

CMB Meeting Minutes #145

DATE: October 31, 2013

MEETING DATE: **October 23, 2013**

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: J Funghi (JF), A. Hoe (AH), J. Wang (JW), R. Redmond, (RR), M. Benson (MB), N. Huff (NH)
J. Park (JP), T. DePooter (TDP), B. Kelleher (BK), V. Chow (VC), R. Nguyen (RN),
E. Stassevitch (ES), B. Ward (BW), L. Zurinaga (LZ), B. Lebovitz (BL)

COPIES TO: Attendees: S. Farhangi (SF), M. Henry (MH), K. Shah (KS), M. Latch (ML), S. Wilson (SW),
J. Xia (JX), S. Espinal (SE), R. Hansen (RH), D. Kuehn (DK)
File No. M544.1.5.0890

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

SUBJECT: Configuration Management Board Meeting # 145 – Rev. No. 0

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

ITEM #	DISCUSSION	ACTION BY DUE DATE
1- 10/16/13	1252 - S. Wilson presented COR 102 Jet Grout Column 18 DSC at UMS South Headwall evaluation of merit and cost comparison sheet and to request negotiation position. The costs represent relocating the drill rig twice, after encountering an unknown obstruction 10 feet below the surface. An investigation determined the obstruction encountered was due to pile caps from micropiles installed during 1251 Contractor work, which were not installed at the correct location. The 1251 Contractor has been put on notice that SFMTA intends to seek compensation from Synergy for any and all costs associated with installation of incorrectly positioned micropiles. The CMB requested the CM Team to determine if the Contractor received as built information before they began operations. The CMB also suggested a better graphic which shows exactly where the headwall control line is located. No action was taken by the CMB, this item will be brought back to the CMB at a later date. Status: <i>10/23 This item was not discussed at the meeting.</i>	SW 10/30/13
3- 10/16/13	1252 - J. Wang presented for information draft PCC 14 Modifications to AWSS Facilities at 4th and Bryant Streets. SFFD/SFWD requirements are to maintain an in-service AWSS hydrant at this intersection at times. The propose change in work would delete the temporary 12" AWSS diagonal pipe crossing 4 th and Bryant Streets and hydrant lateral to be installed near I-80 off ramp and relocating the installation of new AWSS line on west side of 4 th Street (see attached). This change would eliminate work in the 1300 Contract with a potential credit to the Program. The CMB agreed with generating a PCC to request a cost proposal for the relocation and deletion of work. Status: <i>10/23 The final version of the PCC was presented for information along with the Engineers Estimate to perform the new work for \$136K and estimating the credit for the deleted work to be \$163K. Follow up action required to estimate the credit for work deleted from 1300 and prepare PCC for 1300.</i>	JW 11/13/13

ITEM #	DISCUSSION	ACTION BY DUE DATE
1-	1300 – R. Redmond presented for discussion RFI 00023 W30x235 Grade 70, a request-to substitute the called out UMS specification for ASTM A913/Grade 70 wales (W30X235) for (W36x230) Grade 70. In response to the Contractor's request for information the CM Team responded to the RFI instructing the Contractor to submit a no cost request for substitution (RFS). The Contractor then responded with a letter (see attached) notifying SFMTA that the ASTM A913/Grade 70 wales specified is not manufactured in the USA, offering backup documentation from their subconsultant to this fact. Furthermore, a letter was included from ArcelorMittal International stating their company is the only producer of grade A913/70 for high strength low alloy steel shapes of structural at their mills in Luxembourg, Germany, but does not produce W30x235 sections. In addition the Contractor's letter also stated the specification called out for wall Grade 70 pipe struts is also only foreign made. The CMB directed the CM Team to respond to the Contractor by sending them a letter requesting they demonstrate what is in their bid for these items and how did they certify they could provide these items given the Buy America requirement. Secondly a letter will be written to the Designer putting them on notice of a potential E&O issue and that they are requested to validate an opposing position to the Contractor's statements, which confirms that at the time of bid the ASTM A913 steel, was manufactured and available in the USA. The Designer should also be put on notice that SFMTA intends to seek compensation for any additional cost impacts, concerning this issue. In parallel the Program will investigate procuring an approval of an FTA Waiver for the Buy America Act. This item will be brought back to the CMB as more information becomes available.	RR/NH 11/13/13
2-	The Program Trend/Change Control Log dated 10/23 was reviewed. One new item was added to the 1252 Contract, Trend #126 - Ellis shaft and Old Navy Grouting. The Construction Manager reported this item would be denied due to not late submittal of the COR and lack of evidence to support the Contractor claim. The log is attached for distribution with these meeting minutes.	
3-	The Configuration Manager presented for information, pending follow up action to identify and contact the appropriate SFMTA heads of System Safety and Transit departments of their responsibility as a Configuration Management Board Member on the Central Subway Project. Requesting they identify which member of their staff will be given delegation authority as a voting member on the Configuration Management Board for items concerning the respective departments. A suggestion was made by the Board to contact the department heads for Sustainable Streets and System Safety to determine if they jointly would like to assign one voting member to represent a both departments. This item will be brought back to the CMB at a later date.	
4	1300 – T. DePooter presented information regarding the need to install P-Traps and Air vents at four sewer laterals at Stockton between Sacramento and Clay Streets as required by SFDPW. The CMB is in agreement with the change. A PCC will be generated and brought back to the CMB for review.	TDP 11/13/13

ACTION ITEMS

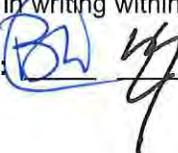
ITEM #	MTG DATE	MTG ACTION DATE	DESCRIPTION	BIC	DUE DATE	STATUS
8	04/03/13	04/03/13	1252 – DP1 – Design Services hours and cost during construction – DP1 Review	MB	10/30/13	Open
8	07/24/13	07/24/13	1252 – Breakdown of Bid Item GE-3	MB	10/30/13	Open
2	08/14/13	08/14/13	1252 – CMod #8 –Statement of occurrence – post meeting record of approval	SW	10/30/13	Open

central subway

1	08/28/13	08/28/13	1252 – Outstanding COR's – status update	SW/MB	10/30/13	Open
2 & 3	08/28/13	08/28/13	1252 – COR 97 & 98 – gravel encountered action plan from Engineering of Record (DP1)	SW/MB	10/30/13	Open
5	08/28/13	08/28/13	1252 – Action plan of execution for the Slip Lining Work (Stockton/Columbus)	SW	10/30/13	Open
4	09/25/13	10/02/13	1252 – Offset Cost for DP2 Budget Increase (Task 16)	SW	10/30/13	Open
4	09/25/13	10/02/13	1252 – COR #104 - Additional Sewer Slip Lining – SFPUC Response	SW	10/30/13	Open
5	09/25/13	10/02/13	1300 – PCC CTS 0001 - Contractor Cost Proposal	TDP	10/30/13	Open
2	10/09/13	10/09/13	1252 – Design Clause - confirmation of existing contract language in CN 1252 and CN 1300 regarding existing conditions related to utilities	JW/AH	10/30/13	Open
1	10/16/13	10/16/13	1252 – Graphic showing the location of the headwalls control line	SW	10/30/13	Open
5	10/16/13	10/16/13	1300 – IRL - COR's 5, 23 & 85 Ltr to Contractor	RR	10/30/13	Open
3	10/23/13	10/23/13	1252 – PCC 014 - Contractor Cost Proposal	JW/SW	11/13/13	Open
1	10/23/13	10/23/13	1300 – Ltr. to TPC – Tutor's Bid item for the Steel	RR/NH	11/13/13	Open
1	10/23/13	10/23/13	1300 – Ltr. to PB – Validation of availability of steel in USA during bid	RR/NH	11/13/13	Open
4	10/23/13	10/23/13	1300 – PCC CTS 0004 – Contractor Cost Proposal	TDP	11/13/13	Open

Meeting adjourned at 5:00pm

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

Signed:  [initials of preparer & reviewer] Date: 11/13/13 [Date review completed]

Meeting Agenda

Project No. M544.1, Contract No. CS-149
Program/Construction Management
Configuration Management Board (CMB) Meeting No. 145
October 23, 2013
3:00pm – 5:00pm
 Central Subway Project Office
 821 Howard St. 2nd Floor
 Main Conference Room

Attendees:

Mark Benson	Melvyn Henry	Brad Lebovitz	Eric Stassevitch
Vivian Chow	Albert Hoe	Roger Nguyen	Beverly Ward
Shahnam Farhangi	Brian Kelleher	Joon Park	Sarah Wilson
John Funghi	Jim Kelly	Richard Redmond	Luis Zurinaga
John Haley	Mark Latch	Kartik Shah	

1. **1252** – PCC 014 – Modification to AWSS Facilities at 4th and Bryant Streets – *Review*
 (Previously discussed at CMB Meeting #144)
~~COR 102 – UMS Jet Grout Column 18 DSC Headwall – Merit Approval & Cost NTE~~
~~(Previously discussed at CMB Meeting #144)~~
2. **1300** – RFI 00023 - W30x235 in Grade 70 – UMS Steel Design Specification – *Information*
3. **Trend/Change Log** – 10/23/13 – (1) new item - Trend #126 Ellis shaft and Old Navy Grouting
4. **Other Business** – Configuration Management Board - SFMTA Voting Members

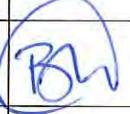
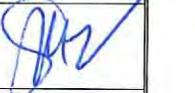
Meeting Attendance Sheet

Project No. M544.1, Contract No. 149
Program/Construction Management
Configuration Management Board S Meeting No. 145
October 23, 2013
3:00 p.m. – 5:00 p.m.
 Central Subway Project Office
 821 Howard, 2nd Floor
 Main Conference Room

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

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Please enter initials if your name is listed below. Please enter name, affiliation, phone number and email address if your name is not listed below.				
Benson, Mark	CSP	(415) 238-0996	Mark.Benson@sfmta.com	MCB
Chow, Vivian	SFMTA	(415) 701-5264	Vivian.chow@sfmta.com	
DePooter, Ted	CSP	415 701-5295	Ted.DePooter@sfmta.com	
Farhangi, Shahnam	SFMTA	(415) 554-0721	Shahnam.Farhangi@sfmta.com	
Funghi, John	SFMTA	(415) 701-4299	John.Funghi@sfmta.com	
Haley, John	SFMTA		John.Haley@sfmta.com	
Henry, Melvyn	SFMTA	(415) 701.5719	Melvyn.Henry@sfmta.com	
Hoe, Albert	SFMTA	(415) 701-4289	Albert.Hoe@sfmta.com	
Kelleher, Brian	SFMTA	(415) 701-5289	Brian. Kelleher@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	

central  subway

NAME	AFFILIATION	PHONE	E-MAIL (for minutes)	INITIALS
Lebovitz, Brad	STV/PMOC	(510) 464-8052	Bradley.lebovitz@stvinc.com	
Nguyen, Roger	SFMTA	(415) 701-4312	Roger.Nguyen@sfmta.com	
Park, Joon	SFMTA	(415) 701-4742	Joon.Park@sfmta.com	
Redmond, Richard	CSP	(415) 701-4288	Richard.Redmond@sfmta.com	
Shah, Kartik	SFMTA	(415) 701.5678	Kartik.Shah@sfmta.com	
Stassevitch, Eric	CSP	(415) 701-4426	Eric.Stassevitch@sfmta.com	
Ward, Beverly	CSP	(415) 701-5291	Beverly.Ward@sfmta.com	
Wilson, Sarah	CSP	(415) 243-0950	Sarah.Wilson@sfmta.com	
Zurinaga, Luis	SFCTA	(415) 716-6956	Luis.zurinaga@sfcta.org	
Huff, Nicolas	SFMTA		nicolas.huff3@sfmta.com	
Jane Wang	SFMTA			
V. Chaw, T. DePoeter, A. Hoe, and E. Stassevitch were all in attendance, but did not sign in.				
				

PROPOSED CONTRACT CHANGE

Contract No. 1252 Tunnels Date 10/18/2013
 PCC No. 1252-14
 PCC Title Modifications to AWSS Facilities at 4th and Bryant Streets

Description of PCC:

Relocate AWSS hydrant from off-ramp to 4th Street. Install 12" AWSS restrained pipe and hydrant lateral to facilitate future connection. Delete 12" AWSS diagonal sleeved pipe crossing and hydrant lateral.

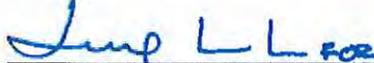
- Delete approximately 75' of 12" flanged pipe, two (2) flanged 45-degree elbows and thrust blocks
- Delete approximately 40' of 24" encasement sleeving
- Delete original hydrant lateral layout on I-80 off ramp, including gate valve, vertical offset piping, 90-degree elbow, thrust blocks, AWSS hydrant, bollards (4) and concrete pad
- F/I approximately 36' of 12" BS restraint pipe, flat cap and thrust block, including excavation/backfill for trenching earthwork
- F/I relocated hydrant lateral onto the west side of Fourth Street as directed by the Engineer, including gate valve, vertical offset piping, 90-degree elbows, thrust blocks, AWSS hydrant and excavation/backfill for trenching earthwork
- Credit for approximately 75' of excavation/backfill trenching earthwork performed for 12" pipe and 24" encasement sleeving
- Credit for approximately 50' of excavation/backfill trenching earthwork performed for 8" hydrant lateral pipe

Spec Ref. CN 1252 Tunnels,
 33 11 20 AWSS Work
 33 12 16.20 AWSS High Pressure DI Gate Valves

Drawing Nos. AW-501.5 and AW-501.13

Attachments AW-501.5 Edited 10/10/13 and AW-501.13 Edited 10/16/13

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:  Date 10/18/13
 Sarah Wilson, Resident Engineer (SFMTA Representative)

Concur in Principle:  Date 10/18/13
 Brian Kelleher, Project Contract Administrator (SFMTA Representative)

PROPOSED CONTRACT CHANGE

FINDING OF FACTS

Contract No.	<u>1252 Tunnels</u>	Date	<u>10/17/2013</u>
PCC No.	<u>1252-014</u>		
PCC Title	<u>Modifications to AWSS Facilities at 4th and Bryant Streets</u>		
PCC Initiator	<u>Michael B. Smith/SFDPW/IDC/EME</u>	Dept.	<u>Design</u>

Description of PCC: Relocate AWSS hydrant from off-ramp to 4th Street. Install 12" AWSS restrained pipe and hydrant lateral to facilitate future connection. Delete 12" AWSS diagonal sleeved pipe crossing and hydrant lateral.

- Delete approximately 75' of 12" flanged pipe, two (2) flanged 45-degree elbows and thrust blocks
- Delete approximately 40' of 24" encasement sleeving
- Delete original hydrant lateral layout on I-80 off ramp, including gate valve, vertical offset piping, 90-degree elbow, thrust blocks, AWSS hydrant, bollards (4) and concrete pad
- F/I approximately 36' of 12" BS restraint pipe, flat cap and thrust block, including excavation/backfill for trenching earthwork
- F/I relocated hydrant lateral onto the west side of Fourth Street as directed by the Engineer, including gate valve, vertical offset piping, 90-degree elbows, thrust blocks, AWSS hydrant and excavation/backfill for trenching earthwork
- Credit for approximately 75' of excavation/backfill trenching earthwork performed for 12" pipe and 24" encasement sleeving
- Credit for approximately 50' of excavation/backfill trenching earthwork performed for 8" hydrant lateral pipe

Reason/Need for PCC: SFFD/SFWD requirements are to maintain an in-service AWSS hydrant at this intersection at all times. Additionally contract 1300-1256 has been awarded and will follow 1252. Diagonal crossing is no longer required to connect new 1252 line on west side of 4th Street and north of Bryant Street to existing line on east side of 4th Street south of Bryant Street.

1300-1256 work will install new AWSS line on west side of 4th Street and connect to line installed on west side of 4th Street and north of Bryant Street installed in 1252.

Proposed AWSS hydrant lateral is being relocated from I-80 off-ramp to west of Fourth Street due to SFFD/SFWD safety concerns for personal to use/maintain hydrant on freeway off-ramp.

Location/Station: 4th and Bryant Streets, San Francisco, CA

Configuration Control Analysis: 12" diagonal AWSS crossing to connect the relocated AWSS main installed under 1252 to the existing 12" AWSS line south of Bryant Street is no longer required, and if installed under 1252 will need to be removed under 1300-1256. Contract 1300-1256 shows these lines to be removed; hence there's additional credit that's due under this contract if the work is deleted in 1252.

The proposed relocation of the hydrant lateral further onto the I-80 off-ramp to clear the proposed 1300-1256 sidewalk changes would place SFFD/SFWD personnel in a dangerous location in order to operate and maintain the hydrant. The hydrant location is to be relocated to the west side of 4th Street.

Recommended Action: Delete the proposed 12" diagonal flanged AWSS main and encasement sleeving crossing the 4th and Bryant Streets intersection as shown on the attached edited drawing AW-501.13.

<p>Delete the proposed 8" hydrant lateral to be installed on the I-80 off-ramp as shown on the attached edited drawing AW-501.13.</p> <p>F/I proposed 12" pipe extension and flat cap to the existing 12" CI line to meet AWSS tieback requirements as shown on the attached edited drawing AW-501.5. F/I hydrant lateral to the west side of 4th Street as shown on the attached edited drawing AW-501.5.</p> <p>Detailed design drawings of the AWSS hydrant lateral to be installed on the west side of Fourth Street shall be provided to the Contractor prior to the installation of the 1252 work to install the 12-inch AWSS line on the west side of Fourth Street. The approximate location and layout of the hydrant lateral is shown on the attached edited drawing AW-501.13. The hydrant lateral shall require a vertical offset, air valve and two (2) 90-degree elbows. The gate valve shall be located between the tee and the hydrant instead of off the tee due to existing and new utility conflicts at this location.</p>
<p>Estimate: New work: \$136,478, Deleted work: \$163,382 (credit).</p> <p>Delta credit: \$26,904 plus additional credit due in Contract 1300 for the diagonal AWSS crossing that is shown to be removed.</p> <p>Please see attached spreadsheets for details.</p>
<p>Spec. Ref.: 33 11 20 AWSS Work 33 12 16.20 AWSS High Pressure DI Gate Valves</p>
<p>Drawing Nos.: AW-501.5 and AW-501.13</p>
<p>Attachments: AW-501.5 Edited 10/10/13 and AW-501.13 Edited 10/16/13</p>

Recommended by:  Date 10/17/13
 Sarah Wilson, Resident Engineer (SFMTA Representative)

Concur in Principle:  Date 10/17/13
 Jane Wang, Program Manager/Project Development (SFMTA Representative)

Estimate for Deleted Work

PROJECT NAME: Central Subway Contract 3 AWSS Work-PCO 10/13 Deleted Work
JOB NUMBER: 1424J
DRAWINGS: AW-501.5 Rev. 0 Edited 10/10/13, AW-501.13 Rev. 0 Edited 10/10/13
LOCATION(S): Locations 5 and 6, Fourth Street between Bryant and Harrison Streets
Estimate preparer: Michael B. Smith
Date estimate prepared: 10/11/13

AWSS Construction Work

Line Item	Item description	Quantity	Type	Each	Total	Each	Total
				Materials (American made)	Materials (American made)	Materials (NonAmerican made)	Materials (NonAmerican made)

Hydrant Lateral-Furnish and Install

1	Hydrant lateral assembly, 12" riser, gate valve, stop collars (2), 8" MJB x FLG adaptor, 15' max 8" straight pipe with MJ fittings, restrained joints, hydrant finish plates (pair), no tee included in price	1	Lump Sum	\$9,500	\$9,500	\$25,504	\$25,504
2	Hydrant assembly (single unit)	0	Lump Sum			\$18,000	\$0

Typical AWSS Piping-Furnish and Install-No Removal of Existing Pipe Included in Cost-see Restrained Joint Costs. Does Not Include Materials/Labor for Fittings Includes excavation and restoration of trench

1	8" diameter DI BS Class 53 pipe	20	Linear Foot	\$65	\$1,300		
2	10" diameter DI BS Class 53 pipe	0	Linear Foot	\$85	\$0		
3	12" diameter DI BS Class 53 pipe	75	Linear Foot	\$100	\$7,500		
4	14" diameter DI BS Class 54 pipe	0	Linear Foot	\$120	\$0		
5	16" diameter DI BS Class 55 pipe	0	Linear Foot	\$150	\$0		
6	18" diameter DI BS Class 56 pipe	0	Linear Foot	\$175	\$0		
7	20" diameter DI BS Class 56 pipe	0	Linear Foot	\$200	\$0		

Gate Valves and Valve Box/Vault-Furnish and Install

1	8" gate valve with valve box and cover (8" line)	0	Lump Sum	\$100	\$0	\$5,552	\$0
2	10" gate valve with valve box and cover (10 and 12" lines)	0	Lump Sum	\$100	\$0	\$7,749	\$0
3	12" gate valve, concrete valve vault, cover fittings (14" line)	0	Lump Sum	\$12,500	\$0	\$11,401	\$0
4	16" gate valve, concrete valve vault, cover fittings (16 and 18" lines)	0	Lump Sum	\$12,500	\$0	\$18,634	\$0
5	20" gate valve, concrete valve vault, cover fittings (20" line)	0	Lump Sum	\$12,500	\$0	\$24,500	\$0
8	Concrete valve vault (14" line)	0	Lump Sum	\$12,500	\$0	\$2,500	\$0
9	Concrete valve vault (16 and 18" lines)	0	Lump Sum	\$12,500	\$0	\$2,500	\$0
10	Concrete valve vault (20" line)	0	Lump Sum	\$12,500	\$0	\$2,500	\$0

Motorized Gate Valves and Valve Box/Vault-Furnish and Install. Does not include actuators, conduits, sidewalk mounted equipment

1	10" gate valve with valve box and cover (10 and 12" lines)	0	Lump Sum	\$15,300	\$0	\$7,749	\$0
2	12" gate valve, concrete valve vault, cover fittings (14" line)	0	Lump Sum	\$15,300	\$0	\$11,401	\$0
3	16" gate valve, concrete valve vault, cover fittings (16 and 18" lines)	0	Lump Sum	\$15,300	\$0	\$18,634	\$0
4	20" gate valve, concrete valve vault, cover fittings (20" line)	0	Lump Sum	\$15,300	\$0	\$24,500	\$0

Motorized Gate Valve Location Equipment Including Actuators-Furnish and Install

1	Single motorized gate valve actuators, wiring by DTIS	0	Lump Sum	\$45,000	\$0		
2	Dual motorized gate valve actuators, wiring by DTIS	0	Lump Sum	\$48,000	\$0		
3	Single motorized gate valve actuator, controller cabinet for single valve, antenna pole, battery vault/cabinet, conduit, sump pump piping, DTIS wiring	0	Lump Sum	\$155,000	\$0		
4	Dual motorized gate valve actuators, controller cabinet for dual valves, antenna pole, battery vault/cabinet, conduit, sump pump piping, DTIS wiring	0	Lump Sum	\$190,000	\$0		

Estimate for Deleted Work

1	10" diameter	0	Each			\$2,223	\$0
2	12" diameter	1	Each			\$2,687	\$2,687
3	14" diameter	0	Each			\$3,280	\$0
4	16" diameter	0	Each			\$4,157	\$0
5	18" diameter	0	Each			\$4,383	\$0
6	20" diameter	0	Each			\$5,713	\$0

Stop Collar, DI

1	8" diameter	3	Each			\$281	\$843
2	10" diameter	0	Each			\$527	\$0
3	12" diameter	1	Each			\$447	\$447
4	14" diameter	0	Each			\$667	\$0
5	16" diameter	0	Each			\$721	\$0
6	18" diameter	0	Each			\$904	\$0
7	20" diameter	0	Each			\$1,038	\$0

Bell Collar, DI

1	8" diameter	0	Each			\$263	\$0
2	10" diameter	0	Each			\$490	\$0
3	12" diameter	0	Each			\$432	\$0
4	14" diameter	0	Each			\$706	\$0
5	16" diameter	0	Each			\$694	\$0
6	18" diameter	0	Each			\$874	\$0
7	20" diameter	0	Each			\$994	\$0

Solid Sleeve, DI

1	8" diameter	0	Each			\$809	\$0
2	10" diameter	0	Each			\$1,011	\$0
3	12" diameter	0	Each			\$1,132	\$0
4	14" diameter	0	Each			\$1,660	\$0
5	16" diameter	0	Each			\$1,844	\$0
6	18" diameter	0	Each			\$1,995	\$0
7	20" diameter	0	Each			\$2,235	\$0

Adaptor, Straight or Reducing, MJB x GHB

1	8" diameter	0	Each			\$2,224	\$0
2	10" diameter	0	Each			\$1,500	\$0
3	12" diameter	0	Each			\$1,683	\$0
4	14" diameter	0	Each			\$2,116	\$0
5	16" diameter	0	Each			\$2,326	\$0
6	18" diameter	0	Each			\$2,812	\$0
7	20" diameter	0	Each			\$3,539	\$0

Adaptor, Straight or Reducing, MJ Spigot x GH Spigot

1	8" diameter	0	Each			\$1,085	\$0
2	10" diameter	0	Each			\$1,326	\$0
3	12" diameter	0	Each			\$1,770	\$0
4	14" diameter	0	Each			\$2,298	\$0
5	16" diameter	0	Each			\$2,619	\$0
6	18" diameter	0	Each			\$3,305	\$0
7	20" diameter	0	Each			\$4,275	\$0

Estimate for Deleted Work

Adaptor, Straight or Reducing, MJB x GH Spigot								
1	10" diameter	0	Each			\$1,298	\$0	
2	12" diameter	0	Each			\$1,664	\$0	
3	14" diameter	0	Each			\$1,304	\$0	
4	16" diameter	0	Each			\$2,955	\$0	
5	18" diameter	0	Each			\$4,091	\$0	
6	20" diameter	0	Each			\$4,406	\$0	

Flanged Adaptor, Straight or Reducing, MJB x FLG								
1	8" diameter	0	Each			\$1,390	\$0	
2	10" diameter	0	Each			\$1,718	\$0	
3	12" diameter	0	Each			\$1,960	\$0	
4	14" diameter	0	Each			\$2,425	\$0	
5	16" diameter	0	Each			\$2,821	\$0	
6	18" diameter	0	Each			\$3,633	\$0	
7	20" diameter	0	Each			\$3,808	\$0	

Flat Cap, MJB or Blind Flange, Including 1 Set of Fasteners								
1	8" diameter	0	Each			\$751	\$0	
2	10" diameter	0	Each			\$804	\$0	
3	12" diameter	0	Each			\$869	\$0	
4	14" diameter	0	Each			\$1,557	\$0	
5	16" diameter	0	Each			\$1,725	\$0	
6	18" diameter	0	Each			\$2,448	\$0	
7	20" diameter	0	Each			\$3,808	\$0	

Flanged Pipe Spool, Class 300 Flanges, 36" Long, Including 1 Set of Fasteners								
1	8" diameter	0	Each	\$1,500	\$0			
2	10" diameter	0	Each	\$1,800	\$0			
3	12" diameter	0	Each	\$1,850	\$0			
4	14" diameter	0	Each	\$2,100	\$0			
5	16" diameter	0	Each	\$2,400	\$0			
6	18" diameter	0	Each	\$2,600	\$0			
7	20" diameter	0	Each	\$3,200	\$0			

Pipe Flange, Class 300 Flanges, Including Welding/Threading onto DS/BS Pipe, Including 1 Set of Fasteners								
1	8" diameter	0	Each	\$750	\$0			
2	10" diameter	0	Each	\$900	\$0			
3	12" diameter	11	Each	\$950	\$10,450			
4	14" diameter	0	Each	\$1,050	\$0			
5	16" diameter	0	Each	\$1,200	\$0			
6	18" diameter	0	Each	\$1,300	\$0			
7	20" diameter	0	Each	\$1,600	\$0			

Restrained Joints-Furnish and Install (in addition to AWSS linear feet piping costs)								
1	8" restrained pipe joint or each end of fitting requiring stop collar and tie rods (4 rods)	4	Lump Sum	\$500	\$2,000			
2	10" restrained pipe joint or each end of fitting requiring stop collar and tie rods (4 rods)	0	Lump Sum	\$550	\$0			
3	12" restrained pipe joint or each end of fitting requiring stop collar and tie rods (4 rods)	0	Lump Sum	\$600	\$0			
4	14" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$850	\$0			
5	16" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$1,100	\$0			

Estimate for Deleted Work

6	18" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$1,300	\$0		
7	20" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$1,500	\$0		

Pipe Encasement , including additional labor for installing main into encasement, sliding materials

1	16" encasement for 8" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$2,700	\$0		
2	20" encasement for 10" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$3,600	\$0		
3	24" encasement for 12" pipe, 18' length, including welding of DS/BS end to adjacent pipe	2.2	Lump Sum	\$4,500	\$9,900		
4	28" encasement for 14" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$5,500	\$0		
5	32" encasement for 16" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$6,750	\$0		
6	36" encasement for 18" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$8,000	\$0		
7	42" encasement for 20" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$9,750	\$0		

Pipe Encasement Closing of One End

1	16" encasement end cap for 8" pipe	0	Lump Sum	\$400	\$0		
2	20" encasement end cap for 10" pipe	0	Lump Sum	\$500	\$0		
3	24" encasement end cap for 12" pipe	2	Lump Sum	\$650	\$1,300		
4	28" encasement end cap for 14" pipe	0	Lump Sum	\$675	\$0		
5	32" encasement end cap for 16" pipe	0	Lump Sum	\$750	\$0		
6	36" encasement end cap for 18" pipe	0	Lump Sum	\$900	\$0		
7	42" encasement end cap for 20" pipe	0	Lump Sum	\$1,050	\$0		

Concrete Thrust Blocks-Furnish and Install including formwork, delivery of concrete

1	8" pipe/fitting thrust block, no rebar	4	Lump Sum	\$50	\$200		
2	10 and 12" pipe/fitting thrust block, no rebar	2	Lump Sum	\$55	\$110		
3	14 and 16" pipe/fitting thrust block, no rebar	0	Lump Sum	\$80	\$0		
4	18 and 20" pipe/fitting thrust block, no rebar	0	Lump Sum	\$100	\$0		
5	8" pipe/fitting thrust block, rebar over pipe/fitting	2	Lump Sum	\$80	\$160		
6	10 and 12" pipe/fitting thrust block, rebar over pipe/fitting	0	Lump Sum	\$85	\$0		
7	14 and 16" pipe/fitting thrust block, rebar over pipe/fitting	0	Lump Sum	\$115	\$0		
8	18 and 20" pipe/fitting thrust block, rebar over pipe/fitting	0	Lump Sum	\$140	\$0		

Existing AWSS Pipe-Remove and Dispose

1	8-12" cast iron pipe with lead joints, including excavation and shoring only	0	Linear Foot				
2	14-16" cast iron pipe with lead joints, including excavation and shoring only	0	Linear Foot				
3	18-20 cast iron pipe with lead joints, including excavation and shoring only	0	Linear Foot				
4	8-12" ductile iron pipe, including excavation and shoring only	0	Linear Foot				
5	14-16" ductile iron pipe, including excavation and shoring only	0	Linear Foot				
6	18-20 ductile iron pipe, including excavation and shoring only	0	Linear Foot				
7	Melt lead joint for 8-14" pipe	0	Each				
8	Melt lead joint for 16-20" pipe	0	Each				
9	8-10" cast iron gate valve and valve box, salvage valve and casting, melt lead joints	0	Lump Sum				
10	12-14" cast iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings, melt lead joints	0	Lump Sum				
11	16-20" cast iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings, melt lead joints	0	Lump Sum				
12	8-10" ductile iron gate valve and valve box, salvage valve and casting	0	Lump Sum				
13	12-14" ductile iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings	0	Lump Sum				
14	16-20" ductile iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings	0	Lump Sum				
15	Hydrant lateral, cast iron, 15' max, not including existing tee; salvage hydrant, valve and castings	0	Lump Sum				
16	Hydrant lateral, ductile iron, 15' max, not including existing tee; salvage hydrant, valve and castings	0	Lump Sum				

Settlement Reference Points

1	Cast iron pipe, install and remove settlement reference/monitoring point requiring excavation, incl. initial/final surveys	0	Each	\$375	\$0		
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Estimate for Deleted Work

2	Ductile iron pipe, install and remove settlement reference/monitoring point requiring excavation, incl. initial/final surveys	0	Each	\$375	\$0		
3	Sidewalk, gate valve or hydrant settlement reference/monitoring point, no excavation, incl. initial/final surveys	0	Each	\$50	\$0		
4	Surveying maximum of 5 monitoring/reference points once per week, not including initial/final surveys	0	Lump Sum	\$0	\$0		

Supporting AWSS Pipe Over Trenches/Excavations

1	Cast iron pipe, 8-14", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$1,500	\$0		
2	Cast iron pipe, 16-20", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$2,000	\$0		
3	Cast iron pipe, 8-14", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$3,500	\$0		
4	Cast iron pipe, 16-20", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$4,500	\$0		
5	Ductile iron pipe, 8-14", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$1,500	\$0		
6	Ductile iron pipe, 16-20", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$2,000	\$0		
7	Ductile iron pipe, 8-14", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$3,500	\$0		
8	Ductile iron pipe, 16-20", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$4,500	\$0		

Miscellaneous AWSS Items-Furnish and Install

1	Concrete protective slab, including formwork and rebar	0	Linear Foot	\$150	\$0		
2	Paving, standard asphalt, 2-inches thick, per square yard	0	Square Yard	\$0	\$0		
3	Air valve assembly, including castings	0	Lump Sum	\$550	\$0	\$1,300	\$0
4	8" flanged offset pipe assembly with 4 45-degree flanged elbows and 3 pipe spools	0	Lump Sum	\$0	\$0		
5	8" MJB offset pipe assembly with 4 45-degree MJB elbows, 3 nipples and 2 stop collars	0	Lump Sum	\$0	\$0		
6	Concrete thrust post, 33' deep with W24x100 steel post	0	Each	\$11,000	\$0		
9	Lead joint for 8-14" pipe, melt lead joint, pour new lead joint	0	Each	\$50	\$0		
10	Lead joint for 16-20" pipe, melt lead joint, pour new lead joint	0	Each	\$80	\$0		
11	Removal and rebuilding/recoating of fireboat wharf manifold	0	Lump Sum	\$25,000	\$0		
12	Installation of rebuilt fireboat wharf manifold, including new concrete supports, tie rods	0	Lump Sum	\$25,000	\$0		
13	Strong back, 8", does not include tie rods	0	Each	\$1,800	\$0		
14	Strong back 10 and 12", does not include tie rods	0	Each	\$2,500	\$0		
15	Strong back 14 and 16", does not include tie rods	0	Each	\$4,500	\$0		
16	Strong back 18 and 20", does not include tie rods	0	Each	\$6,000	\$0		
17	Suction connection hydrant, including concrete pad, 2 bollards, 60' of piping, marine pile, suction assembly	0	Lump Sum	\$45,000	\$0		
18	Suction connection hydrant, including 2 bollards, 12' vertical drafting piping, suction assembly	0	Lump Sum	\$45,000	\$0		

Total
Materials (American made)
\$42,420

Total
Materials (NonAmerican made)
\$38,592

TOTAL FOR ABOVE WORK			
	(AWSS Bid Item cost(s) for multi-discipline project)		

Total from above	
Contingency 10%	
Total with contingency	

Estimate for Deleted Work

Contractor's profit/overhead 15%
Total with profit/overhead
Mobilization 5%
GRAND TOTAL FOR PROJECT
(Cost for stand-alone AWSS Piping project)

Notes:

All piping costs include excavating, standard shoring, backfilling, compaction, road base restoration, unless otherwise noted.

