01/08/14	01/08/14	1300 - PCC - Contractor Cost Proposal - Geoprobes	RR/ST	04/09/14	Open
4	01/08/14	01/08/14	1300 - PCC - Contractor Cost Proposal - Joint Trench Conduits	MK	04/09/14	Open
4	01/15/14	01/15/14	1300 - CTS confirmation from PG&E of cost for concrete encasement of lines	MK	04/09/14	Open
10	02/05/14	02/12/14	1300 - STS Letter to SFPUC on mitigation of collapse <b>CLOSED</b>	MA	04/09/14	Open

ITEM #	DISCUSSION	BY DUE DATE																																				
1-	<p>1252 - The Contractor's Pending Change Order Request and Proposed Contract Change logs were presented for review and statusing of items which have been agreed upon on scope and cost but have yet to be incorporated into a CMod (see attached). Discussion took place to outline an action plan between the 1252 Contractor and SFMTA Construction Management team for processing the outstanding COR &amp; PCC's by the end of September. An agreement was made between the Contractor and SFMTA to process the modification detailing what is agreed to, what is not, and what is being paid and what part is being paid unilaterally. Allowing the Contractor to not waive their right to recover the part which was not agreed upon in a unilaterally change. <b>The list of outstanding COR's and PCC's for immediate action are listed below:</b></p> <table border="1"> <thead> <tr> <th><b>COR No.</b></th> <th><b>Action by</b></th> <th><b>Activity Description</b></th> <th><b>Due by</b></th> </tr> </thead> <tbody> <tr> <td>1, 2, 3 &amp; 8</td> <td>SW</td> <td>Prepare CMod to be executed</td> <td>09/13/13</td> </tr> <tr> <td>11 &amp; 17</td> <td>Contractor</td> <td>BIH will supply addl. info.</td> <td>09/06/13</td> </tr> <tr> <td>45</td> <td>SW</td> <td>Credit - package w/another COR</td> <td>09/13/13</td> </tr> <tr> <td>51</td> <td>SW</td> <td>Prepare CMod to be executed</td> <td>09/20/13</td> </tr> <tr> <td>61</td> <td>SW</td> <td>Prepare CMod to be executed</td> <td>09/20/13</td> </tr> <tr> <td>77</td> <td>MB</td> <td>On CMod list to be processed</td> <td>09/27/13</td> </tr> <tr> <td>79</td> <td>SW/Contractor</td> <td>Scoping meeting to discuss 2 items</td> <td>09/09/13</td> </tr> <tr> <td>83</td> <td>MB</td> <td>On CMod list to be processed</td> <td>09/27/13</td> </tr> </tbody> </table>	<b>COR No.</b>	<b>Action by</b>	<b>Activity Description</b>	<b>Due by</b>	1, 2, 3 & 8	SW	Prepare CMod to be executed	09/13/13	11 & 17	Contractor	BIH will supply addl. info.	09/06/13	45	SW	Credit - package w/another COR	09/13/13	51	SW	Prepare CMod to be executed	09/20/13	61	SW	Prepare CMod to be executed	09/20/13	77	MB	On CMod list to be processed	09/27/13	79	SW/Contractor	Scoping meeting to discuss 2 items	09/09/13	83	MB	On CMod list to be processed	09/27/13	<p>SW/MB 09/11/13</p> <p>#1</p>
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	<p><b><u>PCC No.</u></b> 10</p> <p><b><u>Action by</u></b> SW</p> <p><b><u>Activity Description</u></b> CMod ready to be signed</p> <p><b><u>Due by</u></b> 08/31/13</p> <p>COR's which require additional discussion to reach an agreement were also reviewed to outlined a action plan:</p> <table border="0"> <thead> <tr> <th><b><u>COR No.</u></b></th> <th><b><u>Action by</u></b></th> <th><b><u>Activity Description</u></b></th> <th><b><u>Due by</u></b></th> </tr> </thead> <tbody> <tr> <td>70</td> <td>SW</td> <td>BIH to summit documentation</td> <td>09/06/13</td> </tr> <tr> <td>15</td> <td>Contractor</td> <td>BIH will supply addl. info.</td> <td>09/06/13</td> </tr> <tr> <td>05</td> <td>RR/Contractor</td> <td>Merit not agreed on; requires IRL</td> <td>NA</td> </tr> <tr> <td>09 &amp; 17</td> <td>SW/Contractor</td> <td>Discussion - Include stand by cost</td> <td>NA</td> </tr> <tr> <td>30, 54 &amp; 75</td> <td></td> <td>Claim</td> <td>NA</td> </tr> <tr> <td>82</td> <td>SW/Contractor</td> <td>Merit not agreed addl. discussion</td> <td>NA</td> </tr> <tr> <td>85</td> <td>SW/Contractor</td> <td>Merit not agreed addl. discussion</td> <td>NA</td> </tr> <tr> <td>90</td> <td>SW/Contractor</td> <td>Merit not agreed addl. discussion</td> <td>NA</td> </tr> </tbody> </table>	<b><u>COR No.</u></b>	<b><u>Action by</u></b>	<b><u>Activity Description</u></b>	<b><u>Due by</u></b>	70	SW	BIH to summit documentation	09/06/13	15	Contractor	BIH will supply addl. info.	09/06/13	05	RR/Contractor	Merit not agreed on; requires IRL	NA	09 & 17	SW/Contractor	Discussion - Include stand by cost	NA	30, 54 & 75		Claim	NA	82	SW/Contractor	Merit not agreed addl. discussion	NA	85	SW/Contractor	Merit not agreed addl. discussion	NA	90	SW/Contractor	Merit not agreed addl. discussion	NA	#1 Continued
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2-	1252 – S. Wilson requested negotiation position for <b>COR 037</b> – (see attached) for cost associated with abandon 12" steel pipe removal within the utility demolition limits at UMS North Headwall. Merit for the work was agreed to by the CMB at meeting #128. <b>AGREE – CMB 0132</b> – Not To Exceed value of \$3,379,19																																					

	<p>and address what actions are to be taken when the Contractor encounters gravel. This item will remain open.</p> <p>1252 – COR 100 Unknown Obstruction Investigation – Develop investigation plan of unknown obstruction – The Contractor has been instructed to investigate the unknown obstruction at Tube-a-Manchette installation ES2-08 at the Ellis Shaft and to develop and to coordinate and obtain the Engineer's approval prior to carrying out this investigation.</p> <p>1252 – Action plan of execution for the Slip Lining Work (Stockton/Columbus). An initial phase meeting with the Contractor will take place. Contractor has submitted a work plan, which has been sent back to the Contractor. This item will remain open until the detailed plan of execution is presented to the Board.</p>	#2
2-	<p>The Program Trend/Change Control Log dated 09/11 was presented for review of Contract 1252 newly added COR's 101, 102, 103, 105 and 89. The CMB requested the description of COR's 105 and 89 be expanded to give a better definition of the change request. The log is updated to include the most recent changes and trends for contract 1252. The log is attached for distribution with these meeting minutes.</p>	



ITEM #	DISCUSSION	ACTION BY DUE DATE
3-	1300 - E. Stassevitch on behalf of Jennifer Lovvorn, SFAC proposed a contract change to push the artwork delivery start date to the Contractor back by a year from September 30, 2014 to September 30, 2015, for Stations and STS in the 1300 Contract. The CMB agreed to the change. A PCC will be generated by the 1300 Construction Management team.	
4-	The Program Trend/Change Control Log dated 10/02 - A review of the most recent COR #104 - Retrieval Shaft - Additional Sewer Slip Lining 16" HDPE Pipe. The CM Team states the DSC may be eliminated. Awaiting a response from PUC on how to proceed given the existing conditions. A letter has been written from SFMTA to SFPUC giving the PUC alternative methods to perform the work, which thus far has been rejected. The log is attached for distribution with these meeting minutes.	SW 10/23/13

## ACTION ITEMS

1-	<p>1252 - S. Wilson presented <b>COR 102</b> Jet Grout Column 18 DSC at UMS South Headwall evaluation of merit and cost comparison sheet and to request negotiation position. The costs represent relocating the drill rig twice, after encountering an unknown obstruction 10 feet below the surface. An investigation determined the obstruction encountered was due to pile caps from micropiles installed during 1251 Contractor work, which were not installed at the correct location. The 1251 Contractor has been put on notice that SFMTA intends to seek compensation from Synergy for any and all costs associated with installation of incorrectly positioned micropiles. The CMB requested the CM Team to determine if the Contractor received as built information before they began operations. The CMB also suggested a better graphic which shows exactly where the headwall control line is located. No action was taken by the CMB, this item will be brought back to the CMB at a later date.</p>	<p>SW 10/30/13</p> <p>#4</p> <p>#5</p>
2-	<p>1252 – S. Wilson presented for discussion a fragnet of the effects of the delayed start of work by BIH related to PCC 10 – New Retrieval Shaft. Start of work had been delayed by 22 calendar days from dates originally planned. The work is not on the critical path. The CM team is identifying all activities that could be accelerated to recover from the 22 day delay in order to avoid potential exposure to early arrival of the SB TBM. A submittal fragnet was submitted by the Contractor requesting approval to change the sequence of their work, which does not change the duration. The CMB suggested the Contractor should put on notice that the Program agrees to sequence change if they are accepting of the liability and schedule risk.</p>	
3-	<p>1252 - J. Wang presented for information draft <b>PCC 14</b> Modifications to AWSS Facilities at 4th and Bryant Streets. SFFD/SFWD requirements are to maintain an in-service AWSS</p>	



ITEM #	DISCUSSION	ACTION BY DUE DATE
3-	1252 - Claim 1 - Permanent End Stops at Moscone Headwall - The Program Director reported on his meeting with the Contractor's Senior Management. Discussion took place regarding the settlement of the claim. In which the Contractor states they are prepared to accept nothing less than \$150K to settle the claim. If an agreement cannot be reached at the Senior management level the Contractor's is requesting the matter be taken before the Dispute Review Board (DRB). The CMB suggested that the Program should offer the Contractor of \$150K to settle the clam.	
4-	1252 – COR 05 - CDF Encasement on 42" RCP - The Program Director reported on his meeting with the Contractor's Senior Management. The Contractor's proposes the cost of the DSC to be \$100K on the basis the CDF should not have gotten compressive strength readings of 2000 psi requiring them to use a hydraulic chisels. The Board suggested a engineers estimate should be generated and recommended that a another meeting be held with R. Redmond and the Contractor presenting a video of the excavation work to demonstrate the Program's position that the work did not require an significant amount of effort.	RR 11/13/13  #6
5-	1300 – T. DePooter presented <b>PCC CTS – 0004</b> - Install P-Traps and Air Vents documentation for review. This change would install P-trap and air vents on four active	

	acceptable by SFWD. The CMB agreed to partial merit for costs associated with excavating two additional "kill holes" for the Not To Exceed amount of \$5,727.00	
2-	1252 – S. Wilson presented <b>COR 017</b> – Impacts @ North and South Headwalls due to live utilities. Contractor discovered live utilities at the north and south headwalls. Contract drawings indicate all utilities were abandoned, which prevented the Contractor from	SW 11/20/13 #7

**SFMTA**

Municipal Transportation Agency



DATE

performing planned utility demolition. Evaluation of merit and cost comparison sheet for approval of negotiated amount agreed to by the Contractor. The CMB **agreed to partial merit approval** and a cost Not To Exceed amount of \$43,219.00. **A letter will be sent to all utilities requesting reimbursement for cost through the Form B process.**

#7 Continued

3-

1252 – S. Wilson presented **COR's, 32, 34, 42, 43, 62, 65 and 67** all pertaining to cost

SW/AA

	<p><b>merit</b> approval and a cost Not To Exceed amount of \$43,219.00. A letter will be sent to all utilities requesting reimbursement for cost through the Form B process.</p>	
3-	<p>1252 – S. Wilson presented <b>COR's, 32, 34, 42, 43, 62, 65 and 67</b> all pertaining to cost associated with work to the impacted Slurry wall panels at the launch box.</p> <p><b>AGREE – CMB 0136, 0137, 0138, 0139, 0140, 0141, &amp; 0145,</b> – for a total combined value Not To Exceed value of \$234,438.07 (see attached). In addition the Contractor is also asking for a time extension of seven (7) calendar days, which has been found to have <b>No Merit</b> based upon the SFMTA time - savings for expediting the approval of a critical path submittal. The CMB was not in agreement with the methodology used to reach the engineers estimate for the negotiated price for each COR. <b>The CMB requested a time impact analysis be done and provided to the Contractor to demonstrate how SFMTA saved the Contractor time; to include time-savings and cost saving for premium time.</b></p>	<p>SW/AA 11/20/13</p> <p>#8</p>
4	<p>1252 – S. Wilson requested approval for additional funds for <b>COR 70</b> to cover the</p>	



the Contractor work thru the City Build/First Source Referral Program to hire the pedestrian monitors. The letter will be revised to instruct the Contractor to proceed with hiring two people during a set duration of time until directed otherwise by SFMTA. Additional discussion took place concerning the use of police versus PCOs for traffic control. A meeting will be setup with DT and the RE's to confirm the use of Police and PCO for traffic control.

#9

3-

1300 – Discussion took place to clarify the contract requirements for work during the Holiday moratorium. Specific language contained in the YBM, STS, and CTS work

	Backup documentation.	
7-	1252 - BART Load Cell - BART has requested Central Subway provide information as to the reason two of the twelve load cells installed to monitor BART tunnel lining bolt loads during construction of the Central Subway tunnels are showing prism spikes (see attached). <b>The Board suggested a conference call between BART be conducted to discuss the issue.</b>	JW 01/08/14  #10
8-	1300 - T. DePooter presented for review a Request for Substitution - Self-Compacting Concrete. The Contractor proposes the use of a high slump "wet hole" concrete mix in lieu of the self-compacting concrete for the secant and tangent piles at UMS. The CMB was agreement with the product substitution based on the fact the mix has already been used for construction of the headwalls and proven viable.	
9-	The Program Trend/Change Control Log dated 12/11 was reviewed. The review noted of Trend 80 Segment Measuring Frequency had been closed. <b>The CMB took exception to the deletion of the (\$1.3M) from the log without the consent of the Board. Direction was given to list the potential credit amount to the log adding a notation in "comment section" stating the reasoning the credit is no longer expected from the Contractor</b>	MB 12/18/13  #11
10	1252 - M. Latch reported on the status of the Precast Tunnel Liner Test reports. The criteria require the Contractor to assemble a master ring of segments every 100th ring cast. The Contractor's RFI 203.1 request the measuring of the segments frequency be decreased to every 500 rings cast, due to the increase of frequency of testing on the forms. <b>The CMB requested to review the Contractor's reports which demonstrates the results of the precast tunnel liner testing at next week's CMB meeting.</b>	ML 12/18/13  #12

## **ACTION ITEMS**

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
8	04/03/13	04/03/13	1252 – DP1 – Design Services hours and cost during construction – DP1 Review	MB	11/27/13	<b>CLOSED</b>
8	07/24/13	07/24/13	1252 – Breakdown of Bid Item GE-3	MB	01/08/14	Open

ITEM #	DISCUSSION	ACTION BY DUE DATE
5-	<p>R. Redmond presented for information TPC Ltr. 055 - UMS Notice of Delay - Tangent Secant Piles Concrete Mix Submittal. The Contractor suggests SFMTA's request of additional testing of the Secant Pile Wall Permeability requirement is causing a delay. Stating that per spec 31 62 13 15 the Secant or Tangent Piles Wall is not defined as a Diaphragm Wall but an individual cased Pile Wall. The Contractor has requested confirmation that permeability test are not required for the cased secant or tangent pile walls. The CMB stated the Contractor notification of delay is not in compliance with the contractual requirements. Stating the Contractor is required to demonstrate in writing their findings which show a delay.</p>	
10- 02/05/14	<p>R. Redmond notified the CMB of a potential DSC concerning four separate locations of street base collapse during potholing work a STS. The Contractor has determined the cause is due to the catch basin lateral leaking at the main connection in the middle of the street. The CM team was directed to notify the PUC of the issue letting them know we can make the fix or they need to dispatch an official to address the issue immediately. Status: 02/12 R. Redmond presented for information the Contractor's letter of DSC - Settlement of 4th Street Pavement Panels. The areas of collapse have been backfilled with CDF and steel plated. <b>Closed</b> The CMB suggested that the letter being drafted notifying Manfred Wong, SFPUC of the unsafe condition for traffic and the general public, indicate the urgency of the proposed fix and request SFPUC assistance. Also the letter should include a statement that additional contingency for SFPUC's cost- share dollars should be added to cover the DSC, as work is proceeding on a force account basis to ensure safety to the traveling public.</p>	#13

**ACTION ITEMS**

## **Action Items**

### **Outstanding COR's**

- COR 1, 2, 3 (markup on direct costs) – negotiated. CMOD signed by BIH
- COR 5 (LB 42" CDF encasement) – negotiated. 1252 drafting CMOD
- COR 15 (LB slurry wall pre-excavation) – negotiated. CMOD signed by BIH
- COR 32,34,42,43,62,65,67 (LB wood pile) – negotiated. CMOD signed by BIH
- COR 69 (UMS- Shoring due to 48" pipe) – negotiated. 1252 drafting CMOD
- COR 91 (UMS HW - Steel Section left in) – credit to be reconciled at end of job
- COR 92 (YBM HW – Nylon Strings left in) – credit to be reconciled at end of job
- COR 96 (UMS Tangent Pile) – negotiated. 1252 drafting CMOD
- COR 115 (BART load cells) – negotiated. Paying through allowance

### **Additional Sliplining SFPUC response**

- PUC have been informed that SFMTA will monitor and repair as required
- Additional Surveys of sewers in areas complete
- Tunnel mining performance going well
- Utilities and Tunneling performance being monitored

### **Action plan for execution of slip lining work (Stockton/Columbus)**

- See above

### **1252 COR-17 Notify Utility of cost as to Form B bill update under CN 1250 & 1251**

- TBD

### **1252 Slurry Wall Panels – TIA to be sent to BIH**

- Potential offset to this claim discussed at 5/20 executive meeting

### **1252 Bart Load Cell conference call**

- Resolved, additional load cells installed. BIH will be paid under allowance

**CENTRAL SUBWAY PROJECT**  
**Project Trend/Change Control Log**

Current Cost Estimate and Allocated Contingencies									
Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date				Actual/Forecast
<b>Contract 1250 - Utilities Relocation #1 (Portal &amp; MOS)</b>									
1250-0001	081-0001	Delete Option MF-OPT1 "Fire Protection Sprinkler System"	1	N/A			(50,000)	Cleared City Attorney's Office; to Shahnam for execution. [In "Current Forecast" - Sep2010 Cost Report.] <b>COMPLETE, NO FURTHER ACTION; CMOD #1</b>	<b>CMOD #1</b> Approved
1250-0002	081-0002	Changes to Sewer on 4th between Howard and Folsom	2	CMB-0001	Agree	07/12/10	+107,174	Differing conditions as AWSS is directly over existing sewer; unable to install sewer manhole per plan. [In "Current Forecast" - Sep2010 Cost Report.] <b>No reimbursement from SFPUC Sewer.</b> <b>COR #2-\$34,135; COR #5-\$73,039</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #2</b>	<b>CMOD #2</b> Approved
1250-0003	081-0003	Quantity Adjustment for JT-6 and JT-7	4	CMB-0002	Agree	08/04/10	+192,420	In April 2010 pay app, JT-6 bid qty exceeded by 344% (230 vs. 1021) and JT-7 bid qty exceeded by 112% (500 vs. 1060) [In "Current Forecast" - Sep2010 Cost Report.] <b>COMPLETE, NO FURTHER ACTION; CMOD #3</b>	<b>CMOD #3</b> Approved
1250-0004	081-0004	Demolition of existing brick and concrete footing on 4th between Howard and Folsom	2	CMB-0003	Agree	07/12/10	+170,000	Unforeseen bricks and concrete footing discovered on east side of 4th Street between Folsom and Howard. [In "Current Forecast" - Sep2010 Cost Report.] <b>COR #3-RFI #76</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #4</b>	<b>CMOD #4</b> Approved
1250-0005	081-0005	Modify AWSS at 4th/Bryant and 4th/Harrison	3	CMB-0004	Agree	08/04/10	+586,000	At 4th/Bryant, AWSS conflict with new 48" sewer and AT&T duct bank. At 4th/Harrison, AWSS conflict with 18" sewer. [In "Current Forecast" - Sep2010 Cost Report.] <b>No reimbursement from SFPUC AWSS.</b> <b>PCC #2: RFI #s 34, 49 &amp; 51</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #5</b>	<b>CMOD #5</b> Approved
1250-0006	081-0006	Install four additional piles and reinforce existing foundation at 401 4th Street	2	CMB-0005	Agree	08/25/10	+130,000	Existing foundation was discovered to be part brick and part concrete, which is different from plan. Also, foundation was unstable and required additional reinforcement. <b>Refer to RFIs #85R1, 88.1, 100, 101, 102</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #6</b>	<b>CMOD #6</b> Approved
1250-0007	081-0007	Additional work to install 48" sewer due to various utility conflicts at 4th/Bryant	2	N/A			+32,964	48" RCP sewer in conflict with existing AT&T duct bank that needs to remain in service until new joint trench is installed to enable switchover. This conflict forced contractor into a more expensive means to install sewer. Also, 48" RCP sewer in conflict with existing 30" force main and 24" steel pipes. <b>No reimbursement from SFPUC Sewer.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #9</b>	<b>CMOD #9</b> Approved
1250-0008	081-0008	Relocate TPC vault on 4th Street between Howard and Folsom	6	N/A			+19,500	Contractor uncovered existing TPC conduits on top of AT&T duct bank on 4th near Howard, a differing site condition. An AT&T intercept vault is to be installed, however, TPC conduits can not reside inside AT&T intercept vault. Joint Trench utilities participation cost TBD. Executed on 10/14/2010. <b>Refer to RFI #62</b> <b>(\$19,500) Expected Reimbursement from TPC. RE has provided documentation of notification to TPC, July-August '10. See final 1250 Form B actual costs</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #8</b>	<b>CMOD #8</b> Approved
1250-0009	081-0009	Install additional sewer and provide temporary connections at 4th/Stillman	3	N/A			+47,000	Location of existing sewer to be intercepted differs from where it's shown in the plan, hence additional sewer to be installed. Also, due to optional sewer MH not buildable until (E) AT&T DB is removed, additional sewer is necessary to tie into (E) main as interim. New sewer is supposed to tie into optional MH. <b>No reimbursement from SFPUC Sewer.</b> RFI #91 <b>COMPLETE, NO FURTHER ACTION; CMOD #7</b>	<b>CMOD #7</b> Approved

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 7 - Other



**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date	Actual/Forecast			
1250-0010	081-0010	Perform AT&T wye cast connection and chipping of existing duct bank at various locations	6	N/A			+48,181	AT&T was supposed to tie-in its own facility. However, AT&T's contractor, who is hired to install vaults, stated it is not in their scope of work. Refer to RFI #82.1. AT&T intercept vault at 4th/Harrison can not be installed at design location due to utility conflicts. AT&T vault to be shifted a few feet instead of vault being on top of existing duct bank. This will cause additional excavation, joint trench and modification to existing duct bank. Joint Trench utilities participation cost TBD. SFMTA and AT&T are negotiating with Contractor. <b>(\$48,181) Expected Reimbursement from AT&amp;T. RE has provided documentation of notification to AT&amp;T, Sept-Oct '10. See final 1250 Form B actual costs.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #10</b>	CMOD #10 Approved
1250-0011	081-0011	Remove existing piles and shoring at 801 Howard	2				-0-	This change order has been incorporated in CMOD #16 (Trend #30) <b>COMPLETE, NO FURTHER ACTION; CMOD #16</b>	CMOD #16 Approved
1250-0012	081-0012	Additional work related to AT&T facilities due to unforeseen conditions.	6	CMB-0047	Agree	08/03/11	-0-	This is the total of all force account work related to AT&T facility. SFMTA to seek reimbursement from AT&T through the Form B process. <b>(\$67,798) Expected Reimbursement from AT&amp;T. Cost captured in Trend #15</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved
1250-0013	081-0013	Additional work related to PG&E facilities due to unforeseen conditions.	6	CMB-0047	Agree	08/03/11	-0-	This is the total of all force account work related to PG&E facility. SFMTA to seek reimbursement from PG&E through the Form B process. <b>(\$30,547) Expected Reimbursement from AT&amp;T. Cost captured in Trend #15</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved
1250-0014	081-0014	Remove brick wall at sewer sta 152+94 (west side) on 4th between Howard and Folsom.	2				-0-	This change order has been incorporated in CMOD #16 (Trend #30) <b>COMPLETE, NO FURTHER ACTION; CMOD #16</b>	CMOD #16 Approved
1250-0015	081-0015	Archaeological Findings - Charges for rental of steel plates, triton barriers, shoring and labor for maintenance.	2				+784,771	Midden deposits were discovered on 4th Street between Howard and Folsom. Contractor stopped work. Contractor requesting payment for rental charges of trench plates, barricades, and shoring, and cost of maintenance. Total cost exposure is projected through end of November 2010. The \$290,703.00 is expected to be the final estimate for the rental of trench plates, barriers and shoring. <b>\$597,000 Arch, \$179, 000 DIFF, \$8,500 Traffic</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20
1250-0016	081-0016	Additional AWSS modification at 4th/Harrison	1	CMB-0016	Agree	11/10/10	+156,418	New alignment is proposed by Design team. <b>No reimbursement from SFPUC AWSS.</b> COR #33 Supplemental <b>COMPLETE, NO FURTHER ACTION; CMOD #12</b>	CMOD #12 Approved
1250-0017	081-0017	Protection Work at PG&E Vault 1611	6				-0-	Expected Reimbursement from PG&E or work to be deferred \$6,400. RE has notified PG&E via email dated 10/29/10 that SFMTA expects full reimbursement for this work if implemented. Follow-up pending. <b>Work was not performed and will need to be addressed in a future contract.</b>	
1250-0018	081-0018	Demolition and Support Work at PG&E Vault 1611	6				-0-	Expected Reimbursement from PG&E or work to be deferred \$25,000. RE has notified PG&E via email dated 10/29/10 that SFMTA expects full reimbursement for this work if implemented. Follow-up pending. <b>Work was not performed and will need to be addressed in a future contract.</b>	
1250-0019	081-0019	Extended overhead delay claim due to Archaeological discoveries	2					Old Note: Potential delay claim if issue extends project duration. Amount is estimated at \$3,000.00 per day for 60 days (\$180K). New Note: By exercising all option work, additional 84 calendar days is added to the contract time. In addition, midden mitigation will start on 10/7/10. As a result, the potential for extended overhead cost is averted. <b>This trend has been superseded by Trend #37.</b> <b>COMPLETE, NO FURTHER ACTION</b>	
1250-0020	081-0020	Sewer modification under I-80 freeway at 2 locations	3				+39,062	Inverts of existing sewer where new sewer will tie into are found to be different than shown in plan and would create a reverse slope. Additional pipe and manhole are required to fix slope. <b>Refer to RFI Nos. 2S01 and 147.</b> <b>No reimbursement from SFPUC Sewer.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #11</b>	CMOD #11 Approved

