


## Memorandum

CS Memorandum No. 1411

**To:** Distribution

**From:** Beverly Ward, CMB/Risk Management Assistant 

**Date:** April 16, 2013

**Reference:** Project No. M544.1, Contract No. CS-149  
Task No. 1-8.02, Change Control

**Subject:** Configuration Management Board Meeting No. 120

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Attached please find minutes for Configuration Management Board Meeting No. 120 held on April 03, 2013.

Attachments: CMB Meeting No. 120 Rev. 0 Minutes with attachments

**Cc:** David Kuehn, STV (w/attachments) [david.kuehn@stvinc.com](mailto:david.kuehn@stvinc.com)  
Shahnam Farhangi, SFMTA (w/attachments)  
John Funghi, SFMTA (w/attachments)  
Albert Hoe, SFMTA (w/attachments)  
Arthur Wong, SFMTA (w/attachments)  
Jane Wang, SFMTA (w/attachments)  
Aileen Read, CSDG (w/attachments)  
CS File No. M544.1.5.0890

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**Distribution:**

Brad Lebovitz, STV [bradley.lebovitz@stvinc.com](mailto:bradley.lebovitz@stvinc.com)  
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Joon Park, SFMTA  
Roger Nguyen, SFMTA  
Richard Redmond, CSP  
Mark Benson, CSP  
Mark Latch, CSP  
Sarah Wilson, CSP  
Mun Leong, CSP  
Ross Edwards, CSP  
Eric Stassevitch, CSP  
Brian Kelleher, SFMTA  
Vivian Chow, SFMTA  
Beverly Ward, CSP

## CMB Meeting Minutes #120

DATE: April 04, 2013

MEETING DATE: **April 03, 2013**

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: R Edwards (RE), M. Benson (MB), R. Redmond, (RR), R. Nguyen (RN), J. Park (JP), M. Latch (ML), S. Wilson (SW), B. Kelleher (BK), V. Chow (VC), E. Stassevitch (ES), B. Ward (BW), M. Leong (ML) B. Lebovitz (BL), L. Zurinaga (LZ )

COPIES TO: Attendees: S. Farhangi (SF), J Funghi (JF), A. Hoe (AH), A. Wong (AW), J. Wang (JW), A. Read (AR), D. Kuehn (DK)  
File No. M544.1.5.0890

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

SUBJECT: Configuration Management Board Meeting # 120 – Rev. No. 0

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

ITEM #	DISCUSSION	ACTION BY DUE DATE
1-	The Configuration Manager proposed for consideration a change in the Configuration Management Board membership of voting members. The proposed change is due to Central Subway moving out of the Design phase and into the Construction phase. The proposal for consideration would be to replace voting member Program Manager Project Development/Delivery with Program Manager Project Construction or the Contract Administrator position. This item will be brought back to the CMB for further discussion at a later date.	
2-	1252 – S. Wilson presented COR 070 – LB - Jet Grout Quantity Overrun cost for additional ground treatment for Bid Item ES-3 jet grout quantity in excessive of 857 cy (see attached). Unit Price for Bid Item ES-3 as shown on "Schedule of Bid Prices" is \$700 /cy. <b>AGREE – CMB 0115</b> – Not To Exceed value of \$599,900 for quantity overrun cost.	
3-	1252 – S. Wilson presented Evaluation of Merit of, <b>COR 071 LB</b> - Ramp Excavation Wood Piles and Metal Obstructions – The Contractor encountered wood piles and unknown metal structure in the footprint of the Launch Box excavation. Portions of the wood piles and metal structure have been removed. The limits of each are unknown at this time. The CMB requested that DSC rationale be included as part of the COR's documentation. <b>CMB agreed with partial merit</b> for differing site condition work associated with obstructions not shown in the Contract drawings, but not for removal of the piles which are located outside of the original Launch Box shaft excavation limits.	
4-	1252 – S. Wilson presented Evaluation of Merit of, <b>COR 077</b> – Comp Grout - WFB-5 Drilling Obstruction – Contractor discovered an unknown buried obstruction at a 9-foot depth while drilling for compensation grout hole preventing installation of WFB5 per design. Field investigation including vacuum trucks and attempts to re-drill was not feasible at the original	

ITEM #	DISCUSSION	ACTION BY DUE DATE
	location. Contractor designer confirm it would be acceptable to drill in a different location 2-feet to the west. Contractor encountered another obstruction at 13-feet depth. Additional engineering was performed by the Contractor's designer to eliminate need for compensation grout hole WFB-5 by modifying procedures of the adjacent drill holes (see attach sketch). <b>CMB agreed with merit</b> for differing site condition work associated with additional cost to mitigate the obstruction issue including engineering to relocate the drill hole.	
5-	1252 – S. Wilson presented Evaluation of Merit of, <b>COR 080</b> – MOS - Asbestos Wrapped 20" Waterline @ Headwalls – Contractor discovered an unknown material wrapping around existing 20" water line. The Contractor employed the services of a third party environmental testing firm which confirmed the pipe wrapping contained asbestos. Testing of the wrapping and asbestos abatement work was required in order for SFWD to perform water tie-in work. <b>CMB agreed with merit</b> for differing site condition work associated with removal and disposal asbestos pipe. In addition the CMB requested the asbestos laden pipe at the existing 20" waterline at headwalls condition be noted in Addendum #8 of the 1300 documents.	
6-	1252 – S. Wilson presented Evaluation of Merit of, <b>COR 081</b> – Moscone South 12" Waterline Tee Connection - To make a tee connection to the existing 12" waterline in Folsom St. Contractor encountered a vertical offset in the existing 12" waterline, due to the presence of an existing 42" Waterline. At the request of SFWD and a meeting with SFMTA the Contractor requested to enlarge the excavation to the west to facilitate SFWD installation of the 12" tee connection. <b>CMB agreed with merit</b> for differing site condition work associated with additional labor and equipment cost due to the enlarging the excavation area to the west.	
7-	1252 – R. Edwards presented <b>PCC 012</b> - Revised Tunnel Alignment for approval of the Re-profile of tunnel to avoid the micropile installed under CN1251. In response to RFI 179 this PCC directs the Contractor to use the revised micropile northbound and southbound profile to avoid conflict with existing micropile. The change is required so that TBM and Tunnel structure is below previously installed micro-piles (see attached). The CMB recommend a request be made to the Contractor to segregate all changes so the information may be included in the documentation regarding the Designers E&O issue. Also the CMB need evidence that the design change has been routed and is signed off by the various disciplines as backup documentation for the files. Notification of the profile change will be submitted to BART and the IRP.	RE 04/24/13
8-	1252 – Design Services During Construction - M. Benson presented for a later discussion in more detail a summary of CS155-2 (DP2) Task16 Design Services expended for subtask 16.30 and 16.40. Demonstrating actual cost to date of design services expended during the construction phase. The CMB recommend the chart be expanded showing the total budget for the each individual task in column format, also a breakout of the submittal description and detailing the RFI category type reviewed under the headwalls. In addition information regarding hours spent on activities not included in 16.30 and 16.40. The CMB also requested the same level of effort be presented for review for Design Contract CS155-1 (DP1). This item will be brought back to the next CMB meeting.	MB 04/10/13
9- 03/27/13	1252 – Retrieval Shaft Option B - R. Edwards and A. Hoe presented for consideration a delivery schedule for a plan B option for the Retrieval Shaft to include design, procurement and construction at the Pagoda Theatre site by issuing a new contract to PB/Telamon for Design Services of the Retrieval Shaft in conjunction with elements of BIH's PCC 10 Proposal for Site Preparation (demo, utilities, compensation grout pipes and restoration). This option will continue to be evaluated by Senior Program Management if an agreement cannot be reached between SFMTA and the Contractor to lower the cost of PCC 10 to within budgeted amounts. An Option C was also introduced suggesting PB/Tealmon do the design work and issue a request for a cost from BIH based on that design. Status: 04/03 <i>R. Edwards presented for information and two updated scenarios to the Retrieval Shaft</i>	


ITEM #	DISCUSSION	ACTION BY DUE DATE
	<i>option (see attached) the current issue will be an ongoing discussion as progress is made.</i>	
10-	The Program Trend/Change Control Log dated 04/03/13 was viewed. An overview of the new COR's currently being trended in the 1252 contract was presented by the RE. The log is attached for distribution with these meeting minutes.	

**ACTION ITEMS**

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
1	11/07/12	11/07/12	1300 – 1254 – SF Planning Request - Cost	RE	04/10/13	Open
1	02/20/13	02/27/13	1252 – Update on Micro Pile	ML/RE	04/10/13	Open
2	12/12/12	03/20/13	1252 – Verification of California Class1 correct site for disposal of hazardous material from 1252 as built information included in 1300 docs.	RE/QC	04/10/13	Open
5	04/03/13	04/03/13	1252- Asbestos Wrapped 20"Water line @ headwalls information in 1300 docs	RE	04/10/13	Open
7	04/03/13	04/03/13	1252 – PCC 12 – Advise BART and IRP	RE	04/24/13	Open
8	04/03/13	04/03/10	1252 – DP2/DP1 – Design Services hours and cost during construction	MB	04/10/13	Open

Meeting adjourned at 5:10pm

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: 16 APR 13 [Date review completed]

## Meeting Agenda

**Project No. M544.1, Contract No. CS-149**  
**Program/Construction Management**  
**Configuration Management Board (CMB) Meeting No. 120**  
**April 03, 2013**  
**3:00pm – 5:00pm**  
 Central Subway Project Office  
 821 Howard St. 2<sup>nd</sup> Floor  
 Main Conference Room

**Attendees:**

Mark Benson	Albert Hoe	Roger Nguyen	Sarah Wilson
Ross Edwards	Jim Kelly	Joon Park	Arthur Wong
Shahnam Farhangi	David Kuehn	Richard Redmond	Luis Zurinaga
John Funghi	Mark Latch	Eric Stassevitch	
John Haley	Brad Lebovitz	Beverly Ward	

1. **1252** – COR 070 - LB - Jet Grout Quantity Overrun
  - COR 071 - LB - Ramp Excavation Wood Piles Obstruction
  - COR 077 - Comp Grout - WFB-5 Drilling Obstruction
  - COR 080 - MOS - Asbestos Wrapped 20" Waterline @ Headwalls
  - COR 081 - 12" Waterline Tee Connection Location (MOS South)
  - PCC 12 - Revised Tunnel Alignment
  
2. **Trend/Change Log** – 04/03/13
  
3. **Other Business** –

## Meeting Attendance Sheet




**Project No. M544.1, Contract No. 149**  
**Program/Construction Management**  
**Configuration Management Board Meeting No. 120**  
**April 27, 2013**  
**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.				
Benson, Mark	CSP	(415) 701-4295	Mark.Benson@sfmta.com	<i>MB</i>
Chow, Vivian	SFMTA	(415) 701-5264	Vivian.chow@sfmta.com	<i>VC</i>
Edwards, Ross	CSP	(415) 701-5296	Ross.Edwards@sfmta.com	<i>RE</i>
Farhangi, Shahn timer	SFMTA	(415) 554-0721	Shahn timer.Farhangi@sfmta.com	
Funghi, John	SFMTA	(415) 701-4299	John.Funghi@sfmta.com	
Haley, John	SFMTA		John.Haley@sfmta.com	
Hoe, Albert	SFMTA	(415) 701-4289	Albert.Hoe@sfmta.com	
Kelleher, Brian	SFMTA	(415) 701-5289	Kelleher.Brian@sfmta.com	<i>KB</i>
Kelly, Jim	SFMTA		Jim.Kelly@sfmta.com	
Kuehn, David	STV/PMOC	(510) 464-8053	David.kuehn@stvinc.com	
Latch, Mark	CSP	(415) 701-5294	Mark.Latch@sfmta.com	<i>ML</i>
Lebovitz, Brad	STV/PMOC	(510) 464-8052	Bradley.lebovitz@stvinc.com	<i>BL</i>

central **T** subway

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Nguyen, Roger	SFMTA	(415) 701-4312	Roger.Nguyen@sfmta.com	RN
Park, Joon	SFMTA	(415) 701-4742	Joon.Park@sfmta.com	JP
Redmond, Richard	CSP	(415) 701-4288	Richard.Redmond@sfmta.com	RR
Stassevitch, Eric	CSP	(415) 701-4426	Eric.Stassevitch@sfmta.com	ES
Ward, Beverly	CSP	(415) 701-5291	Beverly.Ward@sfmta.com	BW
Wilson, Sarah	CSP	(415) 243-0950	Sarah.Wilson@sfmta.com	SW
Wong, Arthur	SFMTA	(415) 701-4305	Arthur.Wong@sfmta.com	
Zurinaga, Luis	SFCTA	(415) 716-6956	Luis.zurinaga@sfcta.org	LZ
LEONG, MUN	CSP	(415) 531-9476	MUN.LEONG@SFMTA.COM	LM

GENERAL						
Proposed Change Sponsor:	S. Wilson	Received by CMB:	04/03/2013 <small>(Date)</small>			
Affected Disciplines:	Excavation and Ground Support (TBM Launch Box)					
Impacts of Change	LB – Jet Grout Quantity Overrun					
Change Order Request (COR 070) Amount Not To Exceed \$599,900						
Contract(s) Directly Affected by this Proposed Change:						
1250 <input type="checkbox"/>	1251 <input type="checkbox"/>	1252 <input checked="" type="checkbox"/>	1253 <input type="checkbox"/>	1254 <input type="checkbox"/>	1255 <input type="checkbox"/>	1256 <input type="checkbox"/>
<small>(CP01)</small>	<small>(CP02)</small>	<small>(CP03)</small>	<small>(CP04)</small>	<small>(CP05)</small>	<small>(CP06)</small>	<small>(CP07)</small>
CONFIGURATION MANAGEMENT BOARD APPROVALS						
<i>Signatures</i>						
		Agree with the Change	Disagree with the Change	Date		
Senior Program Manager:						
Deputy Program Manager:						
PM Project Services:				03 APR 13		
PM Project Development/Delivery:				4/3/2013		
SFMTA O & M Manager:						
SFMTA Safety and Security						
SFCTA PMO				5 APR 13		
Comments						



**COR 070 - Launch Box Jet Grout Quantity Overrun**

Total In-Situ Volume of Ground Treatment minus the East and West "Scallops"	(A)	3,688 cy
Total Quantity for Bid Item ES-3 (Ground Treatment TBM Launch Box Breakouts)	(B)	2,831 cy
Quantity in Exceedance of Bid Item ES-3	(A) - (B)	857 cy
Unit Price for Bid Item ES-3 as shown on "Schedule of Bid Prices"		\$700 /cy
Total Amount Requested by RE for Quantity Overrun		\$599,900

CONTRACT NO. 1252  
THIRD STREET LIGHT RAIL PROGRAM PHASE 2  
CENTRAL SUBWAY TUNNELING

SCHEDULE OF BID PRICES - Addendum No. 6

Name of Bidder: Barnard Impreglio Healy Joint Venture

Unit Definition: LS = Lump Sum, CY = Cubic Yards, LP = Linear Feet, CF = Cubic Feet

Bid Item	Bid Item Description	Quantity	Unit	Unit Price	Total Amount
<b>GENERAL - GR</b>					
GE-1	TBM PROCUREMENT AND MOBILIZATION, AND SEGMENT MOULD PROCUREMENT		LS		\$ 27,500,000
GE-2	FIELD MOBILIZATION AND DEMOBILIZATION		LS		\$ 5,500,000
GE-3	UTILITY DEMOLITION, SEWER, WATER DISTRIBUTION, AUXILIARY WATER SUPPLY SYSTEM, ROAD DEMOLITION PAVEMENT		LS		\$ 10,300,000
GE-4	NOT USED				
GE-5	NOT USED				
GE-6	CONTRACT WORK FOR WHICH A BID ITEM HAS NOT BEEN ESTABLISHED		LS		\$ 3,000,000
GE-7	REPAIR OF CATEGORY B PIPES ALLOWANCE		ALLOWANCE		\$300,000
GE-8	ENVIRONMENTAL MITIGATION ALLOWANCE		ALLOWANCE		\$300,000
GE-9	DISPUTES REVIEW BOARD ALLOWANCE		ALLOWANCE		\$100,000
GE-10	PARTNERING ALLOWANCE		ALLOWANCE		\$100,000
GE-11	SOCIALLY/ECONOMICALLY DISADVANTAGED EMPLOYMENT OPPORTUNITIES ALLOWANCE		ALLOWANCE		\$1,000,000
GE-12	RELOCATION OF EXISTING LIGHTING CONTROL EQUIPMENT ALLOWANCE		ALLOWANCE		\$50,000
GE-13	TRAFFIC CONTROL - CITY PERSONNEL ALLOWANCE		ALLOWANCE		\$740,000
<b>EXCAVATION AND GROUND SUPPORT - ES</b>					
ES-1	SHRETTING, SHORING, AND BRACING		LS		\$ 28,312,000
ES-2	TBM LAUNCH BOX CONSTRUCTION		LS		\$ 35,000,000
ES-3	GROUND TREATMENT TBM LAUNCH BOX BREAKOUTS	2,831	CY	\$ 700	\$ 1,981,700
ES-4	GROUND TREATMENT AT RETRIEVAL SHAFT BREAKOUTS	2,477	CY	\$ 425	\$ 1,052,725
ES-5	GROUND TREATMENT AT CROSS PASSAGE NUMBER 5	3,748	CY	\$ 430	\$ 1,611,640
ES-6	CONSTRUCTION OF HEADWALLS AT UNION SQUARE/MARKET STREET STATION		LS		\$ 6,500,000
ES-7	CONSTRUCTION OF HEADWALLS AT MOSCONE STATION		LS		\$ 6,500,000
ES-8	ADDITIONAL COSTS OF HAZARDOUS WASTE ALLOWANCE		ALLOWANCE		\$200,000
<b>STRUCTURAL - ST</b>					
ST-1	CONSTRUCTION OF 4TH STREET PORTAL STRUCTURE		LS		\$ 4,800,000
ST-2	CONSTRUCTION OF TUNNELS		LS		\$ 82,945,000
ST-3	CONSTRUCTION OF CROSS PASSAGES		LS		\$ 2,900,000
ST-4	CONSTRUCTION OF BASE BID PERMANENT RETRIEVAL SHAFT		LS		\$ 2,760,000
<b>BUILDING PROTECTION - DP</b>					
BP-1	PROTECTION AND MONITORING		LS		6,500,000
BP-2	PROTECTION AND MONITORING ALLOWANCE		ALLOWANCE		\$100,000
DP-3	BILLS STREET AND GREEN STREET TEMPORARY ACCESS SHAFTS		LS		\$ 2,000,000
BP-4	COMPENSATION GROUT HOLES	20,910	LP	\$ 95	\$ 1,986,450
BP-5	COMPENSATION GROUTING	20,900	CF	\$ 5	\$ 104,500
A.	TOTAL BASE BID				233,584,015

<b>OPTIONAL BID ITEMS</b>					
ST-OP1	RETRIEVAL SHAFT OPTION (DEDUCT OPTION)		LS		\$ 1827,335
GE-OP1	OWNER CONTROLLED INSURANCE PROGRAM (DEDUCT OPTION)		LS		\$ 6,202,980

See Special Provisions, Section SP-1, for Award Procedures

IN-SITU SOILCRETE VOLUME FOR LAUNCH BOX BREAKOUT  
MINUS THE EAST AND WEST "SCALLOPS"

IN-SITU VOLUME CALCULATION:

- Based on jet grout layout sent to SFMTA under transmittal #00691.
- Yielding 11' Diameter Columns for upper 16' feet
- Yielding 10' Diameter Columns for middle 9' feet
- Yielding 11' Diameter Columns for lower 15.75' feet

UPPER 16 FEET

Surface area of treated ground minus the east/west "scallop" = 2,463 SF  
Column Height: 16 ft

Total in-situ soilcrete =  $(2,463 \text{ ft}^2 * 16 \text{ ft}) / 27 \text{ ft}^3/\text{CY} =$  1460 CY for upper 16'

MIDDLE 9 FEET

Surface area of treated ground minus the east/west "scallop" = 2,373 SF  
Column Height: 9 ft

Total in-situ soilcrete =  $(2,373 \text{ ft}^2 * 9 \text{ ft}) / 27 \text{ ft}^3/\text{CY} =$  791 CY for middle 9'

LOWER 15.75 FEET

Surface area of treated ground minus the east/west "scallop" = 2,463 SF  
Column Height: 15.75 ft

Total in-situ soilcrete =  $(2,463 \text{ ft}^2 * 15.75 \text{ ft}) / 27 \text{ ft}^3/\text{CY} =$  1,437 CY for lower 15.75'

