# central cosubway

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# Memorandum

CS Memorandum No. 1346

То:	Distribution
From:	Susan MacKenzie, Document Control Manager
Date:	January 30, 2013
Reference:	Project No. M544.1, Contract No. CS-149 Task No. 1-8.02, Change Control
Subject:	Configuration Management Board Meeting No. 111

Attached please find minutes for Configuration Management Board Meeting No. 111 held on January 23, 2013.

Attachments: CMB Meeting No. 111 Rev. 0 Minutes with attachments

Cc: David Kuehn, STV (w/attachments) <u>david.kuehn@stvinc.com</u> Albert Hoe, SFMTA (w/attachments) Shahnam Farhangi, SFMTA (w/attachments) Roger Nguyen, SFMTA (w/attachments) Arthur Wong, SFMTA (w/attachments) Quon Chin, CSP (w/attachments) Jane Wang, SFMTA (w/attachments) Chuck Morganson, HNTB/B&C (w/attachments) Aileen Read, CSDG (w/attachments) CS File No. M544.1.5.0890

### Distribution:

Brad Lebovitz, STV <u>bradley.lebovitz@stvinc.com</u> Luis Zurinaga, SFCTA <u>luis.zurinaga@sfcta.org</u> Matt Lee, SFCTA matt@sfcta.org John Funghi, SFMTA Joon Park, SFMTA Richard Redmond, CSP Ross Edwards, CSP Eric Stassevitch, CSP Mark Latch, CSP Mark Benson, CSP Beverly Ward, CSP Sarah Wilson, CSP Mun Leong, CSP Ken Barnhart, CSP





# **CMB Meeting Minutes #111**

DATE:	January 24, 2013
MEETING DATE:	January 23, 2013
LOCATION:	821 Howard St, Main Conference Room
TIME:	3:00 PM
ATTENDEES:	J Funghi (JF), J. Park (JP), R. Edwards (RE), R. Redmond (RR), M. Benson (MB), M. Latch (ML), E. Stassevitch (ES), B. Ward (BW), S. Wilson (SW), K. Barnhart (KB), M. Leong (ML), L. Zurinaga (LZ), B. Lebovitz (BL) M. Lee (ML)
COPIES TO:	Attendees: S. Farhangi (SF), A. Hoe (AH), R. Nguyen (RN), A. Wong (AW), J. Wang (JW), Q. Chin (QC), C. Morganson (CM), 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 # 111 – Rev. No. 0

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

ITEM #	DISCUSSION	ACTION BY DUE DATE
1- 12/19/12	1251 – M. Acosta presented a Final Contract Value for CMods 1 through 12 and the remaining contract modification 13 thru 30 for a total value of \$21,107,191. A final Bid Item Analysis determined there are 40 each (\$299,008K) in unused bid items. The RE calculated the General Condition rate of 19.69% costs/credits from under/over usage. In addition the CMB directed the RE to use 15% General Conditions rate instead of the 19.69%. This item will be brought back to the CMB with the revised final contract cost. <i>01/02</i> : The Construction Manager reported the SFMTA Contract Administrator did not agree with the over/under usage for General Condition's rate of 15% and is not prepared to sign off unless evidence of an actual analysis is presented. The CMB directed the RE to write a paragraph of introduction stating that a thorough analysis of CN1250 was done and as in CN1251 the same Contractor same staff and equipment were used and based on that a calculation rate of 18% was reach, so a rate of 15% for general condition over/under will be used in CN1251. Status: <i>01/23 This item was not discussed at this week's meeting</i>	MB 01/16/13
3- 01/02/13	1252 – S. Wilson presented Evaluation of Merit of, <b>COR 062</b> – LB – Panel P-09 Buried Obstruction – Contractor encountered concrete encased 12in clay sewer pipe with slurry wall panel P-9 at the TBM Launch box 8 feet below the top of the SW guidewall. Concrete encasement is not shown on the drawings. The encasement required the Contractor to deviate from the designed excavation limits. The <b>CMB did not agree with merit</b> requesting the evaluation of merit be rewritten to address time impact, if any. In addition the CMB suggested the RE should include the inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. This item will be brought back to the CMB. Status: 01/23 A revised merit form was presented incorporating language which addresses the approximate time impact of 5 days to slurry wall panel P-9	



Municipal Transportation Agency





ITEM #	DISCUSSION					
		DUE DATE				
	and that work involved affects the critical path activity. <b>CMB agreed with merit</b> for work associated with removal of buried obstruction. In addition due to COR 065 and COR 067 being of similar work the RE has requested the Contractor to combine the TIA's for all three.					
4- 01/02/13	1252 – S. Wilson presented Evaluation of Merit of, <b>COR 065</b> – LB – Panel P-12 Buried Obstruction Contractor encountered concrete encased 12in clay sewer pipe with slurry wall panel P-12 at the TBM Launch box 7 feet below the top of the SW guidewall. Concrete encasement is not shown on the drawings. The encasement prevented SW construction from occurring as originally planned. The <b>CMB did not agree with merit</b> requesting the evaluation of merit be rewritten to address time impact, if any. In addition the CMB suggested the RE should include the inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. This item will be brought back to the CMB. Status: 01/23 A revised merit form was presented incorporating language which addresses the approximate time impact of 3 days to slurry wall panel P-12 and that work involved affects the critical path activity. <b>CMB agreed with merit</b> for work associated with removal of buried obstruction. In addition due to COR 062 and COR 067 being of similar work the RE has requested the Contractor to combine the TIA's for all three.					
5- 01/02/13	1252 – S. Wilson presented Evaluation of Merit of, <b>COR 067</b> – LB – Panel P-10 Buried Obstruction - Contractor encountered concrete encased 12in clay sewer pipe with slurry wall panel P-10 at the TBM Launch box 7 feet below the top of the SW guidewall. Concrete encasement is not shown on the drawings. The encasement prevented SW construction from occurring as originally planned The <b>CMB did not agree with merit</b> requesting the evaluation of merit be rewritten to address time impact, if any In addition the CMB suggested the RE should include the inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. This item will be brought back to the CMB. Status: 01/23 A revised merit form was presented incorporating language which addresses the approximate time impact of 4 hours to slurry wall panel P-10 and that work involved affects the critical path activity. <b>CMB agreed with merit</b> for work associated with removal of buried obstruction. In addition due COR 062 and COR 065 being of similar work the RE has requested the Contractor to combine the TIA's for all three.					
1- 01/23/13	1251 – M. Benson presented for information Form B Analysis - Final Form B. The Analysis is based on initial Form B estimate established in October 2012. The final Form B established in December 2012 shows the actual cost paid to the Contractor for the scope of Form B work. The differences shown between the Engineers estimate and the final in the Form B are due to an overestimate of the initial Form B amount. The CMB requested that the analysis be revised to show the delta difference in the executive summary, and using the final progress payment the amount paid to date (what we received). Status: <i>01/23 A</i> <i>revised Form B analysis was presented along with a comparison sheet by bid item</i> <i>discipline of the Engineer Estimate, Award, Original, Final Form B and Close Out</i> <i>Modification. The Estimator contends that the original Form B calculation was incorrect.</i> <i>Confirmation of the estimators' calculation method was verified by the 1251 Utility</i> <i>Coordinator. The spreadsheet also includes as a separate line item for the contract</i> <i>modifications at 100% on the Final Form B. The CMB requested the Estimator take a look</i> <i>at adding to the Final Form B a percentage for 1) Pavement Restoration - Repaving the</i> <i>street for the Moratorium and putting the sidewalk back twice, 2) Structural – Walls built so</i> <i>we could build the joint trench, 3) Traffic Control, and 4 Archeologist to look at the joint</i> <i>trench. This item will be brought back to the CMB at a later date.</i>	KB/MB 02/06/13				
1	S. Wilson presented cost estimate and comparison (see attached) for <b>COR 038</b> - for costs associated with the removal of concrete manhole and CDF filled pipe at the North side of the Launch Box. Merit for the work was agreed to and authorization was given by the CMB at meeting #105. <b>AGREE – CMB 0101</b> – Not To Exceed value of \$4,052.17.					
2	S. Wilson presented cost estimate and comparison (see attached) for <b>COR 039</b> - for costs associated with removal of 16" steel pipe at the northeast headwall at Moscone. Merit for					

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ITEM #	DISCUSSION	ACTION BY DUE DATE
	the work was agreed to and authorization was given by the CMB at meeting #105. <b>AGREE</b> – <b>CMB 0102</b> – Not To Exceed value of \$2,236, 22.	
3	S. Wilson presented cost estimate and comparison (see attached) for <b>COR 046</b> - for costs associated with removal of unmarked steel pipes 6", 12" and 14" & duct bank removal. Merit for the work was agreed to and authorization was given by the CMB at meeting #105. <b>AGREE</b> – <b>CMB 0103</b> – Not To Exceed value of \$7,461.14.	
4	S. Wilson presented cost estimate and comparison (see attached) for <b>COR 047</b> - for costs associated with removal of unmarked 10" steel pipe discovered during the retrieval shaft work on Columbus Street. Merit for the work was agreed to and authorization was given by the CMB at meeting #105. <b>AGREE – CMB 0104</b> – Not To Exceed value of \$2,201.54.	
5	1252 – S. Wilson presented <b>PCC 011</b> pipe investigation and removal of AT&T 48" steel pipe at the south and north headwalls at UMS. This change is required to allow work to be proceed in conformance with the contract documents (see attached). An Engineer's estimate was prepared for the work. <b>AGREE – CMB 0105</b> – Not To Exceed value of \$150,000.	
6	R. Edwards and E. Stassevitch presented a schedule analysis which demonstrates the proposed schedule change to the Master Project Schedule (MPS) which would reduce the number of days currently in Contract 1300, (from 550 calendar days from NTP to 450 calendar days) for the key interface between CTS and the tunnel completion. This would require Buffer float 7.5 to be reduced from 115 work days to 55 work days. This change will ease the constraint on the 1300 Contractor of when they can break into the Headhouse. This work is not on the critical path. The <b>CMB agreed</b> with the change to the MPS, the date change and reduced number of days will be issued as part of Addendum #3 of the 1300 contract.	
7-	The Project Trend/Change Control Log version 01/23/13 was not viewed at this week's meeting. The log is updated to include most recent changes and trends for 1252. The log is attached for distribution with these meeting minutes.	

## ACTION ITEMS

ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
5	08/08/12	08/29/12	1252 – PCC 1252-02 UMS Headwalls	MB	10/10/12	Open
1	11/07/12	11/07/12	1300 – WP 1254 – SF Planning Request	RE	11/28/12	Open
3	11/14/12	11/14/12	1252 – COR 033 – Retrieval Shaft – 20" Water Line	SW	11/21/12	Open
2	12/12/12	12/12/12	1252 – Validation 1300 docs include as built information regarding Asbestos Pipes	RE	01/09/13	Open
1	12/19/12	12/19/12	1251 – Revised final contract cost	MB	01/16/13	Open
3	01/02/13	01/02/13	1252 – COR 062 – LB – Panel P-09 Buried Obstruction	SW	01/09/13	CLOSED
4	01/02/13	01/02/13	1252 – COR 065 – LB – Panel P-12 Buried Obstruction	SW	01/09/13	CLOSED
5	01/02/13	01/02/13	1252 – COR 067 – LB – Panel P-10 Buried Obstruction	SW	01/09/13	CLOSED
1	01/16/13	01/16/13	1251 - Form B analysis	MB	02/06/13	CLOSED
1	01/23/13	01/23/13	1251 - Form B Comparison – Additional shared percentages	KB/MB	02/06/13	Open



Meeting adjourned at 5:40pm

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.

[initials of preparer & reviewer] Date: 18 [Date review completed] Signed: 🚻



# **Meeting Agenda**

Project No. M544.1, Contract No. CS-149 Program/Construction Management Configuration Management Board (CMB) Meeting No. 111 January 23, 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	Matt Lee	Beverly Ward
Ross Edwards	Jim Kelly	Roger Nguyen	Sarah Wilson
Shahnam Farhangi	David Kuehn	Joon Park	Arthur Wong
John Funghi	Mark Latch	Richard Redmond	Luis Zurinaga
John Haley	Brad Lebovitz	Eric Stassevitch	

- 1. 1251 Form B True Up – Form B Analysis
- 2. 1252 COR 038 -- Manhole in West Guidewall Footprint Not to Exceed Amount
  - COR 039 -- MOS 16" Steel Pipe removal @ northeast headwall Not to Exceed Amount
  - COR 044 -- MOS 16" steel pipe removal @ southeast headwall Not to Exceed Amount
  - COR 046 --- UMS -- Unmarked Steel Pipes/ Duct Bank Not to Exceed Amount
  - COR 047 -- Ret Shaft -- Unmarked 10" Steel /Duct bank Not to Exceed Amount
  - COR 062 -- LB Panel P-9 Buried Obstruction Merit
  - COR 065 -- LB Panel P-12 Buried Obstruction Merit
  - COR 067 -- LB Panel P-10 Buried Obstruction Merit
- PCC 011 COR 069 -- Cap and Removal of 48" Steel Pipe Merit and Not to Exceed Amount
  - 3. 1300 (SSTS) Nothing to Report
  - 4. Trend/Change Log 01/23/13
  - 5. Other Business







# **Meeting Attendance Sheet**

Project No. M544.1, Contract No. 149 Program/Construction Management Configuration Management Board Meeting No. 111 January 23, 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	PHONE E-MAIL (for minutes)					
Please enter nam	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	Mas				
Edwards, Ross	CSP	(415) 701-5296	Ross.Edwards@sfmta.com	The				
Farhangi, Shahnam	SFMTA	(415) 554-0721	Shahnam.Farhangi@sfmta.com					
Funghi, John	SFMTA	(415) 701-4299	John.Funghi@sfmta.com	A				
Haley, John	SFMTA		John.Haley@sfmta.com	7				
Hoe, Albert	SFMTA	(415) 701-4289	Albert.Hoe@sfmta.com					
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	MOL				
Lebovitz, Brad	STV/PMOC	(510) 464-8052	Bradley.lebovitz@stvinc.com	BK				
Lee, Matt	SFCTA	(415) 522-4813	matt@sfcta.org	MU				
Nguyen, Roger	SFMTA	(415) 701-4312	Roger.Nguyen@sfmta.com	, .				



Municipal Transportation Agency





NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Park, Joon	SFMTA	(415) 701-4742	Joon.Park@sfmta.com	90
Redmond, Richard	CSP	(415) 701-4288	Richard.Redmond@sfmta.com	RR
Stassevitch, Eric	CSP	(415) 701-4426	Eric.Stassevitch@sfmta.com	K
Ward, Beverly	CSP	(415) 701-5291	Beverly.Ward@sfmta.com	BN
Wilson, Sarah	CSP	(415) 243-0950	Sarah.Wilson@sfmta.com	SAW
Wong, Arthur	SFMTA	(415) 701-4305	Arthur.Wong@sfmta.com	0
Zurinaga, Luis	SFCTA	(415) 716-6956	Luis.zurinaga@sfcta.org	Ste
LEONG, MUN	CSP	(415)531·9476	MUN. LEON & @SFM7A. COM	Cenz
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### Joint Trench Form B Analysis CN 1251

The purpose of this document is to explain the differences between the initial Form B and the final Form B for contract number 1251 relating to the Central Subway Project. The initial Form B established in October 2010 included an "estimated cost to complete" for work that fits within the scope of Form B. The final Form B established in January 2013 included the actual cost paid to the contractor for the scope of Form B work.

### **Explanation of Payments:**

Fifty percent deposits were made by all of the companies involved once they were invoiced following the issuance of the initial Form B.

Interim invoices in the amount of the remaining fifty percent portion of the initial Form B were issued to PG&E and AT&T. PG&E was the only party that paid the interim invoice amount.

A third invoice will be issued upon the finalization of the final Form B which will either credit or bill the companies involved. This will create the desired results of a zero balance for each company as the total amount paid will be in alignment with the "Grand Total" line on the final Form B.

	Initial Form B Amount		Final Form B Amount		Amount Paid to date		Remaining	
PG&E Electric	\$	2,876,239	\$	1,480,981	\$	3,081,140	\$	(1,600,160) *
PG&E Gas	\$	862,956	\$	619,800	\$	862,956	\$	(243,156)
AT&T	\$	3,017,528	\$	1,842,741	\$	1,508,764	\$	333,977
Qwest	\$	264,262	\$	153,735	\$	264,262	\$	(110,527)
TCG	\$	195,448	\$	90,125	\$	97,724	\$	<mark>(7,599)</mark>
UCCO	\$	162,208	\$	80,378	\$	81,104	\$	(726)
Total	\$	7,378,641	\$	4,267,760	\$	5,895,950	\$	(1,628,190)

\*Amount includes correction for CN 1250 Form B overpayment





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### **Explanation of Primary Differences:**

	Initial Form B	Final Form B	Delta
Trenching	\$1,340,182	\$1,248,835	(91,347)
Conduit / Materials	\$3,286,908	\$917,921	(2,368,987)
Pvmnt demo/rest.	\$907,211		(907,211)
Vaults / Pull Boxes	\$1,116,975	\$458,900	(658,075)
Additional Work		\$1,279,825	1,279,825
Site Management	\$331,875	\$228,536	(103,339)
Allowances	\$1,659,374		(1,659,374)
Incidentals	\$1,645,594	\$665,248	(980,346)
Escalation	\$339,508		(339,508)

After the final Form B was compiled it was found that the initial Form B was overestimated. A comparison of the two may be found below.

Trenching: \$91,347 is an acceptable difference between the initial and final Form B.

**Conduit/Materials:** The difference between the initial Form B and the final Form B is attributed to a couple different portions of the estimate.

- Initial Form B unit prices were on average 29.9% higher than the unit pricing provided by the contractor and used for the actualization of the final Form B
- Total quantity of pipe estimated to be installed in the initial Form B was 11.7% higher than the final Form B
  - 93,813lf vs. 83,936lf
- Miscellaneous work was added into this portion of the initial Form B at an estimated cost of \$834,567. This was to account for stubs, caps, connections, intercepts, etc. These items are included in the unit pricing of the conduits provided by the contractor per the CN 1251 specification.

**Pavement Demolition and Restoration:** This work is included in the trench unit pricing provided per the contractor as requested by the CN 1251 specification.

**Vaults and Pull Boxes:** The vault and pull box unit pricing exceeded the rates submitted by the contractor for CN 1251 by approximately 112% on average.

Additional Work: Additional work was included in the final Form B due to contract modifications one through thirty. This work was analyzed by the Resident Engineer and deemed appropriate for inclusion in the final Form B.

**Site Management:** \$103,339 is an acceptable difference between the initial and final Form B.







**Allowances:** The initial Form B included allowances for "shift work requirements" and "DPW restriction of work hours" at a total estimate cost of \$1,659,374. Costs for "shift work" and "restricted hours" are reflected in the bid unit prices used to populate the final Form B.

**Incidentals:** These costs were overestimated in the initial Form B mostly due to traffic control. The initial Form B included \$698,384 for traffic control which was calculated as 10% of the initial Form B total before allowances. The final Form B included traffic control at a cost of \$115,441 and was calculated as a portion of bid items TR-1 and TR-3.

**Escalation:** Escalation is included in the bidder's schedule of bid prices therefore it is not appropriate to add an additional amount to the final Form B to account for this.

**Overall:** MCI was included in the initial Form B as they initially shared a portion of the joint trenching work. They elected to not participate in the joint trench construction cost agreement proposed to them. This also contributed to a higher initial Form B estimated cost.





#### SCHEDULE OF BID PRICES

Name of Bidder:

## San Francisco Transportation Agency - Third St. Light Rail Program Phase 2 - Central Subway Project

251 - Union S	Square/Market Street Station Utility Relocation		tal Amount eer's Estimate)	Av	ward (SPM)	Original Form B	Final Form B	Close Out Modification	
Bid Item No.	Item Description	Unit Price	Total Amount	Unit Price	Total Amount		Total Amount	Total Amount	
BASE BID ITE									
	GENERAL - GE								
	MOBILIZATION AND DEMOBILIZATION		\$550,000		2,500,000.00	373,436.00	510,802.85	2,500,0	
GE-2	CURRENT SCHEDULES		\$14,482		20,000.00		4,086.42	20,0	
	ALLOWANCE FOR REIMBURSABLE EXPENSES		\$50,000		50,000.00			40,6	
GE-4	ALLOWANCE FOR DIFFERING SITE CONDITIONS		\$570,000		570,000.00			570,0	
	TRENCH BOTTOM STABILIZATION	\$217	\$24,330	90.00	10,080.00			5,7	
GE-6	838 MARKET STREET PLUMBING ALLOWANCE		\$90,000		90,000.00				
	Tota		\$1,298,811		\$3,240,080	\$373,436	\$514,889	\$3,136,362	
	SPECIAL PROVISIONS - SP								
	CUSTOM BARRICADES	\$116	\$115,855	40.00	,			40,0	
SP-7B	GRAPHIC PANELS	\$29	\$57,928	15.00	· · · · ·			30,0	
	Tota		\$173,783		\$70,000	\$0	\$0	\$70,000	
	TEMPORARY TRAFFIC ROUTING - TR								
	TRAFFIC REGULATION		\$362,047		500,000.00	330,358.00	102,160.57	500,	
	TRAFFIC WATER FILLED BARRIER	\$1,448	\$72,409	300.00	15,000.00			15,	
TR-3	CHANGEABLE MESSAGE SIGNS	\$21,723	\$108,614	13,000.00	65,000.00	330,358.00	13,280.87	65,	
TR-4	CONSTRUCTION AREA AND SPECIAL TRAFFIC SIGNS	\$290	\$8,689	100.00	3,000.00			3,(	
TR-5	TEMPORARY PAVEMENT MARKING, DELINEATION TAPE AND OVERLAY RAISED MARKERS AFTER FINAL PAVING		\$36,205		5,600.00	150,000.00		5,6	
TR-6	TRAFFIC SUPERVISORS PROVIDED BY TRAFFIC SUB-CONTRACTOR	\$80	\$125,449	75.00		150,000.00		175,1	
TR-0 TR-7	ALLOWANCE FOR MANUAL TRAFFIC CONTROL	φ00	\$120,000	75.00	120,000.00			120,0	
110-7	Tota		\$833,414		\$826,725	\$810,716	\$115,441	\$883,751	
	DEMOLITION - UD		φ <b>0</b> 55 <b>,</b> 414		<i>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	<i>\(\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</i>	φ113, <del>11</del> 1	φ005,751	
UD-1	RELOCATE THREE TREES IN PLANTER BOXES		\$3,085		2,000.00			2,0	
	RELOCATE FOURTEEN TREES IN PLANTER BOXES		\$14,394		3,500.00			2,	
	HANDLING AND DISPOSAL OF STREET TREES		\$1,542		3,000.00			3,	
UD-4A	PARTIAL DEMOLITION OF PG&E VAULT 1857		\$12,858		7,000.00			-,	
UD-4B	PARTIAL DEMOLITION OF PG&E VAULT 5464		\$12,858		7,000.00				
UD-5	HANDLING AND DISPOSAL OF CALIFORNIA CLASS 1 (NON-RCRA) HAZARDOUS WASTE	\$71	\$354,806	15.00					
UD-6	TRANSPORTATION OF CALIFORNIA CLASS 1 (NON-RCRA) HAZARDOUS WASTE	\$51	\$253,433	17.00					
	HANDLING AND DISPOSAL OF CALIFORNIA CLASS 2 (NON-HAZARDOUS) EXCAVATED MATERIAL	\$22	\$21,723	15.00	15,000.00		17,459.13	90,	
	TRANSPORTATION OF CALIFORNIA CLASS 2 (NON-HAZARDOUS) EXCAVATED MATERIAL	\$29	\$28,964	15.00			17,459.13	90,	
	ADDITIONAL EXPLORATORY HOLES	\$1,448	\$72,409	55.00					
	PRE-EXCAVATION ENVIRONMENTAL SOIL PROFILING		\$36,205		14,000.00			14,	
	REMOVE AND REINSTALL STREETLIGHT POLE ON NEW FOUNDATION		\$5,758		6,000.00			6,	
	RELOCATE THREE FLOWER STANDS		\$21,723		13,500.00			13,	
	ALL DEMOLITION WORK WHICH IS OTHERWISE NOT PAID FOR		\$81,387		50,000.00			50,0	
	ALLOWANCE OF UTILITY SERVICES FOR THREE FLOWER STANDS		\$20,000		20,000.00			19,5	
	Tota		\$941,145		\$318,750	\$0	\$34,918	\$290,574	
	STRUCTURAL DEMOLITION - SD								
SD-1	REMOVE ELEVATOR PIT AND HATCH	\$32,270	\$64,540	6,000.00	12,000.00			12,	
SD-2	REMOVE SEWER EJECTOR SUMP PIT	\$14,482	\$72,409	2,000.00	10,000.00			10,	
SD-3	REMOVE GAS VAULT AND HATCH		\$1,232		4,000.00		4,000.00	4,(	
SD-4	REMOVE FUEL TANK AND FOUNDATION		\$108,614		15,000.00			15,0	

#### SCHEDULE OF BID PRICES

251 - Union	Square/Market Street Station Utility Relocation		al Amount eer's Estimate)	Av	vard (SPM)	Original	l Form B	Final Form B	Close	Out Modification
Bid Item No.	Item Description	Unit Price	Total Amount	Unit Price	Total Amount			Total Amount		Total Amount
SD-5	REMOVE AT&T VAULT AND HATCH		\$6,162		4,000.00			4,000.0	0	4,000.0
SD-6	REMOVE INTERIOR BASEMENT WALLS	\$41	\$281,306	20.00	137,360.00					104,835.0
SD-7	REMOVE EXTERIOR BASEMENT WALLS	\$45	\$81,859	30.00	54,450.00					44,565.0
SD-8	REMOVE BASMENT SLAB ON GRADE	\$19	\$134,002	17.00	119,799.00					149,345.0
SD-9	REMOVE ELEVATED STRUCTURAL SLABS AND STRUCTURAL SIDEWALKS	\$19	\$331,933	10.00	174,550.00					147,320.0
SD-10	REMOVE RAISED CONCRETE PLATFORM		\$72,409		6,000.00					6,000.0
SD-11	ALLOWANCE FOR STRUCTURAL DEMOLITION ITEMS NOT SPECIFIED		\$100,000		100,000.00					83,733.4
	Total		\$1,254,468		\$637,159		\$0	\$8,000		\$580,798
	WATERPROOFING - WP									
WP-1	BUILDING WATERPROOFING		\$315,614		\$350,000		\$0	\$0		\$350,000
	JOINT TRENCH - JT									
JT-1	FURNISH AND INSTALL JT IN SUBSIDEWALK BASEMENT		\$727,694		225,000.00			225,000.0	0	225,000.0
JT-2	FURNISH AND INSTALL CDF BACKFILL IN SUBSIDEWALK BASEMENT	\$185	\$1,323,725	82.00	587,202.00					619,122.1
JT-3	FURNISH AND INSTALL SAND BACKFILL IN SUBSIDEWALK BASEMENT	\$77	\$35,152	50.00	22,850.00			10,900.0	0	10,900.0
	JOINT UTILITY TRENCH: DEPTH ≤ 5-FT									
JT-4	WIDTH ≤ 3-FEET	\$232	\$461,396	170.00	338,300.00			134,470.0	0	148,070.0
JT-5	WIDTH > 3-FEET	\$350	\$87,591	315.00	78,750.00		2,621,925.00	340,200.0	0	302,400.0
	JOINT UTILITY TRENCH: 5-FT < DEPTH ≤ 10-FT									
JT-6	WIDTH ≤ 3-FEET	\$452	\$82,243	234.00	42,588.00			66,924.0	o	84,240.0
JT-7	WIDTH > 3-FEET	\$574	\$591,301	241.00	248,471.00			396,445.0	0	423,919.0
	JOINT UTILITY TRENCH: DEPTH > 10-FT									
JT-8	ALL WIDTHS	\$927	\$237,336	248.00	63,488.00			74,896.0	0	77,376.0
	Total		\$3,546,438		\$1,606,649		\$2,621,925	\$1,248,835		\$1,891,027
	JOINT TRENCH UTILITY VAULTS									
JT-9	INTERCEPT UTILITY VAULTS TYPE PTS69 - 6 x 19 x 9	\$87,727	\$175,454	35,000.00	70,000.00			70,000.0	ð	70,000.0
JT-10	INTERCEPT UTILITY VAULTS TYPE PTS69 - 6 x 14 x 9	\$71,080	\$71,080	30,000.00	30,000.00			30,000.0	δ	30,000.0
JT-11	INTERCEPT UTILITY VAULTS TYPE PTS69 - 6 x 9 x 9	\$53,133	\$159,399	20,000.00	60,000.00			60,000.0	0	60,000.0
JT-12	UTILITY VAULTS T4	\$5,733	\$11,467	4,000.00	8,000.00					0.0
JT-13	PGE VAULT 10 x 10 x 10	\$149,347	\$149,347	25,000.00	25,000.00			25,000.0	ð	25,000.0
JT-14	PGE VAULT 10 x 5.5 x 10	\$60,507	\$60,507	25,000.00	25,000.00			25,000.0	J	25,000.0
JT-15	PGE VAULT 8 x 12 x 10	\$79,075	\$79,075	25,000.00	25,000.00			50,000.0	0	50,000.0
JT-16	PGE VAULT 7 x 12 x 10	\$73,736	\$147,472	25,000.00	50,000.00			25,000.0	ð	25,000.0
JT-17	PGE VAULT 7 x 10 x 10	\$65,736	\$65,736	25,000.00	25,000.00			25,000.0	ð	25,000.0
JT-18		¢20.242	\$191,713	15,000.00	75,000.00			45,000.0	J	45,000.0
J1-10	PGE VAULT 4.5 x 8.5 x 7.5	\$38,343	\$171,715	15,000.00				3,000.0	0	3,000.0
JT-18 JT-19	PGE VAULT 4.5 x 8.5 x 7.5 UTILITY VAULT T3	\$38,343 \$3,229	\$9,688	3,000.00	9,000.00					
										0.0
JT-19	UTILITY VAULT T3	\$3,229	\$9,688	3,000.00	9,000.00		048 072 00	30,000.0	2 2	
JT-19 JT-20	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4	\$3,229 \$17,218	\$9,688 \$17,218	3,000.00 4,000.00	9,000.00 4,000.00		948,072.00			30,000.0
JT-19 JT-20 JT-21	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4	\$3,229 \$17,218 \$13,880	\$9,688 \$17,218 \$83,278	3,000.00 4,000.00 5,000.00	9,000.00 4,000.00 30,000.00		948,072.00	30,000.0	0	30,000.0 2,600.0
JT-19 JT-20 JT-21 JT-22	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4 UTILITY VAULT TYPE I	\$3,229 \$17,218 \$13,880 \$1,938	\$9,688 \$17,218 \$83,278 \$1,938	3,000.00 4,000.00 5,000.00 325.00	9,000.00 4,000.00 30,000.00 325.00		948,072.00	30,000.0 2,600.0	0 0	30,000.0 2,600.0 325.0
JT-19 JT-20 JT-21 JT-22 JT-23	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4 UTILITY VAULT TYPE I UTILITY VAULTS TYPE I-TR	\$3,229 \$17,218 \$13,880 \$1,938 \$1,938	\$9,688 \$17,218 \$83,278 \$1,938 \$13,564	3,000.00 4,000.00 5,000.00 325.00 325.00	9,000.00 4,000.00 30,000.00 325.00 2,275.00		948,072.00	30,000.0 2,600.0 325.0	0 0	30,000.0 2,600.0 325.0 800.0
JT-19 JT-20 JT-21 JT-22 JT-23 JT-24	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4 UTILITY VAULT TYPE I UTILITY VAULTS TYPE I-TR UTILITY VAULTS TYPE II	\$3,229 \$17,218 \$13,880 \$1,938 \$1,938 \$2,325	\$9,688 \$17,218 \$83,278 \$1,938 \$13,564 \$13,950	3,000.00 4,000.00 5,000.00 325.00 325.00 400.00	9,000.00 4,000.00 30,000.00 325.00 2,275.00 2,400.00		948,072.00	30,000.0 2,600.0 325.0	0 0	30,000. 2,600. 325. 800. 0.0
JT-19 JT-20 JT-21 JT-22 JT-23 JT-24 JT-25	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4 UTILITY VAULT TYPE I UTILITY VAULTS TYPE I-TR UTILITY VAULTS TYPE II UTILITY VAULTS TYPE II-TR	\$3,229 \$17,218 \$13,880 \$1,938 \$1,938 \$2,325 \$2,326	\$9,688 \$17,218 \$83,278 \$1,938 \$13,564 \$13,950 \$2,326	3,000.00 4,000.00 5,000.00 325.00 325.00 400.00 400.00	9,000.00 4,000.00 30,000.00 2,275.00 2,400.00 400.00		948,072.00	30,000.0 2,600.0 325.0	0 0	30,000.0 2,600.0 325.0 800.0 0.0 0.0
JT-19           JT-20           JT-21           JT-22           JT-23           JT-24           JT-25           JT-26	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4 UTILITY VAULT TYPE I UTILITY VAULTS TYPE I-TR UTILITY VAULTS TYPE II UTILITY VAULTS TYPE II UTILITY VAULTS TYPE II-TR UTILITY VAULTS TYPE III	\$3,229 \$17,218 \$13,880 \$1,938 \$2,325 \$2,326 \$2,325	\$9,688 \$17,218 \$83,278 \$1,938 \$13,564 \$13,950 \$2,326 \$9,300	3,000.00 4,000.00 5,000.00 325.00 325.00 400.00 400.00 600.00	9,000.00 4,000.00 30,000.00 2,275.00 2,400.00 400.00 2,400.00		948,072.00	30,000.0 2,600.0 325.0	0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	30,000.0 2,600.0 325.0 800.0 0.0 0.0 0.0
JT-19           JT-20           JT-21           JT-22           JT-23           JT-24           JT-25           JT-26           JT-27	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4 UTILITY VAULT TYPE I UTILITY VAULTS TYPE I-TR UTILITY VAULTS TYPE II UTILITY VAULTS TYPE II UTILITY VAULTS TYPE II-TR UTILITY VAULTS TYPE III UTILITY VAULTS TYPE III-TR	\$3,229 \$17,218 \$13,880 \$1,938 \$2,325 \$2,326 \$2,325 \$2,326	\$9,688 \$17,218 \$83,278 \$1,938 \$13,564 \$13,950 \$2,326 \$9,300 \$2,326	3,000.00 4,000.00 5,000.00 325.00 400.00 400.00 600.00 600.00	9,000.00 4,000.00 30,000.00 2,275.00 2,400.00 400.00 2,400.00 600.00		948,072.00	30,000.0 2,600.0 325.0 800.0		30,000.0 2,600.0 325.0 800.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
JT-19           JT-20           JT-21           JT-22           JT-23           JT-24           JT-25           JT-26           JT-27           JT-28	UTILITY VAULT T3 UTILITY VAULT TYPE 4 x 4 x 4 UTILITY VAULT TYPE 3 x 5 x 4 UTILITY VAULT TYPE I UTILITY VAULTS TYPE I-TR UTILITY VAULTS TYPE II UTILITY VAULTS TYPE II-TR UTILITY VAULTS TYPE III UTILITY VAULTS TYPE III-TR UTILITY VAULTS TYPE III-TR UTILITY VAULTS TYPE III-TR	\$3,229 \$17,218 \$13,880 \$1,938 \$2,325 \$2,326 \$2,326 \$2,326 \$2,326 \$2,326	\$9,688 \$17,218 \$83,278 \$1,938 \$13,564 \$13,950 \$2,326 \$9,300 \$2,326 \$12,918	3,000.00 4,000.00 5,000.00 325.00 400.00 600.00 600.00 825.00	9,000.00 4,000.00 30,000.00 2,275.00 2,400.00 400.00 2,400.00 600.00 4,125.00		948,072.00	30,000.0 2,600.0 325.0 800.0 4,950.0		0.0 30,000.0 2,600.0 325.0 800.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0

