

Memorandum

To: Cost Review Committee

From: Ron Alameida, Director of Design & Construction for the Transbay Transit Center, SF Public Works

Dennis Turchon, Senior Construction Manager, TJPA

Sara DeBord, Chief Financial Officer, TJPA

Date: For the Committee Meeting of November 17, 2017

Re: Agenda Items 8-9

Agenda Item 8 – Expenditures and Commitments of Proceeds of the City Financing that Require CRC Approval

Commitments

The Cost Review Committee (CRC) has previously given authorization for TJPA to issue commitments (budget appropriations) for various construction, construction administration, and legal costs of up to \$175 million in City Financing proceeds, and draws of up to \$117 million. The commitments through November 9 are shown below; they represent a \$20.76 million *decrease* since August, which was made possible through de-obligation of some previously appropriated amounts upon financial close of the City's first sale of Community Facilities District (CFD) bonds.

Scope/Trade Package/Contract	Type ¹	Committed
Transit Center Design Team Construction Admin	NTP	\$1,850,000
Various Logistics Packages	NTP / CCOs	16,354,763
TG07.2 Superstructure Concrete	cco	961,995
TG07.3 Miscellaneous Metals	CCOs	133,155
TG07.6 Concrete Topping Slabs/Rails/Joints	NTP	9,656,637
TG08.2 Exterior Awning	NTP	9,646,200
TG08.6 Metal Ceilings	NTP/CCO	4,849,094
TG08.11 Glass Curtain Walls/Skylights	NTP	14,375,033
TG10.3 Heating Ventilation Air Conditioning	NTP/CCO	617,105
TG10.4 Electrical/Communications	NTP	15,483,683
TG12.1 Civil/Sitework at Grade	NTP	6,755,479
TG13.1 Roof Park Landscaping & Irrigation	NTP/CCO	11,560,188
TG13.2 Roofing/Waterproofing	NTP	3,394,701
TG16.0 - Interiors/Finishes	NTP	11,324,678
TG16.8 Fireproofing/Intumescent Spray	NTP	1,848,936
TG18.1 Bus Ramps	NTP	5,220,650
Physical Security Information Management System	NTP	2,339,681
SFPUC Permanent Power	Power Agreement	1,079,859
Seyfarth Shaw / Jones Day Constr / Litigation Counsel	RFS	2,200,000
Public Art Program	Artist Contracts	855,500
Bus Storage Construction	NTP	19,596,436
Bus Storage Constr Admin & Constr Management	NTP	528,993
Other Bus Storage costs, incl. permits	Other	358,541
Total		\$141,041,307

¹ NTP – Notice to Proceed. CCO – Contract Change Order. RFS – Request for Services

Draw Requests

Based upon the above commitments, eight draws totaling \$97 million have been approved and processed as of October 6:

Scope/Contract	Amount
Transit Center Design Team Construction Admin	\$341,470
Transit Center Construction (net of retention)	85,025,522
Bus Storage Construction (net of retention)	5,996,707
Legal Services	2,056,569
PUC Permanent Power	1,079,859
Art Program	855,500
Bus Storage Constr Admin & Constr Management	59,448
Bus Storage Lease & Permits	196,873
Total	\$95,611,946

The City has also paid costs of issuance of \$890,217, leaving a current project fund balance of \$497,837 available before the next draw.

Upcoming Commitments

The following NTPs, CCOs or RFS are planned for issuance using City Financing:

Scope/Trade Package/Contract	Туре	Estimated Amt.	Timing
Artwork	NTP/CCOs	100,000	Winter 2017
Bus Storage Construction, including permits, etc.	NTP/CCOs	3,550,000	Winter/Spring
Transit Center Construction	CCOs	1,764,000	Winter/Spring
Legal Services	RFS	1,700,000	Winter/Spring
Total		\$7,114,000	

Total use of the City Financing would be just over \$148 million with these additional commitments. Here is the projected timing of these commitments and cash flow (\$millions):

Calendar Quarter	4Q 2017	1Q 2018	2Q 2018	3Q2018
Commitments	\$2.5	\$4.6	\$ -	\$ -
Cum. Commit.	\$143.6	\$148.2	\$148.2	\$148.2
Cash Flow	\$19.1	\$24.5	\$7.6	\$1.4
Cum. Cash	\$114.7	\$139.2	\$146.8	\$148.2