- 1 - Owner Directed Change in Scope
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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date	Actual/Forecast			
1250-0021	081-0021	Install new AWSS lateral including hydrant at NW 4th/Harrison	2				Existing AWSS lateral at SW 4th/Harrison is in conflict with new 18" sewer. Instead of modifying the lateral to avoid the sewer, a new lateral at NW corner is a preferred solution. CM awaiting design revision from Design team. <b>Trend No. 21 is combined with Trend No. 22.</b>		
1250-0022	081-0022	Install additional 30 feet of DIP and new AWSS at 4th/Harrison	2	CMB-0026	Agree	01/12/11	+160,908	AWSS Point of connection on 4th Street was found to be cast iron instead of ductile iron as shown in DPW as-built. Due to this differing condition, additional length of pipe needs to be replaced and lead joint to be installed in order to install a ductile iron tee. Also, existing AWSS hydrant lateral is in conflict with new 18" sewer. The preferred solution was to install a new ductile iron lateral at a different location rather than installing vertical offsets on an existing cast iron lateral. <b>No reimbursement from SFPUC AWSS.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #15</b>	CMOD #15 Approved
1250-0023	081-0023	Steel plates and shoring standby for 2 months due to PG&E delay at Clementina	3				+24,981	Sewer at Clementina was delayed by 2 months due to PG&E vault conflict. PG&E will not pay cost of steel plates and shoring standby because PG&E drawings were sent to MTA during design phase and PG&E was not made aware of the conflict then. <b>COMPLETE, NO FURTHER ACTION; CMOD #13</b>	CMOD #13 Approved
1250-0024	081-0024	Utility support and work around for AT&T facilities	6	CMB-0048	Agree	08/24/11	+95,311	Contract specs specified AT&T to compensate contractor directly for workaroud & support. AT&T refused to pay Synergy. Synergy considers AT&T's refusal as a changed condition to CN 1250 contract. <b>(\$95,311) Reimbursement from AT&amp;T. See Final 1250 Form B actual costs.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #19</b>	CMOD #19 Approved
1250-0025	081-0025	Utility support and work around for PG&E facilities	6					Contract specs specified PG&E to compensate contractor directly for workaroud & support. PG&E negotiated \$100,000 directly with Synergy and will pay synergy directly as well.	
1250-0026	081-0026	Utility support and work around for SFWD facilities	3	CMB-0028	Agree	02/09/11	+66,510	Total cost known to date (10/5/10) of all SFWD support and workaroud. See COR #12, 20, 32 and 35. Agreed amount is total of COR #12, 20 and 32. Total exposure is equal to agreed amount plus COR #35. <b>No reimbursement from SFWD.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #14</b>	CMOD #20 Approved
1250-0027	081-0027	Trucking and labor support for Archaeological mitigation	2				-0-	Synergy is asked to provide trucking for delivery of midden soil to Sonoma State University lab. Other support work includes traffic control, plating, loading and unloading of midden soil. The amount shown are charges up to end of November 2010 only. <b>Additional charges are expected which will be tracked as Trend No. 28.</b> <b>COMPLETE, NO FURTHER ACTION</b>	CMOD #20 Approved
1250-0028	081-0028	Trucking and labor support for Archaeological mitigation, Part II	2				-0-	Synergy is asked to provide trucking for delivery of midden soil to Sonoma State University lab. Other support work includes traffic control, plating, loading and unloading of midden soil. The amount shown are expected charges beyond November 2010. <b>COMPLETE, NO FURTHER ACTION</b>	CMOD #14 Approved
1250-0029	081-0029	Cost overrun for bid item UD-10 "Additional excavation and backfill"	4	CMB-0036	Agree	05/04/11	+112,500	Bid item UD-10 is to pay for excavation of connection hole and kill hole for SFWD line. Contract only included 200 cubic yard for this work. The size of excavations is dictated by field conditions and per the direction of SFWD inspector. RE's estimate of the total volume of dirt to be excavated is 630 cy. Examples of differing conditions encountered are: location of existing water line is different than where it's shown in the plan, existing waterline where shown in the plan to be connected to is inactive, differing condition at 5th/Clementina, connection holes and kill holes need to be expanded due to other utilities in the way. <b>COMPLETE, NO FURTHER ACTION; CMOD #17</b>	CMOD #17 Approved
1250-0030	081-0030	Supplement bid item GE-4 "Allowance for differing site conditions" related to the installation of publicly owned facilities only (sewer, water, AWSS, Joint trench)	4	CMB-0030	Agree	04/13/11	+235,595	This change order is to supplement GE-4 for cost overrun related to the installation of publicly owned infrastructure only. GE-4 cost overrun for installation of privately owned infrastructure is being tracked separately and a separate change order will be issued. <b>COMPLETE, NO FURTHER ACTION; CMOD #16</b>	CMOD #16 Approved
1250-0031	081-0031	Unused allowance for bid item GE-8 "Allowance for cast-in-place utility vaults"	4				-0-	Bid item GE-8 is an allowance to pay contractor for designing and constructing cast-in-place manholes as required for installation of new systems. Only one CIP vault was installed. <b>Credit amount included in Trend #43</b>	

- 1 - Owner Directed Change in Scope
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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date				Actual/Forecast
1250-0032	081-0032	Unused allowance for bid item UD-5 "Handling and disposal of Class I Hazardous Waste"	4				-0-	Bid item UD-5 is an allowance to pay contractor for handling and disposal of Class I Hazardous Waste. No class I hazardous waste was off hauled away from the job site. Class I soil found under the I-80 freeway was put back in the trench as backfill. This bid item is expected to remain unused. However, contractor is claiming to recover "General Conditions" cost. <a href="#">Credit amount included in Trend #43</a>	
1250-0033	081-0033	Unused allowance for bid item UD-6 "Transportation of Class I Hazardous Waste"	4				-0-	Bid item UD-6 is an allowance to pay contractor for transporting of Class I Hazardous Waste. No class I hazardous waste was off hauled away from the job site. Class I soil found under the I-80 freeway was put back in the trench as backfill. This bid item is expected to remain unused. However, contractor is claiming to recover "General Conditions" cost. <a href="#">Credit amount included in Trend #43</a>	
1250-0034	081-0034	Cost overrun for bid item TR-6 "Allowance for manual traffic control"	4	CMB-0037	Agree	05/04/11	+68,820	Bid item TR-6 is an allowance to pay for off-duty police officers and parking control officers. Contract allowance amount is \$50,000.00. Contract specs calls for police officers at 4 intersections (4th/Howard, 4th/Folsom, 4th/Harrison and 4th/Bryant). The average cost of 1 police officer is about \$800.00 per day (\$100.00 per hour). The \$50,000.00 allowance is only good for 60 days for 1 police officer. Hence, additional money was needed for traffic control support. Final amount paid police officers is \$87,500.00. Additional billings for parking control officers (from Al Herce of DPT) is forthcoming; RE estimated this bill to be about \$60,000.00. COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved
1250-0035	081-0035	Premium cost for requesting contractor to accelerate work on 4th Street between Howard and Folsom	2				-0-	Due to archaeological discoveries, many trenches remained open and the project would not have enough time to complete installation of underground utilities and restore the roadway before the Holiday season. Without accelerating the work, the project would have had to pay rentals for the barriers, street plates and shoring for the unfinished trenches that would have remained. By accelerating the work and DPT allowing the contractor to work through the beginning of the Holiday Moratorium, the project avoided these rental costs, which is estimated to be greater than the premium cost of accelerating the work. <a href="#">COR Not submitted by Contractor</a> <b>CLOSED COMPLETE, NO FURTHER ACTION</b>	
1250-0036	081-0036	Rental/Maintenance costs for support of Archeological Trenches (Part 1 of 4) \$255,840; Support Work During Archeologist Mitigation Efforts (Part 2 of 4) \$199,741; Mobilization and Equipment Standby Costs (Part 3 of 4) \$67,728; Additional Overhead/Indirect Costs During Archeological Delay Period (Part 4 of 4) \$124,186	2	CMB-0041	Agree	07/13/11 02/15/12 07/25/12 09/12/12	-0-	Due to archaeological discoveries, contractor may potentially claim for compensation for his equipment that were idle for the duration of the waiting period. RE's estimate is based on Caltrans rate for equipment standby for 5 months (May to October). RE has not received any change order request related to this item. RE to verify if his equipment were indeed idle during this time period. <b>2/15:</b> Rental/Maintenance Costs for Support (Part 2 of 4); Addl Work as Result of Archeological Shutdown (3 of 4). <b>07/25:</b> Revised mod - compensation for 1 of 3) Rental/Maintenance, 2 of 3) Addl Work result of Archeological support, 3 of 3) Addl OH/Indirect cost. RE to add Equipment Standby time to revised mod. <b>09/12:</b> RE to Prepare Modification <b>10/29:</b> CMod 20 is being issued as a unilaterally change, by the SFMTA that represents the SFMTA's estimate of a fair and reasonable final compensation amount for the additional work. <b>COMPLETE, NO FURTHER ACTION</b>	CMOD #20 Approved
1250-0037	081-0037	Compensation for loss of production, inefficiency and disruption of work due to archaeological discovery	2				-0-	Due to archaeological discoveries, contractor may potentially claim for compensation for loss of production, inefficiency and disruption of work. RE has not received any change order request related to this item. Amount shown is a ROM cost by the RE. RE expects a COR from the contractor but change justification is very unlikely. Initial draft COR was \$898,453. RE has adjusted to \$661,559 removing the month of October and option work. This was then revised to 800,000. There has been no official submittal from Synergy. SFMTA has directed Synergy to submit anything related to the Architectural delays through the claims process. This will be carried in the Potential Claim Log. <b>COMPLETE, NO FURTHER ACTION</b>	
1250-0038	081-0038	Project Delay due to archaeological discovery and PG&E Issues.	2				-0-	Due to archaeological discoveries compounded with PG&E's ability to perform service switchover to Olivet University and de-energize a live duct bank in conflict with 48" sewer. The project will realize an estimated 6 weeks of non-compensable delay to the substantial completion date of 4/6/11. 47 days estimated by RE. Contractor submitted COR 51 in the amount of \$1,144,776.74 on September 1st, 2011. RE responded requesting additional backup on October 19th, 2011. Subsequently, no additional information has been provided by the contractor, therefore, SFMTA has directed Synergy to submit anything related to the Architectural delays through the claims process. <b>This will be carried in the Potential Claim Log.</b>	

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**CENTRAL SUBWAY PROJECT**

*Project Trend/Change Control Log*

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				Approval Action	Approval Date				Actual/Forecast
1250-0039	081-0039	Remove BP-4 (Waterproofing) from Contract	4				-0- Bid item was not used. Contractor requesting compensation to recover for General Conditions cost. Bid item amount total is \$40,000. <b>NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)</b>	N/A	
1250-0040	081-0040	Delete SW-8 (24" Sewer) from Contract	4				-0- Bid item was not used. Contractor requesting compensation to recover for General Conditions cost. Bid item amount total is \$73,117. <b>NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)</b>	N/A	
1250-0041	081-0041	Delete UD-5 and UD-6 (Class I Off haul and Handling) from Contract	4				-0- Bid items were not used. Contractor requesting compensation to recover for General Conditions cost. Bid items total amount is \$150,000. <b>NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)</b>	N/A	
1250-0042	081-0042	Delete GE-6 (Hazmat) from Contract	4				-0- Bid item was not used. Contractor requesting compensation to recover for General Conditions cost. Bid item amount total is \$100,000. <b>NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)</b>	N/A	
1250-9001	081-9001	<del>Utility Companies refusal to contribute to utility support costs and work-around. (Voided. Recorded individually in TR-0059-TR-0061.)</del>	7					VOIDED	
1250-0043	081-0043	Unit Rate Adjustment for Entire 1250 Bid Items	4			(333,904)	Pursuant to General Provision GP-11, COR is to adjust contract value to account for fix overhead costs for bid items not performed or where the bid item performed varied by 25%. <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved	
<b>Contract 1250 Totals</b>						<b>+2,694,211</b>	<b>Total Changes to the Contract in the amount of \$2,694,211, represents a \$740,834 OVER RUN of the original allocated contingency of \$1,953,377.</b> <b>Changes that will be Utility Reimbursement credits through the Form B process in the amount of \$162,992 will offset some of this OVER RUN.</b> <b>Final Contract Closeout Total \$11,968,150 will be reduce by \$2,275,419 Utility Reimbursement credits for a Final Program cost of \$9,692,731 for CN 1250</b>		
<b>Contract 1251 - Utilities Relocation #2 (UMS)</b>									
1251-0001	082-0001	Modify traffic control plan by establishing a single travel lane on Stockton St. in lieu of time-based multiple lane requirements as stipulated in contract plans TR-001 to 004.	7				-0- After discussions with the Contractor and the Union Square Business Improvement District (BID), the SFMTA determined that modifying the lane requirements along Stockton St. and implementing the alternate pedestrian walkway design would be beneficial to the execution of CN 1251 in the following ways: increased public safety, increase construction production, and create a more pleasing environment to the public and merchant. COR #1 <b>COMPLETE, NO FURTHER ACTION; CMOD #4</b>	CMOD #4 Approved	
1251-0002	082-0002	Installation of reinforced concrete slab underneath Joint Trench along Stockton at O'Farrell (East Side). CTL 133+66.37 (27.08 LEFT) to CTL 134+00.87 (27.08 LEFT)	1&3	CMB-0035	Agree	04/20/11	+67,634	Pursuant to a commitment between Barney's and SFMTA, Emergency Stair #4 (to be constructed in CN 1253) must avoid existing subsided basement. It was determined that moving the conflicting stairs would require the Joint Trench to be constructed in a manner that would enable it to span the excavated area. The addition of the invert slab allowed for the needed span thereby allowing for a relocation of Emergency Stair #4. COR #4; PCC #1 <b>COMPLETE, NO FURTHER ACTION; CMOD #2</b>	CMOD #2 Approved
1251-0003	082-0003	Adjust placement of 3EA manholes along Geary Street and O'Farrell Street. The modified manhole locations require the installation of approximately 265LF of additional HDPE pipe inside the existing 3'x5' brick sewer.	1	CMB-0029	Agree	02/23/11	+148,919	During future station construction, the design team anticipates that excavation related settlement may cause damage to the brick sewers along Geary and O'Farrell Streets. This proposed modification will replace the vulnerable brick sewer within the influence zone with HDPE pipe that will not be as susceptible to settlement-induced damage. COR #9; PCC #2 <b>COMPLETE, NO FURTHER ACTION; CMOD #1</b>	CMOD #1 Approved

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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				Approval Action	Approval Date	Actual/Forecast			
1251-0004	082-0004	Changes to Neiman Marcus secondary enclosure wall due to various differing site conditions.	2	CMB-0031	Agree	04/13/11	+189,584	Due to various differing site conditions as described in RFIs 15, 37, 38 and 44, changes to the secondary enclosure wall are required. The existing footing were found to be inconsistent, i.e. missing footing in one area, footing sticks out beyond existing wall, overpour on existing footing, existing wall to be 6" into private property. Contract plan SR-302 shows a consistent footing. COR #8 <b>COMPLETE, NO FURTHER ACTION; CMOD #3</b>	CMOD #3 Approved
1251-0005	082-0005	Existing PG&E conduits were found on top and parallel to existing AWSS on Geary Blvd. at 2 locations (east and west of Stockton)	6				+66,084	Contract plans AW-501.1, 501.2, 501.4 and 501.4 show the existing AWSS to be replaced in place. However, existing PG&E conduits were found to be on top and parallel to the existing AWSS resulting in extra work in working around and/or shifting the existing electrical conduits. Contract plans JT-308 and 309 showed the existing electrical and AWSS to be separate. Estimate includes \$77,892.53 (Synergy FA Request) + \$25,000 (first digging west side) + \$10,000 (temp backfill during moratorium) + \$15,000 (plate rental west side at \$5k per month). Estimate does not include Synergy's cost to sequence his work. Updated projected cost impact from \$50,000 to \$127,893 based on compilation of force accounts received. RE negotiating <b>COMPLETE, NO FURTHER ACTION</b>	CMOD #24 Approved
1251-0006	082-0006	Design changes to utilities on Stockton street between Post and Geary	1	CMB-0039	Agree	06/08/11	+398,624	Due to changes to the limits of the UMS Station on Stockton Street between Post and Geary, the original utility design has changed. COR #24, PCC #4 <b>COMPLETE, NO FURTHER ACTION; CMOD #5</b>	CMOD #5 Approved
1251-0007	082-0007	Design changes to utilities on Ellis Street	1	CMB-0049	Agree	08/24/11	(434,957)	Due to changes to the limits of the UMS Station on Ellis street, the original utility design has changed. PCC #5 <b>COMPLETE, NO FURTHER ACTION; CMOD #5</b>	CMOD #5 Approved
1251-0008	082-0008	Elimination of underpinning at 150 Stockton	1					Based on field verification, it was determined that underpinning is no longer needed. Contract bid item SR-9 is for a total amount of \$116,000 measured by LF. However, CM team does not anticipate to recover the full amount because contractor may be entitled to retain general conditions cost and some excavation cost that was already performed but encumbered in Bid Item SR-9. Agreed credit of (\$58,000) to be included in Trend #60. <b>CLOSED, NO FURTHER ACTION</b>	
1251-0009	082-0009	Additional cost for police officers and/or Parking Control Officers for traffic control.	4	CMB-0038	Agree	06/01/11	+261,584	Contract bid item TR-7 for manual traffic control in the amount of \$120,000 is insufficient to control traffic for the duration of the contract. The \$120,000 allowance only equates to one police officer for a duration of 7.5 months. At a minimum, it is anticipated that one police officer or PCO will be needed at Stockton/Post for the entire contract duration of 16 months. Additionally, one PCO is required for each intersection at Geary/Stockton and O'Farrell/Stockton. <b>COMPLETE, NO FURTHER ACTION; CMOD #4</b>	CMOD #4 Approved
1251-0010	082-0010	Accelerate Stockton east between O'Farrell and Market	1				+27,409	Contractor needed to rent additional excavators to work concurrently with the other block on Stockton between O'Farrell and Market. Amount: \$27,409; COR #25 <b>COMPLETE, NO FURTHER ACTION; CMOD #3</b>	CMOD #3 Approved
1251-0011	082-0011	Potholing at 4th/Howard for PUC sewer design	1					Request from MOS utility design team to pothole for the intercept of a 36" force main sewer and 96" sewer. PUC requested that this be done in order to ensure that we have accurate utility information to avoid costly change orders during construction. Per direction from CMB on January 18, 2012, this request is denied. COR #50, PCC #6 <b>CLOSED, NO FURTHER ACTION: Per direction from CMB on January 18, 2012, this request is denied.</b>	
1251-0012	082-0012	Additional cost to lower the AWSS at O'Farrell, east of Stockton, due to numerous existing utility conflicts.	2	CMB-0042, CMB-0050	Agree	8/3/2011, 9/21/2011	+278,351	The AWSS is in conflict with AT&T, PG&E and several other utilities and needs to be installed under all these utilities at about 11' deep (instead of 6' depth as noted in Plan AW-501.4, sheet note #5). During negotiations with the Contractor several items of work were found to be missing for the original cost estimates which increase the amount to \$278,351. RFI #76, COR #31 <b>COMPLETE, NO FURTHER ACTION; CMOD #6</b>	CMOD #6 Approved

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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1251-0013	082-0013	Accelerate start of construction in front of Macys West by trenchless construction method	7				Micropile installation on Stockton east between O'Farrell and Market has proven to be much slower than anticipated. To mitigate this potential delay, contractor requested to start construction in front of Macys West. COR 32 (CMB 0055 approval - see also Trend CN1251 #'s 04 & 10) <b>COMPLETE, NO FURTHER ACTION; CMOD #3 (No Cost Change)</b>	CMOD #3 Approved	
1251-0014	082-0014	Increase in Bid Item WD-10, Allowance for Additional Excavation and Backfill.	3	CMB-0055	Agree	09/14/11	+191,779	This allowance is for the contractor to perform additional excavation, backfilling and restoration associated with the water tie-ins and capping for the distribution piping system. The contractor has performed two water service tie-ins at an average cost of \$14,000 per tie-in. The current number of tie-ins and capping is 35 separate points. This amounts to a total cost of \$490,000. The current contract allowance amount is \$100,000, therefore an additional \$390,000 will be needed to augment is bid item. CMB made a partial approve of up to \$200K. The initial Contract Modification to supplement this allowance is in the amount of \$191,778.62. <b>RE's cost analysis of this trend confirms that the initial CMod amount of \$191,778.62 is sufficient to cover for all water tie-in/capping work.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #9</b>	CMOD #9 Approved
1251-0015	082-0015	Additional traffic signal work at Post/Stockton	1				+17,530	Modification of the traffic signal at Post/Stockton is required to implement the detour shown in contract plan TR-010. There are no bid item to bill this work. COR #19 <b>COMPLETE, NO FURTHER ACTION; CMOD #8</b>	CMOD #8 Approved
1251-0016	082-0016	Additional traffic signal work at Sutter/Mason	2				+32,054	Existing conduits shown in Plan ET-101 differs from what is actually in the field. City's response to RFI 73 directs contractor to install new conduits and conductors. RFI #73; COR #33 <b>COMPLETE, NO FURTHER ACTION; CMOD #8</b>	CMOD #8 Approved
1251-0017	082-0017	Furnish and install AT&T Manhole 5830 on O'Farrell Street	6	CMB-0051	Agree	09/21/11	+25,000	AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. <b>AT&amp;T agreed to reimburse SFMTA (\$25,000) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #7</b>	CMOD #7 Approved
1251-0018	082-0018	Furnish and install AT&T Manhole 5829 on Geary Blvd.	6	CMB-0051	Agree	09/21/11	+31,000	AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. <b>AT&amp;T agreed to reimburse SFMTA (\$31,000) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #7</b>	CMOD #7 Approved
1251-0019	082-0019	Extend joint trench and modify existing AT&T Manhole 403 on Ellis Street.	6	CMB-0057	Agree	10/26/11	+31,000	AT&T was supposed to furnish and install AT&T vault #5833 on Ellis Street. The current design was to intercept the existing AT&T conduit in the middle of Ellis Street. It was discovered that the existing AT&T conduit actually run adjacent to the southern curb line along Ellis Street. Therefore, AT&T requested SFMTA for Synergy to extend the joint trench approximately 200 feet to the West and tie into their existing AT&T vault #403. This work will also require Synergy to enlarge vault #403 to accept the additional conduit. <b>This additional work for AT&amp;T will need to be reimbursed to SFMTA through the Form B process.</b> <b>Note: The agreed amount (\$31,000) is for enlargement of vault #403 only; the additional 200 feet of trench to be captured in the JT bid items. (See Trend 60)</b> COR #43 <b>COMPLETE, NO FURTHER ACTION; CMOD #11</b>	CMOD #11 Approved
1251-0020	082-0020	Change PG&E conduit material from PVC to GRS on west side of Stockton between Geary and Post	6	CMB-0058	Agree	11/02/11	+19,537	PG&E requested to use GRS material in lieu of PVC in areas where PG&E conduits were expected to be exposed and temporary supported during future UMS station construction. <b>PG&amp;E agreed to reimburse SFMTA (\$19,537) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #21</b>	CMOD #21 Approved
1251-0021	082-0021	Revise PG&E service points and layout of primary lines at various locations, and delete Muni Vault 1850 A at Stockton/Ellis.	6					PG&E made changes to the locations of the service points and layout of some of the primary lines. In addition, due to changes to the limits of the UMS Station on Ellis Street, it was determined that Muni Vault 1850A is no longer needed. Cost for this trend in captured in Trend #31 or CMod #12. <b>CLOSED; NO FURTHER ACTION. Cost for this trend is captured in Trend #31/CMod #12</b>	

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1251-0022	082-0022	Change OCS supports at SF Hilton Hotel on Mason Street from embedded eyebolts to poles w/foundations.	7				During the design phase the representatives of the Hilton Hotel agreed to and signed a license agreement with the SFMTA to allow embedded eyebolt supports. Hilton's Dir of Property Ops now wants to have OCS poles rather than the embedded building eyebolt supports. However, the OCS designer was able to revise the OCS design to eliminate the need for either eyebolts or poles in front of Hilton Hotel, resulting in a \$2,000 credit. <b>CLOSED; NO FURTHER ACTION. Applicable bid items to be adjusted accordingly, See Trend #60.</b>		
1251-0023	082-0023	4th Street & Folsom Trolley Bypass	1	CMB-0065	Agree	1/25/2012, 2/29/12	+405,440	SFMTA Operations has requested a bypass be installed at 4th Street and Folsom Street. \$242,619 in labor costs for OCS installation has not been negotiated yet. 1/25: Condition agreed upon verification material from Contractor to be procured is available. (Verified 02/01/12). 02/29: CMod negotiated cost has been revised to incorporate original three items and the add'l OCS work on Folsom St. COR #52; PCC #7 <b>Updated projected cost impact from \$490,000 to \$405,440. CMod #12 (Formally CMod #15) COMPLETE, NO FURTHER ACTION; CMOD #12</b>	CMOD #12 Approved
1251-0024	082-0024	Install a 5" slurry wall between the gas line and wet utilities if the separation is less than 3 feet	6	CMB-0059	Agree	11/16/2011, 05/02/12	+201,411	As a new requirement, PG&E had requested that a 5" slurry wall be installed between the gas line and wet utilities where the separation between the 2 utilities is less than 3 feet. <b>PG&amp;E agreed to reimburse SFMTA (\$201,410) through the Form B process.</b> COR #58 <b>COMPLETE, NO FURTHER ACTION; CMOD #19</b>	CMOD #19 Approved
1251-0025	082-0025	Additional PG&E conduit crossings at Geary and O'Farrell to minimize service interruption during future UMS Station construction	6				PG&E requested to install additional conduits crossing Stockton Street at Geary and O'Farrell to minimize service interruption during future UMS Station construction. PG&E agreed to reimburse SFMTA through the Form B process. This item is captured under applicable JT Bid item, see Trend 60. <b>CLOSED; NO FURTHER ACTION. Item is captured under applicable JT Bid Item, See Trend 60.</b>		
1251-0026	082-0026	Install cantilever footing in lieu of regular OCS foundation at 2 locations on Mason Street between Geary and O'Farrell	2				The sub-basement in the public parking garage at O'Farrell/Mason extends beyond the property line up to the curb line. Therefore, regular foundations as per original design could not be installed. <b>CLOSED; NO FURTHER ACTION. Item is captured under applicable OCS Bid Item, See Trend 60.</b>		
1251-0027	082-0027	Accelerate installation of AT&T facilities in order for AT&T to start cut-over sooner	1	CMB-0056	Agree	11/30/11	+281,435	Acceleration is necessary to avoid potential delay impacts to Central Subway follow-on contracts. COR #40 <b>COMPLETE, NO FURTHER ACTION; CMOD #10</b>	CMOD #10 Approved
1251-0028	082-0028	Furnish and install AT&T Manholes 5828 (Stockton), 5831 (Geary), 5832 (O'Farrell) and 113 (O'Farrell)	6	CMB-0057	Agree	10/26/11	+157,000	AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. <b>AT&amp;T agreed to reimburse SFMTA (\$157,000) through the Form B process.</b> COR #43 <b>COMPLETE, NO FURTHER ACTION; CMOD #11</b>	CMOD #11 Approved
1251-0029	082-0029	Rebuild existing AT&T vault 133 at Post/Stockton and demolish existing AT&T vaults 403 (Ellis) and 113 (O'Farrell)	6				Vault 133 rebuild is superseded by Trend 40. Demolition of existing vaults 403 and 113 is superseded by Trend 43 <b>CLOSED; NO FURTHER ACTION. Demo of exiting vaults 403 and 113 are superseded by Trend 43. (See CMOD #23)</b>		
1251-0030	082-0030	Enlarge existing PG&E vault 873 at SW Geary/Stockton	6	CMB-0058	Agree	11/02/11	+46,366	PG&E asked SFMTA to enlarge vault 873. <b>PG&amp;E agreed to reimburse SFMTA (\$46,366) through the Form B process.</b> CMB approved a NTE amount of \$40K <b>COMPLETE, NO FURTHER ACTION; CMOD #21</b>	CMOD #21 Approved
1251-0031	082-0031	Additional PG&E conduits crossing O'Farrell on east side of Stockton (Task Order #32)	6	CMB-0058	Agree	11/02/11	+17,193	PG&E asked SFMTA to install additional conduits. <b>PG&amp;E agreed to reimburse SFMTA (\$17,193) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #21</b>	CMOD #21 Approved