SCHEDULE OF BID PRICES

ntract 1251 - Unior	n Square/Market Street Station Utility Relocation		tal Amount eer's Estimate)	Av	ward (SPM)	Original Form B	Final Form B	Close Out Modification	
Bid Item No.	Item Description	Unit Price	Total Amount	Unit Price	Total Amount		Total Amount	Total Amount	
32 JT-32	UTILITY VAULTS TYPE MUNI 38-687	\$37,562	\$112,686	12,000.00	36,000.00		24,000.00	24,000.00	
33 JT-33	UTILITY VAULTS TYPE MUNI 38-687 INTERCEPT	\$37,562	\$37,562	18,000.00	18,000.00		18,000.00	18,000.00	
34 JT-34	UTILITY VAULT TYPE Christy N9	\$1,744	\$17,439	325.00	3,250.00		2,925.00	2,925.00	
	Total		\$1,489,750		\$511,250	\$948,072	\$450,900	\$450,900	
	JOINT TRENCH UTILITY CONDUITS								
JT-35	FURNISH AND INSTALL 2-INCH HDPE CONDUIT	\$8	\$9,027	10.00	10,960.00		26,870.00	26,870.00	
JT-36	FURNISH AND INSTALL 4-INCH HDPE CONDUIT	\$19	\$30,842	15.00	24,750.00		25,500.00	25,500.00	
JT-37	FURNISH AND INSTALL 5-INCH HDPE CONDUIT	\$28	\$126,851	18.00	82,548.00		52,272.00	52,272.00	
JT-38	FURNISH AND INSTALL 2-INCH PVC CONDUIT	\$28	\$165,231	6.00	35,076.00		31,836.00	31,836.00	
JT-39	FURNISH AND INSTALL 3-INCH PVC CONDUIT	\$10	\$10,496	6.00	6,474.00		5,970.00	5,970.00	
JT-40	FURNISH AND INSTALL 4-INCH PVC CONDUIT	\$22	\$922,564	8.20	337,052.80		366,294.00	366,294.00	
JT-41	FURNISH AND INSTALL 5-INCH PVC CONDUIT	\$39	\$38,296	16.00	15,760.00		1,776.00	1,776.00	
JT-42	FURNISH AND INSTALL 6-INCH PVC CONDUIT	\$45	\$910,771	11.00	224,818.00	3,125,362.00	169,312.00	169,312.00	
JT-43	FURNISH AND INSTALL 1-1/2-INCH QUADLOCK	\$54	\$377,091	19.00	133,912.00		135,052.00	135,052.00	
JT-44	FURNISH AND INSTALL 1-1/2-INCH GRS CONDUIT	\$16	\$24,611	16.00	24,176.00		13,808.00	13,808.00	
JT-45	FURNISH AND INSTALL 2-INCH GRS CONDUIT	\$30	\$67,736	20.00	45,720.00		7,620.00	7,620.00	
JT-46	FURNISH AND INSTALL 4-INCH GRS CONDUIT	\$63	\$20,945	33.00	10,890.00		10,890.00	10,890.00	
JT-47	FURNISH AND INSTALL 6-INCH GRS CONDUIT	\$163	\$32,583	49.00	9,800.00		33,516.00	33,516.00	
JT-48	FURNISH AND INSTALL 2-INCH GAS PE CONDUIT	\$23	\$20,398	20.00	18,020.00		4,040.00	4,040.00	
JT-49	FURNISH AND INSTALL 6-INCH GAS PE CONDUIT	\$92	\$86,859	55.00	51,755.00		33,165.00	33,165.00	
	Total		\$2,844,301		\$1,031,712	\$3,125,362	\$917,921	\$917,921	
	SEWER WORK -SW								
SW-1	TRENCH AND EXCAVATION SUPPORT WORK		\$2,547,683		1,000,000.00			1,000,000.00	
SW-2	DEMOLITION, REMOVALS, AND ABANDONMENT WORK		\$258,625		100,000.00			100,000.00	
SW-3	12-INCH DIAMETER VCP SEWER ON CRUSHED ROCK BEDDING	\$125	\$19,493	170.00	26,520.00			16,490.00	
SW-4	8-INCH DIAMETER HDPE SEWER ENCASED IN CRUSHED ROCK	\$172	\$32,232	150.00	28,050.00			26,400.0	
SW-5	10-INCH DIAMETER HDPE SEWER ENCASED IN CRUSHED ROCK	\$190	\$30,370	180.00	28,800.00			27,000.00	
SW-6	14-INCH DIAMETER HDPE SEWER ENCASED IN CRUSHED ROCK	\$226	\$93,744	200.00	83,000.00			103,200.0	
SW-7	16-INCH DIAMETER HDPE SEWER ENCASED IN CRUSHED ROCK	\$220	\$20,015	225.00	20,475.00			21,375.0	
SW-8	18-INCH DIAMETER HDPE SEWER ENCASED IN CRUSHED ROCK	\$220	\$58,065	250.00	66,000.00			70,000.0	
SW-9	18-INCH DIAMETER FLUSH BELL RCP CLASS IV SEWER ON CRUSHED ROCK BEDDING INCLUDING CASING INSULATOR	\$235	\$9,419	275.00	11,000.00			9,900.0	
SW-10	CONCRETE MANHOLE FOR PIPE SIZE 12-INCH TO 24-INCH DIAMETER WITH NEW FRAME AND COVER (PER SFDPW STD. PLAN 87,181)	\$9,829	\$127,778	4,500.00	58,500.00			63,000.0	
SW-11	MODIFIED BOX MANHOLE FOR CONNECTION TO 3'X5' BRICK SEWER WITH NEW FRAME AND COVER (IN ACCORDANCE WITH SFDPW STD. PLAN 87,184)	\$9,829	\$58,975	20,000.00	120,000.00			120,000.0	
SW-12	SEWER MAIN CLEANOUT (IN ACCORDANCE WITH DETAIL ON DWG SW-2)	\$290	\$869	500.00	1,500.00			2,500.0	
SW-13	CONCRETE CATCH BASIN WITH NEW FRAME, GRATING, AND CAST IRON TRAP (IN ACCORDANCE WITH SFDPW STD. PLAN 87,188 AND AS SHOWN ON DWG SW-2)	\$2,906	\$26,154	5,000.00	45,000.00			25,000.0	
SW-14	10-INCH DIAMETER VCP CULVERT	\$120	\$15,335	150.00	19,200.00			7,200.0	
SW-15	10-INCH DIAMETER DIP CULVERT	\$95	\$15,552	180.00	29,520.00			21,600.0	
SW-16	CAST IRON WATER TRAP FOR CATCH BASIN INCLUDING CLEANOUT CAP (IN ACCORDANCE WITH SFDPW STD. PLAN 87,194)	\$246	\$1,231	300.00	1,500.00			1,500.0	
		\$2,172	\$69,513						
SW 17	TELEVISION INSPECTION OF 6, 8, 10, OR 12-INCH DIAMETER SIDE SEWER OR 10-INCH DIAMETER CULVERT			150.00	4,800.00				
SW-18	6 OR 8-INCH DIAMETER SIDE SEWER CONNECTION TO VCP	\$724	\$18,826	300.00	7,800.00			8,100.0	
					7,800.00 44,375.00			0.0 8,100.0 40,250.0 7,500.0	

SCHEDULE OF BID PRICES

251 - Union	Square/Market Street Station Utility Relocation	_	tal Amount eer's Estimate)	Av	vard (SPM)	Original Form B	Final Form B	Close Out Modification	
Bid Item No.	Item Description	Unit Price	Total Amount	Unit Price	Total Amount		Total Amount	Total An	
SW-21	POST CONSTRUCTION TELEVISION INSPECTION OF NEWLY CONSTRUCTED MAIN SEWERS		\$55,495		20,000.00				
SW-22	EXPLORATORY HOLES OR POTLHOLES (CONDITIONAL BID ITEM)	\$1,448	\$2,896	100.00	200.00				
	Total		\$3,518,674		\$1,726,740	\$0	\$0	\$1,691	
	WATER DISTRIBUTION WORK - WD								
WD-1	METER BOX REMOVAL	\$317	\$951	300.00	900.00				
WD-2	WATER PIPE REMOVAL AND ABANDONMENT		\$375,492		50,000.00				
WD-3A	INSTALLATION 6-INCH DIP WITH POLYETHYLENE ENCASEMENT	\$243	\$20,873	120.00	10,320.00				
WD-3B	INSTALLATION 8-INCH DIP WITH POLYETHYLENE ENCASEMENT	\$459	\$663,159	150.00	216,600.00			1	
WD-3C	INSTALLATION 12-INCH DIP WITH POLYETHYLENE ENCASEMENT	\$255	\$31,165	200.00	24,400.00				
WD-4	INSTALLATION OF SCREW TAPS	\$2,612	\$26,118	200.00	2,000.00				
WD-5A	INSTALLATION OF 1-INCH SERVICE PIPE	\$23	\$2,342	125.00	12,625.00				
WD-5B	INSTALLATION OF 2-INCH SERVICE PIPE	\$23	\$1,793	150.00	11,850.00				
WD-6A	INSTALLATION OF 4-INCH SERVICE PIPE	\$215	\$20,834	120.00	11,640.00				
WD-6B	INSTALLATION OF 6-INCH SERVICE PIPE	\$451	\$41,899	150.00	13,950.00				
WD-6C	INSTALLATION OF 8" SERVICE PIPE	\$1,754	\$52,605	170.00	5,100.00				
WD-7	TRENCH EXCAVATION AND BACKFILL FOR PIPE INSTALLED BY SFWD	\$898	\$54,768	175.00	10,675.00				
WD-8	INSTALLATION OF STRUCTURAL SUB-SIDEWALK BASEMENT AREA-WAY SETTING FOR LOW PRESSURE FIRE HYDRANTS	\$4,508	\$9,016	10,000.00	20,000.00				
WD-9	INSTALLATION OF 8-INCH DUCTILE IRON STRUCTURALLY SUPPORTED PIPES WITH POLYETHYLENE ENCASEMENT	\$134	\$19,627	250.00	36,750.00				
WD-10	ALLOWANCE FOR ADDITIONAL EXCAVATION AND BACKFILL		\$100,000		100,000.00			1	
	Total		\$1,420,642		\$526,810	\$0	\$0	\$405	
	AUXILLIARY WATER SUPPLY SYSTEM (AWSS) - AW								
AW-1	TRENCH SHORING AND BRACING OR EQUIVALENT METHOD CONFORMING TO APPLICABLE SAFETY ORDERS		\$269,947		100,000.00			1	
AW-2	LOCATIONS 1A AND 1B-GEARY STREET - AWSS MAIN AND HYDRANT LATERAL WORK		\$337,497		400,000.00			3	
AW-3	LOCATIONS 1A AND 1B-O'FARRELL STREET - AWSS MAIN AND HYDRANT LATERAL WORK		\$422,426		400,000.00			9	
AW-4	LOCATION 2 - AWSS HYDRANT LATERAL WORK		\$50,773		100,000.00				
AW-5	AWSS HYDRANT LATERAL OFFSET (DELETABLE BID ITEM)		\$28,448	1,250.00	6,250.00				
AW-6	10-INCH DIAMETER AWSS PIPING REPLACEMENT-10 FOOT LAY LENGTH (DELETABLE BID ITEM)		\$1,599	1,000.00	2,000.00				
AW-7	12-INCH DIAMETER AWSS PIPING REPLACEMENT-10 FOOT LAY LENGTH (DELETABLE BID ITEM)		\$4,614	1,200.00	4,800.00				
	Total		\$1,115,305		\$1,013,050	\$0	\$0	\$957	
	PAVEMENT RESTORATION - RP								
RP-1	ASPAHLT CONCRETE (TYPE A, 1/2-INCH MAXIMUM WITH MEDIUM GRADING)	\$204	\$91,876	175.00	78,750.00				
RP-2	FULL DEPTH PLANING PER 2-INCH DEPTH OF CUT	\$7	\$221,337	2.00	62,000.00				
RP-3	8-INCH THICK CONCRETE BASE	\$12	\$66,916	9.00	50,400.00				
RP-4	8-INCH THICK CONCRETE PAVEMENT	\$14	\$27,164	10.00	20,000.00				
RP-5	10-INCH THICK CONCRETE PAVEMENT	\$16	\$18,018	12.00	13,200.00				
RP-6	6-INCH WIDE CONCRETE CURB	\$26	\$150,633	32.00	184,000.00				
RP-7	2-FOOT WIDE CONCRETE GUTTER	\$37	\$20,848	35.00	19,600.00				
RP-8	3-1/2-INCH THICK CONCRETE SIDEWALK	\$13	\$336,631	15.00	378,000.00			2	
RP-9	CONCRETE CURB RAMP	\$1,662	\$41,540	2,500.00	62,500.00				
RP-10	CAST-IN PLACE DETECTABLE SURFACE TILE	\$72	\$21,739	50.00	15,000.00				
RP-11	ALLOWANCE FOR EXCAVATION PERMIT FEE ASSESSED BY BSM ACCORDING TO ARTICLE 2.4 OF THE PUBLIC WORKS CODE		\$10,000		10,000.00				
	Total		\$1,006,703		\$893,450	\$0	\$0	\$500,	

SCHEDULE OF BID PRICES

251 - Union	Square/Market Street Station Utility Relocation		otal Amount neer's Estimate)	Av	ward (SPM)	Original Form B	Final Form B	Close Out Modification	
Bid Item No.	Item Description	Unit Price	Total Amount	Unit Price	Total Amount		Total Amount	Total Amount	
	TRAFFIC SIGNALS- ET								
ET-1	TRAFFIC SIGNALS		\$720		50,000.00			50,000	
ET-2	TEMPORARY TROLLEY RE-ROUTE - TRAFFIC SIGNALS		\$136,739		83,000.00			83,00	
		Total	\$137,459		\$133,000	\$0	\$0	\$133,000	
	STRUCTURAL - SR								
SR-1	CAST-IN-PLACE & PNEUMATICALLY PLACED CONCRETE AND ACESSORIES (6,000 PSI)	\$896	\$682,117	600.00	456,600.00			391,2	
SR-2	STEEL REINFORCEMENTS	\$4,293	\$437,931	2,700.00	275,400.00			330,9	
SR-3	195 KIPS COMPRESSION MICROPILES	\$6,874	\$178,712	10,000.00	260,000.00			260,00	
SR-4	240 KIPS COMPRESSION MICROPILES	\$23,074	\$346,117	4,400.00	66,000.00			66,0	
SR-5	300 KIPS COMPRESSION MICROPILES	\$17,562	\$140,493	6,000.00	48,000.00			48,0	
SR-6	150 KIPS TENSION MICROPILES	\$9,485	\$237,116	6,500.00	162,500.00			162,50	
SR-7	90 KIPS TENSION MICROPILES	\$6,252	\$81,281	3,400.00	44,200.00			44,2	
SR-8	115 KIPS TENSION MICROPILES	\$7,609	\$197,821	2,400.00	62,400.00			62,4	
SR-9	SEGMENTAL UNDERPINNING	\$2,172	\$86,891	2,900.00	116,000.00			58,0	
SR-10	260 KIPS COMPRESSION MICROPILES	\$15,409	\$123,268	6,000.00	48,000.00			48,0	
		Total	\$2,511,748		\$1,539,100	\$0	\$0	\$1,471,212	
	MECHANICAL (PLUMBING) - MP		+_,,		+_,			+-,	
MP-01	PLUMBING SYSTEM		\$139,391		\$200,000			\$200,000	
	ELECTRICAL LIGHTING - EL		1207,072						
EL-1	TEMPORARY TROLLEY RE-ROUTE - STREET LIGHTING		\$119,620		60,000.00			60,0	
EL-2	TEMPORARY TROLLEY RE-ROUTE - TROLLEY POLE GROUNDING		\$18,755		15,000.00			15,0	
EL-3	STREET LIGHTING		\$59,040		75,000.00			75,0	
		Total	\$197,416		\$150,000	\$0	\$0	\$150,000	
	TRACTION POWER - TP		<i><i><i>ϕ</i>μγμγμμ</i></i>		<i><i><i>q</i><b>1</b>20,000</i></i>	ψŪ	ψŬ	φ120,000	
TP-1	TRACTION POWER SYSTEM		\$188,263		125,000.00			37,5	
TP-2	HI-SPEED DC TRIP UNIT	\$9,075	\$36,302	7,800.00	31,200.00			31,2	
11 2		Total	\$224,565	7,000.00	\$156,200	\$0	\$0	\$68,700	
	OVERHEAD - OV	Total	φ224,505		φ <b>130,2</b> 00	Ψ	Ψ	φ00,700	
OV-1	OVERHEAD SPECIAL WORK AT STOCKTON AND SUTTER STREETS		\$201,298		200,000.00			200,0	
OV-2	OVERHEAD SPECIAL WORK AT SUTTER AND MASON STREETS		\$186,816		200,000.00			200,0	
OV-3	OVERHEAD SPECIAL WORK AT MASON AND EDDY STREETS		\$175,231		50,000.00			50,0	
OV-4	OVERHEAD SPECIAL WORK AT MARKET AND TURK STREETS		\$186,816		220,000.00			220,0	
OV-5	OVERHEAD SPECIAL WORK AT MARKET AND FIFTH STREETS		\$186,816		50,000.00			50,0	
OV-6	OVERHEAD SPECIAL WORK AT FIFTH AND HARRISON STREETS		\$176,679		80,000.00			80,0	
OV-0	PROVIDE 2/0 TROLLEYWIRE	\$38	\$414,182	29.00	319,000.00			304,1	
OV-8	PROVIDE LO INOLLE I VINE PROVIDE TANGENT OR INVERTED SPAN	\$11,586	\$162,197	3,500.00	49,000.00			31,5	
OV-9	PROVIDE BRACKET ARM AND SPAN	\$10,282	\$308,464	5,000.00	150,000.00			170,0	
OV-10	PROVIDE DIFFERENTIAL DEAD-END	\$10,202	\$14,482	5,500.00	5,500.00			5,5	
OV-10 OV-11	PROVIDE SECTION INSULATOR	\$21,723	\$152,060	5,000.00	35,000.00			25,0	
OV-11 OV-12	PROVIDE TROLLEYWIRE CROSSOVER	\$14,482	\$57,928	25,000.00	100,000.00			100,0	
OV-12 OV-13	PROVIDE TYPE 761N TROLLEY POLE	\$72	\$2,245	3,400.00	105,400.00			119,0	
								119,0	

#### SCHEDULE OF BID PRICES

Name of Bidder: \_\_\_\_\_

251 - Unior	n Square/Market Street Station Utility Relocation	_	al Amount eer's Estimate)	Av	vard (SPM)	Original Form B	Final Form B	Close Out Modificati
Bid Item No.	Item Description	Unit Price	Total Amount	Unit Price	Total Amount		Total Amount	Total Amo
OV-15	PROVIDE TYPE 770 TROLLEY POLE	\$32,295	\$96,884	6,000.00	18,000.00			18
OV-16	PROVIDE TROLLEY POLE FOUNDATION FOR TYPE 761N POLE	\$8,399	\$235,186	4,200.00	117,600.00			134
OV- 17	PROVIDE TROLLEY POLE FOUNDATION FOR TYPE 765N POLE	\$9,268	\$46,342	4,200.00	21,000.00			1
OV-18	PROVIDE TROLLEY POLE FOUNDATION FOR TYPE 770 POLE	\$12,020	\$36,060	5,500.00	16,500.00			1
OV-19	REMOVE AND SALVAGE OR DISPOSE OF EXISTING TROLLEY POLE AND DISPOSE OF FOUNDATION 3 FEET BELOW FINISH GRADE	\$5,069	\$15,206	800.00	2,400.00			
OV-20	PROSPECT HOLE FOR DEPTH UP TO 3 FEET	\$1,448	\$23,171	450.00	7,200.00			
OV-21	PROSPECT HOLE FOR DEPTH GREATER THAN 3 FEET	\$2,896	\$14,482	675.00	3,375.00			
OV-22	PAINT TROLLEY POLE	\$2,896	\$8,689	800.00	2,400.00			
	Total		\$2,786,677		\$1,769,375	\$0	\$0	\$1,764,
	STRUCTURAL OVERHEAD - SO							
SO-1	PROVIDE SUBSIDEWALK BASEMENT FOUNDATION	\$21,723	\$65,168	12,000.00	36,000.00			e
SO-2	PROVIDE EYEBOLT	\$6,372	\$101,952	2,000.00	32,000.00			2
SO-3	TESTING OF EXISTING EYEBOLTS	\$1,448	\$8,689	750.00	4,500.00			
	Total		\$175,810		\$72,500	\$0	\$0	\$88,75
	Subtotal Base Bid Item Work		\$25,932,113		\$16,772,550	\$7,879,511	\$3,290,905	\$16,001
<b>OPTIONAL</b>	BID ITEM - OP							
SP-OP11	OPTION FOR UTILITY RELOCATION AND CLOSURE WALL FOR VACATING BASEMENT FOR 17-19 STOCKTON STREET		\$1,185,000		60,000.00			
	Subtotal Optional Bid Item Work		\$1,185,000		\$60,000			
	Contract Modifications						\$1,279,825.09	\$4,90
						4	\$1,273,823.03	Ş4,90
	Allowances					\$1,575,902.00		
	Site Management 5%					\$315,181.00	\$228,536.50	
	Escalation					\$322,432.00		
	BID RECAPITULATION							
	DID RECAILION					(\$419,956.00)		
						(, , , , , , , , , , , , , , , , , , ,		
A	Reduction to meet Form B agreement amounts		\$25,932,113		\$16,772,549.80			
A	Reduction to meet Form B agreement amounts         Subtotal Base Bid Item Work (from Page 4.7)		\$25,932,113 \$1,185,000		\$16,772,549.80 \$60,000.00			
A B	Reduction to meet Form B agreement amounts		\$25,932,113 \$1,185,000 <b>\$27,117,113</b>		\$16,772,549.80 \$60,000.00 <b>\$16,832,549.80</b>	\$9,673,070.00	\$4,799,266.56	\$20,906,3



# CMB Change No.: <u>CMB – 101</u> Initial Implementing Change Control Procedure No.:1252 –COR - 038

		GENERAL		
Proposed Change Sponsor:		S. Wilson	Received by CMB:	01/23/2013
Affected Disciplines:	Excavati Support	on and Ground		(Date)
Impacts of Change			walls Footprint R 038) Amount Not To	o Exceed
Contract(s) Directly Affe	cted by thi	is Proposed Change	<u></u>	
1250 1251 1252 <b>1 □ 2 □ 3 ⊠</b> (CP01) (CP02) (CP03)	1253 4 🔲 (CP04)	5 🗌 6 🗌 7	256	
CONFI	GURATIO		BOARD APPROVAL	S
		S <i>igi</i> Agree with the ्रि <del>का</del> ge	Disagree with the Change	Date
Senior Program	Manager:	CAS-		1-23-13
Deputy Program	Manager:	1		
PM Project	Services:			
PM Project Development	/Delivery:	ADR 100		1/23/2013
SFMTA O & M		-HUG VUI		101/001
SFMTA Safety and	C	$\frown$		-
	CTA PMO	Alter		23 JAN 13
		Comments		0301111

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# **Engineer's Estimate** Contract No. 1252 - Tunnel **Change Order Request - 038**

								COR	03	88 _		
	No.	Activity Name	Days (C)	Days (EE)	Con	tractor (C)	Engineer's Estimat	e (EE)	Delt	a (EE-C)	Summary of Delta	Negotiation Position
Labor	1	FA Tag 4278 ( 28-Aug-12 )	0.5	0.5	\$	959.04	\$ 8	862.29	\$		The labor rates were adjusted to align with SFMTA built up labor rates in lieu of an approved labor submittal	Labor Burdens Applied as Follow: FICA 7.65% FUTA 0.12% SUTA 1.2% SF Payroll 1.5% WC 4.03%
	2	FA Tag 4281 ( 29-Aug-12 )	0.25	0.25	\$	479.52	\$ 4	431.15	\$		The labor rates were adjusted to align with SFMTA built up labor rates in lieu of an approved labor submittal	Labor Burdens Applied as Follow: FICA 7.65% FUTA 0.12% SUTA 1.2% SF Payroll 1.5% WC 4.03%
Equipment	1	FA Tag 4278 ( 28-Aug-12 )	.5	0.5	\$	940.15	\$ 8	863.72	\$		The contractor used and incorrect Backhoe Rate as it includes the clamshell which should not be part of the estimate if the breaker attachments is being utilized. The contractor used a more expensive "Large Excavator" for their estimate.	The differences noted to the left account for 100% of the difference between the engineer's estimate equipment total and the contractors estimate equipment total.
Equip	2	FA Tag 4281 ( 29-Aug-12 )	.25	0.25	\$	712.96	\$ 6	649.62	\$		The contractor used and incorrect Backhoe Rate as it includes the clamshell which should not be part of the estimate if the breaker attachments is being utilized. The contractor used a more expensive "Large Excavator" for their estimate.	The differences noted to the left account for 100% of the difference between the engineer's estimate equipment total and the contractors estimate equipment total.
			Markup LN	Material M&E - 15%		<mark>265.61</mark> 503.59		240.00 457.02	\$ \$		The contractor used the same unit price for dump fees yet they incorrectly assessed sales tax and shipping on those dump fees.	
			Ma	l Tier Subs arkup - 5%	\$	-	\$	-	-			
			Prime Ma	nce 2.14% arkup - 5% nce 1.68%	\$	197.17	\$ \$ \$	74.98 178.94 63.13	\$ \$ \$	(7.64) (18.24) (6.43)		
				Total	\$	4,210.24	\$ 3,8	820.84	\$	(389.40)		
		Resident Engineer Recomme	nded NTE /	Amount:			\$ 4,0	052.17			3,820.84 (EE) + 140.33 (Hitachi	200) + 91 (Half of Labor Delta)
		SFM	TA	Mu	inici	pal Tran	sportation Ag	gency		HI		701 5262 Phone

San Francisco, Ca 94103 415 701 5222 Fax



# **Estimate Summary**

**General Scope:** The scope of this estimate pertains to the removal of a concrete manhole and CDF filled pipe at the North side of the Launch Box near the intersection of 4th and Harrison. Force account tags 4278/4281 were provided and loaded with cost within this estimate.

## **Detailed Scope:**

- 1. FA Tag 4278 ( 28-Aug-12 )
- 2. FA Tag 4281 ( 29-Aug-12 )

	Labor	Ec	quipment	N	laterial	Μ	ark Ups	Total	
Cost Summary:	\$ 1,293.44	\$	1,513.34	\$	240.00	\$	774.07	\$ 3,820.84	

## List of attached documents:

- Detailed Estimate
- Materials List
- FA 4278
- FA 4281
- Daily Reports for 08/28/2012 and 08/29/2012 (Gabe Fernandez)





# central cosubway

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## **Engineer's Estimate**

## Contract No. 1252 - Tunnel

### **Change Order Request - 038**

		Hourly rates:		5	9 <sup>15</sup> 5	99. 57 57	00 0	00 5 0	00 0	00 5	00		5	2.81 5	2.26	20.13	6.A. 5	3.12 C	500 5	00 0	00 0	00	
No.	Activity		Days	Laborer (G1)	Operating Engineer (OE) (G3)	Labor Resource	Labor Resource	Labor Resource	Labor Resource	Labor Resource	La	bor totals	Backhoe (John Deere ID 310G)	Breaker attachment for Backhoe	New Holland Excavator (E135)	Dump truck - 3-axle	Work Truck	Equipment	Equipment	Equipment	Equipment	Equipm Totals	
1	FA Tag 4278 ( 28-Aug-12 )		0.5	3	1						\$	862.29	0.25	0.25	0.75	1	1					\$ 863	
2	FA Tag 4281 ( 29-Aug-12 )		0.25	3	1						\$	431.15	1	1	1	1	1					\$ 649	9.62
3			0								\$	-										\$	-
13	Total										\$	1,293.44										\$ 1,513	.34
		Labor Material Equipment	\$	2	293.44 240.00 513.34					nptions		cluded in the					<u> </u>						

- Sales tax is not assessed on dump fees per phone call with Ox Mountain (Marvin) 12/12/12

7-7	S S
Edd	55
Estimated By: Ken Barnhart	1/22/2013

2nd Tier Sub \$

-

457.02

\$74.98 178.94

\$63.13

3,820.84

Markup on 2nd Tier Sub - 5% \$

1st Tier Sub Bond/Insurance - 2.14%

Prime - Bond/Insurance - 1.68%

1st Tier Sub OH&P - 15% \$

Prime - Markup - 5% \$

Total Amount \$

Shift Duration:

10hl: Checked By: Charles Dombrowski



Municipal Transportation Agency



8hrs

821 Howard Street 415 701 5262 Phone San Francisco, Ca 94103 415 701 5222 Fax

1/22/2013



Engineer's Estimate Contract No. 1252 - Tunnel Change Order Request - 038

Material	Qty.	Unit	U	nit Price	Ex	tension
Dump Fee	1	Load	\$	240.00	\$	240.00
					\$	-
					\$	-
					\$	-
Sales Tax 8.5%						
Total					\$	240.00

2nd Tier Sub Quote

\$ -





SFI4) A - Third Street Light I PRDJECT HOL CN 1252 PRDJECT HAME: Control Outway CONTRACTOR: Synery Project Press york on third Synthese to Wood Description: King	Tora al a Mana Jement	L 10C		Date Force Account Hold Report CHERITAL 4278 CATE FERMINAL 8/28/12 DATE CONTROL 8/28/12 DATE CONTROL 8/28/12				
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# central <br/> subway

DAILY REPORT Contract Day 00214

Connecting people. Connecti	ng Communities.					-	
PROJECT: 1252 TBM, Launch INSFECTOR: Gabriel Fernandez	Box and Tunnel	DAY: Shift	Tuesday :		DATE: TIME:	8/28/201	2
TEMPERATURE: 60 - 70 CONTRACTOR:	PRECIPITATION:	None	SKY:	Clear		WIND:	00-10

#### Remarks

UMS headwall construction site;

BIH subcontractor Wang/Gregg;

Cored hole in 4th street between Howard and Mission, and 4th street between Mission and Market to installed utility monitoring point (UMP).

Ellis Street grout shaft construction site; BIH subcontractor Condon Johnson; Began jet grouting test column #7. Grouted to an elevation of 50' BG. Work then stopped due to seal failure of jet grout drill rig.

MOS headwall construction site; BIH cleaned garbage and demotished/removed dilapidated garbage cabinet at the 76 gas station.

Work performed at the TBM launch box construction site;

BIH subcontractor Condon Johnson;

(TUN-03-3160) Completed setting of steel I-beams in shurry wall panel #W11. Began pouring concrete for shurry wall panel #W11 10:15 A.M. QCM Alex C. and Antonio P. onsite. Peter of CTS onsite to test concrete. Finished pouring (72) CY of concrete by 12:P.M. Finished placement of steel for #W11 by I P.M.

(TUN-03-3160) Completed partial placement of steel I-beams for slurry wall panel #W35 and started pouring concrete at 2:P.M. Poured (72) CY of concrete for #W35 by 4:30 P.M.

(TUN-03-3160) Continued re-excavation of slurry wall panel #W40 with UNRC. Excavation at this location was slow due to concrete overpour from panel #39 impeding excavation.

(TUN-03-3160) Continued excavation of slurry wall panel #W23 with LOHC. Reached a depth of 50' by end of shift at this location.

(Extra Work) Pre-trenched slurry wall panel #W16. This work took about one hour to complete.

BIH subcontractor Synergy;

(TUN-03-2040) Continued demolition and removal of (e) abandoned utilities at the jet grout area south side of 4th and Harrison intersection. While performing this work encountered and removed (c) abandoned SSMH filled with CDF not shown on the plans.

Today is contract work night #214. Above report generated by SFMTA inspector Gabriel Fernandez for work hours 8:A.M. to 5:P.M. For work details outside of these hours or witnessed by another inspector see work narrative by Bud Green, Dave Ohlssen, or Bill Hawk.

QUIPMENT Juits Type	Source	Work Area	Description	Remarks	
TRUCK-2	SYN	TBM-WKST	Foremans		
HOE-3	SYN	TBM-WKST			
CRANE	CJ-NC-JV	TBM-WKST			
CRANE-2	СІ-ИС-ІV	TBM-WKST			
CRANE-3	CJ-NC-JV	TBM-WKST			
CRANE-4	CI-NC-JV	TBM-WKST			
EXCAVATOR-2	CI-NC-JV	TBM-WKST			





# central <br/> subway

**DAILY REPORT** Contract Day 00214

EQUIPMENT Units Type	Source	Work Area	Description	Remarks	
JETGROUT-3	CJ-NC-JV	TBM-WKST			
JETGROUT-4	CJ-NC-JV	ELLIS-GR			
JETGROUT-1	CJ-NC-JV	ELLIS-GR			
JETGROUT-7	СЈ-ŊС-ĴV	ELLIS-GR			
LOADER-2	CJ-NC-JV	ТВМ-ЖКЅТ			
BREAKER	SYN	TBM-WKST			
FORKLIFT-2	CJ-NC-JV	TBM-WKST			
TRUCK-I	SYN	TBM-WKST			
BOBCAT-2	CJ-NC-JV	TBM-WKST			

FIELD FORCE Category	Source	Supv. Fr	mn. Jruy	. Appr.	Work Area	Remarks	
Laborers	BIHJV	1	2	2	MOS-HDWL		
Laborers	SYN		-	3	TBM-WKST		
Operator	SYN	1			TBM-WKST		
See CPR	CJ-NC-JV				ELLIS-GR		
See CPR	CJ-NC-JV				TBM-WKST		
	Totals:	2	0 3	5 O			





# central subway

### DAILY REPORT Contract Day 00215

Connecting people. Connecting Communities.										
PROJECT: 1252 TBM, Launch B INSPECTOR: Gabriel Fernande2	ox and Tunnel	DAY: Shift	,	DATE: TIME:	8/29/2012					
TEMPERATURE: 60 - 70 CONTRACTOR:	PRECIPITATION:	None	SKY: Clear		WIND: 00-10					

Remarks

UMS headwall construction site;

BIH subcontractor Wang/Gregg;

BIH replaced green fabric for construction fence. Continued installing tow board for construction fence. Cored hole in 4th street between Mission and Market to install utility monitoring point (UMP).

Ellis Street grout shaft construction site;

BIH subcontractor Condon Johnson;

Continued jet grouting test column #7. Grouted to an elevation of 38.5' BG. Work then stopped due to cement delivery and generator problems.

MOS headwall construction site;

BIH completed placement of rebar and forming for guiewall at southwest headwall location. Poured (45) CY of concrete for this guidewall at 1:P.M. QCM Alex C. onsite.