Agenda Item 9 – Opportunity to Comment on Contracts, Change Orders and Contract Amendments that Require CRC Review

<u>Professional Services Contract Amendments above the \$250,000 Threshold and/or to be funded with City Financing</u>

San Francisco Public Works

TJPA and San Francisco Public Works (SFPW) have an intergovernmental agreement in place under which SFPW's various bureaus provide services including design and construction management. The agencies anticipate amending the agreement in December, to add SFPW's performance of two projects in the Transit Center District, for which TJPA will reimburse SFPW. One is the conversion and extension of Natoma Street to a pedestrian plaza running along the south side of the transit center to Second Street. The other is a bus boarding island on Mission Street for SFMTA. The current estimate for these improvements is not-to-exceed \$1,100,000.

Construction Change Orders above the \$250,000 Threshold and/or to be funded with City Financing The following are new change order requests (CORs) and construction change orders (CCOs) since the last CRC meeting:

TG04.2 – Utility Relocation – Mission Street AWSS

COR – OCS Fiberglass Support System Installation - \$550,000

TG04.2 trade subcontractor, M Squared Construction, to provide labor, equipment, and material to install support system for Overhead Contact System (OCS) fiberglass system. Design of the OCS trough and support system was not finalized until July of 2017. This scope of work was included in the project's original contract scope, but not included in the issued packages. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$550,000.

TG05.10 – Temporary Facilities

COR 310496 - Overhead Protection at First and Fremont - \$1,400,000

TG05.10 trade subcontractor, Anvil Builders, to provide labor, material and equipment to furnish and install overhead protection platform at First Street and Fremont Street. This scope of work was originally proposed to be issued to trade package TG07.1, but was assigned to trade package TG05.10. This scope was unidentified at bid time and assigning trade package TG05.10 to complete this work on a time and material basis was the most cost effective and efficient way to perform this scope. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$1,400,000.

COR 31505.1 - Site Dewatering - \$1,108,000

TG05.10 trade subcontractor, Anvil Builders, to provide labor, material, and equipment for jobsite dewatering that was originally included in trade package TG03. Site dewatering was removed from trade packageTG03 and added to TG05.10 to closeout TG03. Costs associated with this change include monthly costs projected through the Substantial Completion date of December 22, 2017. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$1,108,000.

COR 310841.1 – Furnish Site Dumpsters for LEED Related Construction Waste - \$2,170,000 TG05.10 trade subcontractor, Anvil Builders, to furnish and maintain site dumpsters for LEED related construction. This scope of work was originally proposed to be issued to trade package TG05.7, but was assigned to trade package TG05.10. This scope was unidentified at bid time and assigning trade package TG05.10 to complete this work on a time and material basis was the most cost effective and efficient way to perform this scope. Costs associated with this change includes monthly costs projected through the Substantial Completion date of December 22, 2017. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$2,170,000.

COR 312079 – Provide Plywood Backer Boards for IDF/MDF Rooms – \$500,000 TG05.10 trade subcontractor, Anvil Builders, to provide labor, material and equipment to install plywood backer boards in IDF/MDF rooms. This scope was unidentified at bid time and assigning trade package TG05.10 to complete this work on a time and material basis was the most cost effective and efficient way to perform this scope. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$500,000.

COR – Additional Temporary Facilities for Phased Completion – \$2,000,000

TG05.10 trade subcontractor, Anvil Builders, to provide labor, material and equipment to provide additional temporary facilities for phased completion of the project. This scope includes, but is not limited to, providing dumpsters and to complete removal of dewatering system from January through May 2018 due to phased completion sequence for the project. As specific areas of the project are turned over, TG05.10 is to provide dumpsters for debris removal through to final completion of all zones. The dewatering activities will be extended as well until the building has been fully loaded and all materials are in place including all soil and trees of the roof park. Costs for dewatering and grouting of wells are included in this cost. Additionally, due to the phased turnover of the Transit Center, the operators are needed beyond December 22, 2017. The use of the elevators for construction completion will be required through April 2018. These costs are for the estimated amount of labor needed for this work through the final completion date. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$2,000,000.