TOTAL IN-SITU VOLUME OF SOILCRETE MINUS THE EAST & WEST "SCALLOPS" = 3,688 CY

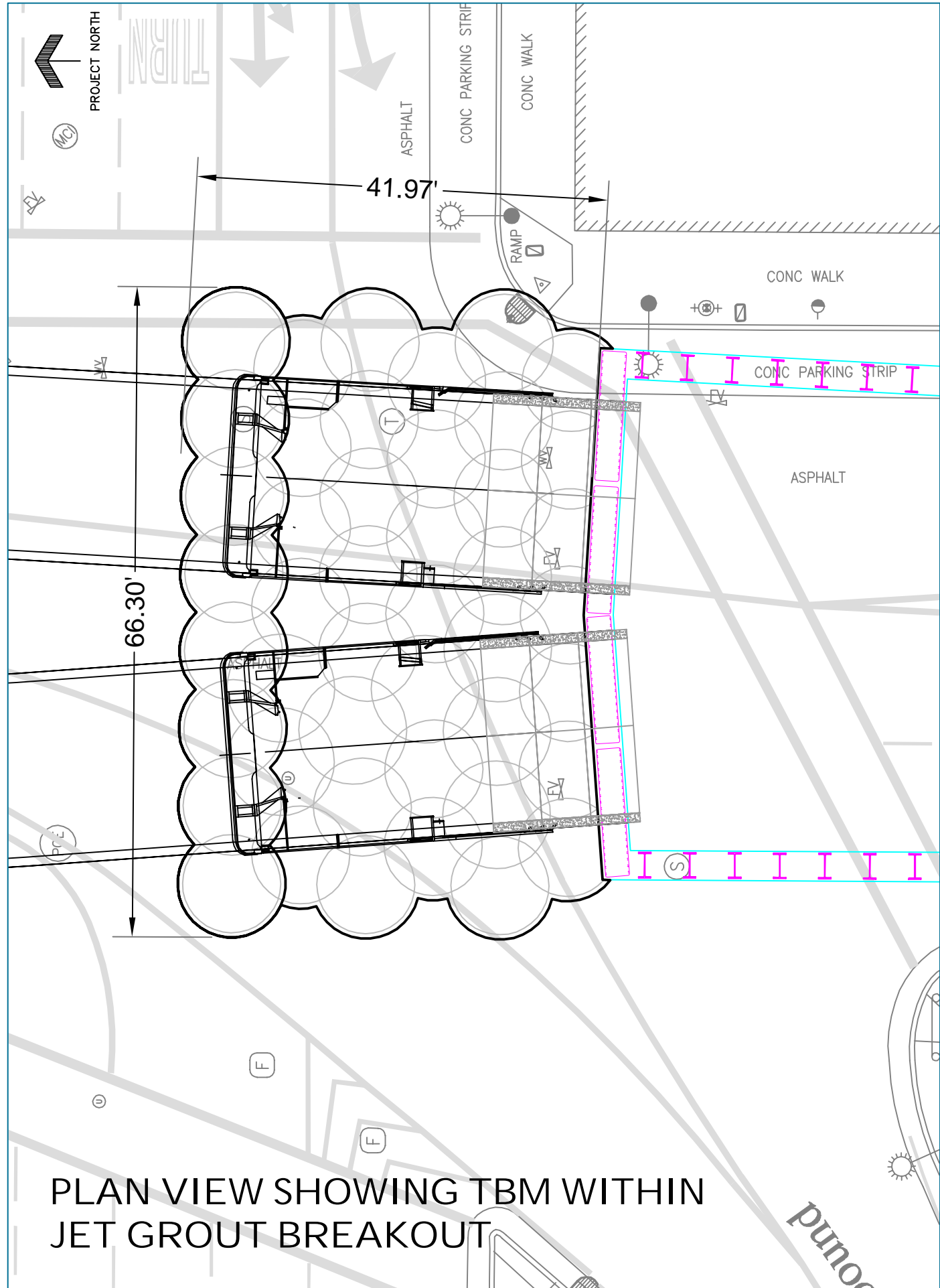
TOTAL IN-SITU VOLUME OF SOILCRETE =	<u>3,929 CY</u>
DELTA =	<u>241 CY</u>



**10 Foot Dia. Columns  
(Minus "Scallops")  
Hatched Area = 2,373SF**



**11 Foot Dia. Columns  
(Minus "Scallops")  
Hatched Area = 2,463SF**



PLAN VIEW SHOWING TBM WITHIN  
JET GROUT BREAKOUT



SECTION TAKEN THROUGH  
NORTHBOUND TUNNEL

REVISION:	

TBMs Shown Within  
Jet Grout Breakout

LAUNCH BOX  
JET GROUTING

**BARNARD CONSTRUCTION  
COMPANY, INC.**  
701 GOLD AVE.  
BOZEMAN, MT 59715  
PHONE: (406) 586-1995  
www.barnard-inc.com



JET  
GROUT  
QTY

SHEET  
JG-04

**Jacobs Associates ♦ Engineers/Consultants**  
 San Francisco ♦ San Diego ♦ Pasadena ♦ Seattle ♦ Portland ♦ Boston ♦ New York ♦ Melbourne

Project	Client	Job No.	Estimator	Rev	Computed on
<b>Central Subway - 100% Design Estimate</b>	<b>SFMTA/AECOM</b>	<b>4235.0</b>	<b>TLP/MH</b>	<b>0</b>	<b>02/28/2011</b>
<b>Twin EPB Tunnels, 4th &amp; Harrison to N.Beach, through MOS, UMS, &amp; CT Stations w/ Five Mined Cross Passages</b>					<b>10:10 AM</b>

**DIRECT COST DETAIL**

L	lo4+	Loader oper. >4cy (Grp 3)		\$76.74 /mhr	13.60 mhr	\$1,044
E	I966	Wheel Loader Cat 966/4.8cy		\$93.84 /hr	13.60 hr	\$1,276
L	lab	General Labor (Grp 1)		\$61.77 /mhr	13.60 mhr	\$840

No.	Item Description	Item Quantity/Unit	Production rate	Other fixed time	Total time	
<b>004</b>	<b>Jet Grouting - Launch Box</b>	<b>2,831 cy</b>	<b>200 cy/day</b>		<b>14.2 work days</b>	
	manhours	Labor	Equipment	Material	Subcontract	Item Cost
	<b>341</b>	<b>\$22,753</b>	<b>\$10,661</b>	<b>\$1,022</b>	<b>\$1,023,390</b>	<b>\$1,057,826</b>
	0.120	\$8.04	\$3.77	\$0.36	\$361.49	\$373.66
	Status (Additive)	Work schedule		Other ST pay	Other OT pay	
1.000	Schedule factor (Normal)	8 hr/shift	1 shift/day	5 day/week	0 hr/shift	0 hr/shift

1 ea. Launch Box      **Jet grout Height**      Note:  
 35 lf long\*      20.67 lf Excavated Diameter      Jet grouting to be completed after excavation  
 52 lf wide      10 ft min. encasement\*      prior to TBM arrival.  
 42 vf tall      40.67 vf  
 2831 cy Grouting      -  
 \* minimum per dwg. ES-163

R/T	Code	Resource Description	Resource Qty/Unit	Production rate	Factor	Resource Unit Cost	Resource Quantity	Resource Cost
M	sts	Small tools and supplies				\$3.00 /mhr	340.8 mhr	\$1,022
S	lg	Jet Grouting			1.05	\$300 /cy	2973 cy	\$891,765
		<i>GC Support</i>						
L	lo4+	Loader oper. >4cy (Grp 3)				\$76.74 /mhr	113.6 mhr	\$8,718
E	I966	Wheel Loader Cat 966/4.8cy				\$93.84 /hr	113.6 hr	\$10,661
L	lab	General Labor (Grp 1)			2	\$61.77 /mhr	227.2 mhr	\$14,035
S	m+ph	Muck disposal (wet / pH)	2831 lcy			\$46.49 /lcy	2831 lcy	\$131,625

No.	Item Description	Item Quantity/Unit	Production rate	Other fixed time	Total time	
<b>005</b>	<b>Jet Grouting - Retrieval Shaft</b>	<b>2477 cy</b>	<b>200 cy/day</b>		<b>12.4 work days</b>	
	manhours	Labor	Equipment	Material	Subcontract	Item Cost
	<b>298</b>	<b>\$19,869</b>	<b>\$9,309</b>	<b>\$893</b>	<b>\$895,421</b>	<b>\$925,492</b>
	0.120	\$8.02	\$3.76	\$0.36	\$361.49	\$373.63
	Status (Additive)	Work schedule		Other ST pay	Other OT pay	
1.000	Schedule factor (Normal)	8 hr/shift	1 shift/day	5 day/week	0 hr/shift	0 hr/shift

1 ea. Launch Box      **Jet grout Height**      Note:  
 30.6 lf long\*      20.67 lf Excavated Diameter      Jet Grout to be completed after shaft constr.  
 52 lf wide      10 ft min. encasement\*      prior to TBM arrival.  
 42 vf tall      40.67 vf  
 2477 cy Grouting      -  
 \* minimum dimension to achieve overall quantity per designer.

R/T	Code	Resource Description	Resource Qty/Unit	Production rate	Factor	Resource Unit Cost	Resource Quantity	Resource Cost
M	sts	Small tools and supplies				\$3.00 /mhr	297.6 mhr	\$893
S	lg	Jet Grouting			1.05	\$300 /cy	2601 cy	\$780,255
S	m+ph	Muck disposal (wet / pH)	2477 lcy			\$46.49 /lcy	2477 lcy	\$115,166
		<i>GC Support</i>						
L	lo4+	Loader oper. >4cy (Grp 3)				\$76.74 /mhr	99.20 mhr	\$7,613
E	I966	Wheel Loader Cat 966/4.8cy				\$93.84 /hr	99.20 hr	\$9,309
L	lab	General Labor (Grp 1)			2	\$61.77 /mhr	198.4 mhr	\$12,256

Project <b>Central Subway - 100% Design Estimate</b>	Client <b>SFMTA/AECOM</b>	Job No. <b>4235.0</b>	Estimator <b>TLP/MH</b>	Rev <b>0</b>	Computed on <b>02/28/2011 10:10 AM</b>
Twin EPB Tunnels, 4th & Harrison to N.Beach, through MOS, UMS, & CT Stations w/ Five Mined Cross Passages					

**CYCLE TIME ANALYSES and QUANTITY TAKEOFF**

TBM Excav. CP5 Jet Grout	3 day	3.0 day
<b>Overall advance rate</b>	<b>41 lf/day</b>	<b>46% utilization</b>
		<b>202.3 day</b>

**Portal to Retrieval Northbound Tunnel**

**Configuration/Takeoff SB**

Tunnel Length	8233 lf	Tunnel Excavation	12.424 bcy/lf	102,288 bcy
Ring Width / Shove Length	4 lf			
ID Bolted/gasketed segments	214 in < CONTRACT SPECIFIED	Inside Area	249.8 sf	
Segment thickness	11 in	Concrete Vol.	2 cy/lf	
OD Bolted/gasketed segments	236 in			
TBM Brushes	2 in	Tailseal grease	0.05 lb/cir.ft	3.1 lb/lf
TBM Tailshield ID	240 in	Segment Grouting	0.974 cy/lf	8,019 cy
TBM Tailshield Thickness	3 in	Assuming Tail grouting worst case option		
TBM Overcut	1 in	1" allowance on radius for steering, ignore for grouting		
<b>OD EPBM</b>	<b>248 in</b>			

**NB EPBM Cycle** **20.67 ft excavated diameter** **8,233 lf**

Cutterhead speed	2 rpm			
Reach	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
Length	5,763		2,470	
Average Instantaneous ROP	0.75		0.25	lf
Rate of Penetration	7.5		2.5	in/rev
				ft/hr
Excavate stroke	4.0 ft stroke		6.0 ft/hr average over 2 reaches	40.1 min
Erect initial support	30.0 min			30.0 min
Basic Cycle				70.1 min
Downtime-general	20%			14.1 min
Advance survey laser delay	30.0 min every	200 lf		0.6 min
Advance track/utilities delay	15.0 min every	32 lf		1.9 min
Add Conveyor Cartridge Delay	120.0 min	600 lf		0.8 min
Other delay	min			0.0 min
Sustained cycle				86.7 min
<b>Sustained advance rate</b>	<b>51 lf/day based on</b>	<b>18.5 mining hrs/day</b>		<b>160.8 day</b>
% Delay for burying TBM	20% of rate	1% of reach	8.2 lf/day	7.8 day
% Delay for learning curve	50% of rate	6% of reach	20.4 lf/day	9.8 day
% Delay for Tight Curves	50% of rate	8% of reach	20.4 lf/day	12.9 day
Obstructions (boulders)	day			0.0 day
Mechanical problems	day			0.0 day
TBM Excav. UMS&retr.sh. JG & SP	6.0 day			6.0 day
TBM Excav. MOS JG & SlurryWall	2 day			2.0 day
TBM Excav. CP5 Jet Grout	3 day			3.0 day
<b>Overall advance rate</b>	<b>41 lf/day</b>	<b>46% utilization</b>		<b>202.3 day</b>

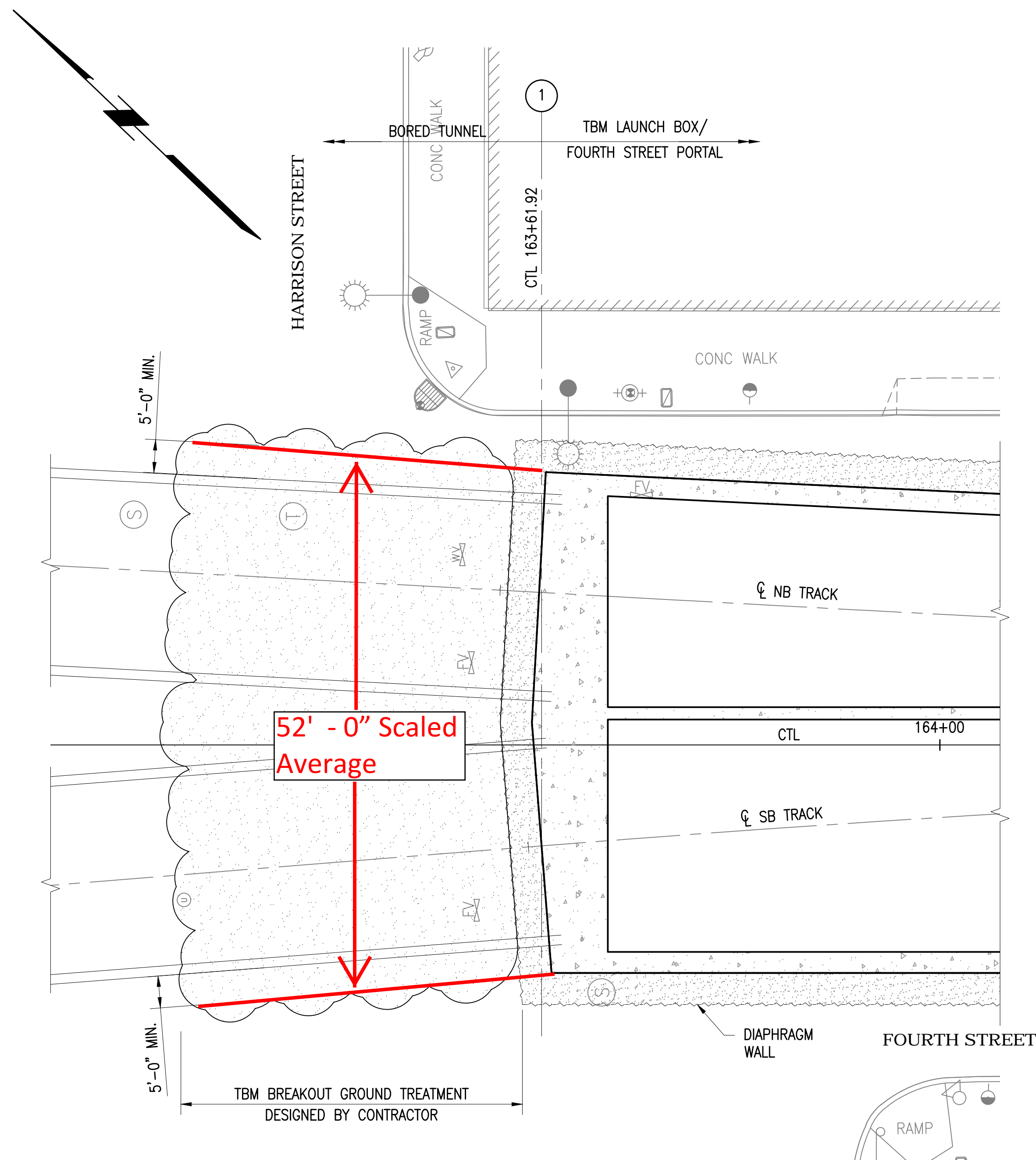
**NB - Continuous Conveyor Configuration**

Take up units installed on Station Invert Slab next to Slurry Wall (Similar to Castelanza Project: Milano, Italy)  
 Conveyor belt leaves tunnel SL elevation at port continues upward at 9 degrees. Discharges  
 onto sloughing conveyor to another transferpoint then on to another conveyor inclined at 9 degrees.  
 This conveyor carries muck over center of station excavation, parallel to tunnel alignments to stacker conveyor.  
 on the ground surface.

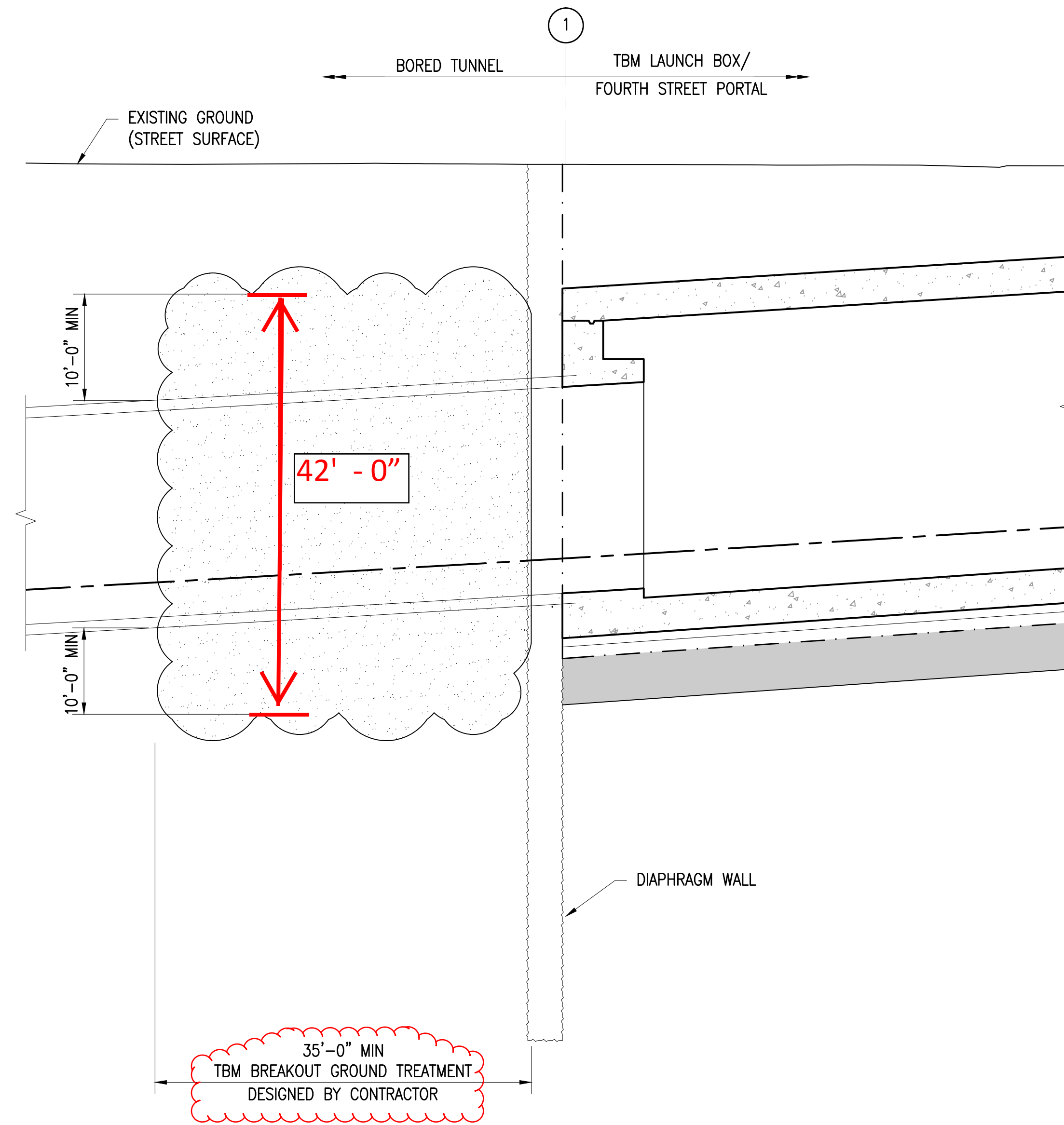
Tunnel Springline Elev.	0 ft
Length of Excavation	300 ft
Allowance for Equipment	20 ft
Effective horizontal run	280 ft
Elevation gain on continuous conveyor	44 ft
Continuous Conveyor Discharge El.	44 ft
Discharge drops to inclined conveyor	10 ft
Starting Elevation of Inclined conveyor	34 ft
Length of inclined conveyor	280 ft
Elevation gain on continuous conveyor	44 ft
Elevation at Slurry Wall	78 ft



\\Sv6nos003.muni.sfgov.org\m544.1\FinalDesign\Drawing-821\3-Structural\Excavation and Ground Support\Sheet Files CP03\M54423E163\_R1C.dwg econtill Tue Aug 23,2011 7:26 am ES-163\_R1C



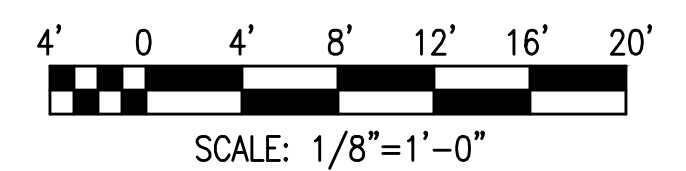
**PARTIAL PLAN OF LAUNCH BOX / FOURTH STREET PORTAL**



**A SECTION**

**NOTES:**

1. UTILITY LOCATIONS TO BE VERIFIED BY POTHOLING BEFORE GROUTING.
2. SEE UTILITIES DRAWINGS FOR UTILITY DIVERSIONS DURING CONSTRUCTION.
3. SEE SPECIFICATIONS FOR RESTRICTIONS ON ROAD OCCUPATION INCLUDING MUNI TROLLEY OPERATION REQUIREMENTS.
4. ALL GROUTING SHOWN SHALL BE PERFORMED AND COMPLETED BEFORE START OF TBM TUNNEL. SEE SPECIFICATION.
5. MAINTAIN AND PROTECT VEHICULAR AND PEDESTRIAN TRAFFIC AT ALL TIMES DURING DRILLING AND GROUTING.
6. IMPLEMENT ENVIRONMENTAL CONTROL TO CONTAIN DRILLING AND GROUT SPOILS AND PROTECT AGAINST SPOIL ENTRY INTO SEWERS, ROADS, WATERCOURSES AND WATERWAYS.
7. STAGE WORK TO MINIMIZE ROAD CLOSURES.
8. GROUT TO BE DESIGNED BY THE CONTRACTOR. THE CONTRACTOR SHALL DEVELOP THE PROPOSED GROUTING PLANS BASED ON THE CONDITIONS AT THE TBM LAUNCH BOX AND THE REQUIREMENTS SHOWN ON THIS SHEET. THE CONTRACTOR SHALL SUBMIT THE PROPOSED GROUTING PLANS TO ENGINEER FOR REVIEW AND APPROVAL.
9. CENTERLINES AND SPRINGLINES SHOWN ARE THE PLANNED OR DESIGN LOCATIONS.
10. INSTALL JET GROUTING IN SEQUENCE WITH DIAPHRAGM WALLS BEFORE EXCAVATION BELOW ROAD DECK STARTS.