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1251-0032	082-0032	Excavation and restoration cost for PG&E gas tie-in and kill holes.	6	CMB-0059	Agree	11/16/2011, 05/02/12	+92,292	PG&E gas drawings were not included in the bid package and there was no bid item to capture this work. Gas drawings was issued by PG&E in June 2011. <b>PG&amp;E agreed to reimburse SFMTA (\$92,292) through the Form B process.</b> Updated projected cost impact from \$202,400 to \$169,087 due to reduction in number of kill holes from 18 to 15. 04/11: Discovery of actual number of Kill/Tie locations being 26 instead of 15 will require confirmation from PG&E of the locations and the new cost of scope of work. <b>COMPLETE, NO FURTHER ACTION; CMOD #19</b>	CMOD #19 Approved
1251-0033	082-0033	Install secondary enclosure wall at One Stockton (Apple Store)	1	CMB-0068	Agree	03/07/12	+408,700	Additional enclosure wall is design initiated change. COR #47, PCC #9 Updated projected cost impact from \$262,484 to \$408,700. 39 Calendar Day Time Extension <b>COMPLETE, NO FURTHER ACTION; CMOD #13 (formally CMOD #14)</b>	CMOD #13 Approved
1251-0034	082-0034	Install temporary support as required to protect existing live utilities that are encroaching into the City right-of-way in front of 17-25 Stockton Street.	2	CMB-0069	Agree	04/04/12	+337,548	Existing utilities that are in active service were discovered in the City public right-of-way and are obstructing the performance of Contract work. Worst case scenario - "Not to Exceed" value) CM team will report actual amount value at a later date COR #71 CMB agreed to a Not-to-Exceed amount of \$346,456 on 4/4/12. All physical work was scheduled to complete by 4/13/12 <b>COMPLETE, NO FURTHER ACTION; CMOD #17</b>	CMOD #17 Approved
1251-0035	082-0035	Potholing on Stockton between Post and Geary for UMS Station design	1					UMS Design Team requested 1251 to pothole (6'Wx12'Lx8'D) on Stockton between Post and Geary to locate existing piles and tie-backs at Union Square. Cost for this scope of work from the Contractor is \$19,870.73. Per direction from the CMB on Jan 18th this request is denied and the DP2 designer will cover this potential future obstruction with a note on the drawings. COR #53 <b>CLOSED; NO FURTHER ACTION. Per direction of CMB on 1/18/12, this request is denied and DP2 Designer will cover this potential future obstruction with a note on the drawings.</b>	
1251-0036	082-0036	Install three 6" PG&E conduits from vault 5800 to PG&E "A" pullbox at 4th/Bryant.	6					CN 1252 Contract is requesting 1251 to install PG&E conduits in order to bring power in advance of the tunnel equipment arrival. The scope of work, which involves trenching at the busy 4th/Bryant intersection, was part of the 1252 contract, hence, a credit of same amount (\$54,892.07) to be due back to 1252. Based upon a field meeting and discussions with BIH on Jan 17th this work will be done under CN 1252 as originally planned. COR #55 <b>CLOSED; NO FURTHER ACTION. Based on field meeting with BIH on 1/17/12; this work will be completed under CN 1252 as planned.</b>	
1251-0037	082-0037	Install sewer lateral from the Gucci building (240 Stockton) to the main sewer on Maiden Lane. Work will involve plumbing modification inside building to raise invert.	3	CMB-0078	Agree	09/12/12	+27,428	After field investigation, the existing sewer lateral was found to connect to the Stockton main near Geary. However, the location where the lateral is connected to the main is inside the footprint of the UMS station, in which the main is shown in the contract plan to be slurry filled. The contract plan shows the lateral to be connected to the main on Maiden Lane but is not possible due to invert problem. At the CMB meeting on 1/18/12, Albert Hoe reported that he had instructed the design team during the design phase to investigate this lateral and make the connection to the sewer main at Maiden Lane. RE was asked to investigate if this could be a possible error and omission by the sewer design. (See Trends #44 and 45) <b>COMPLETE, NO FURTHER ACTION; CMOD #18</b>	CMOD #18 Approved
1251-0038	082-0038	Reimburse Synergy for JCDecaux work to remove kiosks	1	CMB-0064, CMB 0080	Agree	1/04/2012, 10/24/12	+29,273	JCDecaux refused to remove the remaining (2EA) kiosks without being paid for work already completed. The CMB approved on 1/04/12 Task Order No. 35 (Removal of 3EA sidewalk kiosks) as requested for the work already completed. On 10/24/12 the CMB approved Trend #38 removal of the remaining 2EA kiosks; work already completed and paid for as part of the approved CMB 0064 dated 01/04/12 for a total of <b>5EA kiosks removed. Total work priced at \$29,268.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #22</b>	CMOD #22 Approved
1251-0039	082-0039	Furnish and install 2ea benches along 5th Street	1				+4,752	Requested by Muni Operation. <b>COMPLETE, NO FURTHER ACTION; CMOD #22</b>	CMOD #22 Approved

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**CENTRAL SUBWAY PROJECT**

*Project Trend/Change Control Log*

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date	Actual/Forecast			
1251-0040	082-0040	Furnish and install AT&T Manholes 133 at Post/Stockton	6	CMB-0070	Agree	04/11/12	+45,000	AT&T requested SFMTA for Synergy to rebuild manhole 133 at Post/Stockton. COR #64 AT&T agreed to reimburse SFMTA (\$45,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved
1251-0041	082-0041	Install additional 55 LF of AT&T trench to extend conduits from vault 5832 to vault 113 on O'Farrell Street	6	CMB-0070	Agree	04/11/12	+23,704	AT&T requested SFMTA for Synergy to extend their conduit from vault to vault instead of wye-casting into exiting duct bank. COR #63 AT&T agreed to reimburse SFMTA (\$23,704) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved
1251-0042	082-0042	Install additional 95 LF of AT&T trench to extend conduits from vault 5831 to vault 129 on Geary Blvd.	6	CMB-0070	Agree	04/11/12	+31,525	AT&T requested SFMTA for Synergy to extend their conduit from vault to vault instead of wye-casting into exiting duct bank. COR #62 AT&T agreed to reimburse SFMTA (\$31,525) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved
1251-0043	082-0043	Force account work for demolition of existing AT&T vaults 113 (Post/Stockton) and 403 (Ellis)	6	CMB-0076	Agree Conditionally	10/03/12	+52,607	Agreed cost shown in Trends 29 and 40 is for installing vaults only. Cost to demo existing vaults is tracked on force account (estimated cost at \$15k each vault). AT&T agreed to reimburse SFMTA (\$52,607) through the Form B process. CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 72 & 80) COMPLETE, NO FURTHER ACTION; CMOD #23	CMOD #23 Approved
1251-0044	082-0044	Install new sewer lateral from Macys West on O'Farrell including plumbing modification inside Macy's building.	3	CMB-0078	Agree	09/12/12	+11,438	Contract plan SW-4 shows an existing lateral to be connected to new main. However, the 8" lateral is too big to be connected directly to the new 14" main necessitating a new connection to the manhole. However, numerous existing utilities were in the way and required installation of a new lateral at a higher elevation. Due to the raised lateral invert, modification to the building is also needed. COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved
1251-0045	082-0045	Install new 2 each sewer laterals on Stockton between Post and Geary	3	CMB-0078	Agree	09/12/12	+30,260	Contract plan SW-3 shows 2 each existing laterals coming from the Union Square garage to be connected to the new main at approximate sta 128+55. However, the laterals were found to be connected to the downstream end of the existing main (toward Geary), which is called for to be abandoned in 1251 to make room for the future station. (See Trends #37 and 44) COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved
1251-0046	082-0046	Additional cost for enlarging PG&E vault 584 on O'Farrell east of Stockton	6				+80,000	The two (2) existing PG&E duct banks that were supposed to be intercepted by vault 584 were wider than shown on plan. Vault 584 was needed to be enlarged in order to capture the two (2) ductbanks. PG&E agreed to reimburse SFMTA (\$80,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved
1251-0047	082-0047	Enlarge Muni Vault 900A on Stockton between Post and Geary	2	CMB-0082	Agree	10/31/12	+15,357	Contract plan JT-301 calls for an intercept vault to capture 2 (E) Muni ductbanks (DB). These DBs were found to be farther apart than shown on plan. The intercept vault needs to be widened. (CMB 0082 approval - see Trend CN1251 #'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26 Approved
1251-0048	082-0048	Additional cost and time for stuck auger during micropile drilling	2					Contractor's hollow stem auger got stuck during drilling of micropile #27C in front of 17 Stockton. Contractor claims differing condition as cause for the stuck auger. Contractor is asking for 1 day compensable time extension. SFMTA is reviewing claim for entitlement. COR #67 RE Denied COR (City Letter 26); however Contractor will most likely send rebuttal. CLOSED; NO FURTHER ACTION.	
1251-0049	082-0049	Additional cost and time for added rebar and coordination with 17-19 Stockton Owner's contractor	2	CMB-0083	Agree	11/07/12	+9,058	Existing footing of One Stockton was found to be recessed from property line. City's response to RFI 171 called for additional rebar to compensate for the gap between back of new enclosure wall and existing footing. Also, the Owner's contractor of 17-19 Stockton asked that Synergy clear his work area so he can pour the primary wall and bring in his new switchgear. Synergy is asking 2 days compensable time extension. (CMB 0083 approval - see Trend CN1251 #'s 53, 59, and 64) COMPLETE, NO FURTHER ACTION	CMOD #27 Approved

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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1251-0050	Additional cost to install a Type 770 pole foundation at a different location, install 2 each DPT mast arms and demo existing wall in conflict with OCS footing	2	CMB-0074	Agree	08/15/12	+48,898	Type 770 pole foundation at SW 5th/Folsom could not be installed per plan due to a conflict with a cistern. Only solution is to remove an existing pole foundation (recently installed in 1251 as contract work) to make room for the 770 pole foundation. At 5th/Folsom, 2 DPT mast arms (not shown in original plan) need to be installed. At Pole #811, an existing concrete wall is in conflict with pole foundation.  (CMB 0074 approval - see Trend CN1251 #'s 67, 74 & 75) <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved
1251-0051	Intercept existing PG&E duct bank and terminate into vault 5464 at Market/Ellis	6				+23,633	PG&E requested to reroute existing duct bank running north out of MH 1803 at 4th/Pioneer Place into MH 5464 at Market/Ellis <b>PG&amp;E agreed to reimburse SFMTA (\$23,633) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved
1251-0052	Reroute unforeseen existing waterline on Geary east of Stockton	2	CMB-079	Agree	10/10/12	+27,234	An unforeseen existing waterline was found to be in conflict with PG&E vault 573 and needs to be rerouted per City's response to RFI #182.  (CMB 0079 approval - see Trend CN1251 #'s 65 & 70). This is potentially a E&O issue due to unforeseen existing waterline on discovered along Geary Street (east of Stockton Street) not shown in the contract drawings. <b>COMPLETE, NO FURTHER ACTION; CMOD #28</b>	CMOD #28 Approved
1251-0053	Additional cost for premium to accelerate contract work	1	CMB-083	Agree	11/07/12	+10,591	SFMTA directed Synergy to accelerate work to advance PG&E and AT&T cut-over and allow CN 1252 Contractor to start work at UMS COR #74 <b>PG&amp;E agreed to reimburse SFMTA (\$10,590) through the Form B process.</b> <b>11/07/12 (CMB 0083 approval - see Trend CN1251#'s 49, 59, and 64)</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #27</b>	CMOD #27 Approved
1251-0054	Additional waterproofing at FIDM and north end of Crate & Barrel	2				+8,151	Sidewalk in front of FIDM and north end of Crate & Barrel did not have a sub-sidewalk basement, hence the original plan did not call for waterproofing of the primary wall. While excavating for the joint trench, contractor found the existing waterproofing to be spalling and peeling off from the primary wall. COR #72 <b>COMPLETE, NO FURTHER ACTION; CMOD #22</b>	CMOD #22 Approved
1251-0055	Install Swiveloc lids on all PG&E vaults	6					PG&E requested SFMTA to add this scope to the 1251 contract for safety reason. COR #72 <b>SFMTA decided to defer this work to the 1252 contract.</b> <b>COMPLETE, NO FURTHER ACTION;</b>	
1251-0056	Additional work on force account related to sewer installation	2				+45,156	Additional work due to unforeseen and differing conditions during installation of sewer. <b>COMPLETE, NO FURTHER ACTION; CMOD #15</b>	CMOD #15 Approved
1251-0057	Additional work on force account related to water installation and NRG vault demolition	2				+39,599	Additional work due to unforeseen and differing conditions during installation of water and demolish existing NRG vaults that are in conflict with utility installation. <b>COMPLETE, NO FURTHER ACTION; CMOD #16</b>	CMOD #16 Approved
1251-0058	Additional streetlight conduit on 5th Street between Harrison and Bryant	2	CMB-0083	Agree	10/31/12	+17,754	The existing streetlight pullboxes new cables were supposed to be connected to per contract plan did not have power. New conduit needs to be install from the power source. COR #75 (CMB 0082 approval - see Trend CN1251 #'s 47, 76 & 78) <b>COMPLETE, NO FURTHER ACTION; CMOD #25</b>	CMOD #25 Approved
1251-0059	Accelerate contract work at Barney's front	1	CMB-0083	Agree	11/07/12	+16,948	As a result of numerous meetings and complaints by Barneys, it was decided to accelerate contract work in order to restore Barneys sidewalk earlier (CMB 0083 approval - see Trend CN1251 #'s 53, 49, and 64) <b>COMPLETE, NO FURTHER ACTION; CMOD #27</b>	CMOD #27 Approved
1251-0060	Final Bid Item Reconciliation	4				(508,961)	Bid item analysis for entire contract as of 6/12/12.	CMOD #30 Approved
1251-0061	Excavate for PG&E cutover at 177 Stillman	6				+7,424	PG&E requested Synergy to excavate for PG&E cutover at 177 Stillman. Reference document: Email from Michael Lightstone dated 12/9/11 <b>PG&amp;E agreed to reimburse SFMTA (\$7,424) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date	Actual/Forecast			
1251-0062	082-0062	Additional waterproofing at Macys Men's wall	2			+24,774	Contract did not call for waterproofing at Macys Men's wall. However, when contractor dug for the joint trench, it was found that the existing waterproofing has deteriorated and needed to be replaced. COR# 20 <b>COMPLETE, NO FURTHER ACTION; CMOD #22</b>	CMOD #22 Approved	
1251-0063	082-0063	Excavation and restoration cost for PG&E gas tie-in and kill holes. Part II	6			+56,458	After completion of Part I (see trend 32), PG&E had offered to self-perform the excavation and restoration of the gas tie-in/kill holes because PG&E had crews available to perform the work. However, PG&E no longer have available crews, hence Synergy had to continue and finish excavating and restoring the last tie-in/kill holes. <b>PG&amp;E agreed to reimburse SFMTA (\$56,458) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved	
1251-0064	082-0064	Accelerate finish and detail work of AT&T and PG&E vaults	1	CMB-0083	Agree	11/07/12	+4,704	In order to expedite turn-over of AT&T and PG&E vaults, SFMTA directed Synergy to accelerate the detailing and finish work of these vaults. SFMTA will pay Synergy premium cost for OT hours. 11/07/12 - (CMB 0083 approval - see Trend CN1251 #'s 53, 59, and 49) <b>COMPLETE, NO FURTHER ACTION; CMod #27</b>	CMOD #27 Approved
1251-0065	082-0065	Additional fittings for AWSS lateral and chipping of pole foundation at Market/Ellis	2	CMB-0079	Agree	10/10/12	+20,412	An existing Muni pole foundation is in the way of the AWSS lateral. Additional fittings are required to complete contract work. (CMB 0079 approval - see Trend CN1251 #'s 52 & 70) <b>This is potentially an E &amp; O issue due to an existing Muni pole foundation is in the way of the AWSS lateral.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #28</b>	CMOD #28 Approved
1251-0066	082-0066	Intercept PG&E conduits at Vault 573 at Geary east of Stockton	6				+6,466	During installation of PG&E intercept vault 573, PG&E had incorrectly identified the conduits to be intercepted. This error was discovered during cut-over process by PG&E. <b>PG&amp;E agreed to reimburse SFMTA (\$6,466) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved
1251-0067	082-0067	Additional feeder span, no-bo insulator and adjustment of guywire for the Folsom OCS bypass	3	CMB-0074	Agree	08/15/12	+32,149	SFMTA Electrical Designer had pointed out the new Folsom Bypass does not have enough capacity to power the new OCS necessitating installation of feeder spans. Also, adjustments to the guywire are necessary to mitigate conflict with new signal mast arms. COR #76 7/25/12 - RE presented COR to CMB; direction given to develop one CMod with all remaining items to be purchased for the new OCS bypass. (CMB 0074 approval - see Trend CN1251 #'s 50, 74 & 75) <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved
1251-0068	082-0068	Extended Overhead cost from July 19, 2012 to August 16, 2012	1	CMB-0075	Agree Conditionally	10/03/12	+106,967	Contract is expected to be extended beyond the approved July 18, 2012 completion due to the following reasons: contractor was slowed due to accommodation of AT&T and PG&E cut-over, for example, contractor has to provide windows of time for AT&T to occupy its work space to provide continuity and efficiency for AT&T cut-over, contractor has to advance cleaning and detailing of vaults to turnover to AT&T and PG&E, these work are typically done as punchlist, contractor now has to sequence work and reallocate resources; SFWD cut-over is taking longer than expected; PG&E gas cut-over was delayed due to inability to access Armani building, this delay held up completion of sewer MH, SFWD connection and restoration on O'Farrell east; added change order work, i.e. additional PG&E conduit at vault 573 and additional excavation for AT&T cut-over at 240 Stockton  <b>CMB Agreed contingent on receipt of letter confirming e-mail as presented in the meeting and content viewed related to agreement and remaining actions and release of funds.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #29 Approved
1251-0069	082-0069	Removal of abandoned PG&E gas valve (8each) and install anodes	6				+4,737	PG&E asked Synergy to remove all abandoned gas valves (8each) <b>PG&amp;E agreed to reimburse SFMTA (\$4,737) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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1251-0070	Core drill primary wall and install interior plumbing at Armani and Disney for the fire service water cutover	2	CMB-0079	Agree	10/10/12	+14,034	Existing fire service inside the building is a thin-wall steel pipe that extends out to the previously existing sub-sidewalk basement. However, 1251 had backfilled the subsidewalk basement per contract, which now made the steel pipe susceptible to corrosion. SFWD does not want to tie-in to the steel pipe due to corrosion issue plus the fact that the pipe is thin walled, which makes welding almost impossible. A ductile iron pipe needs to be installed from the main and into the building. COR #77  (CMB 0079 approval - see Trend CN1251 #'s 52 & 65) <b>COMPLETE, NO FURTHER ACTION; CMOD #28</b>	CMOD #28 Approved
1251-0071	Install a new 8" backflow preventer for the fire service inside Macys Men's building	6					The new water main (installed in the 1251 Contract) is closer to the property line than the existing backflow preventer. State law stipulates that a backflow preventer be installed in between the property's fire suppression system and the water main. The SFWD refuses to make this connection until a proper backflow preventer is installed. SFMTA will insist on Macys to install its own backflow preventer. <b>CLOSED; NO FURTHER ACTION.</b>	
1251-0072	Additional AT&T trench from new vault 5829 to existing vault 127 on Geary east of Stockton	6	CMB-0076	Agree	10/03/12	+23,993	AT&T requested new conduits to maintain continuity between the 2 vaults. AT&T agreed to reimburse SFMTA (\$23,993) through the Form B process. <b>RE Tracking work on FAR</b>  CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 43 & 80) <b>COMPLETE, NO FURTHER ACTION; CMOD #14</b>	CMOD #14 Approved
1251-0073	Additional work to install water and electrical utilities for Flower Stand on Geary west of Stockton	1				+17,966	Contract bid allowance for providing utility services for flower stands (UD-14) had been exhausted during relocation of 2 flower stands. A third and final flower stand is still needed to be relocated. <b>COMPLETE, NO FURTHER ACTION; CMOD #22</b>	CMOD #22 Approved
1251-0074	Traffic Signal modification at 5th/Folsom	1	CMB-0074	Agree	08/15/12	+16,429	Due to installation of OCS bypass on Folsom between 4th and 5th Streets, a left turn signal is required at 5th/Folsom. Additional signal heads and modification to the existing traffic signal is necessary. <b>RE Tracking work on FAR</b> (CMB 0074 approval - see Trend CN1251 #'s 50, 67, & 75 also). <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved
1251-0075	Unforeseen conditions related to pole foundation installation for the Folsom OCS Bypass	2	CMB-0074	Agree	08/15/12	+12,568	Contractor encountered unforeseen concrete and brick substructures and abandoned utility lines. <b>RE Tracking work on FAR</b> (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved
1251-0076	Adjustment to OCS on Mason Street	2/3	CMB-0082	Agree	10/31/12	+14,988	Modify bracket arm at existing Pole #511 to alleviate tension load and bending of pole. Realign trolley wire on Mason between Geary and Eddy to smoothen transition when shifting from right lane to left lane. Also, add intermediate guywire to prevent excessive sagging of bracket arms at various locations. <b>RE Tracking work on FAR</b> (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) <b>COMPLETE, NO FURTHER ACTION; CMOD #26</b>	CMOD #26 Approved
1251-0077	Additional work related to Qwest, TCG and UCCO facilities	2	CMB-0081	Agree Conditionally	10/31/12	+37,181	Qwest, TCG and UCCO requested Synergy to tie-in their existing conduits into the new vaults that Synergy installed per contract. The utility companies are responsible for connecting existing conduits into new vaults, therefore, this request is considered extra work. Private Utilities companies agreed to reimburse SFMTA (\$37,181) through the Form B process. <b>RE Tracking work on FAR</b> CMB agreement contingent upon Cmod package to include evidence from all utilities that cost are reimbursable to SFMTA through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #25</b>	CMOD #25 Approved

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1251-0078	082-0078	Unforeseen conditions encountered during excavation and installation of OCS poles along Mason and 5th Streets.	2	CMB-0082	Agree	10/31/12	+27,645	Several obstructions, i.e. buried concrete, boulders, brick, abandoned utilities were discovered during excavation and installation of OCS poles along Mason and 5th Street. <b>RE Tracking work on FAR</b> (CMB 0082 approval - see Trend CN1251 #'s 47, 58 & 76) <b>COMPLETE, NO FURTHER ACTION; CMOD #26</b>	CMOD #26 Approved	
1251-0079	082-0079	Additional work related to installation of PG&E Vaults 467, 571, 573, 586 and 594 including joint trench leading to these vaults	2				+44,530	Unforeseen conditions were encountered during installation of select PG&E vaults including joint trenches leading to these vaults. <b>PG&amp;E agreed to reimburse SFMTA (\$44,530) through the Form B process.</b> <b>RE Tracking work on FAR</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved	
1251-0080	082-0080	Additional work related to installation of AT&T Vaults 5828, 5829, 5830, 5831, 5832 and 5833 including joint trench leading to these vaults	2	CMB-0076	Agree	10/03/12	+56,806	Unforeseen conditions were encountered during installation of select AT&T vaults including joint trenches leading to these vaults. <b>AT&amp;T agreed to reimburse SFMTA (\$56,805) through the Form B process.</b> <b>CMB Agreed contingent on receipt of confirmation letter from AT&amp;T for costs associated with these three trends</b> (CMB 0076 approval - see Trend CN1251 #'s 43 & 72) <b>COMPLETE, NO FURTHER ACTION; CMOD #23</b>	CMOD #23 Approved	
1251-0081	082-0081	PG&E concrete cover versus CDF on electrical duct bank	6	CMB-0107	Agree	02/13/13	+43,882	Contract Plan JT-014 calls for CDF cover on PG&E duct bank. However, PG&E requested to use regular concrete due to heat dissipation problem with CDF. <b>PG&amp;E agreed to reimburse SFMTA (\$43,881) through the Form B process.</b> 12/19/12 - Presented to CMB, direction given to finalize cost and obtain a Form B agreement with PG&E 02/13/13 - Revised CMod presented to CMB. PG&E agreed with negotiated reimbursement amount. <b>COMPLETE, NO FURTHER ACTION</b>	CMOD #24 Approved	
<b>Contract 1251 Totals</b>							+3,962,032	<b>Total Changes to the contract in the amount of 3,962,032 represents an UNDERRUN of allocated contingency in the amount of \$1,405,265.32.</b> <b>Changes that will be Utility Reimbursement credits through the Form B process in the amount of \$1,224,828 will increase the UNDERRUN.</b> <b>Final Contract Closeout Total \$20,794,581 will be reduce by \$7,618,112 Utility Reimbursement credits for a Final Program cost of \$13,176,469 for CN 1251</b>		
Contract 1252	COR No.	PCC No.	1252 Change Description	Change Type	CMB Change No.	Configuration Management Board Agree/Disagree	Decision Date	Actual/Forecast	Comments	Contract Modification No.
1252-0001a	1		AWSS Conflict w/ Low Pressure Water	6	CMB-0091	Agree to Merit Agree to Cost	10/10/12 01/16/13	+13,990	AWSS contract work was made more difficult by the proximity of a water line which was closer than indicated on UT-501. See COR 008 for TIA request. 10/10/12 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED \$16,900 - Agreed <b>COMPLETE; NO FURTHER ACTION: CMOD #29</b>	CMOD #29 Executed
1252-0001b	1		AWSS Conflict w/ Low Pressure Water					+2,914	Cmod 32 in process to cover remaining balance for markup.	
1252-0002a	2		AWSS Add. Tie-Rods 4th-Harrison	6	CMB-0086	Agree to Merit Agree to Cost	10/10/12 12/19/12	+45,792	The AWSS line must be restrained a certain distance beyond the 90 degree elbow we are installing under contract 1252. The 1252 contract work includes excavating on both sides of this 12-foot portion of pipe. Additional work scope (per Michael Smith @ DPW): Station 162+80 to 162+90 - Restrain the existing 12-inch tee to the existing pipe north of the tee. Restrain any other joints that are not restrained on the existing pipe up to the new pipe to be installed. 10/10/12 - Merit info presented to CMB - Agreed 12/19/12 - EE brought to CMB for cost NOT TO EXCEED \$58,000 - Agreed <b>COMPLETE; NO FURTHER ACTION: CMOD #29</b>	CMOD #29 Executed
1252-002b			AWSS Add. Tie-Rods 4th-Harrison					+9,337	Cmod 32 in process to cover remaining balance for markup.	