TG07.2 – Structural Concrete

COR 310599 - Deck Steel Plates at Tall Curbs - \$650,000

TG07.2 trade subcontractor, Shimmick Construction, to provide labor, material, and equipment associated with furnishing and installing steel plates at curb locations greater than eight inches. Contract drawings call for steel plates at curb locations where curbs are greater than eight inches, but this was not bought out through package TG07.2. This is a scope procurement issue and funded through CM/GC Contingency. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$650,000.

COR 311646 – Roof Built Up Slab - \$370,000

TG07.2 trade subcontractor, Shimmick Construction, to provide labor, material, and equipment associated with installing architectural sloping slab at the roof level. The architectural slopping slab is shown on the contract drawings, but was not bought out through package TG 7.2. This is a scope procurement issue and funded through CM/GC Contingency. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$370,000.

COR - General Closeout Items - \$3,000,000

TG07.2 trade subcontractor, Shimmick Construction, costs for miscellaneous RFIs, acceleration, and scope procurement items that are under review and include all items to close out the contract. This change has been categorized as Errors and Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$3,000,000.

TG08.4 – Metal Panel Systems

COR 311044 - ASI 141 Changes for Metal Panel System - \$300,000

TG08.4 trade subcontractor, Pacific Erectors Inc., to provide all labor, material and equipment for modifications to the metal panel system due to additional devices added through the TG27.1 package, modifications made to the escalators, and modifications to the Beale Street Lobby. Wireless Application Protocol (WAP) devices added on the roof level required penetrations and additional escutcheon plates to be added to the panels. 16B stainless steel metal panels were added to the sides of escalators E519, E511 and E512 as well as added metal framing due to the structural steel modifications per ASI#141. A reduction of the metal panel deleted in the Public Lobby has been calculated into this revised price and accounts for all additions and deletions per ASI 141 involving trade package 08.4. This change has been categorized as Errors and Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$300,000.

TG08.6R1– Metal Ceilings

Storage of W-14 Ceiling Panels - \$530,000

TG08.6 trade subcontractor, Southwest Specialty Contractors, to provide offsite storage for the W-14 system. Southwest Specialty Contractors was required to store its W-14 metal panels at offsite storage until July 2017 because the project schedule did not allow for the panels to be safely delivered and stored onsite by November 2016 due to the schedule change. This change has been categorized as Schedule Mitigation. This CCO request to the Cost Review Committee is for an NTE amount of \$530,000.

TG10.2 – Plumbing

COR - Gray Water System Clarification RFI - \$1,010,000

TG10.2 trade subcontractor, Desert Mechanical Inc., to provide all labor, material, and equipment to revise the gray water system as outlined in RFIs T-4077, T-4756, T-4809, T-4398, T-4638, T-4811, T-5996, T-4769, T-4805, T-4806, T-4807, T-4812, T-4813, T-5033, T-5109, and T-6628. These changes were made by the design team to ensure the gray water system works at full capacity. This scope includes, but is not limited to, adding an air gap in the gray water tanks, revising gray water tank layout, revising location of the solenoid, control, and shut off valve, adding by-pass lines for gray water tank, adding overflow lines for gray water tanks, adding sludge collector, adding ozone destruct unit, and adding stilling pipe with smoothing inlet. This change has been categorized as Errors & Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$1,010,000.

COR 312174 - RFI T-6805 Wrapping Fuel Oil Piping in Lieu of 2 Hour Enclosure – \$450,000 TG10.2 trade subcontractor, Desert Mechanical Inc., to provide labor, material, and equipment associated with installing fire rated wrap at the fuel oil piping in lieu of the 2 hour enclosure as outlined in RFI T-6805. Plumbing drawings call for a 2 hour enclosure to be installed around the fuel oil piping, but due to the congestion of other trades in the area, a 2 hour wrap is to be installed in lieu of an enclosure. This change has been categorized as Errors & Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$450,000.