**CONFORMED**

FOR ORIGINAL SIGNATURES, SEE CL-18168, REV. 0.

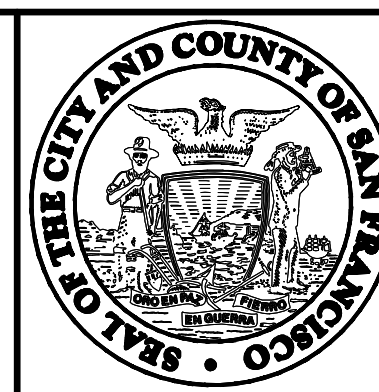
DATE	DESCRIPTION	REV. NO.	BY	CHECKED	APPROVED
05/06/2011	ISSUED FOR ADDENDUM 5	1	MH	MEF	RE
01/21/2011	ISSUED FOR BID	0			

**PB TELAMON**

**PB AMERICAS, INC.**

DESIGNED M. HUDSON
DRAWN T. MARASIGAN
CHECKED T. SMIRNOFF
REVIEWED M. HUDSON
RECOMMENDED M. FOWLER
APPROVED R. EDWARDS
DATE JAN 21, 2011

REV. 0  
SEALED BY  
M. FOWLER



CITY AND COUNTY OF SAN FRANCISCO  
**MUNICIPAL TRANSPORTATION AGENCY**

APPROVED  
CARTER R. ROHAN  
EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM  
PHASE 2 - CENTRAL SUBWAY  
TUNNELS

**EXCAVATION AND GROUND SUPPORT  
TBM LAUNCH BOX  
GENERAL ARRANGEMENT - GROUND TREATMENT**

CONTRACT NO. <b>1252</b>
SFMTA CONTROL NO. <b>CL-18168</b>
DRAWING NO. <b>ES-163</b>
REVISION <b>1</b>

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

EVALUATION OF MERITCOR 070

**Recommendation:** Accept justification of Merit for COR 070, Jet Grout Quantity Greater than Bid Item ES-3 Quantity. Recommend payment for an additional ground treatment quantity of 886 CY in excess of the quantity listed for Bid Item ES-3 (Ground Treatment TBM Launch Box Breakouts) on the Schedule of Bid Prices. There is no time extension requested or recommended for this work.

**Facts:** 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 which has been verified by Quality Control Reports. This translates to an additional quantity of 1,098 CY of ground treatment beyond the quantity listed for Bid Item ES-3. By subtracting 212 CY for the "scallop" portion of the columns the total is 886 CY.

**Justification:** Bid Item ES-3 of Section 01 20 00 Price and Payment Procedures states that "Estimates for progress payment purposes will be made based on the extent of ground treatment performed, measured by the in-situ cubic yard to the dimensions indicated for work compensable under this item, and multiplied by the unit price bid."

Contract Drawing ES-163 Rev.1 provides minimum dimensions for the extent of the ground treatment for the TBM launch box. A note on the plan and section view of the drawing also indicates that the TBM Breakout Ground Treatment is "Designed by Contractor." Note 8 on the same drawing states, "Grout to be designed by the Contractor. The Contractor shall develop the proposed grouting plans based on the conditions at the TBM Launch Box and the requirements shown on this sheet. The Contractor shall submit the proposed grouting plans to Engineer for review and approval."

The main purpose for having a Soilcrete breakout zone is to provide relatively impermeable ground for the TBMs to start mining within. The minimum dimensions were not sufficient to produce a large enough Soilcrete breakout zone for a safe TBM breakout because the overall length of the TBM shield and cutterhead exceeds the minimum length shown in the Contract Drawings (see attached drawings). The zone must be sized to allow installation and backfill grouting of at least one ring of the tunnel liner to provide a watertight seal to develop between the treated impermeable ground and the tunnel liner. Once a satisfactory seal has been developed, the TBM may safely exit the improved ground with a reduced risk of water and soil inflow into the tunnel/TBM Launch Box interface. The lack of a sufficient seal in un-improved ground would result in water and soil inflow which would likely cause significant and potentially catastrophic ground settlement at the breakout (i.e. the intersection of 4th and Harrison). The Contractor has designed the minimum jet grout layout to provide for the development of a sufficient seal. The design allows for the encapsulation of the TBM and one ring with

# central subway

Connecting people. Connecting communities.

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

only 1.8' of cover between the TBM cutterhead and edge of jet grout. The Contractor will also provide additional protection by installing a breakout seal prior to mining.

Payment shall be made in accordance with the Contract Documents including Specification Section 01 20 00 for Price and Payment Procedures and General Provision Section 9.04 for Unit Price Work.

Change Type: (4) Quantity Variation

By: *Sarah Wilson* 3/20/13  
Sarah Wilson Date  
Resident Engineer

*[Signature]* 3-20-13  
Configuration Management Board Date  
Approval

PLEASE PROVIDE 1) QUANTITY CALCULATION  
2) HOW DID A LUMP SUM DESIGN BECOME A UNIT PRICE QUANTITY.

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

### EVALUATION OF MERIT

#### COR 071

**Recommendation:** Accept justification of partial Merit for COR 071 R1, Launch Box Ramp Excavation Obstructions (Wood Piles & Metal Structure). There is no time extension requested or recommended for this work.

**Facts:** In January 2013 the Contractor encountered two groups of wood piles in the footprint of the Launch Box ramp while performing the ramp excavation. The wood piles consisted of 2 groups of individual wood piles, approximately 16"+ in diameter with an unknown depth located along the north and south perimeter walls of the excavation area. The south perimeter wall group of wood piles consisted of 3 individual wood piles and 1 horizontal section of wood atop all (See attached Figure 1). The north perimeter wall group of wood piles consisted of 2 individual wood piles (See attached Figure 2). The limits and make-up of all wood piles are unknown. Removal of a portion of each group of wood piles has occurred and efforts to remove the piles were witnessed by the SFTMA inspectors.

In February 2013 the Contractor encountered one group of wood piles and an unknown buried metal structure in the footprint of the Launch Box ramp while performing the ramp excavation. The wood piles consisted of 1 group of 2 individual wood piles, approximately 16"+ in diameter with unknown depth located along the north perimeter wall of the excavation area (See attached Figure 3). The unknown buried metal structure consists of a circular metal object; approximately 24" in diameter (See attached Figure 4). The limits and make-up of the wood piles and metal structure are unknown. Removal of a portion of these wood piles and unknown metal structure has occurred and efforts to remove these obstructions were witnessed by the SFTMA inspectors.

The Contractor has installed a ramp in place of where a shaft was originally shown in the Contract Drawings. Most of the wood piles are located within the Launch Box excavation footprint and the original shaft footprint. The attached sketch FS 1252 – 032 shows the location of the wood piles superimposed onto Contract Drawing CS-114 Rev.1.

**Justification:** The wood piles discovered in January and the unknown metal structure lie within the original Launch Box shaft excavation limits and constitute a differing and unforeseen site condition as they were not shown in the Contract Documents, specifically Drawing CS-114, Rev. 1 or the Geotechnical Baseline Report. Additional labor and equipment costs are anticipated for removal and disposal of these obstructions.

Compensation is not being considered for the removal of the piles which were found in February as they are located outside the original Launch Box shaft excavation limits.

RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions caused the scope of work to increase.

SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

Change Type: (2) Unforeseen Condition

By:

  
\_\_\_\_\_

Sarah Wilson  
Resident Engineer

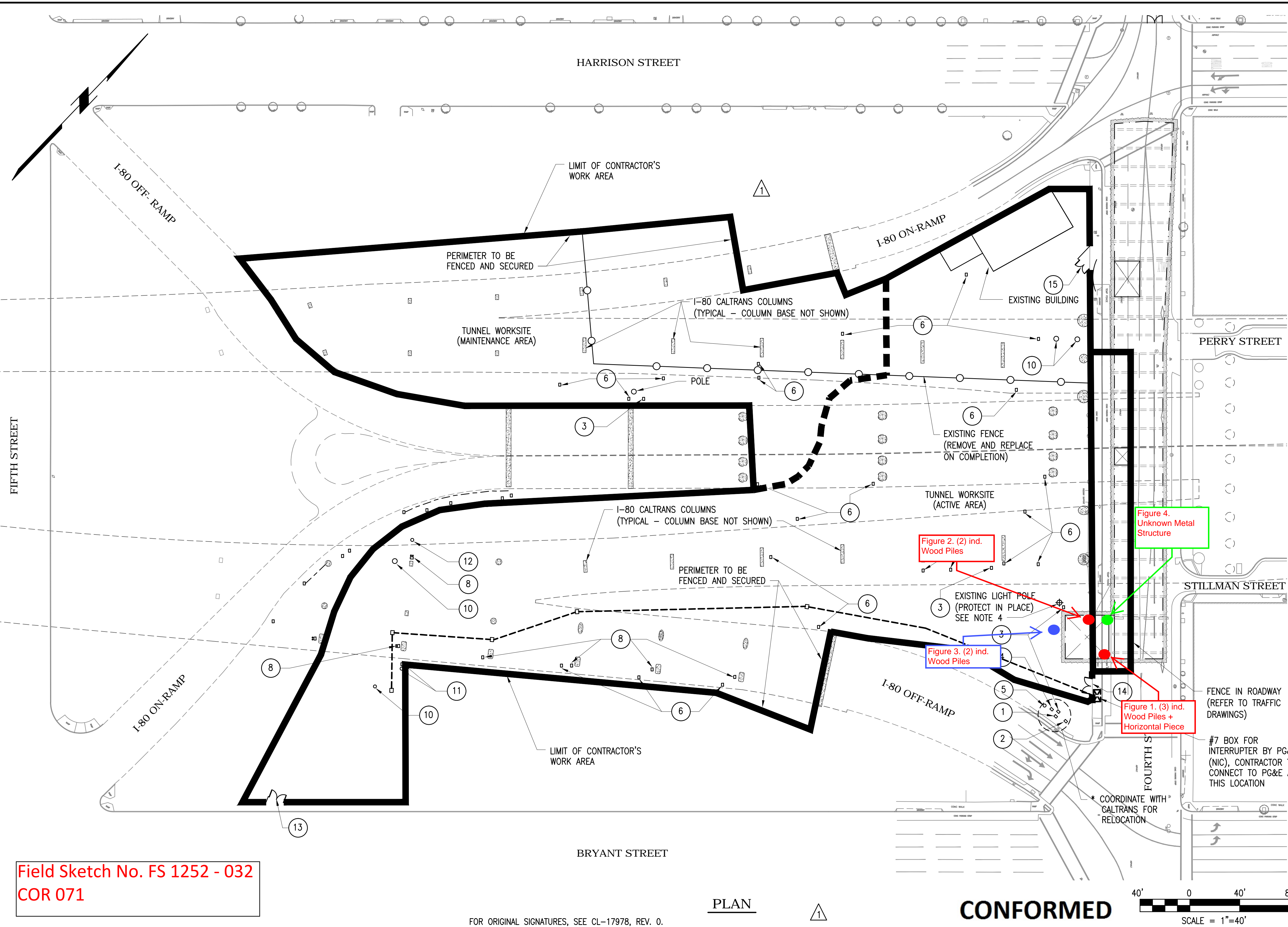
  
Date

  
\_\_\_\_\_

Configuration Management Board  
Approval

  
Date

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- LEGEND**
- ① REMOVE LIGHT POLE FOUNDATION
  - ② EXISTING TRAFFIC CONTROLLER (PROTECT IN PLACE)
  - ③ EXISTING PULL BOX (PROTECT IN PLACE)
  - ④ REMOVE TRAFFIC CONTROLLER AND FOUNDATION
  - ⑤ REMOVE POLE AND FOUNDATION
  - ⑥ EXISTING DRAINAGE INLET (PROTECT IN PLACE)
  - ⑦ EXISTING POLE AND PULL BOX TO REMAIN (PROTECT IN PLACE)
  - ⑧ EXISTING GRATE AND BOLLARDS TO REMAIN (PROTECT IN PLACE)
  - ⑨ EXISTING DRAINAGE INLET WITH CONCRETE VALLEY GUTTER (PROTECT IN PLACE)
  - ⑩ EXISTING MANHOLE (PROTECT IN PLACE)
  - ⑪ FREEWAY SIGN POLE WITH PULL BOX
  - ⑫ FREEWAY SIGN POLE WITHOUT PULL BOX
  - ⑬ BRYANT STREET ENTRANCE
  - ⑭ FOURTH STREET EXIT
  - ⑮ FOURTH STREET ENTRANCE
  - EXISTING COLUMNS, PIERS AND ABUTMENTS
  - TEMPORARY PRECAST CONCRETE DECKING
  - RAMP ON GROUND
  - I-80 DECKING ABOVE (LIMITED HEADROOM)
  - LIMIT OF CONTRACTOR'S WORK AREA

- NOTES:**
1. FOURTH STREET OCCUPATION NOT SHOWN.
  2. PROVIDE PROTECTION TO CALTRANS PROPERTY IN ACCORDANCE WITH CALTRANS COLUMN PROTECTION REQUIREMENTS.
  3. SEE DIVISION SPECIFICATIONS FOR CALTRANS REQUIREMENTS.
  4. USE "COLUMN PROTECTION IN PARKING LOTS" AS SHOWN ON CALTRANS EXHIBIT 11 & 15 PAGE 4 OF 10 FOR LIGHT POLE PROTECTION.
  5. SEE DRAWING CS-115 FOR INDICATIVE LIMITED HEADROOM LOCATIONS BELOW I-80 VIADUCT.
  6. CONTRACTOR TO DESIGN AND PROVIDE POWER CONNECTION FROM PG&E SUPPLY AT #7 BOX. ROUTE AND DETAILS SHOWN ARE INDICATIVE. THESE HAVE BEEN PROVIDED TO PG&E FOR PRELIMINARY DESIGN OF POWER SUPPLY. CONTRACTOR SHALL DESIGN AND SUBMIT ITS POWER SUPPLY REQUIREMENTS TO PG&E, SEE DIVISION I SPECIFICATIONS.

Field Sketch No. FS 1252 - 032  
COR 071

PLAN

**CONFORMED**

FOR ORIGINAL SIGNATURES, SEE CL-17978, REV. 0.

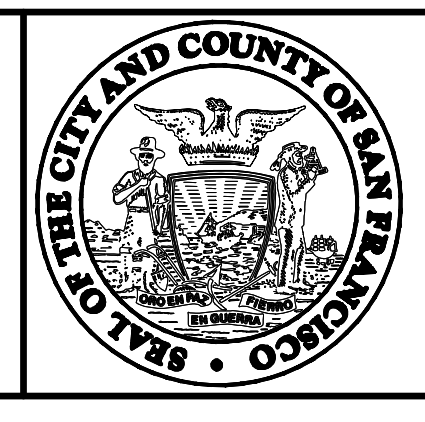
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05/13/2011	ISSUED FOR ADDENDUM 6	1	MH	MEF	RE
01/21/2011	ISSUED FOR BID	0			

**PB TELAMON**

**PB AMERICAS, INC.**

DESIGNED L. AVSTEDT
DRAWN T. MARASIGAN
CHECKED M. HUDSON
REVIEWED K. JOHNSON
RECOMMENDED M. FOWLER
APPROVED R. EDWARDS
DATE 01/21/2011

REV. 0  
SEALED BY  
M. FOWLER



CITY AND COUNTY OF SAN FRANCISCO  
**MUNICIPAL TRANSPORTATION AGENCY**

APPROVED  
CARTER R. ROHAN  
EXECUTIVE DIRECTOR/CEO

THIRD STREET LIGHT RAIL PROGRAM  
PHASE 2 - CENTRAL SUBWAY TUNNELS

**CONSTRUCTION STAGING  
TBM LAUNCH BOX  
TUNNEL WORKSITE**

CONTRACT NO. <b>1252</b>
SFMTA CONTROL NO. <b>CL-17978</b>
DRAWING NO. <b>CS-114</b>
SHEET NO. <b>1</b>



**Jan 2013 DSC:**  
South Perimeter Wood  
piles Qty (3) + horiz piece

horiz top section

#3

#2

#1



**Jan 2013 DSC:**  
North Perimeter  
wood piles Qty (2)

#1

#2

**Figure 2**

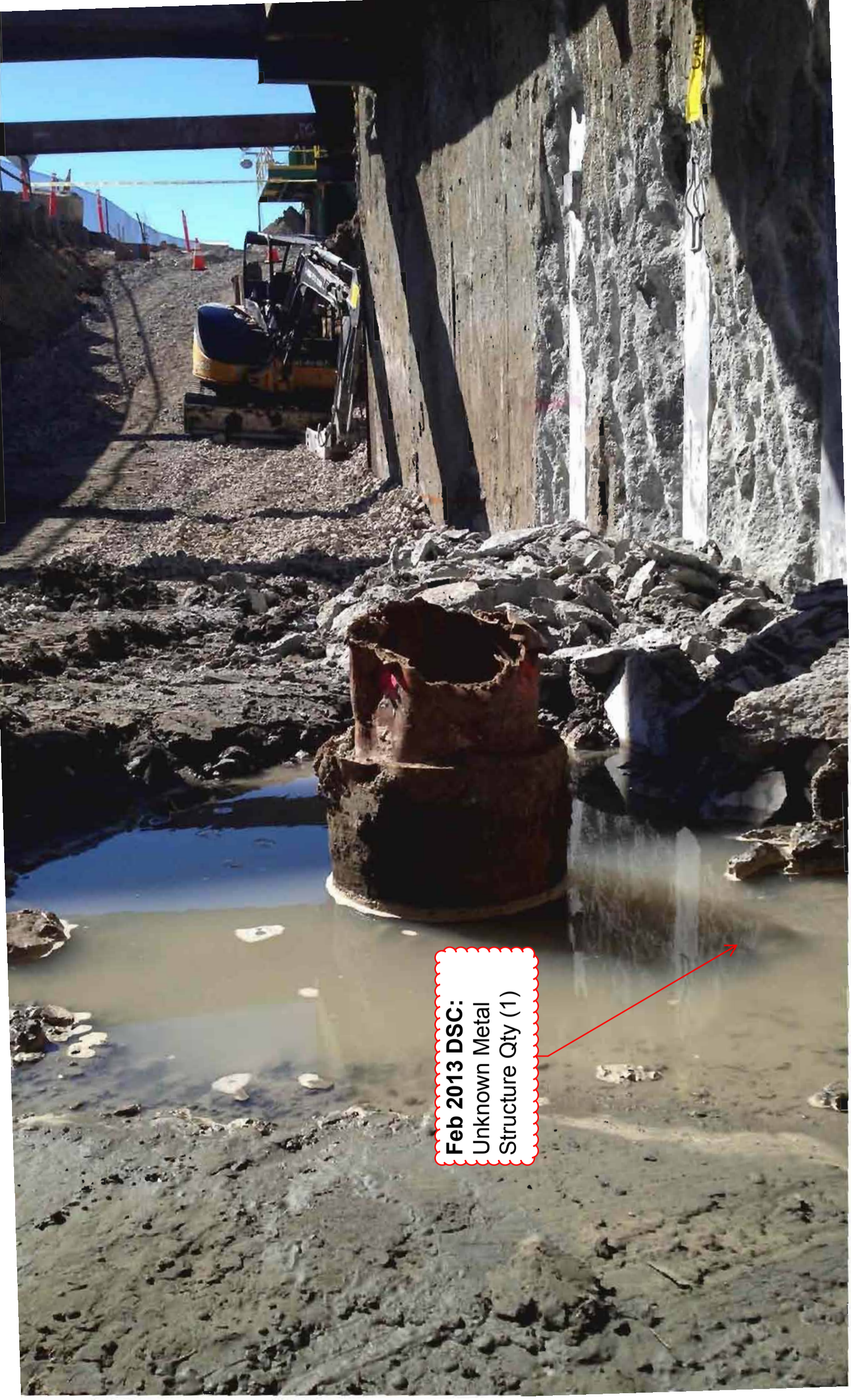


**Feb 2013 DSC:**  
North Perimeter  
Wood piles Qty (2)

#1

#2





**Feb 2013 DSC:**  
Unknown Metal  
Structure Qty (1)

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

## EVALUATION OF MERIT

### COR 077

**Recommendation:** Accept justification of Merit for COR 077 – (Comp Grout – WFB-5 Drilling Obstruction at Whole Foods). There is no time extension requested or recommended for this work.

**Facts:** While drilling for compensation grout hole WFB-5 at approximate CTL station 160+38, the Contractor encountered an unknown obstruction at a depth of 9' which prevented installation of WFB-5 per design. After further field investigation, including the use of a vacuum truck, and attempts to re-drill the hole it was determined that it was not feasible to install a drill hole at the original planned location.

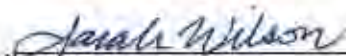
The Contractors designer (Arup) confirmed that it would be acceptable to relocate the location of the hole by approximately 2' to the west. The Contractor drilled at the modified location and encountered another obstruction at 13' in depth. In response, additional engineering was performed by the Contractors designer in order to eliminate compensation grout hole WFB-5 by modifying grouting procedures of the adjacent drill holes. See attached sketch FS 1252 – 033 for more details.

**Justification:** The buried obstruction constitutes a differing and unforeseen site conditions as it is not shown in the Contract Drawings, specifically Reference Drawings UE-137. Additional costs associated with mitigation of this obstruction include engineering to relocate the drill hole, further investigation efforts and additional equipment mobilizations.

RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions caused the scope of work to increase.