Work performed at the TBM launch box construction site;

BIH subcontractor Condon Johnson;

(TUN-03-3160) Completed setting of steel I-beams in slurry wall panel #W23. Began pouring concrete for slurry wall panel #W23 3:P.M. QCM Alex C, and Antonio P. onsite. Peter of CTS onsite to test concrete.

(TUN-03-3160) Continued re-excavation of slurry wall panel #W40 with UNRC in the north-south orientation. Excavation at this location was slow due to concrete overpour from panel #39 impeding excavation.

(TUN-03-3160) Continued excavation of slurry wall panel #W16 with LOHC.

(Extra Work) Pre-trenched slurry wall panel #W29.

BIH subcontractor Synergy;

(TUN-03-2040) Continued demolition and removal of (e) abandoned utilities at the jet grout area south side of 4th and Harrison intersection. Completed removal of (e) abandoned SSMH filled with CDF not shown on the plans.

Today is contract work night #215. Above report generated by SFMTA inspector Gabriel Fernandez for work hours 8:A.M. to 5:P.M. For work details outside of these hours or witnessed by another inspector see work narrative by Bud Green, Dave Ohlssen, or Bill Hawk.

BQUIPMENT					
Units Type	Source	Work Area	Description	Remarks	and the second se
TRUCK-2	SYN	TBM-WKST	Foremans tnick		
DRILL	CJ-NC-JV	ELLIS-GR			
FORKLIFT-2	CJ-NC-JV	ELLIS-GR			
JETGROUT-4	CJ-NC-JV	ELLIS-GR			
2 JETGROUT-7	CJ-NC <b>-</b> JV	ELLIS-GR			
BOBCAT-2	CJ-NC-JV	TBM-WKST			
CRANE	CJ-NC-IV	TBM-WKST			



Municipal Transportation Agency



 821 Howard St.
 415-701-527 Phone

 San Francisco, CA 94103
 415-701-522 Γax

# central <br/> subway

### **DAILY REPORT** Contract Day 00215

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EQUIPMENT Units Type	Source	Work Area	Description	Remarks	
CRANE-2	CJ-NC-JV	TBM-WKST			
LOADER-2	CJ-NC-JV	TBM-WKST			
CRANE-3	CJ-NC-JV	TBM-WKST			
CRANE-4	CJ-NC-JV	TBM-WKST			
HOE-3	SYN	TBM-WKST			
TRUCK-1	SYN	TBM-WKST			
FORKLIFT-3	CJ-NC-JV	TBM-WKST			

Laborers	0101				
	SYN		3	TBM-WKST	
Operator	SYN	I		TBM-WKST	
See CPR	BIHJV		3	UMS-HDWL	
See CPR	CJ-NC-JV			MOS-HDWL	
See CPR	CJ-NC-JV			TBM-WKST	
See CPR	CJ-NC-JV			ELLIS-GR	

# SFIMTA





### **Change Order Cost Analysis Guidelines**

**Labor:** Cost for change order labor hours shall align with the prevailing wage rate for each applicable trade designation. These shall align with the approved submittal required in GP 6.04 Sect. A1. Prevailing labor wage rates may be found on the Department of Industrial Relations website (<u>http://www.dir.ca.gov/OPRL/PWD/</u>).

**Material:** Cost for materials applicable to proposed change orders shall be limited to direct cost including sales tax. Delivery costs may be applied if the delivery is strictly due to the proposed change order. See GP 6.04 Sect. A2.

**Equipment:** Rates used for equipment shall align with the approved submittal required in GP 6.04 Sect. A3. This submittal represents the approved equipment rates showing the lesser rate between the California Department of Transportation's Labor Surcharge & Equipment Rental Rate book and the Machinery Information Division of PRIMEDIA Information, Inc's Rental Rate Blue Book.

#### **Taxes and Labor Burdens:**

Social Security – 6.2%\* Medicare – 1.45%\* Federal Unemployment Tax Act. – 0.12%\* State Unemployment Insurance – 1.2%\* City/County Payroll Expense Tax – 1.5%\* (<u>www.sftreasurer.org/index.aspx?page=23</u>) Workers Compensation Insurance – 4.03%\*(Backup needed with experience modifier)

\*Applied to direct labor plus vacation/holiday fringe

### **Insurance and Bonding:**

General Liability Insurance / Bonding: 2.25% ± 0.75% (Backup needed)

Bonding $0.75\% \pm 0.25\%$ Insurance $1.50\% \pm 0.50\%$ 

**Overhead and Profit:** Mark ups for overhead and profit shall be limited to 15% not to exceed overall markup of 25% of total change once all subcontracting tier mark ups have been applied. Contractors may receive a maximum 5% markup on subcontractors total cost. A detailed explanation of overhead and profit mark ups may be found in GP 6.04 Sect. C.



Municipal Transportation Agency



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# CMB Change No.: <u>CMB – 102</u> Initial Implementing Change Control Procedure No.:1252 –COR - 039

				(	GENERA	L		_	
Proposed (	Change S	Sponsor:		S. Wilso	on		Received by CMB:	01/23/2013	
Affec	Affected Disciplines:			ion and	Ground			(Date)	
Impacts of Change			MOS – 16 <sup>th</sup> Steel Pipe Removal at Northeast headwall						
Change Order Request (COR 039) Amount Not To Exceed									
Contract	t(s) Dire	ctly Affe	cted by th	nis Propo	osed Cha	inge:			
1250 <b>1</b> □	1251 <b>2</b> 🗌	1252 3 🖂	1253 4 🗌	1254 5 🗌	1255 6 🗌	12 7			
(CP01)	(CP02)	(CP03)	(CP04)	(CP05)	(CP06)	(CP			
CONFIGURATION MANAGEMENT BOARD APPROVALS									
				<b>A</b>		<u> </u>	atures	Dete	
					ee with th	ie	Disagree with the Change	Date	
S	Senior P	rogram I	Manager:	(	4			1-23-13	
D	eputy P	rogram I	Manager:	/	()				
	PM	Project	Services:			1			
PM Proje	ct Devel	lopment/	Delivery:	M	Ul/	1		1/23/2013	
	SFMTA	0 & M I	Manager:	1					
SF	MTA Sa	ifety and	Security				1		
		SFC	TA PMO	X	AM.	/		23/1/13	
				0	Commen	s			

# central central

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# Engineer's Estimate Contract No. 1252 - Tunnel Change Order Request - 039

					C	DR 039		
N	o. Activity Name	Days (C)	Days (EE)	Contractor (C)	Engineer's Estimate (EE)	Delta (EE-C)	Summary of Delta	Negotiation Position
Labor	1 FA 4285 (07-Sept-12)	0.5	0.5	\$ 959.04	\$ 862.29	\$ (96.75)	The labor rates were adjusted to align with SFMTA built up labor rates in lieu of an approved labor submittal	Labor Burdens Applied as Follow: FICA 7.65% FUTA 0.12% SUTA 1.2% SF Payroll 1.5% WC 4.03%
Equipment	1 FA 4285 (07-Sept-12)	0.5	0.5	\$ 1,520.80	\$ 1,113.76	\$ (407.04)	The contractor included equipment beyond what is shown on the force account tag (Generator and Welding equipment). The more expensive "Large excavator" was by the contractor to extend the force account tag (Hitachi 200 vs. New Holland) as the size and type is not noted on the tag itself. An incorrect Triton Barrier hourly rate is also being applied.	
		Markup L	Material M&E - 15%		\$ 240.00 \$ 332.41	\$ (150.11) \$ (98.08)	Cutback materials are being shown at 1 TN per steel plate in comparison to 1/10 TN per steel plate in the equipment submittal. This material was left out of the engineer's estimate as it was not accounted for on FA 4285. Incorrect markups included in the contractor's materials list as well.	
		2n	d Tier Subs	\$-	\$ - \$ -	\$ - \$ -		
	Sub 1		larkup - 5% ance 2.14%		1			
<u> </u>	Sub. E	-	ance 2.14% larkup - 5%			. , ,		
	Prime E		ance 1.68%			,		
		.,	Total					
	Resident Engineer Recommended NTE Amount:         \$ 2,951.99         2,779.06 (EE) + 60.66 (Half of labor delta) + 112.27 (Hitachi 200)							delta) + 112.27 (Hitachi 200)







# **Estimate Summary**

**General Scope:** This change order estimate is for the removal of approximately one half tons of 16" steel pipe from the excavation of the NE MOS Headwall. The work was performed by Synergy Project Management (SPM) as first-tier subcontractor to BIH and was tracked using Force Account Tags.

## **Detailed Scope:**

1. FA 4285 (07-Sept-12)

	Labor	Ec	quipment	N	<b>Aaterial</b>	Μ	ark Ups	Total			
Cost Summary:	\$ 862.29	\$	1,113.76	\$	240.00	\$	563.01	\$	2,779.06		

## List of attached documents:

- Detailed Estimate
- Materials/Fee List
- FA 4285





# central <br/> subway

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## Engineer's Estimate Contract No. 1252 - Tunnel

**Change Order Request - 039** 

No. /					( (		00 0	0 5	500 5	00 5	s. /		2	2.97 57	2.20 5	10.13 68	ر. ریم ا	3.12 4	6. S	20 5	\$. 5 5	/
	Activity		Days	Laborer (G3)	Operating Engineer (OE) (G3)	Labor Resource	La	bor totals	Backhoe (John Deere ID 310G)	Breaker attachment for Backhoe	New Holland Excavator (E135)	Dump truck - 3-axle	Work Truck	Total per Plate (small)	Arrow Board	Interlocking Water Filled Triton Barrier	Cones	Equipment Totals				
1 I 2	FA 4285 (07-Sept-12)		0.5 0	3	1						\$ \$	862.29			1	1	1	1	1	31	8	\$ 1,113.76 \$ -
	Total	l	U								ې \$	862.29										\$ - <b>\$ 1,113.76</b>
15											Ŷ	002.23									l	Ŷ 1,113.70
		Labor	\$	8	362.29				Assun	nptions	:											
		Material	\$	2	240.00																	
		Equipment		1,1	13.76																	
_		2nd Tier Sub			-																	
	Markup on 2nd				-																	
		b OH&P - 15%	\$		32.41																	
_	1st Tier Sub Bond/Insu				54.54																	
		- Markup - 5%	Ş		130.15																	
	Prime - Bond/Insu	-	<u> </u>		45.92	I																
		Total Amount	<b>&gt;</b>	2,1	79.06																	
-	Estimated By: Kenneth Barnha	2	2	2		5	1/2	2/2013	Shift Du			8hrs ked By: Charle	es Dom	brows	h	17	10	~	L	Ŀ	3	1/22/2013



Municipal Transportation Agency



821 Howard Street 415 701 5262 Phone San Francisco, Ca 94103 415 701 5222 Fax



Engineer's Estimate Contract No. 1252 - Tunnel Change Order Request - 039

Material	Qty.	Unit	Unit Price		Ex	tension
Dump Fee 16" Steel Pipe - Ox Mountain	1	Load	\$	240.00	\$	240.00
	0		\$	-	\$	-
					\$	-
					\$	-
Sales Tax 8.59	%					
Total					\$	240.00

2nd Tier Sub Quote

\$ -





SFMTA - Third Street Light R PROJECT NO. CN 1252 PROJECT NAME: Central Subway T CONTRACTOR: Synergy Project f The following work was performed this daily requiring th Work Description:	tall Phase Funnels Management	2 Central S , Inc.	Ą	I Services lisjed herein:	REPORT NO	ally Force Acccount Field Report REPORT NO. 4285 DATE PERFORMED DATE OF REPORT					
NAME (FIRST, 1) Manny M Authony Tuan M	LAST) P J. V (		HOURS ST 4 OT ST 4 OT ST 4 OT	Materialy DL(MAD) Tee	ay 1/2- 1/3-	, Comment M	š				
Sergis -	(		ST 4. OT ST OT ST ST OT	Services/Subcontracto	or Q/U	Comment	3				
EQUIPMENT DESCRIPTION	Quantity	Active	Standby	EQUIPMENT DESCRIPTI	ON Quantity	Active S	landby				
Backhoe w/Breaker	1		1 30	Steal Plates	1	BA.	Tricker				
Mini Excavator	-			Shoring							
Large Excavator	1	4	- The	Generator							
Dump Truck	1	1		Air Compressor							
End Dump	1	1		Arroubach		24					
Foreman's Truck	1	4	-	Delivertors	5 1.2	1					
Tool/Fuel Truck	1			Conce A	8	4					
Sawculter w/ Truck			1	Impacted/Delayed Equip	oment Q/U	Comment					
Sawcutter w/ Truck				impacted Delayed Equit		Comment					
Traffic Control @ Intersection		1									
Traffic Control @ Street											
Triton Barriers	31	4									
Notes: SFMTA Inspector was called before work was con Daily Force Account Report was filled out ath the SFMTA signature below acknowledges verificatio compiliance with contract terms and scope of work		e work was perfor nent, material, and mined hot to be a	med? (Yes) I service/subcontractor hor lowable for payment shall	Does owner want to demobilize equipment? No No and quantities only. Costs and contract alloyat be deducted from the report prior to final resolutio		No					
Propared by	91-	7   12 Date	_	SFMTA Engineer/Inspector	e-mond	Date 4	2/12				



### **Change Order Cost Analysis Guidelines**

**Labor:** Cost for change order labor hours shall align with the prevailing wage rate for each applicable trade designation. These shall align with the approved submittal required in GP 6.04 Sect. A1. Prevailing labor wage rates may be found on the Department of Industrial Relations website (<u>http://www.dir.ca.gov/OPRL/PWD/</u>).

**Material:** Cost for materials applicable to proposed change orders shall be limited to direct cost including sales tax. Delivery costs may be applied if the delivery is strictly due to the proposed change order. See GP 6.04 Sect. A2.

**Equipment:** Rates used for equipment shall align with the approved submittal required in GP 6.04 Sect. A3. This submittal represents the approved equipment rates showing the lesser rate between the California Department of Transportation's Labor Surcharge & Equipment Rental Rate book and the Machinery Information Division of PRIMEDIA Information, Inc's Rental Rate Blue Book.

#### **Taxes and Labor Burdens:**

Social Security – 6.2%\* Medicare – 1.45%\* Federal Unemployment Tax Act. – 0.12%\* State Unemployment Insurance – 1.2%\* City/County Payroll Expense Tax – 1.5%\* (<u>www.sftreasurer.org/index.aspx?page=23</u>) Workers Compensation Insurance – 4.03%\*(Backup needed with experience modifier)

\*Applied to direct labor plus vacation/holiday fringe

### **Insurance and Bonding:**

General Liability Insurance / Bonding: 2.25% ± 0.75% (Backup needed)

Bonding $0.75\% \pm 0.25\%$ Insurance $1.50\% \pm 0.50\%$ 

**Overhead and Profit:** Mark ups for overhead and profit shall be limited to 15% not to exceed overall markup of 25% of total change once all subcontracting tier mark ups have been applied. Contractors may receive a maximum 5% markup on subcontractors total cost. A detailed explanation of overhead and profit mark ups may be found in GP 6.04 Sect. C.



Municipal Transportation Agency



821 Howard Street 415 701 5262 Phone San Francisco, Ca 94103 415 701 5222 Fax



## CMB Change No.: <u>CMB – 103</u> Initial Implementing Change Control Procedure No.:1252 –COR - 046

		GE	ENERA	L					
Proposed Change Sponsor		S. Wilson		Re	ceived by CMB:	01/23/2013			
Affected Disciplines	Excavati Support	on and G	round			(Date)			
Impacts of Change	Remova	l Order Ree			6", 12" and 14") & 46) Amount Not T				
Contract(s) Directly Affe	ected by thi	is Propose	ed Cha	nae:					
1250 1251 1252 1 □ 2 □ 3 ⊠ (CP01) (CP02) (CP03)	1253 4 🗌 (CP04)	1254 5 🗌	1255 6 🗍 (CP06)	1256 7 [] (CP07)					
CONFI	CONFIGURATION MANAGEMENT BOARD APPROVALS								
		-	with th	Signatı e   I	<i>ires</i> Disagree with the Change	Date			
Senior Program	Manager:	(G	/			1-23-13			
Deputy Program	Manager:	70	)						
PM Project	Services:								
PM Project Developmen		MDQ	11	7		1/23/2013			
SFMTA O & M		HUES	(NI			1,07,077			
SFMTA Safety an									
	CTA PMO	- Ch	A	1		237AN13			
		Co	mment	3					
		b							

## central central

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## Engineer's Estimate Contract No. 1252 - Tunnel Change Order Request - 046

COR 046											
	No.	Activity Name	Days (C)	Days (EE)	Con	tractor (C)	Engineer's Estimate (EE)	De	lta (EE-C)	Summary of Delta	Negotiation Position
	1	4288 - Exploration / Removal of pipes	0.5	0.5	\$	1,081.48	\$ 862.29	\$		The labor rates were adjusted to align with SFMTA built up labor rates in lieu of an approved labor submittal	Labor Burdens Applied as Follow: FICA 7.65% FUTA 0.12% SUTA 1.2% SF Payroll 1.5% WC 4.03%
Labor	2	4288 - STANDBY	0.5	0.5	\$	-	\$ -	\$	-		
La	3	4290 - Removal of pipes	1	1	\$	2,162.96	\$ 1,724.58	\$		The labor rates were adjusted to align with SFMTA built up labor rates in lieu of an approved labor submittal	Labor Burdens Applied as Follow: FICA 7.65% FUTA 0.12% SUTA 1.2% SF Payroll 1.5% WC 4.03%
	4	4290 - STANDBY	1	1	\$	-	\$ -	\$	_		
	1	4288 - Exploration / Removal of pipes	.5	0.5	\$	835.00	\$ 835.00	\$	-		
Equipment	2	4288 - STANDBY	.5	0.5	\$	111.57	\$ 111.57	\$	0.00		
Equip	-	4290 - Removal of pipes	1	1	\$	1,898.34	\$ 1,898.34	\$	-		
	4	4290 - STANDBY	1	1	\$	189.02	\$ 189.02	\$	(0.00)		
				Material	\$	-	\$ -	\$	-		
		ſ	/&E - 15%	\$	941.76	\$ 843.12	\$	(98.64)			
2nd Tier Sub Markup - 59						-	\$ - \$ -	\$ \$	-		
Sub. Bond/Insurance 2.14% Prime Markup - 5% Prime Bond/Insurance 1.68%						154.51 368.73 130.09	\$ 330.11		(16.18) (38.62) (13.62)		
			Total	\$	7,873.46	\$ 7,048.82	\$	(824.63)			
		Resident Engineer Recommended I	NTE Amou	nt:			\$ 7,461.14			7,048.82 (EE) + 412.3	2 (Half of labor delta)







## **Estimate Summary**

**General Scope:** This estimate contains the cost to remove unmarked steel pipes of differing sizes and a duct bank. This differing site condition was found in the footprint of the Union Square Market Street Station South headwall.

### **Detailed Scope:**

- 1. 4288 Exploration / Removal of pipes
- 2. 4288 STANDBY
- 3. 4290 Removal of pipes
- 4. 4290 STANDBY

	Labor		Ed	quipment	Ν	1aterial	Mark Ups			Total		
Cost Summary:	\$	2,586.87	\$	3,033.93	\$	-	\$	1,428.02		\$	7,048.82	

## List of attached documents:

- Detailed Estimate
- FA 4288
- FA 4290





# central

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## Engineer's Estimate Contract No. 1252 - Tunnel

### **Change Order Request - 046**

	Hourly rates:		5	0.00 m	5. 5. 5.	.00 s	500 5	00 0	500 5	00		5	32.81 5	2.26	122.51	6 <sup>A3</sup> 5	3.12 S	00 5	500 5	00 00	ġ <sub>b</sub>
No.	Activity	Days	Operating Engineer (OE)	Laborer (G3)	Labor Resource	Labor Resource	Labor Resource	Labor Resource	Labor Resource		Labor totals	Backhoe (John Deere ID 310G)	Breaker attachment for	Excavator (Hitachi 200)	Dump truck - 3- axle	Work Truck	Equipment	Equipment	Equipment	Equipment	Equipment Totals
1	4288 Evaluration / Domoval of since	0.5	1	3						ć	862.29			1		2					\$ 835.00
1 2	4288 - Exploration / Removal of pipes 4288 - STANDBY	0.5	1	3						\$ \$	- 802.29	0.12	0.23	1	0.16	2					\$ 835.00 \$ 111.57
2	4290 - Removal of pipes	1	1	3						\$	1,724.58	0.125	0.125	0 875		2					\$ 1,898.34
4	4290 - STANDBY	1	-							\$	-		0.201								\$ 189.02
13	Total						<u> </u>			\$	2,586.87										\$ 3,033.93
Labor       \$       2,586.87         Material       \$       -         Equipment       \$       3,033.93         2nd Tier Sub       \$       -         Markup on 2nd Tier Sub -5%       \$       -         Markup on 2nd Tier Sub OH&P - 15%       \$       843.12         1st Tier Sub Bond/Insurance - 2.14%       \$138.33         Prime - Markup - 5%       \$       330.11         Prime - Bond/Insurance - 1.68%       \$116.46         Total Amount       \$       7,048.82							nptions ere a "Li		e excavator" is b	being u	sed on 1	he For	ce Acco	unt tag	s a Hita	chi 200	) exc. is	used			
	Estimated By: Kenneth Barnhart	Z	~	3	5	> 1/2	- 2/2013	Shift Du	iration:		8hrs ecked By: Charl	les Don	hbrows	the	1-	11	2	6	1	ċ	1/22/201



Municipal Transportation Agency



821 Howard Street 415 701 5262 Phone San Francisco, Ca 94103 415 701 5222 Fax

SFMTA - Third Street Light Rail Phase 2 Central Subway	Daily Force Acccount Field Report
PROJECT NO. CN 1252 MAR#410	REPORT NO. 4288
PROJECT NAME: Central Subway Tunnels CONTRACTOR: Synergy Project Management, Inc.	DATE PERFORMED
The following work was performed this the requiring the use of the Labor Force, Materials, Equipment, Special Fatzes and Services listed herein:	2 DATE OF REPORT
Tork Description Contract Sound	nts auns se
headualt.	

NAME (FIRST, LAST)		HOURS
- Data	ST	4
Juan Ocha	ОТ	
	ST	A
Jesus Alpe	от	
	ST	4
Aliandro R.	ОТ	
	ST	4
Anthony Fuller	оτ	
the second second	ST	
U	от	
	ST	
	от	

Material	Q/U	Comments

Q/U

Comments

Services/Subcontractor

			от
EQUIPMENT DESCRIPTION	Quantity	Active	Standby
ckhoe w/Breaker	1		4
Mini Excavator			
Large Excavator	1	4	
Dump Truck	1		4
End Dump			
Foreman's Truck	1	4	1
ool/Fuel Truck	1	4	
Sawcutter w/ Truck			
Sawcutter w/ Truck			
raffic Control @ Intersection			
raffic Control @ Street			
riton Barriers			

EQUIPMENT DESCRIPTION	Quantity	Active	Standby
Steel Plates			
Shoring			
Generator			
Air Compressor			

Impacted/Delayed Equipment	Q/U	Comments
L		
Does owner want to demobilize equipment?	Yes No	

Notes:

Prepared by

SFMTA Inspector was called balore work was commenced?

Daily Force Account Report was filled out all the end of the day the work was performed? No SFMTA signeture below acknowledges varification of labor, equipment, material, and service/substantiation hours and quantities only. Costs and contract allowability are subject to review and confirmation for compliance with contract terms and scope of work. Any costs determined not to be allowable for perment shall be deducted from the people for the insolution.

12

Yes

No

SFMTA Engineer/impact

Oate

0 20 Dale

SFMTA - Third Street Light Rail Phase 2 Central Subway	Daily Force Acccount Field Report
PROJECT NO. CN 1252	REPORT NO. 4290
PROJECT NAME: Central Subway Tunnels CONTRACTOR: Synergy Project Management, Inc.	DATE PERFORMED
The following work was performed this performing the use of the Labor Force, Material Equipment, Special Forces and Services listed them:	DATE OF REPORT
shown on contract docum	rents a ums
SE head wall.	

	NAME (FIRST, LAST)		HOURS
100	T. Dalana	ST	X
1	Juan Ocha	от	5
1		ST	8
1	Jesus Sepe	от	G
	1 in the n	ST	8
	Allandro R.	от	6
1	Village i Villa	ST	8
	Anthony Fuller	OT	-
-		ST	
	5	от	
ĺ		ST	
ĺ		ОТ	

Material	Q/U	Comments

Q/U

Comments

EQUIPMENT DESCRIPTION	Quantity	Active	Standby
Steel Plates			

Services/Subcontractor

EQUIPMENT DESCRIPTION	Quantity	Active	Standby
ickhoe w/Breaker	1	1	\$7
Mini Excavator			
Large Excavator	1	51	11
Dump Truck	1	4	4
End Dump	1		
Foreman's Truck	1	8	
Tool/Fuel Truck	1	8	
Sawcutter w/ Truck			
Sawcutter w/ Truck			
Traffic Control @ Intersection			
Traffic Control @ Street			
Triton Barriers			

EQUIPMENT DESCRIPTION	Quantity	Active	Standby
Steel Plates			
Shoring			
Generator			
Air Compressor			

Impacted/Delayed Equipment	Q/U	Comments
Does owner want to demobilize equipment?	Yes	No

Date

Notes:

SFMTA Inspector was called before work was commenced?

Delity Force Account Report was filled out alth the end of the day the work was performed? Yes No SFMTA signature below acknowledges verification of labor, equipment, meterial, and service/subcommentor hours and quar compliance with contract terms and scope of work. Any costs determined not to be allowable for payment shall be deducted

No

Ya

tips only. Costs and contract allowsbillty are subject to re lew and confirmation for al resolute n the

9 21 2 Daté

SIFMTA Engineer/Inspecto

Prepared by



### **Change Order Cost Analysis Guidelines**

**Labor:** Cost for change order labor hours shall align with the prevailing wage rate for each applicable trade designation. These shall align with the approved submittal required in GP 6.04 Sect. A1. Prevailing labor wage rates may be found on the Department of Industrial Relations website (<u>http://www.dir.ca.gov/OPRL/PWD/</u>).

**Material:** Cost for materials applicable to proposed change orders shall be limited to direct cost including sales tax. Delivery costs may be applied if the delivery is strictly due to the proposed change order. See GP 6.04 Sect. A2.

**Equipment:** Rates used for equipment shall align with the approved submittal required in GP 6.04 Sect. A3. This submittal represents the approved equipment rates showing the lesser rate between the California Department of Transportation's Labor Surcharge & Equipment Rental Rate book and the Machinery Information Division of PRIMEDIA Information, Inc's Rental Rate Blue Book.

#### **Taxes and Labor Burdens:**

Social Security – 6.2%\* Medicare – 1.45%\* Federal Unemployment Tax Act. – 0.12%\* State Unemployment Insurance – 1.2%\* City/County Payroll Expense Tax – 1.5%\* (<u>www.sftreasurer.org/index.aspx?page=23</u>) Workers Compensation Insurance – 4.03%\*(Backup needed with experience modifier)

\*Applied to direct labor plus vacation/holiday fringe

#### **Insurance and Bonding:**

General Liability Insurance / Bonding: 2.25% ± 0.75% (Backup needed)

Bonding $0.75\% \pm 0.25\%$ Insurance $1.50\% \pm 0.50\%$ 

**Overhead and Profit:** Mark ups for overhead and profit shall be limited to 15% not to exceed overall markup of 25% of total change once all subcontracting tier mark ups have been applied. Contractors may receive a maximum 5% markup on subcontractors total cost. A detailed explanation of overhead and profit mark ups may be found in GP 6.04 Sect. C.



Municipal Transportation Agency



821 Howard Street 415 701 5262 Phone San Francisco, Ca 94103 415 701 5222 Fax



## CMB Change No.: <u>CMB – 104</u> Initial Implementing Change Control Procedure No.:1252 –COR - 047

GENERAL									
Proposed	Change S	Sponsor:		S. Wilso	on		Received by CMB: 01/23/201		
Affected Disciplines:			Excavat Support	ion and	Ground			(Date)	
- - -									
Imp	pacts of (	Change	Retrieva	I Shaft	– Unma	rked	10" Steel Pipe / Duct	Bank Removal	
			Change \$2,236.2				R 047) Amount Not To	Exceed	
Contrac	ct(s) Dire	ctly Affe	cted by th	is Prop	osed Cha	ange			
1250 1 🗌 (CP01)	1251 <b>2</b> 🗌 (CP02)	1252 3 🔀 (CP03)	1253 4 🗌 (CP04)	1254 <b>5</b> 🗌 (CP05)	1255 6 🗌 (CP06)	12 <b>7</b> (CP			
1		CONFIG	GURATIO	N MAN	AGEME		BOARD APPROVALS	3	
				٨	e e with t	<u> </u>	atures	Dete	
					ee with t Change	le	Disagree with the Change	Date	
	Senior P	rogram I	Manager:	G				1-23-13	
Ľ	Deputy P	rogram I	Manager:	/ (	2				
	PM	Project	Services:		A	,			
PM Proje	ect Deve	lopment	/Delivery:	11	let	1		1/23/2013	
	SFMTA	0 & M I	Manager:	_19_0	101				
SI	FMTA Sa	afety and	I Security	C	2	_	2		
SFCTA PMO			X	An	/		23 Jal 13		
				de la	Commer	ts			
1									

## central central

## Connecting people. Connecting communities.

## Engineer's Estimate Contract No. 1252 - Tunnel Change Order Request - 047

	COR 047										
	No.	Activity Name	Days (C)	Days (EE)	Contractor (	C) E	ngineer's Estimate (EE)	De	lta (EE-C)	Summary of Delta	Negotiation Position
Labor		FA tag 4291 - 09/21/12	0.25	0.25	\$ 890.	06 \$	713.29	\$	(176.77)	The labor rates were adjusted to align with SFMTA built up labor rates in lieu of an approved labor submittal	Labor Burdens Applied as Follow: FICA 7.65% FUTA 0.12% SUTA 1.2% SF Payroll 1.5% WC 4.03%
Equipment		FA tag 4291 - 09/21/12	0.25	0.25	\$ 731.	36 \$	727.68	\$	(3.68)	Chipping gun was left out of the Engineers Estimate as it is considered small tools and equipment. Traffic cones were not included in the Engineer's Estimate as they were not on the FA tag. The traffic control set up used in the Contractors Estimate is different from the assumed set up in the Engineer's Estimate. The Engineer's Estimate is in alignment with standard agreed traffic control set up. 1CMS 1 Arrow Board 3 Signs	
Γ	Material \$ 240.00						240.00	Ś	_		
			Markup L	.M&E - 15%			252.15		(27.07)		
					s		\$				
				larkup - 5%			-	\$	-		
		Sub. I	Bond/Insura	ance 2.14%	\$ 45.	81 \$	41.37	\$	(4.44)		
1				larkup - 5%		32 \$	98.72		(10.60)		
		Prime I	Bond/Insura	ance 1.68%	\$ 38.	57 \$	34.83	\$	(3.74)		
				Total	\$ 2,334.	33 \$	2,108.04	\$	(226.30)		
		Resident Engineer Recom	mended NT	FE Amount:		\$	2,201.54			2108.04 (EE) + 93.50	(Half of labor delta)







## **Estimate Summary**

**General Scope:** This estimate contains the cost to remove unmarked 10" steel pipe discovered at CTL 80+33 during the retrieval shaft work on Columbus Street.