Paving per DPW excavation code requirements in not included.

Tie rod costs are based on 3' long tie rods with nuts/washers/binding wires (2 locations).

Labor costs are estimated.

MBS 09/03/10

Estimate for Deleted Work

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Each	Total	Grand Total
Labor	Labor	Materials and Labor

\$36,000	\$36,000	\$71,004
\$8,000	\$0	\$0

Hydrant \$18,000, gate valve \$4262, cover/frame/dust pan \$1290, stop collar (2) \$281, adaptor \$1390

\$300	\$6,000	\$7,300
\$350	\$0	\$0
\$350	\$26,250	\$33,750
\$450	\$0	\$0
\$450	\$0	\$0
\$600	\$0	\$0
\$600	\$0	\$0

\$2,500	\$0	\$0
\$3,500	\$0	\$0
\$10,000	\$0	\$0
\$10,000	\$0	\$0
\$10,000	\$0	\$0
\$5,000	\$0	\$0
\$5,000	\$0	\$0
\$5,000	\$0	\$0

Gate valve \$4262, cover/frame/dust pan \$1290
 Gate valve \$5830, cover/frame/dust pan \$1919
 Gate valve \$8901, cover/frame/dust pan \$2500, concrete valve vault \$16,500
 Gate valve \$16134, cover/frame/dust pan \$2500, concrete valve vault \$16,500
 Gate valve \$22000, cover/frame/dust pan \$2500, concrete valve vault \$16,500
 Cover/frame/dust pan \$2500, concrete valve vault \$12,500
 Cover/frame/dust pan \$2500, concrete valve vault \$12,500
 Cover/frame/dust pan \$2500, concrete valve vault \$12,500

\$13,000	\$0	\$0
\$13,000	\$0	\$0
\$15,000	\$0	\$0
\$15,000	\$0	\$0

Gate valve \$5830, cover/frame/dust pan \$1919, concrete valve vault \$12,500, double leaf doors \$2800
 Gate valve \$8901, cover/frame/dust pan \$2500, concrete valve vault \$12,500, double leaf doors \$2800
 Gate valve \$16134, cover/frame/dust pan \$2500, concrete valve vault \$12,500, double leaf doors \$2800
 Gate valve \$22000, cover/frame/dust pan \$2500, concrete valve vault \$12,500, double leaf doors \$2800

\$12,000	\$0	\$0
\$12,000	\$0	\$0
\$15,000	\$0	\$0
\$18,000	\$0	\$0

Estimate for Deleted Work

\$120	\$120	\$1,538
\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$120	\$360	\$4,323
\$120	\$0	\$0
\$120	\$240	\$3,970
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$120	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$120	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$220	\$0	\$0
\$280	\$0	\$0

\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0
\$300	\$0	\$0
\$300	\$0	\$0

Estimate for Deleted Work

\$180	\$0	\$0
\$180	\$180	\$2,867
\$240	\$0	\$0
\$240	\$0	\$0
\$300	\$0	\$0
\$300	\$0	\$0

\$60	\$180	\$1,023
\$60	\$0	\$0
\$60	\$60	\$507
\$80	\$0	\$0
\$80	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0

\$60	\$0	\$0
\$60	\$0	\$0
\$60	\$0	\$0
\$80	\$0	\$0
\$80	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0

\$120	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$120	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$120	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

Estimate for Deleted Work

\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$120	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$60	\$0	\$0
\$60	\$0	\$0
\$60	\$0	\$0
\$80	\$0	\$0
\$80	\$0	\$0
\$120	\$0	\$0
\$120	\$0	\$0

\$180	\$0	\$0
\$180	\$0	\$0
\$200	\$0	\$0
\$240	\$0	\$0
\$280	\$0	\$0
\$320	\$0	\$0
\$320	\$0	\$0

\$120	\$0	\$0
\$120	\$0	\$0
\$120	\$1,320	\$11,770
\$180	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$240	\$0	\$0

\$240	\$960	\$2,960
\$240	\$0	\$0
\$240	\$0	\$0
\$500	\$0	\$0
\$500	\$0	\$0

Estimate-verify
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Estimate for Deleted Work

Typical AWSS Fittings-Furnish and Install-no removal of existing pipe included in cost or restrained joint costs for tie rods/concrete thrust blocks when required

Elbow, DI MJB or Flanged, Including 1 set of fasteners, 90-degree

1	8" diameter	1	Each			\$1,418	\$1,418
2	10" diameter	0	Each			\$1,748	\$0
3	12" diameter	0	Each			\$2,151	\$0
4	14" diameter	0	Each			\$2,596	\$0
5	16" diameter	0	Each			\$3,067	\$0
6	18" diameter	0	Each			\$4,183	\$0
7	20" diameter	0	Each			\$5,378	\$0

Elbow, DI MJB or Flanged, Including 1 set of fasteners, 45-degree

1	8" diameter	3	Each			\$1,321	\$3,963
2	10" diameter	0	Each			\$1,440	\$0
3	12" diameter	2	Each			\$1,865	\$3,730
4	14" diameter	0	Each			\$2,412	\$0
5	16" diameter	0	Each			\$2,741	\$0
6	18" diameter	0	Each			\$3,305	\$0
7	20" diameter	0	Each			\$4,662	\$0

Elbow, DI MJB or Flanged, Including 1 set of fasteners, 22 1/2-degree

1	8" diameter	0	Each			\$1,252	\$0
2	10" diameter	0	Each			\$1,603	\$0
3	12" diameter	0	Each			\$1,962	\$0
4	14" diameter	0	Each			\$2,451	\$0
5	16" diameter	0	Each			\$2,729	\$0
6	18" diameter	0	Each			\$3,543	\$0
7	20" diameter	0	Each			\$4,544	\$0

Elbow, DI MJB or Flanged, Including 1 set of fasteners, 11 1/4-degree

1	8" diameter	0	Each			\$1,381	\$0
2	10" diameter	0	Each			\$1,577	\$0
3	12" diameter	0	Each			\$1,930	\$0
4	14" diameter	0	Each			\$2,416	\$0
5	16" diameter	0	Each			\$2,710	\$0
6	18" diameter	0	Each			\$3,344	\$0
7	20" diameter	0	Each			\$4,680	\$0

Cross, Full Size and Reducing, DI MJB

1	12" diameter	0	Each			\$3,769	\$0
2	16" diameter	0	Each			\$5,384	\$0

Tee, Full Size and Reducing, DI MJB

1	10" diameter	0	Each			\$2,484	\$0
2	12" diameter	0	Each			\$2,718	\$0
3	14" diameter	0	Each			\$3,933	\$0
4	16" diameter	0	Each			\$4,541	\$0
5	18" diameter	0	Each			\$4,314	\$0
6	20" diameter	0	Each			\$5,922	\$0

Hydrant Tee, DI MJB x FLG

Estimate for Deleted Work

\$700	\$0	\$0
\$700	\$0	\$0

Estimate-verify
Estimate-verify

\$3,500	\$0	\$0
\$3,700	\$0	\$0
\$4,200	\$9,240	\$19,140
\$5,000	\$0	\$0
\$6,000	\$0	\$0
\$7,500	\$0	\$0
\$9,000	\$0	\$0

Estimate-verify
Estimate-verify
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Estimate-verify
Estimate-verify
Estimate-verify
Estimate-verify

\$240	\$0	\$0
\$240	\$0	\$0
\$240	\$480	\$1,780
\$500	\$0	\$0
\$500	\$0	\$0
\$700	\$0	\$0
\$700	\$0	\$0

Estimate-verify
Estimate-verify
Estimate-verify
Estimate-verify
Estimate-verify
Estimate-verify
Estimate-verify

\$110	\$440	\$640
\$110	\$220	\$330
\$120	\$0	\$0
\$120	\$0	\$0
\$160	\$320	\$480
\$160	\$0	\$0
\$200	\$0	\$0
\$200	\$0	\$0

\$150	\$0	\$0
\$225	\$0	\$0
\$300	\$0	\$0
\$125	\$0	\$0
\$160	\$0	\$0
\$200	\$0	\$0
\$120	\$0	\$0
\$180	\$0	\$0
\$2,700	\$0	\$0
\$6,500	\$0	\$0
\$8,500	\$0	\$0
\$2,500	\$0	\$0
\$6,000	\$0	\$0
\$8,000	\$0	\$0
\$12,000	\$0	\$0
\$16,000	\$0	\$0

\$1,200	\$0	\$0
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Estimate for Deleted Work

\$1,050	\$0	\$0
\$150	\$0	\$0
\$650	\$0	\$0

\$2,000	\$0	\$0
\$2,500	\$0	\$0
\$3,500	\$0	\$0
\$4,500	\$0	\$0
\$1,750	\$0	\$0
\$2,250	\$0	\$0
\$3,250	\$0	\$0
\$4,250	\$0	\$0

\$120	\$0	\$0
\$0	\$0	\$0
\$600	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$8,500	\$0	\$0
\$240	\$0	\$0
\$360	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0
\$120	\$0	\$0
\$150	\$0	\$0
\$180	\$0	\$0
\$240	\$0	\$0
\$0	\$0	\$0
\$0	\$0	\$0

Total	Grand Total
Labor	Materials and Labor
\$82,370	\$163,382

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	\$0
	\$0
	\$0

Estimate for Deleted Work

	\$0
	\$0
	\$0
	\$0

Estimate for New Work

PROJECT NAME: Central Subway Contract 3 AWSS-PCO 10/13 New Work
JOB NUMBER: 1424J
DRAWINGS: AW-501.5 Rev. 0 Edited 10/10/13, AW-501.13 Rev. 0 Edited 10/10/13
LOCATION(S): Locations 5 and 6, Fourth Street between Bryant and Harrison Streets
Estimate preparer: Michael B. Smith
Date estimate prepared: 10/11/13, Revised 10/16/13

AWSS Construction Work										
Line Item	Item description	Quantity	Type	Each Materials (American made)	Total Materials (American made)	Each Materials (NonAmerican made)	Total Materials (NonAmerican made)	Each Labor	Total Labor	Grand Total Materials and Labor

Hydrant Lateral-Furnish and Install										
1	Hydrant lateral assembly, 12" riser, gate valve, stop collars (2), 8" MJB x FLG adaptor, 15' max 8" straight pipe with MJ fittings, restrained joints, hydrant finish plates (pair), no tee included in price	1	Lump Sum	\$9,500	\$9,500	\$25,504	\$25,504	\$36,000	\$36,000	\$71,004
2	Hydrant assembly (single unit)	0	Lump Sum			\$18,000	\$0	\$8,000	\$0	\$0

Typical AWSS Piping-Furnish and Install-No Removal of Existing Pipe Included in Cost-see Restrained Joint Costs. Does Not Include Materials/Labor for Fittings Includes excavation and restoration of trench										
1	8" diameter DI BS Class 53 pipe	18	Linear Foot	\$65	\$1,170			\$300	\$5,400	\$6,570
2	10" diameter DI BS Class 53 pipe	0	Linear Foot	\$85	\$0			\$350	\$0	\$0
3	12" diameter DI BS Class 53 pipe	38	Linear Foot	\$100	\$3,800			\$350	\$13,300	\$17,100
4	14" diameter DI BS Class 54 pipe	0	Linear Foot	\$120	\$0			\$450	\$0	\$0
5	16" diameter DI BS Class 55 pipe	0	Linear Foot	\$150	\$0			\$450	\$0	\$0
6	18" diameter DI BS Class 56 pipe	0	Linear Foot	\$175	\$0			\$600	\$0	\$0
7	20" diameter DI BS Class 56 pipe	0	Linear Foot	\$200	\$0			\$600	\$0	\$0

Gate Valves and Valve Box/Vault-Furnish and Install										
1	8" gate valve with valve box and cover (8" line)	0	Lump Sum	\$100	\$0	\$5,552	\$0	\$2,500	\$0	\$0
2	10" gate valve with valve box and cover (10 and 12" lines)	0	Lump Sum	\$100	\$0	\$7,749	\$0	\$3,500	\$0	\$0
3	12" gate valve, concrete valve vault, cover fittings (14" line)	0	Lump Sum	\$12,500	\$0	\$11,401	\$0	\$10,000	\$0	\$0
4	16" gate valve, concrete valve vault, cover fittings (16 and 18" lines)	0	Lump Sum	\$12,500	\$0	\$18,634	\$0	\$10,000	\$0	\$0
5	20" gate valve, concrete valve vault, cover fittings (20" line)	0	Lump Sum	\$12,500	\$0	\$24,500	\$0	\$10,000	\$0	\$0
8	Concrete valve vault (14" line)	0	Lump Sum	\$12,500	\$0	\$2,500	\$0	\$5,000	\$0	\$0
9	Concrete valve vault (16 and 18" lines)	0	Lump Sum	\$12,500	\$0	\$2,500	\$0	\$5,000	\$0	\$0
10	Concrete valve vault (20" line)	0	Lump Sum	\$12,500	\$0	\$2,500	\$0	\$5,000	\$0	\$0

Motorized Gate Valves and Valve Box/Vault-Furnish and Install. Does not include actuators, conduits, sidewalk mounted equipment										
1	10" gate valve with valve box and cover (10 and 12" lines)	0	Lump Sum	\$15,300	\$0	\$7,749	\$0	\$13,000	\$0	\$0
2	12" gate valve, concrete valve vault, cover fittings (14" line)	0	Lump Sum	\$15,300	\$0	\$11,401	\$0	\$13,000	\$0	\$0
3	16" gate valve, concrete valve vault, cover fittings (16 and 18" lines)	0	Lump Sum	\$15,300	\$0	\$18,634	\$0	\$15,000	\$0	\$0
4	20" gate valve, concrete valve vault, cover fittings (20" line)	0	Lump Sum	\$15,300	\$0	\$24,500	\$0	\$15,000	\$0	\$0

Motorized Gate Valve Location Equipment Including Actuators-Furnish and Install										
1	Single motorized gate valve actuators, wiring by DTIS	0	Lump Sum	\$45,000	\$0			\$12,000	\$0	\$0
2	Dual motorized gate valve actuators, wiring by DTIS	0	Lump Sum	\$48,000	\$0			\$12,000	\$0	\$0
3	Single motorized gate valve actuator, controller cabinet for single valve, antenna pole, battery vault/cabinet, conduit, sump pump piping, DTIS wiring	0	Lump Sum	\$155,000	\$0			\$15,000	\$0	\$0
4	Dual motorized gate valve actuators, controller cabinet for dual valves, antenna pole, battery vault/cabinet, conduit, sump pump piping, DTIS wiring	0	Lump Sum	\$190,000	\$0			\$18,000	\$0	\$0

Typical AWSS Fittings-Furnish and Install-no removal of existing pipe included in cost or restrained joint costs for tie rods/concrete thrust blocks when required										
Elbow, DI MJB or Flanged, Including 1 set of fasteners, 90-degree										
1	8" diameter	2	Each			\$1,418	\$2,836	\$120	\$240	\$3,076
2	10" diameter	0	Each			\$1,748	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$2,151	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$2,596	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$3,067	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$4,183	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$5,378	\$0	\$240	\$0	\$0

Elbow, DI MJB or Flanged, Including 1 set of fasteners, 45-degree										
1	8" diameter	1	Each			\$1,321	\$1,321	\$120	\$120	\$1,441
2	10" diameter	0	Each			\$1,440	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$1,865	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$2,412	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$2,741	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$3,305	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$4,662	\$0	\$240	\$0	\$0

Elbow, DI MJB or Flanged, Including 1 set of fasteners, 22 1/2-degree										
1	8" diameter	0	Each			\$1,252	\$0	\$120	\$0	\$0

Estimate for New Work

2	10" diameter	0	Each			\$1,603	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$1,962	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$2,451	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$2,729	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$3,543	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$4,544	\$0	\$240	\$0	\$0

Elbow, DI MJB or Flanged, Including 1 set of fasteners, 11 1/4-degree

1	8" diameter	0	Each			\$1,381	\$0	\$120	\$0	\$0
2	10" diameter	0	Each			\$1,577	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$1,930	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$2,416	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$2,710	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$3,344	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$4,680	\$0	\$240	\$0	\$0

Cross, Full Size and Reducing, DI MJB

1	12" diameter	0	Each			\$3,769	\$0	\$220	\$0	\$0
2	16" diameter	0	Each			\$5,384	\$0	\$280	\$0	\$0

Tee, Full Size and Reducing, DI MJB

1	10" diameter	0	Each			\$2,484	\$0	\$180	\$0	\$0
2	12" diameter	0	Each			\$2,718	\$0	\$180	\$0	\$0
3	14" diameter	0	Each			\$3,933	\$0	\$240	\$0	\$0
4	16" diameter	0	Each			\$4,541	\$0	\$240	\$0	\$0
5	18" diameter	0	Each			\$4,314	\$0	\$300	\$0	\$0
6	20" diameter	0	Each			\$5,922	\$0	\$300	\$0	\$0

Hydrant Tee, DI MJB x FLG

1	10" diameter	0	Each			\$2,223	\$0	\$180	\$0	\$0
2	12" diameter	0	Each			\$2,687	\$0	\$180	\$0	\$0
3	14" diameter	0	Each			\$3,280	\$0	\$240	\$0	\$0
4	16" diameter	0	Each			\$4,157	\$0	\$240	\$0	\$0
5	18" diameter	0	Each			\$4,383	\$0	\$300	\$0	\$0
6	20" diameter	0	Each			\$5,713	\$0	\$300	\$0	\$0

Stop Collar, DI

1	8" diameter	5	Each			\$281	\$1,405	\$60	\$300	\$1,705
2	10" diameter	0	Each			\$527	\$0	\$60	\$0	\$0
3	12" diameter	3	Each			\$447	\$1,341	\$60	\$180	\$1,521
4	14" diameter	0	Each			\$667	\$0	\$80	\$0	\$0
5	16" diameter	0	Each			\$721	\$0	\$80	\$0	\$0
6	18" diameter	0	Each			\$904	\$0	\$120	\$0	\$0
7	20" diameter	0	Each			\$1,038	\$0	\$120	\$0	\$0

Bell Collar, DI

1	8" diameter	0	Each			\$263	\$0	\$60	\$0	\$0
2	10" diameter	0	Each			\$490	\$0	\$60	\$0	\$0
3	12" diameter	1	Each			\$432	\$432	\$60	\$60	\$492
4	14" diameter	0	Each			\$706	\$0	\$80	\$0	\$0
5	16" diameter	0	Each			\$694	\$0	\$80	\$0	\$0
6	18" diameter	0	Each			\$874	\$0	\$120	\$0	\$0
7	20" diameter	0	Each			\$994	\$0	\$120	\$0	\$0

Solid Sleeve, DI

1	8" diameter	0	Each			\$809	\$0	\$120	\$0	\$0
2	10" diameter	0	Each			\$1,011	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$1,132	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$1,660	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$1,844	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$1,995	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$2,235	\$0	\$240	\$0	\$0

Adaptor, Straight or Reducing, MJB x GHB

1	8" diameter	0	Each			\$2,224	\$0	\$120	\$0	\$0
2	10" diameter	0	Each			\$1,500	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$1,683	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$2,116	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$2,326	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$2,812	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$3,539	\$0	\$240	\$0	\$0

Adaptor, Straight or Reducing, MJ Spigot x GH Spigot

Estimate for New Work

1	8" diameter	0	Each			\$1,085	\$0	\$120	\$0	\$0
2	10" diameter	0	Each			\$1,326	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$1,770	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$2,298	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$2,619	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$3,305	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$4,275	\$0	\$240	\$0	\$0

Adaptor, Straight or Reducing, MJB x GH Spigot

1	10" diameter	0	Each			\$1,298	\$0	\$120	\$0	\$0
2	12" diameter	0	Each			\$1,664	\$0	\$120	\$0	\$0
3	14" diameter	0	Each			\$1,304	\$0	\$180	\$0	\$0
4	16" diameter	0	Each			\$2,955	\$0	\$180	\$0	\$0
5	18" diameter	0	Each			\$4,091	\$0	\$240	\$0	\$0
6	20" diameter	0	Each			\$4,406	\$0	\$240	\$0	\$0

Flanged Adaptor, Straight or Reducing, MJB x FLG

1	8" diameter	1	Each			\$1,390	\$1,390	\$120	\$120	\$1,510
2	10" diameter	0	Each			\$1,718	\$0	\$120	\$0	\$0
3	12" diameter	0	Each			\$1,960	\$0	\$120	\$0	\$0
4	14" diameter	0	Each			\$2,425	\$0	\$180	\$0	\$0
5	16" diameter	0	Each			\$2,821	\$0	\$180	\$0	\$0
6	18" diameter	0	Each			\$3,633	\$0	\$240	\$0	\$0
7	20" diameter	0	Each			\$3,808	\$0	\$240	\$0	\$0

Flat Cap, MJB or Blind Flange, Including 1 Set of Fasteners

1	8" diameter	0	Each			\$751	\$0	\$60	\$0	\$0
2	10" diameter	0	Each			\$804	\$0	\$60	\$0	\$0
3	12" diameter	1	Each			\$869	\$869	\$60	\$60	\$929
4	14" diameter	0	Each			\$1,557	\$0	\$80	\$0	\$0
5	16" diameter	0	Each			\$1,725	\$0	\$80	\$0	\$0
6	18" diameter	0	Each			\$2,448	\$0	\$120	\$0	\$0
7	20" diameter	0	Each			\$3,808	\$0	\$120	\$0	\$0

Flanged Pipe Spool, Class 300 Flanges, 36" Long, Including 1 Set of Fasteners

1	8" diameter	0	Each	\$1,500	\$0			\$180	\$0	\$0
2	10" diameter	0	Each	\$1,800	\$0			\$180	\$0	\$0
3	12" diameter	0	Each	\$1,850	\$0			\$200	\$0	\$0
4	14" diameter	0	Each	\$2,100	\$0			\$240	\$0	\$0
5	16" diameter	0	Each	\$2,400	\$0			\$280	\$0	\$0
6	18" diameter	0	Each	\$2,600	\$0			\$320	\$0	\$0
7	20" diameter	0	Each	\$3,200	\$0			\$320	\$0	\$0

Pipe Flange, Class 300 Flanges, Including Welding/Threading onto DS/BS Pipe, Including 1 Set of Fasteners

1	8" diameter	0	Each	\$750	\$0			\$120	\$0	\$0
2	10" diameter	0	Each	\$900	\$0			\$120	\$0	\$0
3	12" diameter	0	Each	\$950	\$0			\$120	\$0	\$0
4	14" diameter	0	Each	\$1,050	\$0			\$180	\$0	\$0
5	16" diameter	0	Each	\$1,200	\$0			\$180	\$0	\$0
6	18" diameter	0	Each	\$1,300	\$0			\$240	\$0	\$0
7	20" diameter	0	Each	\$1,600	\$0			\$240	\$0	\$0

Restrained Joints-Furnish and Install (in addition to AWSS linear feet piping costs)

1	8" restrained pipe joint or each end of fitting requiring stop collar and tie rods (4 rods)	0	Lump Sum	\$500	\$0			\$240	\$0	\$0
2	10" restrained pipe joint or each end of fitting requiring stop collar and tie rods (4 rods)	0	Lump Sum	\$550	\$0			\$240	\$0	\$0
3	12" restrained pipe joint or each end of fitting requiring stop collar and tie rods (4 rods)	3	Lump Sum	\$600	\$1,800			\$240	\$720	\$2,520
4	14" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$850	\$0			\$500	\$0	\$0
5	16" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$1,100	\$0			\$500	\$0	\$0
6	18" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$1,300	\$0			\$700	\$0	\$0
7	20" restrained pipe joint or each end of fitting requiring stop collar and tie rods (6 rods)	0	Lump Sum	\$1,500	\$0			\$700	\$0	\$0

Pipe Encasement, including additional labor for installing main into encasement, sliding materials

1	16" encasement for 8" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$2,700	\$0			\$3,500	\$0	\$0
2	20" encasement for 10" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$3,600	\$0			\$3,700	\$0	\$0
3	24" encasement for 12" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$4,500	\$0			\$4,200	\$0	\$0
4	28" encasement for 14" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$5,500	\$0			\$5,000	\$0	\$0
5	32" encasement for 16" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$6,750	\$0			\$6,000	\$0	\$0
6	36" encasement for 18" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$8,000	\$0			\$7,500	\$0	\$0
7	42" encasement for 20" pipe, 18' length, including welding of DS/BS end to adjacent pipe	0	Lump Sum	\$9,750	\$0			\$9,000	\$0	\$0

Pipe Encasement Closing of One End

1	16" encasement end cap for 8" pipe	0	Lump Sum	\$400	\$0			\$240	\$0	\$0
2	20" encasement end cap for 10" pipe	0	Lump Sum	\$500	\$0			\$240	\$0	\$0

Estimate for Blue Work

3	24" encasement end cap for 12" pipe	0	Lump Sum	\$650	\$0			\$240	\$0	\$0
4	28" encasement end cap for 14" pipe	0	Lump Sum	\$675	\$0			\$500	\$0	\$0
5	32" encasement end cap for 16" pipe	0	Lump Sum	\$750	\$0			\$500	\$0	\$0
6	36" encasement end cap for 18" pipe	0	Lump Sum	\$900	\$0			\$700	\$0	\$0
7	42" encasement end cap for 20" pipe	0	Lump Sum	\$1,050	\$0			\$700	\$0	\$0

Concrete Thrust Blocks-Furnish and Install including formwork, delivery of concrete

1	8" pipe/fitting thrust block, no rebar	3	Lump Sum	\$50	\$150			\$110	\$330	\$480
2	10 and 12" pipe/fitting thrust block, no rebar	1	Lump Sum	\$55	\$55			\$110	\$110	\$165
3	14 and 16" pipe/fitting thrust block, no rebar	0	Lump Sum	\$80	\$0			\$120	\$0	\$0
4	18 and 20" pipe/fitting thrust block, no rebar	0	Lump Sum	\$100	\$0			\$120	\$0	\$0
5	8" pipe/fitting thrust block, rebar over pipe/fitting	1	Lump Sum	\$80	\$80			\$160	\$160	\$240
6	10 and 12" pipe/fitting thrust block, rebar over pipe/fitting	0	Lump Sum	\$85	\$0			\$160	\$0	\$0
7	14 and 16" pipe/fitting thrust block, rebar over pipe/fitting	0	Lump Sum	\$115	\$0			\$200	\$0	\$0
8	18 and 20" pipe/fitting thrust block, rebar over pipe/fitting	0	Lump Sum	\$140	\$0			\$200	\$0	\$0

