THIS PRINT COVERS CALENDAR ITEM NO.: 10.6

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY

DIVISION: Central Subway

BRIEF DESCRIPTION:

Approving Modification No. 87 to Contract No. 1300, Third Street Light Rail Program Phase 2 -Central Subway Stations, Surface, Track and Systems, to compensate Tutor Perini Corporation (Contractor) for direct and indirect costs resulting from: (1) delays, inefficiencies and additional work due to differing site conditions; and, (2) time impact costs related to the delays and additional work, which increases the Contract amount by \$3,596,000 for a total amount not to exceed \$852,263,645, and extends the Contract term by 100 calendar days to a total term not to exceed 1818 days to substantial completion and authorizing the Director to approve up to an additional aggregate of \$30,000,000 in future amendments to Contract No. 1300 without further approval by the SFMTA Board of Directors.

SUMMARY:

- On May 21, 2013, the SFMTA Board of Directors awarded Contract No. 1300 (Contract) to Tutor Perini Corporation (Contractor) to construct stations, trackways and systems for the Central Subway Project in an amount not to exceed \$839,676,400, for a term of 1700 days.
- The Contract has been modified 86 times to compensate the Contractor for additional work to address unexpected site conditions and design changes required by the City, which have increased the total Contract Amount to \$848,667,645. These modifications have also extended the term of the Contract by 18 days.
- The SFMTA issues this Contract Modification unilaterally to provide compensation for amounts that the SFMTA has determined, are owed to the Contractor.
- This amendment also authorizes the Director to approve up to an additional aggregate of \$30,000,000 in future amendments to Contract No. 1300.

ENCLOSURES:

- 1. SFMTAB Resolution
- 2. Appendix A Summary of Prior Modifications to Contract 1300
- 3. Contract No. 1300, Modification No. 87
- 4. https://www.sfmta.com/about-sfmta/reports/central-subway-final-seisseir (Central Subway Final SEIS/SEIR and Mitigation Monitoring and Reporting Program)

APPROVALS:	DATE
DIRECTOR THE	8/13/2018
SECRETARY R. Boomer	8/13/2018

ASSIGNED SFMTAB CALENDAR DATE: August 21, 2018

PAGE 2.

PURPOSE

Approving Modification No. 87 to Contract No. 1300, Third Street Light Rail Program Phase 2 -Central Subway Stations, Surface, Track and Systems, to compensate Tutor Perini Corporation (Contractor) for direct and indirect costs resulting from: (1) delays, inefficiencies and additional work due to differing site conditions; and, (2) time impact costs related to the delays and additional work, which increases the Contract amount by \$3,596,000 for a total amount not to exceed \$852,263,645, and extends the Contract term by 100 calendar days to a total term not to exceed 1818 days to substantial completion and authorizing the Director to approve up to an additional aggregate of \$30,000,000 in future amendments to Contract No. 1300 without further approval by the SFMTA Board of Directors.

STRATEGIC GOALS AND TRANSIT FIRST POLICY PRINCIPLES

This action supports the following SFMTA Strategic Plan Goal and Objectives:

Goal 2 – Make transit, walking, bicycling, taxi, ridesharing & carsharing the preferred means of travel

Objective 2.2: Improve transit performance

Goal 3 – Improve the environment and quality of life in San Francisco

- Objective 3.1: Reduce the Agency's and the transportation system's resource consumption, emissions, waste and noise.
- Objective 3.2: Increase the transportation system's positive impact to the economy.

Objective 3.3: Allocate capital resources effectively.

Objective 3.4: Deliver services efficiently.

Objective 3.5: Reduce capital and operating structural deficits.

This item will support the following Transit First Policy Principles:

- 1. Improves the safe and efficient movement of people and goods.
- 2. Improves public transit as an attractive alternative to travel by private automobile.
- 8. Allocates transit investments to meet the demand for public transit generated by new public and private commercial and residential developments.
- 9. Promotes the use of regional mass transit and the continued development of an integrated, reliable, regional public transportation system.

DESCRIPTION

Contract

On May 21, 2013, the SFMTA Board of Directors adopted Resolution No. 13-061 awarding Contract No. 1300 (Contract) Tutor Perini Corporation to construct one street-level and three subway stations as well as the trackway and systems for the Central Subway Project, for an amount not to exceed \$839,676,400, for a term of 1700 days to substantial completion.

The Contract is comprised of four design packages:

- Union Square/Market Street (UMS) Station
- Chinatown (CTS) Station

PAGE 3.