TG10.4 – Electrical

CR T-517 - Revised ERRCS Scope from ASI 134 - \$2,500,000

TG10.4 trade subcontractor, Fisk Electric, to provide labor, material, and equipment to provide American Fire Wire 2-hour rated coax cable in lieu of specified coax cable to eliminate 3M Fire Wrap and extend the Fiber Ring for Class A Survivability for complete Emergency Responder Radio Coverage System (ERRCS) as intended in ASI # 144. Additionally, provide revised ERRCS design, shop drawings and product data to reflect new material and pathway revisions required to accommodate additional fiber and revised cabling. A portion of the ERRCS scope was issued in previous contractor change orders for initial design, conduit installation, devices, wire, and fiber. These did not include the cost to provide a 2 hour rated system. This final cost for the ERRCS is the final piece for providing a complete fire rated scope. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for an NTE amount of \$2,500,000.

COR 311034 – SFPUC Switchgear and Cabling Additional Work - \$1,100,000 Additional cost for San Francisco Public Utilities Commission (SFPUC) work was previously submitted to and approved by the Cost Review Committee for \$300,000. This scope has increased since, due to the additional requested work by SFPUC. Work includes, but is not limited to additional testing, additional programing, completing work during the night shift, purchasing

additional fiber, and pulling additional cable. This change has been categorized as Scope Procurement. This CCO request to the Cost Review Committee is for a NTE amount of \$1,100,000. TG16.0 – Interiors/ Finishes

COR 311825 - Skanska Inefficiency Costs - \$600,000

The TG16.0 trade subcontractor Skanska submitted costs to recover inefficiency costs due to stacking of trades, amount of change order work required to be completed during project, and schedule changes. This change has been categorized as Schedule Mitigation and a Code Compliance issue. This CCO request to the Cost Review Committee is for an NTE amount of \$600,000.

TG18.1 – Bus Ramps

COR 312068 - Changes to Caltrans Substation Building Lot Elevations - \$300,000 TG18.1 trade subcontractor, Shimmick Construction, to provide labor, equipment, and materials required to make modifications to the California Department of Transportation substation lot due to differences between the existing substation building and the adjacent exterior finish grades as outlined in RFI B-0676. This change has been categorized as Errors & Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$300,000.

COR 310480 – Revised Sizes for Link Beams per ASI 150 - \$700,000

Additional costs for time and overhead related to ASI 150-007 revisions to the Link Beams. Drawings and specifications were revised and issued as ASI 150-07 on May 5, 2015. Revisions to 14 link beams at the Bus Ramp Viaduct result in time and overhead cost impacts. These have not been submitted to date. This change has been categorized as Errors & Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$700,000.

COR 311099 – Hinge 9 Expansion Joint - \$1,500,000

Additional costs for material and equipment rentals related to additional time and overhead related to ASI 150-014, 150-016, and 150-018 revisions to Hinge 9. Drawings and specifications were revised and issued on March 3, March 28, and May 16, 2016. Revisions include deletion of modular joint to a sliding plate seismic joint assembly at Hinge 9, details, and concrete changes. These costs have not been submitted to date. This change has been categorized as Errors & Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$1,500,000

COR General Closeout Items - \$1,000,000

TG18.1 trade subcontractor, Shimmick costs for miscellaneous RFIs, acceleration, and scope procurement items that are under review and include all items to close out the contract. This change has been categorized as Errors and Omissions. This CCO request to the Cost Review Committee is for an NTE amount of \$1,000,000.

Bus Storage Facility (BSF):

BSF CCO#1 – Soil Testing Support - \$9,679

Additional costs associated with soil analytical sampling & testing. Due to outdated tests for the existing soils within the project site, contractor Ghilotti Construction Company (GCC) performed exploratory excavations to assist the environmental consultant performing sampling & testing of existing soils for classification/analysis, as directed by the TJPA. Work was performed on a Time & Materials Basis. A negotiated amount of \$9,679 was agreed to by GCC and the subcontractor. This change has been categorized as "Change Condition".