## **Detailed Scope:**

1. FA tag 4291 - 09/21/12

	Labor		Equipment		Material		Mark Ups		Total	
Cost Summary:	\$ 713.29	\$	727.68	\$	240.00	\$	427.07	\$	2,108.04	

## List of attached documents:

- Detailed Estimate
- Materials / Fees List
- FA 4291
- Sketch



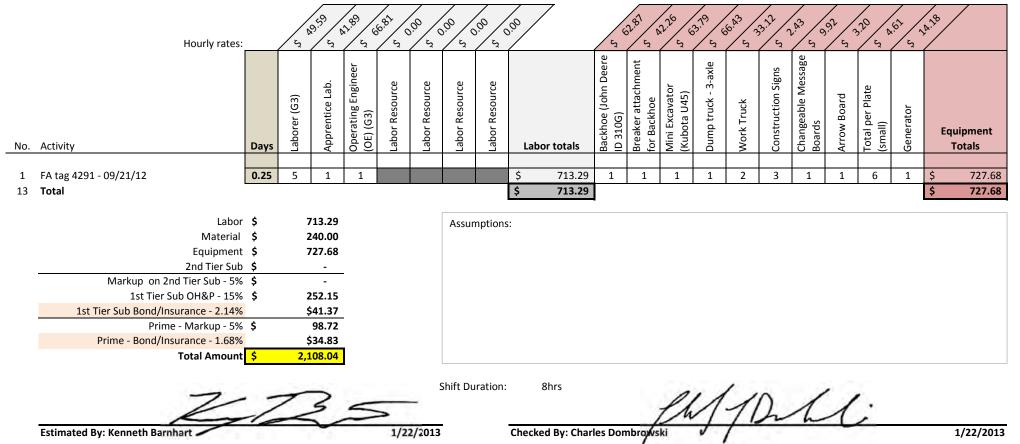


# central <br/> subway

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## Engineer's Estimate Contract No. 1252 - Tunnel

**Change Order Request - 047** 







Engineer's Estimate Contract No. 1252 - Tunnel Change Order Request - 047

Material	Qty.	Unit	Ur	nit Price	Ex	tension
Dump Fee ( Brisbane )	1	Load	\$	240.00	\$	240.00
					\$	-
					\$	-
					\$	-
Sales Tax 8.5%						
Shipping 2%						
Total					\$	240.00

2nd Tier Sub Quote

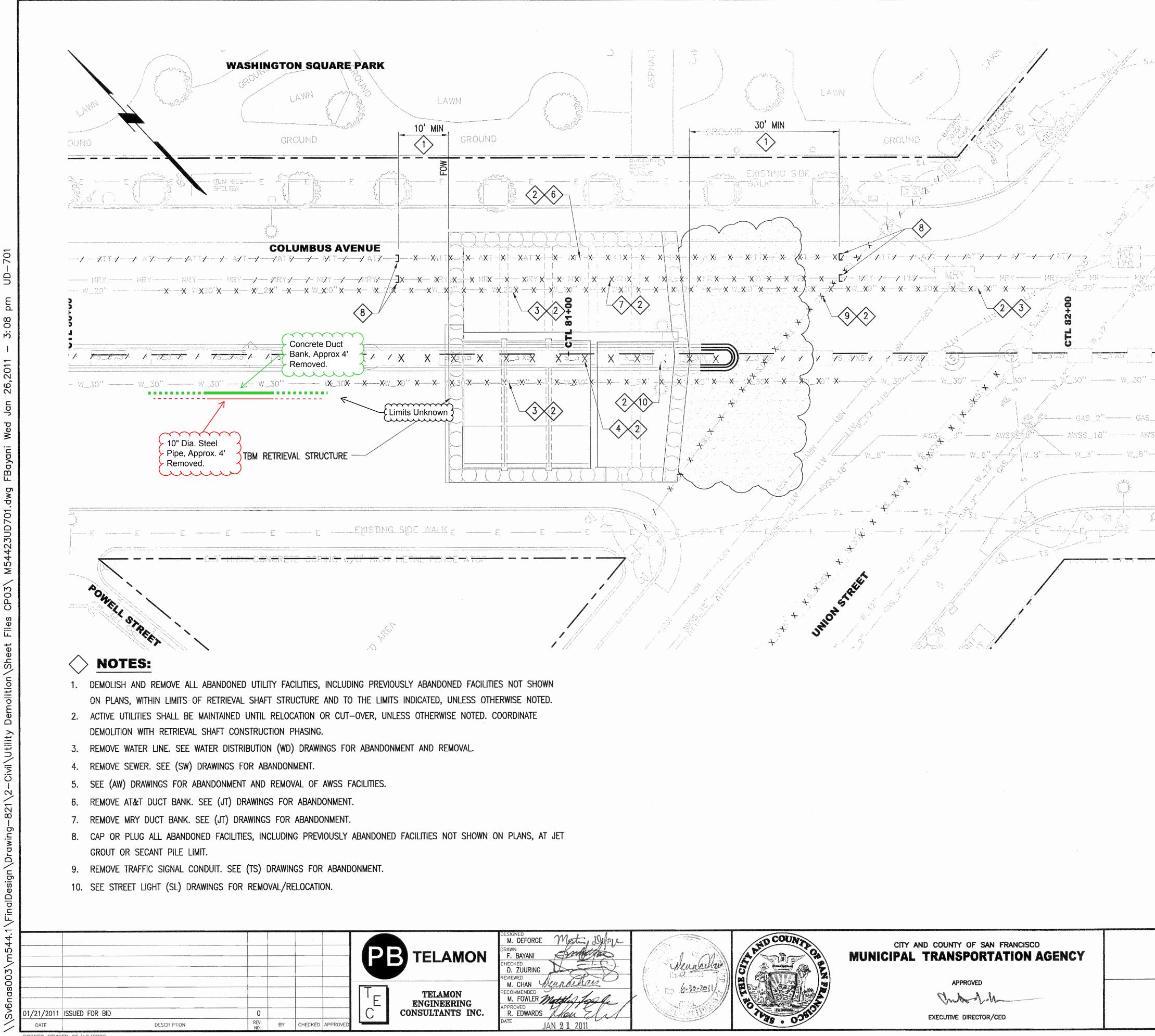
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SFMTA - Third Street Light	Rail Phase			Dai	ily Force Accc	ount Field I	Report
PROJECT NO. CN 1252 PROJECT NAME: Central Subway	Tuppolo	COI	e#47		REPORT NO		4291
CONTRACTOR: Syneray Project	Managemen				DATE PERF	ORMED	72/11
The following work was performed the desired and Work Description:	the use of the Labo	or Force, Materials, E	Equipment, Special Forces and	Struces leter mentil	DATE OF R	SMI	in on
made de	and	no	Ducz	structure	un,	Con	Ult
Sprew 30	o s	ear	UR. CR	trunal shap	(u)	uon	aldu
NAME (FIRST			HOURS	Materia	Q/U	Cor	mments
	, (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1-		Dumpite	Icy		
Francisc	03	7.	ST OT				
Refiniol	N.		от 2				
martin	hn	48	ST 2				
hono	1	/		Services/Subcontractor	Q/U		nments
4 proved			ST 2	dan Mevar	12		
Lamen	Δ.		ОТ		2		
Wike Gu	ite	r	от 2				
EQUIPMENT DESCRIPTION	Quantity	Active	Standby	EQUIPMENT DESCRIPTION	Quantity	Active	Standby
Backhoe w/Breaker	1	2	N OB	Steel Plates	10	5	
wini Excavator	1	2	4	Shoring	~		
Large Excavator			18	Generator	1	5	
Dump Truck	1	2		Air Compressor		-	
End Dump				Chipping (111	n/	2	
Foreman's Truck	1	2		mgga			
Tool/Fuel Truck	1	2					
Sawcutter w/ Truck				Impacted/Delayed Equipment	Q/U	Com	ments
Sawcutter w/ Truck							
Traffic Control @ Intersection							
Patific Control @ Street	1	2	ļļ				
Triton Barriers		- co					
<u>.</u>				Oces owner want to demobilize equipment?	Yes	No	
Notes:							
1TA Inspector was called before work was com ally Force Account Report was filled out ath the e		work was perform	ed?	No No	1	formation for	1
FMTA signature below acknowledges verification compliance with contract terms end scope of work	of labor, equipme Any costs determ	ent, material, and a nined not to be allo	wable for payment shall be	and quantities only. Costs and contract allow billy and a deducted from the report pair to final resolution	ubject to review and con	nrinabon for	1
repared by	9	121/12 Dale	_	SFMTA Engineer/inspector	mon	Dala	9/21/

Prepared by



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TLUDD OTDEET LIQUE DAU	ren al antika kan kan kan kan kan kan kan kan kan k	CONTRACT NO.	
THIRD STREET LIGHT RAIL PHASE 2 - CENTRAL S		1252 SEMTA CONTROL NO.	
TUNNELS		CL-1803	5
UTILITY DEMOLITI	ON	DRAWING NO.	REVISION
TBM RETRIEVAL SI	HAFT	UD-701	0
CTL 80+00 TO 82	2+25	88	



### **Change Order Cost Analysis Guidelines**

**Labor:** Cost for change order labor hours shall align with the prevailing wage rate for each applicable trade designation. These shall align with the approved submittal required in GP 6.04 Sect. A1. Prevailing labor wage rates may be found on the Department of Industrial Relations website (<u>http://www.dir.ca.gov/OPRL/PWD/</u>).

**Material:** Cost for materials applicable to proposed change orders shall be limited to direct cost including sales tax. Delivery costs may be applied if the delivery is strictly due to the proposed change order. See GP 6.04 Sect. A2.

**Equipment:** Rates used for equipment shall align with the approved submittal required in GP 6.04 Sect. A3. This submittal represents the approved equipment rates showing the lesser rate between the California Department of Transportation's Labor Surcharge & Equipment Rental Rate book and the Machinery Information Division of PRIMEDIA Information, Inc's Rental Rate Blue Book.

#### **Taxes and Labor Burdens:**

Social Security – 6.2%\* Medicare – 1.45%\* Federal Unemployment Tax Act. – 0.12%\* State Unemployment Insurance – 1.2%\* City/County Payroll Expense Tax – 1.5%\* (<u>www.sftreasurer.org/index.aspx?page=23</u>) Workers Compensation Insurance – 4.03%\*(Backup needed with experience modifier)

\*Applied to direct labor plus vacation/holiday fringe

#### **Insurance and Bonding:**

General Liability Insurance / Bonding: 2.25% ± 0.75% (Backup needed)

Bonding $0.75\% \pm 0.25\%$ Insurance $1.50\% \pm 0.50\%$ 

**Overhead and Profit:** Mark ups for overhead and profit shall be limited to 15% not to exceed overall markup of 25% of total change once all subcontracting tier mark ups have been applied. Contractors may receive a maximum 5% markup on subcontractors total cost. A detailed explanation of overhead and profit mark ups may be found in GP 6.04 Sect. C.



Municipal Transportation Agency



821 Howard Street 415 701 5262 Phone San Francisco, Ca 94103 415 701 5222 Fax



SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

#### EVALUATION OF MERIT

#### COR 062

**Recommendation:** Accept justification of Merit for COR 062, Launch Box Panel P-9 Buried Obstruction.

**Facts:** On November 7<sup>th</sup> 2012, the Contractor encountered concrete encasement around a 12 inch clay sewer pipe within Slurry Wall (SW) panel P-9 at the TBM Launch Box approximately 8 feet below the top of the SW guidewall. The concrete encasement caused the SW to deviate from the designed excavation limits. To correct the verticality of the panel excavation, the panel was backfilled with lean concrete and re-excavated as agreed upon by the RE.

This change affects a critical path activity. SFMTA inspectors documented an impact of approximately 5 days to SW P-9. We have asked the Contractor to combine the TIA for CORs 62, 65, and 67 and we have not yet received the TIA.

**Justification:** Drawing UD-502, Rev. 0 does not indicate the presence of the concrete encasement within the footprint of SW panel P-9. The concrete encasement prevented SW construction from occurring as originally planned. 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:

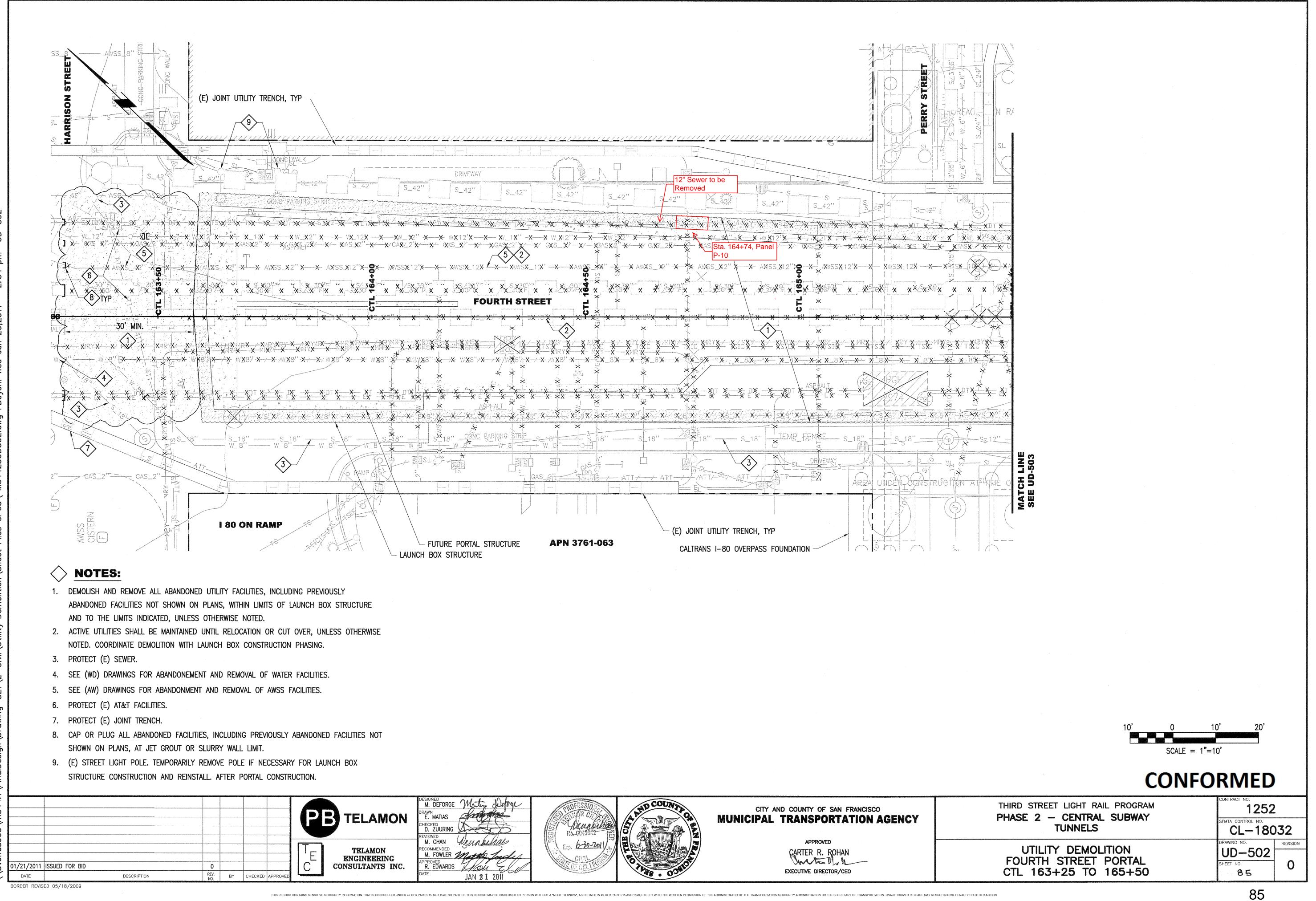
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Sarah Wilson Resident Engineer

Configuration Management Board Approva

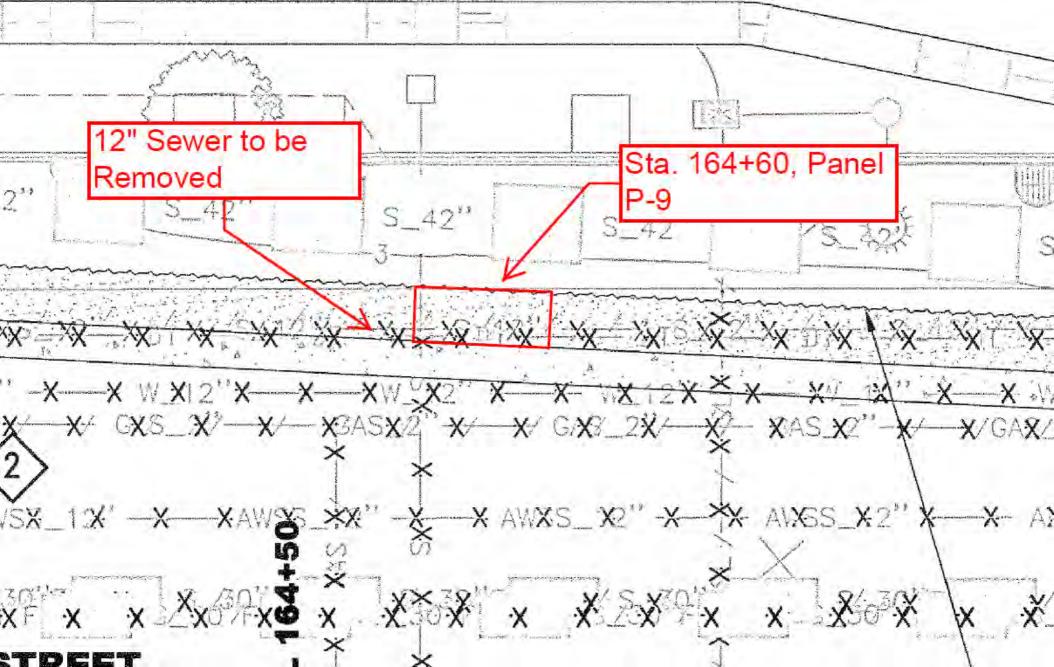
Date

SFMTA Municipal Transportation Agency



SENSITIVE SECURITY INFORMATION

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SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

#### **EVALUATION OF MERIT**

#### **COR 065**

Recommendation: Accept justification of Merit for COR 065, Launch Box Panel P-12 Buried Obstruction.

Facts: On November 13th 2012, the Contractor encountered concrete encasement around a 12 inch clay sewer pipe within Slurry Wall (SW) panel P-12 at the TBM Launch Box approximately 7 feet below the top of the SW guidewall. The concrete encasement caused the SW to deviate from the designed excavation limits. To correct the verticality of the panel excavation, the panel was backfilled with lean concrete and re-excavated as agreed upon by the RE.

This change affects a critical path activity. SFMTA inspectors documented an impact of approximately 3 days to SW P-12. We have asked the Contractor to combine the TIA for CORs 62, 65, and 67 and we have not yet received the TIA.

Justification: Drawing UD-502, Rev. 0 does not indicate the presence of the concrete encasement within the footprint of SW panel P-12. The concrete encasement prevented SW construction from occurring as originally planned. 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

arah Wilson

By:

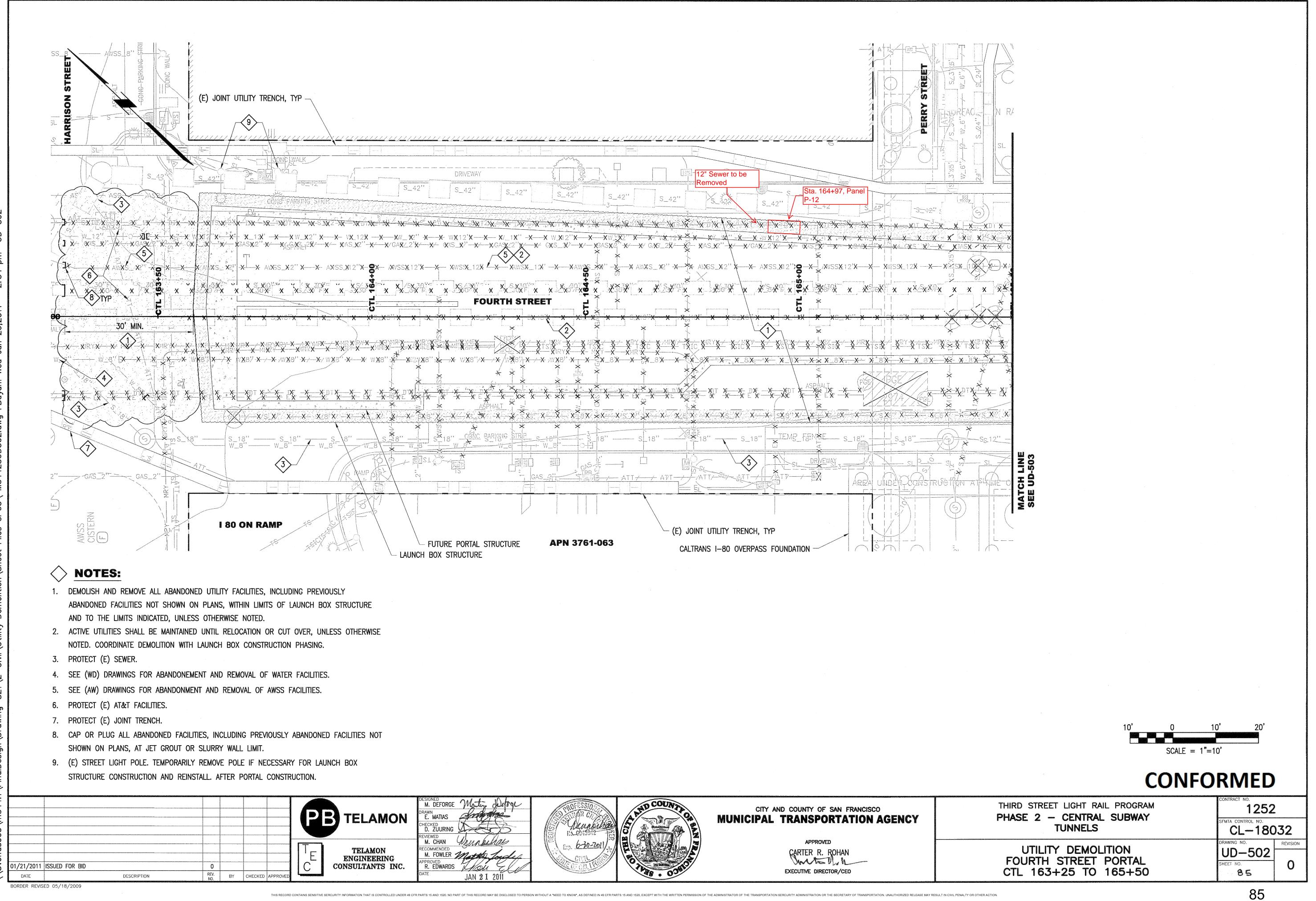
SEMTA

Sarah Wilson Resident Engineer

Configuration Management Board Approval

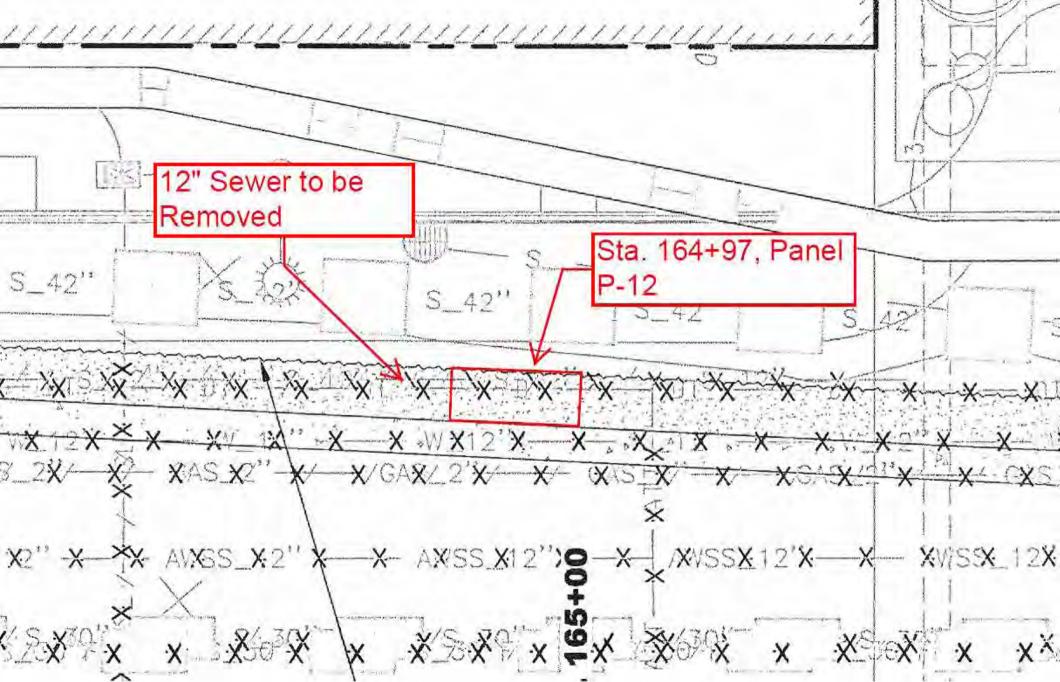
Date

821 Howard Street 415 701 5262 Phone Municipal Transportation Agency San Francisco, Ca 94103 415 701 5222 Fax



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SFMTA Contract No. 1252

Contractor:

Barnard Impregilo Healy JV (BIH)

#### EVALUATION OF MERIT

#### COR 067

**Recommendation:** Accept justification of Merit for COR 067, Launch Box Panel P-10 Buried Obstruction.

**Facts:** On November 19<sup>th</sup> 2012, the Contractor encountered concrete encasement around a 12 inch clay sewer pipe within Slurry Wall (SW) panel P-10 at the TBM Launch Box approximately 7 feet below the top of the SW guidewall. An excavator was used to clear the obstruction. This change affects a critical path activity. SFMTA inspectors documented an impact of approximately 4 hours to SW P-10. We have asked the Contractor to combine the TIA for CORs 62, 65, and 67 and we have not yet received the TIA.

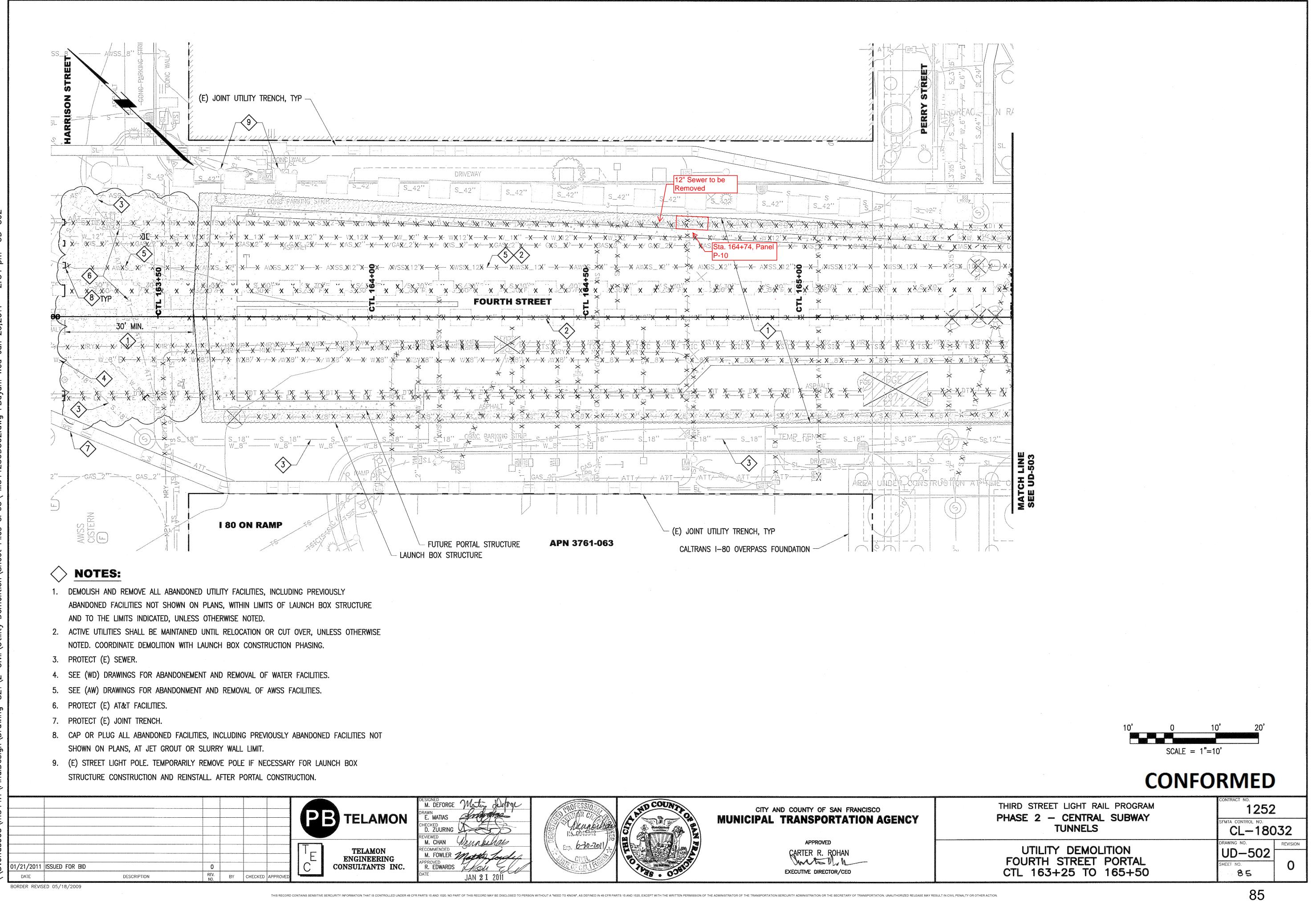
**Justification:** Drawing UD-502, Rev. 0 does not indicate the presence of the concrete encasement within the footprint of SW panel P-10. The concrete encasement prevented SW construction from occurring as originally planned. RE has evaluated the conditions outlined in Article 3.04 and found that: conditions differ materially and conditions caused the scope of work to increase.

Change Type: (2) Unforeseen Condition

1/23/13 Date By: Sarah Wilson Resident Engineer

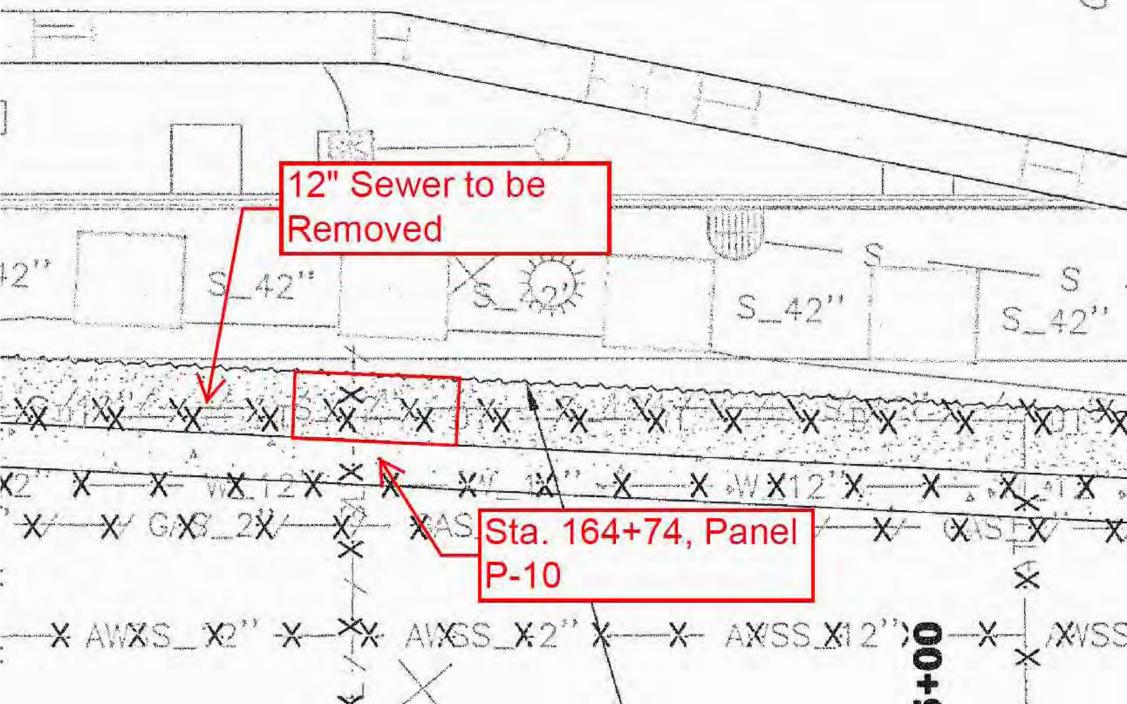
Configuration Management Board Approval 1-23-13 Date

Municipal Transportation Agency



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## CMB Change No.: <u>CMB – 105</u> Initial Implementing Change Control Procedure No.:1252 –PCC - 011

		GENERA	L							
Proposed Change Sponsor:		S. Wilson	Receiv	ved by CMB:	01/23/2013					
Affected Disciplines:	Excavati Support	ion and Ground			(Date)					
Impacts of Change	Propose	Cap and Removal of 48" Steel Pipe Proposed Change Order (PCC 011) Amount Not To Exceed \$150,000								
Contract(s) Directly Affe	cted by th	is Proposed Cha	nge:							
1250 1251 1252 <b>1</b> □ <b>2</b> □ <b>3</b> ⊠ (CP01) (CP02) (CP03)	1253 4 🗍 (CP04)	1254 1255 5 6 0 (CP05) (CP06)	1256 7 🔲 (CP07)							
	and the second se	N MANAGEMEN	the second s	O APPROVAL	S					
		Agree with th	Signatures e Disa	agree with the Change	Date					
Senior Program	Manager:				1-23-13					
Deputy Program	Manager:	10								
PM Project	Services:	/								
PM Project Development	/Delivery:	Allel			1/23/2013					
SFMTA O & M	Manager:	01								
SFMTA Safety and	Security	C1.								
SFC	TA PMO	Mar		_	23, JANB					
		Comment	S							
				-						

## central cosubway

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#### **FINDING OF FACTS**

Contract No. & Name	1252 - Tunnels	Date	01/21/13
PCC No. & Title	1252-11		
Initiator (Name & Dept)	Sarah Wilson, Central Subway Project		

#### What (Description of PCC)

Pipe Investigation and Removal of the AT&T 48" Steel Pipe at the South and North Headwalls at UMS.

Why (Reason for Requesting PCC)

- A. The 48" pipe discovered in the south headwall at UMS is preventing Work to be completed in conformance with the contract documents.
- B. The 48" pipe has been determined to be a differing site condition in accordance with General Provision Section 3.04.
- C. The 48" pipe needs to be removed and the excavated area is to be backfilled in order to allow Work to proceed in conformance with the contract documents.
- D. Need to perform an investigation at the north headwall to determine if the 48" pipe extends to the work area.
- E. If the 48" pipe exist at the north headwall, the pipe needs to be removed and the excavated area is to be backfilled to allow Work to proceed in conformance with the contract documents.

Where (Location, Station)

UMS South Headwall as shown on attachment 1.

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

November 8, 2012 unknown pipe discovered, November 15, 13 initial investigations begins; potential delays to UMS headwall construction and follow on 1300 Contract Work. January 17, 2013, the pipe was determined to be AT&T. At this time there is no time impact associated with this delay.

How (Recommendation of Action)

To be implemented immediately on 01/21/2013.

Estimate (Summary of Engineer's Estimate w/EE attached) \$150,000

Spec Ref GP 3.04 and 6.05

Drawing Nos. Attachment 1

The Contractor's proposal in price and lime 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

Municipal Transportation Agency

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## PROPOSED CONTRACT CHANGE

Contract No.	1252 Tunnels Date 01/24/20	013
PCC No.	1252-11	
PCC Title	Pipe Investigation and Removal of the AT&T 48" Steel Pipe at the South and North	
	Headwalls at UMS.	

#### **Description of PCC:**

Summary of Changes:

- 1. Complete additional excavation and shoring necessary to expose the 48" pipeline within the construction limits at the south headwall.
- 2. Cut and remove the 48" steel pipe at the south headwall.
- 3. Install steel bulkheads at each end of the 48" pipe that remains at the south headwall.
- 4. Backfill the excavation and remove shoring at the south headwall.
- Perform potholing from within existing excavation to confirm AT&T's assumption that the 48" pipe extends to within the construction limits at the north headwall.
- 6. If the 48" does exist at the north headwall construction limits, complete additional excavation and shoring to expose the 48" pipeline within the construction limits.
- 7. Cut and remove the 48" steel pipe at the north headwall.
- 8. Install steel bulkheads at each end of the 48" pipe that remains at the north headwall.
- 9. Backfill the excavation and remove shoring at the north headwall.