### **Change Type – (2) Unforeseen Condition**

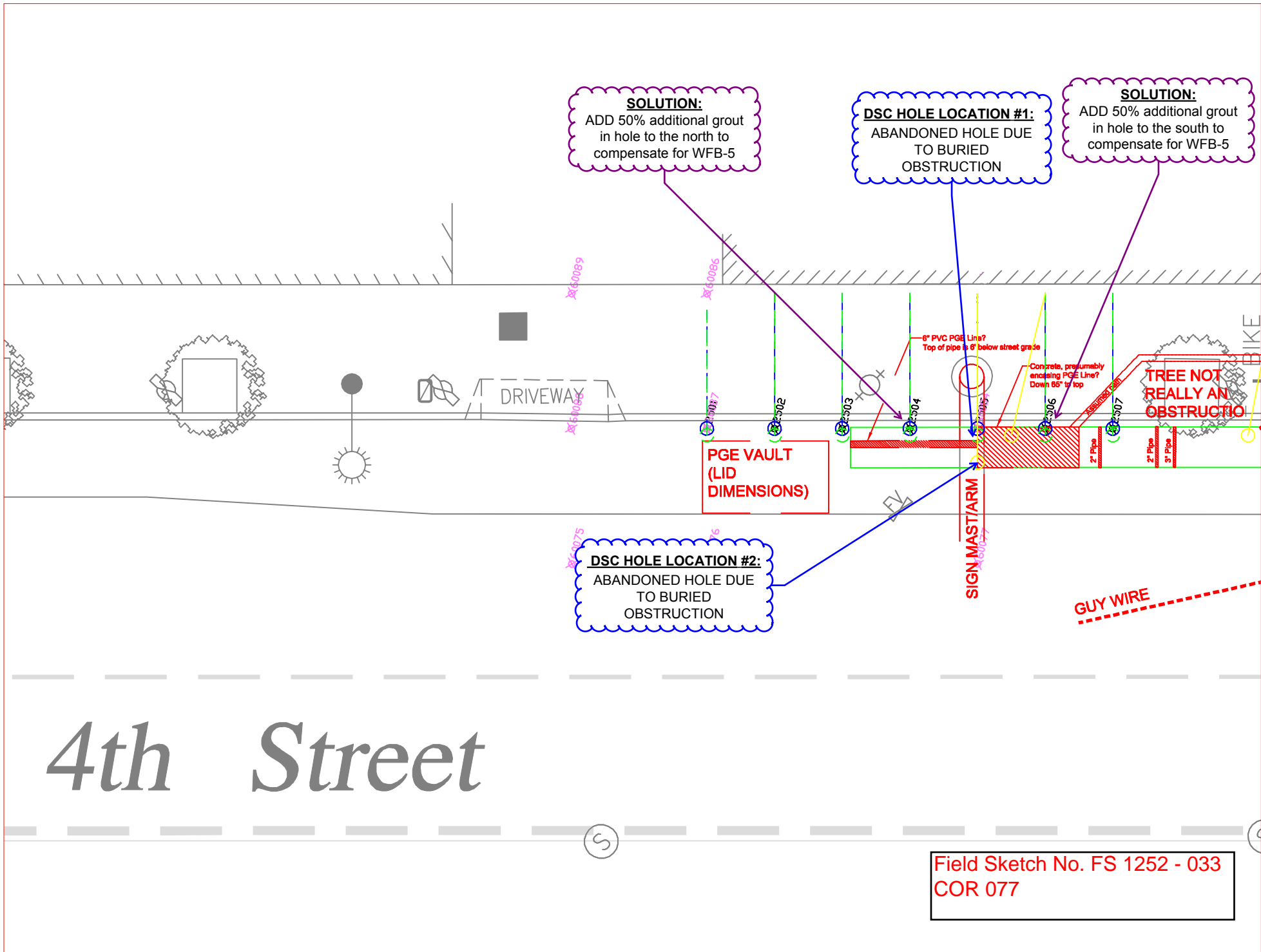
By:

  
\_\_\_\_\_  
Sarah Wilson  
Resident Engineer

4/3/13  
Date

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

03/02/13  
Date



**SOLUTION:**  
ADD 50% additional grout  
in hole to the north to  
compensate for WFB-5

**DSC HOLE LOCATION #1:**  
ABANDONED HOLE DUE  
TO BURIED  
OBSTRUCTION

**SOLUTION:**  
ADD 50% additional grout  
in hole to the south to  
compensate for WFB-5

**PGE VAULT  
(LID  
DIMENSIONS)**

**DSC HOLE LOCATION #2:**  
ABANDONED HOLE DUE  
TO BURIED  
OBSTRUCTION

**SIGN MAST/ARM**

**GUY WIRE**

**TREE NOT  
REALLY AN  
OBSTRUCTION**

**4th Street**

**Field Sketch No. FS 1252 - 033  
COR 077**

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

## EVALUATION OF MERIT

### COR 080

**Recommendation:** Accept justification of partial Merit for COR 080, Moscone Asbestos Wrapped 20" Water Line @ Headwalls. There is no time extension requested or recommended for this work. Standby costs for equipment shall not be considered for compensation.


**Facts:** On March 12<sup>th</sup>, 2013 the Contractor discovered an unknown material wrapping around the existing 20" water line while performing the installation of the low pressure water distribution piping at the Moscone north headwall. The same material was also discovered on the water line located at the south headwall.

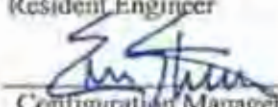
The Contractor employed the services of a qualified 3rd party environmental testing firm, to test the unknown pipe wrapping which indicated the pipe wrapping contained asbestos. The 20" water line was removed and disposed of by an asbestos abatement subcontractor as required to facilitate the installation of the proposed water lines and tie-ins. Additional abatement of asbestos laden pipe is anticipated prior to construction of slurry wall panels S4 and N4. See attached sketch FS 1252 – 034 and 035 for more details.

**Justification:** The asbestos wrapping on the existing 20" water line constitute a differing and unforeseen site condition as it is not shown in the Contract Documents, specifically Drawing WD-402 Rev.0 and UD-402 Rev.0. Testing of the asbestos wrapping and asbestos abatement work was required in order for the SFWD to perform water tie-in work. Additional work will be required to perform asbestos abatement on the remaining portions of the water line prior to slurry wall construction. In accordance with Contract Specifications section 01-20-00 an allowance has been established to pay for Environmental Mitigation as needed and directed by the City.

RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions caused the scope of work to increase.

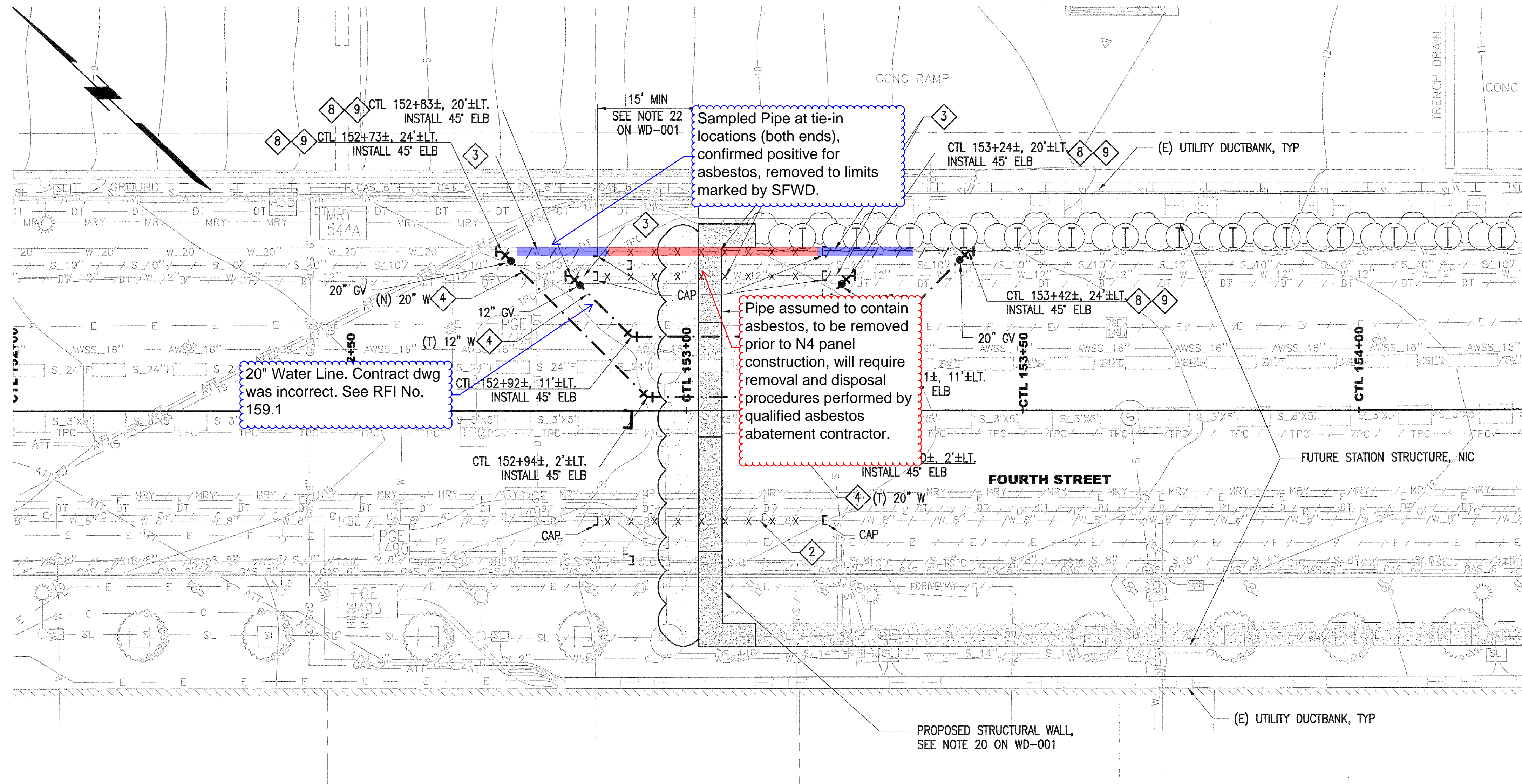
**Change Type:** (2) Unforeseen Condition

By:  \_\_\_\_\_ 4/3/13  
Sarah Wilson Date  
Resident Engineer

 \_\_\_\_\_ 03APR13  
Configuration Management Board Date  
Approval

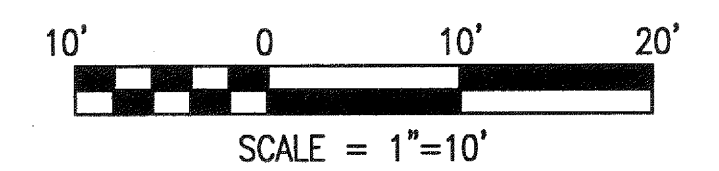
ENSURE ISO CONTRACT  
IS NOTED FOR THIS  
CONDITION

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- NOTES:**
- R/S (E) LPFH. CONTRACTOR SHALL COORDINATE AND EXCAVATE SIDEWALK AT THE HYDRANT TO THE EXTENT NECESSARY FOR SFFD TO REMOVE THE FIRE HYDRANT AND BREAKAWAY RISER, SEE WD-001 GENERAL NOTE 16.
  - R/C (E) WATER PIPE, SEE DRAWING NO. WD-001 GENERAL NOTE 22.
  - ABANDON (E) WATER PIPE, SEE DRAWING NO. WD-001 GENERAL NOTE 15.
  - (N) OR (T) WATER MAIN, SEE DRAWING NO. WD-001 GENERAL NOTE 22.
  - (N) BUILDING SERVICE, SEE DRAWING NO. WD-001 GENERAL NOTE 8A.
  - (N) 6" LPFH ASSEMBLY, SEE DRAWING NO. WD-001 GENERAL NOTE 8B.
  - RECONNECT TO (E) WATER LATERAL BY SFWD.
  - CONNECT TO (E) WATER MAIN BY SFWD.
  - DISCONNECT AND TERMINATION OF (E) WATER LINE BY SFWD.

Field Sketch No. FS 1252 - 034  
COR 080

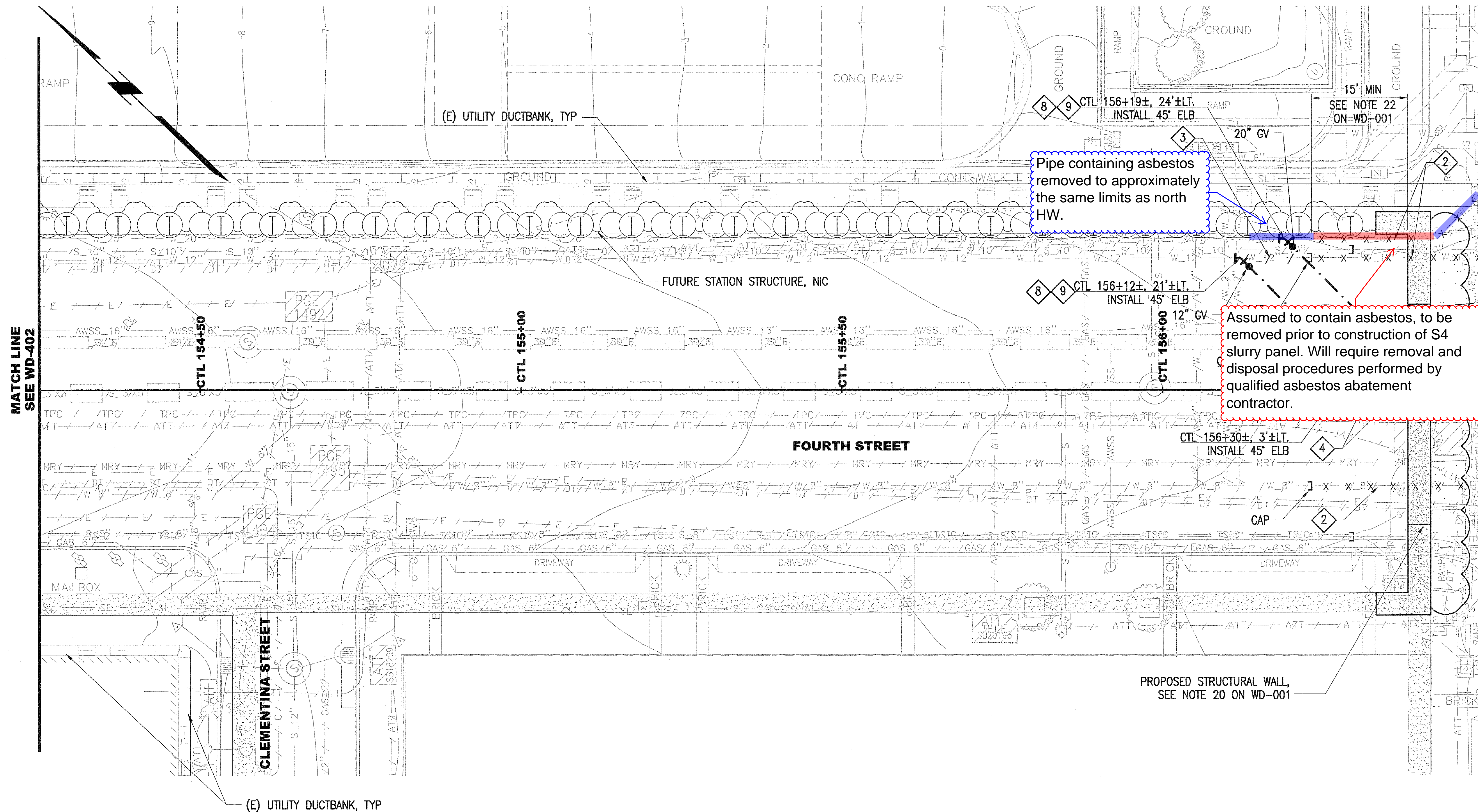


**CONFORMED**

<p>DESIGNED: D. ZUURING DRAWN: E. MATIAS CHECKED: M. DEFORGE REVIEWED: M. CHAN RECOMMENDED: M. FOWLER APPROVED: R. EDWARDS DATE: JAN 21 2011</p>			<p>CITY AND COUNTY OF SAN FRANCISCO <b>MUNICIPAL TRANSPORTATION AGENCY</b></p> <p>APPROVED: <i>[Signature]</i> EXECUTIVE DIRECTOR/CEO</p>	<p>THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS</p> <p>CONTRACT NO. 1252</p>	<p>SPMTA CONTROL NO. <b>CL-18059</b></p>
<p>DATE: 01/21/2011 ISSUED FOR BID</p>			<p>WATER DISTRIBUTION MOSCONE STATION CTL 152+00 TO 154+25</p>	<p>DRAWING NO. <b>WD-402</b></p> <p>SHEET NO. 140</p>	<p>REVISION <b>0</b></p>

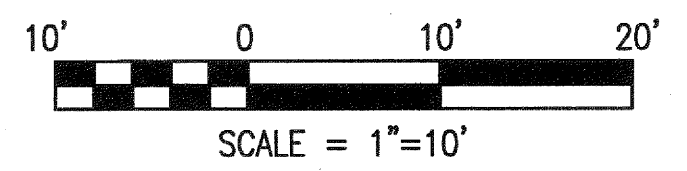
Figure 3

S:\6nas003\m544.1\FinalDesign\Drawing-821\2-Civil\Water Distribution\Sheet Files CP03\M54423WD403.dwg FBayani Wed Jan 26, 2011 - 4:27 pm WD-403



- NOTES:**
- R/S (E) LPFH. CONTRACTOR SHALL COORDINATE AND EXCAVATE SIDEWALK AT THE HYDRANT TO THE EXTENT NECESSARY FOR SFDD TO REMOVE THE FIRE HYDRANT AND BREAKAWAY RISER, SEE WD-001 GENERAL NOTE 16.
  - R/C (E) WATER PIPE, SEE DRAWING NO. WD-001 GENERAL NOTE 22.
  - ABANDON (E) WATER PIPE, SEE DRAWING NO. WD-001 GENERAL NOTE 15.
  - (N) OR (T) WATER MAIN, SEE DRAWING NO. WD-001 GENERAL NOTE 22.
  - (N) BUILDING SERVICE, SEE DRAWING NO. WD-001 GENERAL NOTE 8A.
  - (N) 6" LPFH ASSEMBLY, SEE DRAWING NO. WD-001 GENERAL NOTE 8B.
  - RECONNECT TO (E) WATER LATERAL BY SFWD.
  - CONNECT TO (E) WATER MAIN BY SFWD.
  - DISCONNECT AND TERMINATION OF (E) WATER LINE BY SFWD.

Field Sketch No. FS 1252 - 035  
COR 080



**CONFORMED**

								CITY AND COUNTY OF SAN FRANCISCO <b>MUNICIPAL TRANSPORTATION AGENCY</b>		THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS		CONTRACT NO. <b>1252</b>	
DESIGNED: D. ZUIRING DRAWN: E. MATIAS CHECKED: M. DEFORGE REVIEWED: M. CHAN RECOMMENDED: M. FOWLER APPROVED: R. EDWARDS DATE: JAN 21 2011				APPROVED  EXECUTIVE DIRECTOR/CEO		WATER DISTRIBUTION MOSCONE STATION CTL 154+25 TO 156+50		DRAWING NO. <b>WD-403</b>		SHEET NO. 141		REVISION 0	
01/21/2011 ISSUED FOR BID				0		0		DATE		DESCRIPTION		REV. NO. BY CHECKED APPROVED	



03/14/2013 06:37





03/18/2013 08:46

SFMTA Contract No. 1252

Contractor: Barnard Impregilo Healy JV (BIH)

## EVALUATION OF MERIT

### COR 081

**Recommendation:** Accept justification of Merit for COR 081, Moscone South - 12" Waterline Tee Connection Location. There is no time extension requested or recommended for this work.

**Facts:** Contract Drawing WD-404 Rev.0 shows the new 12" waterline on the south side of the MOS south headwall to make a tee connection to the existing 12" waterline in Folsom St. Upon exposing the connection location the Contractor encountered a vertical offset in the existing 12" waterline. The vertical offset was due to the presence of an existing 42" brick sewer. At the request of the SFWD and following a meeting with the SFMTA, the Contractor was requested to enlarge the excavation to the west to facilitate SFWD's installation of the new 12" tee connection. See attached sketch FS 1252 - 036 for more details.

**Justification:** The vertical offset discovered in the 12" waterline constitutes a differing and unforeseen site condition as it was not shown in the Contract Documents, specifically Drawing WD-404 Rev.0. The additional work to enlarge the excavation was necessary to facilitate the SFWD's installation of the 12" waterline tee connection.

Additional labor and equipment costs were incurred for additional excavation and backfilling due to the enlarged excavation. As a result of enlarging the excavation to the west a larger steel sheet was also needed to allow traffic to return to the approved configuration at the end of the work day. To handle the larger steel sheet it was necessary for the Contractor to mobilize a larger excavator than was currently being utilized to move the smaller steel plates.

RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions caused the scope of work to increase.