Existing AWSS Pipe-Remove and Dispose

1	8-12" cast iron pipe with lead joints, including excavation and shoring only	0	Linear Foot					\$150	\$0	\$0
2	14-16" cast iron pipe with lead joints, including excavation and shoring only	0	Linear Foot					\$225	\$0	\$0
3	18-20" cast iron pipe with lead joints, including excavation and shoring only	0	Linear Foot					\$300	\$0	\$0
4	8-12" ductile iron pipe, including excavation and shoring only	0	Linear Foot					\$125	\$0	\$0
5	14-16" ductile iron pipe, including excavation and shoring only	0	Linear Foot					\$160	\$0	\$0
6	18-20" ductile iron pipe, including excavation and shoring only	0	Linear Foot					\$200	\$0	\$0
7	Melt lead joint for 8-14" pipe	0	Each					\$120	\$0	\$0
8	Melt lead joint for 16-20" pipe	0	Each					\$180	\$0	\$0
9	8-10" cast iron gate valve and valve box, salvage valve and castings, melt lead joints	0	Lump Sum					\$2,700	\$0	\$0
10	12-14" cast iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings, melt lead joints	0	Lump Sum					\$6,500	\$0	\$0
11	16-20" cast iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings, melt lead joints	0	Lump Sum					\$8,500	\$0	\$0
12	8-10" ductile iron gate valve and valve box, salvage valve and casting	0	Lump Sum					\$2,500	\$0	\$0
13	12-14" ductile iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings	0	Lump Sum					\$6,000	\$0	\$0
14	16-20" ductile iron gate valve, removal and disposal of concrete valve vault, salvage valve and castings	0	Lump Sum					\$8,000	\$0	\$0
15	Hydrant lateral, cast iron, 15' max, not including existing tee; salvage hydrant, valve and castings	0	Lump Sum					\$12,000	\$0	\$0
16	Hydrant lateral, ductile iron, 15' max, not including existing tee; salvage hydrant, valve and castings	0	Lump Sum					\$16,000	\$0	\$0

Settlement Reference Points

1	Cast iron pipe, install and remove settlement reference/monitoring point requiring excavation, incl. initial/final surveys	0	Each	\$375	\$0			\$1,200	\$0	\$0
2	Ductile iron pipe, install and remove settlement reference/monitoring point requiring excavation, incl. initial/final surveys	0	Each	\$375	\$0			\$1,050	\$0	\$0
3	Sidewalk, gate valve or hydrant settlement reference/monitoring point, no excavation, incl. initial/final surveys	0	Each	\$50	\$0			\$150	\$0	\$0
4	Surveying maximum of 5 monitoring/reference points once per week, not including initial/final surveys	0	Lump Sum	\$0	\$0			\$650	\$0	\$0

Supporting AWSS Pipe Over Trenches/Excavations

1	Cast iron pipe, 8-14", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$1,500	\$0			\$2,000	\$0	\$0
2	Cast iron pipe, 16-20", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$2,000	\$0			\$2,500	\$0	\$0
3	Cast iron pipe, 8-14", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$3,500	\$0			\$3,500	\$0	\$0
4	Cast iron pipe, 16-20", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$4,500	\$0			\$4,500	\$0	\$0
5	Ductile iron pipe, 8-14", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$1,500	\$0			\$1,750	\$0	\$0
6	Ductile iron pipe, 16-20", trench width less than 5', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$2,000	\$0			\$2,250	\$0	\$0
7	Ductile iron pipe, 8-14", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$3,500	\$0			\$3,250	\$0	\$0
8	Ductile iron pipe, 16-20", trench width 5 to 10', incl. use and setup/removal of I-beams, chains, etc., no surveying incl.	0	Lump Sum	\$4,500	\$0			\$4,250	\$0	\$0

Miscellaneous AWSS Items-Furnish and Install

1	Concrete protective slab, including formwork and rebar	20	Linear Foot	\$150	\$3,000			\$120	\$2,400	\$5,400
2	Paving, standard asphalt, 2-inches thick, per square yard	0	Square Yard	\$0	\$0			\$0	\$0	\$0
3	Air valve assembly, including castings	1	Lump Sum	\$550	\$550	\$1,300	\$1,300	\$600	\$600	\$2,450
4	8" flanged offset pipe assembly with 4 45-degree flanged elbows and 3 pipe spools	0	Lump Sum	\$0	\$0			\$0	\$0	\$0
5	8" MJB offset pipe assembly with 4 45-degree MJB elbows, 3 nipples and 2 stop collars	0	Lump Sum	\$0	\$0			\$0	\$0	\$0
6	Concrete thrust post, 33" deep with W24x100 steel post	0	Each	\$11,000	\$0			\$8,500	\$0	\$0
7	Lead joint for 8-14" pipe, melt lead joint, pour new lead joint	0	Each	\$50	\$0			\$240	\$0	\$0
8	Lead joint for 16-20" pipe, melt lead joint, pour new lead joint	0	Each	\$80	\$0			\$360	\$0	\$0
9	Removal and rebuilding/recoating of fireboat wharf manifold	0	Lump Sum	\$25,000	\$0			\$0	\$0	\$0
10	Installation of rebuilt fireboat wharf manifold, including new concrete supports, tie rods	0	Lump Sum	\$25,000	\$0			\$0	\$0	\$0
11	Strong back, 8", does not include tie rods	0	Each	\$1,800	\$0			\$120	\$0	\$0
12	Strong back 10 and 12", does not include tie rods	0	Each	\$2,500	\$0			\$150	\$0	\$0
13	Strong back 14 and 16", does not include tie rods	0	Each	\$4,500	\$0			\$180	\$0	\$0
14	Strong back 18 and 20", does not include tie rods	0	Each	\$6,000	\$0			\$240	\$0	\$0
15	Suction connection hydrant, including concrete pad, 2 bollards, 60' of piping, marine pile, suction assembly	0	Lump Sum	\$45,000	\$0			\$0	\$0	\$0
16	Suction connection hydrant, including 2 bollards, 12' vertical drafting piping, suction assembly	0	Lump Sum	\$45,000	\$0			\$0	\$0	\$0
17	8" diameter pipe trench earthwork, 6' deep, 3' wide excavation and backfill/compaction, including shoring-no pipe	50	Linear Foot	\$15	\$750			\$120	\$6,000	\$6,750
18	10" diameter pipe trench earthwork, 6' deep, 3' wide excavation and backfill/compaction, including shoring-no pipe	0	Linear Foot	\$15	\$0			\$120	\$0	\$0
19	12" diameter pipe trench earthwork, 6' deep, 3'-6" wide excavation and backfill/compaction, including shoring-no pipe	75	Linear Foot	\$15	\$1,125			\$160	\$12,000	\$13,125
20	14" diameter pipe trench earthwork, 6' deep, 3'-6" wide excavation and backfill/compaction, including shoring-no pipe	0	Linear Foot	\$15	\$0			\$160	\$0	\$0
21	16" diameter pipe trench earthwork, 6' deep, 4' wide excavation and backfill/compaction, including shoring-no pipe	0	Linear Foot	\$15	\$0			\$190	\$0	\$0
22	18" diameter pipe trench earthwork, 6' deep, 4' wide excavation and backfill/compaction, including shoring-no pipe	0	Linear Foot	\$15	\$0			\$190	\$0	\$0
23	20" diameter pipe trench earthwork, 6' deep, 4'-6" wide excavation and backfill/compaction, including shoring-no pipe	0	Linear Foot	\$15	\$0			\$220	\$0	\$0

Estimate for New Work

Total Materials (American made)
\$21,980

Total Materials (NonAmerican made)
\$36,398

Total	Grand Total
Labor	Materials and Labor
\$78,100	\$136,478

TOTAL FOR ABOVE WORK							
(AWSS Bid Item cost(s) for multi-discipline project)							
Total from above							\$0
Contingency 10%							\$0
Total with contingency							\$0
Contractor's profit/overhead 15%							\$0
Total with profit/overhead							\$0
Mobilization 5%							\$0
GRAND TOTAL FOR PROJECT							\$0
(Cost for stand-alone AWSS Piping project)							

Notes:
 All piping costs include excavating, standard shoring, backfilling, compaction, road base restoration, unless otherwise noted. Paving per DPW excavation code requirements in not included.
 Tie rod costs are based on 3' long tie rods with nuts/washers/binding wires (2 locations).
 Labor costs are estimated.

MBS 09/03/10

Estimate for New Work

Hydrant \$18,000, gate valve \$4262, cover/frame/dust pan \$1290, stop collar (2) \$281, adaptor \$1390

Gate valve \$4262, cover/frame/dust pan \$1290
Gate valve \$5830, cover/frame/dust pan \$1919
Gate valve \$8901, cover/frame/dust pan \$2500, concrete valve vault \$16,500
Gate valve \$16134, cover/frame/dust pan \$2500, concrete valve vault \$16,500
Gate valve \$22000, cover/frame/dust pan \$2500, concrete valve vault \$16,500
Cover/frame/dust pan \$2500, concrete valve vault \$12,500
Cover/frame/dust pan \$2500, concrete valve vault \$12,500
Cover/frame/dust pan \$2500, concrete valve vault \$12,500

Gate valve \$5830, cover/frame/dust pan \$1919, concrete valve vault \$12,500, double leaf doors \$2800
Gate valve \$8901, cover/frame/dust pan \$2500, concrete valve vault \$12,500, double leaf doors \$2800
Gate valve \$16134, cover/frame/dust pan \$2500, concrete valve vault \$12,500, double leaf doors \$2800
Gate valve \$22000, cover/frame/dust pan \$2500, concrete valve vault \$12,500, double leaf doors \$2800

Estimate for New Work

Estimate for New Work

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Estimate for New Work

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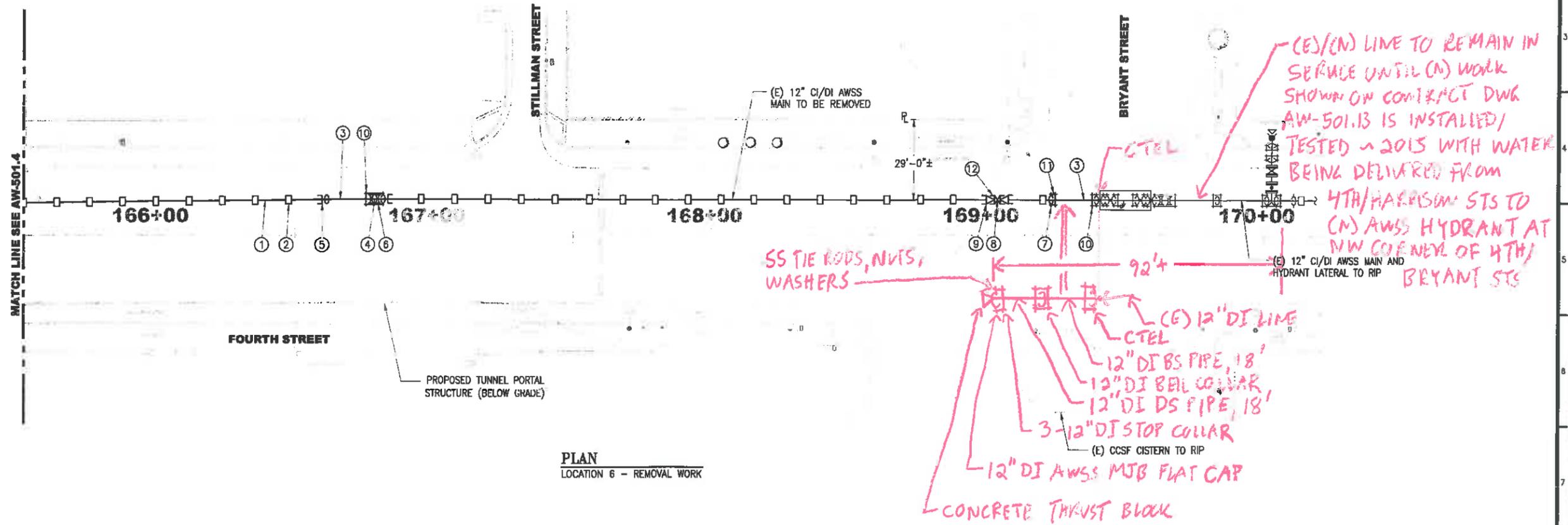


REMOVE AND DISPOSE BY CONTRACTOR (UNLESS OTHERWISE NOTED):

ITEM	QUAN	DESCRIPTION
1	28	12" CI DS PIPE, 18'
2	27	12" CI SLEEVE
3	2	12" DI DS PIPE, 18" (R&S)
4	2	12" DI NIPPLE, CTS (R&S)
5	2	12" DI MJB x GHB ADAPTOR (R&S)
6	2	12" DI SOLID SLEEVE (R&S)
7	1	12" DI MJB x GH SPIGOT ADAPTOR (R&S)
8	1	10" CI GHB GATE VALVE, VALVE BOX, FRAME, COVER, DUST PAN (R&S)
9	2	12"x10" CI GHB x GH SPIGOT REDUCING ADAPTOR (R&S)
10	3	12" DI STOP COLLAR (R&S)
11	A/R	STAINLESS STEEL TIE RODS, NUTS, WASHERS (R&S)
12	A/R	STEEL TIE RODS, NUTS, WASHERS

NOTES:

- REFER TO DWG AW-501.13 FOR NEW WORK PLAN AND DWG AW-501.14 FOR NEW WORK PROFILE.
- REFER TO RELATED DRAWINGS IN THIS CONTRACT FOR EXISTING AND NEW UTILITIES AT THIS LOCATION.
- EXISTING PIPE SHOWN ON THIS DWG HAS A TYPICAL DEPTH OF 3.2 TO 5.5 FEET FROM FINISHED GRADE TO $\frac{1}{2}$ OF PIPE. THESE DIMENSIONS ARE FOR REFERENCE ONLY AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.



PLAN
LOCATION 6 - REMOVAL WORK

PROPOSED NEW WORK

MICHAEL B. SMITH
SFDPW/IDC/EME 1/2
10/09/13
10/10/13

SAN FRANCISCO FIRE DEPARTMENT
APPROVED: *[Signature]*
DATE: 2/1/11



REFERENCE INFORMATION & FILE NO. OF SURVEYS	
AWSS DWG NOS. 265, 265A	
D 01/21/2011	ISSUED FOR BID
MBS	AS
NO.	DATE
DESCRIPTION	
BY	APP.

TABLE OF REVISIONS	
NO.	DATE
DESCRIPTION	
BY	APP.



BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO



DESIGNED:	DATE:	APPROVED:
MBS	01/11	<i>[Signature]</i>
DRAWN:	DATE:	SECTION MANAGER
NL	01/11	<i>[Signature]</i>
CHECKED:	DATE:	DEPUTY BUREAU MANAGER
AS	01/11	<i>[Signature]</i>
		BUREAU MANAGER

SCALE:
1" = 20'-0"
SHEET OF SHEETS:
7 OF 16

THIRD STREET LIGHT RAIL PROGRAM
PHASE 2 - CENTRAL SUBWAY TUNNELS
AUXILIARY WATER SUPPLY SYSTEM WORK
LOCATION 6
REMOVAL WORK - PLAN

CONTRACT NO.	
1252	
FILE NO.	
91,647	
DRAWING NO.	REVISION
AW-501.5	0
SHEET NO.	

DATE PLOTTED: 11/27/11 PLOT SCALE: 1"=1' DATE IN TITLE BLOCK: 11/27/11 THIS USED: FJ/S

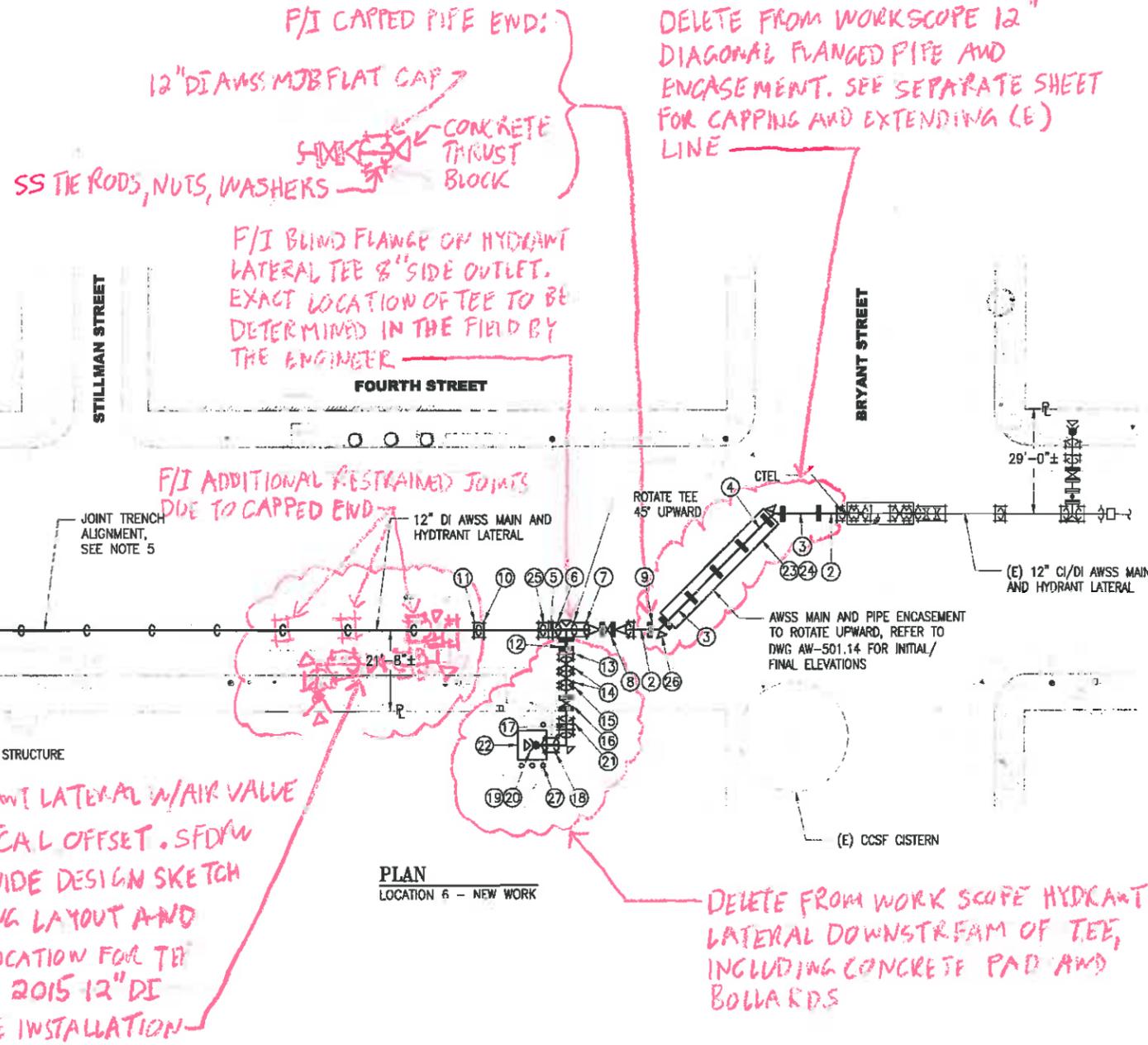


NOTES:

1. REFER TO DWG AW-501.5 FOR REMOVAL WORK PLAN, DWG AW-501.8 FOR TEMPORARY WORK PLAN AND DWG AW-501.14 FOR NEW WORK PROFILE.
2. ALL WORK IS NEW AND SHALL BE FURNISHED/INSTALLED BY THE CONTRACTOR UNLESS SPECIFICALLY REFERRED TO AS EXISTING.
3. REFER TO RELATED DRAWINGS IN THIS CONTRACT FOR EXISTING AND NEW UTILITIES AT THIS LOCATION.
4. EXISTING PIPE SHOWN ON THIS DWG HAS A TYPICAL DEPTH OF 3.2 TO 5.5 FEET FROM FINISHED GRADE TO C. OF PIPE. THESE DIMENSIONS ARE FOR REFERENCE ONLY AND SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR.
5. REFER TO DWGS UT-521, UT-522 AND UT-523 IN THIS CONTRACT FOR EXACT LOCATION OF AWSS MAIN AND HYDRANT LATERAL IN RELATIONSHIP TO OTHER EXISTING AND NEW UTILITIES IN JOINT TRENCH, INCLUDING CLEARANCE REQUIREMENTS.
6. REFER TO AWSS STANDARD DWGS FOR HP HYDRANT AND FINISH PLATES INSTALLATION DETAILS.
7. THE REINFORCED CONCRETE HYDRANT SLAB SHALL BE 8'x8'x12" THICK WITH TOP SURFACE FLUSH WITH TOP OF CURB AND SLOPED 1/4" PER FOOT AWAY FROM STREET.
8. THE BOLLARDS SHALL BE INSTALLED WITH 12" CLEARANCE FROM THE CONCRETE PAD AND AT THE EXACT LOCATIONS AS DIRECTED BY THE ENGINEER IN THE FIELD. THE BOLLARDS SHALL BE MANUFACTURED FROM 6" GS SCH. 40 PIPE AND HAVE 6" THREADED PIPE CAPS.

FURNISH AND INSTALL (UNLESS OTHERWISE NOTED):

ITEM	QUAN	DESCRIPTION
1	17	12" DI BS PIPE, 18'
2	2	12" DI PIPE WITH CLASS 300 FLG ONE END, CTS
3	4	12" DI CLASS 300 FLG PIPE SPOOL, 12'
4	1	12" DI CLASS 300 FLG PIPE SPOOL, CTS
5	2	12" DI NIPPLE, CTS
6	1	12" DI MJB x FLG HYDRANT TEE
7	2	12"x10" DI MJB x FLG REDUCING ADAPTOR
8	1	10" DI FLG GATE VALVE, VALVE BOX, FRAME, COVER, DUST PAN
9	2	12" DI CLASS 300 FLG ELBOW, 45'
10	5	12" DI STOP COLLAR
11	2	12" DI BELL COLLAR
12	1	8" DI CLASS 300 FLG ELBOW, 45'
13	1	8" DI PIPE WITH CLASS 300 FLG ONE END, CTS
14	2	8" DI AWSS MJB ELBOW, 45'
15	2	8" DI MJB x FLG ADAPTOR
16	1	8" DI FLG GATE VALVE, VALVE BOX, FRAME, COVER, DUST PAN
17	4	8" DI NIPPLE, CTS
18	1	8" DI AWSS MJB ELBOW, 90'
19	1	DI HP HYDRANT ASSY
20	2	DI HYDRANT FINISH PLATE
21	3	8" DI STOP COLLAR
22	1	REINFORCED CONCRETE HYDRANT PAD, SEE NOTE 7
23	2	24" DI BS PIPE, 18', FOR PIPE ENCASEMENT, SEE AWSS STANDARD DWGS FOR DETAILS
24	1	24" DI BS PIPE, CTS, FOR PIPE ENCASEMENT, SEE AWSS STANDARD DWGS FOR DETAILS
25	A/R	STAINLESS STEEL TIE RODS, NUTS, WASHERS
26	8	CONCRETE THRUST BLOCK
27	4	PERMANENT BOLLARD, SEE AWSS STANDARD DWGS FOR DETAILS AND NOTE 8



PLAN
LOCATION 6 - NEW WORK

MICHAEL B. SMITH
SDFW/IDC/EME
10/10/13
10/16/13

PROPOSED NEW WORK AND WORK TO BE DELETED



SAN FRANCISCO FIRE DEPARTMENT

APPROVED: *[Signature]*
DATE: 2/1/11



NO.	DATE	DESCRIPTION	BY	APP.
0	01/21/2011	ISSUED FOR BID	MBS	AS

TABLE OF REVISIONS
CHECK WITH TRACING TO SEE IF YOU HAVE LATEST REVISION

REFERENCE INFORMATION & FILE NO. OF SURVEYS
AWSS DWG NOS. 265, 265A



BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY AND COUNTY OF SAN FRANCISCO



DESIGNED:	DATE:	APPROVED:	DATE:
MBS	01/11	<i>[Signature]</i>	02/11
DRAWN:	DATE:	SECTION MANAGER	DATE:
NL	01/11		
CHECKED:	DATE:	DEPUTY BUREAU MANAGER	DATE:
AS	01/11		
		BUREAU MANAGER	DATE:

SCALE:
1" = 20'-0"
SHEET OF SHEETS
15 OF 16

THIRD STREET LIGHT RAIL PROGRAM
PHASE 2 - CENTRAL SUBWAY TUNNELS
AUXILIARY WATER SUPPLY SYSTEM WORK
LOCATION 6
NEW WORK - PLAN

CONTRACT NO.	1252
FILE NO.	91,655
DRAWING NO.	AW-501.13
SHEET NO.	0

Tutor Perini Corporation
15901 Olden Street
Sylmar, CA 91342
Tel: 818/362-8391 Fax: 818-364-8128

Tutor Perini
Over a century of excellence

October 21, 2013

SFMTA-15

Richard Redmond, Program Manager
San Francisco Municipal Transportation Agency
821 Howard St, 2nd Floor
San Francisco, CA 94103

RE: Third Street Light Rail Program Phase 2 – Central Subway Stations, Surface,
Track and Systems, Contract No. 1300

SUB: **Grade A913/70 W Shapes – Sole Source Foreign Steel Specification**

Dear Mr. Redmond:

Tutor Perini Corporation (TPC) has received and reviewed SFMTA's attached response to RFI 00023 and offers Cody Builders Supply's attached letter dated Oct 16, 2013 in response. Specifically, as stated within Cody Builders Supply's letter, SFMTA needs to address three issues: 1) Sole Source Design/Specification for Foreign ASTM A913/Grade 70 wales; 2) ASTM 913/Grade 70 W30x235 Wales not produced worldwide and 3) 36" diameter x 2" wall Grade 70 Pipe Struts foreign made only.

Please be advised that time and cost impacts for these three issues noted above cannot be determined at this time and will be calculated at a later date subsequent to the resolution and SFMTA's direction. Please also note that the time process in SFMTA procuring an approval of an FTA Waiver Request in and of itself may carry delays and impacts to the project's schedule. Be advised this is an urgent matter holding up the placement of mill orders currently due.

Please contact the undersigned at 415-638-6052 if you have any questions.

Sincerely,

TUTOR PERINI CORPORATION



Patrick M. Jennings
Project Manager

cc: File, J Frost, 10-2.0004

Phone: 702-533-8099

TITLE: UMS RFI 0003 W30x235 in Grade 70**DATE:** 9/6/2013**PROJECT:** Stations, Surface, Track & Systems**JOB:** CN1300**TO:** Attn: Richard Redmond
Central Subway Project**STARTED:****COMPLETED:****REQUIRED:** 9/13/2013**QUESTION:**

The W30x235 shape called out on UMS ST-731, sheet 437 in Volume 2 of 3, is not available in Grade 70. Is it acceptable to use a W36x232 in Grade 70? Please advise.

ANSWER:

Refer to Specification Section 01 25 00, Substitution Procedures.

- Submit a no-cost request for substitution (RFS) to construct and install a built-up section equivalent to the W30x235 shape from Gr. 70 steel plates, and any associated cost due to this change will be on Contractor. Contractor is responsible for any schedule impact due to this change.
- Submit an RFS to use W36x230 (Gr. 70) in lieu of constructing an equivalent built-up member size manufactured from Gr. 70 steel plates, as stated in the RFI. The details of the steel and concrete wales would be similar to those shown for the escalator location at the platform strut level. The RFS would state that the additional materials cost are absorbed by the Contractor, and show SFMTA being reimbursed for the required revisions to the details/configuration of the steel and concrete wales which will be affected by this change.

Requested By: Tutor Perini Corp**Date:** 9/6/2013**Signed:** _____
Brett Chabert



Pat Jennings
Tutor Perini
UMS Station project

16 October 2013

UMS Station Unavailable grades of steel specified

1. Grade 70 Wales

Please refer to ST-731 for list of wales specified. As noted in Bidders question No. 13 of Addendum #7, ASTM A913 Grade 70 wales are not manufactured in the USA. The response to this question mentions a "request for waiver". Considering the nature of the steel specified, this waiver should have been requested by the owner prior to specifying sole source foreign steel.

ASTM A913 steel has never been manufactured in the USA. This grade of steel was introduced around 1995 by a Luxembourg steel company, Arbed, which is today Arcelor Mittal. Attached is a letter from Arcelor Mittal indicating that this grade is not manufactured in the USA. We have checked several US mills and found this to be true.

The bidders question response also mentions possibility of the use of steel plate conforming to ASTM A913. Please refer to table 2-5 of the AISC Manual for Steel Construction 14th edition. Plates are not available in this ASTM; it is for structural shapes only. ASTM A913 has a toughness requirement of 40 ft/ lbf charpy V-notch test. Available Grade 70 plates have toughness less than this.

Table 2-4 of the AISC Manual lists ASTM A913 as "Other applicable material specification, the availability of which should be confirmed prior to specification". A request for waiver should have been sent by the designer prior to specifying sole source foreign steel for this application.

Please confirm it will be acceptable to use the ASTM A913 steel beams specified which have only ever been available from Luxembourg.

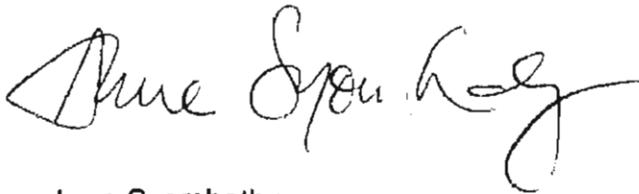
12002 North Lamar Boulevard • Austin, Texas 78753
Voice (512) 339-9834 • Fax (512) 339-0165 • E-mail metals@codybuilderssupply.com
www.codybuilderssupply.com

2. W30x235 Grade 70 walers

As mentioned above the sole source supplier, Arcelor Mittal, does not produce W30x235 sections. Therefore, it is not an available section. Please see attached email from Arcelor Mittal stating this. I have also attached pages from their brochure along with list of available sections. Please direct us on what material to use for this application.

3. Pipe struts 36" dia x 2" wall Grade 70

See attached letters from suppliers. We have checked with 4 of the leading large tube suppliers who have confirmed that 36" dia x 2" wall grade 70 pipe is not available Melted and Manufactured in the USA. See attached letters from Ozark Tubular Products and Aberi Steel LLC. Please indicate what material shall be used for these pipe struts.



Imre Szombathy
Sr Project Manager

Encl.