- Yerba Buena/Moscone (YBM) Station
- Surface, Track and Systems (STS)

Under the Contract, the Contractor provides the following services:

- The work under UMS Design Package includes construction under Stockton Street between Maiden Lane and Market Street with an underground platform centered on O'Farrell Street utilizing cut-and-cover methods, and will have a common mezzanine (concourse) and one center-boarding platform level. The south end of UMS Station connects to the east end of the existing Powell Street Station Mezzanine. The existing Powell Street Station Ellis entrance will be modified to provide egress for UMS Station. At the north end, the main entrance is located at the southeast corner of Union Square on Geary Street, with modifications to the Union Square Garage and Plaza, and emergency ventilation shafts. Two emergency exits are located on O'Farrell Street. The UMS Station will serve Union Square and will connect directly to BART's Powell Street Station.
- 2. The work under CTS Design Package includes a headhouse, cross-cut cavern, platform cavern, cross-over cavern and two emergency egresses. The CTS Station headhouse is constructed on an off-street parcel site on the southwest corner of Stockton and Washington Streets. The station construction below Stockton Street employs Sequential Excavated Method (SEM mined) construction.
- 3. The work under YBM Design Package includes construction of the Station headhouse, station box and four emergency exits. The YBM Station headhouse is constructed on an off-street parcel site on the west side of Fourth Street between Clementina and Folsom Streets, with an underground platform and concourse centered on Fourth Street utilizing cut-and-cover methods. The station box will have a common mezzanine (concourse) to the headhouse and end boarding at platform level.
- 4. The work under STS Design Package includes light rail track and systems, track invert, track safety walkways, constructed in guideway tunnels, emergency cross-passages, and three subway stations; light rail track and systems constructed on the surface for the alignment from the tunnel portal, south to the tie-in to the existing Muni T-Line at Fourth and King Streets; and the surface Fourth and Brannan Street Station.

Prior Modifications to the Contract

The Contract has been modified 86 times to address unexpected site conditions and design changes required by the City, which increased the contract amount by \$8,991,245 for a total amended contract amount not to exceed \$848,667,645. Thirteen modifications pertain to the CTS Design Package and total \$2,964,460, and all were due to differing site conditions, with the exception of Modification No. 6 where the SFMTA reimbursed the Contractor for value engineering services associated with the CTS Plaza. The Director of Transportation approved Modification Nos. 1 through 86, including the CTS modifications, pursuant to the authority delegated to him by the SFMTA Board of Directors' Resolution No. 13-061 Those modifications have been fully executed. Modification No. 87 will result in cumulative modification to the CTS Design Package in excess of \$5 million, thereby surpassing the Director's authority and thus, requiring SFMTA Board of Directors approval. The following table is a cost summary of Modification Nos. 1 thourgh 86 (all amounts rounded to the nearest dollar):

		Time			
Description		Extension			
	STS	YBM	UMS	CTS	
Modification Nos. 1 to					
86*	\$2,700,918	18 Days			

*Refer to Appendix A for details

Contract Modification No. 87 (Direct and Indirect Costs due to Additional Work and Time Extension to Contract)

Delay of Project Construction Requires Extending Construction Services

This Contract Modification reimburses the Contractor for costs and delay impacts during two phases of work occurring in 2014 at Chinatown Station (CTS). The "pre-Slurry Wall Installation" phase covers January 1, 2014 through March 31, 2014. The "Slurry Wall Installation" phase covers April 1 through December 22, 2014. The parties have been unable to agree on costs for additional work, the duration of time impacts, and the compensability of unavoidable delay. The SFMTA issues this Contract Modification unilaterally to compensate the Contractor for amounts that the SFMTA agrees are owed, but the Agency may revisit its determination upon receipt of additional information or completion of a negotiated agreement with the Contractor. This Contract Modification may be subject to a subsequent claim by the Contractor.

The Contractor is entitled to submit a Change Order Request (COR) for differing or unanticipated site conditions not described in the Contract Documents that the Contractor asserts have caused excess costs or time impacts not contemplated at the time of bid. The Contractor may additionally submit a COR for clarifications to the Work causing excess costs. Modification No. 87 involves CORs submitted based on site conditions that may not have been fully described in the Contract Documents. Disputes arose with the Contractor regarding: (1) timeliness of the CORs; (2) entitlement to costs based on described site conditions in contract documents; (3) sufficiency of proof for costs and time; and. (4) allowable delay costs. The Contractor filed certified contract claims and referred the matters to the Dispute Resolution Board (DRB) for recommendations on entitlement. The DRB issued three separate Report and Recommendations on the disputed matters. Modification No. 87 reflects the SFMTA's unilateral determinations on entitlement and quantum based on the information currently available to the Agency. The Contractor disputes the Agency's determination as to amounts of time and compensition owed.

COR Nos. 039, 040, 041 and 1079 were for events occurring during the pre-Slurry Wall Installation phase and involve concurrent events determined to have caused 64 calendar days of delay. Unilateral Contract Modification No. 63 previously awarded costs and time for those CORs; the SFMTA now supplements that prior award. COR Nos. 350, 1137, 033 and 643 relate to events occurring during the Slurry Wall Installation phase determined to have caused an additional 54 calendar days of delay. Contract Modification No. 63 extended the contract duration by 18 calendar days, and this Contract Modification will supplement that extension by an additional 100 days. The Contractor disputes the Agency's determination as to the duration and compensability of these delays. This Contract Modification will additionally reimburse excess costs for Additional Work associated with the Slurry Wall Installation CORs. The following table summarizes the cost breakdown of Modification No. 87 (all amounts rounded to the nearest dollar):

Description	STS YBM UMS CTS				Time Extension
Mod 87: DSCs Slurry Wall				\$3,596,000	100 Days
COR 350, 1137, 033,				40,000	100 Duys
643				\$2,680,000	
COR 350 Obnoxious					
Odor				\$13,477	
COR 1137 Unknown					
Obstruction				\$40,364	
COR 033 Harder Rock				\$650,471	
CM87-05 COR 643					
Caving Rock				\$211,688	
Mod Nos. 1 to 86	\$2,700,918	\$577,424	\$2,748,442	\$2,964,460	18 Days
Modification Nos. 1 to 87	\$2,700,918	\$577,424	\$2,748,442	\$6,560,460	118 Days

Director of Transportation's Authority to Approve Contract Modifications.