Spec Ref.	CN 1252 Tunnels
Drawing Nos.	N/A
Attachments	Attach. No.1 - Sketch for approximate footprint dimensions

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:

ish Wilson Sarah Wilson, Resident Engineer (SFMTA Representative)

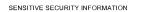
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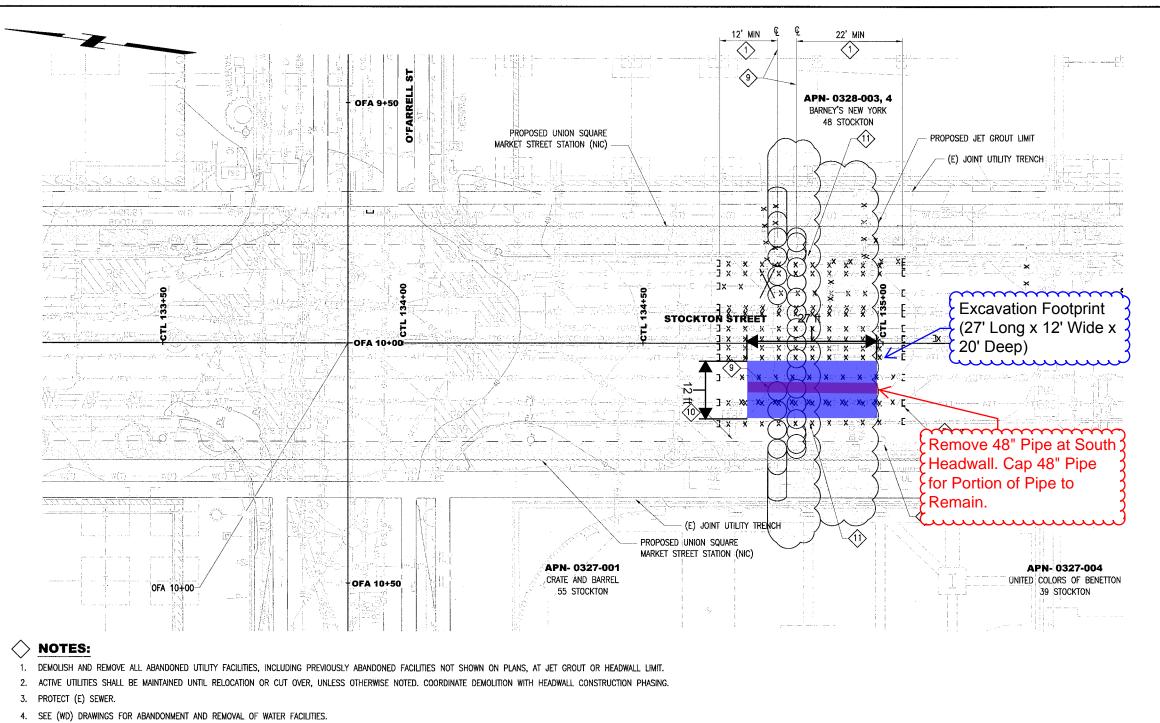
Concur In Principle:

Mark Benson, Construction Manager (SFMTA Representative)



**Municipal Transportation Agency** 

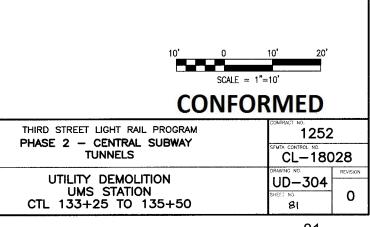


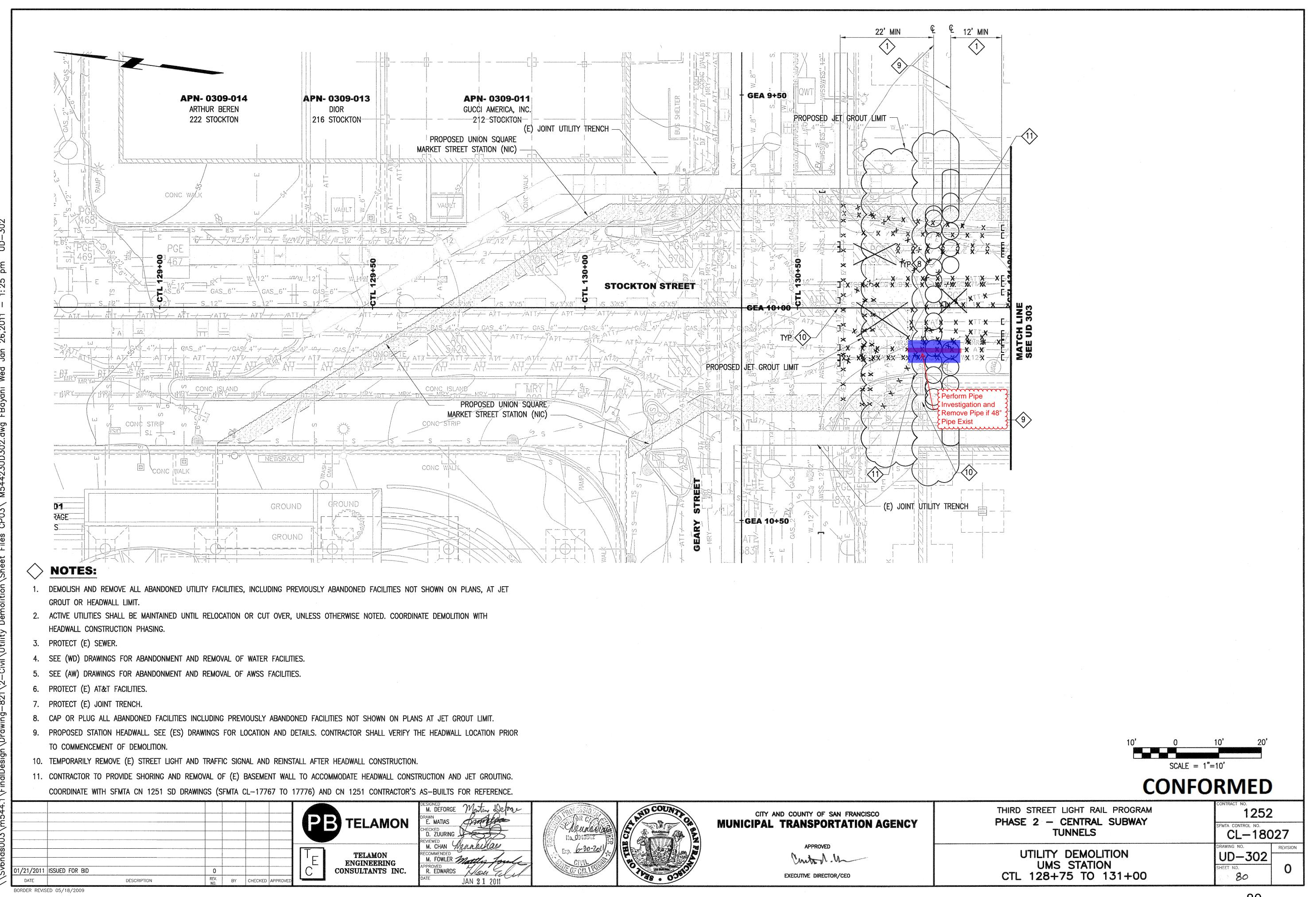


- 5. SEE (AW) DRAWINGS FOR ABANDONMENT AND REMOVAL OF AWSS FACILITIES.
- 6. PROTECT (E) AT&T FACILITIES.
- 7. PROTECT (E) JOINT TRENCH.
- 8. CAP OR PLUG ALL ABANDONED FACILITIES INCLUDING PREVIOUSLY ABANDONED FACILITIES NOT SHOWN ON PLANS AT JET GROUT LIMIT.
- 9. PROPOSED STATION HEADWALL. SEE (ES) DRAWINGS FOR LOCATION AND DETAILS. CONTRACTOR SHALL VERIFY THE HEADWALL LOCATION PRIOR TO COMMENCEMENT OF DEMOLITION.
- 10. TEMPORARILY REMOVE (E) STREET LIGHT IF NECESSARY FOR CONSTRUCTION AND REINSTALL AFTER HEADWALL CONSTRUCTION.
- 11. CONTRACTOR TO PROVIDE SHORING AND REMOVAL OF (E) BASEMENT WALL TO ACCOMMODATE HEADWALL CONSTRUCTION AND JET GROUTING. COORDINATE WITH SFMTA CN 1251 SD DRAWINGS (SFMTA CL-17767 TO 17776) AND CN 1251 CONTRACTOR'S AS-BUILTS FOR REFERENCE.
- 12. REMOVE OCS POLE AS NECESSARY FOR CONSTRUCTION. COORDINATE WITH MUNI TO CONFIRM IF SYSTEM HAS BEEN DEACTIVATED.

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01/21/2011 ISSUED FOR BID	DESCRIPTION	0 REV.	BY CHECKED APPRO		TELAMON ENGINEERING CONSULTANTS INC.	REVENUED M. CHAN YELLAELHAE RECOMMENDE M. FOULER M. FOULER R. EDWARDS M. FOLLAEL MATE JAN 21 2011	(10, 10, 201) (10, 10, 201) (10, 10, 201) (10, 10, 201)	NO TIME O TO TIME	APPROVED	

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Aecom CNTRLSUB003	421nch Pipe PC	C 11				ESTIM/	ATE SUMMARY	- COSTS & BID	PRICES							Page 01/23/2013	1 14:42
Bid# Client# Bid Description	Quantity	Unit	Manliours	Direct Labor	Perm Mali	Constr Matl	Equip- Ment	Sub- Contr	Direct Total	Indirect Charge	Total Cost	Total Cost Unit Price	Markup	Bal Totni	anced Bid   Unit Price	Bid Priœ	Bid Total
1000 Notes ; Basis of Estimate Assum		LS													 		
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30000 Add'l Bracing / Pull Sheeting	180.00	LF	200 1.11	10,948 60.82	850 4.72		3,431 19.06		15,229 84.61						1		
40000 Add'i Excavate Box	65.00	CY	52 0.80	2,657 40.87			1,009 15.53	845 13.00	4,511 69.40								
60000 Backfill Box	240.00	CY	56 0.23	2,842 11.84	2,400 10.00		578 2.41		5,819 24.25								
70000 Cut Pipe Out - Weld 2 Bulkhead	1.00 ds		288 288,00	15,429 15,429.15			2,951 2,951.10		18,380 18,380.25								
100000 Additional Work for South and M		LS	694 694.40	37,624 37,623.75	2,400 2,400.00	5,480 5,480.00	13,688 13,688.25	3,158 3,158.00	62,350 62,350.00		62,350	62,350.00	9,118 14.6%9	71,468	71,467.68	71,467.68	71,467.68
l 20000 Pothole	80.00	LF	40 0.50	2,005 25.06		240 3.00	661 8.26	350 4.38	3,256 40.70								
130000 Install / Pull Sheeting	2,000.00	) SF	224 0.11	12,934 6.47		5,240 2.62	7,822 3.91		25,996 13.00								
140000 Excavate Box	216.00	CY	86 0.40	4,414 20.44			1,677 7.76	2,808 13.00	8,899 41.20								
160000 Backfill Bax	240.00	CY	56 0.23	2,842 11.84	2,400 10.00		578 2.41		5,819 24.25						İ		
170000 Cut Pipe Out - Weld 2 Bulkhea	1.00 ds	)	288 288.00	15,429 15,429.15			2,951 2,951.10		18,380 18,380.25								
Totals:			1,290	69,499	5,650	5,480	21,657	4,003	106,289		106,289		15,543	121,832			121,832.58

Code between Balanced Bid & Bid Price: U=Unbalanced, F=Frozen, C=Closing Biditem (item to absorb unbalancing differences). [bracketed numbers represent adjusted quantities]

\*\* in front of the Biditem indicates a Non-Additive item

Markup % is shown as a percentage of cost

Markup on Resource Costs

15,543 Estimate total cost is determined to be fair and reasonable <u>Charles F. Dombrowski</u>

Aecom CNTRLSUB003	42Inch Pipe PCC 11					Direct Co	st Report							01/23/2013	Page 1 14:43
Activity Resource	Description	Pcs %	Quantity 6	Unit		Unit Cost	Labo	Permanent r Material	Constr Matl/Exp	Inside Equipment	Outside Equipment	Equipment Operation	Sub- Contract	Total	
BID ITEM = Description =	<ul> <li>1000</li> <li>Notes ; Basis of Estimate Assumptions</li> </ul>		Land Item	SCHEDULE: Unit =	l LS	100 Takeoff Quan:	1.000	Engr Quan:	1.	000					
1000A	Noteennul Eulininte Ballsoft	ssumptilons -				i Qinne i Kuu	ûrs - im/s	ilite 8,000.	Cali, 508	WC:: WC20	12,6493				
Davis bacon Payroll Tax = SUTA is 1 = FUTA is 0 = Work Comp Sales tax = 8 % for m	Clech	SUTI FUTI Nove	A A A A A A A A A A A A A A A A A A A	1 <b>5</b> - 6 0.12 - omp	-2 0. 4.0	60 373			Lo Eq	bor reas vati	ra: on es.	tes to	wit prevo fes	hin Liling are	wage withis nd ates.
> Item T \$0.00 0.000	There are no cost reso 'otnis: 1000 - 1 LS	nrces for this d	-	sumptions		[]			r.	Jbmi	itteo	e (	sipni	ent i	ates.
PARENT ITEM Description = Listing of Sub-	VI = 19000 Remain Work at SOuth Headwall Biditems of Parent Item 19000:			Unit =	LS	Takeoff Quan:	1.000	Engr Quan:	1.	.000					
BID ITEM Description =	= 30000 Add'l Bracing / Pull Sheeting		Land Item	SCHEDULE: Unit =	l LF	100 Takeoff Quan:	180.000	Engr Quan:	0.	.000					
SILLID.	Additional Breeks for Estra	Depthistery				Quain 180700	BU HR/S	illi: - 88,00	CAI; 508	WC: NONE	130.000 C		3 A.		
EXCAV3 205122.03 8EXCAV320D0 8WELD001 LABR03 LABR06	Excav Crew STL A36 BUILDING STEEL W CT CAT 320D Excavator 400 Welder -Skid Labor Fore Labor Common	1.00 2.00 1.00 4.00	16. 1,000.00 16.00 32.00 16.00 64.00	HR HR MH		Prod: 0.850 72.230 9.996 30.190 27.190	2,0000 S 79 2,96		9.00	Eqp Pc: 480 39	S:	3.00 676 281		850 1,156 320 794 2,960	

NTRLSUB00	03 42 Inch Pipe PCC 11			Direct Co	ost Report						01/23/2013	14
ctivity Resource	Description	Pcs	Quantity % Unit	Unit Cost	Labor	Permanent Material	Constr Inside Matl/Exp Equipment	Outside Equipment	Equipment Operation	Sub- Contract	Total	
D ITEM scription ==	= 30000 Add't Bracing / Pull Sheeting		Land Item SCHEDULE: Unit =	1 100 LF Takeoff Quan:	180.000	Engr Quan:	0.000					
R1404	Backhoe Oper >37K	1.00	16.00 MH	35.180	1,041						1,041	
R1535	Welder/Burner	2.00	32.00 MH	34.210	2,032						2,032	
R1564	Oiler	1.00	16.00 MH	27.100	888						888	
0,040.12	0.8000 MH/LF		144,0000 MH	[ 23,969 ]	7,715	850	519		957		10,040	
	Units/Hr 90.0000 Un/Shif		1.2500 Unit/MH		42.86	4.72	2.88		5.32		55.78	
- attribute and and a		COMMON COMPANY		Charles and the second	A CONTRACTOR OF A CONTRACT	Selected Bits Conder, Proceeding	New york the state state that the state of t		DALLAR DE CONTRACTOR	1		
00 <b>G.</b>	Pull Sheeting		8.00 CH	Quan: 2,000.00 Prod:	) <sup>2</sup> Sir, Hrs/Shi 1,0000 S	t: 8.00	<b>Cal: 508 WC: NONE</b> 7.00 Eqp Pc:		3.00			
10 <b>G (* + .</b> <u>SHEET2</u> 503	Sheeting Crew Crawler Crone (LS218H)	1.00	8.00 CH 8.00 HR	Prod: 145.720				s:	494		1,166	300
0 <b>G. + +</b> <u>SHEET2</u> 03 04	Sheeting Crew Crawler Crane (LS218H) J.C.E. 416 Vibratory 1,	1.00 1.00	8.00 CH 8.00 HR 8.00 HR	Prod: 145.720 84.500			7.00 Eqp Pc:	s: 536			1,166 676	
10 <b>G. S. 4</b> SHEET2 503 704 9472	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory I, OSR FIXED LEAD 110'W/S	1.00 1.00 1.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR	Prod: 145.720 84,500 14.205	1.0000 S		7.00 Eqp Pc:	s:	494		1,166 676 114	
00 <b>G + + -</b> <u>SHEET2</u> 503 704 9472 9CK05	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory I, OSR FIXED LEAD 110'W/S Dockbldr Foreman	1.00 1.00 1.00 1.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR 8.00 HR	Prod: 145.720 84.500 14.205 32.650	1.0000 S 490		7.00 Eqp Pc:	s: 536	494		1,166 676 114 490	
00 <b>G</b> <u>SHEET2</u> 503 704 9472 90CK05 90CK10	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory I, OSR FIXED LEAD 110'W/S Dockbldr Foreman Dockbldr Journeyman	1.00 1.00 1.00 1.00 4.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR 8.00 MH 32.00 MH	Prod: 145.720 84,500 14.205 32.650 29.650	<b>1.0000 S</b> 490 1,853		7.00 Eqp Pc:	s: 536	494		1,166 676 114 490 1,853	
00 <b>G_3, 4</b> 503 704 9472 90CK05 90CK10 BR06	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory1, OSR FIXED LEAD 110'W/S Dockbldr Foreman Dockbldr Journeyman Labor Common	1.00 1.00 1.00 1.00 4.00 1.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR 8.00 MH 32.00 MH 8.00 MH	Prod: 145.720 84.500 14.205 32.650 29.650 27.190	<b>1.0000 S</b> 490 1,853 370		7.00 Eqp Pc:	s: 536	494		1,166 676 114 490 1,853 370	
00C2 <u>SHEET2</u> 503 704 19472 0CK05 0CK10 0CK10 ABR06 PR1407	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory1, OSR FIXED LEAD 110'W/S Dockbldr Foreman Dockbldr Journeyman Labor Common Crane Oper	1.00 1.00 1.00 1.00 4.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR 8.00 MH 8.00 MH 8.00 MH	Prod: 145.720 84.500 14.205 32.650 29.650 27.190 35.180	1.0000 S 490 1,853 370 521		7.00 Eqp Pc 671	s: 536 114	494 140		1,166 676 114 490 1,853 370 521	10
00G2 <u>SHEET2</u> 503 704 9472 0CK05 0CK10 UBR06 PR1407 ,188,96	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory I, OSR FIXED LEAD 110'W/S Dockbldr Foreman Dockbldr Journeyman Labor Common Crane Oper 0.0280 MH//SF	1.00 1.00 1.00 1.00 4.00 1.00 1.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR 8.00 MH 32.00 MH 8.00 MH 8.00 MH 56.000 MH	Prod: 145.720 84.500 14.205 32.650 29.650 27.190	1.0000 S 490 1,853 370 521 3,234		7.00 Eqp Pc 671 671	s: 536 114 650	494 140 634		1,166 676 114 490 1,853 370 521 5,189	
00G2 <u>SHEET2</u> 503 704 9472 0CK05 0CK10 BR06 PR1407 ,188,96	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory1, OSR FIXED LEAD 110'W/S Dockbldr Foreman Dockbldr Journeyman Labor Common Crane Oper	1.00 1.00 1.00 1.00 4.00 1.00 1.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR 8.00 MH 8.00 MH 8.00 MH	Prod: 145.720 84.500 14.205 32.650 29.650 27.190 35.180	1.0000 S 490 1,853 370 521		7.00 Eqp Pc 671	s: 536 114	494 140		1,166 676 114 490 1,853 370 521	
SHEET2           503           704           9472           DCK05           DCK10           \BR06           \R1407           188.96           \50.0000	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory I, OSR FIXED LEAD 110'W/S Dockbldr Foreman Dockbldr Journeyman Labor Common Crane Oper 0.0280 MH/SF Units/Hr 2,000.0000 Un/Shit	1.00 1.00 1.00 1.00 4.00 1.00 1.00	8.00 CH 8.00 HR 8.00 HR 8.00 MH 32.00 MH 8.00 MH 8.00 MH 56.0000 MH 35.7143 Unit/MH	Prod: 145.720 84.500 14.205 32.650 29.650 27.190 35.180	1.0000 S 490 1,853 370 521 3,234		7.00 Eqp Pc 671 671	s: 536 114 650	494 140 634		1,166 676 114 490 1,853 370 521 5,189	
<u>SHEET2</u> 503 1704 99472 OCK05 OCK10 ABR06 PR1407 5,188.96	Sheeting Crew Crawler Crane (LS218H) I.C.E. 416 Vibratory I, OSR FIXED LEAD 110'W/S Dockbldr Foreman Labor Common Crane Oper 0.0280 MH/SF Units/Hr 2,000.0000 Un/Shit	1.00 1.00 1.00 1.00 4.00 1.00 1.00	8.00 CH 8.00 HR 8.00 HR 8.00 HR 8.00 MH 32.00 MH 8.00 MH 8.00 MH 56.000 MH	Prod: 145.720 84.500 14.205 32.650 29.650 27.190 35.180	1.0000 S 490 1,853 370 521 3,234		7.00 Eqp Pc 671 671	s: 536 114 650	494 140 634		1,166 676 114 490 1,853 370 521 5,189	

**RID ITEM = 40000** Description = Add'l Excavate Box

Land Item SCHEDULE: 1 Unit ≔ CY 100

Takeoff Quan:

65.000 Engr Quan:

0.000

(0000) Bitchvite Bore Call: 508 WC: NONE

Box Excav = 27 ft x 12 ft x 20 VF / 27 = 240 BCY

Reduce by 2 VF , for top excav of pavement removal

Box Excav =  $27 \times 12 \times 18 / 27 = 216 CY$ 

EXCAV2 E	xcav Crew		6.50 CH	Prod:	10.0000 UH	Lab Pcs:	7.00	Eqp Pcs:	1.00	
8EXCAV320DCT	CAT 320D Excavator	1.00	6.50 HR	72.230				195	274	469
LABR03	Labor Fore	1.00	6.50 MH	30,190	322					322

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Aecom CNTRI SUB003

42 Inch Pine PCC 13

#### Aecom CNTRLSUB003 42Inch Pipe PCC 11

#### Direct Cost Report

Activity Resource	Description	Pcs	Quantity % Unit	Unit Cost	Labor	Permanent Material	Constr Inside Outside Matl/Exp Equipment Equipment		Sub- Contract	Total
BID ITEM Description =	= 40000 Add'l Excavate Box		Land Item SCHEDULE: Unit =	l 100 CY Takeoff Quan:	65.000 E	ingr Quan:	0.000			
LABR06	Labor Common	4.00	26.00 MH	27,190	1,202					1,202
OPR1404	Backhoe Oper >37K	1.00	6.50 MH	35,180	423					423
OPR1564 \$2,778.22	Oiler	1.00	6.50 MH 45.5000 MH	27.100	361 2,309					361
	0,7000 MH/ Units/Hr * 80,0000 Un/S		1,4286 Unit/MH	[20,123]	35.52		195 3.00	274 4.22		2,778 42.74
500500R	Muck Disporal Trucking			Ouan: • 34.5	0 CY - Hrs/Shft:	8:00	WC: NONE		hore de la	
- 1 (7) (7) (1)			4 <b>4</b> 0 <b>4 1</b>							**Unreviewed
DMPTR1 4DUMPFEE01	Muck Disposal - Truck Muck Dump Fee - Clean		6.50 CH 84.50 LCY	Prod: 10,000	6.5000 CH	Lab Pcs:	1.00 Eqp Pcs:	1.00	845	845
8TRK006	Dump Truck 20 LCY 85,0	1.00	6,50 HR	83,021			134	405	64.5	540
TMSTR04	Teamster	1.00	6.50 MH	27,750	348					348
\$1,732.53	0.0769 MH/		6.5000 MH	[ 2.135 ]	348		134	405	845	1,733
13.0000	Units/Hr 104.0000 Un/S	Shift	13.0000 Unit/MH		4.12		1.59	4.80	10.00	20.50
===> Item ' \$4,510.75	Totals: 40000 - 0.8000 MH/CY	Add'] Exci	vate Box 52.00 MH	[ 22.898 ]	2,657		329	680	845	4,511
69.396	65 CY			[]	40.87		5.06	10.46	13.00	69.40
BID ITEM Description =	= 60000 Backfill Box		Land Item SCHEDULE: Unit ==	1 100 CY Takeoff Quan:	240.000 F	Engr Quan:	0,000			
	Backill Box				and a second second second second second		WC: NONE			
PUDUD				Q((an):2240.0		<u>.</u> 8.00			<u> 22.592</u> 710777	
EXCAV2	Excav Crew		8.00 CH	Prod:	1.0000 S	Lab Pcs:	7.00 Eqp Pcs:	1.00		<b>0</b> 100
2SAND 8EXCAV320E	Backfill Mtł DCT CAT 320D Excavator	1.00	240.00 CY 8.00 HR	10.000 72.230		2,400	240	338		2,400 578
LABR03	Labor Fore	1.00	8.00 MH	30.190	397		240	338		397
LABR06	Labor Common	4.00	32.00 MH	27.190	1,480					1,480
OPR1404	Backhoe Oper >37K	1.00	8.00 MH	35.180	521					521
OPR1564	Oiler	1.00	8.00 MH	27.100	444					444
\$5,819.34	0.2333 MH		56.0000 MH	[ 6.708 ]	2,842	2,400	240	338		5,819
30,0000	Units/Hr 240.0000 Un/S	Shift	4.2857 Unit/MH		11.84	10.00	1.00	1.41		24.25
> Item	Totals: 60000 -	Backfill B	x							
\$5,819.34	0.2333 MH/CY		56.00 MH	[ 6.708 ]	2,842	2,400	240	338		5,819
24.247	240 CY				11.84	10.00	1.00	1.41		24,25

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Aecom CNTRLSUB003	421nch Pipe PCC 11					Direct Co	st Report							01/23/2013	Page 4 14:43
Activity Resource	Description	Pcs	Quantity %	Unit		Unit Cost	Labor	Permanent Material	Constr Matł/Exp	Inside Equipm <del>e</del> nt	Outside Equipment	Equipment Operation	Sub- Contract	Total	
BID ITEM = 7 Description = Cu	70000 11 Pipe Out - Weld 2 Bulkhea	uds	Land Item	SCHEDULE; Unit =	1	100 Takeoff Quan:	1.000	Engr Quan:	0.	.000					
170000B	Cut & Remove Pipe	ingle in mater	-	and the second second		2.00 Cuant	EA Hrs/Sh	lt: 8.00 ÷		WC;-NONE	in it in the	X X	2. A.S.		
	Excav Crew CAT 320D Excavator	1.00		0 CH		Prod: 72,230	4.0000 S	Lab Pcs:	9.00			3.00 1,351		2,311	Unreviewed
8WELD001	400 Welder -Skid	2,00	64.00			9,996				900 77		562		640	
LABR03	Labor Fore	1.00	32.00	мн		30.190	1,587							1,587	
LABR06	Labor Common	4.00	128.00			27.190	5,919							5,919	
OPR1404	Backhoe Oper >37K	1.00	32.00			35.180	2,083							2,083	
OPR1535	Welder/Burner	2.00	64.00			34,210	4,063							4,063	
OPR 1564	Oiler	1.00	32.00			27.100	1,777							1,777	
\$18,380.25 0.0625 Units/	144.0000 M /Hr 0.5000 M		288.0000 0,0069	MH Unit/MH		[ 43 14.4 ]	15,429 7,714.58			1,037 518,72		1,914 956.83		18,380 9,190.13	
──> Item Total	s: 70000	- Cut Pine O	ut - Weld 2 Bulki	leads											
\$18,380.25 18,380.250	288.0000 MH/		288.00			[ 8628.8 ]	15,429 15,429,15			1,037		1,914		18,380	
18,380.250	1						15,429.15			1,037.44		1,913.66		18,380.25	
				Total of Abov	ve Sub-E	Biditems	_								
→ Item Total \$43,939.42 43,939.420	s: 19000 596.0000 MH/LS 1 LS	- Remain Wo	rk at SOuth Hea 596.00			[17750,38]	31,875 31,875.43			2,797 2,796.76	650 649.64	4,523 4,522.59	845 845.00	43,939 43,939.42	
•	100000 dditional Work for South and items of Parent Item 10000			Unit =	LS	Takeoff Quan:	1.000	Engr Quan:	1	.000					
-	120000		Land Item	SCHEDULE: Unit =	l LF	100 Takeoff Quan:	80.000	Engr Quan:	0	.000					

Aecom CNTRLSUB00	3 42Inch Pipe PCC 11			Direct Co	ost Report					01/23/2013	Page 5 14:43
Activity Resource	Description	Pcs	Quantity % Unit	Unit Cost	Labor	Permanent Material	Constr Inside Matl/Exp Equipment	Outside Equipment Equipment Operation	Sub- Contract	Total	
BID ITEM Description =	≈ 120000 Pothole		Land Item SCHEDULE: Unit =	1 100 LF Takeoff Quan:	80,000	Engr Quan:	0.000				
1040*	Saycul Pavement			Quan: 160.00	0° LIP Hrs/Shi	: <b>8.</b> 00	WC:*NONE	Allow Salls			Unreviewed
<u>SWCT01</u> 3SAWBLD 83904 LABR12 LABR15 \$649,94	0 LF x 2 cuts ( in / out SawCut Pavement SawBlades-Conc Conc Saw-Pavemnt Labor Utility Labor Appr - 2 yr 0.0500 MH// Units/Hr 320.0000 Un/S	2.00 1.00 1.00 LF	t = 960 in-ft 4.00 CH 960.00 INFT 8.00 HR 4.00 MH 4.00 MH 8.0000 MH 20.0000 Unit/MH *	Prod: 0.250 5.000 27.190 27.190 [1.36]	20.0000 UM 185 185 370 2.31	Lab Pcs:	2.00 Eqp Po 240 32 240 32 1.50 0.20	s: 2.00 8 8 0.05		240 40 185 185 650 4,06	
10410	Care-Altrent Top 2 ft			Quan: 427/00	) (ev Harishi	8,005	CAL 508 WCI NONE			**	Unreviewed
EXCAV2 8EXCAV320D LABR03 LABR06 OPR1404 OPR1564 \$1,709.67 6.7500	Excav Crew CT CAT 320D Excavator Labor Fore Labor Common Backhoe Oper >37K Oiler 1.0370 MfH/ Units/Hr 54.0000 Urt/S		4.00 CH 4.00 HR 4.00 MH 16.00 MH 4.00 MH 4.00 MH 28.0000 MH 0.9643 Unit/MH	Prod: 72.230 30.190 27.190 35.180 27.100 [29.812]	0.5000 S 198 740 260 222 1,421 52,62	Lab Pcs:	7.00 Eqp Pc 120 120 120 4.44	s: 1.00 169 169 6.26		289 198 740 260 222 1,710 63,32	Oneviewed
500500R	MuckeDisposide Trucking		a a second a	Quum =3500	0 (€¥r ⊃ <u>H</u> )¢//Shi	8:00	WC: NON	er and see	an a	20/07 <b>-2</b> 0/08/ **	Unreviewed
Vol = 27 C	BCY x 1.3 swell Y x 1.3 = 35 loose cy										
DMPTR1 4DUMPFEE01 8TRK006 TMSTR04 \$896.17 8.7500	Dump Truck 20 LCY 85,0 Teamster 0.1142 MH/		4.00 CH 35.00 LCY 4.00 HR 4.00 MH 4.000 MH 8.7500 Unit/MH	Prod: 10.000 83.021 27.750 [3.171]	0.5000 S 214 214 6.12	Lab Pcs:	1.00 Eqp Pc 83 83 2,36	s: 1.00 250 250 7.13	350 350 10.00	350 332 214 896 25.60	
> Item \$3,255.78 40.697	Totals: 120000 - 0,5000 MH/LF 80 LF	Pothole	40.00 MH	{ 14.168 ]	2,005 25.06		240 235 3.00 2.93	426 5.33	350 4.38	3,256 40.70	

Aecom CNTRLSUB0	03 42Inch Pipe PCC 11			Direct Co	st Report			~				01/23/2013	Page 6 14:43
Activity Resource	Description	Pcs	Quantity % Unit	Unif Cost	Labor	Permanent Material	Constr Mati/Exp Ec	Inside quipment	Outside Equipment	Equipment Operation	Sub- Contract	Total	
BID ITEM Description ==	= 130000 Install / Pull Sheeting		Land Ilem SCHEDULE: Unit =	1 100 SF Takeoff Quan:	2,000.000	Engr Quan:	0.00	0					
3000D & .	🚓 🔿 Drive Sheeting 🔿 💡	dit in state	and the second second	Quan 2(000:00	ŚR Hrs/Shi	1 <u>:xa</u> te <b>8.00</b>	Calis 508 W	C: NONE		***		••U	Inreviewed
Assume PZ	-22 Sheeting												
Area = ( 2	27+12+27+12 ) x 20 VF = 1,5	50 SF											
Wt = 1,560	) SF x 22 lbs / Sf = 34,320	lbs											
Cost to Bu	my = \$ 0.65 / lb x 34,320 =	\$ 22,308											
Rent @ 209 SHEET2	b of Buy = \$ 22,308 x 0.2 = Sheeting Crew	\$ 4,400 01	r \$ 2.82 / SF 24.00 CH	Prod:	3.0000 S	Lab Pcs:	7.00	Eqp Pcs	5:	3.00			
3PZ22RENT	Rent PZ 22 Sheeting		2,000.00 SF	2,620			5,240	- 11				5,240	
81503	Crawler Crane (LS218H)	1.00	24.00 HR	145.720				2,014		1,483		3,497	
84704	I.C.E. 416 Vibratory1,	1.00	24.00 HR	84.500					1,608	420		2,028	
899472 DOCK05	OSR FIXED LEAD 110 W/S Dockbildr Foreman	1,00 1,00	24.00 HR 24.00 MH	14.205 32,650	1,470				341			341 1,470	
DOCK05	Dockbldr Journeyman	4.00	24.00 MH 96.00 MH	29.650	5,558							5,558	
LABR06	Labor Common	1.00	24.00 MH	27,190	1,110							1,110	
OPR1407	Crane Oper	1.00	24.00 MH	35,180	1,562							1,562	
\$20,806.90	0.0840 MH/SF		168.0000 MH	[ 2.563 ]	9,701		5,240	2,014	1,949	1,903		20,807	
83.3333	Units/Hr 666.6667 Un/Shi	ħ	11.9048 Unit/MH		4.85		2.62	1.01	0.97	0.95		10.40	
3000 <b>G</b>	Roll-Sheeting			Quantes : 24000400	Siv in Ash	1: 8:00	Cul: 508 W	C: NONE		2 X A X	$e_{i}$ is as		
SHEET2	Sheeting Crew		8.00 CH	Prod:	1.0000 S	Lab Pcs:	7.00	Eqp Pc:	e.	3.00		**(	Inreviewed
81503	Crawler Crane (LS218H)	1.00	8.00 HR	145.720	2.0000 0	100103.		671		494		1,166	
84704	I.C.E. 416 Vibratory1,	1.00	8.00 HR	84.500					536	140		676	
899472	OSR FIXED LEAD 110 W/S	1.00	8.00 HR	14.205					114			114	
DOCK05	Dockbldr Foreman	1.00	8.00 MH	32.650	490							490	
DOCK10	Dockbldr Journeyman	4.00	32.00 MH	29.650	1,853							1,853	
LABR06	Labor Common	1.00	8.00 MH	27.190	370							370	
OPR1407 \$5,188.96	Crane Oper 0.0280 MH/SF	1.00	8.00 MH 56.0000 MH	35.180 [0.854]	521 3,234			671	650	634		521 5,189	
	Units/Hr 2,000.0000 Un/Shi		35.7143 Unit/MH	[0.034]	1.62			0.34	0.32	0.32		2.59	
> Item	Totals: 130000 -	Install / Pull	Sheeting										
\$25,995.86	0.1120 MH/SF		224.00 MH	[ 3.418 ]	12,934		5,240	2,686	2,599	2,537		25,996	
12,998	2000 SF				6.47		2.62	1.34	1.30	1.27		13.00	