Addendum 7, question 13
AISC 14th edition Manual Tables 2-4, 2-5
Arcelor Mittal letter of 4 October 2013
Arcelor Mittal Brochure (2 pages)
Arcelor Mittal email
Ozark Tubular Products letter
Aberi Steel LLC Letter

THIRD STREET LIGHT RAIL PROGRAM – CENTRAL SUBWAY
 CONTRACT 1253
 RESPONSES TO BIDDER'S QUESTIONS
 ADDENDUM NO. 7
 AUGUST 17, 2012

<p>13</p>	<p>Per our conversation, some of the specs on this project can only be produced overseas. The specifications that are being asked for are contradictory in the fact that they state they have to be domestic, but WF beams can't be made to ASTM A913 Grade 70 domestically, however, they can be made overseas.</p> <p>With this being said, would foreign beams be allowed or not? The mills in the US can only produce beams to A992 Grade 50.</p> <p>Also, I wanted to address the specifications on the pipe as well, API pipe is not made to grade 50, it would be API 5L x48 or x52. This is used for oil and gas lines, so I am wondering why this is being called out for structural use. Would and alternate be acceptable on the pipe as these specs and sizes you are looking are normally made overseas as well. If found domestically the prices would be outrageously higher than an alternative.</p> <p>As an alternate, for instance would pipe made to Cal Trans Class R be acceptable as these specs were based off of API specifications? This is just an A252 Grade 3 pipe with a 50,000 minimum yield with tighter tolerances than A252 calls for.</p> <p>If these alternates are allowed, it would create more competition in the market to ensure the owner is getting the best overall package, thus keeping the work in this country.</p>	<p>An alternative design/manufacturer – particularly if certain specified steel members cannot be readily obtained in accordance with the Buy America Act - will be reviewed for acceptance upon receipt of a request for waiver or substitution, with the appropriate documentation to demonstrate equivalency. Refer to Specification Section 01 25 00, Substitution Procedures.</p> <p>Equivalent built-up member sizes manufactured from steel plates conforming to ASTM A913 Grade 70 are acceptable.</p> <p>API Grade 50 pipe is acceptable; ASTM A252 Grade 3 pipe with minimum 50 ksi yield strength is also acceptable.</p>
<p>14</p>	<p>I have been working with Parsons Brinckerhoff to add FlaktWoods into the list of suppliers for the emergency ventilation fans. FlaktWoods supplies fans of this type around the world – including previous projects for SF Muni, BART locally. So FlaktWoods is normally included. And as a US manufacture (Michigan – Ohio) for a US project – we don't understand why we are not included here.</p> <p>Can you help resolve this issue? PB did suggest I contact you for this issue. I have been in contact with the New York and Sacramento offices. I have talked with you earlier this year to request bid documents for both of these projects. Please give me a call or reply by email. I would like to resolve this issue as soon as possible.</p>	<p>An alternative manufacturer will be reviewed for acceptance upon receipt of a request for substitution, with the appropriate documentation to demonstrate equivalency. Refer to Specification Section 01 25 00, Substitution Procedures.</p>

Table 2-4
Applicable ASTM Specifications
for Various Structural Shapes

Steel Type	ASTM Designation	F _y Min. Yield Stress (ksi)	F _u Tensile Stress* (ksi)	Applicable Shape Series																
				W	M	S	HP	C	MC	L	HSS									
											Rect.	Round	Pipe							
Carbon	A36	36	58-80 ^a																	
	A53 Gr. B	35	60																	
	A500	Gr. B	42	58																
		Gr. C	46	58																
			46	62																
	A501	Gr. A	36	58																
		Gr. B	50	70																
	A529 ^b	Gr. 50	50	85-100																
		Gr. 55	55	70-100																
	High-Strength Low-Alloy	A572	Gr. 42	42	60															
Gr. 50			50	65 ^a																
Gr. 55			55	70																
Gr. 60 ^c			60	75																
Gr. 65 ^d			65	80																
A618 ^e		Gr. I & II	50 ^a	70 ^a																
		Gr. III	50	85																
A913		50	50 ^a	60 ^b																
		60	60	75																
		65	65	80																
	70	70	90																	
A992	50	65 ^f																		
Corrosion Resistant High-Strength Low-Alloy	A242	42	63 ^g																	
		46 ^h	67 ^h																	
		50 ⁱ	70 ⁱ																	
	A588	50	70																	
A847	50	70																		

= Preferred material specification
 = Other applicable material specification, the availability of which should be confirmed prior to specification
 = Material specification does not apply

^a Minimum unless a range is shown.
^b For shapes over 426 lb/ft, only the minimum of 58 ksi applies.
^c For shapes with a flange thickness less than or equal to 1 1/2 in. only. To improve weldability, a maximum carbon equivalent can be specified (per ASTM Supplementary Requirement S78). If desired, maximum tensile stress of 90 ksi can be specified (per ASTM Supplementary Requirement S79).
^d If desired, maximum tensile stress of 70 ksi can be specified (per ASTM Supplementary Requirement S91).
^e For shapes with a flange thickness less than or equal to 2 in. only.
^f ASTM A618 can also be specified as corrosion-resistant; see ASTM A618.
^g Minimum applies for walls nominally 3/4-in. thick and under. For wall thicknesses over 3/4 in., F_y = 46 ksi and F_u = 67 ksi.
^h If desired, maximum yield stress of 65 ksi and maximum yield-to-tensile strength ratio of 0.85 can be specified (per ASTM Supplementary Requirement S75).
ⁱ A maximum yield-to-tensile strength ratio of 0.85 and carbon equivalent formula are included as mandatory in ASTM A992.
 For shapes with a flange thickness greater than 2 in. only.
 For shapes with a flange thickness greater than 1 1/2 in. and less than or equal to 2 in. only.

Table 2-5
Applicable ASTM Specifications
for Plates and Bars

Steel Type	ASTM Designation	F _y Min. Yield Stress (ksi)	F _u Tensile Stress* (ksi)	Plates and Bars																		
				to 0.75	over 0.75 to 1.25	over 1.25 to 1.5	over 1.5 to 2	over 2 to 2.5	over 2.5 to 4	over 4 to 5	over 5 to 6	over 6 to 8	over 8									
				Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.									
Carbon	A36	32	58-80																			
		36	58-80																			
	A529	Gr. 50	50	70-100																		
High-Strength Low-Alloy	A572	Gr. 42	42	60																		
		Gr. 50	50	65																		
		Gr. 55	55	70																		
		Gr. 60	60	75																		
Corrosion Resistant High-Strength Low-Alloy	A242	42	63																			
		46	67																			
		50	70																			
Quenched and Tempered Alloy	A514 ^c	90	100-130																			
		100	110-130																			
Quenched and Tempered Low-Alloy	A852 ^d	70	90-110																			

= Preferred material specification
 = Other applicable material specification, the availability of which should be confirmed prior to specification
 = Material specification does not apply

^a Minimum unless a range is shown.
^b Applicable to bars only above 1-in. thickness.
^c Available as plates only.

ArcelorMittal International America

October 4, 2013

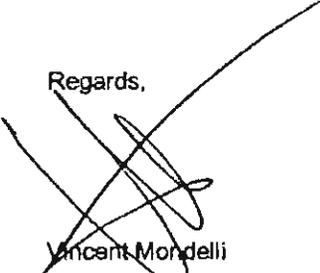


To: Cody Building Supplies
Att: Koto Szombathy

Re: A913/70
Union Square – San Francisco

ArcelorMittal is the only producer of grade A913/70 for high strength low alloy steel shapes of structural quality. This steel is produced at our mill in Luxembourg.

Regards,



Vincent Mondelli
Director of Long Products
ArcelorMittal International

ArcelorMittal International
North America
One South Dearborn, 13th F
Chicago, IL 60603

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ArcelorMittal international



ArcelorMittal

Long Products

Beams, Channels and Angles

ArcelorMittal is the world's leading producer of structural steel shapes and has more than 75 years experience supplying the United States, Mexico and Canada. With an expansive network of operations, global research and development centers, as well as a dedicated sales team, we are prepared to provide the steel solutions you need. We roll most standard sizes available domestically along with many unique products. Specifically, we have two new product developments to announce.

We now offer the **HISTAR / ASTM A913 steel specification in grade 70**. The widely used A913 specification has been available since 1990 in grades 50 and 65. Produced using in-line quenching and self-tempering (QST), A913 steel combines high strength, good toughness and superior weldability, while keeping a low alloy content – properties that have long been considered incompatible. Engineers around the world

are taking advantage of HISTAR / ASTM A913 steel in gravity columns of high-rise buildings, axially loaded members in long-span trusses and in seismic design.

We are also proud to offer **heavier W14, W36 and W40 profiles as well as 10-inch and 12-inch equal leg "L" shapes**.

Our new wide-flange shapes can replace complicated and expensive built-up sections, thereby saving fabrication time and money. Additional weight savings can be realized when ordering these sections in high-strength A913 grades 65 or 70.

Principally aimed for the utilities industry, our new "L" shapes can have a positive impact on the design of power and antenna pylons and lattice wind towers – enabling designers to reach new heights, create more efficient designs and deliver a more economical structure when compared to tubular towers.

**ArcelorMittal International
North America Headquarters**
1 South Dearborn Street, 13th Floor
Chicago, IL 60603
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F 312 899 3765

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Anthony Bryant
Sales Manager
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Robert Caroti
Technical Sales Engineer
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robert.caroti@arcelormittal.com

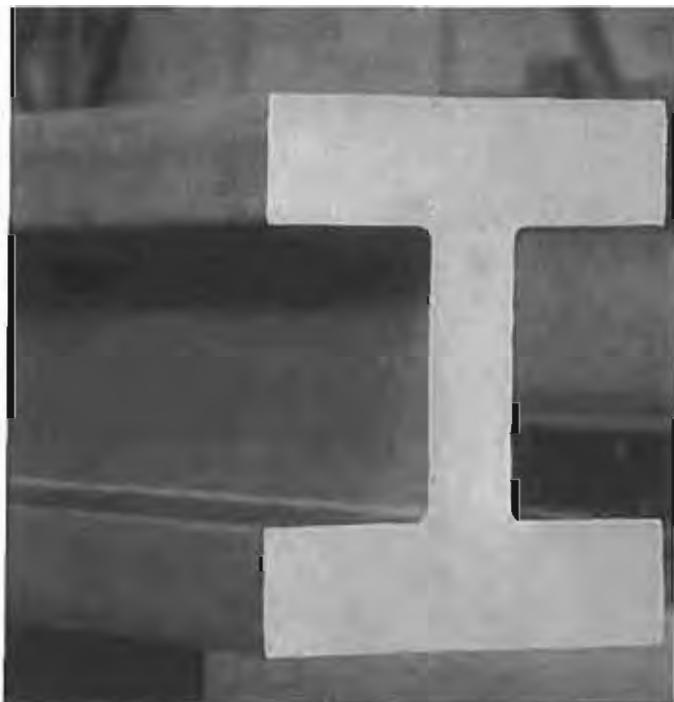
Shelley Finnigan, S.E.
Technical Sales Engineer
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Jumbo beam



One World Trade Center

Rolling Program

"W" Shapes

Section	Footweights																	
W4 x 4	13																	
W5 x 5	16	19																
W6 x 4	9	12	16															
W6 x 6	15	20	25															
W8 x 4	10	13	15															
W8 x 5 1/2	14	18	21															
W8 x 6 1/2	24	28																
W8 x 8	31	35	40	48	58	67												
W10 x 4	12	15	17	19														
W10 x 5 3/4	22	26	30															
W10 x 8	33	39	45															
W10 x 10	44	54	60	68	77	88	100	112										
W12 x 4	14	16	19	22														
W12 x 6 1/2	26	30	35															
W12 x 8	40	45	50															
W12 x 10	51	58																
W12 x 12	65	72	79	87	96	106	120	136	152	170	190	210	230					
W14 x 5	22	26																
W14 x 6 3/4	30	34	38															
W14 x 8	41	48	51															
W14 x 10	61	68	74	82														
W14 x 14 1/2	89	99	109	120	132													
W14 x 16	145	159	176	193	211	233	257	283	311	342	370	398						
W14 x 16	145	159	176	193	211	233	257	283	311	342	370	398						
W16 x 5 1/2	26	31																
W16 x 7	36	40	45	50	57													
W16 x 10 1/4	67	77	89	100														
W18 x 6	35	40	46															
W18 x 7 1/2	50	55	60	65	71													
W18 x 11	76	85	97	106	119	130	143	158	175									
W21 x 6 1/2	44	50	57															
W21 x 8 1/4	49	55	62	68	73	83	93											
W24 x 7	55	62																
W24 x 9	68	76	84	94	102													
W24 x 12 3/4	104	117	131	146	162	176	192	207	229	250	279	306	335	370				
W27 x 10	84	94	102	114	128													
W30 x 10 1/2	90	99	108	116	124	132	148											
W33 x 11 1/2	118	130	141	152	166													
W36 x 12	135	150	160	170	182	194	210	222	256	286	318	350	387					
W36 x 16 1/2	231	247	262	282	302	330	361	393	441	487	529	572	623	681	741	801	853	923
W40 x 12	149	167	183	211	235	264	278	294	331	392								
W40 x 16	188	215	248	277	307	324	382	422	492	563	633	703	783	853	933	1013	1093	1173
W44 x 16	230	262	290	335														

Inquire for stock availability.

Sections in bold are available in HISTAR ASTM A913, grades 50, 65 and 70.

"S" Shapes

Section	Footweights		
S3	5.7	7.5	
S4	7.7	9.5	
S5	10		
S6	12.5	17.25	
S7	15.3	20	
S8	18.4	23	
S10	25.4	35	
S12	31.8	35	
S12	40.8	50	
S15	42.5	50	
S18	54.7	70	
S20	66	75	
S20	86	96	
S24	80	90	100
S24	106	121	

"MC" Shapes

Section	Footweights				
MC6	15.1	15.3			
MC7	19	22.7			
MC8	18.7	20			
MC9	21.4	22.9			
MC9	23.9	25.4			
MC10	22	25	28.5	33.6	41.1
MC12	31	35	40	45	50
MC18	42.7	45.8	51.9	58	

"L" Shapes

Section	Thickness							
L8 x 8	1/2	9/16	5/8	3/4	7/8	1	1 1/8	
L10 x 10	3/4	7/8	1	1 1/8	1 1/4	1 3/8	1 1/2	1 5/8
L12 x 12	1	1 1/8	1 1/4	1 3/8				

"C" Shapes

Section	Footweights	
C8	11.5	13.75
C10	15.1	20
C12	20.7	25

----- Original Message -----

Subject:Re: Fwd: Fwd: Re: Fwd: Fwd: W30x235

Date:Wed, 25 Sep 2013 20:15:47 +0000

From:Mondelli, Vincent <Vincent.Mondelli@arcelormittal.com>

To:'metals@codybuilderssupply.com' <metals@codybuilderssupply.com>

We are the only producer of A913/70 but we do not roll the W30 section you inquired about.
Vincent Mondelli



200 Commercial Drive • Marthasville, MO 63357
Phone: 636-433-2850 Fax: 636-433-2877
www.aberlsteel.com

Koto,

Good afternoon. I am sending this letter to inform you that material listed below is not manufactured in the USA to my knowledge to meet the requirements that are set.

36.000 x 2.000 x Random Length

The wall thickness is too thick to be rolled and welded to meet a 70ksi min yield without causing the material to have cracks or small splits on it.

Thank you,

A handwritten signature in black ink, appearing to read 'Jacob Schoeneman', with a long horizontal flourish extending to the right.

Jacob Schoeneman
Phone: 636-433-2850
Cell: 636-744-6295
Fax: 636-433-2877
Email: jacobs@aberlsteel.com



To Whom It May Concern:

In regards to carbon steel pipe, 36" OD x 2.00" wall, A-252 Gr. 3 or API 5L X-70, is not made by anyone in the United States. The only way to get this size produced is by a foreign manufacturer.

Regards,

A handwritten signature in black ink, appearing to read "L-Lt", written in a cursive style.

Lee Letourneau

CMB Meeting Minutes #96

DATE: October 04, 2012

MEETING DATE: **October 03, 2012**

LOCATION: 821 Howard St, Main Conference Room

TIME: 3:00 PM

ATTENDEES: A. Hoe (AH), J. Park (JP), R. Edwards (RE), M. Latch (ML), M. Benson (MB), E. Stassevitch (ES), B. Ward (BW), M. Acosta (MA), K. Barnhart (KB), S. Wilson (SW), L. Zurinaga (LZ), M. Lee (ML), B. Lebovitz (BL), M. Fowler (MF)

COPIES TO: Attendees: S. Farhangi (SF), J. Funghi (JF), A. Wong (AW), R. Nguyen (RN), Q. Chin (QC), J. Wang (JW), C. Campillo (CC), 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 # 96 – Rev. No. 0

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

ITEM #	DISCUSSION	ACTION BY DUE DATE
1-06/06/12	The Configuration Manager presented the Programs Configuration Management Procedures, Rev 1 for review to identify the current Configuration Board Members or their designees; as listed in the Procedures and their current standing or relation to the Central Subway Project. A notification letter or email will be sent to SFMTA's Operations, Maintenance, Safety, and Security Managers of their responsibility as a Configuration Management Board Member. In addition the CMB Procedures will be revise to reflect the current SFMTA personnel who holds the position. <i>09/12:</i> Due to time limitations the follow up action item was not discussed but will be addressed at the next CMB meeting. <i>10/03</i> Status: <i>The SFMTA heads of System Safety and Transit will be contacted to identify which member of their staff will be given delegation authority as a voting member on the Configuration Management Board.</i> <i>The follow up item as it relates to notifying the department heads is considered Closed.</i>	
4-06/13/12	The CMB requested the PCC team provide an Interface Schedule for Construction Milestones for review. This item will be brought back to the next CMB meeting. <i>06/20:</i> A Milestone Interface Points schedule analysis was shown for information of the Tunnels and STS and their interface with UMS and CTS. MOS is still in review because it isn't working with STS current schedule, it will be put on hold until the STS schedule can be further developed. The CMB recommend the analysis be revised stripping out buffer float and then run analysis. In addition the CMB requested that there be a monthly review update of the milestone interface points. Also the request was made to see the dates of the track schedule even if it doesn't work to see what can be done to resolve it. This item will be brought back to a future CMB meeting. <i>07/11:</i> The PCC team presented for review the Important Interface Points analysis for the contract packages. The analysis showed the	

Title: <div style="text-align: center;">  central T subway PROJECT MANAGEMENT PROGRAM CONTROL PROCEDURE CONFIGURATION MANAGEMENT PROCEDURE </div>	Document Type: Plan and Procedures Document Number: PCP 01
Unit/Function: Capital Programs & Construction Division Central Subway	Revision Number: Rev 2 06.24.2013

6.0 Configuration Management Board

6.1 CONFIGURATION MANAGEMENT BOARD RESPONSIBILITIES

The function of the CMB shall be to control changes to the Baseline Configuration by agreeing/disagreeing with changes that meet the criteria and thresholds defined in the initial implementing change control procedures described above.

Changes that meet the criteria and threshold limits, or any change the Program Director requests to be heard; will be forwarded to the CMB in accordance with the respective procedures. The CMB Chair will be responsible for scheduling CMB meetings as deemed necessary, but the frequency of meetings, as a minimum, will meet the following:

- A meeting shall be held within five working days from the point in time where a minimum of five items are logged for disposition by the CMB.
- At least monthly where a minimum of one item is logged for disposition by the CMB.

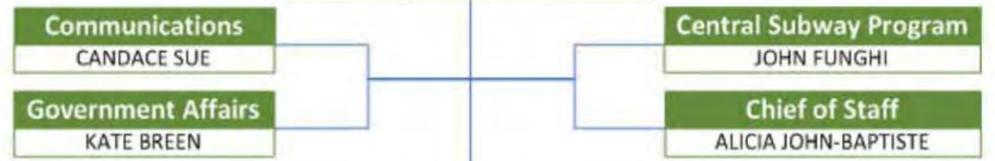
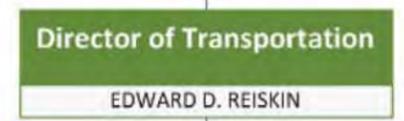
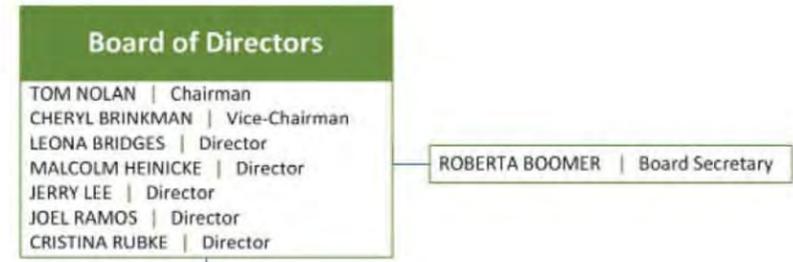
6.2 CMB MEMBERSHIP

The CMB shall consist of the following members or their designees as a minimum. The CMB Chair may identify additional members at his/her discretion:

- Program Director (Chair) (1)
- Deputy Program Manager (1)
- Program Manager Project Services (1)
- Program Manager Project Construction(1)
- SFMTA **Operations** and **Maintenance** Manager (1)
- SFMTA **Safety** and **Security** (1)
- SFCTA Oversight (1)
- Quality Assurance Manager (2)
- Risk and Configuration Manager (2)
- Project Controls Manager (2)
- Construction Managers (SFMTA and/or PM/CM) (2)



Click on a Division's title to navigate to the individual Division's site page or click on a Section's title to navigate to the individual Section's site page.



Welcome to the Transit Division

The Transit Division provides safe, reliable, clean, accessible and convenient public transportation to any destination in San Francisco.

MISSION STATEMENT: We work together to plan, build, operate, regulate and maintain the transportation network, with our partners, to connect comm

STRATEGIC GOALS:

- 41 Create a safer transportation experience for everyone.
- 51 Make transit, walking, bicycling, taxi, ridesharing and carsharing the preferred means of travel.
- 61 Improve the environment and quality of life in San Francisco.
- 71 Create a workplace that delivers outstanding service.

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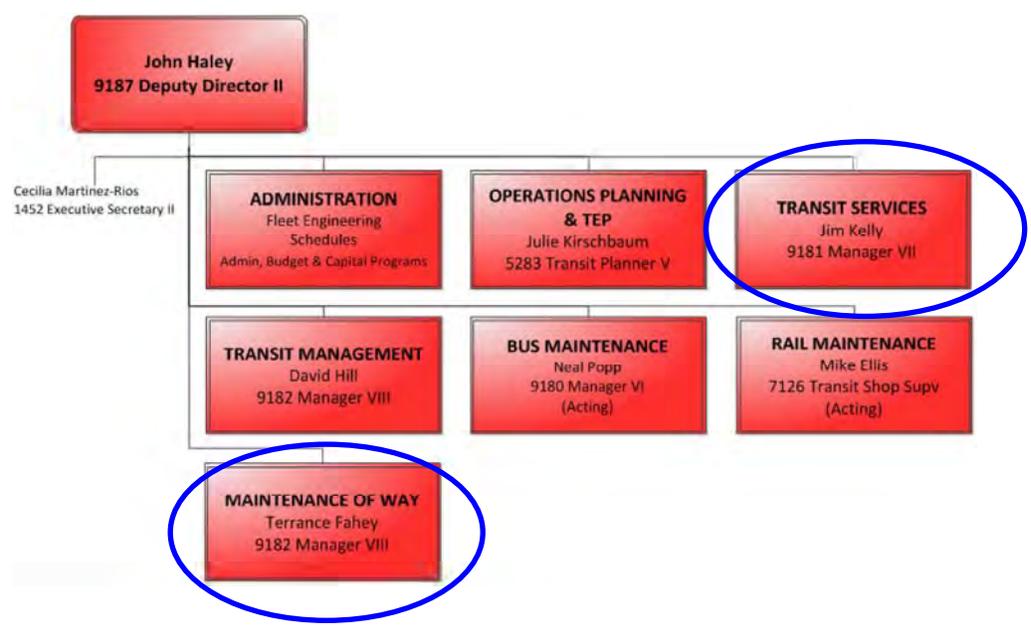
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	<p>John Haley, Director of Transit</p> <p>Mr. Haley is a nationally recognized leader in the transportation industry with over 30 years of public and private sector experience. He joined the SFMTA from the Metropolitan Transit Authority of Harris County (METRO) in Houston, where he was the Vice-President of Infrastructure and Service Development. At METRO, Mr. Haley implemented new bus rapid transit and commuter rail services which significantly contributed to improved service reliability and ridership gains. He also directed internal accountability initiatives to improve operational efficiency and advanced Authority-wide plans to improve system safety.</p> <p>Prior to his work in Houston, Mr. Haley served as Deputy Executive Director of the Port Authority of New York and New Jersey, General Manager of the Massachusetts Bay Transportation Authority (MBTA), Deputy General Manager of the San Francisco Bay Area Rapid Transit District (BART) and as a strategic advisor to major transportation agencies nationwide. He has a Master of Public Administration from Syracuse University and a Bachelor of Science in Government from Northeastern University.</p>
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Like It

Tags & Notes

Welcome to the Sustainable Streets Division (SSD)

The Sustainable Streets Division of the SFMTA provides multi-modal transportation planning, engineering and operational improvements to San Francisco's transportation system to support sustainable closely coordinating the planning, design, engineering and construction of roadway improvements (including transit, bicycle, pedestrian, motor vehicle, parking and taxi facilities) to meet the goals and o as to support the City's General Plan principles. The Division also manages 39 parking facilities, enforces San Francisco's parking regulations, maintains a safe and secure on SFMTA bus and rail lines, and dedicated services provided by the SFPD Traffic Division.

Announcements

Important Links

SFMTA Library
Library Resources
SF Public Library Government Information Center
SF Administrative Code, Section 8.16, Posting and Depository of Documents

Division Contact List

Page Administrator



Nhan, Leanne
1825
Prnpl
Admin
Analyst
II



Workflow Tasks

@ Type Title | Assign

There are no items to show in this view of th

About Us

Name

Bond's Blog

FY13 Tactics and Initiatives

Our Sections

- ADMINISTRATION
- FIELD OPERATIONS
- LIVABLE STREETS
- OFF-STREET PARKING
- SECURITY, INVESTIGATIONS & EN
- STRATEGIC PLANNING & POLICY
- TRANSPORTATION ENGINEERING

SSD Monthly Reports

- SSD June 2013 Monthly Report
- SSD May 2013 Monthly Report
- SSD April 2013 Monthly Report
- SSD March 2013 Monthly Report
- SSD February 2013 Monthly Report

Commonly Used Forms

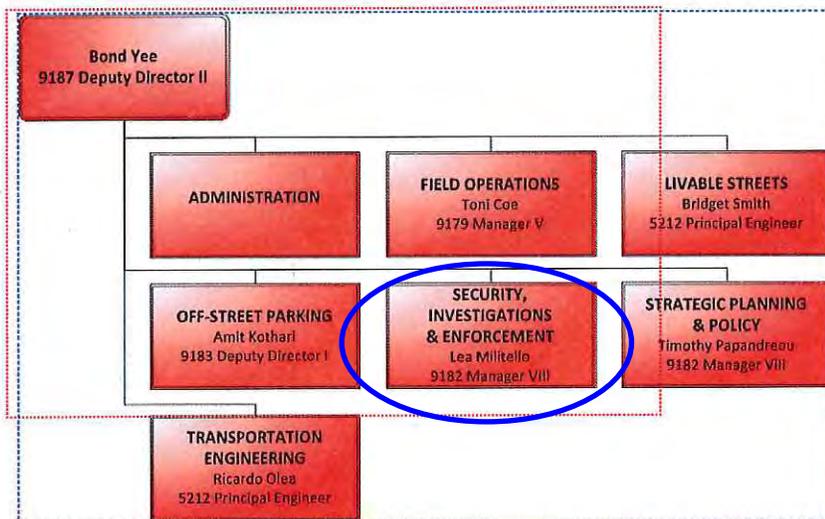
- Action Request Form
- Capital Request Form
- Emergency Contact Information Form
- Local 21 Reimbursement Form
- Meter Work Order Form
- Request Cover Sheet
- SFMTA KEY CONTACT LISTING
- Stop Sign Checklist
- Strategic Plan Objectives - prioritized list
- Traffic Signal Work Order Form
- Turning Movement Count Form
- Work Order Form

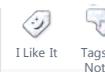


Bond Yee, Director of Sustainable Streets

The Sustainable Streets Division consists of six closely working and coordinated groups:

- Strategic Planning and Policy, including Capital Systems Planning, Transportation Policy Coordination, Short and Long-Range Plans, Sustainability, Climate Action and Urban Planning Initiatives
- Livable Streets, including the Bicycle, Pedestrian, Traffic Calming Programs, School Crossing Guards and Safe Routes to School Programs
- Transportation Engineering, including Traffic Routing, Signal Shop, SFgo/Transit Engineering, Special Projects/Street Use and Traffic Management/Operations
- Field Operations, including the Sign Shop, Paint Shop and Meter Shop
- Off Street Parking, including 18 garages and 21 parking lots
- Security, Investigations and Enforcement, including Parking Enforcement, Proof of Payment and Muni Transit Assistance Program (MTAP)





Welcome to the *System Safety Division*

We are responsible for:

Providing a safe environment for riders, employees, and the citizens of the City and County of San Francisco & maintaining a Safety Program that attains an optimum level of safety and environmental compliance

- **Safety Administration/TransitSafe** – Provide management and administrative support, compile safety data utilizing TransitSafe as the system of record for all accidents/incidents, hazards, internal safety audits and corrective action plans
- **Transportation and System Safety** – Monitor transportation and system safety programs to reduce Muni collisions; Conduct vehicle safety reviews and internal safety audits and inspections; Perform mandated safety certification; Manage the pedestrian and bicycle safety programs; Investigate accidents and incidents that occur throughout the Muni system; Notify external safety oversight agencies and assists in the development and implementation of corrective action plans needed to reduce or eliminate accidents
- **Safety Awareness and Configuration** - Coordinate the implementation of the Safety Awareness and Configuration Control Programs and insures that all safety certifications are secured from the appropriate agencies

Announcements

Title	Modified
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There are no items to show in this view of the "Announcements" list.