BSF CCO#2 - Class I & Class II Offhaul/Disposal - Additional Quantity - \$628,317

Allowance for Class I off haul and disposal exceeded 125% of the base bid quantity. Pursuant to the contract, this item is eligible for an adjustment in unit price. Original bid quantity was 3,200 tons; actual quantity is 10,324 tons. The first 4,000 tons will be paid at the original bid price. The remaining 6,324 shall be paid at the revised unit price. Allowance for Class II off haul and disposal also exceeded 125% of the base bid quantity. Original bid quantity was 3,000 tons; actual quantity is 8,065 tons. The first 3,750 tons will be paid at the original bid price; the remaining 4,315 shall be paid at the revised unit price. This CCO is for the added quantities; CCOs 15 and 16 cover adjustments to unit prices.

	Addtl Quantities	Unit Price	Subtotal	Credits	Total
Class I	6324.14	\$100.00	\$632,414.00	(\$92,205.96)	\$540,208.04
Class II	4314.83	\$35.00	\$151,019.05	(\$62,910.22)	\$88,108.83

A negotiated amount of \$628,317 was agreed to by GCC and the subcontractor. This change has been categorized as "Change Condition".

BSF CCO#3 – Buried Light Pole Foundation - \$1,036

Additional costs associated with an unknown buried light pole foundation encountered at the Second & Stillman Street corner of the project site. Foundation was not shown on the plans, and was removed below subgrade as directed by the resident engineer. Work was performed on a Time & Materials Basis. A negotiated amount of \$1,036 was agreed to by GCC and the subcontractor. This change has been categorized as "Change Condition".

BSF CCO#4 – Water Main Potholing for Redesign - \$6,199

Additional costs associated with potholing to find the existing water main for the BSF domestic and fire water service tie-in on Stillman Street. Upon review of field connections, the tie-in point shown was found to be a monitoring well, and GCC issued RFI #014. Work performed as directed by the TJPA to pothole the existing water main on Stillman Street for basis of design for the new tie-in location. Work performed on a Time & Materials Basis. The NTE amount requested for this new CCO is \$6,199. This change has been categorized as "Change Condition".

BSF CCO#5 - SS Line Relocation Bents 13-14 (LS) - \$21,131

Additional costs associated with the RFI #022 response in regard to the existing Storm Sewer (SS) Line Conflict between existing Bents B13 & B14. Costs include: removal of two existing SS manholes & existing SS Pipe; plugging SS line at manhole on Vassar Place; installation of 4" drain pipe from existing column drains and stubbing through face of Retaining Wall 6. All costs associated with the work are included in the price, except as follows: permit fees from agencies to perform the work; surveying & staking; testing & inspection fees; based on standard 8 hour work shift. The NTE amount requested for this new CCO is \$21,131. This change has been categorized as "Change Condition".

BSF CCO#6 - Food Court cleanup - \$13,906

Additional costs associated with clean-up/debris removal left over from the Beer Garden/Food Court between Bent B5 and Abutment A6, as well as removal/disposal of the two sheds left behind by a parking vendor previously utilizing the site. Trash, debris, etc. removed and disposed of and the two sheds were demolished and disposed of as directed by the TJPA. Work performed on a Time & Materials Basis. The NTE amount requested for this new CCO is \$13,906. This change has been categorized as "Change Condition".

BSF CCO#7 - Abutment A6 Unsuitable Material - \$7,905

Unsuitable existing fill material was encountered at Abutment A6 directly underneath the new abutment foundation. Unsuitable material was excavated and disposed of from the limits of Abutment A6, and replaced with compacted clean fill as directed by the TJPA. Work performed on a Time & Materials Basis. The NTE amount requested for this new CCO is \$7,905. This change has been categorized as "Change Condition".

BSF CCO#8 – Water Service Tie-in Change - \$20,250

Additional costs associated with the RFI #014 response in regard to the tie-in location for new domestic water service. Costs include: additional saw cutting, traffic control, asphalt/concrete pavement removal, additional 30 LF of waterline trenching/installation with hot-tap at main, and pavement/concrete restoration within the limits of Stillman Street. All costs associated with the work are included in the price, except as follows: permit fees from agencies to perform the work; surveying & staking; testing & inspection fees; based on standard 8 hour work shift. The NTE amount requested for this new CCO is \$20,250. This change has been categorized as "Change Condition".