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**CENTRAL SUBWAY PROJECT**

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Item #		Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
					Approval Action	Approval Date	Actual/Forecast		
1252-0003a	3	AT&T Vault Conflict-4th & Harrison	6	CMB-0092	Agree to Merit Agree to Cost	10/10/12 01/16/13	+13,263	After excavation of the roadway surface and subgrade at Fourth and Harrison streets an AT&T vault was discovered to be in conflict with the current alignment of the 42" RCP sewer main. Verbal authorization was given by an AT&T representative to make modifications to the vault. COR 003 has been submitted by BIH in response to this issue. Work is to be charged via SFMTA Form B agreement to AT&T. 10/10/12 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED \$21,089 - Agreed 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #29	CMOD #29 Executed
1252-0003b	3	AT&T Vault Conflict-4th & Harrison					+2,749	Cmod 32 in process to cover remaining balance for markup.	
1252-0004	6	PG&E live electrical delays	6	CMB-0088	Agree to Merit Agree to Cost	11/28/12 1/9/2013	+7,402	PG&E lines indicated on contract drawing UD-502 thru 504 were to be abandoned yet were not yet abandoned when BIH started work. They were abandoned on 5/21. 11/28/12 - Merit info presented to CMB - Agreed 01/09/13 - EE brought to CMB for cost NOT TO EXCEED \$7,600 - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement or cost reimbursement. COMPLETE, NO FURTHER ACTION: CMOD #10 - Final Cost \$7,402.36	CMOD #10 Executed
1252-0005	7	Oil filled pipe @ Launch Box	2	CMB-0093	Agree to Merit Agree to Cost	1/16/13 1/16/13	+9,980	Synergy Demo Crew exposed an existing 6" steel line which had oil in it on the West side of 4th St between Harrison and Bryant. 01/16/13 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED amount \$10,000 COMPLETE, NO FURTHER ACTION: CMOD #05 - Final Cost \$9,979.81	CMOD #5 Executed
1252-0006	8	TIA - Associated w/ COR 001, COR 002, and COR 003	6		Agree to Merit	10/10/12	+153,000	TIA and Overhead Costs related to COR 001, 002 and 003. 10/10/12 - Merit info associated w/COR's 001, 002 & 003 presented to CMB - Agreed. 01/30/13 Elevation Ladder documentation presented for review of unresolved issue of payment of Indirect costs for TIA submittals- COR 008	
1252-0007	9	MOS - Impacts due to SFWD low psi water line	2	CMB-0143	Agree to Merit Agree to Cost	11/06/13	+5,727	Live PG&E Electrical Lines Conflict: BIH was notified that PG&E had live electrical lines running through each headwall work zone @ Moscone station. 8 inch Low Pressure Water Line Conflict: Contract drawings show this utility to be abandoned and capped prior to work. Synergy struck and damaged the water line. SFWD directed Synergy to excavate a kill hole so they could properly abandon the line. 11/04/12 - COR Evaluation for No Merit presented to CMB for - Agreed. Contractor did not follow contract specification 02.30.00 and 02.41.00 requiring the Contractor to verify the locations of any City or public service utility company facilities that may be affected by excavation and to ensure no damage to existing underground facilities. 11/06/13 - Merit info presented to CMB - Agreed for partial merit of cost associated with excavating two additional "kill-holes on 06/20/12 & 06/21/12. 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$5,727.00 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #26	CMOD #26 Executed
1252-0008	10	MOS - Demo PGE duct bank / SF City 911 fiber optic line	2	CMB-0094	Agree to Merit Agree to Cost	10/10/12 01/16/13	+4,916	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a PG&E duct bank that contained a live San Francisco 911 fiber optic line. 11/14/12 - Presented to CMB - The narrative will be rewritten CMB agrees with partial merit labor work involved in supporting the utility agencies. This item will be brought back to the CMB for approval. 01/09/13 - EE brought to CMB for cost NOT TO EXCEED \$4,915.54 - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #03 - Final Cost 4,915.54	CMOD #3 Executed
1252-0009	11	MOS - Traffic Signal line re-route south headwall	6	CMB-0095	Agree to Merit Agree to Cost	01/16/13	+37,500	After potholing Synergy discovered several traffic lines which were in the proposed location of the south MOS headwall. Traffic Lines re-routed. Merit info presented to CMB - Agreed 01/16/13 - CMB - NOT TO EXCEED \$37,500 COMPLETE; NO FURTHER ACTION: CMOD #27	CMOD #27 Executed

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1252-0010	12	MOS - Archaeological Standby North Headwall	2	CMB-0096	Agree to Merit Agree to Cost	12/11/12 01/16/13	+16,893	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a layer of "Midden" or Native American debris. 12/11/12 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED \$7,600 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #06 - Final Cost \$16,892.96	CMOD #6 Executed
1252-0011	13	MOS - SL conduit from PG&E vault @ north headwall	6		Agree to Merit	11/28/12	-0-	Permanent power is required to supply an existing Street Light box north of the MOS N headwall. 11/28/12 - Merit info presented to CMB - Agreed 04/01/13 - CM Team must obtain in writing from PG&E a utility agreement for cost reimbursement. Will be issued as a PCC with the approval of PG&E prior to requesting a proposal from the Contractor. CLOSED; NO FURTHER ACTION	
1252-0012	15	LB - Pre-Excavation for Slurry Walls	2	CMB-0087	Agree to Merit Agree to Cost	11/28/12 12/19/12	+125,000	Pre-excavation of slurry wall panels due to CDF encased sewer line. The concrete encasement was found by the Contractor to extend to a depth of 9'-11' below the top of guide wall or street surface. The 8" VCP sewer main and concrete encasement was incorrectly shown in the contract drawings to be approximately 4'-5' below the street surface. 11/28/12 - Merit info presented to CMB - Agreed 12/19/12 - EE brought to CMB for cost NOT TO EXCEED \$96,000 - Agreed	
1252-0013	17	MOS - Impacts @ North and South Headwalls due to live utilities	6	CMB-0144	Agree to Merit Agree to Cost	11/06/13	+43,219	Standby delays related to the discovery of traffic lines within the proposed location of the south MOS headwall. 11/14/12 - COR presented to CMB. CMB requested additional revisions to the evaluation. CMB agrees with partial merit. The COR will be brought back to the CMB for approval. 11/21/12 - COR revisited at mtg for clarification the issue is related to CMB action from item 3 -7/25/12 (Mtg #88) specifically acted on 08/01/12 (CMB Mtg. 89) referred originally as Trend #15. CMB Agreed to No Merit to this contract change. 11/06/13 - Merit info presented to CMB - Agreed to DSC for equipment standby costs for a period of 16 working days. 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$43,219 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #27	CMOD #27 Executed
1252-0014	19	UMS - Grant street 2 way conversion (e- & striping)	7				-0-	In order to implement a full street closure for Stockton Street at the UMS location the DPT recommended that Grant Street be converted from an existing one-way street to a two way street for vehicular traffic. Closed - Work is done. 07/18/12 - This potential change was brought before the CMB. Board's decision to have DPT perform the work. Work is completed. CLOSED; NO FURTHER ACTION	
1252-0015	20	PROJECT WIDE - Utility Demo Limit reduction credit	7				-0-	BIH's subcontractor Synergy Project Management (SPM) would like to minimize the limits of utility demo at the Launch Box, Moscone station, UMS station and TBM Retrieval Shaft locations. SFMTA to BIH/SPM "Build per Plan". CLOSED; NO FURTHER ACTION	
1252-0016	21	UMS - Reduced Duration	5	CMB-0073	Agree Cost (Conditionally)	08/01/12	-0-	No cost change for acceleration of utility relocation, ground improvements (jet grouting), and headwall construction at Union Square/Market Street Station. 08/01/12 - CMB approval condition upon incorporating correctness to backup documentation as required by & documented in CMB mtg. RE to prepare modification. COMPLETE; NO FURTHER ACTION: CMOD #08 - No Cost Change	CMOD #8 Executed
1252-0017	22	MOS - Asbestos Pipe at north headwall	2	CMB-0090	Agree to Merit Agree to Cost	12/12/12 01/09/13	+5,707	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered friable asbestos-laden transite pipe. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 - EE brought to CMB for cost NOT TO EXCEED \$6,000 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #05 - Final Cost \$5,707.05	CMOD #5 Executed
1252-0018	23	MOS - Brick Wall #2 discovered @ north headwall	2				+15,784	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a buried wall. 11/14/12 COR presented to CMB. Evaluation for merit will be rewritten and brought back to CMB for approval. 11/21/12 - Evaluation of merit presented to CMB - Agreed to No Merit to this contract change.	

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1252-0019	26	MOS - Asbestos Pipe at south headwall	2	CMB-0085	Agree to Merit Agree to Cost	12/12/12 01/09/13	+27,630	Transite pipe was discovered during MOS south headwall excavation. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 EE brought to CMB for cost NOT TO EXCEED \$30,000 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #15 COMPLETE; NO FURTHER ACTION: CMOD#15 - Final Cost \$27,629.64	CMOD #15 Executed
1252-0020	27	MOS - Oil filled pipe at south headwall	2	CMB-0089	Agree to Merit Agree to Cost	12/12/12 01/09/13	+8,226	A pipe containing oil was discovered during MOS south headwall excavation. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 CMB - NOT TO EXCEED \$8,600 COMPLETE; NO FURTHER ACTION: CMOD #05 - Final Cost \$8,225.68	CMOD #5 Executed
1252-0021	29	MOS - Todco scaffolding reimbursement	2	CMB-0097	Agree to Merit Agree to Cost	12/12/12 01/16/13	+1,718	1252 contract work requires the removal of scaffolding erected by Fine Line Construction, the contractor performing renovations on the Woolf House. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 - EE brought to CMB for cost NOT TO EXCEED \$1,717 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #03 - Final Cost \$1,717.83	CMOD #3 Executed
1252-0022	closed	Disputed Work Items - NTP2 vs. NTP3	7				-0-	BIH interpretation of Special Provisions SP-3 NTP2 description includes activities that SFMTA interprets to be within NTP3. These activities include: Ellis Street and Green Street shafts and associated compensation grouting, MOS headwalls and jet grouting, jet grouting at cross passage 5, UMS head walls and jet grouting, OCS removal along Stockton Street from Geary to Ellis, and the TBM retrieval shaft. On April 13, SFMTA released the MOS headwalls and jet grouting, jet grouting at cross passage 5, UMS jet grouting, OCS removal along Stockton Street from Geary to Ellis, and preparatory and utility work necessary for the construction of the retrieval shaft. CLOSED; NO FURTHER ACTION	
1252-0023		Manhole in east guidewall footprint	2				-0-	While performing excavation for the east side guidewalls at the TBM Launch Box, BIH's subcontractor CJA-NCC encountered a manhole near the bottom of the excavation which was unexpected. BIH has stated that removal of the manhole prior to the installation of the guidewalls was necessary to ensure the successful installation of the slurry walls. 05/20/12 - CM Team comment: Synergy traded this COR with SFMTA for shallow Force Main Installation. CLOSED; NO FURTHER ACTION	
1252-0024	closed	2" gas line inside 16" casing	2				-0-	While performing excavation for the Sewer and AWSS trench at the intersection of Fourth and Harrison streets, BIHJV's subcontractor Synergy encountered what was identified to be a 16" depressurized gas main. This gas main contained a 2" gas line which is shown on contract drawing UD-502 to be abandoned/removed. CLOSED; NO FURTHER ACTION	
1252-0025	5	CDF Encasement on 42" RCP	2				+95,000	While performing excavation for the east side guidewalls at the TBM Launch Box, BIH's subcontractor CJA/NCC encountered a CDF backfill at the existing 42" RCP sewer which reportedly had a significantly higher compressive strength than the 50-150 psi, which was anticipated. BIH claims that the CDF conflicted with the construction of the guidewalls and it could not be excavated by conventional means. Escalated to the IRL process	
1252-0026	closed	Damage to Live LPW main at 4th and Folsom	2				-0-	Synergy Demo Crew hit a blow-off valve on the 8" water line at the Southwest corner of the MOS headwalls. SFWD is to install a permanent cap per contract drawing WD-404. CLOSED; NO FURTHER ACTION	
1252-0027		MOS - 76 Gas Station fencing	1				-0-	SFMTA requested BIH to install fencing around the perimeter of the 76 gas station at 4th and Folsom St. Issue closed, cost of fence paid by BIH in return for use of gas station lot. CMB - Temporary use of 800 Folsom Street site for construction staging. Use of this site would be a tradeoff between SFMTA and BIH. The Contractor would maintain the sites security and up-keep in exchange for not billing. CLOSED; NO FURTHER ACTION	
1252-0028		LB - SPTC delays due to concrete encased 8" sewer	2				-0-	Closed. Combined with COR 015. 07/25/12 - Verbal information presented to CMB as a potential change. CLOSED NO FURTHER ACTION	

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1252-0029	18	MOS - South Headwall re-design	1	CMB-0158	Agree to Cost	05/21/14	+144,000	Costs related to leave end stops in place and a "T-Section" at the Moscone headwalls return walls. 11/14/12 - Presented to CMB. RE is recommending a possible compensation value of \$135K. CMB agrees with partial merit for labor and material cost of this COR. RE will proceed with scoping the work. 04/17/13 - Elevation Ladder of unresolved issue of End Stops presented to CMB - COR 018 09/18/13 - Contractor has submitted a Contract Claim No. 1 Permanent End Stops at MOS Headwall for \$169,379.17. CMB directed the CM Team to draft a letter rejecting the claim. Claim #1 has been negotiated for \$144K. CMod will be issued. 05/21/14 - RON for (COR 18) presented to the CMB to approve the process of issuing the CMod for a NTE of \$140K.	
1252-0030	24	Ellis - Utility demolition	3	CMB-0135	Agree to Merit Agree to Cost	12/6/2012 10/09/13	+35,628	BIH says that no utilities were shown at Ellis; however, Reference Drawing UE-126 shows utilities. 12/06/12 - Merit info presented to CMB - Agreed 10/09/13 - Engineers Cost Comparison brought to CMB for cost NOT TO EXCEED \$35,628.22 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #26	CMOD #26 Executed
1252-0031		Crack Gauges	4				-0-	BIH disagrees with SFMTA on the total number of crack gauges to be installed on the project. Per the contract drawings a total of 926 crack gauges are to be installed. BIH claims that a total of 50 are to be installed. CLOSED; NO FURTHER ACTION	
1252-0032	28	Ellis asbestos abatement	2		Agree to Merit	12/06/12	-0-	A steam line containing asbestos was discovered during potholing at the Ellis Street Shaft. 12/06/12 - Merit info presented to CMB - Agreed 01/10/13 - CM Comment - To be paid out of Environmental Mitigation allowance GE-8.	
1252-0033	30	LB - Class 1 Hazardous Material Haul Off	2	CMB-0159	Agree to Cost	05/21/14	+400,000	BIH trucking costs for Class 1 haul off generated at staging yard. Also see COR 054 regarding Class 1 Haz material haul off for Phase 2. 09/18/13 - Contractor has submitted a Contract Claim No. 2 Haz Mat Removal - Caltrans site (COR 30, 45 & 75) for 708,929.00 CMB directed the CM Team to draft a letter rejecting the claim. Claim #2 has been negotiated for \$400K cost to include COR's 030, 054 & 075. 05/21/14 - RON for (COR 30, 54 & 75) presented to the CMB to approve the process of issuing the CMod for a NTE of \$400K.	
1252-0034	70	LB - Jet Grout Quantity Overrun	4	CMB-0115	Agree to Merit Agree to Cost	03/20/13 04/03/13	+599,900	The contract drawings call for the contractor to determine the extent of jet grouting at the launch box. Bid Item ES-3 has an estimated quantity of 2,831 CY of in-situ treated ground. The Contractor has currently installed 3,929 CY of Soilcrete (Jet Grout) for ground treatment. This translates to an additional quantity of 1,098 CY of ground treatment beyond the quantity listed for Bid Item ES-3. By subtracting 241 CY for the "scallop" portion of the columns the total is 857 CY. 03/20/13 - Merit info presented to CMB - Agreed 04/03/13 - EE brought to CMB for cost NOT TO EXCEED \$599,900 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #22 - Contractor may pursue addl amt. \$168,700 for "scallop" portion of jet grout.	CMOD #22 Executed
1252-0035	unsubmitted	Utility Removal UD-304 and UD-503	6				-0-	RFI 00134 asks whether certain utilities indicated on drawings UD-304 (On Stockton inside limits of future UMS Station) and on UD-503 (On Fourth and Stillman Streets outside limits of Launch Box) may be left in place. Answer: "Confirmed, the utilities in question can be abandoned in place and are not required to be removed. The Engineer will seek an adjustment to Bid Item GB-3 for the elimination of this work." COR package not submitted by Contractor. CLOSED; NO FURTHER ACTION	
1252-0036	35	Additional Road Base on Fourth Street	2				-0-	BIH's subcontractor Synergy Project Management (SPM) discovered what they believe to be an additional layer of road base under the existing asphalt and road base layer while performing roadway demo work along the west side of Fourth street between Harrison and Bryant St. The additional layer is estimated by BIH/SPM to be approximately 8" - 12" thick. 12/06/12 - Evaluation of merit presented to CMB - Agreed to No Merit for this change. CLOSED; NO FURTHER ACTION	

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1252-0037	DPW permitting potential impacts	7				-0-	DPW Permitting issue to cause potential impacts. DPW is not issuing BIH permits for excavating the MOS headwalls, jet grouting at the LB, and excavating support at the LB, as they claim to have not been able to conduct a thorough review of the project's design documents and were not included in the design process. BIH may be required to re-sequence and stand many other potential impacts w/o said permits. COR package not submitted by Contractor. CLOSED; NO FURTHER ACTION	
1252-0038	Manhole in West Guidewall Footprint	3	CMB-0101	Agree to Merit Agree to Cost	12/05/12 01/23/13	+3,821	While performing excavation for the west side guidewalls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered a manhole foundation within the excavation at approximate station 165+70. It was necessary to chip away a portion of the existing manhole to gain the necessary clearance to construct the west slurry wall. 12/05/12 - CMB agreed with Evaluation of Merit 01/23/13 - EE brought to CMB for cost NOT TO EXCEED \$4,052.17 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #12 - Final Cost \$3,820.84	CMOD #12 Executed
1252-0039	Panel W-33 Obstruction	2				TBD	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered buried (wood pile?) debris located approximately 12 feet below the guide wall within Launch Box Diaphragm Wall Panel W-33, This trend is being tracked separately from Trend 20 because we believe it may be a different structure. BIH has not provided adequate information substantiating the merging of the two trends. CLOSED; NO FURTHER ACTION	
1252-0040	PCC No.1 - Revisions to Moscone North Headwall Elevation (Top)	1	CMB-0099	Agree to Cost	01/16/13	+20,358	SFMTA initiated change to revise headwall elevations to facilitate a change in the roof elevation of MOS station. 01/16/13 CMB - NOT TO EXCEED \$20,500 Item is now being tracked as PCC 01 COMPLETE; NO FURTHER ACTION: CMOD #07 - Final Cost \$20,358.23	CMOD #7 Executed
1252-0041	PCC No. 2 - Revisions to UMS Headwall Concrete and Reinforcement Limits	1				-0-	SFMTA initiated change to revise UMS headwall concrete and reinforcement limits to provide a cost savings. 08/29/12 - Revised PCC presented to CMB PCC No longer being pursued. CLOSED; NO FURTHER ACTION	
1252-0042	Retrieval Shaft - Unmarked 12" Steel Pipe	2	CMB-0108	Agree to Merit Agree to Cost	01/02/13 02/27/13	+1,200	While performing excavation for the joint trench at the retrieval shaft BIH's subcontractor Synergy Project Management (SPM) discovered an abandoned 12" dia. steel pipe which appears to run continuously under Columbus Ave. 01/02/13 - Merit info presented to CMB - Agreed 02/27/13 - EE brought to CMB for cost NOT TO EXCEED \$1,250 - Agreed 04/01/13 - No reimbursement from SFWD. COMPLETE; NO FURTHER ACTION: CMOD #13 - Final Cost \$1,200	CMOD #13 Executed
1252-0043a	LB - Panel W29 Wood Pile	2	CMB-0136	Agree to Merit Agree to Cost	11/28/2012 11/06/13	+41,961	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered what appeared to be a wood pile within Launch Box Diaphragm Wall Panel W-29. 11/28/12 - Merit info presented to CMB - Agreed 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$41,961 - Agreed Direct Cost for CORs 32, 34, 42, 43, 62, 65, 67 have been negotiated. Time Impacts in IRL process. 02/19/14 - Direct cost for COR will be paid as agreed by both parties. Time and Delay claimed by the Contractor will be denied.	
1252-0043b	LB - Panel W29 Wood Pile					+69,173	In SFMTA/BIH "Issue Resolution Ladder" process for Time Impacts. Resolution not met. Direct Costs of \$41,961 (with Markups & Bonds and Insurance) related to COR 32 has been negotiated and will be processed as a separate Contract Modification.	
1252-0044	Ret Shaft - 20" Water Line Conflict	2		Agree to Merit	11/14/12	-0-	During excavation for the joint trench at the retrieval shaft SPM discovered that the MRY Duct Bank is directly above an active 20" low pressure waterline. As a result the work at the Retrieval Shaft must reportedly be altered. 11/14/12 - Presented to CMB, the CMB agrees with some merit of this COR, element of change not define clearly. RE will proceed with scoping the work. Due to PCC 10 CLOSED; NO FURTHER ACTION	

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #		Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
					Approval Action	Approval Date	Actual/Forecast		
1252-0045a	34	LB - Panel W28 Wood Pile	2	CMB-0137	Agree to Cost	11/06/13	+43,294	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered what appeared to be a wood pile within Launch Box Diaphragm Wall Panel W-28. 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$43,294 - Agreed Direct Cost for CORs 32, 34, 42, 43, 62, 65, 67 have been negotiated. Time Impacts in IRL process. 02/19/14 - Direct cost for COR's will be paid as agreed by both parties. Time and Delay as claimed by the Contractor will be denied.	
1252-0045b	34	LB - Panel W28 Wood Pile					+69,173		
1252-0046	36	MOS - Catch Basin @ south headwall	3				-0-	A catch basin on the NW corner of 4th and Folsom interfered with the construction of the MOS Headwalls. Removal of the catch basin was needed in order for the headwalls to be built. BIH claims the catch basin was not shown in the contract drawings. Closed due to improper notification. COR package not submitted by Contractor. CLOSED; NO FURTHER ACTION	
1252-0047	37	UMS - 12" steel pipe removal	3	CMB-0132	Agree to Merit Agree to Cost	6/5/2013 08/28/13	+3,379	A 12" steel pipe at the north UMS headwall location interfered with the demolition of other existing UMS utilities. BIH claims the steel pipe was not shown in the contract drawings. 06/05/13 - Merit info presented to CMB - Agreed 08/28/13 - EE brought to CMB for cost NOT TO EXCEED \$3,379.19 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #26	
1252-0048	39	MOS - 16" Steel Pipe removal @ northeast headwall	3	CMB-0102	Agree to Cost	01/23/13	+2,952	SPM removed an unmarked 16" steel pipe from the excavation of the NE MOS Headwall. Construction of the MOS headwall could not commence without this utility being removed. BIH claims the 16" steel pipe was not shown in the contract drawings. 01/23/13 - EE brought to CMB for cost NOT TO EXCEED amount \$2,951.99 - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #14 - Final Cost \$2,951.99	CMOD #14 Executed
1252-0049	40	MOS - Extra Road Base @ northeast headwall	2				-0-	BIH's subcontractor Synergy Project Management (SPM) discovered what they believe to be an additional layer of road base under the existing asphalt at the NE MOS headwall location. The road base in this location was approx. 20" thick on a patch that was roughly 25' x 25'. Closed due to improper notification. CLOSED; NO FURTHER ACTION	
1252-0050	41	LB - Impacts due to live PG&E electrical lines (Synergy)	6	CMB-0098	Agree to Merit Agree to Cost	01/16/13	+1,217	Based on direction from the SFMTA, Synergy provided a full time flagger for one night shift of work @ the intersection of I-80 off-ramp near 4th/Bryant streets in order to assist PGE while they performed the abandoning of the existing live PGE electrical at the Launch Box location which was shown to be dead in the contract drawings. 01/13/13 - CMB agreed with Evaluation of Merit 01/16/13 - EE brought to CMB for cost NOT TO EXCEED \$1,245 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #10 - Final Cost \$1,216.60	CMOD #10 Executed
1252-0051	executed	Contract Amendment No. 2	1				(3,040,713)	COMPLETE; NO FURTHER ACTION: CMOD #02	CMOD #2 Executed
1252-0052a	42	LB - Panel W25 Wood Pile	2	CMB-0138	Agree to Merit Agree to Cost	11/28/12 11/16/13	+42,893	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered an obstruction within Launch Box Diaphragm Wall Panel W-25. 11/28/12 - Evaluation of merit presented - CMB agreed 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$42,894 - Agreed Direct Cost for CORs 32, 34, 42, 43, 62, 65, 67 have been negotiated. Time Impacts in IRL process. 02/19/14 - Direct Cost for COR's will be paid as agreed by both parties. Time and Delay claimed by the Contractor will be denied.	
1252-0052b							+69,173	In SFMTA/BIH "Issue Resolution Ladder" process for Time Impacts. Resolution not met. Amount shown is for potential costs associated with time impacts. Amount is calculated = \$484,210 / 7 (7ea. CORs 32,34, 42, 43, 62, 65, 67)	

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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1252-0053	LB - Panel W30 Wood Pile	2	CMB-0139	Agree to Merit Agree to Cost	11/28/12 11/06/13	+14,197	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered an obstruction within Launch Box Diaphragm Wall Panel W-30. 11/28/12 - CMB agreed with Evaluation of Merit 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$14,197 - Agreed Direct Cost for CORs 32, 34, 42, 43, 62, 65, 67 have been negotiated. Time Impacts in IRL process. 02/19/14 - Direct cost for COR's will be paid as agreed to by both parties. Time and Delay claimed by the Contractor will be denied.	
1252-0054	MOS - 16" steel pipe removal @ southeast headwall	3	CMB-0109	Agree to Merit Agree to Cost	12/06/12 02/27/13	+1,600	SPM removed an unmarked 16" steel pipe from the excavation of the NE MOS Headwall. Construction of the MOS headwall could not commence without this utility being removed. BIH claims the 16" steel pipe was not shown in the contract drawings. 12/06/12 - CMB agreed with Evaluation of Merit 02/27/13 - EE brought to CMB for cost NOT TO EXCEED \$1,800 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #14 - Final Cost \$1,600	CMOD #14 Executed
1252-0055	Ret Shaft - Credit for reduced AT&T conduits	6				(331)	Credit to install 2 less conduits in the AT&T infrastructure at the Retrieval Shaft Joint Trench. The conduit notes on page JT-701 of the contract documents require 8 EA 4" conduits as laid out on the AT&T line. The reduced materials would result in 6 EA 4" conduits as a result. 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. 09/18/13 - Contractor has submitted a Contract Claim No. 2 Haz Mat Removal - Caltrans site (COR 30, 45 & 75) for 708,929.00. The CMB directed the CM Team to draft a letter rejecting the claim. COMPLETE; NO FURTHER ACTION: CMOD #26	
1252-0056	UMS - Unmarked steel pipes (6", 12", 14") / Duct Bank	6	CMB-0103	Agree to Merit Agree to Cost	12/06/12 01/23/13	+7,475	While performing excavation for the utility demolition at the south UMS headwall BIH/Synergy discovered a 6" dia. steel pipe, 16" dia. steel pipe, 18" dia. steel pipe, and a concrete duct bank. BIH claims the utilities were not shown in the contract drawings. 12/06/12 - CMB agreed with Evaluation of Merit 01/23/13 - EE brought to CMB for cost NOT TO EXCEED \$7,461 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #16 - Final Cost \$7,475.28	CMOD #16 Executed
1252-0057	Ret Shaft - unmarked 10" steel pipe/duct bank	6	CMB-0104	Agree to Merit Agree to Cost	12/06/12 01/23/13	+2,108	Synergy Project Management (SPM), discovered an abandoned duct bank and 10" steel pipe which traveled underneath Columbus Avenue between Powell and Union Streets. Removal of the duct bank was necessary to complete the construction of the 36" RCP sewer main relocation work in this area. The status of the removal of the steel pipe is uncertain and may have not been necessary for the sewer main relocation. 12/06/12 - CMB agreed with Evaluation of Merit 01/23/13 - CMB - Not to Exceed \$2,201 04/01/13 - No reimbursement from SFWD COMPLETE; NO FURTHER ACTION: CMOD #13 - Final Cost \$2,108.04	CMOD #13 Executed
1252-0058	UMS - 3'x5' brick sewer at south headwall	6	CMB-0114	Agree to Merit Agree to Cost	12/06/12 03/13/13	+11,675	Synergy Project Management (SPM), discovered a brick sewer within the utility demolition limits at the UMS South headwall. The sewer encountered was larger than the 12" pipe which was shown in the contract drawings. Removal and disposal of the sewer commenced on September 26th and was completed by September 28th. Removal of the sewer was necessary for headwall construction. 12/06/12 - CMB agreed with Evaluation of Merit 03/13/13 - EE brought to CMB for cost NOT TO EXCEED \$12,474.65 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #16 - Final Cost \$11,675.00	CMOD #16 Executed
1252-0059	Ret Shaft - Tree trimming debris haul off	7				-0	Synergy Project Management (SPM), was requested by the SFMTA to remove and dispose of debris near the Northeast corner of Columbus Avenue and Union Street. The debris resulted from tree trimming activities performed by MUNI operations. SFMTA Letter No. 119 of no merit sent to Contractor. CLOSED; NO FURTHER ACTION	
1252-0060	Ret Shaft - 12" steel pipe removal at Union/Columbus	6	CMB-0110	Agree to Merit Agree to Cost	12/12/12 02/27/13	+2,200	On October 4th 2012, the Contractor discovered and removed a 12" Steel pipe at the intersection of Union Street and Columbus Avenue. Removal and disposal of the steel pipe was necessary in order to complete the proposed sewer re-location work near the Retrieval Shaft. Sewer work included the construction of a manhole which had been positioned in the field to avoid an existing MUNI duct bank. 12/12/12 - CMB agreed with Evaluation of Merit 02/27/13 - EE brought to CMB for cost NOT TO EXCEED \$2,600 - Agreed 04/01/13 - No reimbursement from SFWD COMPLETE; NO FURTHER ACTION: CMOD #13 - Final Cost \$2,200	CMOD #13 Executed