The Director of Transportation's cumulative authority to approve contract modifications for Contract No. 1300 is currently a total of \$20,000,000, with a \$5 million cap for each of the four design packages. Contract modifications with a total cumulative value over the \$5 million dollar threshold for any of the design packages require approval by the SFMTA Board. One of the four design packages, for the Chinatown Station, has reached its' limit.

The proposed resolution authorizes the Director of Transportation to approve further amendments for Contract No. 1300 up to a cumulative total of \$30,000,000 but does not allocate the additional \$10 million to any specific design package. The requested increase in the Director of Transportation's approval authority will facilitate construction by enhancing the SFMTA's ability to execute contract modifications in a timely manner. Approval of this resolution would supersede Resolution No. 13-061 with regard to contract delegation authority for Contract #1300.

Future contract modifications exceeding a total cumulative value of \$30,000,000 will require approval of the SFMTA Board. Staff will provide immediate notice in writing to the Board for future contract modifications approved by the Director of Transportation.

STAKEHOLDER ENGAGEMENT

The SFMTA meets with the Chinatown Community Development Center (CCDC), on a weekly basis to apprised them of upcoming construction activities, including weekend and night time work.

ALTERNATIVES CONSIDERED

Disapproval of Modification No. 87 may result in litigation with the Contractor. The SFMTA could refuse to pay any amounts owed until a final negotitated or adjudicated resolution of all disputes with the Contractor, but that may subject the SFMTA to interest costs for compensation that the SFMTA has now determined are owed to the Contractor.

FUNDING IMPACT

The Central Subway project is funded with Federal Transit Administration (FTA) New Starts, Federal Congestion Management & Air Quality (CMAQ), State Transportation Bond Proposition 1A and 1B, State Regional Improvement Program, State Transportation Congestion Relief Program (TCRP), and Prop K Half-Cent Local Sales Tax funds. Contract No. 1300 Modification #87 will not increase the total project cost of \$1.578B. Existing funds will be used to pay for the additional cost. The breakdown of the funding sources and their amounts is as follows:

Source	TOTAL
5309 New Starts	\$942,200,000
CMAQ3	\$41,025,000
Prop 1A High Speed Rail Connectivity	\$61,308,000
Prop 1B- MTC	\$87,895,815
Prop 1B-SFMTA	\$219,896,185
RIP-SF/Other	\$74,248,000
TCRP	\$14,000,000
Prop K	\$137,727,000
Total	\$1,578,300,000

ENVIRONMENTAL REVIEW

The Central Subway Final Supplemental Environmental Impact Statement / Supplemental Environmental Impact Report (Central Subway SEIS/SEIR) evaluated the environmental impacts of the Central Subway project, including construction of the subway stations. On August 7, 2008, the San Francisco Planning Commission certified the Final SEIR (Case No. 1996.281E). On August 19, 2008, the SFMTA Board of Directors approved Resolution 08-150 adopting Central Subway Project Alternative 3B as the Locally Preferred Alternative, the CEQA Findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Plan.

The contract modification described herein falls within the scope of the Central Subway SEIS/SEIR; however, future decisions by the Director of Transportation would be subject to CEQA.

The Central Subway SEIS/SEIR is on file with the SFMTA Board of Directors, may be found in the records of the Planning Department at 1650 Mission Street in San Francisco, and is incorporated herein by reference.

PAGE 7.

OTHER APPROVALS RECEIVED OR STILL REQUIRED

The City Attorney's Office has reviewed this calendar item. No other approvals are required.

RECOMMENDATION

Staff recommends that the Board approve Modification No. 87 to Contract No. 1300, Third Street Light Rail Program Phase 2 - Central Subway Stations, Surface, Track and Systems, to compensate the Contractor for direct and indirect costs resulting from: (1) delays, inefficiencies and additional work due to differing site conditions; and, (2) time impact costs related to the delays and additional work, which increase the Contract amount by \$3,596,000 for a total amount not to exceed \$852,263,645, and extend the Contract term by 100 calendar days to a total term not to exceed 1818 days to substantial completion and authorizing the Director to approve up to an additional aggregate of \$30,000,000 in future amendments to Contract No. 1300 without further approval by the SFMTA Board of Directors.

SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY BOARD OF DIRECTORS

RESOLUTION NO.