Aecom CNTRLSUB003 421nch Pipe PCC 11		Direct Co	ost Report			Page 7 01/23/2013 14:43
Activity Description Resource Pcs	Quantity % Unit	Unit Cost	Permanent Labor Material	Constr Inside Outside Matl/Exp Equipment Equipment		Total
BID ITEM = 140000 Description = Excavate Box	Land Item SCHEDULE: 1 Unit = CY	100 Takeoff Quan:	216.000 Engr Quan:	0.000		
40000D Excavate Box		Quan:216,00	0 CY Hrs/Shift: 8.00	Cal: 508 WC: NONE		**Unreviewed
Box Excav = 27 ft x 12 ft x 20 VF / 27 = 240 Be Reduce by 2 VF , for top excav of pavement rem						
Box Excav = 27 x 12 x 18 / 27 = 216 CY           EXCAV2         Excav Crew           8EXCAV320DCT         CAT 320D Excavator         1.00           LABR03         Labor Fore         1.00           LABR06         Labor Common         4.00           OPR1404         Backhoe Oper >37K         1.00           S4,616.09         0.3500         MH/CY           20.0000         Units/Hr         * 160.0000         Un/Shift	10.80 CH 10.80 HR 10.80 MH 43.20 MH 10.80 MH 10.80 MH 75.6000 MH 2.8571 Unit/MH	Prod: 72,230 30,190 27,190 35,180 27,100 [ 10.061 ]	20.0000 UH Lab Pcs: 536 1,998 703 600 3,836 17.76	7.00 Eqp Pcs: 324 324 1.50	1.00 456 456 2.11	780 536 1,998 703 600 4,616 21,37
SUDSUDA: MUCKSDisporal_stracking		Quain: 28080	0 CY. Hri/Shn: 8:00	WC: NONE	e i i i i i i i i i i i	e con constant
DMPTR1         Muck Disposal - Truck           4DUMPFEE01         Muck Dump Fee - Clean           8TRK006         Dump Truck 20 LCY 85,0         1.00           TMSTR04         Teamster         1.00           \$4,282.66         0.0384         MH/CY           26,0000         Units/Hr         208.0000         Un/Shift	10.80 CH 280.80 LCY 10.80 HR 10.80 MH 10.800 MH 26.0000 Unit/MH	Prod: 10.000 83.021 27.750 [1.067]	1.3500 S Lab Pcs: 578 578 2.06	1.00 Eqp Pcs: 223 223 0.79	1.00 2,808 674 674 2,808 2.40 10.00	**Unreviewed 2,808 897 578 4,283 15.25
Item Totnls:         140000         -         Excavate Bo           \$8,898.75         0.4000         MH/CY         41.198         216 CY	x 86.40 MH	[ 11.449 ]	4,414 20.44	547 2.53	1,130 2,808 5.23 13.00	8,899 41.20
BID ITEM = 160000 Description = Backfill Box	Land Item SCHEDULE: 1 Unit = CY	100 Takeoff Quan:	240.000 _ Engr Quan:	0.000		
60000D Hinckfill Box*** <u>EXCAV2</u> Excav Crew	8.00 CH	Prod:	0.CY Hrs/Shft: 8.00 1.0000 S Lab Pcs:	WC: NONE	1.00	**Unreviewed

#### Aecom CNTRLSUB003 42Inch Pipe PCC 11

Activity Resource	Description	Pcs	Quantity % Unit		Unit Cost	Labor	Permanent Material	Constr Inside Matl/Exp Equipment E	Outside Equipment Equipment Operation	Sub- Contract Total
ID ITEM = 1	60000		Land Item SCHEDULE:	1	100	_				
	ackfill Box		Unit =	CY	Takeoff Quan:	240.000	Engr Quan:	0.000		
SAND	Backfill Mtl		240.00 CY		10.000		2,400			2,400
EXCAV320DCT	CAT 320D Excavator	1.00	8.00 HR		72.230			240	338	578
ABR03	Labor Fore	1.00	8.00 MH		30.190	397				397
ABR06	Labor Common	4.00	32.00 MH		27.190	1,480				1,480
OPR1404	Backhoe Oper >37K	1.00	8.00 MH		35,180	521				521
OPR1564	Oiler	1.00	8.00 MH		27,100	444				444
5,819.34	0.2333	MH/CY	56.0000 MH		[ 6.708 ]	2,842	2,400	240	338	5,819
30.0000 Units	/Hr 240.0000	Un/Shift	4.2857 Unit/MH			11.84	10.00	1.00	1.41	24.25
===> Item Total	s: 160000	- Backfill Bo								
\$5,819.34	0.2333 MH/CY		56.00 MH		[ 6.708 ]	2,842	2,400	240	338	5,819
24.247	240 CY					11.84	10.00	1.00	1.41	24,25

Direct Cost Report

BID ITEM = 170000 Description = Cut Pipe Out - Weld 2 Bulkheads Land Item SCHEDULE: 1 Unit =

100 Takeoff Quan:

Engr Quan: 0.000

170000B	Cur& Remove Pipe		and the second second	Quan; 210	0 EA Hrs/Shi	:	ŴĊ	NONE		an in the anti-the second of the	
EXCAV3	Excav Crew		32.00 CH	Prod:	4.0000 S	Lab Pcs:	9.00	Eqp Pcs:	3.00		
8EXCAV320DCT	CAT 320D Excavator	1.00	32.00 HR	72.230				960	1,351	2,311	
8WELD001	400 Welder -Skid	2.00	64.00 HR	9,996				77	562	640	
LABR03	Labor Fore	1.00	32.00 MH	30.190	1,587					1,587	
LABR06	Labor Common	4.00	128.00 MH	27.190	5,919					5,919	
OPR1404	Backhoe Oper >37K	1.00	32.00 MH	35,180	2,083					2,083	
OPR1535	Welder/Burner	2.00	64.00 MH	34.210	4,063					4,063	
OPR1564	Oiler	1.00	32.00 MH	27.100	1,777					1,777	
\$18,380.25	144.0000	MH/EA	288.0000 MH	[ 4314.4 ]	15,429			1,037	1,914	18,380	
0.0625 Units	s/Hr 0.5000	Un/Shift	0.0069 Unit/MH		7,714.58			518.72	956.83	9,190.13	
> Item Tota	nls: 170000	- Cut Pipe Ou	t - Weld 2 Bulkhends								
\$18,380.25	288.0000 MH/		288.00 MH	[ 8628.8 ]	15,429			1,037	1,914	18,380	
18,380.250	1				15,429.15		1,	037.44	1,913.66	18,380.25	

1.000

Total of Above Sub-Biditems

===> Item Totals: 100000 - Additional Work for South and North Wall Page 8

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CNTRLSUBO	03 42Inch Pipe PCC 11				Direct Cost 1	Report							01/23/2013	14:43
Activity Resource	Description	Pcs	Quantity %	Unit	Unit Cost	Labor	Permanent Material	Constr Matl/Exp	Inside Equipment	Outside Equipment	Equipment Operation	Sub- Contract	Totai	
BID ITEM Description = \$62,349.98 62,349.980	= 170000 Cut Pipe Out - Weld 2 Bulkheads 694.4000 MH/LS 1 LS		Land Item 694.40	SCHEDULE: Unit = MH	1 100 Takeoff Quan: [20680.9]	1.000 37,624 37,623.75	Engr Quan: 2,400 2,400.00	5,480 5,480.00	0.000 4,745 4,744.67	2,599 2,598.56	6,345 6,345.00	3,158 3,158.00	62,350 62,349.98	
\$106,289.40	*** Report Totals ***		1,290.40	МН		69,499	5,650	5,480	7,541	3,248	10,868	4,003	106,289	
——Report No The estimate w This report sho	Non Additive Activity ses:—— ras prepared with TAKEOFF Quantitie wws TAKEOFF Quantities with the reso Activities are marked.													
Bid Date: Ow	mer: Engineering Firm: Estimator-In-Char	ge:												
	created on: 11/13/2007 by cimate used: C:\HEAVYBID\E													
	***Estimate created on: 08 timate used: C:\HEAVYBID\E			-										
	***Estimate created on: 04 ed: C:\USERS\REDMONDR1\DES				\RCE-HCSS ESTIMATES - B	ACKUP\RRNY08	09.zip (a 1	backup) f:	com 08/23/	2008 5:3	6:34 PM			
	***Estimate created on: 04 timate used: C:\HEAVYBID\E			-										
	***Estimate created on: 07 timate used: C:\HEAVYBID\F			-										
	***Estimate created on: 12 timate used: C:\HEAVYBID\E			-										
	***Estimate created on: 12 timate used: C:\HEAVYBID\E			-										

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Aecom

Aecom CNTRLSUB003	421nch Pipe PCC 11					Direct Cost 1	Report							01/23/2013	Page 10 14:43
Activity Resource	Description	Pcs	Quantity %	Unit		Unit Cost	La	Permane oor Mater			Outside Equipment	Equipment Operation	Sub- Contract	Total	
	170000 ut Pipe Out - Weld 2 Bulkheads		Land Item	SCHEDULE: 1 Unit =		100 Takeoff Quan:	1.000	Engr Quar	1:	0.000					
	stimate created on: 12/1 te used: C:\HEAVYBID\ES														
	stimate created on: 12/3 te used: C:\HEAVYBID\ES														
	stimate created on: 01/3 te used: C:\HEAVYBID\ES			. ,											
	stimate created on: 01/3 te used: C:\HEAVYBID\ES														
[] in the Unit Cost	licate average labor unit cost was us Column = Labor Unit Cost Withou resources, rent % and ; work 1 saturday shift work 5-8hr shifts work thru lunch concrte work 5-10 hr shifts Pay lunch	t Labor Burde	ns	represented as	XXX%Y	YY where XXX=Re	nt% and YY	Y=EOE%							

J

	Activity Name	Org	Start	Finish	Total		2013			2014				2015			2016	-
CN-1252	Contract Milestones	Dur	21-May-14	21-May-14	Float 6		LINAS					11.			411	I J FI		AS
TUN1195	CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, red/d May 27, 2014)	0	21-May-14	21-May-14*	6					• 0	N 1252	2 - Tun	nel CP	1 & C	F 2 0	omplet	e (851 C	с <u>о</u> -,
Cross Pa	assages 1- 5	177	25-Feb-14	03-Nov-14	64													
	Passages 1- 4	177	25-Feb-14	03-Nov-14	64			1	†					· †	1	+	11-	
TUN1154	TUN Excavate/Support/Line - X-Passage #1 (CTS)	62	25-Feb-14	21-May-14	3				ģ	1	JN Ėxo	cavate	Suppo	rt/Line	- X-P	assage	e #1 (CT	rs)
TUN1205	TUN Excavate/Support/Line - X-Passage #2 (CTS)	37	21-Mar-14	12-May-14	-6				į,	🗖 τυ	IN Exc	avate/	uppor	t/Line	- X-Pa	Issage	#2 (CT	S)
BUF1027	TUN Buffer Float No. 7.5 to Stations CTS (120)	115	22-May-14	03-Nov-14	64							TUN	Buffer	Float	No. 7.	5 to St	tations C	<b>STS</b>
Construc	tion CN-1300	1661	16-May-13	01-Dec-17	39						-							
CN- 1300	0 Milestone	550	16-May-13	16-Nov-14	86			][	Ť		(	•			T		1[	7
CTS2120	CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)	550	16-May-13	16-Nov-14	86			· ·		<b>T</b>		¢ N	300-	CTSR	leq'd -	Tunne	l Interfa	ce O
Constru	ction CTS Station P-1254R	1661	16-May-13	01-Dec-17	39													
CTS9700	CTS Contingency Cost Activity (LOE)	1017	16-May-13	01-Dec-17	6			· ·		-			i.	<u> </u>	<u> </u>	<del></del>		_
CTS Co	ontract Milestones	1602	16-May-13	03-Oct-17	8							•					][	
FDS1800	CTS Start	0	16-May-13		1	•	CTS S	tart										1
N-CTS1000	CTS Tunnel Interface Finish Cross Passages 1 & 2	0		16-Nov-14	86							🔶 ¢т:	Tunn	alinter	face F	Finish (	Cross P	assa
N-CTS9770	CTS Access through tunnels Interface to STS	0		26-Aug-16	4							: L						•
N-CTS1010	CTS Track Interface to STS	0		14-Oct-16	53							:						
N-CTS9760	CTS Interface for Access to Station Rooms for STS Contractor	0		02-Jun-17	3			21-N	lav-1	4		:	06-1	Mar-1	5			
CTS1500	CTS P-1254R Commissioning Completion	0		03-Oct-17	8			21-0	nay-1	-		<u> </u>	1	1			<u></u>	
Headho	ouse / Cross Cut	1661	16-May-13	01-Dec-17	39													
Headh	ouse Exc / Structural	1380	16-May-13	23-Feb-17	222													
N-CTS0900	CTS Relocate Sidewalk / OCS / Install Sound Wall	25	16-May-13	20-Jun-13	1		СТS	Reloc	ate Sid	de <mark>va</mark> k	/ ocs	/ Insta	a Sour	id Wal	1			
N-CTS0950	CTS AT&T Cutov er; Relocate Utilities (PG&E, MUNI, Water, Sewer)	70	21-Jun-13	30-Sep-13	1			стя	AT8	<sup>C</sup> utov	er; Re	ocate	Utilities	(PG8	E, MU	JNI,W	ater, Se	wer)
CTS1000	CTS Building Demolition	30	01-Oct-13	12-Nov-13	1			🗖 C	TS Bu	ilding (	Demolit	lbn		1	1		1	
N-CTS1015	CTS Install Dewatering System	90	13-Nov-13	08-Apr-14	21					CT:S	Install	Dewat	ering S	ystem	1			
CTS1010	CTS Install Slurry Walls	110	13-Nov-13	06-May-14	1					от 🗖	S Insta	al Slurr	Walk	3				
CTS1005	CTS Site Setup/Form / Pour Surface Deck Slab & Support Walls	55	07-May-14	24-Jul-14	1					÷	cts	Site S	etup/Fo	or <mark>m / F</mark>	our S	urface	Deck S	ilab 8
N-CTS1020	CTS Install Gantry Crane	15	25-Jul-14	14-Aug-14	1						🗖 ĊT	S Insta	Gant	ry Cra	ne			
CTS1020	CTS Excavate Headhouse & Bracing to El. +18 for Cross Cut Breakout	130	15-Aug-14	05-Mar-15	1				†			1	CTS	S Exca	vate I	leadhr	ouse & E	Braci
N-CTS1022	CTS Backfill tunnels with CDF	19	17-Nov-14	15-Dec-14	55				Ì							with CE		
N-CTS1052	CTS Cross Cut Breakout Side Drifts and Top Heading from Headhouse	10	06-Mar-15	15 14-15	0								CT	0.000	10		cout Side	e Dri
14-0131032	and an and a state and a state and top in a state and a state a			15-Mar-15	<b>4</b>	i i	i (						1101	Sicro.	ss Cul	t Break	your one	
CN-125	2 Contract Milestones			21-May-14	6	<b>he e je</b>		Ì■ ∎∖	<b>n</b>	∎ <b>'</b> ¢ i	-	• •		SCro	ss Cu	t Break		
CN-1252 TUN1195	CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)		21-May-14		6					• • •	N 1252	2 - Tun				▫┢╺╸	e (851 C	
CN-1252 TUN1195	2 Contract Milestones	0	21-May-14	21-May-14	6 6 124					<b>†</b> °	N 1252	2 - Tun				▫┢╺╸		
CN-125 TUN1195 Cross P Cross	2 Contract Milestones CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014) 2assages 1-5 Passages 1-4	0 0 117 117	21-May-14 25-Feb-14 25-Feb-14	21-May-14 21-May-14* 08-Aug-14 08-Aug-14	-								nelCP	1 & C	F 2 Ca	omplet	é (851 C	CD ->
CN-1252 TUN1195 Cross P	2 Contract Milestones CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014) 2assages 1-5	0 0 117 117 62	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14	21-May-14 21-May-14* 08-Aug-14 08-Aug-14	124						UN Ex	cavate	ne i CP Suppo	1 & Cl	F 2 C	omplete assage	e (851 C e #1 (G1	CD -: TS)
CIN-1257 TUN1195 Cross P Cross I TUN1154 TUN1205	Contract Milestones     CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)     Passages 1- 5     Passages 1- 4     TUN Excavate/Support/Line - X-Passage #1 (CTS)     TUN Excavate/Support/Line - X-Passage #2 (CTS)	0 0 117 117 62 37	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14	124 124 3 -6						UN Exc	cavate	ne i CP /Suppo Suppor	1 & Cl rt/Line	- X-Pa	ompleto assage	é (851 C e #1 (C1 e #2 (CT	CD -: TS) TS)
CN-1252 TUN1195 Cross P Cross I TUN1154	2 Contract Milestones CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014) Passages 1- 5 Passages 1- 4 TUN Excavate/Support/Line - X-Passage #1 (CTS)	0 0 117 117 62 37 55	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14	124 124 3						UN Exc	cavate	ne i CP /Suppo Suppor	1 & Cl rt/Line	- X-Pa	ompleto assage	e (851 C e #1 (G1	CD -: TS) TS)
CN-1257 TUN1195 Cross P Cross 1 TUN1154 TUN1205 BUF1027	Contract Milestones     CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)     Passages 1- 5     Passages 1- 4     TUN Excavate/Support/Line - X-Passage #1 (CTS)     TUN Excavate/Support/Line - X-Passage #2 (CTS)	0 0 117 117 62 37 55 1661	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 01-Dec-17	124 124 3 -6 124 39						UN Exc	cavate	ne i CP /Suppo Suppor	1 & Cl rt/Line	- X-Pa	ompleto assage	é (851 C e #1 (C1 e #2 (CT	CD -: TS) TS)
CN-1252 TUN1195 Cross P Cross P TUN1154 TUN1205 BUF1027 Construct CN- 130	2 Contract Milestones CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD ->NTP1, req'd May 27, 2014) Passages 1- 5 Passages 1- 4 TUN Excavate/Support/Line - X-Passage #1 (CTS) TUN Excavate/Support/Line - X-Passage #2 (CTS) TUN Buffer Float No. 7.5 to Stations CTS (120) ction CN-1300 20 Milestone	0 0 117 117 62 37 55 1661 450	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 01-Dec-17 08-Aug-14	124 124 3 -6 124 39 186						UN Exc JN Exc TU	cavate avate/ N Buffe	re (CP Suppo Suppor	1 & Cl rt/Line t/Line t No. 7.	- X-Pa - X-Pa - X-Pa (.5 to S	ompleti lassage assage Stations	e (851 C e #1 (C1 e #2 (CT CTS (1	CD -: TS) TS) 120)
CN-1252 TUN1195 Cross P Cross J TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120	COntract Milestones     CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)     Passages 1- 5     Passages 1- 4     TUN Excavate/Support/Line - X-Passage #1 (CTS)     TUN Excavate/Support/Line - X-Passage #2 (CTS)     TUN Buffer Float No. 7.5 to Stations CTS (120)     Ction CN-1300     Milestone     CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)	0 0 117 117 62 37 55 1661 450 450	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14	124 124 33 -6 124 39 186 186						UN Exc JN Exc TU	cavate avate/ N Buffe	re (CP Suppo Suppor	1 & Cl rt/Line t/Line t No. 7.	- X-Pa - X-Pa - X-Pa (.5 to S	ompleti lassage assage Stations	é (851 C e #1 (C1 e #2 (CT	CD -: TS) TS) 120)
CN-1257 TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 Construct	Contract Milestones     CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)     Passages 1- 5     Passages 1- 4     TUN Excavate/Support/Line - X-Passage #1 (CTS)     TUN Excavate/Support/Line - X-Passage #2 (CTS)     TUN Buffer Float No. 7.5 to Stations CTS (120)     Ction CN-1300     Milestone     CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)     Jution CTS Station P-1254R	0 0 117 117 62 37 55 1661 450 450 1661	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14	124 124 3 -6 124 39 186						UN Exc JN Exc TU	cavate avate/ N Buffe	re (CP Suppo Suppor	1 & Cl rt/Line t/Line t No. 7.	- X-Pa - X-Pa - X-Pa (.5 to S	ompleti lassage assage Stations	e (851 C e #1 (C1 e #2 (CT CTS (1	CD -: TS) TS) 120)
CN-1257 TUN1195 Cross P Cross J TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 COnstruct CTS9700	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         20 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Juction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)	0 0 117 117 62 37 55 1661 450 450 1661 1017	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17	124 124 33 -6 124 39 186 186						UN Exc JN Exc TU	cavate avate/ N Buffe	re (CP Suppo Suppor	1 & Cl rt/Line t/Line t No. 7.	- X-Pa - X-Pa - X-Pa (.5 to S	ompleti lassage assage Stations	e (851 C e #1 (C1 e #2 (CT CTS (1	CD -: TS) TS) 120)
CN-1257 TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 CONStruct CTS9700 CTS 2 Construct	Contract Milestones     CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)     Passages 1- 5     Passages 1- 4     TUN Excavate/Support/Line - X-Passage #1 (CTS)     TUN Excavate/Support/Line - X-Passage #2 (CTS)     TUN Buffer Float No. 7.5 to Stations CTS (120)     Ction CN-1300     Milestone     CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)     Juction CTS Station P-1254R     CTS Contingency Cost Activity (LOE)     ontract Milestones	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14	124 124 3 -6 124 39 186 186 186 39						UN Exc JN Exc TU	cavate avate/ N Buffe	re (CP Suppo Suppor	1 & Cl rt/Line t/Line t No. 7.	- X-Pa - X-Pa - X-Pa (.5 to S	ompleti lassage assage Stations	e (851 C e #1 (C1 e #2 (CT CTS (1	CD -: TS) TS) 120)
CIN-1257 TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 CONSTRUCT CTS9700 CTS CO FDS1800	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         Ction CN-1300         20 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Justion CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         Ontract Milestones         CTS Start	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 03-Oct-17	124 124 3 -6 124 39 186 186 39 6 8 8 1		● ¢TSS	art 1			UN Ex JN Exc T U	cavate avate/ N Buffe	CTS F	t/Line t/Line t/No. 7.	- X-Pa - X-Pa .5 to S Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD -: TS) (S) (120) mple
CN-1257 TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 CONStruct CTS9700 CTS 2 Construct	Contract Milestones     CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)     Passages 1- 5     Passages 1- 4     TUN Excavate/Support/Line - X-Passage #1 (CTS)     TUN Excavate/Support/Line - X-Passage #2 (CTS)     TUN Buffer Float No. 7.5 to Stations CTS (120)     Ction CN-1300     Milestone     CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)     Juction CTS Station P-1254R     CTS Contingency Cost Activity (LOE)     ontract Milestones	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17	124 124 3 -6 124 39 186 186 186 39 6 8		• ¢ts s	art			UN Ex JN Exc T U	cavate avate/ N Buffe	CTS F	t/Line t/Line t/No. 7.	- X-Pa - X-Pa .5 to S Tunne	assage Stations	e (851 C e #1 (C1 e #2 (CT CTS (1	CD -: TS) T20) mple
CN-1257 TUN1195 Cross P Cross P TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 COnstruct CTS9700 CTS CC FDS1800 N-CTS1000 N-CTS9770	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         Ction CN-1300         00 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Juction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         Ontract Milestones         CTS Start         CTS TunnelInterface Finish Cross Passages 1 & 2         CTS Access through tunnels Interface to STS	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602 0	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 01-Dec-17 03-Oct-17 08-Aug-14 26-Aug-16	124 124 3 -6 124 39 186 186 39 6 8 8 186 39 6 8 186 39 6 4		● ¢TS S	art			UN Ex JN Exc T U	cavate avate/ N Buffe	CTS F	t/Line t/Line t/No. 7.	- X-Pa - X-Pa .5 to S Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD -: TS) T20) mple
CIN-1257 TUN1195 Cross P Cross P TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 CONSTRUCT CTS2120 CONSTRUCT CTS2120 CONSTRUCT CTS2120 CONSTRUCT CTS2120 CONSTRUCT CTS2120 CONSTRUCT CTS2120 CONSTRUCT CTS2120 CONSTRUCT CONSTRUCT CTS2120 CONSTRUCT	Contract Milestones     CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)     Passages 1- 5     Passages 1- 4     TUN Excavate/Support/Line - X-Passage #1 (CTS)     TUN Excavate/Support/Line - X-Passage #2 (CTS)     TUN Buffer Float No. 7.5 to Stations CTS (120)     Ction CN-1300     Milestone     CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)     Justion CTS Station P-1254R     CTS Contingency Cost Activity (LOE)     Ontract Milestones     CTS Start     CTS Start     CTS Tunnel Interface Finish Cross Passages 1 & 2	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602 0 0	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 01-Dec-17 03-Oct-17 08-Aug-14	124 124 3 -6 124 39 186 186 39 6 8 8 1		● ¢TS S	art			UN Ex JN Exc T U	cavate avate/ N Buffe	CTS F	t/Line t/Line t/No. 7.	- X-Pa - X-Pa .5 to S Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD -: TS) T20) mple
CN-1257 TUN1195 Cross P Cross P TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 COnstruct CTS9700 CTS CC FDS1800 N-CTS1000 N-CTS9770	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         Ction CN-1300         00 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Juction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         Ontract Milestones         CTS Start         CTS TunnelInterface Finish Cross Passages 1 & 2         CTS Access through tunnels Interface to STS	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602 0 0 0 0 0	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 01-Dec-17 03-Oct-17 08-Aug-14 26-Aug-16	124 124 3 -6 124 39 186 186 39 6 8 8 186 39 6 8 186 39 6 4		● ¢TS S		Aav-1		UN Ex JN Exc T U	cavate avate/ N Buffe	Suppo Suppor Float	rtiLine tr/Line t No. 7.	X-Pa - X-Pa - X-Pa Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD -: TS) T20) mple
CN-1257 TUN1195 Cross P Cross J TUN1154 TUN1205 BUF1027 COnstrue CN- 130 CTS2120 COnstrue CTS2120 COnstrue CTS9700 CTS2700 CTS2700 FDS1800 N-CTS1000 N-CTS9770 N-CTS1010	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         00 Milestone         CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         ontract Milestones         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Access through tunnels Interface to STS         CTS Track Interface to STS	0 0 117 117 62 37 55 1661 450 1661 1017 1602 0 0 0 0 0 0	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 01-Dec-17 03-Oct-17 03-Oct-17 08-Aug-14 26-Aug-16 14-Oct-16	124 124 33 -6 124 39 186 186 39 6 8 39 6 8 8 11 186 4 186 4 53		• ¢tss	art 21-N	flay-1		UN Ex JN Exc T U	cavate avate/ N Buffe	Suppo Suppor Float	t/Line t/Line t/No. 7.	X-Pa - X-Pa - X-Pa Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD -> TS) (S) 120)
CN-1257 TUN1195 Cross P Cross J TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2700 N-CTS2700 N-CTS9770 N-CTS9760 CTS1500	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         20 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Jution CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         contract Milestones         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Access through tunnels Interface to STS         CTS Track Interface to STS         CTS Interface for Access to Station Rooms for ST S Contractor	00 00 117 117 62 37 55 1661 450 450 1661 1017 1602 00 00 00 00 00	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14 08-Aug-14 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 01-Dec-17 03-Oct-17 03-Oct-17 08-Aug-14 26-Aug-16 14-Oct-16 02-Jun-17	124 124 33 -6 124 39 186 186 39 6 8 39 6 8 8 1 1 186 4 53 3 3		¢tss		1ay-1		UN Ex JN Exc T U	cavate avate/ N Buffe	Suppo Suppor Float	rtiLine tr/Line t No. 7.	X-Pa - X-Pa - X-Pa Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD
CN-1257 TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construct CN- 130 CTS2120 CTS2120 CTS2120 CTS2700 CTS2700 CTS2700 N-CTS1000 N-CTS1000 N-CTS9760 CTS1500 Headhu	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req'd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         20 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Juction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         ontract Milestones         CTS Start         CTS Start         CTS Access through tunnels Interface to STS         CTS Track Interface To STS         CTS Interface for Access to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion	00 0117 117 62 37 55 1661 450 450 1661 1017 1602 00 00 00 00 00 00 00 00	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 21-May-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 01-Dec-17 03-Oct-17 08-Aug-14 26-Aug-16 14-Oct-16 02-Jun-17 03-Oct-17	124 124 33 -6 124 39 186 186 39 6 8 39 6 8 186 39 6 8 186 39 6 8 39 3 3 8 8			21-N	-	4	UN Exc IN Exc TUI	cavate avate/ N Buffe	Suppo Suppor Float	rtiLine tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line	X-Pa - X-Pa - X-Pa Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD -: TS) T20) mple
CIN-1257 TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construct CIS2120 CTS20 CTS	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD ->NTP1, req/d May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         Ction CN-1300         20 Milestone         CN 1300- CTS Req/d -Tunnel Interface Complete (550 CD from NTP)         Juction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         Ontract Milestones         CTS Start         CTS Access through tunnels Interface to STS         CTS Track Interface to STS         CTS Interface for Access to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14* 08-Aug-14 21-May-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 03-Oct-17 03-Oct-16 02-Jun-17 03-Oct-17 03-Oct-17	124 124 124 33 -6 124 39 186 186 39 6 8 8 186 4 11 186 4 53 3 8 8 39		● ¢TSS	21-N	-	4	UN Exc IN Exc TUI	cavate avate/ N Buffe	Suppo Suppor Float	rtiLine tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line	X-Pa - X-Pa - X-Pa Tunne	assage Stations	e (851 C #1 (CT #2 (CT CTS (1	CD -: TS) T20) mple
CN-T25.           TUN1195           Cross P           Cross I           TUN1154           TUN1205           BUF1027           Construct           CN-130           CTS2120           CONSTRUCT           CTS9700           CTS CC           FDS1800           N-CTS1010           N-CTS9770           N-CTS9760           CTS1500           Headh           Headh           N-CTS0900           N-CTS0900	2 Contract Milestories         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, req/d May 27, 2014)         /assages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         00 Milestone         CTS Contingency Cost Activity (LOE)         ontract Milestones         CTS Contingency Cost Activity (LOE)         ontract Milestones         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Access through tunnels Interface to STS         CTS Interface for Acc es to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         ouse/ Cross Cut	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14 08-Aug-14 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 03-Oct-17 08-Aug-14 26-Aug-16 14-Oct-16 02-Jun-17 03-Oct-17 03-Oct-17 03-Oct-17 23-Feb-17	124 124 124 33 -6 124 39 186 186 39 6 8 8 186 4 11 186 4 53 3 8 8 39			21-M Reloc	ate S	4 de valk	UN EX TUI CN	cavate avate/ N Buffe 1300- S Tunn S Tunn	Suppo Suppor Float CTS F	rtiLine tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line	- X-Pa - X-Pa - S to S Tunne	ompleti lassage stations el Interf	e (851 C #1 (CT #2 (CT CTS (1	TS) TS) 120) mple
CN-T25.           TUN1195           Cross P           Cross I           TUN1154           TUN1205           BUF1027           Construct           CN-130           CTS2120           CONSTRUCT           CTS9700           CTS CC           FDS1800           N-CTS1000           N-CTS9770           N-CTS9760           CTS1500           Headh           Headh           N-CTS0900           N-CTS0900	2 Contract Milestones         CN 1252 - Tunnel CP 1 & CP-2 Complete (851 CD -> NT P1, req'd May 27, 2014)         /assages 1 - 5         Passages 1 - 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         20 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         uction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         contract Milestones         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Acc es s through tunnels Interface to STS         CTS Interface for Acc es s to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         cuse Exc / Structural         CTS Relocate Sidewalk / OCS / Install Sound Wall	0 0 117 117 62 37 55 1661 450 450 1661 1017 1602 0 0 0 0 0 0 0 0 0 0 0 0 0	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14 21-May-14 08-Aug-14 08-Aug-14 21-May-14 12-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 03-Oct-17 03-Oct-17 08-Aug-16 14-Oct-16 02-Jun-17 03-Oct-17 23-Feb-17 20-Jun-13	124 124 124 33 -6 124 39 186 186 39 6 8 8 186 4 11 186 4 53 3 8 8 39		СТЯ	21-M Reloc	ate S	4 de valk		cavate avate/ N Buffe 1300- S Tunn S Tunn	Suppo Suppor Float CTS F	rtiLine tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line	- X-Pa - X-Pa - S to S Tunne	ompleti lassage stations el Interf	e (851 C e #1 (G1 #2 (CT CTS (1 acce Cor	TS) TS) 120) mple
CN-125.           TUN1195           Cross P           Cross I           TUN1154           TUN1205           BUF1027           Construct           CN-130           CTS2120           CONSTRUCT           CTS9700           CTS9700           N-CTS1000           N-CTS1010           N-CTS9770           N-CTS9760           CTS1500           Headh           Headh           Headh           N-CTS0900	2 Contract Milestories         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, redd May 27, 2014)         Passages 1 - 5         Passages 1 - 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         00 Milestone         CTS Contingency Cost Activity (LOE)         ontract Milestones         CTS Contingency Cost Activity (LOE)         ontract Milestones         CTS Start         CTS Start         CTS Access through tunnels Interface to STS         CTS Interface Finish Cross Passages 1 & 2         CTS Interface for Access to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         ouse / Cross Cut         house Exc / Structural         CTS Relocate Sidewalk / OCS / Install Sound Wall         CTS AT&T Cutov er; Relocate Utilities (PG&E, MUNI, Water, Sewer)	0           0           117           117           117           62           37           55           1661           450           450           1661           1017           1602           0           1380           25           0           30	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 21-Jun-13	21-May-14 21-May-14 08-Aug-14 08-Aug-14 21-May-14 12-May-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 08-Aug-14 01-Dec-17 01-Dec-17 03-Oct-17	124 124 124 33 -6 124 39 186 186 39 6 8 8 186 4 11 186 4 53 3 8 8 39		СТЯ	21-M Reloc	ate S	4 de valk	UN Ex TU CN CN	cavate avate/ N Buffe 1300- S Tunn S Tunn	CTS F	rt/Line tr/Lin	- X-Pa - X-Pa - X-Pa Tunne	ompleti lassage stations el Interf	e (851 C e #1 (G1 #2 (CT CTS (1 acce Cor	TS) TS) 120) mple
CN-125.           TUN1195           Cross P           Cross I           TUN1154           TUN1205           BUF1027           Construct           CN-130           CTS2120           Construct           CTS2120           CONSTRUCT           CTS2120           CONSTRUCT           BUF1027           CONSTRUCT           CTS2120           CONSTRUCT           FDS1800           N-CTS1010           N-CTS0950           CTS1000           N-CTS1015	2 Contract Milestories         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, redd May 27, 2014)         Passages 1 - 5         Passages 1 - 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         00 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Justion CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         Ontract Milestones         CTS Start         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Track Interface For Acc es to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         Ouse / Cross Cut         house Exc / Structural         CTS Relocate Sidewak / OCS / Install Sound Wall         CTS Building Demolition	0           0           117           117           117           62           37           55           1661           450           450           450           450           1661           1017           1602           0           1380           25           0           30           90	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13	21-May-14           21-May-14*           08-Aug-14           08-Aug-14           21-May-14*           08-Aug-14           21-May-14           12-May-14           12-May-14           08-Aug-14           08-Aug-14           08-Aug-14           08-Aug-14           01-Dec-17           01-Dec-17           03-Oct-17           08-Aug-14           26-Aug-16           14-Oct-16           02-Jun-17           03-Oct-17           23-Feb-17           20-Jun-13           30-Sep-13           12-Nov-13	124 124 124 3 3 -6 124 39 186 186 39 6 8 39 6 8 1 186 39 6 8 39 222 1 1 1 1 1		СТЯ	21-M Reloc	ate S	de vali	UN Ex TU TU CN CT	cavate avate/ N Buffe 1300- S Tunn S Tunn	CTS F	rt Line t/Line t/Line tNo. 7. Req'd -1 face F Mar-1 nd Wal s (PG8	- X-Pa - X-Pa - X-Pa Tunne	ompleti lassage stations el Interf	e (851 C e #1 (G1 #2 (CT CTS (1 acce Cor	TS) TS) 120) mple
CN-125.           TUN1195           Cross P           Cross I           TUN1154           TUN1205           BUF1027           Construct           CN-130           CTS2120           Construct           CTS2120           CONSTRUCT           CTS2120           CONSTRUCT           BUF1027           CONSTRUCT           CTS2120           CONSTRUCT           FDS1800           N-CTS1010           N-CTS0950           CTS1000           N-CTS1015	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NT P1, red/d May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         20 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Juction CTS Station P-1254R         CTS Contingency Cost Ac tivity (LOE)         contract Milestones         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Access through tunnels Interface to STS         CTS Track Interface to STS         CTS Interface for Acces to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         ouse / Cross Cut         house Exc / Structural         CTS Relocate Sidewalk / OCS / Install Sound Wall         CTS Building Demolition         CTS Install Dewatering System	0           117           117           117           62           37           55           1661           450           450           450           450           1661           1017           1602           0           1380           90           10           10	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-13 16-May-13 17-May-14 17-May-14	21-May-14           21-May-14*           08-Aug-14           08-Aug-14           21-May-14*           21-May-14           21-May-14           12-May-14           12-May-14           08-Aug-14           08-Aug-16           14-Oct-16           02-Jun-17           03-Oct-17           03-Oct-17           23-Feb-17           20-Jun-13           30-Sep-13           12-Nov-13           08-Apr-14	124 124 124 3 3 -6 124 39 186 186 39 6 8 39 6 8 1 186 39 6 8 39 222 1 1 1 1 1		СТЯ	21-M Reloc	ate S	de valk	UN Exc TUI CN CN CN CT: CD: CD: CD: CT: CD: CD: CD: CD: CD: CD: CD: CD: CD: CD	cavate avate/ N Buffe 1300- S Tunn S Tunn S / Inst locate tion	ering S VValia	rtiLine t/Line t/Line tNo. 7. Req'd -1 face F Mar-1	X-Pa X-Pa 5 to S Tunne	ompleti assage Stations el Interf	e (851 C e #1 (G1 #2 (CT CTS (1 acce Cor	TS) TS) 120) mple
CN-125, TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construct CN-130 CTS2120 CONSTRUCT CTS9700 CTS2120 CTS1000 N-CTS1010 N-CTS9760 CTS1500 Headth N-CTS0950 CTS1000 N-CTS1015 CTS1010 CTS1005	2 Contract Milestones         CN 1252 - Tunnel CP-1 & CP-2 Complete (851 CD -> NTP1, red/d May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         ction CN-1300         20 Milestone         CN 1300- CTS Req'd -Tunnel Interface Complete (550 CD from NTP)         Juction CTS Station P-1254R         CTS Contingency Cost Ac tivity (LOE)         contract Milestones         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Access through tunnels Interface to STS         CTS Track Interface to STS         CTS Interface for Access to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         ouse / Cross Cut         house Exc / Structural         CTS Relocate Sidewalk / OCS / Install Sound Wall         CTS Install Dewatering System         CTS Install Slurry Walls	0           117           117           117           117           62           37           55           1661           450           450           450           1661           1017           1662           0           1380           90           110           55	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-13 16-May-13 17-Nov-13 17-Nov-13	21-May-14         21-May-14*         08-Aug-14         08-Aug-14         21-May-14*         08-Aug-14         21-May-14         12-May-14         08-Aug-14         14-Oct-17         03-Oct-17         03-Sep-13	124 124 124 3 3 -6 124 39 186 186 39 6 8 39 6 8 1 186 39 6 8 39 222 1 1 1 1 1		СТЯ	21-M Reloc	ate S		UN Exc IN Exc CN CN CN CN CTS	cavate avate/ N Buffe 1300- S Tunn S Tunn S / Inst locate tion	ering S Walk etup/Fi	rtiLine tr/Lin	X-Pa X-Pa Sto S Tunne	ompleti assage Stations el Interf	e (851 C #1 (G1 #2 (CT CTS (1 acce Cor	TS) TS) 120) mple
CN-125, TUN1195 Cross P Cross I TUN1154 TUN1205 BUF1027 Construe CN-130 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 CTS2120 N-CTS9700 CTS1000 N-CTS0950 CTS1010 CTS1010	2 Contract Milestories         CN 1252 - Tunnel CP.1 & CP.2 Complete (851 CD -> NTP1, red/d May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         Ction CN-1300         00 Milestone         CN 1300- CTS Red/d -Tunnel Interface Complete (550 CD from NTP)         Jaction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         Contract Milestones         CTS Start         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Tunnel Interface to STS         CTS Track Interface to STS         CTS Interface for Acc es to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         Ouse Exc / Structural         CTS Relocate Sidewak / OCS / Install Sound Wall         CTS Install Dewatering System         CTS Install Dewatering System         CTS Site Setup/Form / Pour Surface Deck Slab & Support Walls	0           0           117           117           62           37           55           1661           450           450           450           450           1661           1017           1602           0           1380           90           110           55           15	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 21-Mar-14 22-May-13 16-May-14 16-May-14	21-May-14         21-May-14*         08-Aug-14         08-Aug-14         21-May-14         12-May-14         12-May-14         08-Aug-14         26-Aug-16         14-Oct-16         02-Jun-17         03-Oct-17         03-Oct-17         03-Oct-17         23-Feb-17         20-Jun-13         30-Sep-13         12-Nov-13         08-Apr-14         06-May-14         24-Jul-14	124 124 124 3 3 -6 124 39 186 186 39 6 8 39 6 8 1 186 39 6 8 39 222 1 1 1 1 1		СТЯ	21-M Reloc	ate S		UN Exc TUI CN CN CN CT: CTS CTS CTS	cavate avate/ N Buffe 1 1300- S Tunn S Tunn S / Inst locate tion I Dewal all Surr S Site S	el triter	1 & Cl rtiLine tr/Line tr/Line tr/Cine tr/Cine tr/Cine tr/Cine tr/Cine tr/Cine tr/Cine tr/Cine	- X-Pa - X-Pa - Sto S Tunne Tunne Binish (	ompleti assage Stations el Interf	e (851 C #1 (G1 #2 (CT CTS (1 acce Cor	CD -: TS) TS) 120) mple
CN-T25.           TUN1195           Cross P           Cross I           TUN1154           TUN1205           BUF1027           Construct           CN-130           CTS2120           Construct           CTS9700           CTS0700           FDS1800           N-CTS1010           N-CTS9770           N-CTS9760           CTS1500           Headh           N-CTS99700           N-CTS9770           N-CTS9770           N-CTS9770           N-CTS9760           CTS1010           N-CTS9760           CTS1000           N-CTS0950           CTS1000           N-CTS1015           CTS1010           CTS1005           N-CTS1020	2 Contract Milestories         CN 1252 - Tunnel CP.1 & CP.2 Complete (851 CD -> NTP1, redd May 27, 2014)         Passages 1- 5         Passages 1- 4         TUN Excavate/Support/Line - X-Passage #1 (CTS)         TUN Excavate/Support/Line - X-Passage #2 (CTS)         TUN Buffer Float No. 7.5 to Stations CTS (120)         Ction CN-1300         00 Milestone         CN 1300- CTS Redd - Tunnel Interface Complete (550 CD from NTP)         Jaction CTS Station P-1254R         CTS Contingency Cost Activity (LOE)         Contract Milestones         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Tunnel Interface Finish Cross Passages 1 & 2         CTS Track Interface to STS         CTS Interface for Access to Station Rooms for ST S Contractor         CTS P-1254R Commissioning Completion         Ouse Exc / Structural         CTS Relocate Sidewak / OCS / Install Sound Wall         CTS Install Dewatering System         CTS Install Dewatering System         CTS Site Setup/Form / Pour Surface Deck Slab & Support Walls         CTS Site Setup/Form / Pour Surface Deck Slab & Support Walls	0           0           117           117           62           37           55           1661           450           450           450           1661           1017           1662           0           0           00           1380           255           700           300           900           1100           55           15           19	21-May-14 25-Feb-14 25-Feb-14 25-Feb-14 22-May-14 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 16-May-13 17-May-13 13-Nov-13-Nov-13 13-Nov-13-Nov-13 13-Nov-13-Nov-13-Nov-13-Nov-13-Nov-13-Nov	21-May-14         21-May-14*         08-Aug-14         08-Aug-14         21-May-14         21-May-14         12-May-14         08-Aug-14         26-Aug-16         14-Oct-16         02-Jun-17         03-Oct-17         03-Oct-17      >	124 124 124 3 3 -6 124 39 186 186 186 39 6 8 39 6 8 39 222 1 1 186 39 222 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		СТЯ	21-M Reloc	ate S		UN Exc TUI CN CN CN CT: CTS CTS CTS	cavate avate/ N Buffe 1300- S Tunn S Tunn S Tunn S Tunn S Tunn S Tunn S Tunn S Tunn S Tunn S Tunn	CTS F CTS F	rtiLine tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line tr/Line s ortm / P try Cra nriels v	- X-Pa - X-Pa - Sto S Tunne Tunne Bis h ( 15	ompleti assage Stations el Interf Cross	e (851 C #1 (G1 #2 (CT CTS (1 acce Cor	CD -: TS) (S) 120) mple (es 1 ( S) (S) (S) (S) (S) (S) (S) (
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& Support Walls Ing to El. +18 for Cross Cut Breakout Its and Top Heading from Headhouse Heading Berich/Invert Side Drifts and Ceriter Drift Top Heading & Bracing to El. -10 (64)