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #		Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
					Approval Action	Approval Date			
1252-0061	51	Ret Shaft - Elevation design conflict (30" low psi water / sewer)	3	CMB-0123	Agree to Merit Agree to Cost	03/13/13 7/10/2013	+13,386	03/13/13 - Merit info presented to CMB - Agreed 07/10/13 EE brought to CMB for cost NOT TO EXCEED \$21,100. COMPLETE; NO FURTHER ACTION: CMod #26	
1252-0062	53	Chinatown - Night drilling for instrumentation	7				-0-	Closed.	
1252-0063	54	LB Class 2 Hazardous Material Haul Off (Phase 2)	2	CMB-0159	Agree to Cost	05/21/14	-0-	BIH trucking costs for Class 1 haul off generated at staging yard. Also see COR 030 regarding Class 1 Haz material haul off for Phase 1. Claim #2 has been negotiated cost to include COR's 030, 054 & 075. 05/21/14 - RON for (COR 30, 54 & 75) presented to the CMB to approve the process of issuing the CMod for a NTE of \$400K.	
1252-0064		PCC 4 PCC No. 4 - Ret shaft sewer pipe material change	1				-0-	Change approximately 65 ft. of pipe for sewer bypass around the TBM Retrieval Shaft from 3' X 5' oval glass fiber reinforced pipe to a 48-inch (OD) HDPE SD-17 pipe with casing insulator placed inside a 54-inch diameter, 1/2-inch thick steel casing pipe. In addition, delete permanent sheet pile wall that was to have been placed along the west side of the trench to facilitate future maintenance access to the sewer along the shaft. CLOSED; NO FURTHER ACTION	
1252-0065		PCC 8 PCC No. 8 - UMS - Tree Removal	1				-0-	SFMTA is directing removal of a tree at the northeast corner of Stockton and O'Farrell St. CLOSED; NO FURTHER ACTION	
1252-0066		PCC 5 PCC No. 5 - Ret Shaft Water Dist. Pipe Material Change	1				-0-	Change material type of approximately 188 linear feet of 20-inch water line and approximately 125 linear feet of 30-inch water line from Welded Steel Pipe (WSP) to Ductile Iron Pipe (DIP) with TR-Flex joints. Install 6-inch thick concrete cap over 20-inch water line where cover is less than 24 inches. CLOSED; NO FURTHER ACTION	
1252-0067	58	Ret Shaft - Additional 10" steel pipe removal	6	CMB-0111	Agree to Merit Agree to Cost	12/12/12 02/27/13	+700	Work is a continuation of work performed in COR 047. 12/12/12 - CMB agreed with Evaluation of Merit 02/27/13 - EE brought to CMB for cost NOT TO EXCEED \$860.85 - Agreed COMPLETE; NO FURTHER ACTION: CMod #13 - Final Cost \$700	<b>CMOD #13 Executed</b>
1252-0068	56	PCC 3 PCC No. 3 - General Detour Signage	1	CMB-0113	Agree to Cost	10/03/12 02/27/13	-0-	Full closure of Stockton Street at Union Square was not anticipated under the 1252 Contract. The implementation of detour signage associated with the full closure of Stockton Street was to occur under the 1300 Contract. After the award of the 1252 Contract it was decided that a full closure of Stockton could be implemented to help reduce the headwall construction durations. As a result of the full closure the City Traffic Engineer has requested that a portion of the 1300 detour signs be installed now under the 1252 Contract to help alleviate traffic congestion and provide better detour signage around Union Square. 10/03/12 - PCC presented to CMB. CMB directed the RE to get a price quote from DPT do the work as a price comparison. This item will be brought back to the CMB at a later date. 11/14/12 - PCC presented to CMB. The CMB did not agree that Central Subway needed to take the lead on implementing detour signage, but suggested that the RE study the traffic activity and at the end of November report findings. 02/27/13 - Cost presented to CMB - Agreed to NTE \$6,152.60 Signs furnished and installed by SFMTA, PCC withdrawn. CLOSED; NO FURTHER ACTION	

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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1252-0069	PCC 6 PCC No. 6 - Supplemental instrumentation of BART tunnel lining.	1	CMB-0124 (voided) CMB-0129 (voided) CMB 0131	Agree to Merit Agree to Cost Agree to Cost	10/13/12 07/10/13 08/09/13	+307,861	Implement additional instrumentation of BART tunnel lining: (A) Existing bolt preload force – Determine the actual load in 12 bolts. (B) Bolt force sensor – Install 12 bolt force sensors at bolts for a total of 24 bolts. (C) Rail movement under dynamic train loading – Install dynamic strain gauges (2 per rail, 8 per tunnel). 10/31/12 - PCC presented to CMB for merit. CMB directed RE to proceed with obtaining a price quote from Contractor to perform the work. 05/08/13 - PCC 06 cost comparison was presented. CMB felt \$624K to perform the work was too high and requested IRP be contacted in writing to find out if the additional instrumentation monitoring was still warranted given the new alignment. 06/05: CS Letter No. 1972 presented - Tunnel Design Changes sent to IRP notified them of recent changes and developments in the tunneling contract. 07/10/13 - CMB - Not to Exceed \$650,127.62 IRP's response to SFMTA letter is still pending. 08/07/13 - EE brought to CMB for cost NOT TO EXCEED amount \$305K contingent upon revised estimate to reflect deletion in scope of work. 08/09/13 - Special CMB Mtg to clarify direction and approval to proceed with direction to the Contractor on extra work contained in PCC 06 (BART Work Scope reduction) The CMB Agreed to a NTE revised value of \$307,860 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #19	CMOD #19 Executed
1252-0070	CORs 32, 34, 42, 43, 62, 65, 67 Full Closure of 4th Street	1				TBD	SFMTA allowed full closure of 4th Street in order to facilitate construction of Launch Box Slurry Wall Construction Week Ending 11/04/12 - 11/11/12.	
1252-0071	61 LB - Panel P-17 Buried Obstruction	2	CMB-0125	Agree to Merit	01/02/13	+377	CJA-NCC discovered an unmarked buried water main at Panel P-17, approximately 6' below the guidewall at CTL Station 165+52, while performing slurry diaphragm wall excavation. 01/02/13 - CMB agreed with Evaluation of Merit. 07/24/13 - CMB agreed to cost of reconciliation change - NTE \$1,100 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #26	CMOD #26 Executed
1252-0072a	62 LB – Panel P-9 Buried Obstruction	2	CMB-0140	Agree to Merit Agree to Cost	1/23/2013 11/06/13	+41,587	CJA-NCC discovered a buried obstruction while excavating slurry diaphragm wall panel P-9 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Revised write up presented CMB agreed with Evaluation of Merit. 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$41,588 - Agreed Direct Cost for CORs 32, 34, 42, 43, 62, 65, 67 have been negotiated. Time Impacts in IRL process. 02/19/14 - Direct Cost for COR's will be paid as agreed to by both parties. Delay or Time claimed by the Contractor will be denied.	
1252-0072b	62 LB – Panel P-9 Buried Obstruction					+69,173	In SFMTA/BIH "Issue Resolution Ladder" process for Time Impacts. Resolution not met. Amount shown is for potential costs associated with time impacts. Amount is calculated = \$484,210 / 7 (7ea. CORs 32,34, 42, 43, 62, 65, 67)	
1252-0073	63 UMS - 48" Steel Pipe @ southwest headwall	2		Agree to Merit	1/23/13		BIH/Synergy encountered a buried 48" Diameter steel pipe during work at the UMS S. Headwall. The pipe is located 6 feet from the south UMS headwall and 5 feet from the face of the curb. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Revised write up presented CMB agreed with Evaluation of Merit COR has been changed to PCC09. CLOSED; NO FURTHER ACTION	
1252-0074a	65 LB – Panel P-12 Buried Obstruction	2	CMB-0141	Agree to Merit Agree to Cost	1/23/2013 11/06/13	+40,522	CJA-NCC discovered a buried obstruction (water main) while excavating slurry diaphragm wall panel P-12 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Revised write up presented; CMB agreed with Evaluation of Merit. 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$40,523 - Agreed Direct Cost for CORs 32, 34, 42, 43, 62, 65, 67 have been negotiated. Time Impacts in IRL process. 02/19/14 - Direct cost for COR's will be paid as agreed to by both parties. Delay or Time claimed by the Contractor will be denied.	

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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				Approval Action	Approval Date	Actual/Forecast			
1252-0074b	65		LB – Panel P-12 Buried Obstruction				+69,173	In SFMTA/BIH "Issue Resolution Ladder" process for Time Impacts. Resolution not met. Amount shown is for potential costs associated with time impacts. Amount is calculated = \$484,210 / 7 (7ea. CORs 32,34, 42, 43, 62, 65, 67)	
1252-0075	66		Retrieval Shaft - Unmarked 12" Steel Pipe	2	Agree to Merit Agree to Cost	01/23/13 02/27/13	+3,700	While performing excavation for the joint trench at the retrieval shaft BIH's subcontractor Synergy Project Management (SPM) discovered an abandoned 12" dia. steel pipe which appears to be a Low Pressure Water Main. 01/23/13 - Merit info presented to CMB - Agreed 02/27/13 - EE brought to CMB for cost. NOT TO EXCEED amount \$3,800 04/01/13 - No reimbursement from SFWD COMPLETE; NO FURTHER ACTION: CMOD #13 - Final cost \$3,700	CMOD #13 Executed
1252-0076a	67		LB - Panel P-10 Buried Obstruction	2	Agree to Merit Agree to Cost	1/23/2013 11/06/13	+9,984	CJA-NCC discovered a buried obstruction or concrete encased clay sewer pipe, approximately 7' below the top of the guide wall while excavating slurry diaphragm wall panel P-10 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup be attached or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Merit info presented to CMB - Agreed 11/06/13 - EE brought to CMB for cost. NOT TO EXCEED \$49,984 - Agreed Direct Cost for CORs 32, 34, 42, 43, 62, 65, 67 have been negotiated. Time Impacts in IRL process. 02/19/14 - Direct cost for COR's will be paid as agreed to by both parties. Delay or Time claimed by the Contractor will be denied.	
1252-0076b	67		LB - Panel P-10 Buried Obstruction				+69,173	In SFMTA/BIH "Issue Resolution Ladder" process for Time Impacts. Resolution not met. Amount shown is for potential costs associated with time impacts. Amount is calculated = \$484,210 / 7 (7ea. CORs 32,34, 42, 43, 62, 65, 67)	
1252-0077	PCC 7	PCC No. 7 - BART Temporary Annex Wall	1	Agree to Cost	01/30/13		+15,500	SFMTA is requesting Contractor construct temporary wall for Bart Annex for SFMTA use. 01/30/13 - NOT TO EXCEED Amount \$15,380 COMPLETE; NO FURTHER ACTION: CMOD #11 - Final Cost \$15,500	CMOD #11 Executed
1252-0078	PCC 9, FA CO 1	PCC No. 9 - UMS Headwall - Unknown Buried Pipe	1	Agree to Merit Agree to Cost	01/16/13 01/16/13		+75,000	Related to COR 063. SFMTA instructed BIH to perform investigation into the 48" diameter steel pipe as it is a Differing Site Condition. 01/30/13 01/16/13 - EE brought to CMB for cost. NOT TO EXCEED amount \$75,000 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #04	CMOD #4 Executed
1252-0079	PCC 10 FA CO 3	PCC No. 10 - Relocation of TBM Retrieval Shaft - Excludes Button Up Costs	1				+5,150,000	Modify Bid Item ST-4 (Construction of Base Bid Permanent Retrieval Shaft) and ES-4 (Ground Treatment at Retrieval Shaft Breakouts) to relocate the TBM Retrieval Shaft to 1731-1741 Powell Street - (Excludes Utility Button Up and Site Restoration) 01/09/13 - Draft PCC10 presented to CMB for Contractor Design Activity to be paid on Force Account. NTE value \$20K presented to CMB as a draft copy, final copy distributed to the Contractor increased to \$50K. 02/20/13 - COST IS NOT REFLECTED HERE - SCOPE IS FUNDED BY OTHER CPT 690 \$\$\$\$ 03/06/13 - Cost proposal received from BIH. SFMTA will develop a detail estimate of what is believed to be the scope of work. 03/13/13 - PCC 10 presented for CMB change approval of \$50K NTE amount to perform design activities. CMB requested CM team return with a more detailed estimate, Contractor's cost proposal of the bulleted items as listed on the PCC and backup documentation as evidence of work completed by the Contractor. COMPLETE; NO FURTHER ACTION CMOD #20 (separate funding source used - CPT 690).	CMOD #20 Executed

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**CENTRAL SUBWAY PROJECT**

*Project Trend/Change Control Log*

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1252-0080	Segment Measuring Frequency	7				-0-	RFI 203.1 - In light of gauging frequency, and the difficulties of erecting a ring with cast in gaskets, BIH JV alternately proposes to assemble a ring on the Master ring at an interval of every 500th ring cast. The assembled ring would be comprised of randomly selected segments, or segments chosen by the Engineer. 12/11/13 - The CMB took exception to the deletion of the (\$1.3M) from the log without the consent of the Board. Direction was given to re-insert the credit and add a notation to the "comments section" the reasoning the dollar amount is no longer valid and should be removed.	
1252-0081	F21 and Old Navy Instrumentation Proposal	7				TBD	Wang Technology is proposing instrumentation changes to the Liquid Level Sensors and Tilt Beams in the basements of Old Navy and Forever 21.	
1252-0082	68 UMS – AT&T Vault Walkway @ N Headwall	2		Agree to Merit	01/16/13	+2,000	SPM discovered an walkway at the UMS north headwall. This walkway is located at the UMS north headwall and connects the south AT&T vault, located within the utility demolition limits, to a north AT&T, located outside of the utility demolition limits. SPM proposes to construct 3'x5' wall to the extents necessary, inside this walkway. The wall will be constructed of plywood and necessary reinforcement in order to create a bulkhead that will isolate the walkway and north vault from the south vault. 01/16/13 - CMB recommendation Contractor/Sub-contractor proceed on Force Account with a "Not to Exceed Amount" \$2K. 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #16 - Final Cost \$2,000.00	CMOD #16 Executed
1252-0083	69 UMS - Shoring Impacts due to 48" ATT Pipe at SW Headwall	2	CMB-0153	Agree to Cost	4/23/14	+29,463	On or about 10-25-13, BIH/Synergy were installing sheet piles at the UMS SW head wall to demolish the existing basement wall in conflict with the head wall construction per contract requirements. During the driving of the sheet piles, Synergy struck a buried object which was later identified as a 48" Diameter steel pipe. See PCC 9 and 11. Synergy thought they were hitting a buried tie-back which was shown on the contract drawings. Synergy did not know at the time that they were hitting a buried 48" pipe. After hitting the buried object, Synergy installed additional sheet piles and enlarged the excavation area in order to clear the buried object and drive the sheet piles to the minimum embedment depth. Due to the larger excavation, Synergy is claiming impacts as a result of encountering this DSC including shoring revisions and for installing additional sheets. 06/05/13 - CM TEAM NOTES: COR 069 reopened by BIH to cover cost for enlarging excavation due to encountering the 48" buried pipe. Previously COR 069 was to cover capping and removal of the pipe until it was changed to PCC 11. 02/05/14 - CM TEAM NOTES: In IRL process 04/23/14 - EE brought to CMB for Cost Not to Exceed \$30K - Agreed. Change will be negotiated as a lump sum.	
1252-0084	PCC 11, FA CO 2 PCC No. 11 - UMS – Cap and Remove 48" Steel pipe	1	CMB-0105	Agree to Cost	1/23/13	+150,000	BIH/Synergy encountered a buried 48" Diameter steel pipe during work at the UMS S. Headwall. The pipe is located 6 feet from the south UMS headwall and 5 feet from the face of the curb. This PCC is to complete removal of pipe @ S. Headwall and Investigate and remove pipe if necessary @ the North headwall. 01/30/13 - EE brought to CMB for cost NOT TO EXCEED amount \$150,000 - Agreed 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #09	CMOD #9 Executed
1252-0085	71 LB – Ramp Excavation Obstructions	2	CMB-0133	Agree to Merit Agree to Cost	4/3/2013 09/25/13	+5,594	BIHJV encountered numerous groups of wood piles while performing excavation of the Launch Box ramp. The wood piles are approximately 16"+ in diameter and are located along the north and south perimeter walls of the Launch Box ramp excavation area. 01/30/13 - CMB did not agree with merit of change suggestion the RE negotiate w/Contractor for another concession. 04/03/13 - COR merit evaluation presented to CMB again due to a greater number of obstruction encountered. CMB - Agreed to Partial Merit. 09/25/13 - EE brought to CMB for cost NOT TO EXCEED amount \$5,700. COMPLETE; NO FURTHER ACTION: CMOD #26	CMOD #26 Executed
1252-0086	72 Ellis Shaft Jet Grout Obstruction	2				-0-	On February 6th, 2013, CJA/NCC was drilling column R3 of the Ellis Shaft and reported hitting an obstruction 52ft below existing grade. The obstruction reportedly caused the jet grout monitor to shear off. At this time it is not known what the obstruction is or if it caused the monitor to be sheared off. Contractor no longer pursuing. CLOSED; NO FURTHER ACTION	

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

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					Approval Action	Approval Date	Actual/Forecast		
1252-0087	73	MOS - 16" Pipe removal @ NE Headwall	2	CMB-0118	Agree to Merit Agree to Cost	3/13/2013 05/08/13	+940	BIH-JV's subcontractor, Synergy, encountered an abandoned 16" pipe while installing the 12" waterline at the north headwall of Moscone. The pipe was at the same elevation as the new 12" waterline and therefore needed to be removed to facilitate the installation of the new 12" waterline. 03/13/13 - Merit info presented to CMB - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. 05/08/13 - CMB agreed to cost of reconciliation of change on FA - NTE \$989.00 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #17	CMOD #17 Executed
1252-0088		Whole Foods - Unknown brick obstruction in Comp Grout Trench	0				-0-	BIH has decided not to submit a COR as production was not significantly impacted. CLOSED; NO FURTHER ACTION	
1252-0089	75	Hazardous Waste Disposal Denial - Spoils Containment Cost Impacts	7	CMB-0159	Agree to Cost	05/21/14	-0-	BIH submitted change order request (COR) 030 seeking reimbursement for the demonstrated additional costs of excavating, handling and disposing of excavated material found to contain hazardous material to a permitted landfill over that which can be disposed of at an unregulated dump site. The SFMTA refused reimbursement for such costs under the hazardous waste bid item allowance. As a result of this determination, BIH is modifying its approach to the construction and handling operations of tunnel spoils generated during tunneling operations. 09/18/13 - Contractor has submitted a Contract Claim No. 2 Haz Mat Removal - Caltrans site (COR 30, 45 & 75) for 708,929.00 CMB directed the CM Team to draft a letter rejecting the claim. Claim #2 has been negotiated to include COR 30, 54 and 75. 05/21/14 - RON for (COR 30, 54 & 75) presented to the CMB to approve the process of issuing the CMod for a NTE of \$400K.	
1252-0090	76	MOS - 16" Pipe removal @ SE Headwall	2	CMB-0119	Agree to Merit Agree to Cost	03/20/13 05/08/13	+1,116	BIH-JV's subcontractor, Synergy, encountered an abandoned 16" pipe while installing the 12" waterline at the south headwall of Moscone. The pipe was at the same elevation as the new 12" waterline and therefore needed to be removed to facilitate the installation of the new 12" waterline. 03/20/13 - Merit info presented to CMB - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. 05/08/13 - CMB agreed to cost of reconciliation of change on FA - NTE \$1,116.00 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #17 - Final Cost \$1,116.00	CMOD #17 Executed
1252-0091	77	Comp Grout - WFB-5 Drilling Obstruction	2	CMB-0126	Agree to Merit Agree to Cost	04/03/13	+6,126	On March 06,2013, BIHJV encountered a potential Differing Site Condition (DSC) while drilling the compensation grouting hole WFB-5 located at Whole Foods and more precisely at CTL Station 160+38. This potential DSC consists of an obstruction located at a depth of 9' below grade which prevented CJA-NCC from drilling any further. 04/03/13 - Merit info presented to CMB - Agreed 07/24/13 - CMB agreed to cost of reconciliation change - NTE \$6,125.93 COMPLETE; NO FURTHER ACTION: CMOD #26 - Final Cost \$1,116.00	CMOD #26 Executed
1252-0092	78	Comp Grout - WF & ATT	2		Agree to Merit	3/20/13	-0-	BIHJV encountered multiple potential Differing Site Conditions (DSC's) of varying dimensions while excavating the compensation grouting trench for the drill holes located at Whole Foods and AT&T. 03/20/13 - Merit info presented to CMB - CMB agreed there was No Merit for this contract change. 05/24/13 - CM Team Notes - Contractor no longer pursuing due to failure to provide proper notification. CLOSED; NO FURTHER ACTION.	

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1252-0093	79	FA CO 4	Comp Grout - Old Navy	2	CMB-0116 CMB-0142	Agree to Merit Agree to Merit (addl) Agree to Cost Agree to Addl Cost	03/20/13 04/24/13 04/26/13 11/06/13	+259,373	BIHJV encountered a potential Differing Site Condition (DSC) while sawcutting the pavement for the compensation grouting holes located at Old Navy. The original design was to drill the compensation grout holes between two existing PG&E lines. It was discovered in the field that there is not enough clearance between the existing PG&E lines for the original design to be possible and multiple other potential DSCs were also encountered including, but not limited to, tile duct banks, concrete of unknown contents, and steel pipes. 03/20/13 - Merit info presented to CMB - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. 04/24/13 - Addl info presented for rationale for Contractor to demolish and remove drill rig due to insufficient clearance between existing PG&E lines to drill the grout holes - Agreed 04/26/13 - COR presented at a special CMB mtg to notifying CMB of need to have Contractor perform work on FA4 for a NTE amount of \$70K. 05/15/13 - Addl request for funds to cover (inefficiencies) - agreed for a not to exceed amount \$152,000. 11/06/13 - EE brought to CMB for cost NOT TO EXCEED \$37,380 for the (remaining cost) parts 2 and 3 of 4 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #23	CMOD #23 Executed
1252-0094	80		MOS – Asbestos Wrapped 20" water line @ Headwalls	2		Agree to Merit	04/03/13	-0	BIHJV's subcontractor, Synergy Project Management was performing the installation of low pressure water distribution piping at the Moscone north headwall and discovered an unknown material wrapping around the existing 20" waterline which appeared to contain asbestos material. 04/03/13 - Merit info presented to CMB - Agreed 07/10/13 - CM Team Notes - To be paid out of Environmental Mitigation allowance GE-8.	
1252-0095	81		12" Waterline Tee Connection Location (MOS South)	2		Agree to Merit	04/03/13	+3,001	BIHJV's subcontractor, Synergy Project Management, encountered a potential Differing Site Condition (DSC) upon exposing the tie-in point for the 12" waterline at the south headwall of Moscone. The potential DSC consists of two 45 degree elbows in the existing 12" waterline at the point of the tee connection. SFWD has surveyed the field conditions and indicated that the tee connection will need to be moved to the west. 04/03/13 - Merit info presented to CMB - Agreed COMPLETE; NO FURTHER ACTION: CMOD #17 - Final Cost \$3,000.00	CMOD #17 Executed
1252-0096	82		MOS 20" Conflict with 16" AWSS @ South Headwall	2	CMB-0160	Agree to Merit Agree to Cost	04/30/14 05/21/14	+40,152	Upon exposing the existing 20" waterline at the south headwall of MOS, in preparation for installing the new 20" waterline shown on WD-403 and amended by RFI 0155, BIHJV's subcontractor Synergy Project Management encountered a potential DSC. The potential DSC consisted of a crossing conflict between the new 16" AWSS, the new 20" waterline, and the existing 6" PE gas. These three utilities cross at multiple locations however the existing depths are roughly the same. 01/22/14 - Item reviewed at the CMB mtg as a status update to potential cost exposure. Item now being discussed in the IRL process. 04/30/14 - Merit info presented to CMB - Agreed. RE will negotiate a credit for amount no less than \$25K. 05/21/14 - Updated info presented to the Board. Further negotiation revealed an extra 25ft was not accounted for. CMB approved a change Not to exceed \$12K to cover the difference and contractor's claim of standby cost	
1252-0097	83		Ellis Shaft Concrete Obstruction	2	CMB-0127	Agree to Merit Agree to Cost	04/17/13 07/24/13	+1,420	During excavation for the Ellis Street Shaft, BIHJV's subcontractor, CJA-NCC, encountered a concrete obstruction at approximately 10 feet below grade. CJA-NCC spent 4 hours removing the obstruction. 04/17/13 - Merit info presented to CMB - Agreed 07/24/13 - CMB agreed to cost of reconciliation change - NTE \$1,424.52 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #26	CMOD #26 Executed
1252-0098	84		Crate & Barrel Water Intrusion	2				-0	Water was discovered seeping into the Crate & Barrel basement in concert with secant pile installation at Pile #SRV-A. At the time, pile excavation was approximately 90 feet deep. BIHJV's subcontractor, CJA-NCC, stopped pile installation and placed lean concrete within the pile excavation. This allowed them to continue secant pile construction on other piles until which time SFMTA could provide appropriate mitigation for the water leak. 07/03/13 - CM Team will deny merit, notice not received within 7 days. CLOSED; NO FURTHER ACTION	

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**CENTRAL SUBWAY PROJECT**

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1252-0099a	PCC 12, FA CO 6 PCC No. 12 - Modifications to Tunnel Alignment at Market Street - Adv. Materials Purchase	1	CMB-131	Agree to Merit Agree to Cost (Conditionally)	08/14/13 08/14/13	+45,637	IFB Tunnel Profile conflicts with micro-piles installed under Contract 1251. Tunnel Profile needs to be revised (lowered) such that TBM and Tunnel structure is below previously installed micro-piles. Contractor shall revise compensation grouting design to conform to Contract requirements given the revised tunnel alignment. 04/03/13 - CMB agreed to Micropile profile change being forwarded to the Contractor. 04/10/13 - Updated alignment was presented superseding 04/03/10 version - (lowered 4.9%) 04/10/13 - Original Contractor submittal needs to be evaluated to verify the new alignment has been incorporated. 08/14/13 - Merit Evaluation and PCC 12 Cost NTE (Construction portion) was presented to the CMB for approval. The CMB agreed to merit contingent upon verification signature by the Designer (DP1) of additional work and cost associated with the change. NTE Value \$41,470.01 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #28	CMOD #28 Executed
1252-0099b	PCC 12 PCC No. 12 - Modifications to Tunnel Alignment at Market Street - Initial Design Costs					+39,930	Contractors proposal for PCC 12 is \$1,668,434. Amount shown represents Cmod 34 in process for negotiated amount for Initial Design Costs (\$39,930).	
1252-0099c	PCC 12 PCC No. 12 - Modifications to Tunnel Alignment at Market Street - Construction Costs					+1,582,868	Contractors proposal for PCC 12 is \$1,668,434. Amount shown (1,582,868) represents Construction Costs proposed by Contractor. Amount under negotiations.	
1252-0100	85 SFWD Impacts at MOS North	2				+100,000	BIHJV's subcontractor CJA-NCC is in the process of constructing the Moscone Station headwalls, the sequence of construction is such that it requires the 12" and 20" waterlines on the eastside of 4th street to be rerouted prior to completing the headwalls. In accordance with the Contract the San Francisco Water Department (SFWD) is responsible for completing the waterline reroutes (chlorination and tie-in) in a specified duration. BIHJV claims the SFWD failed to complete this work in the contractual durations. As a result, BIHJV claims the headwall construction operation has been incurring stand by costs. 04/10/13 - Item reviewed at CMB meeting during review of Trend/Change Log COR's. CM team contends this is not a valid change and will reject the Contractor's claim of merit. Contractor has submitted a notification of Claim #3 for standby cost for this item. The CM Team will respond by 02/14/14.	
1252-0101	87 Cross Passage 5 - Value Engineering Change Proposal	5				(2,674)	As indicated in Contract Drawing No. ES-144, ground treatment for the excavation of CP5 was anticipated to be performed using jet grouting methods. BIHJV proposes to perform ground freezing from within the tunnels as an alternative ground treatment methodology, thereby avoiding the need to disrupt and impact the public by occupying 4th Street for an extended period. 04/24/13 - Item reviewed at CMB mtg. during review of Trend/Change Log COR's. CMB suggested a credit from the Contractor should be received for Bid Item ES-5. In addition suggested a minimal review of the BIH's proposed ground freezing method be done by the PB. COMPLETE; NO FURTHER ACTION: CMOD #25	CMOD #25 Executed
1252-0102	UMS - Secant Pile SRV-J Obstruction DSC	2				-0-	BIHJV's subcontractor, CJA-NCC, encountered a potential Differing Site Condition (DSC) while drilling for UMS Secant Pile #SRV-J. The DSC consists of what appears to be an abandoned utility pipe located approximately 10 feet deep. 04/24/13 - Information presented to CMB during review of Trend Log. CM Team states COR merit will be rejected due to notification of change not met in timely manner per the contract docs. 05/24/13 - CM Team update - Contractor no longer pursuing due to untimely notification of event. CLOSED; NO FURTHER ACTION.	
1252-0103	88 SFWD Impacts at MOS South	2				-0-	BIHJV's subcontractor CJA-NCC is in the process of constructing the Moscone Station headwalls, the sequence of construction is such that it requires the 12" and 20" waterlines on the eastside of 4th street to be rerouted prior to completing the headwalls. In accordance with the Contract the San Francisco Water Department (SFWD) is responsible for completing the waterline reroutes (chlorination and tie-in) in a specified duration. BIHJV claims the SFWD failed to complete this work in the contractual durations. As a result, BIHJV claims the headwall construction operation has been incurring stand by costs. 05/08/13 - Information presented to CMB during review of Trend Log. CM Team states COR will be rejected due to no merit. This item is not on the critical path. 06/17/13 - Contractor no longer pursuing. CLOSED; NO FURTHER ACTION.	