Important Links

Section Contact List

Page Administrator

Renteria, Jason E 1820 Junior Administrative Analyst

About Us

- [Name](#)
- [Safety Statistics Tracking](#)
- [FY12 Initiatives](#)
- [FY11 Accomplishments](#)

Standard Operating Procedures (SOPs)

Commonly Used Forms

Relevant Documents

CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

Trend Log

Total Cost Estimate and Allocated Contingencies										
Item #	Date Initiated	CMB No.	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
						Approval Action	Approval Date			
Contract 1250 - Utilities Relocation #1 (Portal & MOS)										
1250-0001	04/15/10	081-0001	Delete Option MF-OPT1 "Fire Protection Sprinkler System"	1	N/A			(50,000)	Cleared City Attorney's Office; to Shahnam for execution. [In "Current Forecast" - Sep2010 Cost Report.] COMPLETE, NO FURTHER ACTION; CMOD #1	CMOD #1 Approved
1250-0002	05/07/10	081-0002	Changes to Sewer on 4th between Howard and Folsom	2	CMB-0001	Agree	07/12/10	+107,174	Differing conditions as AWSS is directly over existing sewer; unable to install sewer manhole per plan. [In "Current Forecast" - Sep2010 Cost Report.] 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 Forecast" - 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 duct bank. At 4th/Harrison, AWSS conflict with 18" sewer. [In "Current Forecast" - Sep2010 Cost Report.] No reimbursement from SFPUC AWSS. PCC #2: RFI #s 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 #85R1, 88.1, 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 duct bank that needs to remain in service until new joint trench is installed to enable switchover. This conflict forced contractor into a more expensive means to install sewer. Also, 48" RCP sewer in conflict with existing 30" force main and 24" steel pipes. 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 duct bank on 4th near Howard, a differing site condition. An AT&T intercept vault is to be installed, however, TPC conduits can not reside inside AT&T intercept vault. Joint Trench utilities participation cost TBD. Executed on 10/14/2010. 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; CMOD #8	CMOD #8 Approved

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

CENTRAL SUBWAY PROJECT
Project Trend/Change Control Log

Item #	Date Initiated	Change Description	Change Type	CMB No.	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number	
					Approval Action	Approval Date	Actual/Forecast			
1250-0009	10/06/10	081-0009	Install additional sewer and provide temporary connections at 4th/Stillman	3	N/A		+47,000	Location of existing sewer to be intercepted differs from where it's shown in the plan, hence additional sewer to be installed. Also, due to optional sewer MH not buildable until (E) AT&T DB is removed, additional sewer is necessary to tie into (E) main as interim. New sewer is supposed to tie into optional MH. 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 duct bank at various locations	6	N/A		+48,181	AT&T was supposed to tie-in its own facility. However, AT&T's contractor, who is hired to install vaults, stated it is not in their scope of work. Refer to RFI #82.1. AT&T intercept vault at 4th/Harrison can not be installed at design location due to utility conflicts. AT&T vault to be shifted a few feet instead of vault being on top of existing duct bank. This will cause additional excavation, joint trench and modification to existing duct bank. Joint Trench utilities participation cost TBD. SFMTA and AT&T are negotiating with Contractor. (\$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. COMPLETE, NO FURTHER ACTION; CMOD #10	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	
1250-0012	10/06/10	081-0012	Additional work related to AT&T facilities due to unforeseen conditions.	6	CMB-0047	Agree	08/03/11	-0-	This is the total of all force account work related to AT&T facility. SFMTA to seek reimbursement from AT&T through the Form B process. (\$67,798) Expected Reimbursement from AT&T. Cost captured in Trend #15 COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved
1250-0013	10/06/10	081-0013	Additional work related to PG&E facilities due to unforeseen conditions.	6	CMB-0047	Agree	08/03/11	-0-	This is the total of all force account work related to PG&E facility. SFMTA to seek reimbursement from PG&E through the Form B process. (\$30,547) Expected Reimbursement from AT&T. Cost captured in Trend #15 COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved
1250-0014	10/06/10	081-0014	Remove brick wall at sewer sta 152+94 (west side) on 4th between Howard and Folsom.	2			-0-	This change order has been incorporated in CMOD #16 (Trend #30) 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			+784,771	Midden deposits were discovered on 4th Street between Howard and Folsom. Contractor stopped work. Contractor requesting payment for rental charges of trench plates, barricades, and shoring, and cost of maintenance. Total cost exposure is projected through end of November 2010. The \$290,703.00 is expected to be the final estimate for the rental of trench plates, barriers and shoring. \$597,000 Arch, \$179, 000 DIFF, \$8,500 Traffic COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20	
1250-0016	10/06/10	081-0016	Additional AWSS modification at 4th/Harrison	1	CMB-0016	Agree	11/10/10	+156,418	New alignment is proposed by Design team. No reimbursement from SFPUC AWSS. COR #33 Supplemental COMPLETE, NO FURTHER ACTION; CMOD #12	CMOD #12 Approved
1250-0017	10/06/10	081-0017	Protection Work at PG&E Vault 1611	6			-0-	Expected Reimbursement from PG&E or work to be deferred \$6,400. RE has notified PG&E via email dated 10/29/10 that SFMTA expects full reimbursement for this work if implemented. Follow-up pending. Work was not performed and will need to be addressed in a future contract.		
1250-0018	10/06/10	081-0018	Demolition and Support Work at PG&E Vault 1611	6			-0-	Expected Reimbursement from PG&E or work to be deferred \$25,000. RE has notified PG&E via email dated 10/29/10 that SFMTA expects full reimbursement for this work if implemented. Follow-up pending. Work was not performed and will need to be addressed in a future contract.		
1250-0019	10/06/10	081-0019	Extended overhead delay claim due to Archaeological discoveries	2				Old Note: Potential delay claim if issue extends project duration. Amount is estimated at \$3,000.00 per day for 60 days (\$180K). New Note: By exercising all option work, additional 84 calendar days is added to the contract time. In addition, midden mitigation will start on 10/7/10. As a result, the potential for extended overhead cost is averted. This trend has been superseded by Trend #37. COMPLETE, NO FURTHER ACTION		

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1250-0020	10/06/10	081-0020	Sewer modification under I-80 freeway at 2 locations	3			+39,062	Inverts of existing sewer where new sewer will tie into are found to be different than shown in plan and would create a reverse slope. Additional pipe and manhole are required to fix slope. Refer to RFI Nos. 2S01 and 147. No reimbursement from SFPUC Sewer. 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				Existing AWSS lateral at SW 4th/Harrison is in conflict with new 18" sewer. Instead of modifying the lateral to avoid the sewer, a new lateral at NW corner is a preferred solution. CM awaiting design revision from Design team. 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 install a ductile iron tee. Also, existing AWSS hydrant lateral is in conflict with new 18" sewer. The preferred solution was to install a new ductile iron lateral at a different location rather than installing vertical offsets on an existing cast iron lateral. No reimbursement from SFPUC AWSS. 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 workaroud & support. AT&T refused to pay Synergy. Synergy considers AT&T's refusal as a changed condition to CN 1250 contract. (\$95,311) Reimbursement from AT&T. See Final 1250 Form B actual costs. COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19 Approved
1250-0025	10/06/10	081-0025	Utility support and work around for PG&E facilities	6					Contract specs specified PG&E to compensate contractor directly for workaroud & support. PG&E negotiated \$100,000 directly with Synergy and will pay synergy directly as well.	
1250-0026	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 workaroud. See COR #12, 20, 32 and 35. Agreed amount is total of COR #12, 20 and 32. Total exposure is equal to agreed amount plus COR #35. No reimbursement from SFWD. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #20 Approved
1250-0027	10/06/10	081-0027	Trucking and labor support for Archaeological mitigation	2				-0.	Synergy is asked to provide trucking for delivery of midden soil to Sonoma State University lab. Other support work includes traffic control, plating, loading and unloading of midden soil. The amount shown are charges up to end of November 2010 only. Additional charges are expected which will be tracked as Trend No. 28. COMPLETE, NO FURTHER ACTION	CMOD #20 Approved
1250-0028	12/08/10	081-0028	Trucking and labor support for Archaeological mitigation, Part II	2				-0.	Synergy is asked to provide trucking for delivery of midden soil to Sonoma State University lab. Other support work includes traffic control, plating, loading and unloading of midden soil. The amount shown are expected charges beyond November 2010. COMPLETE, NO FURTHER ACTION	CMOD #14 Approved
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 conditions encountered are: location of existing water line is different than where it's shown in the plan, existing waterline where shown in the plan to be connected to is inactive, differing condition at 5th/Clementina, connection holes and kill holes need to be expanded due to other utilities in the way. COMPLETE, NO FURTHER ACTION; CMOD #17	CMOD #17 Approved

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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				-0-	Bid item GE-8 is an allowance to pay contractor for designing and constructing cast-in-place manholes as required for installation of new systems. Only one CIP vault was installed. 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				-0-	Bid item UD-5 is an allowance to pay contractor for handling and disposal of Class I Hazardous Waste. No class I hazardous waste was off hauled away from the job site. Class I soil found under the I-80 freeway was put back in the trench as backfill. This bid item is expected to remain unused. However, contractor is claiming to recover "General Conditions" cost. Credit amount included in Trend #43	
1250-0033	12/08/10	081-0033	Unused allowance for bid item UD-6 "Transportation of Class I Hazardous Waste"	4				-0-	Bid item UD-6 is an allowance to pay contractor for transporting of Class I Hazardous Waste. No class I hazardous waste was off hauled away from the job site. Class I soil found under the I-80 freeway was put back in the trench as backfill. This bid item is expected to remain unused. However, contractor is claiming to recover "General Conditions" cost. Credit amount included in Trend #43	
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
1250-0035	12/08/10	081-0035	Premium cost for requesting contractor to accelerate work on 4th Street between Howard and Folsom	2				-0-	Due to archaeological discoveries, many trenches remained open and the project would not have enough time to complete installation of underground utilities and restore the roadway before the Holiday season. Without accelerating the work, the project would have had to pay rentals for the barriers, street plates and shoring for the unfinished trenches that would have remained. By accelerating the work and DPT allowing the contractor to work through the beginning of the Holiday Moratorium, the project avoided these rental costs, which is estimated to be greater than the premium cost of accelerating the work. COR Not submitted by Contractor CLOSED COMPLETE, NO FURTHER ACTION	
1250-0036	12/08/10	081-0036	Rental/Maintenance costs for support of Archeological Trenches (Part 1 of 4) \$255,840; Support Work During Archeologist Mitigation Efforts (Part 2 of 4) \$199,741; Mobilization and Equipment Standby Costs (Part 3 of 4) \$67,728; Additional Overhead/Indirect Costs During Archeological Delay Period (Part 4 of 4) \$124,186	2	CMB-0041	Agree	07/13/11 02/15/12 07/25/12 09/12/12	-0-	Due to archaeological discoveries, contractor may potentially claim for compensation for his equipment that were idle for the duration of the waiting period. RE's estimate is based on Caltrans rate for equipment standby for 5 months (May to October). RE has not received any change order request related to this item. RE to verify if his equipment were indeed idle during this time period. 2/15: Rental/Maintenance Costs for Support (Part 2 of 4); Addl Work as Result of Archeological Shutdown (3 of 4). 07/25: Revised mod - compensation for 1 of 3) Rental/Maintenance, 2 of 3) Addl Work result of Archeological support, 3 of 3) Addl OH/Indirect cost. RE to add Equipment Standby time to revised mod. 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 Approved

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1250-0037	12/08/10	081-0037	Compensation for loss of production, inefficiency and disruption of work due to archaeological discovery	2				Due to archaeological discoveries, contractor may potentially claim for compensation for loss of production, inefficiency and disruption of work. RE has not received any change order request related to this item. Amount shown is a ROM cost by the RE. RE expects a COR from the contractor but change justification is very unlikely. Initial draft COR was \$898,453. RE has adjusted to \$661,559 removing the month of October and option work. This was then revised to 800,000. There has been no official submittal from Synergy. SFMTA has directed Synergy to submit anything related to the Architectural delays through the claims process. This will be carried in the Potential Claim Log. COMPLETE, NO FURTHER ACTION	
1250-0038	03/18/11	081-0038	Project Delay due to archaeological discovery and PG&E Issues.	2				Due to archaeological discoveries compounded with PG&E's ability to perform service switchover to Olivet University and de-energize a live duct bank in conflict with 48" sewer. The project will realize an estimated 6 weeks of non-compensable delay to the substantial completion date of 4/6/11. 47 days estimated by RE. Contractor submitted COR 51 in the amount of \$1,144,776.74 on September 1st, 2011. RE responded requesting additional backup on October 19th, 2011. Subsequently, no additional information has been provided by the contractor, therefore, SFMTA has directed Synergy to submit anything related to the Architectural delays through the claims process. This will be carried in the Potential Claim Log.	
1250-0039	05/18/11	081-0039	Remove BP-4 (Waterproofing) from Contract	4				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				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				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				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			(333,904)	Pursuant to General Provision GP-11, COR is to adjust contract value to account for fix overhead costs for bid items not performed or where the bid item performed varied by 25%. COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved
Contract 1250 Totals							+2,694,211	Total Changes to the Contract in the amount of \$2,694,211, represents a \$740,834 OVER RUN of the original allocated contingency of \$1,953,377. Changes that will be Utility Reimbursement credits through the Form B process in the amount of \$162,992 will offset some of this OVER RUN. Final Contract Closeout Total \$11,968,150 will be reduce by \$2,275,419 Utility Reimbursement credits for a Final Program cost of \$9,692,731 for CN 1250	

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Contract 1251 - Utilities Relocation #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				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 COMPLETE, NO FURTHER ACTION; CMOD #4	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 265LF of additional HDPE pipe inside the existing 3'x5' brick sewer.	1	CMB-0029	Agree	02/23/11	+148,919	During future station construction, the design team anticipates that excavation related settlement may cause damage to the brick sewers along Geary and O'Farrell Streets. This proposed modification will replace the vulnerable brick sewer within the influence zone with HDPE pipe that will not be as susceptible to settlement-induced damage. COR #9, PCC #2 COMPLETE, NO FURTHER ACTION; CMOD #1	CMOD #1 Approved
1251-0004	04/06/11	082-0004	Changes to Neiman Marcus secondary enclosure wall due to various differing site conditions.	2	CMB-0031	Agree	04/13/11	+189,584	Due to various differing site conditions as described in RFIs 15, 37, 38 and 44, changes to the secondary enclosure wall are required. The existing footing were found to be inconsistent, i.e. missing footing in one area, footing sticks out beyond existing wall, overpour on existing footing, existing wall to be 6" into private property. Contract plan SR-302 shows a consistent footing. COR #8 COMPLETE, NO FURTHER ACTION; CMOD #3	CMOD #3 Approved
1251-0005	04/06/11	082-0005	Existing PG&E conduits were found on top and parallel to existing AWSS on Geary Blvd. at 2 locations (east and west of Stockton)	6				+66,084	Contract plans AW-501.1, 501.2, 501.4 and 501.4 show the existing AWSS to be replaced in place. However, existing PG&E conduits were found to be on top and parallel to the existing AWSS resulting in extra work in working around and/or shifting the existing electrical conduits. Contract plans JT-308 and 309 showed the existing electrical and AWSS to be separate. Estimate includes \$77,892.53 (Synergy FA Request) + \$25,000 (first digging west side) + \$10,000 (temp backfill during moratorium) + \$15,000 (plate rental west side at \$5k per month). Estimate does not include Synergy's cost to sequence his work. Updated projected cost impact from \$50,000 to \$127,893 based on compilation of force accounts received. RE negotiating COMPLETE, NO FURTHER ACTION	CMOD #24 Approved
1251-0006	04/20/11	082-0006	Design changes to utilities on Stockton street between Post and Geary	1	CMB-0039	Agree	06/08/11	+398,624	Due to changes to the limits of the UMS Station on Stockton Street between Post and Geary, the original utility design has changed. COR #24, PCC #4 COMPLETE, NO FURTHER ACTION; CMOD #5	CMOD #5 Approved
1251-0007	04/20/11	082-0007	Design changes to utilities on Ellis Street	1	CMB-0049	Agree	08/24/11	(434,957)	Due to changes to the limits of the UMS Station on Ellis street, the original utility design has changed. PCC #5 COMPLETE, NO FURTHER ACTION; CMOD #5	CMOD #5 Approved

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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. CLOSED, NO FURTHER ACTION	
1251-0009	04/20/11	082-0009	Additional cost for police officers and/or Parking Control Officers for traffic control.	4	CMB-0038	Agree	06/01/11	+261,584	Contract bid item TR-7 for manual traffic control in the amount of \$120,000 is insufficient to control traffic for the duration of the contract. The \$120,000 allowance only equates to one police officer for a duration of 7.5 months. At a minimum, it is anticipated that one police officer or PCO will be needed at Stockton/Post for the entire contract duration of 16 months. Additionally, one PCO is required for each intersection at Geary/Stockton and O'Farrell/Stockton. 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
1251-0011	06/22/11	082-0011	Potholing at 4th/Howard for PUC sewer design	1					Request from MOS utility design team to pothole for the intercept of a 36" force main sewer and 96" sewer. PUC requested that this be done in order to ensure that we have accurate utility information to avoid costly change orders during construction. Per direction from CMB on January 18, 2012, this request is denied. COR #50, PCC #6 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 items of work were found to be missing for the original cost estimates which increase the amount to \$278,351. RFI #76, COR #31 COMPLETE, NO FURTHER ACTION; CMOD #6	CMOD #6 Approved
1251-0013	07/06/11	082-0013	Accelerate start of construction in front of Macys West by trenchless construction method	7				-0-	Micropile installation on Stockton east between O'Farrell and Market has proven to be much slower than anticipated. To mitigate this potential delay, contractor requested to start construction in front of Macys West. COR 32 (CMB 0055 approval - see also Trend CN1251 #'s 04 & 10) COMPLETE, NO FURTHER ACTION; CMOD #3 (No Cost Change)	CMOD #3 Approved
1251-0014	07/21/11	082-0014	Increase in Bid Item WD-10, Allowance for Additional Excavation and Backfill.	3	CMB-0055	Agree	09/14/11	+191,779	This allowance is for the contractor to perform additional excavation, backfilling and restoration associated with the water tie-ins and capping for the distribution piping system. The contractor has performed two water service tie-ins at an average cost of \$14,000 per tie-in. The current number of tie-ins and capping is 35 separate points. This amounts to a total cost of \$490,000. The current contract allowance amount is \$100,000, therefore an additional \$390,000 will be needed to augment bid item. CMB made a partial approve of up to \$200K. The initial Contract Modification to supplement this allowance is in the amount of \$191,778.62. RE's cost analysis of this trend confirms that the initial CMod amount of \$191,778.62 is sufficient to cover for all water tie-in/capping work. COMPLETE, NO FURTHER ACTION; CMOD #9	CMOD #9 Approved
1251-0015	08/03/11	082-0015	Additional traffic signal work at Post/Stockton	1				+17,530	Modification of the traffic signal at Post/Stockton is required to implement the detour shown in contract plan TR-010. There are no bid item to bill this work. COR #19 COMPLETE, NO FURTHER ACTION; CMOD #8	CMOD #8 Approved
1251-0016	08/03/11	082-0016	Additional traffic signal work at Sutter/Mason	2				+32,054	Existing conduits shown in Plan ET-101 differs from what is actually in the field. City's response to RFI #73 directs contractor to install new conduits and conductors. RFI #73; COR #33 COMPLETE, NO FURTHER ACTION; CMOD #8	CMOD #8 Approved

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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 (\$25,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved
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 reimburse SFMTA (\$31,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #7	CMOD #7 Approved
1251-0019	08/03/11	082-0019	Extend joint trench and modify existing AT&T Manhole 403 on Ellis Street.	6	CMB-0057	Agree	10/26/11	+31,000	AT&T was supposed to furnish and install AT&T vault #5833 on Ellis Street. The current design was to intercept the existing AT&T conduit in the middle of Ellis Street. It was discovered that the existing AT&T conduit actually run adjacent to the southern curb line along Ellis Street. Therefore, AT&T requested SFMTA for Synergy to extend the joint trench approximately 200 feet to the West and tie into their existing AT&T vault #403. This work will also require Synergy to enlarge vault #403 to accept the additional conduit. . This additional work for AT&T will need to be reimbursed to SFMTA through the Form B process. Note: The agreed amount (\$31,000) is for enlargement of vault #403 only; the additional 200 feet of trench to be captured in the JT bid items. (See Trend 60) COR #43 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	+19,537	PG&E requested to use GRS material in lieu of PVC in areas where PG&E conduits were expected to be exposed and temporary supported during future UMS station construction. PG&E agreed to reimburse SFMTA (\$19,537) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21 Approved
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 Muni Vault 1850A 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 from Contractor to be procured is available. (Verified 02/01/12). 02/29: CMod negotiated cost has been revised to incorporate original three items and the add'l OCS work on Folsom St. COR #52; PCC #7 Updated projected cost impact from \$490,000 to \$405,440. CMod #12 (Formally CMod #15) COMPLETE, NO FURTHER ACTION; CMOD #12	CMOD #12 Approved
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	+201,411	As a new requirement, PG&E had requested that a 5" slurry wall be installed between the gas line and wet utilities where the separation between the 2 utilities is less than 3 feet. PG&E agreed to reimburse SFMTA (\$201,410) through the Form B process. COR #58 COMPLETE, NO FURTHER ACTION; CMOD #19	CMOD #19 Approved

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1251-0025	09/07/11	082-0025	6					PG&E requested to install additional conduits crossing Stockton Street at Geary and O'Farrell to minimize service interruption during future UMS Station construction. PG&E agreed to reimburse SFMTA through the Form B process. This item is captured under applicable JT Bid item, see Trend 60. CLOSED; NO FURTHER ACTION. Item is captured under applicable JT Bid Item, See Trend 60.	
1251-0026	09/14/11	082-0026	2					The sub-basement in the public parking garage at O'Farrell/Mason extends beyond the property line up to the curb line. Therefore, regular foundations as per original design could not be installed. CLOSED; NO FURTHER ACTION. Item is captured under applicable OCS Bid Item, See Trend 60.	
1251-0027	09/20/11	082-0027	1	CMB-0056	Agree	11/30/11	+281,435	Acceleration is necessary to avoid potential delay impacts to Central Subway follow-on contracts. COR #40 COMPLETE, NO FURTHER ACTION; CMOD #10	CMOD #10 Approved
1251-0028	10/18/11	082-0028	6	CMB-0057	Agree	10/26/11	+157,000	AT&T was supposed to hire its own subcontractor to furnish and install all AT&T vaults in CN 1251. AT&T requested SFMTA for Synergy to perform this work as change order to CN 1251. AT&T agreed to reimburse SFMTA (\$157,000) through the Form B process. COR #43 COMPLETE, NO FURTHER ACTION; CMOD #11	CMOD #11 Approved
1251-0029	10/26/11	082-0029	6					Vault 133 rebuild is superseded by Trend 40. Demolition of existing vaults 403 and 113 is superseded by Trend 43 CLOSED; NO FURTHER ACTION. Demo of existing vaults 403 and 113 are superseded by Trend 43. (See CMOD #23)	
1251-0030	10/26/11	082-0030	6	CMB-0058	Agree	11/02/11	+46,366	PG&E asked SFMTA to enlarge vault 873. PG&E agreed to reimburse SFMTA (\$46,366) through the Form B process. CMB approved a NTE amount of \$40K COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21 Approved
1251-0031	10/26/11	082-0031	6	CMB-0058	Agree	11/02/11	+17,193	PG&E asked SFMTA to install additional conduits. PG&E agreed to reimburse SFMTA (\$17,193) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #21	CMOD #21 Approved
1251-0032	11/08/11	082-0032	6	CMB-0059	Agree	11/16/2011, 05/02/12	+92,292	PG&E gas drawings were not included in the bid package and there was no bid item to capture this work. Gas drawings was issued by PG&E in June 2011. PG&E agreed to reimburse SFMTA (\$92,292) 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 Approved
1251-0033	11/23/11	082-0033	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 Approved
1251-0034	01/10/12	082-0034	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 Approved

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1251-0035	01/11/12	082-0035	Potholing on Stockton between Post and Geary for UMS Station design	1				UMS Design Team requested 1251 to pothole (6'Wx12'Lx8'D) on Stockton between Post and Geary to locate existing piles and tie-backs at Union Square. Cost for this scope of work from the Contractor is \$19,870.73. Per direction from the CMB on Jan 18th this request is denied and the DP2 designer will cover this potential future obstruction with a note on the drawings. COR #53 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.		
1251-0036	01/11/12	082-0036	Install three 6" PG&E conduits from vault 5800 to PG&E "A" pullbox at 4th/Bryant.	6				CN 1252 Contract is requesting 1251 to install PG&E conduits in order to bring power in advance of the tunnel equipment arrival. The scope of work, which involves trenching at the busy 4th/Bryant intersection, was part of the 1252 contract, hence, a credit of same amount (\$54,892.07) to be due back to 1252. Based upon a field meeting and discussions with BIH on Jan 17th this work will be done under CN 1252 as originally planned. COR #55 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	+27,428	After field investigation, the existing sewer lateral was found to connect to the Stockton main near Geary. However, the location where the lateral is connected to the main is inside the footprint of the UMS station, in which the main is shown in the contract plan to be slurry filled. The contract plan shows the lateral to be connected to the main on Maiden Lane but is not possible due to invert problem. At the CMB meeting on 1/18/12, Albert Hoe reported that he had instructed the design team during the design phase to investigate this lateral and make the connection to the sewer main at Maiden Lane. RE was asked to investigate if this could be a possible error and omission by the sewer design. (See Trends #44 and 45) COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved
1251-0038	01/04/12	082-0038	Reimburse Synergy for JCDecaux work to remove kiosks	1	CMB-0064, CMB 0080	Agree	1/04/2012, 10/24/12	+29,273	JCDecaux refused to remove the remaining (2EA) kiosks without being paid for work already completed. The CMB approved on 1/04/12 Task Order No. 35 (Removal of 3EA sidewalk kiosks) as requested for the work already completed. On 10/24/12 the CMB approved Trend #38 removal of the remaining 2EA kiosks; work already completed and paid for as part of the approved CMB 0064 dated 01/04/12 for a total of 5EA kiosks removed. Total work priced at \$29,268. COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved
1251-0039	01/17/12	082-0039	Furnish and install 2ea benches along 5th Street	1				+4,752	Requested by Muni Operation. COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved
1251-0040	02/15/12	082-0040	Furnish and install AT&T Manholes 133 at Post/Stockton	6	CMB-0070	Agree	04/11/12	+45,000	AT&T requested SFMTA for Synergy to rebuild manhole 133 at Post/Stockton. COR #64 AT&T agreed to reimburse SFMTA (\$45,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved
1251-0041	02/15/12	082-0041	Install additional 55 LF of AT&T trench to extend conduits from vault 5832 to vault 113 on O'Farrell Street	6	CMB-0070	Agree	04/11/12	+23,704	AT&T requested SFMTA for Synergy to extend their conduit from vault to vault instead of wye-casting into exiting duct bank. COR #63 AT&T agreed to reimburse SFMTA (\$23,704) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved
1251-0042	02/15/12	082-0042	Install additional 95 LF of AT&T trench to extend conduits from vault 5831 to vault 129 on Geary Blvd.	6	CMB-0070	Agree	04/11/12	+31,525	AT&T requested SFMTA for Synergy to extend their conduit from vault to vault instead of wye-casting into exiting duct bank. COR #62 AT&T agreed to reimburse SFMTA (\$31,525) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved

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1251-0043	02/15/12	082-0043	6	CMB-0076	Agree Conditionally	10/03/12	+52,607	Agreed cost shown in Trends 29 and 40 is for installing vaults only. Cost to demo existing vaults is tracked on force account (estimated cost at \$15k each vault). AT&T agreed to reimburse SFMTA (\$52,607) through the Form B process. CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 72 & 80) COMPLETE, NO FURTHER ACTION; CMOD #23	CMOD #23 Approved
1251-0044	02/15/12	082-0044	3	CMB-0078	Agree	09/12/12	+11,438	Contract plan SW-4 shows an existing lateral to be connected to new main. However, the 8" lateral is too big to be connected directly to the new 14" main necessitating a new connection to the manhole. However, numerous existing utilities were in the way and required installation of a new lateral at a higher elevation. Due to the raised lateral invert, modification to the building is also needed. COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved
1251-0045	02/15/12	082-0045	3	CMB-0078	Agree	09/12/12	+30,260	Contract plan SW-3 shows 2 each existing laterals coming from the Union Square garage to be connected to the new main at approximate sta 128+55. However, the laterals were found to be connected to the downstream end of the existing main (toward Geary), which is called for to be abandoned in 1251 to make room for the future station. (See Trends #37 and 44) COMPLETE, NO FURTHER ACTION; CMOD #18	CMOD #18 Approved
1251-0046	03/06/12	082-0046	6				+80,000	The two (2) existing PG&E duct banks that were supposed to be intercepted by vault 584 were wider than shown on plan. Vault 584 was needed to be enlarged in order to capture the two (2) ductbanks. PG&E agreed to reimburse SFMTA (\$80,000) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved
1251-0047	04/10/12	082-0047	2	CMB-0082	Agree	10/31/12	+15,357	Contract plan JT-301 calls for an intercept vault to capture 2 (E) Muni ductbanks (DB). These DBs were found to be farther apart than shown on plan. The intercept vault needs to be widened. (CMB 0082 approval - see Trend CN1251 #'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26 Approved
1251-0048	04/10/12	082-0048	2					Contractor's hollow stem auger got stuck during drilling of micropile #27C in front of 17 Stockton. Contractor claims differing condition as cause for the stuck auger. Contractor is asking for 1 day compensable time extension. SFMTA is reviewing claim for entitlement. COR #67 RE Denied COR (City Letter 26); however Contractor will most likely send rebuttal. CLOSED; NO FURTHER ACTION.	
1251-0049	04/10/12	082-0049	2	CMB-0083	Agree	11/07/12	+9,058	Existing footing of One Stockton was found to be recessed from property line. City's response to RFI 171 called for additional rebar to compensate for the gap between back of new enclosure wall and existing footing. Also, the Owner's contractor of 17-19 Stockton asked that Synergy clear his work area so he can pour the primary wall and bring in his new switchgear. Synergy is asking 2 days compensable time extension. (CMB 0083 approval - see Trend CN1251 #'s 53, 59, and 64) COMPLETE, NO FURTHER ACTION	CMOD #27 Approved
1251-0050	04/10/12	082-0050	2	CMB-0074	Agree	08/15/12	+48,898	Type 770 pole foundation at SW 5th/Folsom could not be installed per plan due to a conflict with a cistern. Only solution is to remove an existing pole foundation (recently installed in 1251 as contract work) to make room for the 770 pole foundation. At 5th/Folsom, 2 DPT mast arms (not shown in original plan) need to be installed. At Pole #811, an existing concrete wall is in conflict with pole foundation. (CMB 0074 approval - see Trend CN1251 #'s 67, 74 & 75) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved

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1251-0051	04/10/12	082-0051	Intercept existing PG&E duct bank and terminate into vault 5464 at Market/Ellis	6				+23,633	PG&E requested to reroute existing duct bank running north out of MH 1803 at 4th/Pioneer Place into MH 5464 at Market/Ellis PG&E agreed to reimburse SFMTA (\$23,633) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved
1251-0052	04/10/12	082-0052	Reroute unforeseen existing waterline on Geary east of Stockton	2	CMB-079	Agree	10/10/12	+27,234	An unforeseen existing waterline was found to be in conflict with PG&E vault 573 and needs to be rerouted per City's response to RFI #182. (CMB 0079 approval - see Trend CN1251 #'s 65 & 70). This is potentially a E&O issue due to unforeseen existing waterline on discovered along Geary Street (east of Stockton Street) not shown in the contract drawings. COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28 Approved
1251-0053	04/10/12	082-0053	Additional cost for premium to accelerate contract work	1	CMB-083	Agree	11/07/12	+10,591	SFMTA directed Synergy to accelerate work to advance PG&E and AT&T cut-over and allow CN 1252 Contractor to start work at UMS COR #74 PG&E agreed to reimburse SFMTA (\$10,590) through the Form B process. 11/07/12 (CMB 0083 approval - see Trend CN1251#'s 49, 59, and 64) COMPLETE, NO FURTHER ACTION; CMOD #27	CMOD #27 Approved
1251-0054	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 Approved
1251-0055	04/17/12	082-0055	Install Swiveloc lids on all PG&E vaults	6					PG&E requested SFMTA to add this scope to the 1251 contract for safety reason. COR #72 SFMTA decided to defer this work to the 1252 contract. COMPLETE, NO FURTHER ACTION;	
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 Approved
1251-0057	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 Approved
1251-0058	05/31/12	082-0058	Additional streetlight conduit on 5th Street between Harrison and Bryant	2	CMB-0083	Agree	10/31/12	+17,754	The existing streetlight pullboxes new cables were supposed to be connected to per contract plan did not have power. New conduit needs to be install from the power source. COR #75 (CMB 0082 approval - see Trend CN1251 #'s 47, 76 & 78) COMPLETE, NO FURTHER ACTION; CMOD #25	CMOD #25 Approved
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 #'s 53, 49, and 64) COMPLETE, NO FURTHER ACTION; CMOD #27	CMOD #27 Approved
1251-0060	06/26/12	082-0060	Final Bid Item Reconciliation	4				(508,961)	Bid item analysis for entire contract as of 6/12/12.	CMOD #30 Approved
1251-0061	06/26/12	082-0061	Excavate for PG&E cutover at 177 Stillman	6				+7,424	PG&E requested Synergy to excavate for PG&E cutover at 177 Stillman. Reference document: Email from Michael Lightstone dated 12/9/11 PG&E agreed to reimburse SFMTA (\$7,424) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved

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

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					Approval Action	Approval Date	Actual/Forecast			
1251-0069		082-0069	Removal of abandoned PG&E gas valve (8each) and install anodes	6			+4,737	PG&E asked Synergy to remove all abandoned gas valves (8each) PG&E agreed to reimburse SFMTA (\$4,737) through the Form B process. COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	
1251-0070		082-0070	Core drill primary wall and install interior plumbing at Armani and Disney for the fire service water cutover	2	CMB-0079	Agree	10/10/12	+14,034	Existing fire service inside the building is a thin-wall steel pipe that extends out to the previously existing sub-sidewalk basement. However, 1251 had backfilled the subsidewalk basement per contract, which now made the steel pipe susceptible to corrosion. SFWD does not want to tie-in to the steel pipe due to corrosion issue plus the fact that the pipe is thin walled, which makes welding almost impossible. A ductile iron pipe needs to be installed from the main and into the building. COR #77 (CMB 0079 approval - see Trend CN1251 #'s 52 & 65) COMPLETE, NO FURTHER ACTION; CMOD #28	CMOD #28 Approved
1251-0071		082-0071	Install a new 8" backflow preventer for the fire service inside Macys Men's building	6				The new water main (installed in the 1251 Contract) is closer to the property line than the existing backflow preventer. State law stipulates that a backflow preventer be installed in between the property's fire suppression system and the water main. The SFWD refuses to make this connection until a proper backflow preventer is installed. SFMTA will insist on Macys to install its own backflow preventer. CLOSED; NO FURTHER ACTION.		
1251-0072	08/08/12	082-0072	Additional AT&T trench from new vault 5829 to existing vault 127 on Geary east of Stockton	6	CMB-0076	Agree	10/03/12	+23,993	AT&T requested new conduits to maintain continuity between the 2 vaults. AT&T agreed to reimburse SFMTA (\$23,993) through the Form B process. RE Tracking work on FAR CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 43 & 80) COMPLETE, NO FURTHER ACTION; CMOD #14	CMOD #14 Approved
1251-0073	08/08/12	082-0073	Additional work to install water and electrical utilities for Flower Stand on Geary west of Stockton	1				+17,966	Contract bid allowance for providing utility services for flower stands (UD-14) had been exhausted during relocation of 2 flower stands. A third and final flower stand is still needed to be relocated. COMPLETE, NO FURTHER ACTION; CMOD #22	CMOD #22 Approved
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 (CMB 0074 approval - see Trend CN1251 #'s 50, 67, & 75 also). COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved
1251-0075	08/08/12	082-0075	Unforeseen conditions related to pole foundation installation for the Folsom OCS Bypass	2	CMB-0074	Agree	08/15/12	+12,568	Contractor encountered unforeseen concrete and brick substructures and abandoned utility lines. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #20	CMOD #20 Approved
1251-0076	08/08/12	082-0076	Adjustment to OCS on Mason Street	2/3	CMB-0082	Agree	10/31/12	+14,988	Modify bracket arm at existing Pole #511 to alleviate tension load and bending of pole. Realign trolley wire on Mason between Geary and Eddy to smoothen transition when shifting from right lane to left lane. Also, add intermediate guywire to prevent excessive sagging of bracket arms at various locations. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251#'s 47, 58 & 78) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26 Approved

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1251-0077	09/12/12	082-0077	2	CMB-0081	Agree Conditionally	10/31/12	+37,181	Qwest, TCG and UCCO requested Synergy to tie-in their existing conduits into the new vaults that Synergy installed per contract. The utility companies are responsible for connecting existing conduits into new vaults, therefore, this request is considered extra work. Private Utilities companies agreed to reimburse SFMTA (\$37,181) through the Form B process. 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 Approved	
1251-0078	09/12/12	082-0078	2	CMB-0082	Agree	10/31/12	+27,645	Several obstructions, i.e. buried concrete, boulders, brick, abandoned utilities were discovered during excavation and installation of OCS poles along Mason and 5th Streets. RE Tracking work on FAR (CMB 0082 approval - see Trend CN1251 #'s 47, 58 & 76) COMPLETE, NO FURTHER ACTION; CMOD #26	CMOD #26 Approved	
1251-0079	09/12/12	082-0079	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 (\$44,530) through the Form B process. RE Tracking work on FAR COMPLETE, NO FURTHER ACTION; CMOD #24	CMOD #24 Approved	
1251-0080	09/12/12	082-0080	2	CMB-0076	Agree	10/03/12	+56,806	Unforeseen conditions were encountered during installation of select AT&T vaults including joint trenches leading to these vaults. AT&T agreed to reimburse SFMTA (\$56,805) through the Form B process. CMB Agreed contingent on receipt of confirmation letter from AT&T for costs associated with these three trends (CMB 0076 approval - see Trend CN1251 #'s 43 & 72) COMPLETE, NO FURTHER ACTION; CMOD #23	CMOD #23 Approved	
1251-0081	09/13/12	082-0081	6	CMB-0107	Agree	02/13/13	+43,882	Contract Plan JT-014 calls for CDF cover on PG&E duct bank. However, PG&E requested to use regular concrete due to heat dissipation problem with CDF. PG&E agreed to reimburse SFMTA (\$43,881) through the Form B process. 12/19/12 - Presented to CMB, direction given to finalize cost and obtain a Form B agreement with PG&E 02/13/13 - Revised CMod presented to CMB. PG&E agreed with negotiated reimbursement amount. COMPLETE, NO FURTHER ACTION	CMOD #24 Approved	
Contract 1251 Totals								+3,962,032	Total Changes to the contract in the amount of 3,962,032 represents an UNDERRUN of allocated contingency in the amount of \$1,405,265.32. Changes that will be Utility Reimbursement credits through the Form B process in the amount of \$1,224.828 will increase the UNDERRUN. Final Contract Closeout Total \$20,794,581 will be reduce by \$7,618,112 Utility Reimbursement credits for a Final Program cost of \$13,176,469 for CN 1251	
Contract 1252	COR No.	PCC No.	1252 Change Description	Change Type	CMB Change No.	Configuration Management Board Agree/Disagree	Decision Date	Actual/Forecast	Comments	Contract Modification No.

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1252-0001	04/23/12	1	AWSS Conflict w/ Low Pressure Water	6	CMB-0091	Agree to Merit Agree to Cost	10/10/12 01/16/13	+16,907	AWSS contract work was made more difficult by the proximity of a water line which was closer than indicated on UT-501. See COR 008 for TIA request. 10/10/12 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED Amount \$16,900 - Agreed	
1252-0002	04/23/12	2	AWSS Add. Tie-Rods 4th-Harrison	6	CMB-0086	Agree to Merit Agree to Cost	10/10/12 12/19/12	+55,132	The AWSS line must be restrained a certain distance beyond the 90 degree elbow we are installing under contract 1252. The 1252 contract work includes excavating on both sides of this 12-foot portion of pipe. Additional work scope (per Michael Smith @ DPW): Station 162+80 to 162+90 - Restrain the existing 12-inch tee to the existing pipe north of the tee. Restrain any other joints that are not restrained on the existing pipe up to the new pipe to be installed. 10/10/12 - Merit info presented to CMB - Agreed 12/19/12 - EE brought to CMB for cost NOT TO EXCEED Amount \$58,000 - Agreed	
1252-0003	04/23/12	3	AT&T Vault Conflict-4th & Harrison	6	CMB-0092	Agree to Merit Agree to Cost	10/10/12 01/16/13	+16,015	After excavation of the roadway surface and subgrade at Fourth and Harrison streets an AT&T vault was discovered to be in conflict with the current alignment of the 42" RCP sewer main. Verbal authorization was given by an AT&T representative to make modifications to the vault. COR 003 has been submitted by BIH in response to this issue. Work is to be charged via SFMTA Form B agreement to AT&T. 10/10/12 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED Amount \$21,089 - Agreed 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement.	
1252-0004	05/18/12	6	PG&E live electrical delays	6	CMB-0088	Agree to Merit Agree to Cost	11/28/12 1/9/2013	+7,402	PG&E lines indicated on contract drawing UD-502 thru 504 were to be abandoned yet were not yet abandoned when BIH started work. They were abandoned on 5/21. 11/28/12 - Merit info presented to CMB - Agreed 01/09/13 - EE brought to CMB for cost NOT TO EXCEED Amount \$7,600 - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement or cost reimbursement. COMPLETE, NO FURTHER ACTION: CMOD #10 - Final Cost \$7,402.36	CMOD #10 Approved
1252-0005	06/06/12	7	Oil filled pipe @ Launch Box	2	CMB-0093	Agree to Merit Agree to Cost	1/16/13 1/16/13	+9,980	Synergy Demo Crew exposed an existing 6" steel line which had oil in it on the West side of 4th St between Harrison and Bryant. 01/16/13 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED amount \$10,000 COMPLETE, NO FURTHER ACTION: CMOD #05 - Final Cost \$9,979.81	CMOD #5 Approved
1252-0006	04/23/12	8	TIA - Associated w/ COR 001, COR 002, and COR 003	6		Agree to Merit	10/10/12	+269,904	TIA and Overhead Costs related to COR 001, 002 and 003. 10/10/12 - Merit info associated w/COR's 001, 002 & 003 presented to CMB - Agreed. 01/30/13 - Elevation Ladder documentation presented for review of unresolved issue of payment of Indirect costs for TIA submittals- COR 008	
1252-0007	06/12/12	9	MOS - Live Utilities: PGE, AT&T, and SFWD 8" Water Line extra kill hole location	2		Agree to Merit	11/14/12	+49,047	Live PG&E Electrical Lines Conflict: BIH was notified that PG&E had live electrical lines running through each headwall work zone @ Moscone station. 8 inch Low Pressure Water Line Conflict: Contract drawings show this utility to be abandoned and capped prior to work. Synergy struck and damaged the water line. SFWD directed Synergy to excavate a kill hole so they could properly abandon the line. 11/04/12 - COR Evaluation for Merit presented to CMB - Agreed.	
1252-0008	06/19/12	10	MOS - Demo PGE duct bank / SF City 911 fiber optic line	2	CMB-0094	Agree to Merit Agree to Cost	10/10/12 01/16/13	+4,916	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a PG&E duct bank that contained a live San Francisco 911 fiber optic line. 11/14/12 - Presented to CMB - The narrative will be rewritten CMB agrees with partial merit labor work involved in supporting the utility agencies. This item will be brought back to the CMB for approval. 01/09/13 - EE brought to CMB for cost NOT TO EXCEED amount \$4,919.54 - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. COMPLETE, NO FURTHER ACTION: CMOD #03 - Final Cost 4,915.54	CMOD #3 Approved

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1252-0009	07/02/12	11	MOS - Traffic Signal line re-route south headwall	6	CMB-0095	Agree to Merit Agree to Cost	01/16/13	+37,500	After potholing Synergy discovered several traffic lines which were in the proposed location of the south MOS headwall. Traffic Lines re-routed. Merit info presented to CMB - Agreed 01/16/13 - CMB - NOT TO EXCEED Amount \$37,500	
1252-0010	01/00/00	12	MOS - Archaeological Standby North Headwall	2	CMB-0096	Agree to Merit Agree to Cost	12/11/12 01/16/13	+16,893	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a layer of "Midden" or Native American debris. 12/11/12 - Merit info presented to CMB - Agreed 01/16/13 - EE brought to CMB for cost NOT TO EXCEED amount \$7,600 - Agreed COMPLETE, NO FURTHER ACTION: CMOD #06 - Final Cost \$16,892.96	CMOD #6 Approved
1252-0011	07/06/12	13	MOS - SL conduit from PG&E vault @ north headwall	6		Agree to Merit	11/28/12	-0-	Permanent power is required to supply an existing Street Light box north of the MOS N headwall. 11/28/12 - Merit info presented to CMB - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement.	
1252-0012	06/26/12	15	LB - Pre-Excavation for Slurry Walls	2	CMB-0087	Agree to Merit Agree to Cost	11/28/12 12/19/12	+96,000	Pre-excavation of slurry wall panels due to CDF encased sewer line. The concrete encasement was found by the Contractor to extend to a depth of 9'-11' below the top of guide wall or street surface. The 8" VCP sewer main and concrete encasement was incorrectly shown in the contract drawings to be approximately 4'-5' below the street surface. 11/28/12 - Merit info presented to CMB - Agreed 12/19/12 - EE brought to CMB for cost NOT TO EXCEED amount \$96,000 - Agreed	
1252-0013	07/02/12	17	MOS - Standby Time @ south headwall due to live TS lines	6		Agree to Merit	11/21/12	+79,219	Standby delays related to the discovery of traffic lines within the proposed location of the south MOS headwall. 11/14/12 - COR presented to CMB. CMB requested additional revisions to the evaluation. CMB agrees with partial merit. The COR will be brought back to the CMB for approval. 11/21/12 - COR revisited at mtg for clarification the issue is related to CMB action from item 3 - 7/25/12 (Mtg #88) specifically acted on 08/01/12 (CMB Mtg. 89) referred originally as Trend #15. No Merit - Agreed	
1252-0014	Closed	19	UMS - Grant street 2 way conversion (e- & striping)	7				-0-	In order to implement a full street closure for Stockton Street at the UMS location the DPT recommended that Grant Street be converted from an existing one-way street to a two way street for vehicular traffic. Closed - Work is done. 07/18/12 - This potential change was brought before the CMB. Board's decision to have DPT perform the work. CLOSED; NO FURTHER ACTION	
1252-0015	06/22/12	20	PROJECT WIDE - Utility Demo limit reduction credit	7				-0-	BIH's subcontractor Synergy Project Management (SPM) would like to minimize the limits of utility demo at the Launch Box, Moscone station, UMS station and TBM Retrieval Shaft locations. SFMTA to BIH/SPM "Build per Plan". CLOSED; NO FURTHER ACTION	
1252-0016	04/02/12	21	UMS - Reduced Duration	5	CMB-0073	Agree Cost (Conditionally)	08/01/12	-0-	No cost change for acceleration of utility relocation, ground improvements (jet grouting), and headwall construction at Union Square/Market Street Station. 08/01/12 - CMB approval condition upon incorporating correctness to backup documentation as required by & documented in CMB mtg. RE to prepare modification. COMPLETE; NO FURTHER ACTION: CMOD #08 - No Cost Change	CMOD #8 Approved
1252-0017	07/10/12	22	MOS - Asbestos Pipe at north headwall	2	CMB-0090	Agree to Merit Agree to Cost	12/12/12 01/09/13	+5,705	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered friable asbestos-laden transite pipe. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 - EE brought to CMB for cost NOT TO EXCEED Amount \$6,000 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #05 - Final Cost \$5,707.05	CMOD #5 Approved

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1252-0018	07/10/12	23	MOS - Brick Wall #2 discovered @ north headwall	2				+16,025	Upon excavation of the MOS north headwall, BIH's subcontractor Synergy Project Management (SPM) uncovered a buried wall. 11/14/12 COR presented to CMB. Evaluation for merit will be rewritten and brought back to CMB for approval. 11/21/12 - Evaluation of merit presented to CMB - Agreed to No Merit for this change.	
1252-0019	08/10/12	26	MOS - Asbestos Pipe at south headwall	2	CMB-0085	Agree to Merit Agree to Cost	12/12/12 01/09/13	+27,630	Transite pipe was discovered during MOS south headwall excavation. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 EE brought to CMB for cost NOT TO EXCEED amount \$30,000 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #15 COMPLETE, NO FURTHER ACTION: CMOD#15 - Final Cost \$27,629.64	CMOD #15 Approved
1252-0020	08/10/12	27	MOS - Oil filled pipe at south headwall	2	CMB-0089	Agree to Merit Agree to Cost	12/12/12 01/09/13	+8,226	A pipe containing oil was discovered during MOS south headwall excavation. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 CMB - NOT TO EXCEED Amount \$8,600 COMPLETE, NO FURTHER ACTION: CMOD #05 - Final Cost \$8,225.68	CMOD #5 Approved
1252-0021	06/19/12	29	MOS - Todco scaffolding reimbursement	2	CMB-0097	Agree to Merit Agree to Cost	12/12/12 01/16/13	+1,718	1252 contract work requires the removal of scaffolding erected by Fine Line Construction, the contractor performing renovations on the Woolf House. 12/12/12 - Merit info presented to CMB - Agreed 01/09/13 - EE brought to CMB for cost NOT TO EXCEED Amount \$1,717 - Agreed COMPLETE, NO FURTHER ACTION: CMOD #03 - Final Cost \$1,717.83	CMOD #3 Approved
1252-0022	Closed	closed	Disputed Work Items - NTP2 vs. NTP3	7				-0-	BIH interpretation of Special Provisions SP-3 NTP2 description includes activities that SFMTA interprets to be within NTP3. These activities include: Ellis Street and Green Street shafts and associated compensation grouting, MOS headwalls and jet grouting, jet grouting at cross passage 5, UMS head walls and jet grouting, OCS removal along Stockton Street from Geary to Ellis, and the TBM retrieval shaft. On April 13, SFMTA released the MOS headwalls and jet grouting, jet grouting at cross passage 5, UMS jet grouting, OCS removal along Stockton Street from Geary to Ellis, and preparatory and utility work necessary for the construction of the retrieval shaft. CLOSED; NO FURTHER ACTION.	
1252-0023	05/30/12		Manhole in east guidewall footprint	2				-0-	While performing excavation for the east side guidewalls at the TBM Launch Box, BIH's subcontractor CJA-NCC encountered a manhole near the bottom of the excavation which was unexpected. BIH has stated that removal of the manhole prior to the installation of the guidewalls was necessary to ensure the successful installation of the slurry walls. 05/20/12 - CM Team comment: Synergy traded this COR with SFMTA for shallow Force Main Installation. CLOSED; NO FURTHER ACTION.	
1252-0024	Closed	closed	2" gas line inside 16" casing	2				-0-	While performing excavation for the Sewer and AWSS trench at the intersection of Fourth and Harrison streets, BIHJV's subcontractor Synergy encountered what was identified to be a 16" depressurized gas main. This gas main contained a 2" gas line which is shown on contract drawing UD-502 to be abandoned/removed. CLOSED; NO FURTHER ACTION.	
1252-0025	04/23/12	5	CDF Encasement on 42" RCP	2				+140,596	While performing excavation for the east side guidewalls at the TBM Launch Box, BIH's subcontractor CJA/NCC encountered a CDF backfill at the existing 42" RCP sewer which reportedly had a significantly higher compressive strength than the 50-150 psi. which was anticipated. BIH claims that the CDF conflicted with the construction of the guidewalls and it could not be excavated by conventional means.	
1252-0026	Closed	closed	Damage to Live LPW main at 4th and Folsom	2				-0-	Synergy Demo Crew hit a blow-off valve on the 8" water line at the Southwest corner of the MOS headwalls. SFWD is to install a permanent cap per contract drawing WD-404. CLOSED; NO FURTHER ACTION.	

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1252-0027	Closed		MOS - 76 Gas Station fencing	1				-0-	SFMTA requested BIH to install fencing around the perimeter of the 76 gas station at 4th and Folsom St. Issue closed, cost of fence paid by BIH in return for use of gas station lot. CMB - Temporary use of 800 Folsom Street site for construction staging. Use of this site would be a tradeoff between SFMTA and BIH. The Contractor would maintain the sites security and up-keep in exchange for not billing. CLOSED; NO FURTHER ACTION.	
1252-0028	Closed		LB - SPTC delays due to concrete encased 8" sewer	2				-0-	Closed. Combined with COR 015. 07/25/12 - Verbal information presented to CMB as a potential change. CLOSED NO FURTHER ACTION	
1252-0029	08/06/12	18	MOS - South Headwall re-design	1				+145,000	Costs related to leave end stops in place and a "T-Section" at the Moscone headwalls return walls. 11/14/12 - Presented to CMB. RE is recommending a possible compensation value of \$135K. CMB agrees with partial merit for labor and material cost of this COR. RE will proceed with scoping the work. 04/17/13 - Elevation Ladder of unresolved issue of End Stops presented to CMB - COR 018 09/18/13 - Contractor has submitted a Contract Claim No. 1 Permanent End Stops at MOS Headwall for \$169,379.17. CMB directed the CM Team to draft a letter rejecting the claim.	
1252-0030	08/02/12	24	Ellis - Utility demolition	3	CMB-0135	Agree to Merit Agree to Cost	12/6/2012 10/09/13	+38,678	BIH says that no utilities were shown at Ellis; however, Reference Drawing UE-126 shows utilities. 12/06/12 - Merit info presented to CMB - Agreed 10/09/13 - Engineers Cost Comparison brought to CMB for cost NOT TO EXCEED amount \$35,628.22 - Agreed	
1252-0031	Closed		Crack Gauges	4				-0-	BIH disagrees with SFMTA on the total number of crack gauges to be installed on the project. Per the contract drawings a total of 926 crack gauges are to be installed. BIH claims that a total of 50 are to be installed. CLOSED; NO FURTHER ACTION.	
1252-0032	08/07/12	28	Ellis asbestos abatement	2		Agree to Merit	12/06/12	-0-	A steam line containing asbestos was discovered during potholing at the Ellis Street Shaft. 12/06/12 - Merit info presented to CMB - Agreed 01/10/13 - CM Comment - To be paid out of Environmental Mitigation allowance GE-8.	
1252-0033	-	30	LB - Class 1 Hazardous Material Haul off	2				+198,276	BIH trucking costs for Class 1 haul off generated at staging yard. Also see COR 054 regarding Class 1 Haz material haul off for Phase 2. 09/18/13 - Contractor has submitted a Contract Claim No. 2 Haz Mat Removal - Caltrans site (COR 30, 45 & 75) for 708,929.00 CMB directed the CM Team to draft a letter rejecting the claim.	
1252-0034	01/00/00	70	LB - Jet Grout Quantity Overrun	4	CMB-0115	Agree to Merit Agree to Cost	03/20/13 04/03/13	+599,900	The contract drawings call for the contractor to determine the extent of jet grouting at the launch box. Bid Item ES-3 has an estimated quantity of 2,831 CY of in-situ treated ground. The Contractor has currently installed 3,929 CY of Soilcrete (Jet Grout) for ground treatment. This translates to an additional quantity of 1,098 CY of ground treatment beyond the quantity listed for Bid Item ES-3. By subtracting 241 CY for the "scallop" portion of the columns the total is 857 CY. 03/20/13 - Merit info presented to CMB - Agreed 04/03/13 - EE brought to CMB for cost NOT TO EXCEED amount \$599,900 - Agreed	
1252-0035	01/00/00	unsubmitted	Utility Removal UD-304 and UD-503	6				TBD	RFI 00134 asks whether certain utilities indicated on drawings UD-304 (On Stockton inside limits of future UMS Station) and on UD-503 (On Fourth and Stillman Streets outside limits of Launch Box) may be left in place. Answer: "Confirmed, the utilities in question can be abandoned in place and are not required to be removed. The Engineer will seek an adjustment to Bid Item GB-3 for the elimination of this work."	
1252-0036	05/17/12	35	Additional Road Base on Fourth Street	2				-0-	BIH's subcontractor Synergy Project Management (SPM) discovered what they believe to be an additional layer of road base under the existing asphalt and road base layer while performing roadway demo work along the west side of Fourth street between Harrison and Bryant St. The additional layer is estimated by BIH/SPM to be approximately 8" - 12" thick. 12/06/12 - Evaluation of merit presented to CMB - Agreed to No Merit for this change.	

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1252-0037	01/00/00	unsubmitted	DPW permitting potential impacts	7				TBD	DPW Permitting issue to cause potential impacts. DPW is not issuing BIH permits for excavating the MOS headwalls, jet grouting at the LB, and excavating support at the LB, as they claim to have not been able to conduct a thorough review of the project's design documents and were not included in the design process. BIH may be required to re-sequence and stand many other potential impacts w/o said permits.	
1252-0038	05/30/12	38	Manhole in West Guidewall Footprint	3	CMB-0101	Agree to Merit Agree to Cost	12/05/12 01/23/13	+3,821	While performing excavation for the west side guidewalls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered a manhole foundation within the excavation at approximate station 165+70. It was necessary to chip away a portion of the existing manhole to gain the necessary clearance to construct the west slurry wall. 12/05/12 - CMB agreed with Evaluation of Merit 01/23/13 - EE brought to CMB for cost NOT TO EXCEED amount \$4,052.17 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #12 - Final Cost \$3,820.84	CMOD #12 Approved
1252-0039		unsubmitted	Panel W-33 Obstruction	2				TBD	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered buried (wood pile?) debris located approximately 12 feet below the guide wall within Launch Box Diaphragm Wall Panel W-33, This trend is being tracked separately from Trend 20 because we believe it may be a different structure. BIH has not provided adequate information substantiating the merging of the two trends. CLOSED; NO FURTHER ACTION.	
1252-0040	08/23/12	PCC 1	PCC No.1 - Revisions to Moscone North Headwall Elevation (Top)	1	CMB-0099	Agree to Cost	01/16/13	+20,358	SFMTA initiated change to revise headwall elevations to facilitate a change in the roof elevation of MOS station. 01/16/13 CMB - NOT TO EXCEED Amount \$20,500 COMPLETE, NO FURTHER ACTION: CMOD #07 - Final Cost \$20,358.23	CMOD #7 Approved
1252-0041	08/23/12	PCC 2	PCC No. 2 - Revisions to UMS Headwall Concrete and Reinforcement Limits	1				-0-	SFMTA initiated change to revise UMS headwall concrete and reinforcement limits to provide a cost savings. 08/29/12 - Revised PCC presented to CMB CLOSED; NO FURTHER ACTION	
1252-0042	08/24/12	31	Retrieval Shaft - Unmarked 12" Steel Pipe	2	CMB-0108	Agree to Merit Agree to Cost	01/02/13 02/27/13	+1,200	While performing excavation for the joint trench at the retrieval shaft BIH's subcontractor Synergy Project Management (SPM) discovered an abandoned 12" dia. steel pipe which appears to run continuously under Columbus Ave. 01/02/13 - Merit info presented to CMB - Agreed 02/27/13 - EE brought to CMB for cost NOT TO EXCEED amount \$1,250 -- Agreed 04/01/13 - No reimbursement from SFWD. COMPLETE; NO FURTHER ACTION: CMOD #13 - Final Cost \$1,200	CMOD #13 Approved
1252-0043	08/31/12	32	LB - Panel W29 Wood Pile	2		Agree to Merit	11/28/12	+81,000	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered what appeared to be a wood pile within Launch Box Diaphragm Wall Panel W-29. 11/28/12 - Merit info presented to CMB - Agreed	
1252-0044	09/04/12	33	Ret Shaft - 20" Water Line Conflict	2		Agree to Merit	11/14/12	-0-	During excavation for the joint trench at the retrieval shaft SPM discovered that the MRY Duct Bank is directly above an active 20" low pressure waterline. As a result the work at the Retrieval Shaft must reportedly be altered. 11/14/12 - Presented to CMB, the CMB agrees with some merit of this COR, element of change not define clearly. RE will proceed with scoping the work. CLOSED; NO FURTHER ACTION	
1252-0045	09/11/12	34	LB - Panel W28 Wood Pile	2				+81,000	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered what appeared to be a wood pile within Launch Box Diaphragm Wall Panel W-28.	
1252-0046	01/00/00	36	MOS - Catch Basin @ south headwall	3				-0-	A catch basin on the NW corner of 4th and Folsom interfered with the construction of the MOS Headwalls. Removal of the catch basin was needed in order for the headwalls to be built. BIH claims the catch basin was not shown in the contract drawings. Closed due to improper notification. CLOSED; NO FURTHER ACTION	

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1252-0047	01/00/00	37	UMS - 12" steel pipe removal	3	CMB - 0132	Agree to Merit Agree to Cost	6/5/2013 08/28/13	+3,379	A 12" steel pipe at the north UMS headwall location interfered with the demolition of other existing UMS utilities. BIH claims the steel pipe was not shown in the contract drawings. Closed due to improper notification. 06/05/13 - Merit info presented to CMB - Agreed 08/28/13 - EE brought to CMB for cost NOT TO EXCEED Amount \$3,379.19 - Agreed	
1252-0048	09/07/12	39	MOS - 16" Steel Pipe removal @ northeast headwall	3	CMB-0102	Agree to Cost	01/23/13	+2,952	SPM removed an unmarked 16" steel pipe from the excavation of the NE MOS Headwall. Construction of the MOS headwall could not commence without this utility being removed. BIH claims the 16" steel pipe was not shown in the contract drawings. 01/23/13 - EE brought to CMB for cost NOT TO EXCEED amount \$2,951.99 - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #14 - Final Cost \$2,951.99	CMOD #14 Approved
1252-0049	01/00/00	40	MOS - Extra Road Base @ northeast headwall	2				-0-	BIH's subcontractor Synergy Project Management (SPM) discovered what they believe to be an additional layer of road base under the existing asphalt at the NE MOS headwall location. The road base in this location was approx. 20" thick on a patch that was roughly 25' x 25'. Closed due to improper notification. CLOSED; NO FURTHER ACTION	
1252-0050	05/18/12	41	LB - Impacts due to live PG&E electrical lines (Synergy)	6	CMB-0098	Agree to Merit Agree to Cost	01/16/13	+1,217	Based on direction from the SFMTA, Synergy provided a full time flagger for one night shift of work @ the intersection of I-80 off-ramp near 4th/Bryant streets in order to assist PGE while they performed the abandoning of the existing live PGE electrical at the Launch Box location which was shown to be dead in the contract drawings. 01/13/13 - CMB agreed with Evaluation of Merit 01/16/13 - EE brought to CMB for cost NOT TO EXCEED amount \$1,245 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #10 - Final Cost \$1,216.60	CMOD #10 Approved
1252-0051	01/00/00	executed	Contract Amendment No. 2	1				(3,040,713)	COMPLETE; NO FURTHER ACTION: CMOD #02	CMOD #2 Approved
1252-0052	08/17/12	42	LB - Panel W25 Wood Pile	2		Agree to Merit	11/28/12	+116,785	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered an obstruction within Launch Box Diaphragm Wall Panel W-25. 11/28/12 - Evaluation of merit presented - CMB agreed	
1252-0053	08/22/12	43	LB - Panel W30 Wood Pile	2		Agree to Merit	11/28/12	+47,185	While performing excavation for the slurry walls at the TBM Launch Box, BIH's subcontractor CJA-NCC unexpectedly encountered an obstruction within Launch Box Diaphragm Wall Panel W-30. 11/28/12 - CMB agreed with Evaluation of Merit	
1252-0054	09/19/12	44	MOS - 16" steel pipe removal @ southeast headwall	3	CMB-0109	Agree to Merit Agree to Cost	12/06/12 02/27/13	+1,600	SPM removed an unmarked 16" steel pipe from the excavation of the NE MOS Headwall. Construction of the MOS headwall could not commence without this utility being removed. BIH claims the 16" steel pipe was not shown in the contract drawings. 12/06/12 - CMB agreed with Evaluation of Merit 02/27/13 - EE brought to CMB for cost NOT TO EXCEED amount \$1,800 - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #14 - Final Cost \$1,600	CMOD #14 Approved
1252-0055	06/09/12	45	Ret Shaft - Credit for reduced AT&T conduits	6				(331)	Credit to install 2 less conduits in the AT&T infrastructure at the Retrieval Shaft Joint Trench. The conduit notes on page JT-701 of the contract documents require 8 EA 4" conduits as laid out on the AT&T line. The reduced materials would result in 6 EA 4" conduits as a result. 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. 09/18/13 - Contractor has submitted a Contract Claim No. 2 Haz Mat Removal - Caltrans site (COR 30, 45 & 75) for 708,929.00. The CMB directed the CM Team to draft a letter rejecting the claim.	