	Trend Lo	og											
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ltem #	Date Initiated		Change Description	Change Type	CMB No.	Stat	tus		Cost Impact re/(Benefit)	Comments	Modification Number	Manager per Co	Project Controls ompleted Change orm
						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
CONSTRUCT	ION TRENDS	S											
Contract 1250	- Utilities R	elocation #	1 (Portal & MOS)										
1250-0001	04/15/10	081-0001	Delete Option MF-OPT1 "Fire Protection Sprinkler System"	1	N/A		-	(50,000)		Status of ROCA? Cleared City Attorney's Office; to Shahnam for execution. [n *Current Forecast* - Sep2010 Cost Report.] COMPLETE, NO FURTHER ACTION; CMOD #1	CMOD #1 Approved	JB	04/20/10
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.] No reimbursement from SFPUC Sewer. COR #2-\$34,135; COR #5-\$73,039 COMPLETE, NO FURTHER ACTION; CMOD #2	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 Processat" - Sep2010 Cost Report.] COMPLETE, NO FURTHER ACTION; CMOD #3	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.] COR #3-RFI #76 COMPLETE, NO FURTHER ACTION; CMOD #4	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 ductbank. At 4th/Harrison, AWSS conflict with 18° sewer. [In 'Current Forecast' - Sep2010 Cost Report.] No reimbursement from SFPUC AWSS. PCC #2: RFI #5 34, 49 & 51 COMPLETE, NO FURTHER ACTION; CMOD #5	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. Refer to RFIs #85F1, 83.1, 100, 101, 102 COMPLETE, NO FURTHER ACTION; CMOD #6	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 ductbank 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. No reimbursement from SFPUC Sewer. COMPLETE, NO FURTHER ACTION; CMOD #9	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 ductbank on 4th near Howard, a differing site condition. An AT&T intercept vauit is to be installed, however, TPC conduits can not reside niside AT&T intercept vauit. Joint Trench utilities participation cost TBD. Executed on 10/14/2010. Refer to RFI #62 (\$19.500) Expected Reimbursement from TPC. RE has provided documentation of notification to TPC, July-August '10. See final 1250 Form B actual costs COMPLETE, No FURTHER ACTION; CMD0 #8	CMOD #8 Approved		
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 the into (E) main as interim. New sewer is supposed to the into optional MH. No reimbursement from SFPUC Sewer. RFI #91 COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved		
1250-0010	10/06/10	081-0010	Perform AT&T wye cast connection and chipping of existing ductbank 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 ductbank. This will cause additional excavation, joint trench and modification to existing ductbank. Joins will participation cost TBD. SFITA and AT&T are negotiating with Contractor. (\$48,181) Expected Reimbursement from AT&T. RE has provided documentation of notification to AT&T, Sept-Oct 10. See final 1250 Form B actual costs. <b>COMPLETE, NO FURTHER ACTION; CMOD #10</b>	CMOD #10 Approved		
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) COMPLETE, NO FURTHER ACTION; CMOD #16	CMOD #16 Approved		

ltem #	Date Initiated		Change Description	Change Type	CMB No.	State	us		Cost Impact ire/(Benefit)	Comments	Modification Number	Completed by F Manager per Cor Fo	mpleted Change
						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
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	+67,798		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. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21		
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	+30,547		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. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21		
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) COMPLETE, NO FURTHER ACTION; CMOD #16	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				+290,703		Midden deposits were discovered on 4th Street between Howard and Folsom. Contractor stopped work. Contractor requesting payment for rental charges of trench plates, barricades, and shoring, and cost of maintenance. Total cost exposure is projected through end of November 2010. The \$290,703.00 is expected to be the final estimate for the rental of trench plates, barriers and shoring. <b>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. CM awaiting cost proposal from Contractor. No reimbursement from SFPUC AWSS. COR #33 Supplemental COMPLETE, NO FURTHER ACTION; CMOD #12	CMOD #12 Approved		
1250-0017	10/06/10	081-0017	Protection Work at PG&E Vault 1611	6					+6,400	CM reviewing COR for merit. Expected Relimbursement 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					+25,000	CM reviewing COR for merit. 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				-0-		Old Note: Potential delay claim if issue extends project duration. Amount is estimated at \$3,000.00 per day (for 604%) (\$160K). New Note: By exercising all option work, additional 84 calendar days is added to the contract time. In addition, midden miligation will start on 10/7/10. As a result, the potential for extended overhead cost is averted. This trend has been superseded by Trend #37. COMPLETE, NO FURTHER ACTION			
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 be 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. 2501 and 147. No reimbursement from SFPUC Sewer. COMPLETE, NO FURTHER ACTION; CMOD #11	CMOD #11 Approved		
1250-0021	10/06/10	081-0021	Install new AWSS lateral including hydrant at NW 4th/Harrison	2					+100,000	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 availing design revision from Design team. Trend No. 21 is combined with Trend No. 22.			
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 instal a ductile iron tee. Also, existing AWSS hydrant lateral is in conflict with new 18° sever. The preferred solution was to instal a new ductile iron lateral at a different location rather than installing vertical offsets on an existing cast iron lateral. No reimburgement from SFPUC AWSS. COMPLETE, NO FURTHER ACTION; CMOD #15	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. COMPLETE, NO FURTHER ACTION; CMOD #13	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 workaround & support. AT&T refused to pay Synergy. Synergy considers AT&T's refusal as a changed condition to CN 1250 contract. (395.311) Reimbursement from AT&T. See Final 1250 Form B actual costs. COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19		
1250-0025	10/06/10	081-0025	Utility support and work around for PG&E facilities	6					+182,980	Contract specs specified PG&E to compensate contractor directly for workaround & support. PG&E negotiated \$100,000 directly with Synergy and will pay synergy directly as well.			
1250-0026	10/06/10	081-0026	Utility support and work around for SFWD facilities	3	CMB-0028	Agree	02/09/11	+66,510		Total cost known to date (10/5/10) of all SFWD support and workaround. 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. No reimbursement from SFWD. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved		

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1250-0027	10/06/10	081-0027	Trucking and labor support for Archaeological mitigation	2				+115,789		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. Additional charges are expected which will be tracked as Trend No. 28. COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		
1250-0028	12/08/10	081-0028	Trucking and labor support for Archaeological mitigation, Part II	2				+50,000		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. COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		
1250-0029	12/08/10	081-0029	Cost overrun for bid item UD-10 "Additional excavation and backfill"	4	CMB-0036	Agree	05/04/11	+112,500		Bid item UD-10 is to pay for excavation of connection hole and kill hole for SFWD line. Contract only included 200 cubic yard for this work. The size of excavations is dictated by field conditions and per the direction of SFWD inspector. RE's estimate of the total volume of dirt to be excavated is 630 cy. Examples of differing condition sencountered 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 SHUClementina, connection holes and kill holes need to be expanded due to other utilities in the way. COMPLETE, NO FURTHER ACTION; CMOD #17	CMOD #17 Approved		
1250-0030	12/08/10	081-0030	Supplement bid item GE-4 "Allowance for differing site conditions" related to the installation of publicly owned facilities only (sewer, water, AWSS, Joint trench)	4	CMB-0030	Agree	04/13/11	+235,595		This change order is to supplement GE-4 for cost overrun related to the installation of publicly owned infrastructure only. GE-4 cost overrun for installation of privately owned infrastructure is being tracked separately and a separate change order will be issued. COMPLETE, NO FURTHER ACTION; CMOD #16	CMOD #16 Approved		
1250-0031	12/08/10	081-0031	Unused allowance for bid item GE-8 "Allowance for cast-in- place utility vaults"	4					(38,048	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. Credit amount included in Trend #43			
1250-0032	12/08/10	081-0032	Unused allowance for bid item UD-5 "Handling and disposal of Class I Hazardous Waste"	4					(50,807	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 oft 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	Unused allowance for bid item UD-6 "Transportation of Class I Hazardous Waste"	4					(76,210	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 soli 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	Cost overrun for bid item TR-6 "Allowance for manual traffic control"	4	CMB-0037	Agree	05/04/11	+68,820		Bid item TR-6 is an allowance to pay for off-duty police officers and parking control officers. Contract allowance amount is \$50,000.00. Contract specs calls for police officers at 4 intersections (4th/Howard, 4th/Folsom, 4th/Harrison and 4th/Bryant). The average cost of 1 police officer is about \$800.00 per day (\$100.00 per hour). The \$50,000.00 allowance is only good for 60 days for 1 police officer. Hence, additional money was needed for traffic control support. Final amount paid police officers is \$87,500.00. Additional billings for parking control officers (from AI Herce of DPT) is forthcoming; RE estimated this bill to be about \$60,000.00. COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved	SS	05/04/11
1250-0035	12/08/10	081-0035	Premium cost for requesting contractor to accelerate work on 4th Street between Howard and Folsom	2				+35,000		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 rentials 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. COMPLETE, NOFURTHER ACTION; CMOD #20	CMOD #20		
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	+450,867		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 standy for 5 monts (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. 27/15: Rental/Maintenance Costs for Support (Part 2 of 4): Add! Work as Result of Archeological Shutdown (3 of 4). 0/3) Rental/Maintenance, 2 of 3) Add! Work result of Archeological support, 3 of 3 ) Add! OH/Indirect cost. RE to add Equipment Standby time to revised mod. 09/12: RE to Prepare Modification 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. COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1250-0037	12/08/10	081-0037	Compensation for loss of production, inefficiency and disruption of work due to archaeological discovery	2				+100,000		Due to archaeological discoveries, contractor may potentially claim for compensation for loss of producton, 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. SFNTA has directed Synergy to submit anything related to the Architectural delays through the claims process. This will be carried in the Potential ComPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		
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 ductbank 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 responder requesting additional backup on Octboer 19th, 2011. Subsequentially, 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. This will be carried in the Potential Claim Log.			
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. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A		
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. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A		
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. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A		
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. NO FURTHER ACTION; Superseded by COR #58. (See 1250-0043 below)	N/A		
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							VOIDED		
1250-0043	08/03/11	081-0043	Unit Rate Adjustment for Entire 1250 Bid Items	4				(203,548)	(203,548)	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%. COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22		
Contract 1250	Totals							+3,180,500	(54,233)	Of the total cost exposure shown, changes have been absorbed by allocated contingency in the amount of \$2,860,848. Final Contract Closeout Total \$11,966,150			
Contract 1251	- Utilities R	elocation #2	2 (UMS)										
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				-0-		After discussions with the Contractor and the Union Square Business Improvement District (BID), the SFMTA determined that modifying the lane requirements along Stockton St. and implementing the alternate pedestrian walkway design would be beneficial to the execution of CN 1251 in the following ways: increased public safety, increase construction production, and create a more pleasing environment to the public and merchant. COR #1	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 COMPLETE, NO FURTHER ACTION; CMOD #2	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 26SLF 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 COMPLETE, NO FURTHER ACTION; CMOD #1	CMOD #1 Approved	JH	6/9/2011

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
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 COMPLETE, NO FURTHER ACTION; CMOD #3	CMOD #3 Approved	SS	10/5/2011
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				+127,892		Contract plans AW-5011, 5012, 5014 and 5014 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 existing 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 577,892.53 (Synergy FA Request) + \$25,000 (first digging west side) + \$1000 (temp backfill during moratorium) + \$15,000 (plate rental west side at \$5k per month). Estimate does not include Synergy's cost to resequence his work. Updated projected cost impact from \$50,000 to \$127,893 based on compilation of force accounts received. RE is availing COR Cost proposal COMPLETE, NO FURTHER ACTION	CMOD #24		1/2/2013
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, POC #4 COMPLETE, NO FURTHER ACTION; CMOD #5	CMOD #5 Approved	SS	
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. RE has not determined cost impact. PCC #5 COMPLETE, NO FURTHER ACTION; CMOD #5	CMOD #5 Approved	SS	
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 Gean/Stockton and OFarrell/Stockton. COMPLETE, NO FURTHER ACTION; CMOD #4	CMOD #4 Approved		
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 COMPLETE, NO FURTHER ACTION; CMOD #3	CMOD #3 Approved	SS	10/5/2011
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. COR #50, PCC #6 CLOSED, NO FURTHER ACTION: Per direction from CMB on January 18, 2012, this request is denied.			
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 litems of work were found to be missing for the original cost estimates which increase the amount to \$278,351. RFI #76, COR #31 COMPLETE, NOF URTHER ACTION; CMOD #6	CMOD #6 Approved	SS	
1251-0013	07/06/11	082-0013	Accelerate start of construction in front of Macys West by trenchless construction method	7				-0-		Micropile installation on Stockton east between OF arrel and Market has proven to be much slower than anticipated. To mitigate this potential delay, contractor requested to start construction in front of Macys West. This is a no cost change order. COR 32: COMPLETE, NO FURTHER ACTION; CMOD #3	CMOD #3 Approved	SS	10/5/2011
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. CME made a partial approve of up to \$200K. The initial Contract Modification to supplement this allowance is in the amount of \$191,778.62. COMPLETE, NO FURTHER ACTION; CMOD #9	CMOD #9 Approved	SS	

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
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 bil this work. COR #19 COMPLETE, NO FURTHER ACTION; CMOD #8	CMOD #8 Approved	SS	
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 RF173 directs contractor to instal new conduits and conductors. RF1#73: COR #33 COMPLETE, NO FURTHER ACTION; CMOD #8	CMOD #8 Approved	SS	
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. AT&T agreed to reimburse SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved	SS	
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. AT&T agreed to reinburse SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved	SS	
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 instal 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. This additional work for AT&T will need to be reimbursed to SFMTA through the Form B process. Note: The agreed amount (\$31,000.00) is for enlargement of vault #403 only; the additional 200 feet of trench to be captured in the JT bid items. (See Trend 60) COMPLETE, NO FURTHER ACTION; CMOD #11	CMOD #11 Approved		
1251-0020	09/07/11	082-0020	Change PG&E conduit material from PVC to GRS on west side of Stockton between Geary and Post	6	CMB-0058	Agree	11/02/11	+21,410		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 through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21		1/2/2013
1251-0021	09/07/11	082-0021	Revise PG&E service points and layout of primary lines at various locations, and delete Muni Vault 1850 A at Stockton/Ellis.	6						PG&E made changes to the locations of the service points and layout of some of the primary lines. In addition, due to changes to the limits of the UMS Station on Ellis Street, it was determined that Numi Vault 1850Å is no longer needed. Cost for this trend in captured in Trend #31 or CMod #12. CLOSED; NO FURTHER ACTION. Cost for this trend is captured in Trend #31/CMod #12			
1251-0022	09/07/11	082-0022	Change OCS supports at SF Hilton Hotel on Mason Street from embedded eyebolts to poles w/foundations.	7						During the design phase the representatives of the Hilton Hotel agreed to and signed a license agreement with the SFMTA to allow embedded eyebolt supports. Hilton's Dir of Property Ops now wants to have OCS poles rather than the embedded building eyebolt supports. However, the OCS designer was able to revise the OCS design to eliminate the need for either eyebolts or poles in front of Hilton Hotel, resulting in a \$2,000 credit. CLOSED; NO FURTHER ACTION. Applicable bid items to be adjusted accordingly, See Trend #60.			
1251-0023	09/07/11	082-0023	4th Street & Folsom Trolley Bypass	1	CMB-0065	Agree	1/25/2012, 2/29/12	+405,440		SFMTA Operations has requested a bypass be installed at 4th Street and Folsom Street. \$242,619 in labor costs for OCS installation has not been negotiated yet. 1/25: Condition agreed upon verification material form Contractor to be procured is available. (Verified 02/01/1/2). 02/29: CMod negotiated cost has been revised to incorporate original three items and the add1 OCS work on Folsom St. COR #52: PCC #7 Updated projected cost impact from \$490,000 to \$405,440. CMod #12 (Formally CMod #15) COMPLETE, NO FURTHER ACTION; CMOD #12	CMOD #12 Approved	MAB	03/28/12
1251-0024	09/07/11	082-0024	Install a 5" slurry wall between the gas line and wet utilities if the separation is less than 3 feet	6	CMB-0059	Agree	11/16/2011, 05/02/12	+204,610		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 through the Form B process. COR #58: Engineer's Estimate \$146,018 COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19		1/2/2013
1251-0025	09/07/11	082-0025	Additional PG&E conduit crossings at Geary and O'Farrell to minimize service interruption during future UMS Station construction	6						PG&E requested to install additional conduits crossing Stockton Street at Geary and O'Farrell to minimize service interruption during future UMS Station construction. David Greenaway is coordinating with PG&E regarding reimbursement of additional cost through the Form B process. CLOSED; NO FURTHER ACTION. Item is captured under applicable JT Bid Item, See Trend 60.			

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1251-0026	09/14/11	082-0026	Install cantilever footing in lieu of regular OCS foundation at 2 locations on Mason Street between Geary and O'Farrell	2						The sub-basement in the public parking garage at O'Farrell/Mason extends beyond the property line up to the curb line. Therefore, regular foundations as per original design could not be installed. CLOSED; No FURTHER ACTION. Item is captured under applicable OCS Bid Item, See Trend 60.			
1251-0027	09/20/11	082-0027	Accelerate installation of AT&T facilities in order for AT&T to start cut-over sooner	1	CMB-0056	Agree	11/30/11	+281,435		Acceleration is necessary to avoid potential delay impacts to Central Subway follow-on contracts. Initial Cost Estimate \$287,000. COR #40 COMPLETE, NO FURTHER ACTION; CMOD #10	CMOD #10 Approved	MAB	
1251-0028	10/18/11	082-0028	Furnish and install AT&T Manholes 5828 (Stockton), 5831 (Geary), 5832 (O'Farrell) and 113 (O'Farrell)	6	CMB-0057	Agree	10/26/11	+157,000		AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. AT&T agreed to reimburse SFMTA through the Form B process. COR #43 COMPLETE, NO FURTHER ACTION; CMOD #11	CMOD #11 Approved	MAB	
1251-0029	10/26/11	082-0029	Rebuild existing AT&T vault 133 at Post/Stockton and demolish existing AT&T vaults 403 (Ellis) and 113 (O'Farrell)	6						AT&T asked SFMTA to rebuild existing vault 133 (estimated cost at \$30k). Demolition of existing vaults 403 and 113 was done on force account but was not included in the cost shown in Trend No. 28 and 19 (estimated cost at \$20k). AT&T agreed to reimburse SFMTA through the Form B process. COR #64 Vault 133 rebuild is superseded by Trend 40. Demolition of existing vaults 403 and 113 is superseded by Trend 43. Updated projected cost impact from \$50,000 to \$0. CLOSED; NO FURTHER ACTION. Demo of exiting vaults 403 and 113 are superseded by Trend 43. (See CMOD #23)			
1251-0030	10/26/11	082-0030	Enlarge existing PG&E vault 873 at SW Geany/Stockton	6	CMB-0058	Agree	11/02/11	+40,000		PG&E asked SFMTA to enlarge vault 873. PG&E agreed to reimburse SFMTA through the Form B process. CMB approved a NTE amount of \$40K COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21		1/2/2013
1251-0031	10/26/11	082-0031	Additional PG&E conduits crossing O'Farrell on east side of Stockton (Task Order #32)	6	CMB-0058	Agree	11/02/11	+27,534		PG&E asked SFMTA to install additional conduits. PG&E agreed to reimburse SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21		1/2/2013
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	+98,439		PG&E gas drawings were not included in the bid package and there was no bid item to capture this work. Gas drawings was issued by PG&E in June 2011. PG&E agreed to reimburse SFMTA through the Form B process. 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. COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19		1/2/2013
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 COMPLETE, NO FURTHER ACTION; CMOD #13 (formally CMOD #14)	CMOD #13	МАВ	4/21/2012
1251-0034	01/10/12	082-0034	Install temporary support as required to protect existing live utilities that are encreaching 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 COMPLETE. NO FURTHER ACTION: CMOD #17	CMOD #17	MAB	6/28/2012
1251-0035	01/11/12		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 \$19,370.73. 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 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.			

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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 cred to 4 same amount (554, 832, 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 CLOSED; NO FURTHER ACTION. Based on field meeting with BIH on 1/17/12; this work will be completed under CN 1252 as planned.			
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	+25,926		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 siurry 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, Abert Hoe reported that he had instructed the design team during the design phase to investigate if this lateral and make the connection to the sever main at Maiden Lane. RE was asked to investigate if this could be a possible error and omission by the sever design. (See Trends #44 and 45) <b>COMPLETE, NO FURTHER ACTION; CMOD #18</b>	CMOD #18		01/02/13
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	+29,268		JCDecaux refused to remove the remaining (2EA) kiosks without being paid for work already completed. The CMB approved on 1/04/12 Task Order No. 35 (Removal of 3EA sidewalk kiosks) as requested for the work already completed. On 10/24/12 the CMB approved Trend #38 removal of the remaining 2EA kiosks; work already completed and paid for as part of the approved CMB 0064 dated 01/04/12 for a total of <b>5EA kiosks</b> <b>removed</b> . Total work priced at \$29,268. <b>COMPLETE, NO FURTHER ACTION; CMOD #22</b>			
1251-0039	01/17/12	082-0039	Furnish and install 2ea benches along 5th Street	1				+5,250		COMPLETE, NO FURTHER ACTION; CMOD #22			
1251-0040	02/15/12	082-0040	Fumish and install AT&T Manholes 133 at Post/Stockton	6	CMB-0070	Agree	04/11/12	+45,000		AT&T requested SFMTA for Synergy to rebuild manhole 133 at Post/Stockton. COR #64 AT&T agreed to reimburse SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14	MAB	04/24/12
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 ductbank. COR r63 AT&T agreed to reimburse SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14	MAB	04/24/12
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 ductbank. AT&T agreed to reimburse SFMTA through the Form B process. COR #62 COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14	MAB	04/24/12
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	+55,961		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 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 CN12511 #'s 72 & 80) OMPLETE, NO FURTHER ACTION; CMOD #23	CMOD #23		01/02/13
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	+20,014		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 <b>COMPLETE, NO FURTHER ACTION; CMOD #18</b>	CMOD #18		01/02/13
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	+25,145		Contract plan SW-3 shows 2 each existing laterals coming from the Union Square garage to be connected to the new main at approximate sta 128+55. However, the laterals were found to be connected to the downstream end of the existing main (toward Geary), which is called for to be abandoned in 1251 to make room for the future station. (See Trends #37 and 44) COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18		01/02/13
1251-0046	03/06/12	082-0046	Additional cost for enlarging PG&E vault 584 on O'Farrell east of Stockton	6				+60,053		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 through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1251-0047	04/10/12	082-0047	Enlarge Muni Vault 900A on Stockton between Post and Geary	2	CMB-0082	Agree	10/31/12	+15,801		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. RE awaiting COR (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26		01/02/13
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 467 RE Denied COR (City Letter 26); however Contractor will most likely send rebuttal. CLOSED; NO FURTHER ACTION.			
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) COMPLETE, NO FURTHER ACTION			
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. RE preparing modification (CMB 0074 approval - see Trend CN1251 #'s 67, 74 & 75) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		01/02/13
1251-0051	04/10/12	082-0051	Intercept existing PG&E ductbank and terminate into vault 5464 at Market/Ellis	6				+15,000		PG&E requested to reroute existing ductbank running north out of MH 1803 at 4th/Pioneer Place into MH 5464 at Market/Ellis COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013
1251-0052	04/10/12	082-0052	Reroute unforeseen existing waterline on Geary east of Stockton	2	CMB-079	Agree	10/10/12	+28,852		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. RE awaiting COR (CMB 0079 approval - see Trend CN1251 #'s 65 & 70). This is potentially E&O lissue due to unforeseen existing waterline on discovered along Geary Street (east of Stockton Street) not sown in the contract drawings. COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28		1/2/2013
1251-0053	04/10/12	082-0053	Additional cost for premium to accelerate contract work	1	CMB-083	Agree	11/07/12	+10,590		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 through the Form B process. 11/07/12 (CMB 0083 approval - see Trend CN1251#'s 49, 59, and 64) COMPLETE, NO FURTHER ACTION; CMOD #27	CMOD #27		01/02/13
251-0054	04/17/12	082-0054	Additional waterproofing at FIDM and north end of Crate & Barrel	2				+8,151		Sidewalk in front of FIDM and north end of Crate & Barrel did not have a sub-sidewalk basement, hence the original plan did not call for waterproofing of the primary wall. While excavating for the joint trench, contractor found the existing waterproofing to be spalling and peeling off from the primary wall. COR #72 COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22		01/02/13
1251-0055	04/17/12	082-0055	Install Swiveloc lids on all PG&E vaults	6				+29,255		PG&E requested SFMTA to add this scope to the 1251 contract for safety reason. COR #72 PG&E agreed to reimburse SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013
1251-0056	05/31/12	082-0056	Additional work on force account related to sewer installation	2				+45,156		Additional work due to unforeseen and differing conditions during installation of sewer. COMPLETE, NO FURTHER ACTION; CMOD #15	CMOD #15	MAB	06/01/12
251-0057	05/31/12	082-0057	Additional work on force account related to water installation and NRG vault demolition	2				+39,599		Additional work due to unforeseen and differing conditions during installation of water and demolish existing NRG vaults that are in conflict with utility installation. COMPLETE, NO FURTHER ACTION; CMOD #16	CMOD #16	MAB	06/01/12
251-0058	05/31/12	082-0058	Additional streetlight conduit on 5th Street between Harrison and Bryant	2	CMB-0083	Agree	10/31/12	+1,754		The existing streetlight pullboxes new cables were supposed to be connected to per contract plan did not have power. New conduit needs to be install from the power source. COR #75 RE to review COR (CMB 0082 approval - see Trend CN1251 #'s 47, 76 & 78) COMPLETE, NO FURTHER ACTION; CMOD #25	CMOD #25		1/2/2012
1251-0059	06/26/12	082-0059	Accelerate contract work at Barney's front	1	CMB-0083	Agree	11/07/12	+16,948		As a result of numerous meetings and complaints by Barneys, it was decided to accelerate contract work in order to restore Barneys sidewalk earlier (CMB 0083 approval - see Trend CN1251#* 53, 49, and 64) COMPLETE, NO FURTHER ACTION; CMOD #27	CMOD #27		01/02/13