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1252-0104	PCC 13, FA CO 5 PCC 13 - SFWD Excavation, Support and Backfilling	1	CMB-0122 CMB-0128	Agree to Cost Agree to Addl Cost	06/19/13 08/09/13	+33,982	Excavation, support and restoration work at two locations required to facilitate fitting/valve installation work by the San Francisco Water Department. Installation of valves are to facilitate fire service connection cutover and cutting off of the existing water main. The existing water main is in the footprint of the UMS station piles and is to be abandoned. 06/05/13 - CMB agreed to change required; work must be completed sometime in June 2013 06/19/13 - Cost estimate presented; CMB agreed for a NTE of \$20K 08/07/13 - CMB viewed the estimate requesting the narrative be rewritten to tell the entire story of what has generated the change. 08/09/13 - Special CMB Mtg to clarify direction and approval to proceed with direction to the Contractor on extra work contained in PCC 13 (Macy's Backflow work). CMB approved additional work and scope for a NTE value of \$14,100 for a total change value of \$34,100 COMPLETE; NO FURTHER ACTION: CMOD #18 executed for \$20K. Supplementary CMOD #24 executed for \$13,982 was issue for remaining cost.	
1252-0105	90 Abandoned Well at MOS Panel N-4	2				-0	BIHJV's subcontractor, CJA-NCC, discovered an obstruction that appears to be an abandoned monitoring well within the Moscone Slurry Wall Panel "N-4". Contractor claims impacts resulting from this alleged DSC include, but are not limited to, excavation inefficiency, the required backfilling of the panel with lean concrete on multiple occasions, and re-excavations of the panel. 06/19/13 - Information presented to CMB during review of Trend Log. CM Team states COR will be rejected due to several reasons of "no merit" Items in in the IRL process	
1252-0106	0 PCC No. 9 and 11 - Remaining Budget	0				(71,885)		
1252-0107	92 Credit - North headwall panel N-2 at Moscone	7				(4,943)	During installation of the reinforcement cage at panel N-2 at the Moscone North Headwall a 1-inch dia. Polyester sling used for lifting could not be detached from the reinforcement cage. The slings were then casted in-place. SFTMA requested a credit CO for the CN 1300 contractor to demolish the concrete and slings and replace the structural concrete. 07/10/13 - NCR condition of the wall be provided in order to prepare engineer's estimate for credit amount. Negotiated amount to be deducted from pay estimate. COR has been rescinded.	
1252-0108	91 Credit - Secant pile SRV-H, UMS south headwall	7				(263)	During concrete placement, the dummy steel beam that was used to hold down the secant pile steel beam reinforcement for pile SRV-H @ the UMS south headwall could not be removed and was poured in-place. SFTMA requested a credit CO for the CN 1300 contractor to demolish this beam between El. 16.66' and the beam top. Negotiated amount to be deducted from pay estimate. COR has been rescinded.	
1252-0109	93 Credit - 65 feet of water pipe not installed at MOS	7				-0	Contract Drawings WD-403 & WD-404 shows the 20" low pressure water line cutting through an area in the intersection where the joint trench is in the way. BIHJV's subcontractor, Synergy Project Management, with SFMTA's concurrence, installed the water line tie-in per a configuration which resulted in approximately 65' less line required to be installed. SFTMA requested a credit CO to eliminate 65' of the line.	
1252-0110	94 Credit - Switching of the 12" and 20" lines at MOS	3				(30,466)	It was discovered that the field locations of the 12" water line and 20" water line were actually "switched" from the location shown in contract drawing WD-402 Rev.0. SFMTA requested a credit CO as less 20" water line was required to be installed than was originally anticipated.	
1252-0111	95 Green St Shaft – Design Cost Impacts for Jet Grout	7				-0	BIHJV: "BIH and CJA-NCC are in receipt of the SFMTA's revised submittal review comments for Submittal No 31.43.14-003 (review cycle 3) dated July 10, 2013, where the SFMTA determined that the previously submitted content does not fulfill the contract requirements. The submittal status was changed from "Approved" on March 21, 2013, to "Disapproved - Resubmit" on July 10, 2013. The SFMTA states that the submittal was reviewed in further detail and it was determined the submittal didn't fulfill the contract requirements. This new submittal determination will result in additional costs to the SFMTA." 07/24/13 - Information presented to CMB during review of Trend Log. CM Team preparing letter of no merit, due to disagreement of dwg shown. CLOSED; NO FURTHER ACTION	

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1252-0112	96	Micropiles @ UMS Tangent Pile SRB-H	2	CMB-0155	Agree to Merit Agree to Cost	7/31/2013 05/07/14	+48,810	Excavation for battered secant pile SRB-H began on July 12. At approximate depth of 30', CJN reported hitting an obstruction. Two, 36" and 45" long, No. 18, Dywidag bars were discovered within spoils of the first bite of the clamshell bucket. The 2-1/2" diameter bar was consistent with the micro piles installed in the previous contract. 07/24/13 - Draft merit evaluation presented to CMB. CM Team reported further investigation needed to verify survey location of micropiles. CMB requested a specific dwg of 1251 As Built of piles be presented at next CMB. 1251 Contractor will be put on notice referencing the CS CN1251 Ltr. #018 - Future Potential Costs Due to Incorrect Micropile Placement. 07/31/13 - Merit Approval presented to CMB - Agreed. Notification of Possible Micropile Obstruction to CN1252 and possible CN1300 work was sent to CN1251 Contractor. COR was rescinded. CLOSED; NO FURTHER ACTION	
1252-0113		Relocation of TBM Retrieval Shaft - Columbus Ave. Restoration	1				+261,057	Modify Bid Item GE-3 (Utility Demo, Sewer, Road Demo, Pavement Restoration, etc.) to relocate the TBM Retrieval Shaft to 1731-1741 Powell Street - (Includes Utility Button Up and Site Restoration Only) 07/24/13 - Information presented to CMB during review of Trend Log. CMB requested LS Bid Item be broken-down based on contract work to see how much money would be put in to perform the restoration button up cost. In addition the CMB requested the item description be change to "Columbus Ave. Restoration" in order to not confuse it with PCC 10 Retrieval Shaft work. COMPLETE; NO FURTHER ACTION: CMOD #21	CMOD #21 Executed
1252-0114	97	Ellis Shaft – TAM ES2-01 and ES2-17	2		Agree to Merit	08/28/13	-0-	BIHJV's subcontractor, CJA-NCC, discovered gravel material within the drill spoils from two separate Ellis Shaft TAM installations, TAM ES2-01 and ES2-17 08/14/13 - Item reviewed at CMB during review of Trend/Change Log COR's. GBR's will be checked to see if gravel material is known to exist in the drill location. 08/28/13 - Merit info presented to CMB - Agreed COR Rescinded CLOSED; NO FURTHER ACTION	
1252-0115	98	Ellis Shaft – TAM ES2-16	2		Agree to Merit	08/28/13	-0-	BIHJV's subcontractor, CJA-NCC, discovered gravel material within Ellis Shaft TAM installations, TAM ES2-16 08/14/13 - Item reviewed at CMB during review of Trend/Change Log COR's. GBR's will be checked to see if gravel material is known to exist in the drill location. 08/28/13 - Merit evaluation presented to CMB - Agreed COR Rescinded CLOSED; NO FURTHER ACTION	
1252-0116	99	MOS – AWSS Vault Over pour @ South Headwall)	2	CMB-0134	Agree to Merit Agree to Cost	09/25/13	+2,394	BIHJV: "While performing AWSS work at the MOS South Headwall, Synergy crews found the mechanical joint Tee bolts, required for the AWSS point of connection, to be completely encased in concrete. The concrete encasement appeared to be concrete over pour remaining from a previous contractor's AWSS vault wall pour." 08/14/13 - Item reviewed at CMB during review of Trend/Change Log COR's. 09/25/13 - Merit evaluation presented to CMB - Agreed. 09/25/13 - Eng. Est. presented to CMB for cost NOT TO EXCEED \$2,400 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #26	CMOD #26 Executed
1252-0117	100	Ellis Shaft TAM ES2-08	2		Agree to Merit	08/28/13	-0-	BIHJV: "August 12, 2013, BIHJV's subcontractor, CJA-NCC, struck a hard unknown object while drilling the Ellis Shaft TAM ES2-08." 08/28/13 - Merit evaluation presented to CMB - Agreed CMB requested a investigation plan to be developed and included in this COR if the plan is implemented. COR Rescinded. CLOSED; NO FURTHER ACTION	
1252-0118	101	Ellis Shaft TAM ES2-11	2				-0-	BIHJV's subcontractor, CJA-NCC, discovered gravel material within Ellis Shaft TAM installations, TAM ES2-11 09/11/13 - Viewed at CMB during review of Trend/Change Log COR's. CLOSED; NO FURTHER ACTION	

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	CMB No.	Change Description	Change Type	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
				Approval Action	Approval Date	Actual/Forecast		
1252-0119	102	UMS Jet Grout Column 18 DSC Headwall	2	CMB-0156	Agree to Merit Agree to Cost	05/07/14	+13,758	While drilling down on column #18 at the UMS south headwall, BIHJV's subcontractor, CJA-NCC, encountered a hard unknown obstruction. 09/11/13 - Item reviewed at CMB mtg. during review of Trend/Change Log. 10/16/13 - DSC presented for merit approval - No action was taken by the CMB. The CM will investigate if the 1252 Contractor received the 1251 As built information by the start of operations. COR Rescinded. CLOSED; NO FURTHER ACTION
1252-0120	103	Retrieval Shaft Additional Slip Lining Pipe Qty	4				-0	RFI 251.1 SFMTA Response: Specification 33 31 00 1.01 A.22 Sewer Work, states, " Slip lining existing 3-foot by 5-foot brick sewer with 16-inch and 24-inch diameter HDPE Pipe (polyethylene pipe) nominal size SDR 26." As such, slip lining is to be performed for both the 16" and 24" diameter HDPE pipe. Branches indicated in the supplied sketch to be relined along Stockton and Columbus are acceptable. In addition, the 33-ft long branch that crosses the alignment at CTL 86+35 must also be relined. Acceptable alternative (to fused HDPE) pipe materials and sizes for this branch can be proposed by BIH. BIH shall submit the propose alternative for this branch of pipe for SFMTA review. The use of coupled PVC is not acceptable." 09/11/13 - Item viewed at CMB mtg. during review of weekly Trend/change log. No dwg for this work only a table. CM Team working with designer to make the determination. Item now being tracked under PCC 16. CLOSED; NO FURTHER ACTION
1252-0121	105	Retrieval Shaft Relocation of Seismograph	1				-0	BIHJV: "BIHJV's instrumentation subcontractor, Wang, was directed to relocate one of the vibration monitoring devices (Seismograph) installed at the Retrieval Shaft area to monitor vibration induced by demolition operations of the existing Pagoda Theater building." 09/11/13 item reviewed at CMB meeting during review of weekly Trend/Change log. CMB doesn't agree with the relocation charge and requested a better definition of the item. 01/22/14 - Item viewed at CMB as an status update. SFMTA letter No. 241 sent to Contractor denying merit. CLOSED; NO FURTHER ACTION.
1252-0122	89	UMS - Suspended Remobilization of Jet Grout Rig	7				-0	BIHJV: "The SFMTA directed BIHJV/CJA-NCC to suspend the planned remobilization of the Jet Grout Rig at the UMS location due to external affairs with local UMS businesses." 09/11/13 - Item reviewed at CMB mtg. during review of weekly Trend/change log. CMB questioned the timeliness of the COR also requesting a better definition of the item. Item has been elevated to the Issue Resolution Ladder (IRL) process.
1252-0123	104	Retrieval Shaft - Additional Sewer Slip Lining 16" HDPE Pipe	4				-0	BIHJV: "BIHJV submitted RFI Nos. 275, 275.1 and 275.2 requesting clarification about specific sewer slip lining runs at the Retrieval Shaft, see Attachment Nos. 2, 4 and 6. The SFMTA responded, via RFI No. 275.2, stating that the slip lining is to be installed in a stacked configuration with the 24" over the 16" HDPE pipe, see Attachment No. 7. BIHJV and Synergy believe the SFMTA's response to install stacked HDPE slip lining pipes is additional work as the contract documents do not support this statement." 10/02/13 - Item reviewed at CMB mtg. during review of the weekly Trend/change log update. The CM states the DSC maybe eliminated. Waiting for a response from PUC now there is a as built condition. Letters are being written between SFMTA and SFPUC. 01/22/14 - Item viewed at CMB mtg as an update to potential cost exposure.
1252-0124	PCC 17	Green Street Sewer Changes	2		Agree to Merit	9/25/2013	-0	In preparation to beginning slip lining work at the intersection of Columbus/Green/Stockton, the Contractor performed a site investigation of the existing 3'x5' brick sewer. The Contractor discovered 4 unknown pipes intersecting the sewer. Received email from DPW on Oct 18 regarding proposed new direction to spray mortar sewer line in lieu of slip lining. DPW also requested additional slip lining on Columbus from Sta. 83+50 to Sta. 85+50. 09/25/13 - DSC presented for merit approval - Agreed. CMB directed the CM Team to ask the Contractor for recommendation to slipline as much of the sewer line as possible without rerouting the conflicting pipe lines. 01/22/14 - Item viewed at CMB mtg as a status update to projected cost exposure. Item will be tracked under PCC17.
1252-0125	PCC 14	Modifications to AWSS Facilities at 4th and Bryant Streets	1				+35,925	Deletion of 12" AWSS diagonal sleeved pipe crossing and hydrant lateral. Installation of 12" AWSS restrained pipe and hydrant lateral. 10/16/13 - Draft PCC reviewed at CMB. The Board is in agreement with the modification. 10/23/13 - Engineers estimate for new work \$136,478 and deleted work (\$163,382) was presented to the CMB. PCC will be forwarded to the Contractor to price the work. In addition a cost estimate will be done for the work which would have been under the 1300 contract. 04/16/14 - CMB authorize the RE to negotiate with the Contractor for a amount up to \$35K.

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1252-0126	108		Ellis shaft and Old Navy Grouting	2						
1252-0127a		FA CO 8	Remove and replace material at Retrieval Shaft CSM wall	1			+22,300	Contractor to remove hazardous material (approximately 250 CY) found in the footprint of the Retrieval Shaft Cutter Soil Mix (CSM) wall and replace with both clean material found on-site (approximately 190 CY) and import material (approximately 60 CY). 10/23/13 - Item reviewed at CMB mtg. during review of weekly Trend/Change log. The CM stated this item will be rejected, due to a lack of information being supplied by the Contractor to validate the COR. SFMTA sent Letter No. 247 & 253 denying merit.	CMOD #28 Executed	
1252-0127b		FA CO 8	Remove and replace material at Retrieval Shaft CSM wall				(6,339)	Approximate remaining balance of Executed CMod associated with FA CO 8. SFMTA current reconciled FA costs are \$15,961. Final CMod required to reconcile balance. See Trend 127a.		
1252-0128a		FA CO 7	Acceleration of Work Activities at Retrieval Shaft	1			+5,000	SFMTA to compensate BIHJV for premium time incurred on October 5th, 2013 to accelerate the completion of the site work and soundwall at the Retrieval Shaft. 11/06/13 - Item reviewed at CMB mtg. during review of weekly Trend/Change log. 01/22/14 - Item reviewed at CMB mtg as a status update to potential cost exposure. COMPLETE; NO FURTHER ACTION: CMOD #28	CMOD #28 Executed	
1252-0128b		FA CO 7	Acceleration of Work Activities at Retrieval Shaft				(4,356)			
1252-0129		0	UMPs on 96-inch Sewer	2			-0-	BIHJV's subcontractor Wang Technology claims to have encountered a DSC (brick structure) while drilling for utility monitoring points on Howard Street. 11/06/13 - Item reviewed at CMB mtg. during review of weekly Trend/Change log.		
1252-0130	0	PCC 16	Ret Shaft Sewer Changes	2			-0-	BIHJV's subcontractor Synergy Project Management claims to have encountered the following DSCs while performing an investigation into planned slip lining work at the intersection of Columbus/Union/Powell: Internal clearance issues, unforeseen lateral connections, mixed debris and grease buildup inside sewer, and tighter radius than was anticipated for the planned junction structure. 11/20/13 - Item reviewed at CMB mtg. during review of weekly Trend/Change log. The Board suggested the CM Team ask the PUC to tell us what they would like the Contractor to do. 02/05/14 - FACO 10 was presented for consideration to add a 16" pipe. The CMB took no action. Direction was given to investigate the use of the pipe and to determine the most cost effective approach to reach PUC's desired equivalency of the 36" pipe removed.		
1252-0131	0	FA CO 9	Obstruction hit at CSM panel W6	2	CMB-0146	Agree to Merit Agree to Cost	12/11/13	+9,000	BIHJV's subcontractor Drill Tech claims to have encountered a DSC (unknown steel members) while performing Cutter Soil Mixing (CSM) on panel W6 at the Retrieval Shaft. 11/20/13 - Item reviewed at CMB mtg. during review of weekly Trend/Change log. This item will be tracked on FA. 12/11/13 - Merit evaluation presented to CMB - Agreed. EE presented for cost NOT TO EXCEED \$9,000 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #28	CMOD #28 Executed
1252-0132	COR 111	0	Material Hardness at Retrieval Shaft	2				+259,486	BIHJV's claims to have encountered ground material characteristics that are significantly harder than anticipated based on the information provided during the negotiations of PCC 10 (Relocation of Retrieval Shaft). 11/20/13 - Item reviewed at CMB mtg. during review of weekly Trend/Change log.	
1252-0133	0	PCC 15	Deleted AWSS Work at Union St and Columbus Ave	1				(187,181)	PCC 15 issued to: 1.) Delete all work associated with the removal and disposal of the Auxiliary Water Supply System (AWSS) utilities as shown on Contract Drawing No. AW-501.1 Rev.0. 2.) Delete all work associated with furnishing and installation of AWSS utilities as shown on Contract Drawing No. AW-501.9 Rev.0. Note: Monitoring of existing AWSS line to be performed in lieu of installation of new AWSS utilities. 12/11/13 - Item reviewed at CMB during review of weekly Trend/Change log. 02/19/14 - Cost revised based on Eng Est. and scoping meeting w/Contractor.	

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1252-0134	0	PCC 18	Retrieval Shaft Site Supervision	1			-0	PCC 18 issued to provide for the Contractor's supervision and engineering services during the compensation grouting activities at the Retrieval Shaft. 01/08/14 - Item reviewed at CMB meeting during review of weekly Trend/Chang log. 01/29/14 - PCC presented for review. CMB agreed with change.		
1252-0135	0		Retrieval Shaft Comp Grout Array 045 Obstruction	2			-0	BIHJV's subcontractor, Drill Tech, encountered a concrete obstruction at the Retrieval Shaft location on December 17th, 2013 when performing survey layout of the design location for several of the comp grout holes in the 045 array. 01/08/14 - Item reviewed at CMB meeting during review of weekly Trend/Chang log. The CM reported the Contractor will be notified there is no merit for this change request. SFMTA denial letter No. 270 sent to Contractor.		
1252-0136	0		Installation of Piping, Conduit and Casing at Fourth Street Portal	1			TBD	PCC 19 issued to provide standpipe piping, telephone and train signal conduits, and casing at Fourth Street Portal. 02/26/14 CMB agreed on Jan. 29, 2014 with forwarding the PCC to the Contractor for pricing.		
1252-0137	0		North Beach Sewer Work	1	CMB-0152	Agree to Cost	03/12/14	-0	Contractor directed to proceed with work on a Force Account basis for 'Sewer Work on Columbus and Powell St (North Beach)' in accordance with Force Account Change Order No. 010 03/12/14 CMB authorized a NTE amount of \$10,000 to start negotiations with the Contractor on the forthcoming PCC 20 for the price of the plates. Contractor's written cost for standby required to complete negotiations.	
1252-0138			Curb Ramp Work at NE Corner of 4th and Harrison Streets	1				+5,023	Contractor directed to proceed with work on a Force Account basis to install modified curb ramps and additional sidewalk flags in accordance with Force Account Change Order No. 011. 03/26/14 - CMB authorized a FACO NTE amount of \$4500., which will be reimbursed by PG&E through the form B process.	
1252-0139	115		BART - Additional Load Cells		CMB-0157	Agree to Merit Agree to Cost	05/07/14	+1,066	BIHJV: "In accordance with the SFMTA's direction, BIH is providing two new fully functional load cells (the same model as currently installed in the BART tunnels) as well as two new DTI Squirters (the same model as currently installed in the BART Tunnels). It is BIHJV understanding that the SFMTA may decide to replace load cells #M1-75A and #M2-75A currently installed in the BART existing tunnels with the instruments hereby provided by BIH-JV and that the replacement operation will occur without BIHJV technical support."	
1252-0140a			Installation of Water Pipe, Sewer, Bulb-outs, and Sidewalk Widening in North Beach					+562,247	PCC 20 includes: • Furnish and install water piping for the San Francisco Water Department (SFWD) • Furnish and install sewer catch pits, manholes, and piping for the San Francisco Public Utilities Commission (SFPU) • Furnish and install additional sidewalk pavement (widening and bulb-outs), crosswalk ramps, curb, gutter, reinforced bus-pads, street base and pavement for the San Francisco Municipal Transportation Agency, Sustainable Streets Division (SFMTA) 05/14/14 - Item reviewed at CMB mtg. during review of weekly Trend/Change log. - CMod 36 will be issued for \$328,860K for install of water pipe.	
1252-0140b			Installation of Water Pipe					+328,860	Cmod 36 in process for installation of Water Main only (Lump Sum \$328,860).	
1252-0141			SB Tunnel Material Conditions					TBD	BIHJV claims to have encountered soil conditions different from those described in the GBR and Contract Documents on April 15, 2014, while excavating the Southbound (SB) tunnel. 05/14/14 - Item reviewed at CMB mtg. during review of weekly Trend/Change log.	
1252-0142			Contract Milestone Changes					-0	Contract Modification to modify the sequencing of tunnel construction and cross passage construction. 05/14/14 - Item reviewed at CMB mtg. during review of weekly Trend/Change log.	
<b>Contract 1252 Totals</b>								<b>8,606,634</b>	<b>Total Changes and Potential Change (trends) to the contract are currently \$8,606,634</b> <b>Out of Scope Changes to the Contract for Relocation of TBM (Trend 79, PCC 10) to be paid out of CPT690, funded separately. Not include in total above and being tracked separately from original Program Costs of \$1.5783B</b>	

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<b>CONSTRUCTION TRENDS (Based on #1252 Trending Log and CMod) - SUBTOTALS:</b>						<b>8,606,634</b>	The \$8,606,634 represents an UNDERRUN of allocated contingency. Current Balance = (23,658,463 - 8,606,634 = \$15,051,830. This does not include potential reimbursements from utilities.	
<b>DESIGN TRENDS</b>								
FD-001	084-0001	Narrowing of Platform at UMS	1	CMB-0006	Agree	08/04/10	(800,000)	[In "Current Forecast" - Sep2010 Cost Report.]
FD-002	084-0002	Redux of Station Emergency Ventilation Fans (UMS)	1	CMB-0009	Agree (Conditionally)	08/25/10	(2,000,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]
FD-002	085-0001	Redux of Station Emergency Ventilation Fans (CTS)	1	CMB-0009	Agree (Conditionally)	08/25/10	(500,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]
FD-002	086-0001	Redux of Station Emergency Ventilation Fans (MOS)	1	CMB-0009	Agree (Conditionally)	08/25/10	(500,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]
FD-003	085-0002	Lowering of CTS	1	To be verified	Info Only	08/25/10	+7,000,000	Presented to CMB for information/consideration.
FD-004	084-0003	UMS Structural Configuration	1	CMB-0007	Agree	08/18/10	(8,000,000)	[In "Current Forecast" - Sep2010 Cost Report.]
FD-005	084-0004	UMS Alternate Station Access/Vent Shaft @ Union Square	1	CMB-0010	Agree	12/29/10	(22,500,000)	Documentation to be filed.
FD-006	084-0005	Station Headwalls - UMS	1	CMB-0008	Agree	08/18/10	-0-	
FD-006	086-0002	Station Headwalls - MOS	1	CMB-0008	Agree	08/18/10	-0-	
FD-007		Cross-passages	1	CMB-0018	Agree	09/15/10	-0-	
FD-008		Trolley Re-route @ Columbus & Powell	1	CMB-0017	Agree	09/15/10	+2,000,000	
FD-009	082-0003	ECP to Modify Sidewalk Vault Demolition and Construction Sequence to Facilitate Construction of Joint Utilities Trench and Future UMS Station	1	CMB-0019	Agree	12/15/10	+3,000,000	
FD-010	082-0004	Redesign Stockton Street Sanitary Sewer to conform to SFPUC Sewer Criteria that preclude placement of relocated sanitary sewer under sidewalks	1	CMB-0020	Agree	11/17/10	+2,000,000	
FD-011	082-0005	Reconfigure Routing of Water, Sewer and Gas laterals from buildings on north side of Ellis Street	1	CMB-0021	Agree	11/17/10	+500,000	
FD-012	082-0006	Recognize cost transfers from design allowances allocated to contingency to explicit line items in final design estimates	1	CMB-0022	Disagree	11/17/10	-0-	
FD-013	082-0007	Increase Extent of Sub-sidewalks Vault Secondary Closure Walls and Waterproofing	1	CMB-0023	Agree	11/17/10	+4,100,000	
FD-014	082-0008	Include OCS system for rerouting trolley buses to Fifth Street	1	CMB-0024	Agree	12/15/10	+3,100,000	
FD-015	082-0009	Subsidewalk Vault Secondary Closure Walls for Buildings at 800 Market and 838 Market	1	CMB-0025	Agree	11/17/10	+1,000,000	
FD-016	085-0003	Underpinning of Mandarin Tower	1	CMB-0011	over taken by FD-021	01/19/11	+5,000,000	Additional Information Pending.
FD-017	085-0004	CTS Ground Improvement	1	CMB-0012	over taken by FD-021	01/19/11	+10,300,000	Additional Information Pending.
FD-018	084-0006	UMS Apple Store Entrance	1	CMB-0013	Disagree	11/10/10	-0-	Additional Information Pending.
FD-019	086-0003	MOS TOD Configuration	1	CMB-0014	Agree	11/10/10	TBD	
FD-020	084-0007	UMS Emergency Stair #4 Relocation	1	CMB-0015	Agree	11/10/10	TBD	
FD-021	085-0005	CTS Lowering and Stations Reconfiguration	1	CMB-0027	Agree	01/19/11	(18,000,000.00)	Agreement with changes to project configuration only. Additional Information required related to cost and schedule impacts. No agreement on Design cost impact, Design costs directly related to this change to be tracked separately
FD-022	084-0008	Sewer Replacement along Geary & O'Farrell	1	CMB-0029	Agree	02/23/11	(134,000)	This trend has both an EPC number as well as a Construction Trend Number. See also Construction Trend No. 1251-0003