**Change Type:** (2) Unforeseen Condition

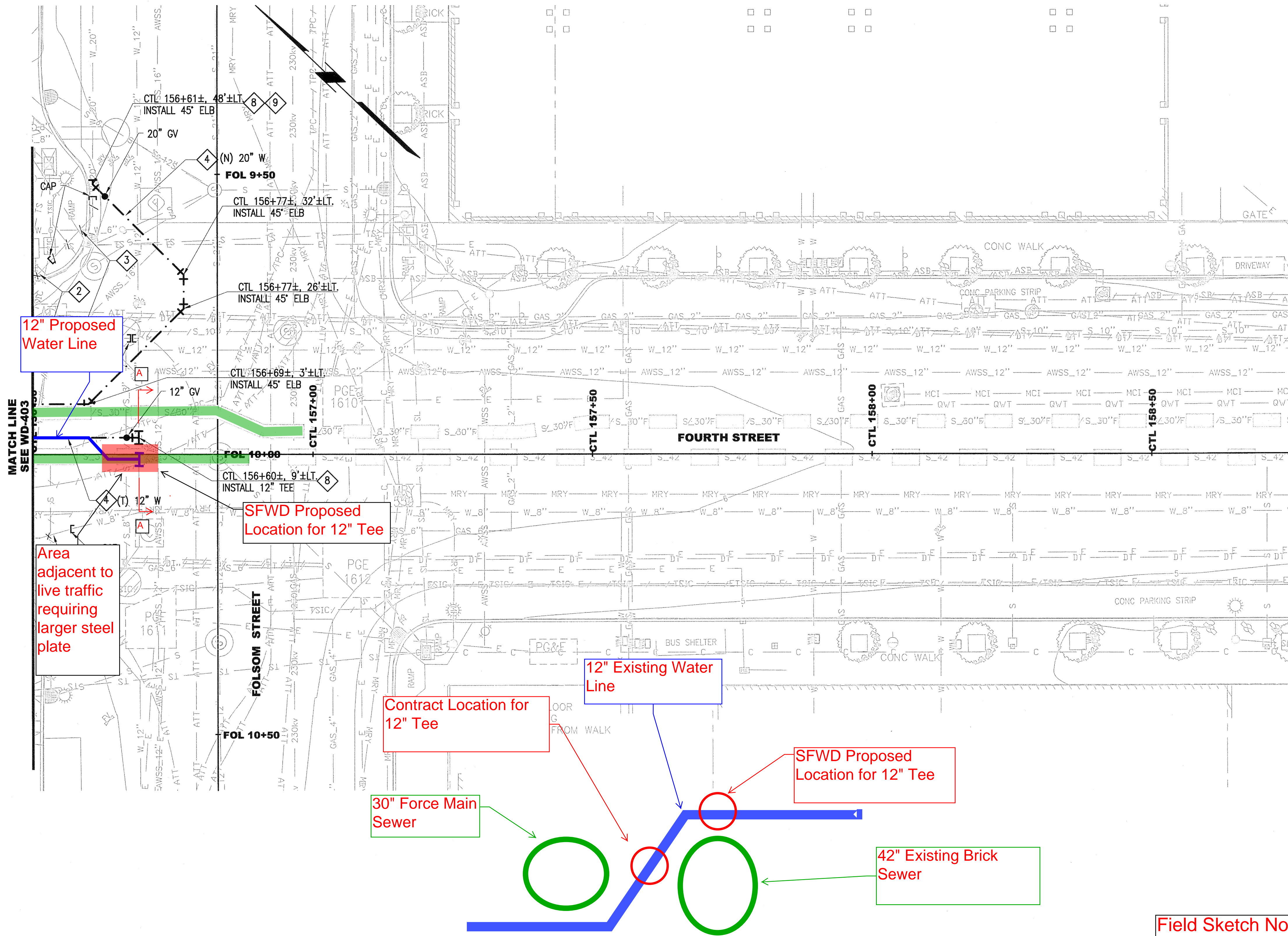
By:   
Sarah Wilson  
Resident Engineer

4/3/13  
Date

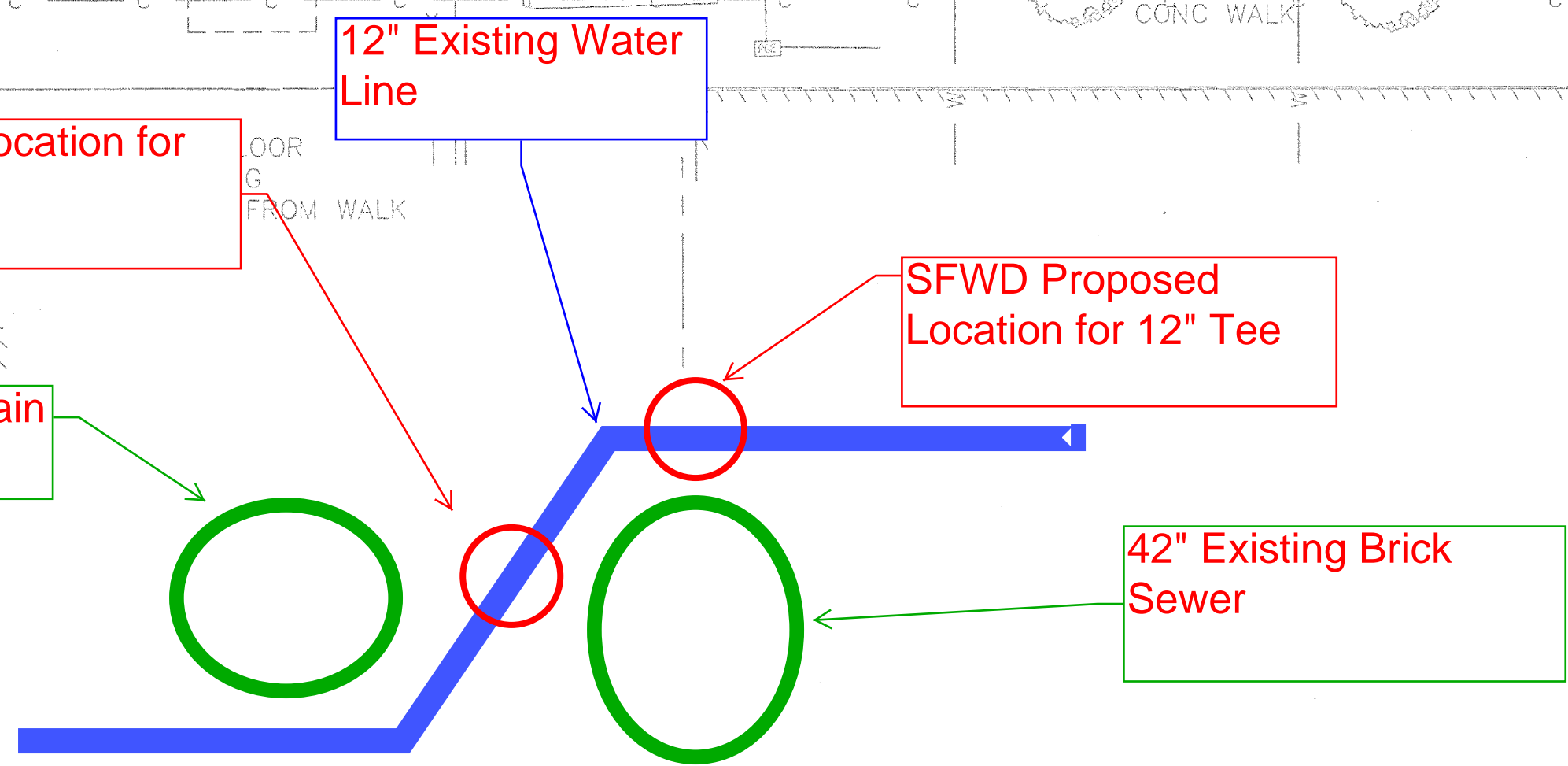
  
Configuration Management Board  
Approval

03 APR 13  
Date

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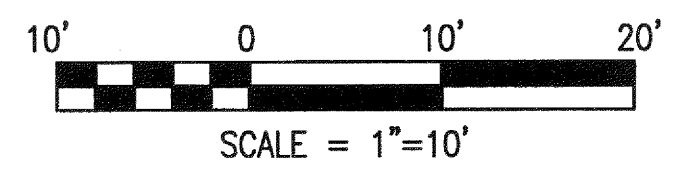


- NOTES:**
- R/S (E) LPFH. CONTRACTOR SHALL COORDINATE AND EXCAVATE SIDEWALK AT THE HYDRANT TO THE EXTENT NECESSARY FOR SFFD TO REMOVE THE FIRE HYDRANT AND BREAKAWAY RISER, SEE WD-001 GENERAL NOTE 16.
  - R/C (E) WATER PIPE, SEE DRAWING NO. WD-001 GENERAL NOTE 22.
  - ABANDON (E) WATER PIPE, SEE DRAWING NO. WD-001 GENERAL NOTE 15.
  - (N) OR (T) WATER MAIN, SEE DRAWING NO. WD-001 GENERAL NOTE 22.
  - (N) BUILDING SERVICE, SEE DRAWING NO. WD-001 GENERAL NOTE 8A.
  - (N) 6" LPFH ASSEMBLY, SEE DRAWING NO. WD-001 GENERAL NOTE 8B.
  - RECONNECT TO (E) WATER LATERAL BY SFWD.
  - CONNECT TO (E) WATER MAIN BY SFWD.
  - DISCONNECT AND TERMINATION OF (E) WATER LINE BY SFWD.



Section A - A

Field Sketch No. FS 1252 - 036  
COR 081



**CONFORMED**

				THIRD STREET LIGHT RAIL PROGRAM PHASE 2 - CENTRAL SUBWAY TUNNELS		CONTRACT NO. <b>1252</b>	
TELAMON ENGINEERING CONSULTANTS INC.		DESIGNED: D. ZUURING DRAWN: E. MATIAS CHECKED: M. DEFORGE REVIEWED: M. CHAN RECOMMENDED: M. FOWLER APPROVED: R. EDWARDS DATE: JAN 21 2011		APPROVED  EXECUTIVE DIRECTOR/CEO		SFMTA CONTROL NO. <b>CL-18061</b>	
WATER DISTRIBUTION MOSCONE STATION CTL 156+50 TO 158+75		DRAWING NO. <b>WD-404</b>		SHEET NO. 142		REVISION <b>0</b>	

**PROPOSED CONTRACT CHANGE**

Contract No. 1252 Tunnels Date 4/03/2013  
 PCC No. 1252-12  
 PCC Title Modifications to Tunnel Alignment at Market Street

**Description of PCC:**

Summary of Changes:

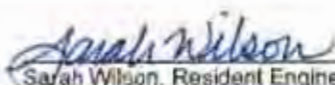
1. Modifications to tunnel alignment as required to avoid conflict with existing micropile. Modifications effect tunnel alignments between:  
 NB: STA 134+25.00 and STA 151+69.83  
 SB: STA 134+25.00 and STA 151+87.00  
  
 The modified alignments shown on the attached drawing supersedes original NB and SB alignments shown on Contract Plans TC-108 Rev.1 through TC-111 Rev.0, TC-134 Rev.1 through TC-136 Rev.0.
2. Modification to Building Protection Compensation Grouting within the Market Street Area (Pipe Arrays 1 through 3 shown on Contract Plans BP-122 Rev.0, BP-123 Rev.0 and BP-124 Rev.0). Contractor shall revise compensation grouting design to conform to Contract requirements given the revised tunnel alignment. Revised grouting plans shall be submitted to the SFMTA in accordance with Contract Specification section 31 43 14.

**Spec Ref.** CN 1252 Tunnels

**Drawing Nos.** CS 1252 TC-108  
 CS 1252 TC-134  
 CS 1252 BP-122

**Attachments** Attachment A - Revised Tunnel Alignment

The Contractor's proposal in price and time is required on the this proposed contract change to the subject contract in accordance with the General Provisions Section 6.02 B, within 14 days after receipt of a PCC.

Recommended by:   
 Sarah Wilson, Resident Engineer (SFMTA Representative)

Date 4/3/13

Concur in Principle:   
 Mark Benson, Construction Manager (SFMTA Representative)

Date 4/3/13

## FINDING OF FACTS

Contract No. & Name: 1252 - Tunnels Date: 04/03/2013  
 PCC No. & Title: 1252-12  
 Initiator (Name & Dept): Sarah Wilson, Central Subway Project

**What (Description of PCC)**

Revised Tunnel Profile

**Why (Reason for Requesting PCC)**

- A. IFB Tunnel Profile conflicts with micro-piles installed under Contract 1251.
- B. Tunnel Profile needs to be revised (lowered) such that TBM and Tunnel structure is below previously installed micro-piles.

**Where (Location, Station)**

Modifications effect tunnel alignments between:

NB: STA 134+25.00 and STA 151+69.83

SB: STA 134+25.00 and STA 151+67.00

**When (Occurrence date, action date, potential time impact)**

In response to RFI 179, a potential conflict between the tunnel profile and previously installed micro piles was identified. Response was made February 19<sup>th</sup>, 2013.

Action to be implemented immediately. No time impact is anticipated at this time.

**How (Recommendation of Action)**

Revise tunnel alignment. To be implemented immediately.

Estimate (Summary of Engineer's Estimate w/EE attached) \$TBD

Spec Ref GP 3.04 and 6.05

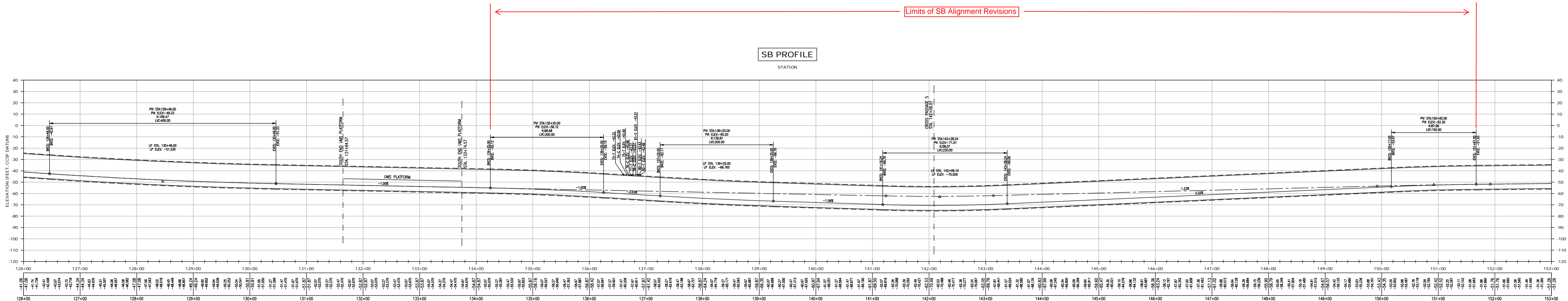
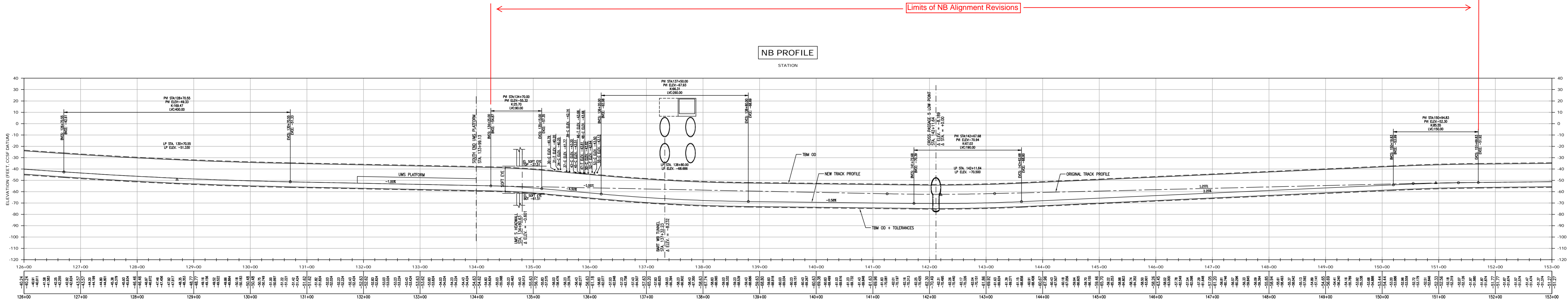
Drawing Nos. Attachment A

The Contractor's proposal in price and time is required on this proposed contract change to the subject contract in accordance with the General Provisions Section 6.02 B within 14 days after receipt of a PCC.

Prepared by:

  
 Sarah Wilson, Resident Engineer  
 SFMTA Representative

4/3/13  
 Date



# Barnard Impregilo Healy J.V.

420 4th Street

San Francisco, CA 94107

## REQUEST FOR INFORMATION

No. 00179

Phone: 415-546-0799

Fax: 415-546-3822

**TITLE:** 1251 Pin Pile Information

**DATE:** 10/23/2012

**PROJECT:** 1252 TBM, Launch Box and Tunnel

**JOB:** 1252

**TO:** Attn: Sarah Wilson  
San Francisco MTA

821 Howard St.

2nd Floor

San Francisco, CA 94103

Phone: 415-701-5276 Fax: 415-701-5222

**STARTED:**

**COMPLETED:**

**REQUIRED:** 11/6/2012

### QUESTION:

BIHJV requests the SFMTA kindly provide any section views for the utility relocations performed at #2 Stockton, as well as Northings, Eastings, and Elevations for all pin piles installed. Please confirm the length of the pin piles used at #2 Stockton are 60ft long and indicate which pin piles utilized the battered installation.

This information is needed so that proper analysis can be done for the compensation grouting program as well as for TBM tunneling.

### ANSWER:

The sketches, drawings and as-built data listed have been compiled in response to RFI00179 requesting as-information for micropiles installed by Synergy (sub Drilltech) along the east side of Stockton Street under prior utility contract 1251. The combined file size is over 50MB so the files have been uploaded to a CD (to be transmitted to BIH) and will also be added in the attachments tab of this RFI.

1. Attachment 1 Sketch SK-1 – showing as-built locations of piles placed at 2 and 48 Stockton; created from as built survey data presented in CNCR 7 (provided in .pdf format);
2. Attachment 1a. Sketch SK-1 – (provided in .dwg format);
3. Attachment 2 CNCR 7 –containing surveyed as-built locations for the piles placed 2 and 48 Stockton (from CN1251);
4. Attachment 3 CNCR 8 – containing survey data for the top of footing elevations for closure walls placed at 2 and 48 Stockton (from CN1251);
5. Attachment 4 Pin Table – containing available pile length information extracted from the survey data, micropile reports and as-built drawings for each pile at 2 Stockton;
6. Attachment 5 Document No. 12755 – micropile reports from Drilltech for 2 Stockton (from CN1251);
7. Attachment 6 AB Dwg Scans – a compilation of selected CN1251 as-built markups to drawings pertaining to micropiles at 2 Stockton – (as received from Synergy):

- SR-001
- SR-002
- SR-006
- SR-304
- SR-305
- SR-325

**Requested By:** Barnard Impregilo Healy J.V.

**Date:** 10/23/2012

**Signed:** \_\_\_\_\_

Glenn Strid

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**Barnard Impregilo Healy J.V.**

420 4th Street

San Francisco, CA 94107

**REQUEST FOR INFORMATION****No. 00179****Phone:** 415-546-0799**Fax:** 415-546-3822

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**TITLE:** 1251 Pin Pile Information**DATE:** 10/23/2012**PROJECT:** 1252 TBM, Launch Box and Tunnel**JOB:** 1252**TO:** Attn: Sarah Wilson

San Francisco MTA

821 Howard St.

2nd Floor

San Francisco, CA 94103

Phone: 415-701-5276 Fax: 415-701-5222

**STARTED:****COMPLETED:****REQUIRED:** 11/6/2012

These changes will be addressed by a realignment of the tunnel(s) in a forthcoming PCC.

**Requested By:** Barnard Impregilo Healy J.V.**Date:** 10/23/2012**Signed:** \_\_\_\_\_

Glenn Strid



	Planned Hours	Planned Costs	Actual Hours	Actual Costs	Delta Hours	Delta Costs
<b>16.0 1252 Design Services During Construction</b>						
16.30 <b>Shop Drawings Review and Consultation during construction</b>	320	\$48,000	428	\$55,361	(108)	(7,361.00)
16.30.C4 Shop Drawings Reviews and RFI – (UMS Headwalls)	160	\$24,000	202	\$29,253	(42)	(5,253.00)
16.30.C6 Shop Drawings Reviews and RFI – (MOS Headwalls)	160	\$24,000	226	\$26,108	(66)	(2,108.00)
16.40 <b>Field Visits / Meetings</b>	80	\$12,000	28	\$4,296	52	7,704.00
16.40.C4 Field Visits / Meetings – (UMS Headwalls)	40	\$6,000	18	\$2,717	22	3,283.00
16.40.C6 Field Visits / Meetings – (MOS Headwalls)	40	\$6,000	10	\$1,579	30	4,421.00
<b>16.0 1252 Total</b>	<b>400</b>	<b>\$60,000</b>	<b>456</b>	<b>\$59,657</b>	<b>(56)</b>	<b>343.00</b>
<b>16.0 DP2 Total Budget</b>	<b>53,556</b>	<b>\$7,858,383</b>				

**Work Completed to Date:**

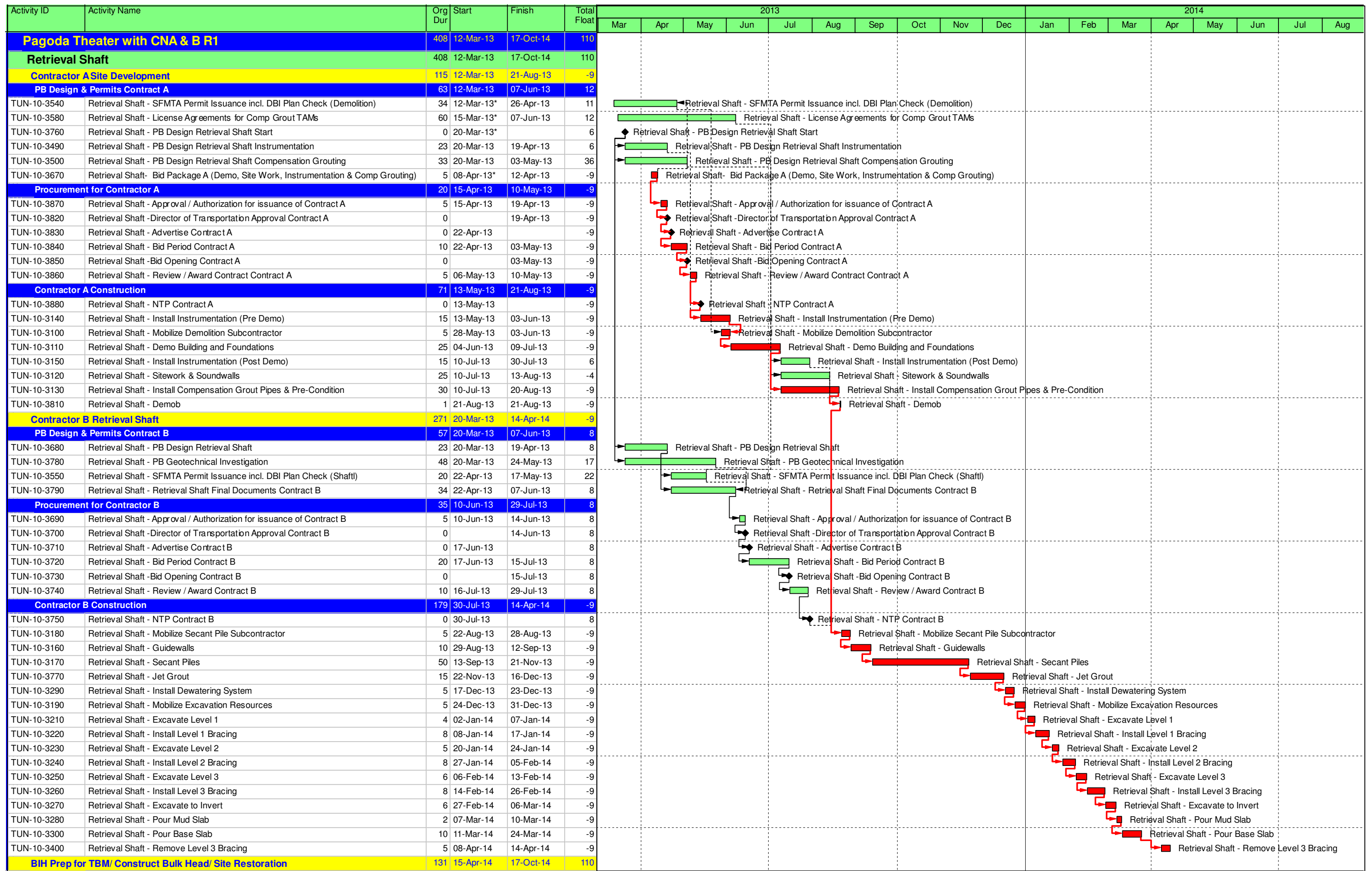
Submittals/ Shop Drawing Reviews - 24  
Resubmittals/ Shop Drawing Reviews - 22  
RFI's - 33