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1252-0056	09/25/12	46	UMS - Unmarked steel pipes (6", 12", 14") / Duct Bank	6	CMB-0103	Agree to Merit Agree to Cost	12/06/12 01/23/13	+7,475	While performing excavation for the utility demolition at the south UMS headwall BIH/Synergy discovered a 6" dia. steel pipe, 16" dia. steel pipe, 18" dia. steel pipe, and a concrete duct bank. BIH claims the utilities were not shown in the contract drawings. 12/06/12 - CMB agreed with Evaluation of Merit 01/23/13 - EE brought to CMB for cost NOT TO EXCEED amount \$7,461 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #16 - Final Cost \$7,475.28	CMOD #16 Approved
1252-0057	09/25/12	47	Ret Shaft - unmarked 10" steel pipe/duct bank	6	CMB-0104	Agree to Merit Agree to Cost	12/06/12 01/23/13	+2,108	Synergy Project Management (SPM), discovered an abandoned duct bank and 10" steel pipe which traveled underneath Columbus Avenue between Powell and Union Streets. Removal of the duct bank was necessary to complete the construction of the 36" RCP sewer main relocation work in this area. The status of the removal of the steel pipe is uncertain and may have not been necessary for the sewer main relocation. 12/06/12 - CMB agreed with Evaluation of Merit 01/23/13 - CMB - Not to Exceed \$2,201 04/01/13 - No reimbursement from SFWD COMPLETE; NO FURTHER ACTION: CMOD #13 - Final Cost \$2,108.04	CMOD #13 Approved
1252-0058	09/28/12	48	UMS - 3'x5' brick sewer at south headwall	6	CMB-0114	Agree to Merit Agree to Cost	12/06/12 03/13/13	+11,675	Synergy Project Management (SPM), discovered a brick sewer within the utility demolition limits at the UMS South headwall. The sewer encountered was larger than the 12" pipe which was shown in the contract drawings. Removal and disposal of the sewer commenced on September 26th and was completed by September 28th. Removal of the sewer was necessary for headwall construction. 12/06/12 - CMB agreed with Evaluation of Merit 03/13/13 - EE brought to CMB for cost NOT TO EXCEED amount \$12,474.65 - - Agreed COMPLETE; NO FURTHER ACTION: CMOD #16 - Final Cost \$11,675.00	CMOD #16 Approved
1252-0059	01/00/00	49	Ret Shaft - Tree trimming debris haul off	7				-0-	Synergy Project Management (SPM), was requested by the SFMTA to remove and dispose of debris near the Northeast corner of Columbus Avenue and Union Street. The debris resulted from tree trimming activities performed by MUNI operations. CLOSED; NO FURTHER ACTION.	
1252-0060	10/10/12	50	Ret Shaft - 12" steel pipe removal at Union/Columbus	6	CMB-0110	Agree to Merit Agree to Cost	12/12/12 02/27/13	+2,200	On October 4th 2012, the Contractor discovered and removed a 12" Steel pipe at the intersection of Union Street and Columbus Avenue. Removal and disposal of the steel pipe was necessary in order to complete the proposed sewer re-location work near the Retrieval Shaft. Sewer work included the construction of a manhole which had been positioned in the field to avoid an existing MUNI duct bank. 12/12/12 - CMB agreed with Evaluation of Merit 02/27/13 - EE brought to CMB for cost NOT TO EXCEED amount \$2,600 - - Agreed 04/01/13 - No reimbursement from SFWD COMPLETE; NO FURTHER ACTION: CMOD #13 - Final Cost \$2,200	CMOD #13 Approved
1252-0061	10/11/12	51	Ret Shaft - Elevation design conflict (30" low psi water / sewer)	3	CMB-0123	Agree to Merit Agree to Cost	03/13/13 7/10/2013	+13,386	03/13/13 - Merit info presented to CMB - Agreed 07/10/13 EE brought to CMB for cost NOT TO EXCEED amount \$21,100.	
1252-0062	09/07/12	53	Chinatown - Night drilling for instrumentation	7				-0-	Closed.	
1252-0063	-	54	LB Class 2 Hazardous Material Haul Off (Phase 2)	2				+110,967	BIH trucking costs for Class 1 haul off generated at staging yard. Also see COR 030 regarding Class 1 Haz material haul off for Phase 1.	
1252-0064	10/10/12		PCC No. 4 - Ret shaft sewer pipe material change	1				-0-	Change approximately 65 ft. of pipe for sewer bypass around the TBM Retrieval Shaft from 3' X 5' oval glass fiber reinforced pipe to a 48-inch (OD) HDPE SD-17 pipe with casing insulator placed inside a 54-inch diameter, 1/2-inch thick steel casing pipe. In addition, delete permanent sheet pile wall that was to have been placed along the west side of the trench to facilitate future maintenance access to the sewer along the shaft. CLOSED; NO FURTHER ACTION	
1252-0065	12/18/12		PCC No. 8 - UMS - Tree Removal	1				-0-	SFMTA is directing removal of a tree at the northeast corner of Stockton and O'Farrell St. CLOSED; NO FURTHER ACTION	

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1252-0066	10/10/12		PCC 5 PCC No. 5 - Ret Shaft Water Dist. Pipe Material Change	1				-0-	Change material type of approximately 188 linear feet of 20-inch water line and approximately 125 linear feet of 30-inch water line from Welded Steel Pipe (WSP) to Ductile Iron Pipe (DIP) with TR-Flex joints. Install 6-inch thick concrete cap over 20-inch water line where cover is less than 24 inches. CLOSED; NO FURTHER ACTION	
1252-0067	10/26/12	58	Ret Shaft - Additional 10" steel pipe removal	6	CMB-0111	Agree to Merit Agree to Cost	12/12/12 02/27/13	+700	Work is a continuation of work performed in COR 047. 12/12/12 - CMB agreed with Evaluation of Merit 02/27/13 - EE brought to CMB for cost NOT TO EXCEED amount \$860.85 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #13 - Final Cost \$700	CMOD #13 Approved
1252-0068	10/10/12		PCC 3 PCC No. 3 - General Detour Signage	1	CMB-0113	Agree to Cost	10/03/12 02/27/13	-0-	Full closure of Stockton Street at Union Square was not anticipated under the 1252 Contract. The implementation of detour signage associated with the full closure of Stockton Street was to occur under the 1300 Contract. After the award of the 1252 Contract it was decided that a full closure of Stockton could be implemented to help reduce the headwall construction durations. As a result of the full closure the City Traffic Engineer has requested that a portion of the 1300 detour signs be installed now under the 1252 Contract to help alleviate traffic congestion and provide better detour signage around Union Square. 10/03/12 - PCC presented to CMB. CMB directed the RE to get a price quote from DPT do the work as a price comparison. This item will be brought back to the CMB at a later date. 11/14/12 - PCC presented to CMB. The CMB did not agree that Central Subway needed to take the lead on implementing detour signage, but suggested that the RE study the traffic activity and at the end of November report findings. 02/27/13 - Cost presented to CMB - Agreed to NTE \$6,152.60 CLOSED; NO FURTHER ACTION	
1252-0069	11/08/12		PCC 6 PCC No. 6 - Supplemental instrumentation of BART tunnel lining.	1	CMB-0124 (voided) CMB-0129 (voided) CMB 0131	Agree to Merit Agree to Cost Agree to Cost	10/13/12 07/10/13 08/07/13 08/09/13	+307,861	Implement additional instrumentation of BART tunnel lining: (A) Existing bolt preload force – Determine the actual load in 12 bolts. (B) Bolt force sensor – Install 12 bolt force sensors at bolts for a total of 24 bolts. (C) Rail movement under dynamic train loading – Install dynamic strain gauges (2 per rail, 8 per tunnel). 10/31/12 - PCC presented to CMB for merit. CMB directed RE to proceed with obtaining a price quote from Contractor to perform the work. 05/08/13 - PCC 06 cost comparison was presented. CMB felt \$624K to perform the work was too high and requested IRP be contacted in writing to find out if the additional instrumentation monitoring was still warranted given the new alignment. 06/05: CS Letter No. 1972 presented - Tunnel Design Changes sent to IRP notified them of recent changes and developments in the tunneling contract. 07/10/13 - CMB - Not to Exceed \$650,127.62 IRP's response to SFMTA letter is still pending. 08/07/13 - CEE brought to CMB for cost NOT TO EXCEED amount \$305K contingent upon revised estimate to reflect deletion in scope of work. 08/09/13 - Special CMB Mtg to clarify direction and approval to proceed with direction to the Contractor on extra work contained in PCC 06 (BART Work Scope reduction) The CMB Agreed to a NTE revised value of \$307,860 - Agreed	
1252-0070	01/00/00	unsubmitted	Full Closure of 4th Street	1				TBD	SFMTA allowed full closure of 4th Street in order to facilitate construction of Launch Box Slurry Wall Construction Week Ending 11/04/12 - 11/11/12.	
1252-0071	11/07/12	61	LB - Panel P-17 Buried Obstruction	2	CMB-0125	Agree to Merit	01/02/13	+377	CJA-NCC discovered an unmarked buried water main at Panel P-17, approximately 6' below the guidewall at CTL Station 165+52, while performing slurry diaphragm wall excavation. 01/02/13 - CMB agreed with Evaluation of Merit. 07/24/13 - CMB agreed to cost of reconciliation change - NTE \$1,100 - Agreed	

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1252-0072	11/14/12	62	LB – Panel P-9 Buried Obstruction	2		Agree to Merit	01/23/13	+150,000	CJA-NCC discovered a buried obstruction while excavating slurry diaphragm wall panel P-9 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Revised write up presented CMB agreed with Evaluation of Merit.	
1252-0074	11/16/12	65	LB – Panel P-12 Buried Obstruction	2		Agree to Merit	01/23/13	+150,000	CJA-NCC discovered a buried obstruction (water main) while excavating slurry diaphragm wall panel P-12 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Revised write up presented; CMB agreed with Evaluation of Merit.	
1252-0075	11/19/12	66	Retrieval Shaft - Unmarked 12" Steel Pipe	2	CMB-0112	Agree to Merit Agree to Cost	01/23/13 02/27/13	+3,700	While performing excavation for the joint trench at the retrieval shaft BIH's subcontractor Synergy Project Management (SPM) discovered an abandoned 12" dia. steel pipe which appears to be a Low Pressure Water Main. 01/23/13 - Merit info presented to CMB - Agreed 02/27/13 - EE brought to CMB for cost NOT TO EXCEED amount \$3,800 04/01/13 - No reimbursement from SFWD COMPLETE; NO FURTHER ACTION: CMOD #13 - Final cost \$3,700	CMOD #13 Approved
1252-0076	11/19/12	67	LB - Panel P-10 Buried Obstruction	2		Agree to Merit	01/23/13	+18,000	CJA-NCC discovered a buried obstruction or concrete encased clay sewer pipe, approximately 7' below the top of the guide wall while excavating slurry diaphragm wall panel P-10 at the Launch Box location. 01/02/13 - Presented to CMB for merit, CMB did not agree. CMB suggested inspector's daily tags as backup be attached or reference the tag numbers in the write-up when force account work is involved. 01/23/13 - Merit info presented to CMB - Agreed	
1252-0077	12/21/12		PCC 7 PCC No. 7 - BART Temporary Annex Wall	1	CMB-0106	Agree to Cost	01/30/13	+15,500	SFMTA is requesting Contractor construct temporary wall for Bart Annex for SFMTA use. 01/30/13 - NOT TO EXCEED Amount \$15,380 COMPLETE; NO FURTHER ACTION: CMOD #11 - Final Cost \$15,500	CMOD #11 Approved
1252-0078	12/28/12		PCC 9, FA CO 1 PCC No. 9 - UMS Headwall - Unknown Buried Pipe	1	CMB-0100	Agree to Merit Agree to Cost	01/16/13 01/16/13	+55,666	Related to COR 063. SFMTA instructed BIH to perform investigation into the 48" diameter steel pipe as it is a Differing Site Condition. 01/30/13 01/16/13 - EE brought to CMB for cost NOT TO EXCEED amount \$75,000 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #04	CMOD #4 Approved
1252-0079	01/09/13		PCC 10 PCC No. 10 - Relocation of TBM Retrieval Shaft - Excludes Button Up Costs	1					Modify Bid Item ST-4 (Construction of Base Bid Permanent Retrieval Shaft) and ES-4 (Ground Treatment at Retrieval Shaft Breakouts) to relocate the TBM Retrieval Shaft to 1731-1741 Powell Street - (Excludes Utility Button Up and Site Restoration) 01/09/13 - Draft PCC10 presented to CMB for Contractor Design Activity to be paid on Force Account. NTE value \$20K presented to CMB as a draft copy, final copy distributed to the Contractor increased to \$50K. 02/20/13 - COST IS NOT REFLECTED HERE - SCOPE IS FUNDED BY OTHER CPT 690 \$\$\$\$ 03/06/13 - Cost proposal received from BIH. SFMTA will develop a detail estimate of what is believed to be the scope of work. 03/13/13 - PCC 10 presented for CMB change approval of \$50K NTE amount to perform design activities. CMB requested CM team return with a more detailed estimate, Contractor's cost proposal of the bulleted items as listed on the PCC and backup documentation as evidence of work completed by the Contractor.	
1252-0080	12/19/12	0	Segment Measuring Frequency	7				(1,300,000)	RFI 203.1 - In light of gauging frequency, and the difficulties of erecting a ring with cast in gaskets, BIH JV alternately proposes to assemble a ring on the Master ring at an interval of every 500th ring cast. The assembled ring would be comprised of randomly selected segments, or segments chosen by the Engineer.	

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1252-0081	09/09/12	0	F21 and Old Navy Instrumentation Proposal	7				-0-	Wang Technology is proposing instrumentation changes to the Liquid Level Sensors and Tilt Beams in the basements of Old Navy and Forever 21.	
1252-0082	01/14/13	68	UMS – AT&T Vault Walkway @ N Headwall	2		Agree to Merit	01/16/13	+2,000	SPM discovered an walkway at the UMS north headwall. This walkway is located at the UMS north headwall and connects the south AT&T vault, located within the utility demolition limits, to an north AT&T, located outside of the utility demolition limits. SPM proposes to construct 3'x5' wall to the extents necessary, inside this walkway. The wall will be constructed of plywood and necessary reinforcement in order to create a bulkhead that will isolate the walkway and north vault from the south vault. 01/16/13 - CMB recommendation Contractor/Sub-contractor proceed on Force Account with a "Not to Exceed Amount" \$2K. 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #16 - Final Cost \$2,000.00	CMOD #16 Approved
1252-0083	11/08/12	69	UMS - Shoring Impacts due to 48" ATT Pipe at SW Headwall	2				-0-	On or about 10-25-13, BIH/Synergy were installing sheet piles at the UMS SW head wall to demolish the existing basement wall in conflict with the head wall construction per contract requirements. During the driving of the sheet piles, Synergy struck a buried object which was later identified as a 48" Diameter steel pipe. See PCC 9 and 11. Synergy thought they were hitting a buried tie-back which was shown on the contract drawings. Synergy did not know at the time that they were hitting a buried 48" pipe. After hitting the buried object, Synergy installed additional sheet piles and enlarged the excavation area in order to clear the buried object and drive the sheet piles to the minimum embedment depth. Due to the larger excavation, Synergy is claiming impacts as a result of encountering this DSC including shoring revisions and for installing additional sheets. 06/05/13 - CM TEAM NOTES: COR 069 reopened by BIH to cover cost for enlarging excavation due to encountering the 48" buried pipe. Previously COR 069 was to cover capping and removal of the pipe until it was changed to PCC 11. CLOSED; NO FURTHER ACTION.	
1252-0084	01/24/13		PCC No. 11 - UMS – Cap and Remove 48" Steel pipe	1	CMB-0105	Agree to Cost	1/23/13	+99,449	BIH/Synergy encountered a buried 48" Diameter steel pipe during work at the UMS S. Headwall. The pipe is located 6 feet from the south UMS headwall and 5 feet from the face of the curb. This PCC is to complete removal of pipe @ S. Headwall and Investigate and remove pipe if necessary @ the North headwall. 01/30/13 - EE brought to CMB for cost NOT TO EXCEED amount \$150,000 - Agreed 04/01/13 - CM team must obtain in writing from AT&T a utility agreement for cost reimbursement. COMPLETE; NO FURTHER ACTION: CMOD #09	CMOD #9 Approved
1252-0085	01/24/13	71	LB – Ramp Excavation Obstructions	2	CMB 0133	Agree to Merit Agree to Cost	4/3/2013 09/25/13	+5,594	BIHJV encountered numerous groups of wood piles while performing excavation of the Launch Box ramp. The wood piles are approximately 16"+ in diameter and are located along the north and south perimeter walls of the Launch Box ramp excavation area. 01/30/13 - CMB did not agree with merit of change suggestion the RE negotiate w/Contractor for another concession. 04/03/13 - COR merit evaluation presented to CMB again due to a greater number of obstruction encountered. CMB - Agreed to Partial Merit. 09/25/13 - EE brought to CMB for cost NOT TO EXCEED amount \$5,700.	
1252-0086	02/08/13	72	Ellis Shaft Jet Grout Obstruction	2				-0-	On February 6th, 2013, CJA/NCC was drilling column R3 of the Ellis Shaft and reported hitting an obstruction 52ft below existing grade. The obstruction reportedly caused the jet grout monitor to shear off. At this time it is not known what the obstruction is or if it caused the monitor to be sheared off. CLOSED; NO FURTHER ACTION	
1252-0087	02/14/13	73	MOS - 16" Pipe removal @ NE Headwall	2	CMB-0118	Agree to Merit Agree to Cost	3/13/2013 05/08/13	+940	BIH-JV's subcontractor, Synergy, encountered an abandoned 16" pipe while installing the 12" waterline at the north headwall of Moscone. The pipe was at the same elevation as the new 12" waterline and therefore needed to be removed to facilitate the installation of the new 12" waterline. 03/13/13 - Merit info presented to CMB - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. 05/08/13 - CMB agreed to cost of reconciliation of change on FA - NTE \$989.00 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #17	CMOD #17 Approved

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1252-0088	NA		Whole Foods - Unknown brick obstruction in Comp Grout Trench	0				-0-	BIH has decided not to submit a COR as production was not significantly impacted. CLOSED; NO FURTHER ACTION	
1252-0089	03/11/13	75	Hazardous Waste Disposal Denial - Spoils Containment Cost Impacts	7				+326,971	BIH submitted change order request (COR) 030 seeking reimbursement for the demonstrated additional costs of excavating, handling and disposing of excavated material found to contain hazardous material to a permitted landfill over that which can be disposed of at an unregulated dump site. The SFMTA refused reimbursement for such costs under the hazardous waste bid item allowance. As a result of this determination, BIH is modifying its approach to the construction and handling operations of tunnel spoils generated during tunneling operations. 09/18/13 - Contractor has submitted a Contract Claim No. 2 Haz Mat Removal - Caltrans site (COR 30, 45 & 75) for 708,929.00 CMB directed the CM Team to draft a letter rejecting the claim.	
1252-0090	03/08/13	76	MOS - 16" Pipe removal @ SE Headwall	2	CMB-0119	Agree to Merit Agree to Cost	03/20/13 05/08/13	+1,116	BIH-JV's subcontractor, Synergy, encountered an abandoned 16" pipe while installing the 12" waterline at the south headwall of Moscone. The pipe was at the same elevation as the new 12" waterline and therefore needed to be removed to facilitate the installation of the new 12" waterline. 03/20/13 - Merit info presented to CMB - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. 05/08/13 - CMB agreed to cost of reconciliation of change on FA - NTE \$1,116.00 - Agreed COMPLETE; NO FURTHER ACTION: CMOD #17 - Final Cost \$1,116.00	CMOD #17 Approved
1252-0091	03/06/13	77	Comp Grout - WFB-5 Drilling Obstruction	2	CMB-0126	Agree to Merit Agree to Cost	04/03/13	+6,126	On March 06,2013, BIHJV encountered a potential Differing Site Condition (DSC) while drilling the compensation grouting hole WFB-5 located at Whole Foods and more precisely at CTL Station 160+38. This potential DSC consists of an obstruction located at a depth of 9' below grade which prevented CJA-NCC from drilling any further. 04/03/13 - Merit info presented to CMB - Agreed	
1252-0092	03/07/13	78	Comp Grout - WF & ATT	2		Agree to Merit	3/20/13	-0-	BIHJV encountered multiple potential Differing Site Conditions (DSC's) of varying dimensions while excavating the compensation grouting trench for the drill holes located at Whole Foods and AT&T. 03/20/13 - Merit info presented to CMB - Agreed to No Merit for this change. 05/24/13 - CM Team update - Contractor no longer pursuing due to failure to provide proper notification. CLOSED; NO FURTHER ACTION.	
1252-0093	03/07/13	79	Comp Grout - Old Navy	2	CMB-116	Agree to Merit Agree to Merit (addl) Agree to Cost	03/20/13 04/24/13 04/26/13	+276,462	BIHJV encountered a potential Differing Site Condition (DSC) while sawcutting the pavement for the compensation grouting holes located at Old Navy. The original design was to drill the compensation grout holes between two existing PG&E lines. It was discovered in the field that there is not enough clearance between the existing PG&E lines for the original design to be possible and multiple other potential DSCs were also encountered including, but not limited to, tile duct banks, concrete of unknown contents, and steel pipes. 03/20/13 - Merit info presented to CMB - Agreed 04/01/13 - CM team must obtain in writing from PG&E a utility agreement for cost reimbursement. 04/24/13 - Addl info presented for rationale for Contractor to demob and remob drill rig due to insufficient clearance between existing PG&E lines to drill the grout holes - Agreed 04/26/13 - COR presented at a special CMB mtg to notifying CMB of need to have Contractor perform work on FA4 for a NTE amount of \$70K.	
1252-0094	03/12/13	80	MOS - Asbestos Wrapped 20" water line @ Headwalls	2		Agree to Merit	04/03/13	-0-	BIHJV's subcontractor, Synergy Project Management was performing the installation of low pressure water distribution piping at the Moscone north headwall and discovered an unknown material wrapping around the existing 20" waterline which appeared to contain asbestos material. 04/03/13 - Merit info presented to CMB - Agreed 07/10/13 - CM Comment - To be paid out of Environmental Mitigation allowance GE-8.	

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1252-0095	03/11/13	81	12" Waterline Tee Connection Location (MOS South)	2		Agree to Merit	04/03/13	+3,001	BIHJV's subcontractor, Synergy Project Management, encountered a potential Differing Site Condition (DSC) upon exposing the tie-in point for the 12" waterline at the south headwall of Moscone. The potential DSC consists of two 45 degree elbows in the existing 12" waterline at the point of the tee connection. SFWD has surveyed the field conditions and indicated that the tee connection will need to be moved to the west. 04/03/13 - Merit info presented to CMB - Agreed COMPLETE; NO FURTHER ACTION: CMOD #17 - Final Cost \$3,000.00	CMOD #17 Approved
1252-0096	03/13/13	82	MOS 20" Conflict with 16" AWSS @ South Headwall	2				+50,000	Upon exposing the existing 20" waterline at the south headwall of MOS, in preparation for installing the new 20" waterline shown on WD-403 and amended by RFI 0155, BIHJV's subcontractor Synergy Project Management encountered a potential DSC. The potential DSC consisted of a crossing conflict between the new 16" AWSS, the new 20" waterline, and the existing 6" PE gas. These three utilities cross at multiple locations however the existing depths are roughly the same.	
1252-0097	03/19/13	83	Ellis Shaft Concrete Obstruction	2	CMB-127	Agree to Merit Agree to Cost	04/17/13 07/24/13	+1,420	During excavation for the Ellis Street Shaft, BIHJV's subcontractor, CJA-NCC, encountered a concrete obstruction at approximately 10 feet below grade. CJA-NCC spent 4 hours removing the obstruction. 04/17/13 - Merit info presented to CMB - Agreed 07/24/13 - CMB agreed to cost of reconciliation change - NTE \$1,424.52 - Agreed	
1252-0098	03/16/13	84	Crate & Barrel Water Intrusion	2				-0-	Water was discovered seeping into the Crate & Barrel basement in concert with secant pile installation at Pile #SRV-A. At the time, pile excavation was approximately 90 feet deep. BIHJV's subcontractor, CJA-NCC, stopped pile installation and placed lean concrete within the pile excavation. This allowed them to continue secant pile construction on other piles until which time SFMTA could provide appropriate mitigation for the water leak. 07/03/13 - CM Teams merit denied, notice not received within 7 days. CLOSED; NO FURTHER ACTION	
1252-0099	04/05/13	PCC 12	PCC No. 12 - Modifications to Tunnel Alignment at Market Street	1	CMB-131	Agree to Merit Agree to Cost (Conditionally)	08/14/13 08/14/13	+292,000	IFB Tunnel Profile conflicts with micro-piles installed under Contract 1251. Tunnel Profile needs to be revised (lowered) such that TBM and Tunnel structure is below previously installed micro-piles. Contractor shall revise compensation grouting design to conform to Contract requirements given the revised tunnel alignment. 04/03/13 - CMB agreed to Micropile profile change being forwarded to the Contractor. 04/10/13 - Updated alignment was presented superseding 04/03/10 version - (lowered 4.9%) 04/10/13 - Original Contractor submittal needs to be evaluated to verify the new alignment has been incorporated. 08/14/13 - Merit Evaluation and PCC 12 Cost NTE (Construction portion) was presented to the CMB for approval. The CMB agreed to merit contingent upon verification signature by the Designer (DP1) of additional work and cost associated with the change. NTE Value \$41,470.01 - Agreed	
1252-0100	03/26/13	85	SFWD Impacts at MOS North	2				+345,600	BIHJV's subcontractor CJA-NCC is in the process of constructing the Moscone Station headwalls, the sequence of construction is such that it requires the 12" and 20" waterlines on the eastside of 4th street to be rerouted prior to completing the headwalls. In accordance with the Contract the San Francisco Water Department (SFWD) is responsible for completing the waterline reroutes (chlorination and tie-in) in a specified duration. BIHJV claims the SFWD failed to complete this work in the contractual durations. As a result, BIHJV claims the headwall construction operation has been incurring stand by costs. 04/10/13 - Item reviewed at CMB meeting during review of Trend/Change Log COR's. CM team contends this is not a valid change and will reject the Contractor's claim of merit.	
1252-0101	01/28/13	87	Cross Passage 5 - Value Engineering Change Proposal	5				(2,674)	As indicated in Contract Drawing No. ES-144, ground treatment for the excavation of CP5 was anticipated to be performed using jet grouting methods. BIHJV proposes to perform ground freezing from within the tunnels as an alternative ground treatment methodology, thereby avoiding the need to disrupt and impact the public by occupying 4th Street for an extended period. 04/24/13 - Item reviewed at CMB during review of Trend/Change Log COR's. CMB suggested a credit from the Contractor should be received for Bid Item ES-5. In addition suggested a minimal review of the BIH's proposed ground freezing method be done by the PB.	

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1252-0102	04/09/13		UMS - Secant Pile SRV-J Obstruction DSC	2				-0-	BIHJV's subcontractor, CJA-NCC, encountered a potential Differing Site Condition (DSC) while drilling for UMS Secant Pile #SRV-J. The DSC consists of what appears to be an abandoned utility pipe located approximately 10 feet deep. 04/24/13 - Information presented to CMB during review of Trend Log. CM Team states COR merit will be rejected due to notification of change not met in timely manner per the contract docs. 05/24/13 - CM Team update - Contractor no longer pursuing due to untimely notification of event. CLOSED; NO FURTHER ACTION.	
1252-0103	04/18/13	88	SFWD Impacts at MOS South	2				-0-	BIHJV's subcontractor CJA-NCC is in the process of constructing the Moscone Station headwalls, the sequence of construction is such that it requires the 12" and 20" waterlines on the eastside of 4th street to be rerouted prior to completing the headwalls. In accordance with the Contract the San Francisco Water Department (SFWD) is responsible for completing the waterline reroutes (chlorination and tie-in) in a specified duration. BIHJV claims the SFWD failed to complete this work in the contractual durations. As a result, BIHJV claims the headwall construction operation has been incurring stand by costs. 05/08/13 - Information presented to CMB during review of Trend Log. CM Team states COR will be rejected due to no merit. This item is not on the critical path. 06/17/13 - Contractor no longer pursuing. CLOSED; NO FURTHER ACTION.	
1252-0104	06/06/13	PCC 13, FA CO 5	SFWD Excavation, Support and Backfilling	1	CMB-0122 CMB 0128	Agree to Cost Agree to Addl Cost	6/19/13 08/09/13	+20,000	Excavation, support and restoration work at two locations required to facilitate fitting/valve installation work by the San Francisco Water Department. Installation of valves are to facilitate fire service connection cutover and cutting off of the existing water main. The existing water main is in the footprint of the UMS station piles and is to be abandoned. 06/05/13 - CMB agreed to change required; work must be completed sometime in June 2013 06/19/13 - Cost estimate presented; CMB agreed for a NTE of \$20K 08/07/13 - CMB viewed the estimate requesting the narrative be rewritten to tell the entire story of what has generated the change. 08/09/13 - Special CMB Mtg to clarify direction and approval to proceed with direction to the Contractor on extra work contained in PCC 13 (Macy's Backflow work). CMB approved additional work and scope for a NTE value of \$14,100 for a total change value of \$34,100 COMPLETE; NO FURTHER ACTION: CMOD #18	CMOD #18 Approved
1252-0105	05/30/13	90	Abandoned Well at MOS Panel N-4	2				+450,000	BIHJV's subcontractor, CJA-NCC, discovered an obstruction that appears to be an abandoned monitoring well within the Moscone Slurry Wall Panel "N-4". Contractor claims impacts resulting from this alleged DSC include, but are not limited to, excavation inefficiency, the required backfilling of the panel with lean concrete on multiple occasions, and re-excavations of the panel. 06/19/13 - Information presented to CMB during review of Trend Log. CM Team states COR will be rejected due to several reasons of "no merit "	
1252-0107	12/13/12	92	Credit - North headwall panel N-2 at Moscone	7				(4,943)	During installation of the reinforcement cage at panel N-2 at the Moscone North Headwall a 1-inch dia. Polyester sling used for lifting could not be detached from the reinforcement cage. The slings were then casted in-place. SFTMA requested a credit CO for the CN 1300 contractor to demolish the concrete and slings and replace the structural concrete. 07/10/13 - NCR condition of the wall be provided in order to prepare engineer's estimate for credit amount. CLOSED; NO FURTHER ACTION.	
1252-0108	04/11/13	91	Credit - Secant pile SRV-H, UMS south headwall	7				(263)	During concrete placement, the dummy steel beam that was used to hold down the secant pile steel beam reinforcement for pile SRV-H @ the UMS south headwall could not be removed and was poured in-place. SFTMA requested a credit CO for the CN 1300 contractor to demolish this beam between El. 16.66' and the beam top. CLOSED; NO FURTHER ACTION.	
1252-0109	09/24/12	93	Credit - 65 feet of water pipe not installed at MOS	7				+86,882	Contract Drawings WD-403 & WD-404 shows the 20" low pressure water line cutting through an area in the intersection where the joint trench is in the way. BIHJV's subcontractor, Synergy Project Management, with SFMTA's concurrence, installed the water line tie-in per a configuration which resulted in approximately 65' less line required to be installed. SFTMA requested a credit CO to eliminate 65' of the line.	