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FD-023	Emergency walkways through crossover cavern changed from outside the main tracks to between the main tracks.	1	CMB-0032	Agree	07/27/11			
FD-024	Diamond crossover on surface segment to a tandem (universal) crossover.	1	CMB-0033	Agree	08/24/11	(350,000)		
FD-025	Bid Option for TBM Retrieval Shaft		CMB-0034	Agree	04/13/11	(10,000,000)	Will require changes to Bid Schedule to incorporate Traffic, Utilities and Pavement Demo/Restoration as incidental costs to the Bid Option. Estimated DP1 cost impact is approx. 80-100 hrs. of engineering time.	
FD-026	Air Replenishment System for Stations	1	CMB-0040	Agree	07/13/11	+1,245,000	Install air replenishment system at MOS, CTS and UMS to address the requirements of the SFFD Bulletin 5.07. The air replenishment system will be used to fill firefighter's self-contained breathing apparatus during firefighting operations in the three subway stations.	
FD-027	1 Stockton street (Apple Store) Secondary Closure Wall		CMB-0043	Agree	08/03/11	+500,000	1) Add secondary closure wall to supplement recently completed primary closure wall built by owner to isolate the sub-sidewalk basement of 1 Stockton Street (Apple Store). 2) Modify position of joint trench (and all associated conduits, ducts etc.) for secondary closure wall to be constructed.	
FD-028	MOS Revisions to Emergency Ventilation Requirements		CMB-0052	Agree	09/07/11	+500,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. <b>Project Controls estimated \$321,645.</b>	
FD-029	CTS Revisions to Emergency Ventilation Requirements		CMB-0053	Agree	09/07/11	+1,000,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. <b>Project Controls estimated \$411,895.</b>	
FD-030	UMS Revisions to Emergency Ventilation Requirements		CMB-0054	Agree	09/07/11	+1,000,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. <b>Project Controls estimated 733,420.</b>	
FD-031	Accessibility Improvements at the SE corner of Union Square (UMS)							
FD-032	Union Square Entrance Reconfiguration (UMS)							
FD-033	Additional Compensation Grouting due to Tunnel Settlement Alert and Trigger Levels (All Stations)					+21,040,000	ECP dated 11/17/11. ECP being routed for approval.	
FD-034	Operational Performance and Safety Enhancement at 4th and King		CMB-0062	Agree	12/14/11	+450,000	SFMTA Operations requested that the design of the 4th & King tie-in work be expanded to include a number of improvements at the junction involving the turn-back area extending to the scissors crossover at 6th & King. SFMTA Ops confirmed that the requested changes result in an arrangement that is consistent with standard operation practices and therefore does not involve new or unacceptable risks. CS 1553 Memorandum No. 0081. Conditionally agreed upon verification/resolution of Buy America issue for the switches. <b>3/14/12: "Buy America" issue no longer applicable. Revised ECP element - remove H&amp;K switch machines and replace with hydraulic/120V switch machines such as Nortrak or equal.</b>	
FD-035	Tunnel Air Replenishment System		CMB-0071	Agree	07/11/12	+1,215,000	Design and construct a fire fighter air replenishment system for Central Subway tunnel as described in SF Fire Code 511.2, Bulletin 5.07 except as noted in the Central Subway Request for Approval of Variance for the ARS Design Impact: ROM - \$215K Construction Impact: ROM - \$1M	
FD-036	Surface Segment Sewers - 4th St.		CMB-0072	Agree	07/18/12	+2,200,000	Replace current unreinforced brick crown from 1906 as it may not be able to withstand loading for construction of the CS trackway section. Reconstruct manholes between Brannan and King Streets as existing are in conflict with proposed rail. Replace service laterals and provide sleeves for future replacement. Additional potential scope option of \$1.5M-Sewer and \$2.3M-Force Main may be requested. If so, it will be Cost to SFPUC	
FD-037	Platform Display System Signs		CMB-0077	Agree (Conditionally)	08/29/12	+500,000	Modify Stations (Contracts 1253, 1254 and 1255) and Surface, Track and Systems (Contract 1256) technical specifications and drawings for the Platform Display System (PDS) to match the changes made to the PDS units being supplied under the Integrated Systems Replacement (ISR) Project, Contract No.1260. <b>08/29/12 - CMB agreement condition upon follow up action to evaluate procurement by CN1260</b>	

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FD-038	Elongated Sidewalk Bulb-out at Chinatown Station		CMB-0121	Agree	06/05/13	+36,000	<p>CTS Sidewalk Bulb out (Southwest corner Stockton/Washington To bring the Central Subway Project - Chinatown Station in closer conformance wit the City's General Plan, SF Planning Department in its May, 2012 GPR Letter (recommends) making design changes specifically the extension of the sidewalk bulb-out at Stockton Street to help create a "station plaza". This elongated bulbout on the southwest corner (SWC) of Stockton and Washington Streets in front of the station headhouse would also include bike racks, benches, trees and other landscape features.</p> <p>06/05/13 - CSDG designer estimate cost is not a CS expense. Addl funding source will need to be establish by San Francisco Planning to support the investigation study</p> <p>Design Impact: Estimated Construction Cost ROM \$36,200                      Construction Impact:                      Estimated ROM 97 Hrs.: DPW Pavement/Sidewalk Design Modification                      Estimated ROM 60 Hrs.: CSDG bus door/mirror/tree/bike rack coordination</p>	
<b>FINAL DESIGN TRENDS (Based on All ECPs) - SUBTOTALS</b>						<b>+4,902,000</b>	<b>Incorporated budget increases have been absorbed by allocated and unallocated funds and the program budget to date remains \$1,578,300,000.</b>	
<b>OTHER TRENDS</b>								
X51-001	082-0001	1251 Revised estimate, escalation impact and contingency.	7			+9,532,314	Cost Transfer #0033 (Base \$\$), 0033a (Allocated Contingency), 0036 (Base \$\$ Escalation , 0036a (Allocated Contingency Escalation). [Sep2010 Cost Report]	BT-0033, BT-0033-A, BT0036, BT-0036-A
X51-002	082-0002	Form B Credit for 1251 Utilities	7			(7,697,949)	Reserve and Contingencies removed as per communications with PG&E. This is consistent with the 1250 utility agreement. [ Cost Transfer #0034 - Aug2010 Cost Report].	BT-0034
X52-001	083-0001	1252-(TUN) Revised estimate, escalation impact and contingency	7			(2,165,462)	Cost Transfer #0035 (Base \$\$), 0035a (Allocated Contingency), 0037 (Base \$\$ Escalation , 0037a (Allocated Contingency Escalation). [Sep2010 Cost Report]	BT-0037, BT-0037-A
X03-001	003-0001	OEWD's Pilot Training Program	7			+75,000	Workforce training pilot program in conjunction with the City/County's Office of Economic and Workforce Development (OEWD). Provides specialized training to SF residents to perform tunneling work. Central Subway financial responsibility being investigated. Requires further clarification	
X53-001	084-0001	CS 155-2 (DP2) CBP4 - Construction Budget Adjustment YOY	7	CMB-0044	Agree	07/27/11	Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure	
X53-002		Change UMS Advertise Date to April 4th, 2012					DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.	
X53-003	084-0002	CN1253 (UMS) Construction Budget Adjustment 90%				+55,720,600	CMB is currently vetting the 90% estimate of \$221,534,723 which represents a \$XX increase from the 65% base amount in 2010\$. Increase would deplete current YOY dollars and require use of unallocated contingency.	
X53-004	084-0002	Approve/Execute/Certify durations change for UMS Contract					Shortened the duration for Approve/Execute/Certify - UMS Contract from 40 to 24days to reflect an optimistic but doable duration for contractor submittals.	
X54-001	085-0001	CS 155-2 (DP2) CBP5 - Construction Budget Adjustment YOY	7	CMB-0045	Agree	07/27/11	Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure	
X54-002		Change CTS Advertise Date to May 23rd, 2012		CMB-0061	Agree	12/28/11	DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.	
X54-003		Change CTS Advertise Date to February 8th, 2012					Change CTS Advertise Date from May 23, 2012 to February 8, 2012 (-74 working days)	
X54-005		Revisions to CTS Construction Schedule		CMB-0060	Agree	12/28/11		
X54-006	085-0002	CS 155-2 (DP2) CBP4 - Construction Budget Adjustment - allowed	7					
X55-001	086-0001	CS 155-2 (DP2) CBP6 - Construction Budget Adjustment YOY	7	CMB-0046	Agree	07/27/11	Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure	
X55-002		Change MOS Advertise Date to June 25th, 2012					DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.	
X55-003		Change MOS Advertise Date to May 23rd, 2012					Change MOS Advertise Date from June 25, 2012 to May 23, 2012 (-22 working days)	
X55-004		Change MOS Advertise Date to Aug 20, 2012					Change MOS to August 20, 2012	
X56-001		Change STS Advertise Date to July 27th, 2012					DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out the Station's Advertise Dates. STS Advertise Date is staggered from Station's Advertise Dates.	

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
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- 6 - Private Utilities
- 7 - Other

**CENTRAL SUBWAY PROJECT**

*Project Trend/Change Control Log*

Item #	CMB No.	Change Description	Change Type	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date				
						Actual/Forecast			
X56-002		STS Construction Schedule Revision for Equipment Procurement							
X56-003		Change STS Advertise Date to October 1, 2012					Change STS Advertise Date to October 1, 2012		
X40-001	028-0001	SFPUC CDD Updated Budgets	7		Authorized	+505,127	1250 SFPUC CDD Monthly Service Report Final & 1251 SFPUC CDD Estimate	BT-0172, BT-0177	
X80-001	071-0001	DP1: CS 155-1 Modifications No. 2 & 3	see Prof. Serv		Authorized	+560,585	Modification No. 2: \$395,584.59, Modification No. 3: \$165,000. Individual details listed in Professional Services. See trend 1551-0002,1551-0005 - 1551-0009	BT-0170, BT-0171, BT-0173	
X80-002	071-0002	DP1: CS 155-1 Modification No. 4	7		Authorized	+135,898	Modification No. 4: \$135,898 Individual details listed in Professional Services. See trends 1551-0010 - 1551-0014.	BT-0187	
X80-003	029-0001	Increase City Auditor Budget	7		Authorized	+50,220	Reduce unallocated Contingency to increase City Auditor budget as authorized in Budget Authorization #51.	BR#51, BT-0181	
X80-004	232-0001	Increase SFCTA Budget	7		Authorized	+20,000	Increase SFCTA budget per Budget Authorization #51 to conduct travel forecast (TEP CEQA Modeling) to satisfy PMO review and SFMTA Fleet Plan light rail vehicle.	BR #51, BT-0182	
X80-005	072-0001	DP2: CS 155-2 Modification No. 1	7		Authorized	+1,010,000	Modification No. 1: \$1,010,600 Individual details listed in Professional Services. See trends 1552-0002, 1552-0003 and 1552-0005.	BT-0194, BR#53	
X80-006	072-0002	DP2: CS 155-2 Exercised Options	see Prof. Serv		Authorized	+366,771	Individual details listed in Professional Services. See trends 1552-0001, 1552-0007 and 1552-0014.	BT-0023, BT-0194	
X80-007	151-0001	Operations SFMTA Transit Services			Authorized	+50,000	CSP request services to support and test OCS for 30/45 trolley reroute. Authorized per Budget Revision #53	BR #53, BT-0189	
X80-008	081-0001	SFMTA Safety, Training, Security & Enforcement Div PCOs	7		Authorized	+60,000	CSP request PCOs to support 1251 and 1252 construction for one year. Authorized \$60,000 per Budget Revision #45.	BR #45, BT-0190	
X80-009	016-0001	SFMTA Sustainable Streets 30 and 45 re-route	7		Authorized	-0-	CSP request services to support 30/45 trolley reroute. \$162,600 was reduced from DPT staffing plan budget.	BT-0188	
X80-010	073-0001	DP3: CS 155-3 Modification No. 1	7		Authorized	+152,882	Modification No. 1: \$152,882 Individual details listed in Professional Services. See trends 1553-0012 and 1553-0013.	BT-0203	
X80-011	073-0002	DP3: CS 155-3 Exercised Options	see Prof. Serv		Authorized	+1,026,398	Individual details listed in Professional Services. See trends 1553-0001 - 1553-0004, 1553-0006, 1553-0009 - 1553-0011, 1553-0014. <b>Updated from \$971,686 to include Trend 1553-0014.</b>	BT-0203	
X80-012	151-0002	OCS materials procured directly for work in reference to CN1251 CMOD#12.		CMB-0065	Agree	1/25/2012, 2/29/12	+126,149	See also Trend 1251-0023	
X80-013	073-0003	DP3: Provide Vibration Impact Analysis and Extend PC Support Technical and CSP Quality Manager	1				+133,906	Amend #2: Vibration Impact Analysis \$38,380 Amend #3: PC Support Tech \$34,483; Quality Manager - \$61,043	TBD
X80-014		For combining the stations and track and systems into Contract 1300 (SSTS)	7					Combined all the Station ad Track and Systems into one Contract. Removed the buffer float activities from the statin to track and systems and overlapped work that can now be done concurrent.	
X80-015		Changing the Bid Opening date and condensing the Contract Duration for Contract 1300	7		Agree	11/14/12		Change bid opening to March 19, 2013 and reevaluated procurement durations, revised calendars for UMS Garage, revised production rates for steel. 11/14/13 CMB Agreed verbally to change @ Mtg #101	
X80-016		Change to Tunnel and CTS interface and buffer float Contract 1300 (SSTS)	7		Agree	01/23/13		Change (MPS) reducing the number of days currently in (from 550 calendar days from NTP to 450 calendar days) for the key interface between CTS and the tunnel completion. Reduced number of days will be issued as part of Add #3 of the 1300 contract. 1/23/13 CMB Agreed verbally to change @ Mtg #111.	
<b>OTHER TRENDS (Based on Various Trends)</b>						<b>+59,662,439</b>	<b>Current Forecast reflects a net +3,537,933 unfavorable impact for all Other Trends.</b>		
<b>GRAND TOTALS</b>						<b>+73,171,073</b>	<b>Current Forecast reflects an estimated net +68,635,132 3 unfavorable exposure to the project to date. Incorporated budget increases have been absorbed by allocated and unallocated funds and the program budget to date remains \$1,578,300,000.</b>		

**PROFESSIONAL SERVICES TRENDS:** The following trends are listed for administrative purposes. The dollar amounts are reflected in the "Other Trends" section of this log in the form of cost (budget) transfers - i.e. CCOP's. The total values indicated for each professional contract are for tracking all potential cost exposures and may or may not be approved.

Contract CS-155-1

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 7 - Other

**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
				Approval Action	Approval Date	Actual/Forecast		
1551-0001	071-0001	Conform Contract Terms per Negotiations from 10/2/09 to 11/6/09	7			-0-	To be addressed in Amendment 1.	Amendment 1 Pending
1551-0002	071-0002	Project Office Delay (Adjustments for OH Rate and Team Productivity impact)	7	Authorized	07/29/11	+101,411	Amendment Signed by ED/CEO 7/29/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #2</b>	Amendment 2 Approved
1551-0003	071-0003	Additional Construction Support for CP-1	7					
1551-0004	071-0004	Redesign Required by Barney's and PUC for CP-2	7					
1551-0005	071-0005	Archeological Monitoring 16.20.C1 (total)	7	Authorized	07/29/11	+197,173	Amendment Signed by ED/CEO 7/29/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #2</b>	Amendment 2 Approved
1551-0006	071-0006	Eyebolts	7	Authorized	07/29/11	+50,000	Amendment Signed by ED/CEO 7/29/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #2</b>	Amendment 2 Approved
1551-0007	071-0007	Secondary Closure Walls 800/838 Market	1	Authorized	07/29/11	+47,400	Amendment Signed by ED/CEO 7/29/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #2</b>	Amendment 2 Approved
1551-0008	071-0008	Delete Optional Tasks - Tasks 1-14	1			-0-	Deleted Options in the amount of (\$529,952) in Amendment has been reversed through Budget Authorization #50. <b>COMPLETE, NO FURTHER ACTION; Amendment #2</b>	Amendment 2 Approved
1551-0009	071-0009	CTS Lowering	1	Authorized	12/08/11	+165,000	Amendment Signed by ED/CEO 12/8/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #3</b>	Amendment 3 Approved
1551-0010	071-0010	Modify Sidewalk Vault Demo ECP-FD009	7	Authorized	12/08/11	+39,311	Amendment Signed by ED/CEO 12/8/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #4</b>	Amendment 4 Approved
1551-0011	071-0011	Modify Stockton St. Sewer ECP-FD010	7	Authorized	12/08/11	+4,112	Amendment Signed by ED/CEO 12/8/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #4</b>	Amendment 4 Approved
1551-0012	071-0012	Reconfigure Utilities N. Side Ellis ECP-FD011	7	Authorized	12/08/11	+2,448	Amendment Signed by ED/CEO 12/8/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #4</b>	Amendment 4 Approved
1551-0013	071-0013	Extend SubSidewalk Closure Wall ECP-FD013	7	Authorized	12/08/11	+85,233	Amendment Signed by ED/CEO 12/8/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #4</b>	Amendment 4 Approved
1551-0014	071-0014	Reroute OCS to Fifth St. ECP-FD014	7	Authorized	12/08/11	+4,794	Amendment Signed by ED/CEO 12/8/11 <b>COMPLETE, NO FURTHER ACTION; Amendment #4</b>	Amendment 4 Approved
1551-0015	071-0015	Retrieval Shaft Redesign - Sewer By Pass	7			+56,000	Awaiting documentation from Designer	
1551-0016	071-0016	Design Measures for Settlement Protection	7			+99,000	Awaiting documentation from Designer	
1551-0017	071-0017	Incorporate Headwalls MOSUMS	1	Disagree at this time	11/01/11	+42,000	In letter dated November 1, 2011 DPM responded that until concurrence with DP2 on cost transfer or additional documentation, the requested change is denied.	
1551-0018	071-0018	Prepare Utility Composite	-	Disagree	11/01/11	+50,000	DPM responded that Program does not agree in letter dated November 1, 2011.	
1551-0019	071-0019	Incorporate Cross Passages	1	Disagree at this time	11/01/11	+43,000	In letter dated November 1, 2011 DPM responded that until concurrence with DP2 on cost transfer or additional documentation, the requested change is denied.	
<b>Contract CS-155-1 Total</b>						<b>+986,882</b>	<b>Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP1 allocated contingency in the amount of \$696,483 of a total budget of \$705,000. Additional potential exposure is +\$391,411. Currently, overall contract value remains unchanged in the amount of \$6,500,000.</b>	
<b>Contract CS-155-2</b>								
1552-0001	072-0001	Optional Task 2.50 and Task 12.07	1	Authorized	05/06/10	+274,775	CS Letter 0473 from ED/CEO Optional Task 2.50 to support art enhancement activities NTE \$164,383 and Optional Task 12.07 to support design structures for Public Art NTE \$110,392.	
1552-0002	072-0002	Expanded Hydraulic Testing at CTS	7	Authorized	07/01/10	+26,100	Estimated cost breakdown is included in the 7/1/10 letter from CSDG and includes signed approval by SFMTA. Amendment No. 1 authorized by ED/CEO on 12/21/11. <b>COMPLETE, NO FURTHER ACTION; Amendment #1</b>	Amendment 1 Approved
1552-0003	072-0003	Additional Soil Borings at UMS Station - Task No. 3.10 Supplemental Investigations	7	Authorized	11/02/10	+34,500	Estimated cost breakdown is included in the 10/11/10 letter from CSDG and includes signed approval by SFMTA. Amendment No. 1 authorized by ED/CEO on 12/21/11. <b>COMPLETE, NO FURTHER ACTION; Amendment #1</b>	Amendment 1 Approved
1552-0004	072-0004	MOS TOD White Paper Proposal	1			+33,847	Conceptual study will assess a potential high rise building at the Moscone station headhouse. Estimated cost breakdown is included in the 2/11/2011 letter from CSDG - <b>On Hold.</b>	
1552-0005	072-0005	CTS - Alternate 5	7	Authorized	03/24/11	+950,000	CS Letter from DED dated 3/24/11 has agreed to a modification of \$950,000 for performing additional work. Amendment No. 1 authorized by ED/CEO on 12/21/11. <b>COMPLETE, NO FURTHER ACTION; Amendment #1</b>	Amendment 1 Approved
1552-0006	072-0006	Audited Overhead Rate Adjustment for Year 2010 - Request for Amendment	7			-0-	Estimated cost of \$406,320 is included in the 6/28/11 letter from CSDG. <b>See 1552-0006 Rev. 1 for most current estimate</b>	

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
				Approval Action	Approval Date	Actual/Forecast			
1552-0007	072-0007	REVIT and CAD Support (to City Staff) Option to DP2 Contract (Optional Services Task 12.12)	1		Authorized	07/25/11	+79,200	CS Letter No. 0768 from ED/CEO dated 7/25/11 has authorized Optional Task 12.12 NTE \$79,200.	
1552-0008	072-0008	MOS Revisions to Emergency Ventilation Requirements	-		Provide further Justification	09/07/11	-0-	CMB did not approve a \$60,000 proposed increase. Document References ECP FD028, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0009	072-0009	CTS Revisions to Emergency Ventilation Requirements	-		Provide further Justification	09/07/11	-0-	CMB did not approve an \$80,000 proposed increase. Document References ECP FD029, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0010	072-0010	UMS Revisions to Emergency Ventilation Requirements	-		Provide further Justification	09/07/11	-0-	CMB did not approve a \$100,000 proposed increase. Document References ECP FD030, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0011	072-0011	Audited Overhead Rate Adjustment for Year 2010 - Request for Amendment - Rev. 1	7				+426,322	Estimated cost breakdown is included in the 8/17/11 letter from CSDG. This is a revision to the 6/28/11 letter and cost breakdown.	
1552-0012	072-0012	Station Air Replenishment System	-		Disagree	10/17/11	+36,240	Estimated cost breakdown is included in the 8/23/11 letter from CSDG. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0013	072-0013	COR for Additional Services Related to MOS Constructability Review and Assessment of Alternatives	-				-0-	Cost charged to Task 2.70- part of base work	
1552-0014	072-0014	Proposal for Additional Work to provide Structural Engineering Support (Optional Services)	1		Authorized Optional Task 12.01.C5 only	11/04/11	+35,724	Estimated cost breakdown is included in the 9/22/11 letter from CSDG. Referenced Optional Work Tasks 12.01.C5 and 12.07.C5 - Effort re-evaluated - proposed cost to be resubmitted. <b>CS Letter No. 1232 dated 11/4/11 from Director of Transportation has authorized Optional Task 12.01.C5 for the amount of \$12,796.</b>	Option
<b>Contract CS-155-2 Total</b>							<b>+1,896,708</b>	<b>Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP2 allocated contingency in the amount of \$1,046,324 of a total budget of \$4,890,707. Overall contract value remains unchanged in the amount of \$39,949,959.</b>	
<b>Contract CS-155-3</b>									
1553-0001	073-0001	Authorization to commence optional tasks 9.20J Technical Specifications Item J Facility SCADA	1		Authorized	08/01/11	+259,305	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0002	073-0002	ation to commence optional tasks 12.05 Architectu	1		Authorized	08/01/11	+257,129	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0003	073-0003	Authorization to commence optional tasks 12.13J Facility SCADA Design	1		Authorized	08/01/11	+169,553	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0004	073-0004	Authorization to commence optional tasks 12.12E traction power cables for CAD production	1		Authorized	08/01/11	+52,800	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$738,787 in optional tasks. <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0005	073-0005	Proposal to hire Wilson Ihrig to support Acoustics, Noise and Vibration tasks.	7		Authorized	03/08/12	+38,380	Signed by Director of Transportation 3/8/2012. <b>COMPLETE, NO FURTHER ACTION ; Amendment 2</b>	Amendment 2 Approved
1553-0006	073-0006	Proposal to exercise optional task 12.07 Public Art.	1		Authorized	11/04/11	+10,285	Letter dated 9/22/11 to DOM. PMCM response pending. Priced level of Effort assumed for this task. SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task.	
1553-0007	073-0007	Proposal to exercise optional sub-task 12.12 structural design of the OCS attachments.	7				+59,460	Letter dated 9/27/11 to DOM. <b>NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHANGE.</b> PMCM has responded to clarify scope in stations and Tunnel Design. Awaiting resubmittal of request by DP3	
1553-0008	073-0008	Scope Clarification - Add Emergency and Location Signage.	7		Disagree A.12.08-Signage	11/09/11		Letter dated 10/5/11 to DOM. <b>NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHANGE.</b> CS Memo No. 0892 from DOM to DP3 PM considers A.12.08 Signage as part of the work necessary to complete the trackway elements of the scope. The work in question is considered part of the base scope of services.	
1553-0009	073-0009	Proposal to exercise mechanical optional task A 12.11 to design a water line on the FBS station platform.	1		Authorized	11/04/11	+33,000	SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0010	073-0010	Proposal to exercise Task 12.01 Surface Segment site Drainage	1		Authorized	11/04/11	+108,240	SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option

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**CENTRAL SUBWAY PROJECT**

**Project Trend/Change Control Log**

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
				Approval Action	Approval Date	Actual/Forecast		
1553-0011	073-0011	Proposal to exercise Task 12.02 Sewer Relocation and Analysis Report.	1	Authorized	11/04/11	+81,374	SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0012	073-0012	CTS - Alternate 5	7	Authorized	01/18/12	+88,855	Contract Modification No. 1 authorized by ED/CEO on 1/18/12 <b>COMPLETE, NO FURTHER ACTION; Amendment #1</b>	Amendment 1 Approved
1553-0013	073-0013	Proposal for Geotechnical Services	7	Authorized	01/18/12	+64,027	Letter dated October 7, 2011 to DOM. PM/CM response pending. Contract Modification No. 1 authorized by ED/CEO on 1/18/12 <b>COMPLETE, NO FURTHER ACTION; Amendment #1</b>	Amendment 1 Approved
1553-0014	073-0014	Authorization to commence optional tasks 12.12E traction power cables for CAD production, Optional task 2.50 Coordination with Art		Authorized	02/06/12	+54,712	SFMTA Letter 1381 from Director of Transportation dated 2/06/12 authorizing optional tasks 12.12e in the amount of \$41,280 and 2.50 for \$13,432 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0015	073-0015	Proposal for additional services in Response to Approved (ECP) FD-034 Operation Performance and Safety Enhancements to 4th and King and 6th and King.	1			+26,026	FD-034 was updated by CMB on 3/14/12. Proposal transmitted via letter CS1553 No. 0012 dated 3/20/12 to DOM. <b>Amendment #4 PENDING</b>	Option
1553-0016	073-0016	Proposal for additional work - Tunnel Air Replenishment System (Exercise Optional Service)	7	Authorized	04/26/12	+173,119	SFMTA letter 1658 from Director of Transportation dated 4/26/2012 authorizing \$173,119 in optional tasks. Included in FD-035 to be presented to CMB on 6/26/12	Option
1553-0017	073-0017	Extension of PC Support Technician	1	Authorized	05/04/12	+34,483	Signed by Director of Transportation 5/14/12 <b>COMPLETE, NO FURTHER ACTION; Amendment #3</b>	Amendment 3 Approved
1553-0018	073-0018	Extension of CSP Quality Manager	1	Authorized	05/04/12	+61,043	Signed by Director of Transportation 5/14/12 <b>COMPLETE, NO FURTHER ACTION; Amendment #3</b>	Amendment 3 Approved
1553-0019	073-0019	Authorization to commence optional task 12.02 Utility Plans for design of repositioned and reconstructed manholes for the 78 inch diameter sewer on 4th St.	1	Authorized	04/09/12	+52,712	SFMTA Letter 1630 from the Director of Transportation dated 4/9/2012 authorizing optional task 12.02 in the amount of \$52,712 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0020	073-0020	Authorization to commence optional task 12.12 civil and structural support for traction power duct banks	1	Authorized	04/09/12	+109,000	SFMTA Letter 1630 from the Director of Transportation dated 4/9/2012 authorizing optional task 12.12 in the amount of \$109,000 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0021	073-0021	Authorization to commence optional task 12.11 design of the tunnel based Air Replenishment System including fill panels, feeder pipes, gauges, valves, fire proofing, anchors, supports, low level alarms, wiring, signage, connections to SCADA and monitoring devices, equipment placement, and impact protection	1	Authorized	04/26/12	+173,119	SFMTA Letter 1658 from the Director of Transportation dated 4/26/2012 authorizing optional task 12.11 in the amount of \$173,119 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0022	073-0022	Increased authorization for optional task 12.12.e CAD production support	1	Authorized	04/26/12	+30,000	SFMTA Letter 1658 from the Director of Transportation dated 4/26/2012 authorizing the increase in optional task 12.12e in the amount of \$30,000 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0023	073-0023	Authorization to commence option task 12.11 structural design support for Fire Protection and Plumbing designs	1	Authorized	05/21/12	+39,204	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.11 in the amount of \$39,204 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0024	073-0024	Authorization to commence optional task 12.12 structural design support for Traction Power and Power/Lighting designs	1	Authorized	05/21/12	+43,638	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.12 in the amount of \$43,638 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0025	073-0025	Authorization to commence optional task 12.13 structural design support for Telephone and CCTV designs	1	Authorized	05/21/12	+24,328	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.13 in the amount of \$24,328 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
1553-0026	073-0026	Authorization to commence optional task 9.20 Technical Specifications for structural design support for above designs	1	Authorized	05/21/12	+3,039	SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 9.20 in the amount of \$3,039 <b>COMPLETE, NO FURTHER ACTION; OPTION</b>	Option
<b>Contract CS-155-3 Total</b>						<b>7,814,010.46</b>	<b>Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP3 allocated contingency in the amount of \$1,168,995 of a total budget of \$4,598,725. Overall contract value remains unchanged in the amount of \$19,919,526.</b>	