**Remaining Work to be Completed:**

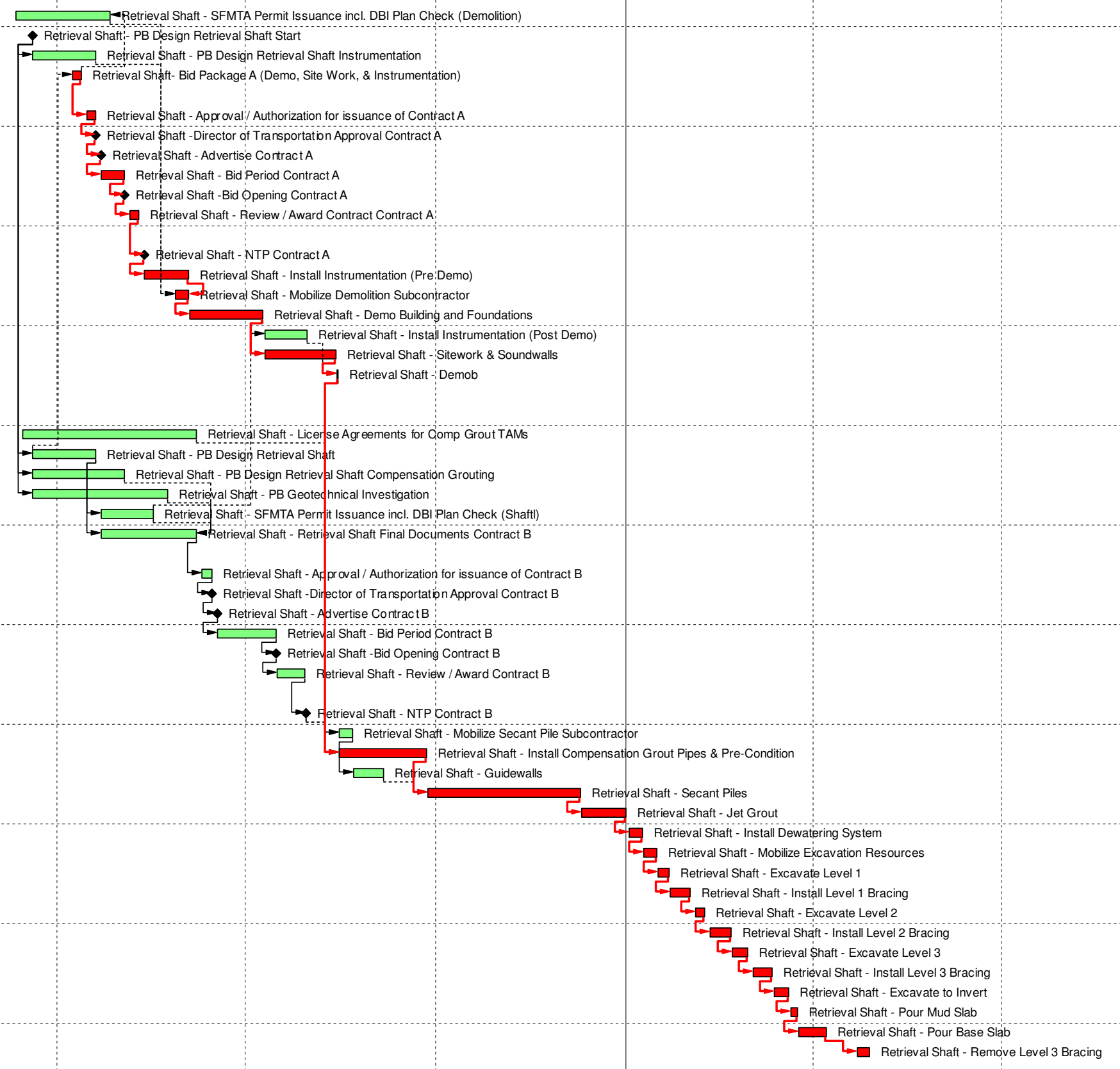
Submittals/ Shop Drawing Reviews (In Review) - 4  
Submittals/ Shop Drawing Reviews (Planned yet to be submitted) - 4  
Submittals/ Shop Drawing Reviews (Anticipated) - 2  
Open RFI's - 1  
Open NCR's - 2

**Reasons for Overrun:**

Submittals required multiple cycles for approval  
Re-sequencing of pile installation required additional work plan reviews  
Received more RFI's than anticipated  
MOS End Stop issue used hours that were not originally anticipated  
Development of two PCC's that was not covered in the original budget



Activity ID	Activity Name	Org Dur	Start	Finish	Total Float	2013												2014					
						Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
<b>Pagoda Theater with CNA &amp; B R2</b>																							
<b>Retrieval Shaft</b>																							
<b>Contractor A Site Development</b>																							
<b>PB Design &amp; Permits Contractor A</b>																							
TUN-10-3540	Retrieval Shaft - SFMTA Permit Issuance incl. DBI Plan Check (Demolition)	34	12-Mar-13*	26-Apr-13	1																		
TUN-10-3760	Retrieval Shaft - PB Design Retrieval Shaft Start	0	20-Mar-13*		-14																		
TUN-10-3490	Retrieval Shaft - PB Design Retrieval Shaft Instrumentation	23	20-Mar-13	19-Apr-13	6																		
TUN-10-3670	Retrieval Shaft - Bid Package A (Demo, Site Work, & Instrumentation)	5	08-Apr-13*	12-Apr-13	-19																		
<b>Procurement for Contractor A</b>																							
TUN-10-3870	Retrieval Shaft - Approval / Authorization for issuance of Contract A	5	15-Apr-13	19-Apr-13	-19																		
TUN-10-3820	Retrieval Shaft - Director of Transportation Approval Contract A	0		19-Apr-13	-19																		
TUN-10-3830	Retrieval Shaft - Advertise Contract A	0	22-Apr-13		-19																		
TUN-10-3840	Retrieval Shaft - Bid Period Contract A	10	22-Apr-13	03-May-13	-19																		
TUN-10-3850	Retrieval Shaft - Bid Opening Contract A	0		03-May-13	-19																		
TUN-10-3860	Retrieval Shaft - Review / Award Contract Contract A	5	06-May-13	10-May-13	-19																		
<b>Contractor A Construction</b>																							
TUN-10-3880	Retrieval Shaft - NTP Contract A	0	13-May-13		-19																		
TUN-10-3140	Retrieval Shaft - Install Instrumentation (Pre Demo)	15	13-May-13	03-Jun-13	-19																		
TUN-10-3100	Retrieval Shaft - Mobilize Demolition Subcontractor	5	28-May-13	03-Jun-13	-19																		
TUN-10-3110	Retrieval Shaft - Demo Building and Foundations	25	04-Jun-13	09-Jul-13	-19																		
TUN-10-3150	Retrieval Shaft - Install Instrumentation (Post Demo)	15	10-Jul-13	30-Jul-13	-9																		
TUN-10-3120	Retrieval Shaft - Sitework & Soundwalls	25	10-Jul-13	13-Aug-13	-19																		
TUN-10-3810	Retrieval Shaft - Demob	1	14-Aug-13	14-Aug-13	-19																		
<b>Contractor B Construction</b>																							
<b>PB Design &amp; Permits Contractor B</b>																							
TUN-10-3580	Retrieval Shaft - License Agreements for Comp Grout TAMs	60	15-Mar-13*	07-Jun-13	28																		
TUN-10-3680	Retrieval Shaft - PB Design Retrieval Shaft	23	20-Mar-13	19-Apr-13	-14																		
TUN-10-3500	Retrieval Shaft - PB Design Retrieval Shaft Compensation Grouting	33	20-Mar-13	03-May-13	-5																		
TUN-10-3780	Retrieval Shaft - PB Geotechnical Investigation	48	20-Mar-13	24-May-13	2																		
TUN-10-3550	Retrieval Shaft - SFMTA Permit Issuance incl. DBI Plan Check (Shaft)	20	22-Apr-13	17-May-13	7																		
TUN-10-3790	Retrieval Shaft - Retrieval Shaft Final Documents Contract B	34	22-Apr-13	07-Jun-13	-7																		
<b>Procurement for Contractor B</b>																							
TUN-10-3690	Retrieval Shaft - Approval / Authorization for issuance of Contract B	5	10-Jun-13	14-Jun-13	-7																		
TUN-10-3700	Retrieval Shaft - Director of Transportation Approval Contract B	0		14-Jun-13	-7																		
TUN-10-3710	Retrieval Shaft - Advertise Contract B	0	17-Jun-13		-7																		
TUN-10-3720	Retrieval Shaft - Bid Period Contract B	20	17-Jun-13	15-Jul-13	-7																		
TUN-10-3730	Retrieval Shaft - Bid Opening Contract B	0		15-Jul-13	-7																		
TUN-10-3740	Retrieval Shaft - Review / Award Contract B	10	16-Jul-13	29-Jul-13	-7																		
<b>Contractor B Construction</b>																							
TUN-10-3750	Retrieval Shaft - NTP Contract B	0	30-Jul-13		-7																		
TUN-10-3180	Retrieval Shaft - Mobilize Secant Pile Subcontractor	5	15-Aug-13	21-Aug-13	-4																		
TUN-10-3130	Retrieval Shaft - Install Compensation Grout Pipes & Pre-Condition	30	15-Aug-13	26-Sep-13	-19																		
TUN-10-3160	Retrieval Shaft - Guidewalls	10	22-Aug-13	05-Sep-13	-4																		
TUN-10-3170	Retrieval Shaft - Secant Piles	50	27-Sep-13	09-Dec-13	-19																		
TUN-10-3770	Retrieval Shaft - Jet Grout	15	10-Dec-13	31-Dec-13	-19																		
TUN-10-3290	Retrieval Shaft - Install Dewatering System	5	02-Jan-14	08-Jan-14	-19																		
TUN-10-3190	Retrieval Shaft - Mobilize Excavation Resources	5	09-Jan-14	15-Jan-14	-19																		
TUN-10-3210	Retrieval Shaft - Excavate Level 1	4	16-Jan-14	21-Jan-14	-19																		
TUN-10-3220	Retrieval Shaft - Install Level 1 Bracing	8	22-Jan-14	31-Jan-14	-19																		
TUN-10-3230	Retrieval Shaft - Excavate Level 2	5	03-Feb-14	07-Feb-14	-19																		
TUN-10-3240	Retrieval Shaft - Install Level 2 Bracing	8	10-Feb-14	20-Feb-14	-19																		
TUN-10-3250	Retrieval Shaft - Excavate Level 3	6	21-Feb-14	28-Feb-14	-19																		
TUN-10-3260	Retrieval Shaft - Install Level 3 Bracing	8	03-Mar-14	12-Mar-14	-19																		
TUN-10-3270	Retrieval Shaft - Excavate to Invert	6	13-Mar-14	20-Mar-14	-19																		
TUN-10-3280	Retrieval Shaft - Pour Mud Slab	2	21-Mar-14	24-Mar-14	-19																		
TUN-10-3300	Retrieval Shaft - Pour Base Slab	10	25-Mar-14	07-Apr-14	-19																		
TUN-10-3400	Retrieval Shaft - Remove Level 3 Bracing	5	22-Apr-14	28-Apr-14	-19																		
<b>BIH Prep for TBM/ Construct Bulk Head/ Site Restoration</b>																							



Activity ID	Activity Name	Org Dur	Start	Finish	Total Float	2013												2014															
						Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec						
<b>PB Design Pagoda Theater with PCC 10</b>						499	12-Mar-13	06-Oct-14	149																								
<b>Retrieval Shaft</b>						499	12-Mar-13	06-Oct-14	149																								
<b>BIH Site Development</b>						125	12-Mar-13	31-Jul-13	523																								
<b>BIH Utilities &amp; Restorations</b>						60	22-Apr-13	16-Jul-13	386																								
<b>BIH</b>						100	12-Mar-13	31-Jul-13	6																								
TUN-10-3540	Retrieval Shaft - SFMTA Permit Issuance incl. DBI Plan Check (Demolition)	34	12-Mar-13*	26-Apr-13	11	[Gantt bar: Mar 12 - Apr 26]																											
TUN-10-3670	Retrieval Shaft - BIH CMOD for Demo, Site Work, & Pre Demo Shaft Instrumentation	15	01-Apr-13	19-Apr-13	6	[Gantt bar: Apr 01 - Apr 19]																											
TUN-10-3800	Retrieval Shaft - BIH CMOD for Comp Grouting & Post Demo Shaft Instrumentation	35	01-Apr-13	17-May-13	26	[Gantt bar: Apr 01 - May 17]																											
TUN-10-3140	Retrieval Shaft - Install Instrumentation (Pre Demo)	15	22-Apr-13	10-May-13	6	[Gantt bar: Apr 22 - May 10]																											
TUN-10-3100	Retrieval Shaft - Mobilize Demolition Subcontractor	5	06-May-13	10-May-13	6	[Gantt bar: May 06 - May 10]																											
TUN-10-3110	Retrieval Shaft - Demo Building and Foundations	25	13-May-13	17-Jun-13	6	[Gantt bar: May 13 - Jun 17]																											
TUN-10-3150	Retrieval Shaft - Install Instrumentation (Post Demo)	15	18-Jun-13	09-Jul-13	21	[Gantt bar: Jun 18 - Jul 09]																											
TUN-10-3120	Retrieval Shaft - Sitework & Soundwalls	25	18-Jun-13	23-Jul-13	11	[Gantt bar: Jun 18 - Jul 23]																											
TUN-10-3130	Retrieval Shaft - Install Compensation Grout Pipes & Pre-Condition	30	18-Jun-13	30-Jul-13	6	[Gantt bar: Jun 18 - Jul 30]																											
TUN-10-3810	Retrieval Shaft - BIH Demob	1	31-Jul-13	31-Jul-13	6	[Gantt bar: Jul 31 - Jul 31]																											
<b>Contractor B Construction</b>						259	15-Mar-13	24-Mar-14	6																								
<b>PB Design &amp; Permits</b>						60	15-Mar-13	07-Jun-13	12																								
TUN-10-3580	Retrieval Shaft - License Agreements for Comp Grout TAMs	60	15-Mar-13*	07-Jun-13	12	[Gantt bar: Mar 15 - Jun 07]																											
TUN-10-3760	Retrieval Shaft - PB Design Retrieval Shaft Start	0	20-Mar-13*		6	[Gantt bar: Mar 20 - Mar 20]																											
TUN-10-3490	Retrieval Shaft - PB Design Retrieval Shaft Instrumentation	23	20-Mar-13	19-Apr-13	8	[Gantt bar: Mar 20 - Apr 19]																											
TUN-10-3680	Retrieval Shaft - PB Design Retrieval Shaft	23	20-Mar-13	19-Apr-13	6	[Gantt bar: Mar 20 - Apr 19]																											
TUN-10-3500	Retrieval Shaft - PB Design Retrieval Shaft Compensation Grouting	33	20-Mar-13	03-May-13	10	[Gantt bar: Mar 20 - May 03]																											
TUN-10-3780	Retrieval Shaft - PB Geotechnical Investigation	48	20-Mar-13	24-May-13	17	[Gantt bar: Mar 20 - May 24]																											
TUN-10-3550	Retrieval Shaft - SFMTA Permit Issuance incl. DBI Plan Check (Shaft)	20	22-Apr-13	17-May-13	22	[Gantt bar: Apr 22 - May 17]																											
TUN-10-3790	Retrieval Shaft - PB Design Retrieval Shaft Final Documents	34	22-Apr-13	07-Jun-13	8	[Gantt bar: Apr 22 - Jun 07]																											
<b>Procurement for Contractor B</b>						35	10-Jun-13	29-Jul-13	8																								
TUN-10-3690	Retrieval Shaft - Approval / Authorization for issuance of contract	5	10-Jun-13	14-Jun-13	8	[Gantt bar: Jun 10 - Jun 14]																											
TUN-10-3700	Retrieval Shaft - Director of Transportation Approval	0		14-Jun-13	8	[Gantt bar: Jun 14 - Jun 14]																											
TUN-10-3710	Retrieval Shaft - Advertise	0	17-Jun-13		8	[Gantt bar: Jun 17 - Jun 17]																											
TUN-10-3720	Retrieval Shaft - Bid Period	20	17-Jun-13	15-Jul-13	8	[Gantt bar: Jun 17 - Jul 15]																											
TUN-10-3730	Retrieval Shaft - Bid Opening	0		15-Jul-13	8	[Gantt bar: Jul 15 - Jul 15]																											
TUN-10-3740	Retrieval Shaft - Review / Award Contract	10	16-Jul-13	29-Jul-13	8	[Gantt bar: Jul 16 - Jul 29]																											
<b>Contractor B Construction</b>						164	30-Jul-13	24-Mar-14	6																								
TUN-10-3750	Retrieval Shaft - NTP	0	30-Jul-13		8	[Gantt bar: Jul 30 - Jul 30]																											
TUN-10-3180	Retrieval Shaft - Mobilize Secant Pile Subcontractor	5	01-Aug-13	07-Aug-13	6	[Gantt bar: Aug 01 - Aug 07]																											
TUN-10-3160	Retrieval Shaft - Guidewalls	10	08-Aug-13	21-Aug-13	6	[Gantt bar: Aug 08 - Aug 21]																											
TUN-10-3170	Retrieval Shaft - Secant Piles	50	22-Aug-13	31-Oct-13	6	[Gantt bar: Aug 22 - Oct 31]																											
TUN-10-3770	Retrieval Shaft - Jet Grout	15	01-Nov-13	21-Nov-13	6	[Gantt bar: Nov 01 - Nov 21]																											
TUN-10-3290	Retrieval Shaft - Install Dewatering System	5	22-Nov-13	02-Dec-13	6	[Gantt bar: Nov 22 - Dec 02]																											
TUN-10-3190	Retrieval Shaft - Mobilize Excavation Resources	5	03-Dec-13	09-Dec-13	6	[Gantt bar: Dec 03 - Dec 09]																											
TUN-10-3210	Retrieval Shaft - Excavate Level 1	4	10-Dec-13	13-Dec-13	6	[Gantt bar: Dec 10 - Dec 13]																											
TUN-10-3220	Retrieval Shaft - Install Level 1 Bracing	8	16-Dec-13	26-Dec-13	6	[Gantt bar: Dec 16 - Dec 26]																											
TUN-10-3230	Retrieval Shaft - Excavate Level 2	5	27-Dec-13	03-Jan-14	6	[Gantt bar: Dec 27 - Jan 03]																											
TUN-10-3240	Retrieval Shaft - Install Level 2 Bracing	8	06-Jan-14	15-Jan-14	6	[Gantt bar: Jan 06 - Jan 15]																											
TUN-10-3250	Retrieval Shaft - Excavate Level 3	6	16-Jan-14	23-Jan-14	6	[Gantt bar: Jan 16 - Jan 23]																											
TUN-10-3260	Retrieval Shaft - Install Level 3 Bracing	8	24-Jan-14	04-Feb-14	6	[Gantt bar: Jan 24 - Feb 04]																											
TUN-10-3270	Retrieval Shaft - Excavate to Invert	6	05-Feb-14	12-Feb-14	6	[Gantt bar: Feb 05 - Feb 12]																											
TUN-10-3280	Retrieval Shaft - Pour Mud Slab	2	13-Feb-14	14-Feb-14	6	[Gantt bar: Feb 13 - Feb 14]																											
TUN-10-3300	Retrieval Shaft - Pour Base Slab	10	18-Feb-14	03-Mar-14	6	[Gantt bar: Feb 18 - Mar 03]																											
TUN-10-3400	Retrieval Shaft - Remove Level 3 Bracing	5	18-Mar-14	24-Mar-14	6	[Gantt bar: Mar 18 - Mar 24]																											
<b>BIH Prep for TBM/ Construct Bulk Head/ Site Restoration</b>						131	02-Apr-14	06-Oct-14	119	[Gantt bar: Apr 02 - Oct 06]																							