WHEREAS, Design and construction of the 1.75-mile Central Subway (Central Subway Project) is Phase 2 of the Third Street Light Rail Transit Project; and,

WHEREAS, On May 21, 2013, the SFMTA Board of Directors adopted Resolution No. 13-061 which awarded Contract No. 1300 (Contract) to Tutor Perini Corporation (Contractor) to construct one street-level and three subway stations, trackways, and systems for the Central Subway Project, in an amount not to exceed \$839,676,400, and for a term of 1700 days to substantial completion; and,

WHEREAS, TPC provides construction services to construct the work described in four separate design packages, for the construction of the stations, trackway and control systems of the Central Subway; and,

WHEREAS, On May 21, 2013, the SFMTA Board of Directors approved Resolution No. 13-061, which established the cumulative authority of the Director of Transportation to approve contract modifications under the Contract up to an aggregate of \$20 million, but established a \$5 million limit for each of the four design packages that comprise the Contract; and,

WHEREAS, Modification No. 63 to the Contract previously extended the contract duration 18 calendar days for new contract duration of 1718 calendar days; and,

WHEREAS, Construction of the Central Subway Project has been delayed 100 calendar days beyond the revised substantial completion date, and Modification No. 87 extends the contract time for an additional 100 calendar days; and,

WHEREAS, Modification No. 87 reimburses TPC's excess costs associated with Additional Work and compensable Unavoidable Delay associated with unexpected site conditions that increased the cost of the base contract work by \$3,596,000; and,

WHEREAS, The SFMTA issues Modification No. 87 unilaterally to compensate the Contractor amounts that the SFMTA has determined are reasonably owed to the Contractor, which amounts the Contractor disputes; and,

WHEREAS, Contract Modification Nos. 1 through 86 increased the contract amount by \$8,991,244, with \$2,964,460 of that amount being incurred for work associated with the construction of the Chinatown Station, and Modification No. 87 in the amount of \$3,596,000 will increase the aggregate value of CTS contract modifications to \$6,560,460 which exceeds the authority delegated to the Director to authorize modifications related to a Design Package; and,

WHEREAS, SFMTA's Contract Compliance Office has determined that the Contractor is in compliance with Small Business Enterprise requirements of the Contract: and,

WHEREAS, The Central Subway Final Supplemental Environmental Impact Statement/Supplemental Environmental Impact Report (Central Subway SEIS/SEIR) evaluated the environmental impacts of the Central Subway Project, including construction of the subway stations; on August 7, 2008, the San Francisco Planning Commission certified the Final SEIR (Case No. 1996.281E); on August 19, 2008, the SFMTA Board of Directors approved Resolution 08-150 adopting Central Subway Project Alternative 3B as the Locally Preferred Alternative, the CEQA Findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Plan; and,

WHEREAS, The contract modification described in this calendar item falls within the scope of the Central Subway SEIS/SEIR; and,

WHEREAS, The Central Subway SEIS/SEIR is on file with the SFMTA Board of Directors, may be found in the records of the Planning Department at 1650 Mission Street in San Francisco, and is incorporated herein by reference; therefore, be it

RESOLVED, That the SFMTA Board has reviewed and considered the Central Subway SEIS/SEIR and record as a whole, and finds that the Central Subway SEIS/SEIR is adequate for the Board's use as the decision-making body for the actions taken herein relative to construction of the Project, and incorporates the CEQA findings by this reference as though set forth in this Resolution; and be it

RESOLVED, The SFMTA Board of Directors approves Modification No. 87 to Contract No. 1300, Third Street Light Rail Program Phase 2 - Central Subway Stations, Surface, Track and Systems, to compensate Tutor Perini Corporation for direct and indirect costs resulting from: (1) delays, inefficiencies and additional work due to differing site conditions; and, (2) time impact costs related to the delays and additional work, which increases the Contract amount by \$3,596,000 for a total amount not to exceed \$852,263,645, and extends the Contract term by 100 calendar days to a total term not to exceed 1818 days to substantial completion; and, be it

FURTHER RESOLVED, That the SFMTA Board of Directors authorizes the Director of Transportation to approve further amendments to Contract No. 1300 up to a cumulative total of \$30,000,000 but does not allocate the additional \$10 million to any specific design package, without further approval by the SFMTA Board of Directors provided that staff shall immediately provide written notice to the Board of such amendments.

I certify that the foregoing resolution was adopted by the San Francisco Municipal Transportation Agency Board of Directors at its meeting of August 21, 2018.

Secretary to the Board of Directors San Francisco Municipal Transportation Agency