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 7 - Other

**CENTRAL SUBWAY PROJECT**

*Project Trend/Change Control Log*

Item #	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
				Approval Action	Approval Date			

- 1 - Owner Directed Change in Scope
- 2 - Unforeseen Conditions
- 3 - Errors and Omissions
- 4 - Quantity Variation
- 5 - Value Engineering
- 6 - Private Utilities
- 7 - Other

# CMB LOG

## CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

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Initial Implementing Procedure				CMB		
Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
1250-0002	Chgs to Sewer on 4th between Howard and Folsom		\$ 107	CMB-0001	Agree	07/12/10
1250-0003	Quantity Adjustment for JT-6 and JT-7		\$ 192	CMB-0002	Agree	08/04/10
1250-0004	Demolition of existing brick and concrete footing on 4th between Howard and Folsom		\$ 170	CMB-0003	Agree	07/12/10
1250-0005	Modify AWSS at 4th/Bryant and 4th/Harrison		\$ 586	CMB-0004	Agree	08/04/10
1250-0006	Install four additional piles and reinforce existing foundation at 401 4th Street		\$ 130	CMB-0005	Agree	08/25/10
FD-001	Narrowing of Platform at UMS		\$ (800)	CMB-0006	Agree	08/04/10
FD-004	UMS Structural Configuration		\$ (8,000)	CMB-0007	Agree	08/18/10
FD-006	Station Headwalls - UMS/MOS		\$ -	CMB-0008	Agree	08/18/10
FD-002	Redux of Station Emergency Ventilation Fans - UMS/CTS/MOS		\$ (3,000)	CMB-0009	Agree (Conditionally)	08/25/10
FD-005	UMS Alternate Station Access/Vent Shaft @ Union Square		\$ (22,500)	CMB-0010	Agree	12/29/10
FD-016	Underpinning of Mandarin Tower		\$ 5,000	CMB-0011	Over Taken by FD-021	01/19/11
FD-017	CTS Ground Improvement		\$ 10,300	CMB-0012	Over Taken by FD-021	01/19/11
FD-018	UMS Apple Store Entrance		\$ -	CMB-0013	Disagree	11/10/10
FD-019	MOS TOD Configuration		TBD	CMB-0014	Agree	11/10/10
FD-020	UMS Emergency Stair #4 Relocation		TBD	CMB-0015	Agree	11/10/10
1250-0016	Additional AWSS modification at 4th/Harrison		\$ 156	CMB-0016	Agree	11/10/10
FD-008	Trolley Re-route @ Columbus & Powell		\$ 2,000	CMB-0017	Agree	09/15/10
FD-007	Cross-passages		\$ -	CMB-0018	Agree	09/15/10
FD-009	ECP to Modify Sidewalk Vault Demolition and Construction Sequence to Facilitate Construction of Joint Utilities Trench and Future UMS Station		\$ 3,000	CMB-0019	Agree	12/15/10
FD-010	Redesign Stockton Street Sanitary Sewer to conform to SFPUC Sewer Criteria that preclude placement of relocated sanitary sewer under sidewalks		\$ 2,000	CMB-0020	Agree	11/17/10
FD-011	Reconfigure Routing of Water, Sewer and Gas laterals from buildings on north side of Ellis Street		\$ 500	CMB-0021	Agree	11/17/10
FD-012	Recognize cost transfers from design allowances allocated to contingency to explicit line items in final design estimates		\$ -	CMB-0022	Disagree	11/17/10
FD-013	Increase Extent of Sub-sidewalks Vault Secondary Closure Walls and Waterproofing		\$ 4,100	CMB-0023	Agree	11/17/10
FD-014	Include OCS system for rerouting trolley buses to Fifth Street		\$ 3,100	CMB-0024	Agree	12/15/10
FD-015	Subsidewalk Vault Secondary Closure Walls for Buildings at 800 Market and 838 Market		\$ 1,000	CMB-0025	Agree	11/17/10
1250-0022	Install additional 30 feet of DIP and new AWSS at 4th/Harrison		\$ 160	CMB-0026	Agree	01/12/11
FD-021	CTS Lowering and Stations Reconfiguration		\$ (18,000)	CMB-0027	Agree	01/19/11
1250-0026	Supporting working around and protecting SFWD existing facilities		\$ 66	CMB-0028	Agree	02/09/11
1251-003	Extending Sewer lines on O'Farrell and Geary - CMod 001		\$ 149	CMB-0029	Agree	02/23/11
1250-0030	Differing site conditions during utility installations - CMod #16 - Public only		\$ 238	CMB-0030	Agree	04/13/11

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Initial Implementing Procedure				CMB		
Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
1251-0004	Additional work related to secondary basement closure wall, 150 Stockton Street		\$ 190	CMB-0031	Agree	04/13/11
FD-023	Change to the emergency walkway configuration in the cross cavern at CTS		\$ -	CMB-0032	Agree	07/27/11
FD-024	Change No. 5 diamond X-over on surface segment to tandem (universal) crossover		\$ (350)	CMB-0033	Agree	08/24/11
FD-025	Bid Option for TBM Retrieval Shaft		\$ (10,000)	CMB-0034	Agree	04/13/11
1251-0002	Installation of concrete slab under joint trench at Stockton and O'Farrell CMod #02 (NTE Total)		\$ 71	CMB-0035	Agree	04/20/11
1250-0029	Adjustment to Additional Excavation and Backfill Bid Item CMod #17		\$ 112	CMB-0036	Agree	05/04/11
1250-0034	Supplement Bid Item TR-06 DPT Traffic Control Allowance CMod #18		\$ 69	CMB-0037	Agree	05/04/11
1251-0009	Supplement Bid Item TR-07- Allowance for Manual Traffic Control with Add'l funds		\$ 263	CMB-0038	Agree	06/01/11
1251-0006	Revising layouts of utilities, northern portion of Stockton Street CMod #05		\$ 399	CMB-0039	Agree	06/08/11
FD-026	Air Replenishment Systems in the three underground stations		\$ 1,245	CMB-0040	Agree	07/13/11
1250-0036	<i>Rental/Maintenance costs for support of Archeological Trenches - 05/30: SFMTA Board approval due to contract value exceeding the 25% threshold remaining item will be handled through the claims process. CM will provide and update at a later date. 09/12/12: Rental/Maintenance costs for support of Archeological Trenches (Part 1 of 4), (Part 2 of 4), (Part 3 of 4), (Part 4 of 4)</i>		\$ 597	CMB-0041	Agree	09/12/12
1251-0012	Compensate Contractor for additional expenses to modified installation of AWSS on O'Farrell East on Stockton St CMod #07 representing change, now CMod #06 (Refer to Approve CMB-0050, which notes the contract modification amount for this work)		-	CMB-0042	Agree	08/03/11
FD-027	1 Stockton Street (Apple Store) Secondary Closure Wall		\$ 500	CMB-0043	Agree	08/03/11
X53-001	CS 155-2 (DP2) CBP4 (UMS) - Construction Budget Adjustment YOY		-	CMB-0044	Agree	07/27/11
X54-001	CS 155-2 (DP2) CBP5 (CTS) - Construction Budget Adjustment YOY		-	CMB-0045	Agree	07/27/11
X55-001	CS 155-2 (DP2) CBP6 (MOS) - Construction Budget Adjustment YOY		-	CMB-0046	Agree	07/27/11
1250-0012 & 0013	Differing site conditions during utility installations - CMod #21 - Private only		\$ 98	CMB-0047	Agree	08/03/11
1250-0024	Costs associated with support, workaround and protection of existing AT&T utilities - CMod #19		\$ 95	CMB-0048	Agree	08/24/11
1251-0007	Costs associated with design changes to utility layouts along Ellis Street - CMod #05		\$ (435)	CMB-0049	Agree	08/24/11
1251-0012	Additional expenses related to modified installation of the AWSS on O'Farrell East of Stockton St - CMod #06 (Ref. CMB-0042 for original CMod presented for this work)		\$ 278	CMB-0050	Agree	09/21/11
1251-0017 & 0018	Installation of AT&T manholes 5829 and 5830 located on Geary at Stockton - CMod #07		\$ 56	CMB-0051	Agree	09/21/11
FD-028	MOS Revisions to Emergency Ventilation Requirements		\$ 500	CMB-0052	Agree	09/07/11
FD-029	CTS Revisions to Emergency Ventilation Requirements		\$ 1,000	CMB-0053	Agree	09/07/11

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Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
FD-030	UMS Revisions to Emergency Ventilation Requirements		\$ 1,000	CMB-0054	Agree	09/07/11
1251-0014	Increase Bid Item WD-10 Allowance for Add'l Excavation and Backfill - CMod #09		\$ 200	CMB-0055	Agree	09/14/11
1251-0027	AT&T installation additional cost to accelerate work - CMod #10		\$ 281	CMB-0056	Agree	11/30/11
1251-0019 & 0028	Installation of AT&T manholes 5828, 5831, 113, 5832 and 403 - CMod #11		\$ 188	CMB-0057	Agree	10/26/11
1251-0020, 0030 & 0031	PG&E Field Changes - Cost will be part of the Form B calculations and be included in the reimbursement from PG&E. ( <b>Formally CMod #12 New CMod number is 21</b> )		\$ 89	CMB-0058	Agree	11/02/11
1251-0024 & 0032	PG&E Field Changes - (Formally CMod #13 New CMod number is 19) 1/25: Revision to the number of Kill Tie in locations will reduced this CMod to \$315K when conditions are satisfactorily met. 04/11 : Discovery of the actual number of Kill/Tie locations being 26 instead of 15 will require confirmation from PG&E of the locations and the new cost of scope of work . 05/02: Previously approved CMod for \$349K on 11/16/11. Revised CMod approved for 12 Kill hole locations and "NTE" value. PGE email concurrence presented 05/23/12		\$ 303	CMB-0059	Agree	11/16/11
X54-005	Revisions to MPS - CTS Construction Schedule		\$ -	CMB-0060	Agree	12/28/11
X55-002	MPS - STS Construction Schedule Revision for Procurement of Equipment		\$ -	CMB-0061	Agree	12/28/11
FD-034	STS 4th and King Operational Performance and Safety Enhancements. 12/14/11: Agree contingent up "Buy America" waiver. 03/14: "Buy America" contingency no longer applicable. Revised ECP change element - Removing H&K switches and replace with hydraulic/120V. Revised CSP Design Criteria to reflect element design change. CMB approval of replacement agreed on 03/14/12. Revision made to the approved ECP at Mtgs. #71 & #72.		\$ 450	CMB-0062	Agree	12/14/11
CS-155-2	CS 155-2 (DP2) CTS Construction Budget Adjustment - (65% Submittal)		\$ 45,261	CMB-0063	Agree	12/21/11
1251 -0038 (TO-035 )	CN1251 (3EA) Kiosk Removal; previous work, and Addl (2EA) new work (see CMB 0080 approved on 10/24/12 for \$29,267.83) for all (5EA) Kiosks.		\$ -	CMB-0064	Agree	01/04/12
1251-0023	Overhead Contact System (OCS) Facilities along Folsom St. between 4th & 5th Streets and Installation of Foundations and Poles - <b>CMod #12 (Formally CMod #15 - less than 50K)</b> Condition agreed upon verification material from Contractor to be procured is available. (Verified 02/01/12) . 02/29: CMod negotiated cost has been revised to incorporate original three items and the add'l OCS work on Folsom St.		\$ 542	CMB-0065	Agree	02/29/12
CS-155-2	CS 155-2 (DP2) UMS Construction Budget Adjustment - (65% Submittal)		\$ 27,986	CMB-0066	Agree	02/01/12
CS-155-2	CS 155-2 (DP2) MOS Construction Budget Adjustment - (65% Submittal)		\$ 22,947	CMB-0067	Agree	02/01/12
1251 - 0033	Installation of Secondary Closure Wall at 1 Stockton St. (Apple Store) - <b>CMod #13 (Formally CMod #14)</b> (Negotiated Direct Cost \$264K, & Negotiated OH Cost \$143K)		\$ 409	CMB-0068	Agree	03/07/12



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Initial Implementing Procedure				CMB		
Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
1251-0034	Additional work related to discovery of conflicting utilities within the subsidewalk basement at 17-19 Stockton Street. (Worst case scenario - "NTE" value) CM team will report actual amount value at a later date.		\$ 346	CMB-0069	Agree	04/04/12
1251-0040, 0041, & 0042	Installation of approximately 150LF in additional AT&T trenching (including conduit packages) and the installation of AT&T Vault No.133 (Reimbursement to SFMTA for this compensation value via the Form B process - <b>CMod #14</b>		\$ 100	CMB-0070	Agree	04/11/12
FD-035	Tunnel Air Replenishment System (ARS)		\$ 1,215	CMB-0071	Agree	07/11/12
FD-036	Surface Segment Sewers - 4th St. Base and SFPUC Option		\$ 2,200	CMB-0072	Agree	07/18/12
1252-025	UMS Reduced Duration - 08/01/12: Condition upon incorporating correctness to backup documentation as required by & documented in CMB mtg.		\$ -	CMB-0073	Agree (Conditionally)	08/01/12
1251-0050, 0067, 0074 & 0075	Trend #50 - Installation of MUNI 770 Pole at 5th and Folsom Trend #67 - OCS Feeder Work On Folsom Trend #74 - Traffic Signal Modifications At 5th And Folsom Trend #75 - Unforeseen Conditions During Pole Foundation Installation On Folsom		\$ 1,100	CMB-0074	Agree	08/15/12
1251-0068	Additional time related overhead (TRO) costs resulting from the 29EA calendar day Contract extension		\$ 107	CMB-0075	Agree (Conditionally)	10/03/12
1251-0043, 0072 & 0080	Trend #43 FAR for Demolition of existing AT&T Vault #113 and 403 Trend #72 Additional AT&T trench from Vault #5829 and 127 Trend #80 Additional work related to installation of AT&T Vaults #5828, 5829, 5830, 5831, 5832 and 5833.		\$ 129	CMB-0076	Agree (Conditionally)	10/03/12
FD-037	Platform Display System Signs - 08/29/12: Condition follow up action to evaluate procumbent by CN1260)		\$ 500	CMB-0077	Agree (Conditionally)	08/29/12
1251-0037, 0044 & 0045	Gucci Store, Macy's West and Union Square Garage Sewer Installations		\$ 71	CMB-0078	Agree	09/12/12
1251-0052, 0065 and 0070	Trend #52 - Reroute Unforeseen existing waterline discovered along Geary St (east of Stockton St.) Trend #65 - Additional fittings for AWSS lateral and chipping of pole foundation at Market/Ellis Streets Trend #70 - Core drill primary wall and install interior plumbing at Armani and Disney for the completion of fire service water cutover work.		\$ 65	CMB-0079	Agree	10/10/12

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Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
1251-0038, 0039, 0054,0062 and 0073	Trend #38 - Reimburse Synergy for JCDecaux's removal of 2EA kiosks and other Central Subway related work (TO #35 for this work approved on 01/04/12 - CMB 0064). Trend #39 - Furnish and install 2EA benches along 5th Street. Trend #54 - Additional waterproofing at FIDM and north end of Crate and Barrel. Trend #62 - Additional waterproofing at Macy's Men's wall . Trend 73 - Additional work to install water and electrical utilities for flower stand on Geary west of Stockton.		\$ 86	CMB-0080	Agree	10/24/12
1251-0077	Additional Work Related to Qwest, TCG and UCCO Infrastructure - Contingent CMod pig to include evidence from all utilities that cost are reimbursable to SFMTA		\$ 41	CMB-0081	Agree (Conditionally)	10/31/12
1251-0047, 0058, 0076, and 0078	Muni Vault 900A, Additional SL Work, Additional OCS Work		\$ 76	CMB-0082	Agree	10/31/12
1251-0049, 0053, 0059 and 0064	Contract Acceleration work and Additional Rebar work at 1 Stockton Street Trend #49 Additional cost related to installation of additional rebar at 1 Stockton Street Trend #53 Additional costs to accelerate Contract work related to AT&T and PG&E vaults Trend #59 Additional costs to accelerate Contract work as required to clear Barneys frontage Trend #64 Accelerate finishing/detailing work on AT&T and PG&E vaults		\$ 41	CMB-0083	Agree	11/07/12
1252	Retrieval Shaft Options (Board Action) for approval presented to the Directors by J.F.		-	CMB-0084	Agree	12/05/12
1252-COR26	MOS - Asbestos Pipe at south headwall - NTE \$30K		\$ 30	CMB-0085	Agree	01/09/13
1252-COR02	Pre-excavation to remove concrete encased sewer line. \$13K increase of original \$45K for a total of \$58K NTE		\$ 58	CMB-0086	Agree	12/19/12
1252-COR15	Additional work to restrain the AWSS line - NTE \$96K		\$ 96	CMB-0087	Agree	12/19/12
1252-COR06	PG&E live electrical delays - NTE \$7,600		\$ 8	CMB-0088	Agree	01/09/13
1252-COR27	MOS Oil Filled Pipe at south headwall - NTE \$8,600		\$ 9	CMB-0089	Agree	01/09/13
1252-COR22	MOS Asbestos Pipe at north headwall - NTE \$6K		\$ 6	CMB-0090	Agree	01/09/13
1252-COR01	AWSS Conflict with Low Pressure Water - NTE \$16,900		\$ 17	CMB-0091	Agree	01/16/13
1252-COR03	AT&T Vault Conflict -4th & Harrison - NTE \$21,089		\$ 21	CMB-0092	Agree	01/16/13
1252-COR07	Oil Filled pipe @ Launch Box - NTE \$10K		\$ 10	CMB-0093	Agree	01/16/13
1252-COR10	MOS - Demo Pea duct bank / SF City 911 fiber optic line - NTE \$4,915		\$ 5	CMB-0094	Agree	01/16/13
1252-COR11	MOS - Traffic Signal line re-route south headwall - NTE \$37,500		\$ 38	CMB-0095	Agree	01/16/13
1252-COR12	MOS - Archaeological Standby North Headwall - NTE \$16,892		\$ 17	CMB-0096	Agree	01/16/13
1252-COR29	MOS - Todco scaffolding reimbursement - NTE \$1,717		\$ 2	CMB-0097	Agree	01/16/13

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Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
1252-COR41	LB Impacts due to live PG&E electrical lines (Flagging) NTE \$1,245		\$ 1	CMB-0098	Agree	01/16/13
1252-PCC01	Revisions to Moscone North Headwall Elevation (Top) NTE \$20,500		\$ 21	CMB-0099	Agree	01/16/13
1252-PCC09	UMS Headwall - Unknown Buried Pipe - NTE \$75K		\$ 75	CMB-0100	Agree	01/16/13
1252-COR.38	Manhole in West side Guidewalls Footprint - NTE \$4,052.17		\$ 4	CMB-0101	Agree	01/23/13
1252-COR39	MOS - 16" Steel Pipe Removal at North east Headwall - NTE \$2,951.99		\$ 3	CMB-0102	Agree	01/23/13
1252-COR46	UMS - Unmarked Steel Pipes (6", 12" and 14") & Duct Bank - NTE \$7,461.14		\$ 7	CMB-0103	Agree	01/23/13
1252-COR47	Retrieval Shaft - Unmarked 10" Steel Pipe / Duct Bank Removal - NTE \$2,201.54		\$ 2	CMB-0104	Agree	01/23/13
1252-PCC11	Cap and Removal of 48" Steel Pipe - NTE \$150,000		\$ 150	CMB-0105	Agree	01/23/13
1252-PCC07	BART Annex Wall - NTE \$15,380		\$ 15	CMB-0106	Agree	01/30/13
1251-05, 46, 51, 61, 63, 66, 69, 79, 81	<b>CMod #24 PG&amp;E:</b> 1. Trend 05 – Add'l wok to work around and shift existing PG&E conduits on Geary Blvd. at 2 locations 2. Trend 46 – Additional cost for enlarging PG&E Vault No. 584 on O'Farrell east of Stockton 3. Trend.51 – Intercept existing PG&E ductbank and terminate into Vault No. 5464 Market/Ellis 4. Trend 61 – Excavate for PG&E service cut-over at 177 Stillman 5. Trend 63 – Excavation and restoration for PG&E gas tie-in and kill holes (Pt.2) 6. Trend 66 – Intercept PG&E conduits at Vault No. 573 at Geary east of Stockton 7. Trend 69 – Removal of abandoned PG&E gas valve (8EA and installation of anodes 8. Trend 79 – Additional work related to the installation of PG&E Vault Nos. 467, 571, 573, 586 and 594 (including joint trench leading to these vaults). 9. Trend 81 – Use of regular concrete as opposed to cover PG&E electrical ductbanks.		\$ 333	CMB-0107	Agree	02/13/13
1252-COR031	Retrieval Shaft Unmarked 12" Steel Pipe - NTE \$1,250		\$ 1	CMB-0108	Agree	02/27/13
1252COR-044	MOS - 16" Steel pipe removal at headwall - NTE \$1,800		\$ 2	CMB-0109	Agree	02/27/13
1252-COR050	MOS - 12" Steel pipe removal at Union/Columbus Streets - NTE \$2,600		\$ 3	CMB-0110	Agree	02/27/13
1252-COR058	10" Steel pipe removal at Union and Columbus Streets - NTE \$860.86		\$ 1	CMB-0111	Agree	02/27/13
1252-COR066	MOS - 12" Steel pipe removal intersection of Union and Columbus - NTE \$3,800		\$ 4	CMB-0112	Agree	02/27/13
1252-PCC03	Modified Stockton St. Detour Signage Plan - NTE \$6,152.60		\$ 6	CMB-0113	Agree	02/27/13
1252-COR048	Removal of 3" x 5" brick sewer at UMS South Headwall - NTE \$12,474.65		\$ 12	CMB-0114	Agree	03/13/13
1252-COR070	LB Jet Grout Quantity Overrun - Bid Item ES-3 - NTE \$599,900		\$ 600	CMB-0115	Agree	04/03/13

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Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
1252-COR079	Compensation Grouting - Old Navy - NTE \$70,000		\$ 70	CMB-0116	Agree	04/26/13
1252-COR079	Compensation Grouting - Old Navy (Inefficiencies) - NTE \$152,000		\$ 152	CMB-0117	Agree	05/15/13
1252-COR073	MOS - 16" Pipe removal at NE Headwall - NTE \$989		\$ 1	CMB-0118	Agree	05/08/13
1252-COR076	MOS - 16" Pipe removal at SE Headwall - NTE \$1,116		\$ 1	CMB-0119	Agree	05/08/13
1252-COR081	12" Waterline Tee Connection (MOS) South - NTE \$3,000.63		\$ 3	CMB-0120	Agree	05/15/13
FD-038	Elongated Sidewalk Bulb-out Chinatown Station at Stockton St. (CTS) 1254R - 1300Pkg		\$ 36	CMB-0121	Agree	06/05/13
1252-PCC13	UMS SFWD - Excavate, Support and Backfilling - NTE \$20K		\$ 20	CMB-0122	Agree	06/19/13
1252-COR051	Retrieval Shaft - Elevation Design Conflict (30" Low psi Water / Sewer)		\$ 21	CMB-0123	Agree	07/10/13
1252-PCC06	<del>Additional Instrumentation of BART Tunnel Lining - NTE \$650K - Voided - Superseded by CMB Change #0130</del>		\$ -	CMB-0124	Agree	07/10/13
1252-COR061	Launch Box - Panel - 17 Buried Water Main Obstruction - NTE \$1,100		\$ 1	CMB-0125	Agree	07/24/13
1252-COR077	Compensation grouting at WFB-5 Drilling Obstruction - NTE \$6,125		\$ 6	CMB-0126	Agree	07/24/13
1252-COR083	Ellis Shaft Concrete Obstruction - NTE \$1,424		\$ 1	CMB-0127	Agree	07/24/13
1252-PCC13	SFWD Excavation, Support and Backfilling NTE \$14,100K		\$ 14	CMB-0128	Agree	08/09/13
1252-PCC06	<del>Additional Instrumentation of BART Tunnel Lining - NTE \$305K - Voided - Superseded by CMB Change #0130</del>		\$ -	CMB-0129	Agree	08/07/13
1252-PCC06	Additional Instrumentation of BART Tunnel Lining - NTE \$307,470		\$ 307	CMB-0130	Agree	08/09/13
1252-PCC12	Modification to Tunnel Alignment at Market Street - NTE \$41,470		\$ 41	CMB-0131	Agree	08/14/13
1252-COR037	UMS - 12" Steel Pipe Removal - NTE \$3,379.19		\$ 3	CMB-0132	Agree	08/28/13
1252-COR071	LB Ramp Excavation of Steel Obstruction - NTE \$5,700		\$ 6	CMB-0133	Agree	09/25/13
1252-COR099	MOS - AWSS Vault Over pour @ South Headwall - NTE \$2,400		\$ 2	CMB-0134	Agree	09/25/13
1252-COR024	Ellis shaft Utility Demolition - NTE \$35,628.22		\$ 36	CMB-0135	Agree	10/09/13
1252-COR032	LB Panel W29 Wood Pile - NTE \$41,961.00		\$ 42	CMB-0136	Agree	11/06/13
1252-COR034	LB Panel W28 Wood Pile - NTE \$43,294.00		\$ 43	CMB-0137	Agree	11/06/13
1252-COR042	LB Panel W25 Wood Pile - NTE 42,894.00		\$ 43	CMB-0138	Agree	11/06/13

# CMB LOG

## CENTRAL SUBWAY PROJECT - Configuration Management Board Change Control Log

*\*Dollar value listed for Cost Impact amount reflects the CMB agreed amount, the actual Cost Impact amount may differ as shown on the Project Trend Log to reflect actual final agreed to value. Amount on Trend log will not be greater than agreed CMB amount without prior additional action by CMB.*

Initial Implementing Procedure				CMB		
Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	Final Decision Record Date
1252-COR043	LB - Panel W30 Wood Pile - NTE \$14,197.00		\$ 14	CMB-0139	Agree	11/06/13
1252-COR062	LB - Panel P-9 Buried Obstruction - NTE \$41,588.00		\$ 42	CMB-0140	Agree	11/06/13
1252-COR065	LB – Panel P-12 Buried Obstruction - NTE \$40,523.00		\$ 41	CMB-0141	Agree	11/06/13
1252-COR079	Compensation Grouting – Old Navy (Remaining Costs) - NTE \$37,380.00		\$ 37	CMB-0142	Agree	11/06/13
1252-COR009	Impacts due to SFWD low psi water line - NTE \$5,727.00		\$ 6	CMB-0143	Agree	11/06/13
1252-COR017	Impacts @ North and South Headwalls due to live utilities - NTE \$43,219.00		\$ 43	CMB-0144	Agree	11/06/13
1252-COR067	LB – Panel P-10 Buried Obstruction - NTE \$9,984.00		\$ 10	CMB-0145	Agree	11/06/13
1252-FA-009	Obstruction hit at CSM panel W6 - NTE \$9,000		\$ 9	CMB-0146	Agree	12/11/13
1252- PCC20	Retrieval Shaft 3x5 Sewer Changes - North Beach - NTE \$10K		\$ 10	CMB-0152	Agree	03/12/14
1252- COR 69	UMS Shoring Impacts 48" AT&T Pipe - \$30K		\$ 30	CMB-0153	Agree	04/23/14
1300-PCC005	CTS - Chinatown Plaza Construciton Estimating Support - NTE \$75		\$ 75	CMB-0154	Agree	04/30/14
1252- COR096	Micropiles at UMS Tangent Pile SRB-H - NTE \$50,500K		\$ 51	CMB-0155	Agree	05/07/14
1252- COR102	UMS Jet Grout Column 18 DSC Headwall - NTE \$12K		\$ 12	CMB-0156	Agree	05/07/14
1252- COR098	BART - Additional Load Cells - NTE \$1065.72		\$ 1	CMB-0157	Agree	05/07/14
1252- COR018	Permanent End Stops at Moscone Headwalls - Claim #1 NTE \$140,000		\$ 140	CMB-0158	Agree	05/21/14
1252- COR30, 54,75	Hazardous Material Cost Impacts - Claim #2 NTE \$400.000		\$ 400	CMB-0159	Agree	05/21/14
1252- COR82	MOS 20" Conflict with 16" AWSS @ So. Headwall - NTE \$12,000		\$ 12	CMB-0160	Agree	05/21/14
<b>Total</b>			<b>\$ 84,413</b>			