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

**Trend Log**

Contract Cost Estimate and Allocated Contingencies											
Item #	Date Initiated	CMB No.	Change Description	Change Type	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements	
					Approval Action	Approval Date					Actual/Forecast
<b>CONSTRUCTION TRENDS</b>											
<b>Contract 1250 - Utilities Relocation #1 (Portal &amp; MOS)</b>											
1250-0001	04/15/10	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>	CMOD #1 Approved		
1250-0002	05/07/10	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>	CMOD #2 Approved	
1250-0003	05/28/10	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>	CMOD #3 Approved	
1250-0004	07/02/10	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>	CMOD #4 Approved	
1250-0005	04/20/10	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>	CMOD #5 Approved	
1250-0006	04/29/10	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>	CMOD #6 Approved	
1250-0007	10/06/10	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>	CMOD #9 Approved	
1250-0008	10/06/10	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>	CMOD #8 Approved	(19,500)
1250-0009	10/06/10	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>	CMOD #7 Approved	
1250-0010	10/06/10	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	(48,181)

- 1 - Owner Directed Change in Scope
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**CENTRAL SUBWAY PROJECT**  
**Project Trend/Change Control Log**

Item #	Date Initiated	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements	
					Approval Action	Approval Date					Actual/Forecast
1250-0011	10/06/10	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	10/06/10	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. (\$67,798) Expected Reimbursement from AT&T. Cost captured in Trend #15 <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved	
1250-0013	10/06/10	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. (\$30,547) Expected Reimbursement from AT&T. Cost captured in Trend #15 <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20 Approved	
1250-0014	10/06/10	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	10/06/10	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. \$597,000 Arch, \$179,000 DIFF, \$8,500 Traffic <b>COMPLETE, NO FURTHER ACTION; CMOD #20</b>	CMOD #20	
1250-0016	10/06/10	081-0016	Additional AWSS modification at 4th/Harrison	1	CMB-0016	Agree	11/10/10	+156,418	New alignment is proposed by Design team. No reimbursement from SFPUC AWSS. COR #33 Supplemental <b>COMPLETE, NO FURTHER ACTION; CMOD #12</b>	CMOD #12 Approved	
1250-0017	10/06/10	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. Work was not performed and will need to be addressed in a future contract.		
1250-0018	10/06/10	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. Work was not performed and will need to be addressed in a future contract.		
1250-0019	10/06/10	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	10/06/10	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. Refer to RFI Nos. 2S01 and 147. No reimbursement from SFPUC Sewer. <b>COMPLETE, NO FURTHER ACTION; CMOD #11</b>	CMOD #11 Approved	
1250-0021	10/06/10	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	10/06/10	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. No reimbursement from SFPUC AWSS. <b>COMPLETE, NO FURTHER ACTION; CMOD #15</b>	CMOD #15 Approved	
1250-0023	10/06/10	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	10/06/10	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 workarounds & support. AT&T refused to pay Synergy. Synergy considers AT&T's refusal as a changed condition to CN 1250 contract. (\$95,311) Reimbursement from AT&T. See Final 1250 Form B actual costs. <b>COMPLETE, NO FURTHER ACTION; CMOD #19</b>	CMOD #19 Approved	(95,311)

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

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					Approval Action	Approval Date				
1250-0025	10/06/10	081-0025	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	10/06/10	081-0026	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	10/06/10	081-0027	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	12/08/10	081-0028	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	12/08/10	081-0029	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	12/08/10	081-0030	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	12/08/10	081-0031	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>		
1250-0032	12/08/10	081-0032	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. <b>Credit amount included in Trend #43</b>		
1250-0033	12/08/10	081-0033	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. <b>Credit amount included in Trend #43</b>		
1250-0034	12/08/10	081-0034	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. <b>COMPLETE, NO FURTHER ACTION; CMOD #18</b>	CMOD #18 Approved	
1250-0035	12/08/10	081-0035	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. <b>COR Not submitted by Contractor</b> <b>CLOSED COMPLETE, NO FURTHER ACTION</b>		

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**CENTRAL SUBWAY PROJECT**  
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					Approval Action	Approval Date				
1250-0036	12/08/10	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); -0- 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: RE to Prepare Modification</b> <b>10/29: 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> <b>COMPLETE, NO FURTHER ACTION</b>	<b>CMOD #20 Approved</b>	
1250-0037	12/08/10	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	03/18/11	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>		
1250-0039	05/18/11	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>	<b>N/A</b>	
1250-0040	05/18/11	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>	<b>N/A</b>	
1250-0041	05/18/11	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>	<b>N/A</b>	
1250-0042	05/25/11	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>	<b>N/A</b>	
1250-9001	10/06/10	081-9001 Utility Companies refusal to contribute to utility support costs and work around. (Voided. Recorded individually in TR-0059-TR-0061.)	7						<b>VOIDED</b>	
1250-0043	08/03/11	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>	<b>CMOD #20 Approved</b>	
<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>(162,992)</b>

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**Project Trend/Change Control Log**

Item #	Date Initiated	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements	
					Approval Action	Approval Date					Actual/Forecast
<b>Contract 1251 - Utilities Relocation #2 (UMS)</b>											
1251-0001	03/18/11	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				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	03/18/11	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 subsidewalk 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	03/18/11	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	
1251-0004	04/06/11	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	04/06/11	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	(66,084)
1251-0006	04/20/11	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	04/20/11	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	04/20/11	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	04/20/11	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	

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1251-0010	05/25/11	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	06/22/11	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	07/06/11	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	
1251-0013	07/06/11	082-0013	Accelerate start of construction in front of Macys West by trenchless construction method	7				-0	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	07/21/11	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	08/03/11	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	08/03/11	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	08/03/11	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	(25,000)
1251-0018	08/03/11	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	(31,000)
1251-0019	08/03/11	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	(31,000)

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1251-0020	09/07/11	082-0020	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. PG&E agreed to reimburse SFMTA (\$19,537) through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #21</b>	CMOD #21 Approved	(19,537)
1251-0021	09/07/11	082-0021	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 is captured in Trend #31 or CMod #12. <b>CLOSED; NO FURTHER ACTION. Cost for this trend is captured in Trend #31/CMod #12</b>		
1251-0022	09/07/11	082-0022	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	09/07/11	082-0023	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 Updated projected cost impact from \$490,000 to \$405,440. CMod #12 (Formally CMod #15) <b>COMPLETE, NO FURTHER ACTION; CMOD #12</b>	CMOD #12 Approved	
1251-0024	09/07/11	082-0024	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. PG&E agreed to reimburse SFMTA (\$201,410) through the Form B process. COR #58 <b>COMPLETE, NO FURTHER ACTION; CMOD #19</b>	CMOD #19 Approved	(201,411)
1251-0025	09/07/11	082-0025	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	09/14/11	082-0026	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	09/20/11	082-0027	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	10/18/11	082-0028	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. AT&T agreed to reimburse SFMTA (\$157,000) through the Form B process. COR #43 <b>COMPLETE, NO FURTHER ACTION; CMOD #11</b>	CMOD #11 Approved	(157,000)
1251-0029	10/26/11	082-0029	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	10/26/11	082-0030	6	CMB-0058	Agree	11/02/11	+46,366	PG&E asked SFMTA to enlarge vault 873. PG&E agreed to reimburse SFMTA (\$46,366) through the Form B process. CMB approved a NTE amount of \$40K <b>COMPLETE, NO FURTHER ACTION; CMOD #21</b>	CMOD #21 Approved	(46,366)
1251-0031	10/26/11	082-0031	6	CMB-0058	Agree	11/02/11	+17,193	PG&E asked SFMTA to install additional conduits. PG&E agreed to reimburse SFMTA (\$17,193) through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #21</b>	CMOD #21 Approved	(17,193)

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1251-0032	11/08/11	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 were 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	(92,292)
1251-0033	11/23/11	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	01/10/12	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	01/11/12	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	01/11/12	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	01/17/12	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	01/04/12	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 5EA kiosks removed. Total work priced at \$29,268. <b>COMPLETE, NO FURTHER ACTION; CMOD #22</b>	CMod #22 Approved	
1251-0039	01/17/12	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	
1251-0040	02/15/12	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 <b>AT&amp;T agreed to reimburse SFMTA (\$45,000) through the Form B process.</b> <b>COMPLETE, NO FURTHER ACTION; CMOD #14</b>	CMOD #14 Approved	(45,000)

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1251-0041	02/15/12	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. <b>COMPLETE, NO FURTHER ACTION; CMOD #14</b>	CMOD #14 Approved	(23,704)
1251-0042	02/15/12	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. <b>COMPLETE, NO FURTHER ACTION; CMOD #14</b>	CMOD #14 Approved	(31,525)
1251-0043	02/15/12	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) <b>COMPLETE, NO FURTHER ACTION; CMOD #23</b>	CMOD #23 Approved	(52,607)
1251-0044	02/15/12	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. <b>COMPLETE, NO FURTHER ACTION; CMOD #18</b>	CMOD #18 Approved	
1251-0045	02/15/12	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) <b>COMPLETE, NO FURTHER ACTION; CMOD #18</b>	CMOD #18 Approved	
1251-0046	03/06/12	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. <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved	(80,000)
1251-0047	04/10/12	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) <b>COMPLETE, NO FURTHER ACTION; CMOD #26</b>	CMOD #26 Approved	
1251-0048	04/10/12	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. <b>CLOSED; NO FURTHER ACTION.</b>		
1251-0049	04/10/12	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) <b>COMPLETE, NO FURTHER ACTION</b>	CMOD #27 Approved	
1251-0050	04/10/12	082-0050	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	

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1251-0051	04/10/12	082-0051	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 PG&E agreed to reimburse SFMTA (\$23,633) through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved	(23,633)
1251-0052	04/10/12	082-0052	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	04/10/12	082-0053	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 PG&E agreed to reimburse SFMTA (\$10,590) through the Form B process. 11/07/12 (CMB 0083 approval - see Trend CN1251#'s 49, 59, and 64) <b>COMPLETE, NO FURTHER ACTION; CMOD #27</b>	CMOD #27 Approved	
1251-0054	04/17/12	082-0054	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	04/17/12	082-0055	6					PG&E requested SFMTA to add this scope to the 1251 contract for safety reason. COR #72 SFMTA decided to defer this work to the 1252 contract. <b>COMPLETE, NO FURTHER ACTION;</b>		
1251-0056	05/31/12	082-0056	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	05/31/12	082-0057	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	05/31/12	082-0058	2	CMB-0083	Agree	10/31/12	+17,754	The existing streetlight pulboxes 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	06/26/12	082-0059	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	06/26/12	082-0060	4				(508,961)	Bid item analysis for entire contract as of 6/12/12.	CMOD #30 Approved	
1251-0061	06/26/12	082-0061	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 PG&E agreed to reimburse SFMTA (\$7,424) through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved	(7,424)
1251-0062		082-0062	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	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. PG&E agreed to reimburse SFMTA (\$56,458) through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	CMOD #24 Approved	(56,458)
1251-0064		082-0064	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	

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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) This is potentially an E & O issue due to an existing Muni pole foundation is in the way of the AWSS lateral. <b>COMPLETE, NO FURTHER ACTION; CMOD #28</b>	<b>CMOD #28 Approved</b>	
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. PG&E agreed to reimburse SFMTA (\$6,466) through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	<b>CMOD #24 Approved</b>	(6,466)
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>	<b>CMOD #20 Approved</b>	
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  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>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	<b>CMOD #29 Approved</b>	
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) PG&E agreed to reimburse SFMTA (\$4,737) through the Form B process. <b>COMPLETE, NO FURTHER ACTION; CMOD #24</b>	<b>CMOD #24 Approved</b>	(4,737)
1251-0070		082-0070	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>	<b>CMOD #28 Approved</b>	
1251-0071		082-0071	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	08/08/12	082-0072	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. RE Tracking work on FAR  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>	<b>CMOD #14 Approved</b>	(23,993)
1251-0073	08/08/12	082-0073	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>	<b>CMOD #22 Approved</b>	

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1251-0074	08/08/12	082-0074	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	08/08/12	082-0075	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	08/08/12	082-0076	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	09/12/12	082-0077	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. <b>Private Utilities companies agreed to reimburse SFMTA (\$37,181) through the Form B process.</b> <b>RE Tracking work on FAR</b> <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> <b>COMPLETE, NO FURTHER ACTION; CMOD #25</b>	CMOD #25 Approved	(37,181)
1251-0078	09/12/12	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	09/12/12	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	(44,530)
1251-0080	09/12/12	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	(56,806)
1251-0081	09/13/12	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	(43,882)

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							Approval Action	Approval Date				
<p><b>Contract 1251 Totals</b></p> <p><b>+3,962,032</b></p> <p>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.</p> <p>Changes that will be Utility Reimbursement credits through the Form B process in the amount of \$1,224,828 will increase the UNDERRUN.</p> <p>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</p>												
<b>Contract 1252</b>		<b>COR No.</b>	<b>PCC No.</b>	<b>1252 Change Description</b>	<b>Change Type</b>	<b>CMB Change No.</b>	<b>Configuration Management Board Agree/Disagree</b>	<b>Decision Date</b>	<b>Actual/Forecast</b>	<b>Comments</b>	<b>Contract Modification No.</b>	
1252-0001	04/23/12	1		AWSS Conflict w/ Low Pressure Water	6	CMB-0091	Agree to Merit Agree to Cost	10/10/12 1/16/13	+16,907	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 - CMB - NOT TO EXCEED Amount \$16,900	CMOD #17	
1252-0002	04/23/12	2		AWSS Add. Tie-Rods 4th-Harrison	6	CMB-0086	Agree to Merit Agree to Cost	10/10/12 12/19/12	+58,000	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 - CMB - NOT TO EXCEED Amount \$58,000	CMOD #17	
1252-0003	04/23/12	3		AT&T Vault Conflict-4th & Harrison	6	CMB-0092	Agree to Merit Agree to Cost	10/10/12 1/16/13	+16,015	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 - CMB - NOT TO EXCEED Amount \$21,089	CMOD #17	(16,015)
1252-0004	05/18/12	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 - CMB - NOT TO EXCEED Amount \$7,600 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement. Final Contract Modification #10 \$7,402.36	CMOD #10	
1252-0005	06/06/12	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. 01/16/132 - Merit info presented to CMB - Agreed 01/16/13 - CMB - NOT TO EXCEED Amount \$10,000 Final Contract Modification #5 \$9,979.81	CMOD #5 Approved	
1252-0006	04/23/12	8		TIA - Associated w/ COR 001, COR 002, and COR 003	6		Agree to Merit	10/10/12	+269,904	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.	CMOD #17	
1252-0007	06/12/12	9		MOS - Live Utilities: PGE, AT&T, and SFWD 8" Water Line extra kill hole location	2		Agree to Merit	11/14/12	+49,007	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 Merit presented to CMB.		
1252-0008	06/19/12	10		MOS - Demo PGE duct bank / SF City 911 fiber optic line	2	CMB-0094	Agree to Merit Agree to Cost	10/10/12 1/16/13	+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 - CMB - NOT TO EXCEED Amount 4,919.54 Final Contract modification #3 \$4,915.54	CMOD #3 Approved	(4,916)
1252-0009	07/02/12	11		MOS - Traffic Signal line re-route south headwall	6	CMB-0095	Agree to Merit Agree to Cost	1/16/13	+37,500	After potholing Synergy discovered several traffic lines which were in the proposed location of the south MOS headwall. Traffic Lines re-routed. 01/16/13 - CMB - NOT TO EXCEED Amount \$37,500	CMOD #19	

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1252-0010	01/00/00	12	MOS - Archaeological Standby North Headwall	2	CMB-0096	Agree to Merit Agree to Cost	12/11/12 1/16/13	+16,892	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 - CMB - NOT TO EXCEED Amount \$7,600 Final Contract Modification #6 \$16,892.96	<b>CMOD #6 Approved</b>	
1252-0011	07/06/12	13	MOS - SL conduit from PG&E vault @ north headwall	6		Agree to Merit	11/28/12	+10,903	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		
1252-0012	06/26/12	15	LB - Pre-Excavation for Slurry Walls	2	CMB-0087	Agree to Merit Agree to Cost	11/28/12 12/19/12	+96,000	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 - CMB - NOT TO EXCEED Amount \$96,000	<b>CMOD #22</b>	
1252-0013	07/02/12	17	MOS - Standby Time @ south headwall due to live TS lines	6		Agree to Merit	11/21/12	+79,153	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.	<b>CMOD #19</b>	
1252-0014	Closed	19	UMS - Grant street 2 way conversion (e- & striping)	7					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. CLOSED; NO FUTHER ACTION		
1252-0015	06/22/12	20	PROJECT WIDE - Utility Demo limit reduction credit	5					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. Closed - SFMTA to BIH/SPM "Build per Plan".		
1252-0016	04/02/12	21	UMS - Reduced Duration	5	CMB-0073	Agree Cost (Conditionally)	8/01/12	-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. Final Contract Modification #8 \$0 - No change to the contract amount	<b>CMOD #8</b>	
1252-0017	07/10/12	22	MOS - Asbestos Pipe at north headwall	2	CMB-0090	Agree to Merit Agree to Cost	12/12/12 1/09/13	+5,705	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered fryable asbestos-laden transite pipe. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 - CMB - NOT TO EXCEED Amount \$6,000 Final Contract Modification #5 \$5,707.05	<b>CMOD #5 Approved</b>	
1252-0018	07/10/12	23	MOS - Brick Wall #2 discovered @ north headwall	2		Agree to Merit	12/6/12	+14,997	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 - Merit info presented to CMB - Agreed		
1252-0019	08/10/12	26	MOS - Asbestos Pipe at south headwall	2	CMB-0085	Agree to Merit Agree to Cost	12/12/12 1/09/13	+27,630	Transite pipe was discovered during MOS south headwall excavation. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 CMB - NOT TO EXCEED Amount \$30,000	<b>CMOD #16</b>	
1252-0020	08/10/12	27	MOS - Oil filled pipe at south headwall	2	CMB-0089	Agree to Merit Agree to Cost	12/12/12 1/09/13	+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 Amount \$8,600 Final Contract Modification #5 \$8,225.68	<b>CMOD #5 Approved</b>	
1252-0021	06/19/12	29	MOS - Todco scaffolding reimbursement	2	CMB-0097	Agree to Merit Agree to Cost	12/12/12 1/16/13	+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 - CMB - NOT TO EXCEED Amount \$1,717 Final Contract Modification #3 \$1,717.83	<b>CMOD #3 Approved</b>	
1252-0022	Closed	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.		

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1252-0023	05/30/12	4	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.		
1252-0024	Closed	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.		
1252-0025	04/23/12	5	CDF Encasement on 42" RCP	2				+140,596	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.		
1252-0026	Closed	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.		
1252-0027	Closed	14	MOS - 76 Gas Station fencing	1					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.		
1252-0028	Closed	16	LB - SPTC delays due to concrete encased 8" sewer	2					Closed. Combined with COR 015. 07/25/12 - Verbal information presented to CMB as a potential change.		
1252-0029	08/06/12	18	MOS - South Headwall re-design	1				+145,000	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.		
1252-0030	08/02/12	24	Ellis - Utility demolition	3		Agree to Merit	12/6/12	+38,678	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		
1252-0031	Closed	25	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.		
1252-0032	08/07/12	28	Ellis asbestos abatement	2		Agree to Merit	12/6/12	+35,386	A steam line containing asbestos was discovered during potholing at the Ellis Street Shaft. 12/06/12 - Merit info presented to CMB - Agreed	<b>CMOD #16</b>	
1252-0033	-	30	LB - Class 1 Hazardous Material Haul off	2				+198,276	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.		
1252-0034	-	70	LB - Jet Grout Quantity Overrun	4	CMB-0115	Agree to Merit Agree to Cost	3/20/13 04/03/13	+768,600	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 - CMB - NOT TO EXCEED Amount \$599,900		
1252-0035	01/00/00	unsubmitted	Utility Removal UD-304 and UD-503	6				TBD	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."		
1252-0036	05/17/12	35	Additional Road Base on Fourth Street	2			12/6/12	+7,000	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.		
1252-0037	01/00/00	unsubmitted	DPW permitting potential impacts	7				TBD	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.		