Appendix A - Summary of Prior Modifications to Contract 1300

NT		ama				Time
No.	Modification Description	STS	YBM	UMS	CTS	Extension
1	BART Elevator (Exercise Contract			\$00,000		
1	Option)			\$90,000		
2	Errata (rescinded)	-	-	-	-	
	Work Safely Around (E) Power					
3	Pole				\$25,956	
4	Force Account Change Orders				\$130,000	
5	Deletion of Compensation Grouting		-\$1,833,869			
	Plaza Construction Support					
6	Services				\$75,000	
7	FACOs 016, 017 and COR 009	\$80,170				
8	PCC 006 - UCO - UNILATERAL	\$225,208				
	COR 010, 015, 016, 018, 020, and					
	025		\$126,663			
10	PCC 42		\$64,287			
11	PCC 002			\$12,997		
12	STS Traffic Control	\$1,032,302				
13	CTS - Temp Sewer Wash				\$57,707	
	YBM - Alt Alignment VCP &					
14	Connection WL		\$58,526			
1 -	YBM - Presidential Motorcade		¢2 170			
15	Work Stoppages		\$3,178			
16	UMS - Place Slurry Backfill In Void			\$8,261		
				\$6,201	\$54,322	
	CTS - Potholing/AWSS Work CTS - AWSS Modifications					
10	CTS - Contam Soil Hauling				\$60,248.20	
19	Disposal				\$2,274,225.22	
17	YBM - 4th Street Utility, SW and				φ2,271,223.22	
20	WM Upgrade		\$364,562			
	STS: Various Changes Related to					
	Differing Site Conditions					
21	Encountered	\$18,220.84				
	UMS: YBM/UMS/CTS Pipe					
22	Protection and UMS Floor Drain			\$16,198		
	UMS: PCC 058 - Install Deluge			¢(2) 020		
25	Main STS - AT&T Ductbank at 4th and			\$63,838		
24	Bryant Streets - UNILATERAL	\$108,053				
	YBM - Various CORs	ψ100,033	\$59,113			
			· · · · · ·			
20	COR 072		\$84,509			

No	Madification Description	CTC	VDM	LINE	CTS	Time
	Modification Description TME_FAR Forms -	STS	YBM	UMS	CTS	Extension
	UNILATERAL	-	-	_	_	
-	CTS PCC 017.1 Jade Galore				\$97,743	
	STS - PCC 009.1	-\$143,668			+ > . ,	
	YBM - Various CORs	+ ,	\$334,165			
	UMS - Fuel Tank		+	\$53,701		
	YBM - Various PCCs		\$92,934	+		
	CTS - Various CORs		+- <u>-</u> ;- •		\$56,422	
	CTS - Various CORs				\$19,334	
	STS - PCC 077 - STS: Tunnel				+ - > , = = -	
35	Sump Pump Upgrade	\$11,147				
36	YBM - COR 054		\$14,484			
37	YBM - Various CORs				\$8,886	
38	STS Various CORs	\$52,553				
39	UMS - Various CORs			\$23,271		
40	YBM - COR 046 - UNILATERAL		\$3,655			
41	YBM - COR 373		\$40,250			
42	UMS - PCC 070			36,873		
43	UMS - COR 019			65,188		
44	UMS - COR 002			\$572,884		
45	STS - PCC 008 OCS Changes	\$107,285				
46	Cross Station		\$35,489			
	UMS - PCC 065 Roof Deck					
47	Acceleration Unilateral			\$76,124		
	UMS - COR 079 Two Underground			+		
	Storage Tanks			\$97,817		
	STS - Various CORs	\$136,728				
	STS - Various CORs	\$67,036				
51	YBM - Various CORs & PCCs		\$24,875			
52	YBM - Removal of 5 Underground		\$167 202			
	Storage Tanks Unilateral STS - Various CORs	\$17,035	\$167,393			+
	UGS - PCC 030 Micropiles at Line	φ17,033				
54	-			\$732,157		
	YBM - COR 116 Archaeological			+ , ,		
55	Discovery Unilateral		\$102,734			
	YBM - COR 240 Contaminated					
56	Material		\$106,923			
	STS - PCC No. 051: Inventory/Prep	\$21.215				
	Temp Crossover Materials	\$21,245				
58	STS - Various CORs	\$90,081				

No	Modification Description	STS	YBM	UMS	CTS	Time Extension
	CTS - COR 171 & 640	515		UNIS	\$66,592	L'ATCHSION
	UMS - COR 946 - UNILATERAL			\$61,312	\$00,57 <u>2</u>	
	YBM - Various CORs - Unilateral		\$207,181	\$01,012		
•1	UMS - Wales and Waterproofing -		<i>q</i> 2 07,101			
62	Unilateral			\$277,714		
						18
						Calendar
	CTS - Utilities - Unilateral	\$52.57 0			\$38,025	Days
	STS - Various CORs	\$52,570		¢10.220		
	UMS - Various CORs & PCC 049	.		\$10,320		
	STS COR 634	\$66,949.14		#22.2 00		
	UMS PCC 149	.		\$23,290		
	STS Various CORs	\$59,555			
-	UMS Various CORs			\$49,682		
70	YBM Various CORs		\$178,079			
	UMS Various CORs		+- <i>i</i> - <i>i</i>	\$81,907		
	YBM Various CORs		\$74,694			
	STS PCC 066	\$96,516				
	UMS PCC 039			\$336,236		
	UMS COR 060			\$58,672		
	YBM COR 806		-\$9,611			
	STS: Various Changes	\$56,629				
78	STS: Various Changes	\$191,175				
70	STS: PCC 014 Traffic Signal and	¢242.427				
	Streetlight Changes	\$242,427				
	STS: Various Changes	\$111,701	\$57.006			
81	YBM - Various Changes YBM - Mitigate Impacts to PG&E		\$57,886			
82	Work - Moscone Expansion		\$21,170			
83	YBM Misc Change Work		\$27,270			
84	YBM - Various Changes		\$12,156	1		
85	YBM - COR 086		\$156,831			
86	YBM - Various Changes		\$1,897			
	Modification Nos. 1 to 86	\$2,700,917.98	\$577,424	\$2,748,442	\$2,964,460.42	18 Calendar Days