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1251-0060	06/26/12	082-0060	Final Bid Item Reconciliation	4					+25,946	Bid item analysis for entire contract as of 6/12/12.			
1251-0061	06/26/12	082-0061	Excavate for PG&E cutover at 177 Stillman	6				+15,000		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 through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013
1251-0062		082-0062	Additional waterproofing at Macys Men's wall	2				+24,774		Contract did not call for waterproofing at Macys Men's wall. However, when contractor dug for the joint trench, it was found that the existing waterproofing has deteriorated and needed to be replaced. COR#20 COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22		1/2/2013
1251-0063		082-0063	Excavation and restoration cost for PG&E gas tie-in and kill holes. Part II	6				+40,000		After completion of Part I (see trend 32), PG&E had offered to self-perform the excavation and restoration of the gas tie-in/kill holes because PG&E had crews available to perform the work. However, PG&E no longer have available crews, hence Synergy had to continue and finish excavating and restoring the last tie-in/kill holes. <b>PG&amp;E agreed to reimburse SFMTA through the Form B process.</b> <b>COMPLET, NO FURTHER ACTION; CMOD #24</b>	CMOD #24		1/2/2013
1251-0064		082-0064	Accelerate finish and detail work of AT&T and PG&E vaults	1	CMB-0083	Agree	11/07/12	+4,704		In order to expedite turn-over of AT&T and PG&E vaults, SFMTA directed Synergy to accelerate the detailing and finish work of these vaults. SFMTA will pay Synergy premium cost for OT hours. 11/07/12 (CMB 0063 approval - see Trend CH1251#'s 53, 59, and 49) COMPLETE, NO FURTHER ACTION; CMOd #27	CMOD #27		1/2/2013
1251-0065		082-0065	Additional fittings for AWSS lateral and chipping of pole foundation at Market/Ellis	2	CMB-0079	Agree	10/10/12	+21,779		An existing Muni pole foundation is in the way of the AWSS lateral. Additional fittings are required to complete contract work. RE awaiting COR (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. COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28		1/2/2013
1251-0066		082-0066	Intercept PG&E conduits at Vault 573 at Geary east of Stockton	6				+15,000		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 through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013
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		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 RE presented COR to CMB 7/25; direction given to develop one CMod with all remaining items to be purchased for the new OCS bypass. RE to prepare modification (CMB 0074 approval - see Trend CN1251 #'s 50, 74 & 75) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		01/02/13
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 punchist, contractor now has to resequence 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 OFarrel 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. COMPLETE, No FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013
1251-0069		082-0069	Removal of abandoned PG&E gas valve (8each) and install anodes	6				+15,000		PG&E asked Synergy to remove all abandoned gas valves (8each) PG&E agreed to reimburse SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013
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	+14,033		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 sub-sidewalk basement per contract, which now made the steel pipe susceptible to corrosion. SFWD does not want to tei-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 RE reviewing COR (CMB 0079 approval - see Trend CN1251 #'s 52 & 65) COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28		1/2/2013

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
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 sire 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</b> : NO FURTHER ACTION.			
1251-0072	08/08/12	082-0072	Additional AT&T trench from new vauit 5829 to existing vauit 127 on Geary east of Stockton	6	CMB-0076	Agree Conditionally	10/03/12	+15,020		AT&T requested new conduits to maintain continuity between the 2 vaults. AT&T agreed to reimburse SFMTA 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 RE to prepare modification (CMB 0076 approval - see Trend CN1251 #'s 43 & 80) COMPLETE, NO FURTHER ACTION; CMOD #'14	CMOD #14		1/2/2013
1251-0073	08/08/12	082-0073	Additional work to install water and electrical utilities for Flower Stand on Geary west of Stockton	1					+18,840	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>RE to prepare mod</b>			
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. RE Tracking work on FAR RE to prepare modification (CMB 0074 approval - see Trend CN1251 #'s 50, 67, & 75 also). COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		01/02/13
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. RE Tracking work on FAR RE to prepare modification (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20		01/02/13
1251-0076	08/08/12	082-0076	Adjustment to OCS on Mason Street	2/3	CMB-0082	Agree	10/31/12	+14,987		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. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26		1/2/2013
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		Owest, TCG and UCCO requested Synergy to tie-in their existing conduits into the new vaults that Synergy installed per contract. The utility companies are responsible for connecting existing conduits into new vaults, therefore, this request is considered extra work. Private Utilities companies agreed to reimburse SFMTA through the Form B process. RE Tracking work on FAR CMB agreement contingent upon CMod package to include evidence from all utilities that cost are reimbursable to SFMTA through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #25	CMOD #25		
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	+27,644		Several obstructions, i.e. buried concrete, boulders, brick, abandoned utilities were discovered during excavation and installation of OCS poles along Mason and 5th Street. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251 #'s 47, 58 & 76) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26		1/2/2013
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. PG&E agreed to reimburse SFMTA through the Form B process. RE Tracking work on FAR COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24		1/2/2013
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 Conditionally	10/03/12	+58,180		Unforeseen conditions were encountered during installation of select AT&T vaults including joint trenches leading to these vaults. CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends AT&T agreed to reimburse SFMTA through the Form B process. RE to prepare modification (CMB 0076 approval - see Trend CN1251 #'s 43 & 72) COMPLETE, NO FURTHER ACTION; CMOD 23	CMOD #23		1/2/2013

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1251-0081	09/13/12	082-0081	PG&E concrete cover versus CDF on electrical ductbank	6					+99,751	Contract Plan JT-014 calls for CDF cover on PG&E ductbank. However, PG&E requested to use regular concrete due to heat dissipation problem with CDF. 12/19/12 - Presented to CMB, direction given to finalize cost and obtain a Form B agreement with PG&E			
Contract 1251	Totals							+4,482,370	+144,537	Of the total cost exposure shown, changes have been absorbed by allocated contingency in the amount of \$2,618,313. Additional potential exposure shown includes credits provided through Utility Reimbursement. Final Contract Closeout Total \$21,003,607			
Contract 1252	- Tunnels												
1252-0001 COR #001	04/11/12		AWSS Conflict w/ Low Pressure Water	6	CMB-0091	Agree	01/16/13		+16,906	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. 01/16/13 - CMB NOT TO EXCEED \$16,900			
1252-0002 COR #002	04/11/12		AWSS Add. Tie-Rods 4th-Harrison	6						The AWSS line must be restrained a certain distance beyond the 90 degree ebow we are installing under contract 1252. The 1252 contract work includes excavating on both sides of this 12-feet portion of pipe. Additional work scope (per Michael Simth @ 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.			
1252-0003 COR #003	04/06/12		AT&T Vault Conflict-4th & Harrison	6	CMB-0092	Agree	01/16/13		+41,218	was discovered to be in conflict with the current alignment of the 42° RCP sewer main. Verbal authorization was given by an Tat representative to make modifications to the vault. COR 003 has been submitted by BHI in response to this issue. Work is to be charged via SFMTA Form B agreement to AT&T. Work is to be charged via SFMTA Form B agreement to AT&T. 01/16/13 - CMB NOT TO EXCEED \$21,089			
1252-0004 COR #006	04/06/12		PG&E live electrical delays	2	CMB-0092	Agree	01/09/13		+7,600	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.			
1252-0005 COR #007	06/12/12		Oil filled pipe @ Launch Box	2					+9,979	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.			
1252-0006 COR #008	07/16/12		TIA - Associated w/ COR 001, COR 002, and COR 003	6					-0-	TIA and Overhead Costs related to COR 001, 002 and 003.			
1252-0007 COR #009	05/23/12		MOS - Live Utilities: PGE, AT&T, and SFWD 8' Water Line extra kill hole location	2						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.			
1252-0008 COR #010	07/16/12		MOS - Demo PGE duct bank / SF City 911 fiber optic line	2	CMB-0094	Agree	01/16/13		+4,919	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			
1252-0009 COR #011	06/29/12		MOS - Traffic Signal line re-route south headwall	6	CMB-0095	Agree	01/16/13		+37,500	After potholing Synergy discovered several traffic lines which were in the proposed location of the south MOS headwall. Traffic Lines re-routed.			
1252-0010 COR #012	07/16/12		MOS - Archaeological Standby North Headwall	2	CMB-0096	Agree	01/16/13		+16,861	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a layer of "Midden" or Native American debris			
1252-0011 COR #013	07/16/12		MOS - SL conduit from PG&E vault @ north headwall	6					+10,903	Permanent power is required to supply an existing Street Light box north of the MOS N headwall.			
1252-0012 COR #015	07/16/12		LB - Pre-Excavation for Slurry Walls	2						Pre-excavation of slurry wall panels due to CDF encased sever 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 sever main and concrete encasement was incorrectly shown in the contract drawings to be approximately 4'-5' below the street surface.			

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1252-0013 COR #015	06/29/12	MOS - Standby Delays @ south headwall due to live TS lines	6					-0-	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.			
1252-0014 COR #019	07/16/12	UMS - Grant street 2 way conversion (e- & striping)	7				-0-		In order to implement a full street closure for Stockton Street at the UMS location the DPT recommended that Grant Street be converted from an existing one-way street to a two way street for vehicular traffic. 07/f4712 - This potential change was brought before the CMB. Board's decision to have DPT perform the work. CLOSED; NO FUTHER ACTION			
1252-0015 COR #020	06/22/12	PROJECT WIDE - Utility Demo limit reduction credit	5					-0-	BIH's subcontractor Synergy Project Management (SPM) would like to minimize the limits of utility demo at the Launch Box, Moscone station, UMS station and TBM Retrieval Shaft locations. Closed - SFMTA to BIH/SPM 'Build per Plan'.			
1252-0016 COR #021	07/16/12	UMS - Reduced Duration	5	CMB-0073	Agree (Conditionally)	08/01/12		-0-	No cost change for acceleration of utility relocation, ground improvements (jet grouting), and headwall construction at Union Square/Market Street Station. Approval condition up incorporating correctness to backup documentation as required by & documented in CMB mtg. RE to prepare modification Modification in process	CMod #3		
1252-0017 COR #022	07/10/12	MOS - Asbestos Pipe at north headwall	2	CMB-0089	Agree	01/09/13		+6,000	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered fryable asbestos-laden transite pipe.			
1252-0018 COR #023	07/10/12	MOS - Brick Wall #2 discovered @ north headwall	2					-0-	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.			
1252-0019 COR #026	08/07/12	MOS - Asbestos Pipe at south headwall	2	CMB-0085	Agree	01/09/13		+30,000	Transite pipe was discovered during MOS south headwall excavation.			
1252-0020 COR #027	08/10/12	MOS - Oil filled pipe at south headwall	2	CMB-0088	Agree	01/09/13		+8,600	A pipe containing oil was discovered during MOS south headwall excavation.			
1252-0021 COR #029	06/19/12	MOS - Todco scaffolding reimbursement	2	CMB-0097	Agree	01/16/13		+1,718	1252 contract work requires the removal of scatfolding erected by Fine Line Construction, the contractor performing renovations on the Woolf House. RE reviewing COR			
1252-0022 COR Closed	03/15/12	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: Elis Street and Green Street shafts and associated compensation grounding, MOS headwals and jet grouting, jet grouting at crosspassage 5, UMS head wals and jet grouting, OCS removal along Stockton Street from Geary to Elis, and the TBM retrieval shaft. On April 13, SFMTA released the MOS headwals and jet grouting, jet grouting, orcsspassage 5, UMS jet grouting, OCS removal along Stockton Street from Geary to Elis, and preparatory and utility work necessary for the construction of the retrieval shaft and preparatory and utility work necessary for the construction of the retrieval shaft. <b>CLOSED NO FURTHER ACTION.</b>			
1252-0023 COR #004	05/07/12	Manhole in east guidewall footprint	2				-0-		While performing excervation 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. CLOSED; NO FURTHER ACTION.			
1252-0024 COR Closed	04/18/12	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, BiHUV's subcontractor Synergy encountered what was identified to be a 16" depressurized gas main. This gas main contained a 2" gas line which is shown on contract drawing UD-502 to be abandoned/removed. CLOSED; NO FURTHER ACTION.			

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1252-0025 COR #005	04/18/12	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 r0eportedly 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 COR Closed	06/12/12	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 COR #014	07/16/12	MOS - 76 Gas Station fencing	1				-0-		SFMTA requested BiH to install fencing around the perimeter of the 76 gas station at 4th and Folsom St. Issue closed, cost of fence paid by BiH in return for use of gas station lot. Temporary use of 800 Folsom Street site for construction staging. Use of this site would be a tradeoff between SFMTA and BiH. The Contractor would maintain the sites security and up-keep in exchange for not billing CLOSED; NO FUTHER ACTION			
1252-0028 COR #016	07/16/12	LB - SPTC delays due to concrete encased 8* sewer	2				-0-		Closed. Combined with COR 015. Verbal information presented to CMB at mtg 07/25 as a potential change. CLOSED; NO FUTHER ACTION			
1252-0029 COR #018	07/16/12	MOS - South Headwall re-design	1					-0-	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 ment for labor and material cost of this COR. RE will proceed with scoping the work			
1252-0030 COR #024	08/02/12	Ellis - Utility demolítion	3					+38,678	BIH says that no utilities were shown at Ellis; however, Reference Drawing UE-126 shows utilities.			
1252-0031 COR #025	07/25/12	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 COR #028	08/07/12	Ellis asbestos abatement	2					+35,385	A steam line containing asbestos was discovered during potholing at the Ellis Street Shaft.			
1252-0033 COR #030	08/15/12	LB - Class 1 Hazardous Material Haul off	2					+198,276	BIH trucking costs for Class 1 haul off. Also see COR 054 regarding Class 1 Haz material haul off for Phase 2. Cost to be reimbursed by "ES-8". Additional costs hazardous waste allowances.			
1252-0034 COR Unsubmitted	08/15/12	LB - Jet Grout Quantity Overrun	4					+812,497	The contract drawings call for the contractor to determine the extent of jet grouting at the launch box. BIH's jet grout quantities are projected to overrun the prescribed bid quantity by up to 40 percent.			
1252-0035 COR Unsubmitted	08/24/12	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 COR #035	09/19/12	Additional Road Base on Fourth Street	2					-0-	BIH's subcontractor Synergy Project Management (SPM) discovered what they believe to be an additional layer of road base under the existing asphalt and road base layer while performing roadway demo work along the west side of Fourth street between Harrison and Bryant St. The additional layer is estimated by BIH/SPM to be approximately 8" - 12" thick.			
1252-0037 COR Unsubmitted	09/19/12	DPW permitting potential impacts	7					TBD	DPW Permitting issue to cause potential impacts. DPW is not issuing BIH permits for excavating the MOS headwalls, let 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 COR #038	09/19/12	Manhole in West Guidewall Footprint	2	CMB-0101	Agree	01/23/13			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 agreed Not to Exceed value \$4052.17			
1252-0039 COR Unsubmitted	09/19/12	Panel W-33 Obstruction	2						While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA- NCC unexpectedly encountered buried (wood pile?) dehrs 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 COR #052, PCC #1	09/19/12	Revisions to Moscone North Headwall Elevation (Top)	1	CMB-0099	Agree	01/16/13		+21,181	SFMTA initiated change to revise headwall elevations to facilitate a change in the roof elevation of MOS station.			
1252-0041 COR #060, PCC #2	09/19/12	Revisions to UMS Headwall Concrete and Reinforcement Limits	1					TBD	SFMTA initiated change to revise UMS headwall concrete and reinforcement limits to provide a cost savings.			
1252-0042 COR #031	09/19/12	Retrieval Shaft - Unmarked 12" Steel Pipe	2					+6,000	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.			
1252-0043 COR #032	09/19/12	LB - Panel W29 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-29.			
1252-0044 COR #033	09/19/12	Ret Shaft - 20' Water Line Conflict	2					+67,000	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 the merit of this COR. RE will proceed with scoping the work.			
1252-0045 COR #034	09/19/12	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 COR #036	09/19/12	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 COR #037	09/19/12	UMS - 12* steel pipe removal	3					-0-	A 12 <sup>e</sup> 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 COR #039	09/19/12	MOS - 16" Steel Pipe removal @ northeast headwall	3					+3,599	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.			
1252-0049 COR #040	09/19/12	MOS - Extra Road Base @ northeast headwall	2					-0-	BH'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'.			
1252-0050 COR #041	09/19/12	LB - Impacts due to live PG&E electrical lines (Synergy)	6	CMB-0098	Agree	01/16/13		+1,392	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.			

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1252-0051 COR Executed	10/25/12	Contract Amendment No. 2	1					(3,040,713)				
1252-0052 COR #042	10/25/12	LB - Panel W25 Wood Pile	2					+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.			
1252-0053 COR #043	10/25/12	LB - Panel W30 Wood Pile	2					+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.			
1252-0054 COR #044	10/25/12	MOS - 16 steel pipe removed @ southeast headwall	3					+1,932	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.			
1252-0055 COR #045	10/25/12	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.			
1252-0056 COR #046	10/25/12	UMS - Unmarked steel pipes (6", 12", 14") / Duct Bank	6					+15,000	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.			
1252-0057 COR #047	10/25/12	Ret Shaft - unmarked 10' steel piped/duct bank	6						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 3° RCP sever 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.			
1252-0058 COR #048	10/25/12	UMS- 3'x5' brick sewer at south headwall	6						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.			
1252-0059 COR #049	10/25/12	Ret Shaft - Tree trimming debris haul off	7					+1,500	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.			
1252-0060 COR #050	10/25/12	Ret Shaft 12" steel pipe removed at Union/ Columbus	6					+2,848	BIH/SFMTA to finalize labor rates			
1252-0061 COR #051	10/25/12	Ret Shaft - Elevation design conflict (30' low ppl water / sewer)	3					+26,000	SPM preparing COR form.			
1252-0062 COR #053	10/25/12	Chinatown - Night drilling for instrumentation	7					-0-	CLOSED			
1252-0063 COR #054	10/25/12	LB Class 2 Hazardous Material Haul Off (Phase 2)	2					+115,915	Cost to be reimbursed by "ES-8". Additional costs hazardous waste allowances.			
1252-0064 COR #055 PCC #04	10/25/12	PCC No. 4 - Ret shaft sewer pipe material change	1					+153,740	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, X-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 sever along the shaft.			
1252-0065	10/31/12	UMS - Tree Removal	1					+13,345	SFMTA is directing removal of a tree at the northeast corner of Stockton and O'Farrell St.			
1252-0066 COR #059 PCC #05	10/31/12	PCC No. 5 - Ret Shaft Water Dist. Pipe Material Change	1					(31,012)	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 nches.			
1252-0067 COR #058	11/05/12	Ret Shaft - Additional 10" steel pipe removal	6					+850	Work is a continuation of work performed in COR 047.			

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1252-0068 COR #056 PCC #03	11/05/12	PCC No. 3 - General Detour Signage	1					+22,180	BIH/SFMTA to finalize labor rates 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.			
1252-0069 COR #064 PCC #06	11/05/12	 PCC No. 6 - Supplemental instrumentation of BART tunnel lining.	1					+97,369	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 COR Unsubmitted	11/13/12	Full Closure of 4th Street	1					-0-	Construction Week Ending 11/04/12 - 11/11/12.			
1252-0071 COR #061	11/13/12	LB - Panel P-17 Buried Obstruction	1					+5,000	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.			
1252-0072 COR #062	11/16/12	LB – Panel P-9 Buried Obstruction	2					+150,000	CJA-NCC discovered a buried obstruction while excavating slurry diaphragm wall panel P-9 at the Launch Box location. 0/102/13 - 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.			
1252-0073	11/16/12	UMS - 48" Steel Pipe @ southwest headwall	2					+250,000	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.			
1252-0074 COR #065	12/12/12	LB – Panel P-12 Buried Obstruction	2					+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.			
1252-0075 COR #066	12/12/12	Retrieval Shaft - Unmarked 12* Steel Pipe	2					+4,250	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.			
1252-0076 COR #067	12/12/12	LB - Panel P-10 Buried Obstruction	2					+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 or reference the tag numbers in the write-up when force account work is involved.			
1252-0077 COR #NA PCC#07	12/19/12	PCC No. 7 BART Temporary Annex Wall	1					+7,498	SFMTA is requesting Contractor construct temporary wall for Bart Annex for SFMTA use.			
1252-0078 COR #NA PCC#09	01/23/13	UMS Headwall - Unknown Buried Pipe	1	CMB-0100	Agree	01/16/13		+75,000	Related to COR 063. SFMTA instructed BIH to perform investigation into the 48" diameter steel pipe as it is a Differing Site Condition. 01/16/13: Presented and tracked under PCC 09.			
1252-0079 COR #NA PCC#10	01/23/13	Relocation of TBM Retrieval Shaft	1					-0-	Modify Bid Item ST -4 Construction of Base Bid Permanent Retrieval Shaft to relocate the TBM retrieval Shaft to 1731-1741 Powell Street			
1252-0080 COR #NA PCC#NA	01/23/13	 Segment Measuring Frequency	10					твр	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.			

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1252-0081 COR #NA PCC#NA	01/23/13		F21 and Old Navy Instrumentation Proposal	10					TBD	Wang Technology is proposing instrumentation changes to the Liguid Level Sensors and Tilt Beams in the basements of Old Navy and Forever 21.			
1252-0082 COR #68 PCC#NA	01/23/13		UMS - AT&T Vault Walkway @ North.Headwall	2					+8,000	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.			
Contract 1252	Totals							-0-	+69,859				
CONSTRUCTI	ON TRENDS	S (Based on	n #1250, #1251 & #1252 Trending Log and Cmods) - SUE	STOTALS:				+7,662,870	(1,263,103)				
DESIGN TREN	IDS												
FD-001	07/31/10	084-0001	Narrowing of Platform at UMS	1	CMB-0006	Agree	08/04/10	(800,000)	(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)	(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)	(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)	(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)	(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-	-0-				
FD-006	08/03/10	086-0002	Station Headwalls - MOS	1	CMB-0008	Agree	08/18/10	-0-	-0-				
FD-007	08/03/10		Cross-passages	1	CMB-0018	Agree	09/15/10	-0-	-0-				
FD-008	07/30/10		Trolley Re-route @ Columbus & Powell	1	CMB-0017	Agree	09/15/10	-0-	+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	Descriptions Douting of Water Course and Cos Isterals from	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				

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
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						
FD-016	10/06/10		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		UMS Apple Store Entrance	1	CMB-0013	Disagree	11/10/10			Additional Information Pending.			
FD-019	10/06/10		MOS TOD Configuration	1	CMB-0014	Agree	11/10/10		TBD				
FD-020 FD-021	10/06/10 01/14/11		UMS Emergency Stair #4 Relocation CTS Lowering and Stations Reconfiguration	1	CMB-0015 CMB-0027	Agree Agree	11/10/10 01/19/11	(18,000,000.00)	TBD (18,000,000)	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		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	084,085,08 6	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	<ol> <li>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.</li> </ol>			
FD-028	08/03/11	086-0004	MOS Revisions to Emergency Ventilation Requirements		CMB-0052	Agree	09/07/11			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			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			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 Operation practices and therefore does not involve new 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. 3/14/12: "Buy America" issue no longer applicable. Revised ECP element - remove H&K switch machines and replace with hydraulic/120V switch machines such as Nortrak or equal.			
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		mab	06/27/12

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
FD-036	06/26/12		Surface Segment Sewers - 4th St.		CMB-0072	Agree	07/18/12			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 Stretss 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		mab	06/27/12
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 Stdewalk Bub out (Southwest corner Stockton/Washington To bring the Contral Subway Project - Chinatown Station in closer conformance wit the City's General Plan, SF Planning Department in its May, 2012 GPR Letter (recommends) making design changes specifically the extension of the sidewake bub-out at Stockton Street to help create a "station Plaza". This elongated bulkbout on the southwest corner (SWC) of Stockton and W ashington 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			
FINAL DESIG	N TRENDS (	Based on A	NI ECPs) - SUBTOTALS						+3,866,000	Incorporated budget increases have been absorbed by allocated and unallocated funds and the program budget to date remains \$1,576,300,000.			
OTHER TREN	IDS												
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					(7,967,949)	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 (OCWD). 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	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 YOE dollars and require use of unallocated contingency.			
X53-004	06/26/12	084-0002								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 YOE	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						
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 YOE	7	CMB-0046	Agree	07/27/11			Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure			
X55-002	10/25/11		Change MOS Advertise Date to June 25th, 2012							DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.			

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
X55-003	11/02/11		Change MOS Advertise Date to May 23rd, 2012							Change MOS Advertise Date from June 25, 2012 to May 23, 2012 (-22 working days)			
X55-004	06/26/12		Change MOS Advertise Date to Aug 20, 2012							Change MOS to August 20, 2012			
X56-001	10/25/11		Change STS Advertise Date to July 27th, 2012							DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out the Station's Advertise Dates. STS Advertise Date is staggered from Station's Advertise Dates.			
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							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-		
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.	0173 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, 11/2/10,3/2 4/11	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	SS	
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	SS	
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	SS	
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)	1						Stations and track and systems into Contract 1300 (SSTS)			
X80-015	12/17/12		Changing the Bid Opening date and condensing the Contract Duration for Contract 1300	1						Changing the Bid Opening date and condensing the Contract Duration for Contract 1300			
THER TREN	DS (Based o	on Various 1	Trends)						+59,258,533	Current Forecast reflects a net +3,537,933 unfavorable impact for all Other Trends.			
RAND TOTA	LS								+61,861,430	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 \$1,576,300,000.			
			: The following trends are listed for administrative pur may not be approved.	poses. The	e dollar amou	unts are reflect	ted in the "C	ther Trends" sect	ion of this log in the	e form of cost (budget) transfers - ie CCOP's. The total values indicated for each profess	sional contract	are for tracki	ng all

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						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
Contract CS-	155-1												
1551-0001	07/30/10	071-0001	Conform Contract Terms per Negotiations from 10/2/09 to 11/6/09	7				-0-	-0-	To be addressed in Amendment 1.	Amendment 1 Pending		
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 COMPLETE, NO FURTHER ACTION; Amendment #2	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 COMPLETE, NO FURTHER ACTION; Amendment #2	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 COMPLETE, NO FURTHER ACTION; Amendment #2	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 COMPLETE, NO FURTHER ACTION; Amendment #2	Amendment 2 Approved		
1551-0008		071-0008	Delete Optional Tasks - Tasks 1-14	1				-0-		Deleted Options in the amount of (529,932) in Amendment has been reversed through Budget Authorization #50. COMPLETE, NO FURTHER ACTION; Amendment #2	Amendment 2 Approved		
1551-0009		071-0009	CTS Lowering	1		Authorized	12/08/11	+165,000		Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #3	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 COMPLETE, NO FURTHER ACTION; Amendment #4	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 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment		
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 COMPLETE, NO FURTHER ACTION; Amendment #4	4 Approved Amendment		
1551-0013		071-0013	Extend SubSidewalk Closure Wall ECP-FD013	7		Authorized	12/08/11	+85,233		COMPLETE, NO FURTHER ACTION; Amendment #4 Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	4 Approved Amendment		
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	4 Approved Amendment		
1551-0015			Retrieval Shaft Redesign - Sewer By Pass	7					+56,000	COMPLETE, NO FURTHER ACTION; Amendment #4 Awaiting documentation from Designer	4 Approved		
1551-0016			Design Measures for Settlement Protection	7						Awaiting documentation from Designer			
1551-0017			Incorporate Headwalls MOS/UMS	1		Disagree at this	11/01/11			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.			
Contract CS-1	55-1 Total							+696,882	+290,000	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 +\$331,411. Currently, overall contract value remains unchanged in the amount of \$6,500,000.			
Contract CS-	155-2			-	-								
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 71/1/10 letter from CSDG and includes signed approval by SFMTA. Amendment No. 1 authorized by ED/CEO on 12/21/11. COMPLETE, NO FURTHER ACTION; Amendment #1	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. COMPLETE, NO FURTHER ACTION; Amendment #1	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 - On Hold.			
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. COMPLETE, NO FURTHER ACTION; Amendment #1	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. See 1552-0006 Rev. 1 for most current estimate			
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.			

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ltem #	Date Initiated		Change Description	Change Type	CMB No.	Statu	IS		Cost Impact re/(Benefit)	Comments	Modification Number		Project Controls mpleted Change orm
						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
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 neevaluated - proposed cost to be resubmitted. 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.	Option		
Contract CS-1	55-2 Total							+1,046,324	+850,384	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.			
Contract CS-	155-3												
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 8/9/11authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0002	08/09/11	073-0002	Authorization to commence optional tasks 12.05 Architectural	1		Authorized	08/01/11	+257,129		SFMTA letter 0933 from ED/CEO dated 8/9/11authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	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 8/9/11authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0004	08/09/11	073-0004	Authorization to commence optional tasks 12.12E traction power cables for CAD production	1		Authorized	08/01/11	+52,800		SFMTA letter 0933 from ED/CEO dated 8/9/11authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0005	09/19/11	073-0005	Proposal to hire Wilson Ihrig to support Acoustics, Noise and Vibration tasks.	7		Authorized	03/08/12	+38,380		Signed by Director of Transportation 3/8/2012. COMPLETE, NO FURTHER ACTION ; Amendment 2	Amendment 2 Approved		
1553-0006	09/22/11	073-0006	Proposal to exercise optional task 12.07 Public Art.	1		Authorized	11/04/11	+10,285		Letter dated 9/22/11 to DOM. PMCM response pending. Priced level of Effort assumed for this task. SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task.			
1553-0007	09/27/11	073-0007	Proposal to exercise optional sub-task 12.12 structural design of the OCS attachments.	7					+59,460	Letter dated 9/27/11to DOM. NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHAINGE. PMCM has responded to clarify scope in stations and Tunnel Design. Awaiting resubmittal of request by DP3			
1553-0008	10/05/11	073-0008	Scope Clarification - Add Emergency and Location Signage.	7		Disagree A.12.08- Signage	11/09/11			Letter dated 105/11 to DOM. NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHANCE 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	Proposal to exercise mechanical optional task A 12.11 to design a water line on the FBS station platform.	1		Authorized	11/04/11	+33,000		SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0010		073-0010	Proposal to exercise Task 12.01 Surface Segment site Drainage	1		Authorized	11/04/11	+108,240		SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0011		073-0011	Proposal to exercise Task 12.02 Sewer Relocation and Analysis Report.	1		Authorized	11/04/11	+81,374		SFMTA Letter 1213 from Director of Transportation dated 11/4/11 authorizing optional task. COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0012	11/09/11	073-0012	CTS - Alternate 5	7		Authorized	01/18/12	+88,855		Contract Modification No. 1 authorized by ED/CEO on 1/18/12 COMPLETE, NO FURTHER ACTION; Amendment #1	Amendment 1 Approved		
1553-0013	11/09/11	073-0013	Proposal for Geotechnical Services	7		Authorized	01/18/12	+64,027		Letter dated October 7, 2011 to DOM. PM/CM response pending. Contract Modification No. 1 authorized by ED/CEO on 1/18/U2 COMPLETE, NO FURTHER ACTION; Amendment #1	Amendment 1 Approved		
1553-0014	02/06/12	073-0014	Authorization to commence optional tasks 12.12E traction power cables for CAD production, Optional task 2.50 Coordination with Art			Authorized	02/06/12	+54,712		SFMTA Letter 1381 from Director of Transportation dated 2/06/12 authorizing optional tasks 12.12e in the amount of \$41,280 and 2.50 for \$13,432 COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0015	03/20/12	073-0015	Proposal for additional services in Response to Approved (ECP) FD-034 Operation Performance and Safety Enhancements to 4th and King and 6th and King.	1					+26,026	FD-034 was updated by CMB on 3/14/12. Proposal transmitted via letter CS1553 No. 0012 dated 3/20/12 to DOM. Amendment #4 PENDING			

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Item #	Date Initiated		Change Description	Change Type	CMB No.	Stat	us		Cost Impact re/(Benefit)	Comments	Modification Number	Manager per Co	Project Controls ompleted Change orm
						Action	Date	Actual/Forecast	Potential Change			Verifier Name	Date
1553-0016	03/23/12	073-0016	Proposal for additional work - Tunnel Air Replenishment System (Exercise Optional Service)	7		Authorized	04/26/12	+173,119		SFMTA letter 1658 from Director of Transportation dated 4/26/2012 authorizing \$173,119 in optional tasks. Included in FD-035 to be presented to CMB on 6/26/12	Option	mab	06/26/12
1553-0017	05/14/12	073-0017	Extension of PC Support Technician	1		Authorized	05/04/12	+34,483		Signed by Director of Transportation 5/14/12 CCOMPLETE, NO FURTHER ACTION; Amendment #3	Amendment 3 Approved		
1553-0018	05/14/12	073-0018	Extension of CSP Quality Manager	1		Authorized	05/04/12	+61,043		Signed by Director of Transportation 5/14/12 CCOMPLETE, NO FURTHER ACTION; Amendment #3	Amendment 3 Approved		
1553-0019	04/09/12	073-0019	Authorization to commence optional task 12.02 Utility Plans for design of repositioned and reconstructed manholes for the 78 inch diameter sewer on 4th St.	1		Authorized	04/09/12	+52,712		SFMTA Letter 1630 from the Director of Transportation dated 4/9/2012 authorizing optional task 12.02 in the amount of \$52,712 COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0020	04/09/12	073-0020	Authorization to commence optional task 12.12 civil and structural support for traction power duct banks	1		Authorized	04/09/12	+109,000		SFMTA Letter 1630 from the Director of Transportation dated 4/9/2012 authorizing optional task 12.12 in the amount of \$109,000 COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0021	04/26/12	073-0021	Authorization to commence optional task 12.11 design of the tunnel based Air Replenishment System including III panels, feeder pipes, gauges, valves, fire proofing, anchors, supports, low level alarms, wiring, signage, connections to SCADA and monitoring devices, equipment placement, and impact protection	1		Authorized	04/26/12	+173,119		SFMTA Letter 1658 from the Director of Transportation dated 4/26/2012 authorizing optional task 12.11 in the amount of \$173,119 COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0022	04/26/12	073-0022	Increased authorization for optional task 12.12.e CAD production support	1		Authorized	04/26/12	+30,000		SFMTA Letter 1658 from the Director of Transportation dated 4/26/2012 authorizing the increase in optional task 12.12e in the amount of \$30,000 COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0023	05/21/12	073-0023	Authorization to commence option task 12.11 structural design support for Fire Protection and Plumbing designs	1		Authorized	05/21/12	+39,204		SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.11 in the amount of \$39,204 COMPLETE, No FURTHER ACTION; OPTION	Option		
1553-0024	05/21/12	073-0024	Authorization to commence optional task 12.12 structural design support for Traction Power and Power/Lighting designs	1		Authorized	05/21/12	+43,638		SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the increase in optional task 12.12 in the amount of \$43,638 COMPLETE, NO FURTHER ACTION; OPTION	Option		
1553-0025	05/21/12	073-0025	Authorization to commence optional task 12.13 structural design support for Telephone and CCTV designs	1		Authorized	05/21/12	+24,328		SFMTA Letter 1688 from the Director of Transportation dated 5/21/2012 authorizing the in crease in optional task 12.13 in the amount of \$24,328 COMPLETE, NO FURTHER ACTION; OPTION	Option		
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 COMPLETE, NO FURTHER ACTION; OPTION	Option		
Contract CS-1	55-3 Total							+1,961,345	+85,486	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.			

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