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1252-0038	05/30/12	38	Manhole in West Guidewall Footprint	3	CMB-0101	Agree to Merit Agree to Cost	12/05/12 1/23/13	+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 - CMB - NOT TO EXCEED Amount \$4,052.17 Final Contract Modification #12 \$3,820.84	CMOD #12	
1252-0039	01/00/00	unsubmitted	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.		
1252-0040	08/23/12		PCC No.1 - Revisions to Moscone North Headwall Elevation (Top)	1	CMB-0099	Agree to Cost	1/16/2013	+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 Amount \$20,500 Final Contract Modification #7 \$20,358.23	CMOD #7 Approved	
1252-0041	08/23/12		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.		
1252-0042	08/24/12	31	Retrieval Shaft - Unmarked 12" Steel Pipe	2	CMB-0108	Agree to Merit Agree to Cost	1/2/2013 2/27/13	+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 2/27/13 - Cost presented to CMB - agreed to NTE \$1,250 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement.	CMOD #13	
1252-0043	08/31/12	32	LB - Panel W29 Wood Pile	2		Agree to Merit	11/28/12	+81,000	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	CMOD #20	
1252-0044	09/04/12	33	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.		
1252-0045	09/11/12	34	LB - Panel W28 Wood Pile	2				+81,000	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.		
1252-0046	01/00/00	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.		
1252-0047	01/00/00	37	UMS - 12" steel pipe removal	3				+3,500	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. Closed due to improper notification.		
1252-0048	09/07/12	39	MOS - 16" Steel Pipe removal @ northeast headwall	3	CMB-0102	Agree to Cost	1/23/13	+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 - CMB - NOT TO EXCEED Amount \$2,951.99 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement.	CMOD #14	(2,952)
1252-0049	01/00/00	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.		
1252-0050	05/18/12	41	LB - Impacts due to live PG&E electrical lines (Synergy)	6	CMB-0098	Agree to Merit Agree to Cost	1/16/13	+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 -CMB - NOT TO EXCEED Amount \$1,245 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement. Final Contract Modification #10 \$1,216.60	CMOD #10	(\$1,217)

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1252-0051	01/00/00	executed	Contract Amendment No. 2	1				(3,040,713)	0	CMOD #2 Approved	
1252-0052	08/17/12	42	LB - Panel W25 Wood Pile	2		Agree to Merit	11/28/12	+116,785	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 - CMB agreed with Evaluation of Merit	CMOD #20	
1252-0053	08/22/12	43	LB - Panel W30 Wood Pile	2		Agree to Merit	11/28/12	+47,185	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	CMOD #20	
1252-0054	09/19/12	44	MOS - 16" steel pipe removal @ southeast headwall	3	CMB-0109	Agree to Merit Agree to Cost	12/06/12 2/27/13	+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 2/27/13 - Cost presented to CMB - agreed to NTE \$1,800 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement.	CMOD #14	(1,600)
1252-0055	06/09/12	45	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.		(331)
1252-0056	09/25/12	46	UMS - Unmarked steel pipes (6", 12", 14") / Duct Bank	6	CMB-0103	Agree to Merit Agree to Cost	12/06/12 1/23/2013	+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. 12/206/12 - CMB agreed with Evaluation of Merit 01/23/13 - CMB - NOT TO EXCEED Amount \$7,461 04/01/13 - CM team must obtain in writing from Utility agreement to cost reimbursement.	CMOD #18	(7,475)
1252-0057	09/25/12	47	Ret Shaft - unmarked 10" steel pipe/duct bank	6	CMB-0104	Agree to Merit Agree to Cost	12/06/12 1/23/13	+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 - CM team must obtain in writing from Utility a agreement to cost reimbursement.	CMOD #13	(2,108)
1252-0058	09/28/12	48	UMS - 3'x5' brick sewer at south headwall	6	CMB-0114	Agree to Merit Agree to Cost	12/06/12 03/13/13	+12,475	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 - CMB - NOT TO EXCEED Amount \$1,2474.65	CMOD #18	
1252-0059	01/00/00	49	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. CLOSED; NO FURTHER ACTION.		
1252-0060	10/10/12	50	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. 12/212/12 - CMB agreed with Evaluation of Merit 2/27/13 - Cost presented to CMB - Agreed to NTE \$2,600 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement.	CMOD #13	(2,200)
1252-0061	10/11/12	51	Ret Shaft - Elevation design conflict (30" low psi water / sewer)	3		Agree to Merit	3/13/13	+26,000	03/13/13 - Merit info presented to CMB - Agreed		
1252-0062	09/07/12	53	Chinatown - Night drilling for instrumentation	7				-0-	Closed.		
1252-0063	-	54	LB Class 2 Hazardous Material Haul Off (Phase 2)	2				+110,967	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.		

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1252-0064	10/10/12		PCC 4 PCC No. 4 - Ret shaft sewer pipe material change	1					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.		
1252-0065	12/18/12	57	PCC 8 PCC No. 8 - UMS - Tree Removal	1					SFMTA is directing removal of a tree at the northeast corner of Stockton and O'Farrell St. CLOSED; NO FURTHER ACTION.		
1252-0066	10/10/12		PCC 5 PCC No. 5 - Ret Shaft Water Dist. Pipe Material Change	1					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.		
1252-0067	10/26/12	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 2/27/13 - Cost presented to CMB - Agreed to NTE \$860.85 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement.	CMOD #13	(700)
1252-0068	10/10/12		PCC 3 PCC No. 3 - General Detour Signage	1	CMB-0113	Agree to Cost	02/27/13	+6,153	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. 2/27/13 - Cost presented to CMB - Agreed to NTE \$6,152.60		
1252-0069	11/08/12		PCC 6 PCC No. 6 - Supplemental instrumentation of BART tunnel lining.	1				+657,884	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.		
1252-0070	01/00/00	unsubmitted	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	11/07/12	61	LB - Panel P-17 Buried Obstruction	2		Agree to Merit	1/2/13	+1,473	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.	CMOD #21	
1252-0072	11/14/12	62	LB – Panel P-9 Buried Obstruction	2		Agree to Merit	1/23/13	+150,000	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.	CMOD #21	
1252-0074	11/16/12	65	LB – Panel P-12 Buried Obstruction	2		Agree to Merit	1/23/13	+150,000	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.	CMOD #21	
1252-0075	11/19/12	66	Retrieval Shaft - Unmarked 12" Steel Pipe	2	CMB-0112	Agree to Merit Agree to Cost	1/23/2013 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 2/27/13 - Cost presented to CMB - Agreed to NTE \$3,800 04/01/13 - CM team must obtain in writing from Utility a agreement to cost reimbursement.	CMOD #13	(3,700)

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1252-0076	11/19/12	67	LB - Panel P-10 Buried Obstruction	2		Agree to Merit	1/23/13	+18,000	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 Final Contract Modification #4 \$75,000 (on Force Account)	CMOD #21	
1252-0077	12/21/12		PCC No. 7 - Bart Temporary Annex Wall	1	CMB-0106	Agree to Cost	1/30/13	+15,500	SFMTA is requesting Contractor construct temporary wall for Bart Annex for SFMTA use. 01/30/13 - CMB - NOT TO EXCEED Amount \$15,380 Final Contract Modification #11 \$15,500	CMOD #11	
1252-0078	12/28/12		PCC No. 9 - UMS Headwall - Unknown Buried Pipe	1	CMB-0100	Agree to Merit Agree to Cost	1/16/13 1/16/13	+42,000	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 - CMB - NOT TO EXCEED Amount \$75,000	CMOD #4 Approved	(42,000)
1252-0079	01/09/13		PCC No. 10 - Relocation of TBM Retrieval Shaft	1					Modify Bid Item ST -4 Construction of Base Bid Permanent Retrieval Shaft to relocate the TBM retrieval Shaft to 1731-1741 Powell Street - 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.		
1252-0080	12/19/12	0	Segment Measuring Frequency	7				(1,300,000)	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.		
1252-0081	09/09/12	0	F21 and Old Navy Instrumentation Proposal	7				-0-	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	01/14/13	68	UMS – AT&T Vault Walkway @ N Headwall	2		Agree to Merit	1/16/13	+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 an 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.		
1252-0084	01/24/13		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 - CMB - NOT TO EXCEED Amount \$150,000 Final Contract Modification #9 \$150,000	CMOD #9	(150,000)
1252-0085	01/24/13	71	LB – Ramp Excavation Wood Piles Obstruction	2		Agree to Merit	4/3/13	+800	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		
1252-0086	02/08/13	72	Ellis Shaft Jet Grout Obstruction	2				+54,000	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.		

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1252-0087	02/14/13	73	MOS - Unknown 16" Pipe removal @ northwest headwall	2		Agree to Merit	3/13/13	+3,000	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 Utility a agreement to cost reimbursement.		(3,000)
1252-0088	NA	74	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.		
1252-0089	03/11/13	75	Hazardous Waste Disposal Denial - Spoils Containment Cost Impacts	7				+1,100,000	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.		
1252-0090	03/08/13	76	MOS - 16" Pipe removal @ SW Headwall	2		Agree to Merit	3/20/13	+2,000	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 Utility a agreement to cost reimbursement.		
1252-0091	03/06/13	77	Comp Grout - WFB-5 Drilling Obstruction	2		Agree to Merit	4/3/13	+10,000	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		
1252-0092	03/07/13	78	Comp Grout - WF & ATT	2			3/20/13	+20,000	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 - Agreed to No Merit for this change.		
1252-0093	03/07/13	79	Comp Grout - Old Navy	2		Agree to Merit	3/20/13	+45,000	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 Utility a agreement to cost reimbursement.		(45,000)
1252-0094	03/12/13	80	MOS - Asbestos Wrapped 20" water line @ Headwalls	2		Agree to Merit	4/3/13	+43,000	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		
1252-0095	03/11/13	81	12" Waterline Tee Connection Location (MOS South)	2		Agree to Merit	4/3/13	+5,000	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		
1252-0096	03/13/13	82	MOS 20" Conflict with 16" AWSS @ South Headwall	2				+50,000	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.		
1252-0097	03/19/13	83	Ellis Shaft Concrete Obstruction	2				+4,000	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.		
1252-0098	03/16/13	84	Crate & Barrel Water Intrusion	2				+50,000	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.		
1252-0099	TBD	PCC 12	PCC No. 12 - Modifications to Tunnel Alignment at Market Street	1			4/3/13	TBD	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 Micronile profile change being forwarded to the Contractor.		

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<b>Contract 1252 Totals</b>								<b>+812,490</b>	Total Changes and Potential Change (trends) to the contract are currently \$812,490 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>(283,214)</b>
<b>CONSTRUCTION TRENDS (Based on #1252 Trending Log and CMod) - SUBTOTALS:</b>								<b>+812,490</b>	The \$812,490 represents an UNDERRUN of allocated contingency. Current Balance = (33,658,454 - 812,490 = \$32,845,964 This does not include potential reimbursements from utilities		<b>(283,214)</b>
<b>DESIGN TRENDS</b>											
FD-001	07/31/10	084-0001	Narrowing of Platform at UMS	1	CMB-0006	Agree	08/04/10	(800,000)	[In "Current Forecast" - Sep2010 Cost Report.]		
FD-002	07/12/10	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	07/12/10	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	07/12/10	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	07/31/10	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	07/29/10	084-0003	UMS Structural Configuration	1	CMB-0007	Agree	08/18/10	(8,000,000)	[In "Current Forecast" - Sep2010 Cost Report.]		
FD-005	08/22/10	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	08/03/10	084-0005	Station Headwalls - UMS	1	CMB-0008	Agree	08/18/10	-0-			
FD-006	08/03/10	086-0002	Station Headwalls - MOS	1	CMB-0008	Agree	08/18/10	-0-			
FD-007	08/03/10		Cross-passages	1	CMB-0018	Agree	09/15/10	-0-			
FD-008	07/30/10		Trolley Re-route @ Columbus & Powell	1	CMB-0017	Agree	09/15/10	+2,000,000			
FD-009	10/06/10	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	10/06/10	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	10/06/10	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	10/06/10	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	10/06/10	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	10/06/10	082-0008	Include OCS system for rerouting trolley buses to Fifth Street	1	CMB-0024	Agree	12/15/10	+3,100,000			
FD-015	10/06/10	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	10/06/10	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	10/06/10	085-0004	CTS Ground Improvement	1	CMB-0012	over taken by FD-021	01/19/11	+10,300,000	Additional Information Pending.		
FD-018	10/06/10	084-0006	UMS Apple Store Entrance	1	CMB-0013	Disagree	11/10/10	-0-	Additional Information Pending.		
FD-019	10/06/10	086-0003	MOS TOD Configuration	1	CMB-0014	Agree	11/10/10	TBD			

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FD-020	10/06/10	084-0007	UMS Emergency Stair #4 Relocation	1	CMB-0015	Agree	11/10/10	TBD			
FD-021	01/14/11	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	02/16/11	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		
FD-023	11/17/10	087-0001	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	11/17/10	087-0002	Diamond crossover on surface segment to a tandem (universal) crossover.	1	CMB-0033	Agree	08/24/11	(350,000)			
FD-025	04/13/11	083-0001	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	05/31/11	084,085,086	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	07/21/11	082-0010	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	08/03/11	086-0004	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	08/08/11	085-0006	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	08/08/11	084-0009	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	10/31/11		Accessibility Improvements at the SE corner of Union Square (UMS)								
FD-032	10/31/11		Union Square Entrance Reconfiguration (UMS)								
FD-033	10/31/11		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	12/09/11		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	06/26/12		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 to SFFD on March 5, 2012, and subsequently approved by SFFD. Design Impact: ROM - \$215K Construction Impact: ROM - \$1M		

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FD-036	06/26/12		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	08/27/12		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.  08/29/12: CMB agreement condition upon follow up action to evaluate procurement by CN1260		
FD-038	11/07/12		Elongated Sidewalk Bulb-out at Chinatown Station					TBD	CTS Sidewalk Bulb out (Southwest corner Stockton/Washington To bring the Central Subway Project - Chinatown Station in closer conformance with 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.  Design Impact: ROM - \$TBD Construction Impact: ROM - \$TBD		
<b>FINAL DESIGN TRENDS (Based on All ECPs) - SUBTOTALS</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>-0-</b>
<b>OTHER TRENDS</b>											
X51-001	07/31/10	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	07/31/10	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	07/31/10	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	08/31/10	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	07/18/11	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	10/25/11		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	04/11/12	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	06/26/12	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	07/13/11	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	10/25/11		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	11/02/11		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	12/06/11		Revisions to CTS Construction Schedule		CMB-0060	Agree	12/28/11				

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X54-006	12/07/11	085-0002	CS 155-2 (DP2) CBP4 - Construction Budget Adjustment - allowed	7						
X55-001	07/18/11	086-0001	CS 155-2 (DP2) CBP6 - Construction Budget Adjustment YOY	7	CMB-0046	Agree	07/27/11			
X55-002	10/25/11		Change MOS Advertise Date to June 25th, 2012							
X55-003	11/02/11		Change MOS Advertise Date to May 23rd, 2012							
X55-004	06/26/12		Change MOS Advertise Date to Aug 20, 2012							
X56-001	10/25/11		Change STS Advertise Date to July 27th, 2012							
X56-002	12/14/11		STS Construction Schedule Revision for Equipment Procurement							
X56-003	06/26/12		Change STS Advertise Date to October 1, 2012							
X40-001	10/19/11	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	10/19/11	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	10/27/11	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	10/27/11	232-0001	Increase SFCTA Budget	7		Authorized		+20,000	Increase SFCTA budget per 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	7/1/10, 11/2/10, 3/24/11	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	5/6/10, 7/25/11, 9/22/11	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	11/08/11	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	09/01/11	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	11/30/11	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	11/09/11	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	8/9/11, 9/22/11, 10/11/11, 11/9/11	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. Updated from \$971,686 to include Trend 1553-0014.	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	05/30/12	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	12/17/12		For combining the stations and track and systems into Contract 1300 (SSTS)	7						

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X80-015	12/17/12	Changing the Bid Opening date and condensing the Contract Duration for Contract 1300	7					Changing the Bid Opening date and condensing the Contract Duration for Contract 1300		
X80-016	02/19/13	Change to Tunnel and CTS interface and buffer float Contract 1300 (SSTS)	7					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>Current Forecast reflects a net +3,537,933 unfavorable impact for all Other Trends.</b>		<b>-0-</b>
<b>GRAND TOTALS</b>								<b>Current Forecast reflects an estimated net +66,751,620 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>		<b>(283,214)</b>
<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 - ie CCOP's. The total values indicated for each professional contract are for tracking all potential cost exposures and may or may not be approved.</b>										
<b>Contract CS-155-1</b>										
1551-0001	07/30/10	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	-0-
1551-0002	02/18/11	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	02/18/11	071-0003 Additional Construction Support for CP-1	7							-0-
1551-0004	02/18/11	071-0004 Redesign Required by Barney's and PUC for CP-2	7							-0-
1551-0005	02/18/11	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	02/18/11	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 MOS/UMS	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.		

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<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>-0-</b>
<b>Contract CS-155-2</b>										
1552-0001	05/06/10	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	07/01/10	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	10/11/10	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	02/11/11	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	03/24/11	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	06/28/11	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>		
1552-0007	07/25/11	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	08/03/11	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	08/03/11	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	08/03/11	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	08/17/11	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	08/23/11	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	09/01/11	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	09/22/11	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>-0-</b>
<b>Contract CS-155-3</b>										
1553-0001	08/09/11	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	08/09/11	073-0002	Authorization to commence optional tasks 12.05 Architectural Plans	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	08/09/11	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	

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

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

Item #	Date Initiated	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements
					Approval Action	Approval Date				
1553-0004	08/09/11	073-0004	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	09/19/11	073-0005	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	09/22/11	073-0006	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	09/27/11	073-0007	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	10/05/11	073-0008	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. 0882 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	10/11/11	073-0009	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	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	
1553-0011		073-0011	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	11/09/11	073-0012	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	11/09/11	073-0013	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	02/06/12	073-0014			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	03/20/12	073-0015	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	03/23/12	073-0016	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	05/14/12	073-0017	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	05/14/12	073-0018	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	04/09/12	073-0019	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	04/09/12	073-0020	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	04/26/12	073-0021	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	04/26/12	073-0022	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	05/21/12	073-0023	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	05/21/12	073-0024	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	05/21/12	073-0025	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	

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

Item #	Date Initiated		Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	Utility Reimbursements
						Approval Action	Approval Date				
1553-0026	05/21/12	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	
Contract CS-155-3 Total								+2,046,831	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.		-0-

- 1 - Owner Directed Change in Scope
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- 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

# CMB LOG

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Initial Implementing Procedure				CMB		Final Decision Record Date
Change Form No.	Title of Change	Schedule Impact	*Cost Impact (X,000)	CMB No.	Agree / Disagree	
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 <i>(Not to Exceed Total)</i>		\$ 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 -6 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		\$ 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.</i> <i>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 YOE		-	CMB-0044	Agree	07/27/11
X54-001	CS 155-2 (DP2) CBP5 (CTS) - Construction Budget Adjustment YOE		-	CMB-0045	Agree	07/27/11
X55-001	CS 155-2 (DP2) CBP6 (MOS) - Construction Budget Adjustment YOE		-	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
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

# CMB 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
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 pending assignment</b> )		\$ 89	CMB-0058	Agree	11/02/11
1251-0024 & 0032	PG&E Field Changes - ( <b>Formally CMod #13 New CMod number is pending assignment</b> ) 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 "not to exceed" 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)</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
1251-0034	Additional work related to discovery of conflicting utilities within the subsidewalk basement at 17-19 Stockton Street. (Worst case scenario - "Not to Exceed" value) <i>CM team will report actual amount value at a later date.</i>		\$ 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

# CMB 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
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
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

# CMB 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
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		\$ 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 - Not To Exceed \$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 Not To Exceed		\$ 58	CMB-0086	Agree	12/19/12
1252-COR15	Additional work to restrain the AWSS line - Not To Exceed \$96K		\$ 96	CMB-0087	Agree	12/19/12
1252-COR06	PG&E live electrical delays - Not To Exceed \$7,600		\$ 8	CMB-0088	Agree	01/09/13
1252-COR27	MOS Oil Filled Pipe at south headwall - Not To Exceed \$8,600		\$ 9	CMB-0089	Agree	01/09/13
1252-COR22	MOS Asbestos Pipe at north headwall - Not To Exceed \$6K		\$ 6	CMB-0090	Agree	01/09/13
1252-COR01	AWSS Conflict with Low Pressure Water - Not To Exceed \$16,900		\$ 17	CMB-0091	Agree	01/16/13
1252-COR03	AT&T Vault Conflict -4th & Harrison - Not To Exceed \$21,089		\$ 21	CMB-0092	Agree	01/16/13
1252-COR07	Oil Filled pipe @ Launch Box - Not To Exceed \$10K		\$ 10	CMB-0093	Agree	01/16/13
1252-COR10	MOS - Demo Pea duct bank / SF City 911 fiber optic line - Not To Exceed \$4,915		\$ 5	CMB-0094	Agree	01/16/13
1252-COR11	MOS - Traffic Signal line re-route south headwall - Not To Exceed \$37,500		\$ 38	CMB-0095	Agree	01/16/13
1252-COR12	MOS - Archaeological Standby North Headwall - Not To Exceed \$16,892		\$ 17	CMB-0096	Agree	01/16/13
1252-COR29	MOS - Todco scaffolding reimbursement - Not To Exceed \$1,717		\$ 2	CMB-0097	Agree	01/16/13
1252-COR41	LB Impacts due to live PG&E electrical lines (Flagging) Not To Exceed \$1,245		\$ 1	CMB-0098	Agree	01/16/13
1252-PCC01	Revisions to Moscone North Headwall Elevation (Top) Not To Exceed \$20,500		\$ 21	CMB-0099	Agree	01/16/13
1252 PCC09	UMS Headwall - Unknown Buried Pipe - Not To Exceed \$75K		\$ 75	CMB-0100	Agree	01/16/13
1252-COR.38	Manhole in West side Guidewalls Footprint - Not To Exceed \$4,052.17		\$ 4	CMB-0101	Agree	01/23/13
1252-COR39	MOS - 16" Steel Pipe Removal at North east Headwall - Not To Exceed \$2,951.99		\$ 2	CMB-0102	Agree	01/23/13
1252-COR46	UMS - Unmarked Steel Pipes (6", 12" and 14") & Duct Bank - Not To Exceed \$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 - Not To Exceed \$150,000		\$ 150	CMB-0105	Agree	01/23/13
1252-PCC07	BART Annex Wall - Not To Exceed \$15,380		\$ 15	CMB-0106	Agree	01/30/13

# 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
1251-05, 46, 51, 61, 63, 66, 69, 79, 81	<b>CMod #24 PG&amp;E:</b> 1. Trend 05 – Addll 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
1252-031	Retrieval Shaft Unmarked 12" Steel Pipe - <i>Not To Exceed \$1,250</i>		\$ 1	CMB-0108	Agree	02/27/13
1252-044	MOS - 16" Steel pipe removal at headwall - <i>Not To Exceed \$1,800</i>		\$ 2	CMB-0109	Agree	02/27/13
1252-050	MOS - 12" Steel pipe removal at Union/Columbus Streets - <i>Not To Exceed \$2,600</i>		\$ 3	CMB-0110	Agree	02/27/13
1252 - 058	10" Steel pipe removal at Union and Columbus Streets - <i>Not To Exceed \$860.86</i>		\$ 1	CMB-0111	Agree	02/27/13
1252 - 066	MOS - 12" Steel pipe removal intersection of Union and Columbus - <i>Not To Exceed \$3,800</i>		\$ 4	CMB-0112	Agree	02/27/13
1252-PCC03	Modified Stockton St. Detour Signage Plan - <i>Not To Exceed \$6,152.60</i>		\$ 6	CMB-0113	Agree	02/27/13
1252 - 048	Removal of 3' x 5" brick sewer at UMS South Headwall - <i>Not To Exceed \$12,474.65</i>		\$ 12	CMB-0114	Agree	03/13/13
1252 - 070	LB Jet Grout Quantity Overrun - Bid Item ES-3- <i>Not To Exceed \$599,900</i>		\$ 600	CMB-0115	Agree	04/03/2013
<b>Total</b>			<b>\$ 82,630</b>			