UNILATERAL CONTRACT MODIFICATION NO. 087

	Contractor:	Tutor Perini Corporation
SFMTA Contract No. 1300 Stations, Surface,		530 Bush Street, Suite
Track & Systems		302
		San Francisco, CA 94108

<u>Contract Modification No. 087</u> – CTS: Various Changes Related to Construction of the CTS Headhouse Slurry Wall

The SFMTA hereby modifies the Contract unilaterally in accordance with General Provision Articles 6, 7 and 9 to address Dispute Resolution Board (DRB) determinations from Hearing Nos. 002, 003, and 004. The DRB issued findings on merit and directed the parties to negotiated cost and time impacts. The parties have been unable to agree on costs for Additional Work, the duration of time impacts, and the compensability of Unavoidable Delay. The SFMTA reserves the right to revisit determinations in this Contract Modification upon receipt of future DRB findings and recommendations or a negotiated settlement with the Contractor.

This Contract Modification resolves disputed cost and delay issues covering two phases of work occurring in 2014 at Chinatown Station (CTS). The "pre-Slurry Wall Installation" phase covers January 1, 2014 through March 31, 2014. COR Nos. 039, 040, 041 and 1079 involve concurrent events determined to have caused 64 calendar days delay occurring in this phase. Unilateral Contract Modification No. 63 previously awarded costs and time for those CORs; the SFMTA now supplements the prior award. The "Slurry Wall Installation" phase covers April 1st through December 22, 2014. COR Nos. 350, 1137, 033 and 643 relate to events determined to have caused an additional fifty-four (54) calendar days of delay. Contract Modification No. 63 extended the contract duration by 18 calendar days, and this Contract Modification will supplement that extension by an additional 100 days; 67 of the 118 days will be compensable. The parties dispute the duration and compensability of the delay(s). This Contract Modification will additionally reimburse excess costs for Additional Work associated with the Slurry Wall Installation CORs.

SFMTA hereby modifies the Contract unilaterally as follows:

1. The following Change Order Requests (COR) and Certified Contract Claims are included in the scope of this Contract Modification:

A. <u>Time Extension</u>

Unavoidable Delay will result in a contract time extension where the Contractor demonstrates (a) interruption of the Work beyond the control of the Contractor that could not be avoided by the exercise of care, prudence and foresight and (b) delay impacts that actually extend the most current Substantial Completion date. (GP 7.02 H.) The Critical Path Method based on actual events in the field is used to demonstrate impacts to the Substantial Completion date. (GP 7.02 C; 13.04 D; 01 32 13-3.07 C.) Unavoidable Delay will be compensable if caused by the circumstances described in GP 7.02 H (2), which includes delay caused by "constructive suspension." Constructive suspension delay meets the following three criteria: (1) the SFMTA is solely responsible, (2) the delay is unreasonable in duration under the circumstances, and (3) the delay is not within the contemplation of the

parties. Compensable Unavoidable Delay will become non-compensable if concurrent with non-compensable Unavoidable Delay or Avoidable Delay. (GP 7.02 H (3); J.)

COR 039, 040, 041 - DRB Hearing Nos. 002

The approved Baseline Schedule for the project established that guide wall installation activities at CTS constituted the current longest path for the project during the period November 2013 through March 2014. A third party utility (PG&E) impacted these critical activities on the current longest path by failure to remove and relocate utility facilities in a timely fashion following notice by the City. Inability to procure or failure of a public utility service may be the basis for a time extension. (GP 7.02 H.1.) The facts demonstrate that the SFMTA was the party responsible for mitigating the impacts of the unanticipated live power pole; that the delay to remove the power pole was unreasonable under the circumstances involved; and that the delay not within the contemplation of the parties.

The SFMTA agrees that the PG&E delay "constructively suspended" Contractor's Work from January 8 to January 20, 2014. The SFMTA will designate this thirteen (13) calendar day period as compensable Unavoidable Delay and compensate the Contractor at the Established Daily Rate for Delay of \$40,000/day. (GP 1.01 A (44).)

Due to uncertainty associated with the removal of the PG&E power pole, the Contractor suspended mobilization of the equipment required for slurry wall work. The Contractor had planned that the forty-two (42) calendar day equipment mobilization would occur during a period of schedule "float" that was consumed while waiting for PG&E to remove the power pole (prior to January 2014). The SFMTA accepts the DRB's recommendation to view the Contractor's decision to hold off equipment mobilization as prudent under the circumstances. The project record reflects that the forty-two day mobilization started on January 21st and continued through March 25, 2014 for a sixty-four (64) calendar day duration. The SMTA designated forty-two (42) calendar days as Unavoidable Delay associated with mobilization which would be potentially eligible for compensability in the absence of non-compensable Unavoidable Delay or concurrent Avoidable Delay. Nine (9) calendar days are designated non-compensable Unavoidable Delay "rain delays" – for a total of fifty-one (51) calendar days of Unavoidable Delay. Compensability of the Unavoidable Delay is discussed under COR 1079, below which alleges concurrent events causing delay. The remaining thirteen (13) days constitutes Avoidable Delay that Contractor could have avoided by exercising prudence, foresight and diligence, as discussed further under COR 1079.