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1252-0110	02/06/13	94	Credit - Switching of the 12" and 20" lines at MOS	3				(30,466)	It was discovered that the field locations of the 12" water line and 20" water line were actually "switched" from the location shown in contract drawing WD-402 Rev.0. SFMTA requested a credit CO as less 20" water line was required to be installed than was originally anticipated.	
1252-0111	07/16/13	95	Green St Shaft – Design Cost Impacts for Jet Grout	7				+80,000	BIHJV: "BIH and CJA-NCC are in receipt of the SFMTA's revised submittal review comments for Submittal No 31.43.14-003 (review cycle 3) dated July 10, 2013, where the SFMTA determined that the previously submitted content does not fulfill the contract requirements. The submittal status was changed from "Approved" on March 21, 2013, to "Disapproved - Resubmit" on July 10, 2013. The SFMTA states that the submittal was reviewed in further detail and it was determined the submittal didn't fulfill the contract requirements. This new submittal determination will result in additional costs to the SFMTA." 07/24/13 - Information presented to CMB during review of Trend Log. CM Team preparing letter of no merit, due to disagreement of dwg shown.	
1252-0112	07/16/13	96	Micropiles @ UMS Tangent Pile SRB-H	2		Agree to Merit	07/31/13	+50,000	Excavation for battered secant pile SRB-H began on July 12. At approximate depth of 30', CJN reported hitting an obstruction. Two, 36" and 45" long, No. 18, Dywidag bars were discovered within spoils of the first bite of the clamshell bucket. The 2-1/2" diameter bar was consistent with the micro piles installed in the previous contract. 07/24/13 - Draft merit evaluation presented to CMB. CM Team reported further investigation needed to verify survey location of micropiles. CMB requested a specific dwg of 1251 As Built of piles be presented at next CMB. 1251 Contractor will be put on notice referencing the CS CN1251 Ltr. #018 - Future Potential Costs Due to Incorrect Micropile Placement. 07/31/13 - Merit Approval presented to CMB - Agreed. Notification of Possible Micropile Obstruction to CN1252 and possible CN1300 work was sent to CN1251 Contractor.	
1252-0113	01/09/13		Relocation of TBM Retrieval Shaft - Columbus Ave. Restoration	1				+223,820	Modify Bid Item GE-3 (Utility Demo, Sewer, Road Demo, Pavement Restoration, etc.) to relocate the TBM Retrieval Shaft to 1731-1741 Powell Street - (Includes Utility Button Up and Site Restoration Only) 07/24/13 - Information presented to CMB during review of Trend Log. CMB requested LS Bid Item be broken-down based on contract work to see how much money would be put in to perform the restoration button up cost. In addition the CMB requested the item description be change to "Columbus Ave. Restoration" in order to not confuse it with PCC 10 Retrieval Shaft work.	
1252-0114	07/24/13	97	Ellis Shaft – TAM ES2-01 and ES2-17	2		Agree to Merit	08/28/13	+30,000	BIHJV's subcontractor, CJA-NCC, discovered gravel material within the drill spoils from two separate Ellis Shaft TAM installations, TAM ES2-01 and ES2-17 08/14/13 - Item reviewed at CMB during review of Trend/Change Log COR's. GBR's will be checked to see if gravel material is known to exist in the drill location. 08/28/13 - Merit info presented to CMB - Agreed	
1252-0115	08/07/13	98	Ellis Shaft – TAM ES2-16	2		Agree to Merit	08/28/13	+15,000	BIHJV's subcontractor, CJA-NCC, discovered gravel material within Ellis Shaft TAM installations, TAM ES2-16 08/14/13 - Item reviewed at CMB during review of Trend/Change Log COR's. GBR's will be checked to see if gravel material is known to exist in the drill location. 08/28/13 - Merit evaluation presented to CMB - Agreed	
1252-0116	08/08/13	99	MOS – AWSS Vault Over pour @ South Headwall)	2	CMB 0134	Agree to Merit Agree to Cost	09/25/13	+4,000	BIHJV: "While performing AWSS work at the MOS South Headwall, Synergy crews found the mechanical joint Tee bolts, required for the AWSS point of connection, to be completely encased in concrete. The concrete encasement appeared to be concrete over pour remaining from a previous contractor's AWSS vault wall pour." 08/14/13 - Item reviewed at CMB during review of Trend/Change Log COR's. 09/25/13 - Merit evaluation presented to CMB - Agreed. 09/25/13 - Eng. Est. presented to CMB for cost NOT TO EXCEED amount \$2,400 - Agreed	
1252-0117	08/15/13	100	Ellis Shaft TAM ES2-08	2		Agree to Merit	08/28/13	+15,000	BIHJV: "August 12, 2013, BIHJV's subcontractor, CJA-NCC, struck a hard unknown object while drilling the Ellis Shaft TAM ES2-08." 08/28/13 - Merit evaluation presented to CMB - Agreed CMB requested a investigation plan to be	
1252-0118	08/23/13	101	Ellis Shaft TAM ES2-11	2				+15,000	BIHJV's subcontractor, CJA-NCC, discovered gravel material within Ellis Shaft TAM installations, TAM ES2-11	

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1252-0119	09/03/13	102	UMS Jet Grout Column 18 DSC Headwall	2				+20,000	While drilling down on column #18 at the UMS south headwall, BIHJV's subcontractor, CJA-NCC, encountered a hard unknown obstruction. 09/11/13 - Item reviewed at CMB during review of Trend/Change Log.	
1252-0120	09/05/13	103	Retrieval Shaft Additional Slip Lining Pipe Qty	4				+28,625	RFI 251.1 SFMTA Response: Specification 33 31 00 1.01.A.22 Sewer Work, states, " Sliplining existing 3-foot by 5-foot brick sewer with 16-inch and 24-inch diameter HDPE Pipe (polyethylene pipe) nominal size SDR 26." As such, sliplining is to be performed for both the 16" and 24" diameter HDPE pipe. Branches indicated in the supplied sketch to be relined along Stockton and Columbus are acceptable. In addition, the 33-ft long branch that crosses the alignment at CTL 86+35 must also be relined. Acceptable alternative (to fused HDPE) pipe materials and sizes for this branch can be proposed by BIH. BIH shall submit the propose alternative for this branch of pipe for SFMTA review. The use of coupled PVC is not acceptable." 09/11/13 - Item viewed at CMB during review of weekly Trend/change log. No dwg for this work only a table.CM Team working with designer to make the determination.	
1252-0121	09/06/13	105	Retrieval Shaft Relocation of Seismograph	1				+6,000	BIHJV: "BIHJV's instrumentation subcontractor, Wang, was directed to relocate one of the vibration monitoring devices (Seismograph) installed at the Retrieval Shaft area to monitor vibration induced by demolition operations of the existing Pagoda Theater building." 09/11/13 item reviewed at CMB meeting during review of weekly Trend/Change log. CMB doesn't agree with the relocation charge and requested a better definition of the item.	
1252-0122	04/19/13	89	UMS - Suspended Remobilization of Jet Grout Rig	7				+52,305	BIHJV: "The SFMTA directed BIHJV/CJA-NCC to suspend the planned remobilization of the Jet Grout Rig at the UMS location due to external affairs with local UMS businesses." 09/11/13 - Item reviewed at CMB during review of weekly Trend/change log. - CMB questioned the timeliness of the COR also requesting a better definition of the item.	
1252-0123	09/10/13	104	Retrieval Shaft - Additional Sewer Slip Lining 16" HDPE Pipe	4				+98,337	BIHJV: "BIHJV submitted RFI Nos. 275, 275.1 and 275.2 requesting clarification about specific sewer sliplining runs at the Retrieval Shaft, see Attachment Nos. 2, 4 and 6. The SFMTA responded, via RFI No. 275.2, stating that the sliplining is to be installed in a stacked configuration with the 24" over the 16" HDPE pipe, see Attachment No. 7. BIHJV and Synergy believe the SFMTA's response to install stacked HDPE sliplining pipes is additional work as the contract documents do not support this statement." 10/02/13 - Item reviewed at CMB during review of the weekly Trend/change log update. The CM states the DSC maybe eliminated. Waiting for a response from PUC now there is a as built condition. Letters are being written between SFMTA and SFPUC.	
1252-0124	09/17/13	0	Retrieval Shaft Sewer Slip Lining Work	2		Agree to Merit	9/25/2013	TBD	In preparation to beginning sliplining work at the intersection of Columbus/Green/Stockton, the Contractor performed a site investigation of the existing 3'x5' brick sewer. The Contractor discovered 4 unknown pipes intersecting the sewer 09/25/13 - DSC presented for merit approval - Agreed. CMB directed the CM Team to ask the Contractor for recommendation to slipline as much of the sewer line as as possible without rerouting the conflicting pipe lines.	
1252-0125	TBD	0	Modifications to AWSS Facilities at 4th and Bryant Streets	1				(26,904)	Deletion of 12" AWSS diagonal sleeved pipe crossing and hydrant lateral. Installation of 12" AWSS restrained pipe and hydrant lateral. 10/16/13 - Draft PCC reviewed at CMB. The Board is in agreement with the modification. 10/23/13 - Engineers estimate for new work S136,478 and deleted work \$(163,382) was presented to the CMB. PCC will be forwarded to the Contractor to price the work.	
1252-0126	10/14/13	0	Ellis shaft and Old Navy Grouting	2				TBD	BIHJV's subcontractor, CJA-NCC, claims to have discovered material (cemented zones) different than that described in the Geotechnical Baseline Report in the Ellis Shaft and Old Navy Grouting Zones. 10/23/13 - Item reviewed at CMB during review of weekly Trend/Change log. The CM stated this item will be rejected, due to a lack of information being supplied by the Contractor to validate their potential COR.	

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						Approval Action	Approval Date			
Contract 1252 Totals								+1,250,132	Total Changes and Potential Change (trends) to the contract are currently \$1,250,132 Out of Scope Changes to the Contract for Relocation of TBM (Trend 79, PCC 10) to be paid out of CPT690, funded separately. Not include in total above and being tracked separately from original Program Costs of \$1.5783B	
CONSTRUCTION TRENDS (Based on #1252 Trending Log and CMod) - SUBTOTALS:								+1,250,132	The 1,250,132 represents an UNDERRUN of allocated contingency. Current Balance = (33,658,463 - 1,250,132 = \$32,408,331). This does not include potential reimbursements from utilities	
DESIGN TRENDS										
FD-001	07/31/10	084-0001	Narrowing of Platform at UMS	1	CMB-0006	Agree	08/04/10	(800,000)	[In "Current Forecast" - Sep2010 Cost Report.]	
FD-002	07/12/10	084-0002	Redux of Station Emergency Ventilation Fans (UMS)	1	CMB-0009	Agree (Conditionally)	08/25/10	(2,000,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]	
FD-002	07/12/10	085-0001	Redux of Station Emergency Ventilation Fans (CTS)	1	CMB-0009	Agree (Conditionally)	08/25/10	(500,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]	
FD-002	07/12/10	086-0001	Redux of Station Emergency Ventilation Fans (MOS)	1	CMB-0009	Agree (Conditionally)	08/25/10	(500,000)	Further actions: Designer required to receive Fire/Life/Safety approval before proceeding with this change. Designer to allocate cost impacts by Station (Current figures are "place-holders.". [In "Current Forecast" - Sep2010 Cost Report.]	
FD-003	07/31/10	085-0002	Lowering of CTS	1	To be verified	Info Only	08/25/10	+7,000,000	Presented to CMB for information/consideration.	
FD-004	07/29/10	084-0003	UMS Structural Configuration	1	CMB-0007	Agree	08/18/10	(8,000,000)	[In "Current Forecast" - Sep2010 Cost Report.]	
FD-005	08/22/10	084-0004	UMS Alternate Station Access/Vent Shaft @ Union Square	1	CMB-0010	Agree	12/29/10	(22,500,000)	Documentation to be filed.	
FD-006	08/03/10	084-0005	Station Headwalls - UMS	1	CMB-0008	Agree	08/18/10	-0-		
FD-006	08/03/10	086-0002	Station Headwalls - MOS	1	CMB-0008	Agree	08/18/10	-0-		
FD-007	08/03/10		Cross-passages	1	CMB-0018	Agree	09/15/10	-0-		
FD-008	07/30/10		Trolley Re-route @ Columbus & Powell	1	CMB-0017	Agree	09/15/10	+2,000,000		
FD-009	10/06/10	082-0003	ECP to Modify Sidewalk Vault Demolition and Construction Sequence to Facilitate Construction of Joint Utilities Trench and Future UMS Station	1	CMB-0019	Agree	12/15/10	+3,000,000		
FD-010	10/06/10	082-0004	Redesign Stockton Street Sanitary Sewer to conform to SFPUC Sewer Criteria that preclude placement of relocated sanitary sewer under sidewalks	1	CMB-0020	Agree	11/17/10	+2,000,000		
FD-011	10/06/10	082-0005	Reconfigure Routing of Water, Sewer and Gas laterals from buildings on north side of Ellis Street	1	CMB-0021	Agree	11/17/10	+500,000		

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CENTRAL SUBWAY PROJECT
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FD-012	10/06/10	082-0006	Recognize cost transfers from design allowances allocated to contingency to explicit line items in final design estimates	1	CMB-0022	Disagree	11/17/10	-0-		
FD-013	10/06/10	082-0007	Increase Extent of Sub-sidewalks Vault Secondary Closure Walls and Waterproofing	1	CMB-0023	Agree	11/17/10	+4,100,000		
FD-014	10/06/10	082-0008	Include OCS system for rerouting trolley buses to Fifth Street	1	CMB-0024	Agree	12/15/10	+3,100,000		
FD-015	10/06/10	082-0009	Subsidewalk Vault Secondary Closure Walls for Buildings at 800 Market and 838 Market	1	CMB-0025	Agree	11/17/10	+1,000,000		
FD-016	10/06/10	085-0003	Underpinning of Mandarin Tower	1	CMB-0011	over taken by FD-021	01/19/11	+5,000,000	Additional Information Pending.	
FD-017	10/06/10	085-0004	CTS Ground Improvement	1	CMB-0012	over taken by FD-021	01/19/11	+10,300,000	Additional Information Pending.	
FD-018	10/06/10	084-0006	UMS Apple Store Entrance	1	CMB-0013	Disagree	11/10/10	-0-	Additional Information Pending.	
FD-019	10/06/10	086-0003	MOS TOD Configuration	1	CMB-0014	Agree	11/10/10	TBD		
FD-020	10/06/10	084-0007	UMS Emergency Stair #4 Relocation	1	CMB-0015	Agree	11/10/10	TBD		
FD-021	01/14/11	085-0005	CTS Lowering and Stations Reconfiguration	1	CMB-0027	Agree	01/19/11	(18,000,000.00)	Agreement with changes to project configuration only. Additional Information required related to cost and schedule impacts. No agreement on Design cost impact, Design costs directly related to this change to be tracked separately	
FD-022	02/16/11	084-0008	Sewer Replacement along Geary & O Farrell	1	CMB-0029	Agree	02/23/11	(134,000)	This trend has both an EPC number as well as a Construction Trend Number. See also Construction Trend No. 1251-0003	
FD-023	11/17/10	087-0001	Emergency walkways through crossover cavern changed from outside the main tracks to between the main tracks.	1	CMB-0032	Agree	07/27/11			
FD-024	11/17/10	087-0002	Diamond crossover on surface segment to a tandem (universal) crossover.	1	CMB-0033	Agree	08/24/11	(350,000)		
FD-025	04/13/11	083-0001	Bid Option for TBM Retrieval Shaft		CMB-0034	Agree	04/13/11	(10,000,000)	Will require changes to Bid Schedule to incorporate Traffic, Utilities and Pavement Demo/Restoration as incidental costs to the Bid Option. Estimated DP1 cost impact is approx. 80-100 hrs. of engineering time.	
FD-026	05/31/11	084,085,086	Air Replenishment System for Stations	1	CMB-0040	Agree	07/13/11	+1,245,000	Install air replenishment system at MOS, CTS and UMS to address the requirements of the SFFD Bulletin 5.07. The air replenishment system will be used to fill firefighter's self-contained breathing apparatus during firefighting operations in the three subway stations.	
FD-027	07/21/11	082-0010	1 Stockton street (Apple Store) Secondary Closure Wall		CMB-0043	Agree	08/03/11	+500,000	1) Add secondary closure wall to supplement recently completed primary closure wall built by owner to isolate the sub-sidewalk basement of 1 Stockton Street (Apple Store). 2) Modify position of joint trench (and all associated conduits, ducts etc.) for secondary closure wall to be constructed.	
FD-028	08/03/11	086-0004	MOS Revisions to Emergency Ventilation Requirements		CMB-0052	Agree	09/07/11	+500,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. Project Controls estimated \$321,645.	
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. Project Controls estimated \$411,895.	
FD-030	08/08/11	084-0009	UMS Revisions to Emergency Ventilation Requirements		CMB-0054	Agree	09/07/11	+1,000,000	Changes will extend the date of the 90% (pre-final) submittal by 20 working days and the 100% (final) submittal by 40 working days. CMB did not approve a time extension for 90% or 100% submittal delivery. Project Controls estimated 733,420.	
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.	

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FD-034	12/09/11	Operational Performance and Safety Enhancement at 4th and King		CMB-0062	Agree	12/14/11	+450,000	SFMTA Operations requested that the design of the 4th & King tie-in work be expanded to include a number of improvements at the junction involving the turn-back area extending to the scissors crossover at 6th & King. SFMTA Ops confirmed that the requested changes result in an arrangement that is consistent with standard operation practices and therefore does not involve new or unacceptable risks. CS 1553 Memorandum No. 0081. Conditionally agreed upon verification/resolution of Buy America issue for the switches. 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		
FD-036	06/26/12	Surface Segment Sewers - 4th St.		CMB-0072	Agree	07/18/12	+2,200,000	Replace current unreinforced brick crown from 1906 as it may not be able to withstand loading for construction of the CS trackway section. Reconstruct manholes between Brannan and King Streets as existing are in conflict with proposed rail. Replace service laterals and provide sleeves for future replacement. Additional potential scope option of \$1.5M-Sewer and \$2.3M-Force Main may be requested. If so, it will be Cost to SFPUC		
FD-037	08/27/12	Platform Display System Signs		CMB-0077	Agree (Conditionally)	08/29/12	+500,000	Modify Stations (Contracts 1253, 1254 and 1255) and Surface, Track and Systems (Contract 1256) technical specifications and drawings for the Platform Display System (PDS) to match the changes made to the PDS units being supplied under the Integrated Systems Replacement (ISR) Project, Contract No.1260. 08/29/12: CMB agreement condition upon follow up action to evaluate procurement by CN1260		
FD-038	11/7/2012 06/05/13	Elongated Sidewalk Bulb-out at Chinatown Station		CMB-0121	Agree	06/05/13	+36,000	CTS Sidewalk Bulb out (Southwest corner Stockton/Washington To bring the Central Subway Project - Chinatown Station in closer conformance with the City's General Plan, SF Planning Department in its May, 2012 GPR Letter (recommends) making design changes specifically the extension of the sidewalk bulb-out at Stockton Street to help create a "station plaza". This elongated bulbout on the southwest corner (SWC) of Stockton and Washington Streets in front of the station headhouse would also include bike racks, benches, trees and other landscape features. 06/05/13 - CSDG designer estimate cost is not a CS expense. Addl funding source will need to be establish by San Francisco Planning to support the investigation study Design Impact: Estimated Construction Cost ROM \$36,200 Construction Impact: Estimated ROM 97 Hrs.: DPW Pavement/Sidewalk Design Modification Estimated ROM 60 Hrs.: CSDG bus door/mirror/tree/bike rack coordination		
FINAL DESIGN TRENDS (Based on All ECPs) - SUBTOTALS								+4,902,000	Incorporated budget increases have been absorbed by allocated and unallocated funds and the program budget to date remains \$1,578,300,000.	
OTHER TRENDS										
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	

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X51-002	07/31/10	082-0002	Form B Credit for 1251 Utilities	7			(7,697,949)	Reserve and Contingencies removed as per communications with PG&E. This is consistent with the 1250 utility agreement. [Cost Transfer #0034 - Aug2010 Cost Report].	BT-0034
X52-001	07/31/10	083-0001	1252-(TUN) Revised estimate, escalation impact and contingency	7			(2,165,462)	Cost Transfer #0035 (Base \$\$), 0035a (Allocated Contingency), 0037 (Base \$\$ Escalation , 0037a (Allocated Contingency Escalation). [Sep2010 Cost Report]	BT-0037, BT-0037-A
X03-001	08/31/10	003-0001	OEWD's Pilot Training Program	7			+75,000	Workforce training pilot program in conjunction with the City/County's Office of Economic and Workforce Development (OEWD). Provides specialized training to SF residents to perform tunneling work. Central Subway financial responsibility being investigated. Requires further clarification	
X53-001	07/18/11	084-0001	CS 155-2 (DP2) CBP4 - Construction Budget Adjustment YOY	7	CMB-0044	Agree	07/27/11	Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure	
X53-002	10/25/11		Change UMS Advertise Date to April 4th, 2012					DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.	
X53-003	04/11/12	084-0002	CN1253 (UMS) Construction Budget Adjustment 90%				+55,720,600	CMB is currently vetting the 90% estimate of \$221,534,723 which represents a \$XX increase from the 65% base amount in 2010\$. Increase would deplete current YOY dollars and require use of unallocated contingency.	
X53-004	06/26/12	084-0002	Approve/Execute/Certify durations change for UMS Contract					Shortened the duration for Approve/Execute/Certify - UMS Contract from 40 to 24days to reflect an optimistic but doable duration for contractor submittals.	
X54-001	07/13/11	085-0001	CS 155-2 (DP2) CBP5 - Construction Budget Adjustment YOY	7	CMB-0045	Agree	07/27/11	Adjust construction budget in Section 6 of Contract No. CS 155-2 to Year of Expenditure	
X54-002	10/25/11		Change CTS Advertise Date to May 23rd, 2012		CMB-0061	Agree	12/28/11	DP2 Designer's new proposed dates for Pre-Final and Final Design have pushed out Advertise Dates.	
X54-003	11/02/11		Change CTS Advertise Date to February 8th, 2012					Change CTS Advertise Date from May 23, 2012 to February 8, 2012 (-74 working days)	
X54-005	12/06/11		Revisions to CTS Construction Schedule		CMB-0060	Agree	12/28/11		
X54-006	12/07/11	085-0002	CS 155-2 (DP2) CBP4 - Construction Budget Adjustment - allowed	7					
X55-001	07/18/11	086-0001	CS 155-2 (DP2) CBP6 - Construction Budget Adjustment YOY	7	CMB-0046	Agree	07/27/11	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.	
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-0173

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X80-002		071-0002	DP1: CS 155-1 Modification No. 4	7		Authorized		+135,898	Modification No. 4: \$135,898 Individual details listed in Professional Services. See trends 1551-0010 - 1551-0014.	BT-0187
X80-003	10/27/11	029-0001	Increase City Auditor Budget	7		Authorized		+50,220	Reduce unallocated Contingency to increase City Auditor budget as authorized in Budget Authorization #51.	BR#51, BT-0181
X80-004	10/27/11	232-0001	Increase SFCTA Budget	7		Authorized		+20,000	Increase SFCTA budget per Budget Authorization #51 to conduct travel forecast (TEP CEQA Modeling) to satisfy PMO review and SFMTA Fleet Plan light rail vehicle.	BR #51, BT-0182
X80-005	7/1/10, 11/2/10,3/24/11	072-0001	DP2: CS 155-2 Modification No. 1	7		Authorized		+1,010,000	Modification No. 1: \$1,010,600 Individual details listed in Professional Services. See trends 1552-0002, 1552-0003 and 1552-0005.	BT-0194, BR#53
X80-006	5/6/10,7/25/11, 9/22/11	072-0002	DP2: CS 155-2 Exercised Options	see Prof. Serv		Authorized		+366,771	Individual details listed in Professional Services. See trends 1552-0001, 1552-0007 and 1552-0014.	BT-0023, BT-0194
X80-007	11/08/11	151-0001	Operations SFMTA Transit Services			Authorized		+50,000	CSP request services to support and test OCS for 30/45 trolley reroute. Authorized per Budget Revision #53	BR #53, BT-0189
X80-008	09/01/11	081-0001	SFMTA Safety, Training, Security & Enforcement Div PCOs	7		Authorized		+60,000	CSP request PCOs to support 1251 and 1252 construction for one year. Authorized \$60,000 per Budget Revision #45.	BR #45, BT-0190
X80-009	11/30/11	016-0001	SFMTA Sustainable Streets 30 and 45 re-route	7		Authorized		-0-	CSP request services to support 30/45 trolley reroute. \$162,600 was reduced from DPT staffing plan budget.	BT-0188
X80-010	11/09/11	073-0001	DP3: CS 155-3 Modification No. 1	7		Authorized		+152,882	Modification No. 1: \$152,882 Individual details listed in Professional Services. See trends 1553-0012 and 1553-0013.	BT-0203
X80-011	8/9/11, 9/22/11, 10/11/11, 11/9/11	073-0002	DP3: CS 155-3 Exercised Options	see Prof. Serv		Authorized		+1,026,398	Individual details listed in Professional Services. See trends 1553-0001 - 1553-0004, 1553-0006, 1553-0009 - 1553-0011, 1553-0014. Updated from \$971,686 to include Trend 1553-0014.	BT-0203
X80-012		151-0002	OCS materials procured directly for work in reference to CN1251 CMOD#12.		CMB-0065	Agree	1/25/2012, 2/29/12	+126,149	See also Trend 1251-0023	
X80-013	05/30/12	073-0003	DP3: Provide Vibration Impact Analysis and Extend PC Support Technical and CSP Quality Manager	1				+133,906	Amend #2: Vibration Impact Analysis \$38,380 Amend #3: PC Support Tech \$34,483; Quality Manager - \$61,043	TBD
X80-014	12/17/12		For combining the stations and track and systems into Contract 1300 (SSTS)	7					Combined all the Station and Track and Systems into one Contract. Removed the buffer float activities from the satin to track and systems and overlapped work that can now be done concurrent.	
X80-015	12/17/12		Changing the Bid Opening date and condensing the Contract Duration for Contract 1300	7		Agree	11/14/12		Change bid opening to March 19, 2013 and reevaluated procurement durations, revised calendars for UMS Garage, revised production rates for steel. 11/14/13 CMB Agreed verbally to change @ Mtg #101	
X80-016	02/19/13		Change to Tunnel and CTS interface and buffer float Contract 1300 (SSTS)	7		Agree	01/23/13		Change (MPS) reducing the number of days currently in (from 550 calendar days from NTP to 450 calendar days) for the key interface between CTS and the tunnel completion. Reduced number of days will be issued as part of Add #3 of the 1300 contract. 1/23/13 CMB Agreed verbally to change @ Mtg #111.	

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OTHER TRENDS (Based on Various Trends)							+59,662,439	Current Forecast reflects a net +3,537,933 unfavorable impact for all Other Trends.	
GRAND TOTALS							+65,814,570	Current Forecast reflects an estimated net + 65,556,908 3 unfavorable exposure to the project to date. Incorporated budget increases have been absorbed by allocated and unallocated funds and the program budget to date remains \$1,578,300,000.	

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

Contract CS-155-1

1551-0001	07/30/10		071-0001	Conform Contract Terms per Negotiations from 10/2/09 to 11/6/09	7			-0-	To be addressed in Amendment 1.	Amendment 1 Pending
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					
1551-0004	02/18/11		071-0004	Redesign Required by Barney's and PUC for CP-2	7					
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 (\$529,952) 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 4 Approved
1551-0012			071-0012	Reconfigure Utilities N. Side Ellis ECP-FD011	7	Authorized	12/08/11	+2,448	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved
1551-0013			071-0013	Extend SubSidewalk Closure Wall ECP-FD013	7	Authorized	12/08/11	+85,233	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved
1551-0014			071-0014	Reroute OCS to Fifth St. ECP-FD014	7	Authorized	12/08/11	+4,794	Amendment Signed by ED/CEO 12/8/11 COMPLETE, NO FURTHER ACTION; Amendment #4	Amendment 4 Approved
1551-0015			071-0015	Retrieval Shaft Redesign - Sewer By Pass	7			+56,000	Awaiting documentation from Designer	
1551-0016			071-0016	Design Measures for Settlement Protection	7			+99,000	Awaiting documentation from Designer	
1551-0017			071-0017	Incorporate Headwalls MOS/UMS	1	Disagree at this time	11/01/11	+42,000	In letter dated November 1, 2011 DPM responded that until concurrence with DP2 on cost transfer or additional documentation, the requested change is denied.	
1551-0018			071-0018	Prepare Utility Composite	-	Disagree	11/01/11	+50,000	DPM responded that Program does not agree in letter dated November 1, 2011.	
1551-0019			071-0019	Incorporate Cross Passages	1	Disagree at this time	11/01/11	+43,000	In letter dated November 1, 2011 DPM responded that until concurrence with DP2 on cost transfer or additional documentation, the requested change is denied.	

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Item #	Date Initiated	CMB No.	Change Description	Change Type	Change Status		Projected Cost Impact +Exposure/(Benefit)	Comments	Contract Modification Number
					Approval Action	Approval Date			
Contract CS-155-1 Total							+986,882	Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP1 allocated contingency in the amount of \$696,483 of a total budget of \$705,000. Additional potential exposure is +\$391,411. Currently, overall contract value remains unchanged in the amount of \$6,500,000.	
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 7/1/10 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.	
1552-0008	08/03/11	072-0008	MOS Revisions to Emergency Ventilation Requirements	-	Provide further Justification	09/07/11	-0-	CMB did not approve a \$60,000 proposed increase. Document References ECP FD028, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0009	08/03/11	072-0009	CTS Revisions to Emergency Ventilation Requirements	-	Provide further Justification	09/07/11	-0-	CMB did not approve an \$80,000 proposed increase. Document References ECP FD029, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0010	08/03/11	072-0010	UMS Revisions to Emergency Ventilation Requirements	-	Provide further Justification	09/07/11	-0-	CMB did not approve a \$100,000 proposed increase. Document References ECP FD030, CSDG letter dated 8/8/11. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0011	08/17/11	072-0011	Audited Overhead Rate Adjustment for Year 2010 - Request for Amendment - Rev. 1	7			+426,322	Estimated cost breakdown is included in the 8/17/11 letter from CSDG. This is a revision to the 6/28/11 letter and cost breakdown.	
1552-0012	08/23/11	072-0012	Station Air Replenishment System	-	Disagree	10/17/11	+36,240	Estimated cost breakdown is included in the 8/23/11 letter from CSDG. DPM responded that program does not agree in letter dated 10/17/11.	
1552-0013	09/01/11	072-0013	COR for Additional Services Related to MOS Constructability Review and Assessment of Alternatives	-			-0-	Cost charged to Task 2.70- part of base work	
1552-0014	09/22/11	072-0014	Proposal for Additional Work to provide Structural Engineering Support (Optional Services)	1	Authorized Optional Task 12.01.C5 only	11/04/11	+35,724	Estimated cost breakdown is included in the 9/22/11 letter from CSDG. Referenced Optional Work Tasks 12.01.C5 and 12.07.C5 - Effort re-evaluated - proposed cost to be resubmitted. 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

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					Approval Action	Approval Date	Actual/Forecast			
Contract CS-155-2 Total							+1,896,708	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 8/9/11 authorizing \$738,787 in optional tasks. COMPLETE, NO FURTHER ACTION; OPTION	Option
1553-0002	08/09/11	073-0002	Proposal to commence optional tasks 12.05 Architecture	1		Authorized	08/01/11	+257,129	SFMTA letter 0933 from ED/CEO dated 8/9/11 authorizing \$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 8/9/11 authorizing \$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 8/9/11 authorizing \$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 9/27/11 to DOM. NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHANGE. 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 10/5/11 to DOM. NOT FOLLOWING CONTRACT REQUIREMENTS FOR PROPER NOTIFICATION OF CHANGE. 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 1/18/12 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	Option

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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
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 COMPLETE, 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 COMPLETE, 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 fill panels, feeder pipes, gauges, valves, fire proofing, anchors, supports, low level alarms, wiring, signage, connections to SCADA and monitoring devices, equipment placement, and impact protection	1	Authorized	04/26/12	+173,119	SFMTA Letter 1658 from the Director of Transportation dated 4/26/2012 authorizing optional task 12.11 in the amount of \$173,119 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 increase 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-155-3 Total							+2,046,831	Of the total cost exposure shown, Contract Modifications and Authorized Option dollars have been absorbed by DP3 allocated contingency in the amount of \$1,168,995 of a total budget of \$4,598,725. Overall contract value remains unchanged in the amount of \$19,919,526.	

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