The Contractor performed Additional Work associated with COR Nos. 040 and 041 for which the City provided full reimbursement under by Contract Modification No. 063. The SFMTA accepts the DRB's recommendation to treat the alleged delay impacts associated with COR 040 and 041 as concurrent with COR 039.

COR 1079 - DRB Hearing Nos. 003

Concurrent to the delayed equipment mobilization required to commence slurry wall work, the Contractor engaged in an untimely, piecemeal and protracted substitution and submittal process also required as a condition to commencing slurry wall installation work. The Contractor asserted that its prolonged substitution and submittal process was caused by defective Contract Documents, which is rejected by the SFMTA. The facts demonstrate the Contractor's own lack of diligence in pursuing approved submittals contributed to delayed approvals. SFMTA therefore rejects the DRB's recommendation that the SFMTA take "sole

responsibility" for delay occurring during the period January 21st to March 13, 2014, which would result in "constructive suspension" and compensability. The Contractor's acts and omissions in submitting a late and incomplete substitution request and late, incomplete and erroneous submittal packages are concurrent to the "unavoidable" fifty-one (51) calendar day delay period described above. The Contractor's actions are deemed concurrent Avoidable Delay which negates compensability for the forty-two (42) calendar day delay for equipment mobilization. Even if the submittal-related delays were deemed unavoidable, the nature of the delay does not qualify for compensability as a "constructive suspension." In sum, the SFMTA acknowledges that delayed removal of the live PG&E pole may have contributed to the Contractor's planning and coordination challenges for the entire period of the mobilization, but the facts demonstrate that the SFMTA was not solely responsible for Unavoidable Delay associated with the delayed submittal approvals. Based on this finding, the fifty-one (51) calendar days of Unavoidable Delay will be deemed non-compensable Unavoidable Delay.

COR 350, 1137, 033, 643 - DRB Hearing No. 004

DRB Hearing No. 004 dealt with four separate CORs submitted by the Contractor for differing site conditions asserted to have affected the progress of the slurry wall work that commenced on March 26, 2014, and continued through mid-December 2014. Slurry wall installation activities at CTS controlled the current longest critical path for the project at the time of the event. SFMTA offered to resolve COR Nos. 350, 1137, and 033 for costs and time supported by the project record. TPC did not accept SFMTA's offers prior to hearing.

<u>COR 350</u> - Contractor suspended slurry wall installation work at Panel P-45 for all/part of the days April 9 to April 14, 2014, to obtain sampling and analysis of unexpected liquid hydrocarbons to protect worker safety. The SFMTA determined that Contractor could not have avoided delay for a cumulative five (5) calendar days of work suspension by exercising care, prudence, foresight and diligence. The SFMTA deems the five-day Unavoidable Delay to be compensable as a "constructive suspension" based on the SFMTA being solely responsible for the delay an unreasonable duration under the circumstances involved, and the delay not being within the contemplation of the parties. The SFMTA identifies no concurrent delay that would negate compensability.

<u>COR 1137</u> - Contractor suspended work for a cumulative period of two (2) days covering the period July 28 to July 30, 2014 and performed extra work to resolve an unexpected differing site condition obstruction at Panel C-32; this included correction of slurry wall deviation by backfilling Panel C-32 with lean concrete followed by re-excavation. The SFMTA deems this Unavoidable Delay to be compensable as a "constructive suspension" based on the SFMTA being solely responsible for the delay, an unreasonable duration under the circumstances involved, and the delay not being within the contemplation of the parties. SFMTA has not any identified concurrent delay that would negate compensability.

<u>COR 033</u> - Contractor experienced constructive suspension of expected progress for installation of slurry walls when it encountered harder than expected rock based on information SFMTA provided in the Contract Documents. Contractor provided additional labor, materials and equipment to overcome the harder rock to excavate and install the slurry wall panels. The SFMTA acknowledges a cumulative forty-one (41) calendar day delay to slurry wall installation due to harder than expected rock. The SFMTA deems this Unavoidable Delay to be compensable as a "constructive suspension" based on the SFMTA being solely responsible for the delay, an unreasonable duration under the circumstances involved, and the delay not being within the contemplation of the parties. SFMTA has not identified any concurrent delay negating compensability.

COR 643 - Contractor experienced constructive suspension of expected progress for installation of slurry walls when it encountered multiple "wedge failures" at Panels C-14, C-16, C-18, P-19 during installation of the slurry wall panels. The wedge failures caused caving rock making it more difficult and time-consuming to install the slurry wall panels. Additional work included stopping installation of rebar cage to analyze caving condition, moving the hydromill back into place to remove the caved in rock, cleaning/de-sanding of the panel and the pouring of extra concrete to fill the void. Once the concrete was hardened, re-installation efforts would be renewed. The Contract Documents indicate jointing and provide information on response to wedge failures. The SFMTA partially accepts the DRB's findings that the GBR did not indicate the nature and extent of potential wedge failure. The SFMTA additional finds that the Contractor contributed to the delay impact and additional work by leaving the excavation exposed for too long and by not using "lean concrete" for the fill. The SFMTA acknowledges a cumulative six (6) calendar day delay to slurry wall installation due to rock wedge failure. The SFMTA deems this Unavoidable Delay to be compensable as a "constructive suspension" based on the SFMTA being solely responsible for the delay, an unreasonable duration under the circumstances involved, and the delay not being within the contemplation of the parties. SFMTA has not identified any concurrent delay that would negate compensability.

The following table summarizes the "total time" that SFMTA is adding to Contract No. 1300 for the referenced CORs, which will extend the duration of the Contract. In summarizing the total award of time, the table below includes the 18 calendar day time extension previously awarded in Contract Modification No. 63:

CORs	Compensable Unavoidable Delay	Non-Compensable Unavoidable Delay	Total Time Extension
COR 039, 040, 041	13	51	64
COR 1079	0	Concurrent - 51	Concurrent
COR 350	5		5
COR 1137	2		2
COR 033	41		41
COR 643	6		6
SubTotal	67	51	118
Less 18 Days Awarded	(13)	(5)	(18)
in Cmod 63			
Total	54	46	100

Contract No. 1300 establishes seventeen hundred (1700) days as the maximum duration of the work measured from the official date of commencement in the "Notice to Proceed" to the date of Substantial Completion. (SP-4)

The SFMTA extends the Contract Duration a total of 118 calendar days for demonstrated Unavoidable Delay pursuant to Section 7.02 H of the General Provisions. SFMTA

previously extended the Contract duration by eighteen (18) calendar days pursuant to Contract Modification No. 63 associated with COR Nos. 039, 040, 041. For that reason, this Contract Modification supplements the prior extension by one hundred (100) calendar days, but supersedes Contract Modification No. 063 on the scope of work and entitlement to compensability.

	Original Contract Time	Prior Time Extension(s)	Current Award of Time	New Contract Time
Notice to Proceed	6/17/13	n/a	n/a	n/a
Contract Duration (CD)	1700	18	100	1818
Substantial Completion	2/10/18	2/28/18	100	6/08/18
Final Completion	5/10/18	5/28/18	n/a	9/06/18

This Table summarizes the current status of the Substantial Completion Date:

The SFMTA is not assessing Contractor for any liquidated damages for the duration of this time extension. (SP-5A)

B. Costs

<u>COR 350</u> - Contractor to obtain sampling and analysis of unanticipated liquid hydrocarbons encountered during excavation for slurry wall panel P-45 to identify nature of potential contaminate for safety of workers and neighbors.

<u>COR 1137</u> - Contractor to perform extra work to resolve an unexpected differing site condition consisting of an obstruction at Panel C-32, including correction of slurry wall deviation by backfilling Panel C-32 with lean concrete followed by re-excavation.

<u>COR 033</u> - Contractor to overcome differing site condition of harder than expected rock encountered during installation of slurry walls throughout the CTS headhouse area, which were not identified in Geotechnical Baseline Report by providing additional labor, materials and equipment to excavate and install the slurry wall panels.

<u>COR 643</u> - Contractor to perform additional work to overcome unanticipated "wedge failures" at Panels C-14, C-16, C-18, P-19 during installation of the slurry wall panels. Additional work includes analyzing the caving condition, moving the hydromill back into place to remove the caved in rock, re-installation of rebar cage with cleaning/de-sanding of the panel and the pouring of extra concrete to fill the void. Once concrete hardened, Contractor to re-install panels.

CORs	# Compensable Days	# Days x \$40,000/Day	Direct Costs	Total Costs
COR 039, 040, 041	13	\$520,000	CMOD 003/063	\$520,000

COR 1079	0	0	0	0
COR 350	5	\$200,000	\$13,477	\$213,477
COR 1137	2	\$80,000	\$40,364	\$120,364
COR 033	41	\$1,640,000	\$650,471	\$2,290,471
COR 643	6	\$240,000	\$211,688	\$451,688
Total	67	\$2,680,000	\$916,000	\$3,596,000

2. The following new Contract Pay Items are added to compensate the Contractor for the Additional Work described above:

Pay Item	COR	SFMTA Amount
CM087-01	67 Calendar Day Compensable Unavoidable Delay	\$2,680,000
CM087-02	COR 350 – Obnoxious Odor	\$13,477
СМ087-03	COR 1137 – Unknown Obstruction	\$40,364
СМ087-04	COR 033 – Harder Rock at Slurry Walls	\$650,471
CM087-05	COR 643 – Caving Rock	\$211,688

Total Net Amount of this Contract Modification Increase:	\$ 3,596,000.00
Previous Total of Contract:	\$848,667,664.68
New Revised Total of Contract:	\$852,263,644.68
Adjustment to Contract Time by this Contract Modification:	100 calendar days
Previous Substantial Completion Date:	Feb 28, 2018
Revised Substantial Completion Date:	June 08, 2018

- 3. The SFMTA issues this Unilateral Contract Modification in accordance with Articles 6, 7 and 9 of the General Provisions of the Contract.
- 4. Except as specifically stated herein, all other terms and conditions of the Contract remain unchanged. Any modification of the Contract must be express and in conformance with the General Provisions and Special Provisions.