BSF CCO#9 – Fence & Graffiti Repairs (T&M) - \$1,251

Additional costs associated with repair of construction fence and removal of graffiti from vandalization along the BSF site perimeter. Removed graffiti and repaired fence as directed by the TJPA. Work performed on a Time & Materials Basis. The NTE amount requested for this new CCO is \$1,251. This change has been categorized as "Change Condition".

BSF CCO#10 – Soundwall CIDH Pile Drilling Conditions - \$20,000

CIDH Pile installation has begun as of August 21, and it has been determined that the subsurface conditions for the Soundwall #1 CIDH Piles include unanticipated levels of hard rock which are greatly reducing the production for the CIDH pile installation. The NTE amount requested for this new CCO is \$20,000. This change has been categorized as "Change Condition".

BSF CCO#11 - Second Street OCS Removal & Replacement - \$33,699

Cost Proposal from SFMTA for the removal of the Second Street OCS Line and replacement upon completion of Bus Storage Facility Box Girder Bridge Construction. Submitted cost includes removal of contact wires, support wires, and related hardware for the Second Street OCS Line and replacement when bus bridge is completed. If it is determined that the OCS Lines do not require reinstallation, then the costs for the work shall be 50% of this proposal. The NTE amount requested for this new CCO is \$33,699. This change has been categorized as "Change Condition".

BSF CCO#12 - SW1 Footing Conflict - \$24,315

During excavation of retaining walls SW#1 and SW#2 existing undocumented and unforeseen concrete footings were encountered. Excess unforeseen concrete was removed from the footing foot print and off hauled. The NTE amount requested for this new CCO is \$24,315. This change has been categorized as "Change Condition".

BSF CCO#13 – Soundwall #3 & #4 Utility Conflict - \$3,131

While performing excavation for SW#3 and SW#4 unforeseen and undocumented utilities (sewer and storm drain) were encountered within the excavation and drilling limits. Existing facilities had to be removed to allow CIDH drilling to continue. Costs include drainage pipe, sewer pipe removal, and delay for drill rig. The NTE amount requested for this new CCO is \$3,131. This change has been categorized as "Change Condition".

BSF CCO#14 - Buried Concrete Conflict at Architectural Wall #2 - \$99,194

During excavation for walls along AW2 line unforeseen/undocumented concrete bridge footings were encountered. Additional work required included demolition, removal, off haul, and then backfill of the area. Costs through October 26 total \$99,194 for this additional work. The NTE amount requested for this new CCO is \$99,194. This change has been categorized as "Change Condition".

BSF CCO#15 – Class I Offhaul/Disposal Unit Price Adjustment - \$221,914
Allowance for Class I offhaul and disposal exceeded 125% of the base bid quantity. Original bid quantity was 3,200 tons. Actual quantity is 10,324 tons. The first 4,000 tons will be paid at the original bid price of \$100.00/ton. The remaining 6,324 shall be paid at the revised unit price, which is a \$35.091/ton adjustment in addition to the contract unit price included in CCO #2. Revised unit prices are based on the force account analysis performed for the work. The NTE amount requested for this new CCO is \$221,914.07.11 to Class I Off haul/Dispose Unit Price Adjustment. This change has been categorized as "Change Condition".

BSF CCO#16 – Class II Offhaul/Dispose Unit Price Adjustment - \$43,925 Allowance for Class II offhaul and disposal exceeded 125% of the base bid quantity. Original bid quantity was 3,000 tons. Actual quantity is 8,065 tons. The first 3,750 tons will be paid at the original bid price of \$35.00/ton. The remaining 4,315 shall be paid at the revised unit price, which is a \$10.179/ton adjustment in addition to the contract unit price included in CCO #2. Revised unit prices are based on the force account analysis performed for the work. The NTE amount requested for this new CCO is \$43,925. This change has been categorized as "Change Condition".

BSF CCO#17 - Bus Ramp Link striping - \$10,000

At the request of AC Transit, striping modifications are to be made along the Bus Ramp structure to accommodate operational items. These modifications were the outcome of the Bus testing performed in April 2017. The NTE amount requested for this new CCO is \$10,000 to incorporate all striping modifications from the bus testing. This change has been categorized as "Owner Requested".

BSF CCO#18 – Flashing Beacon on Essex Street On ramp for bus merge - \$250,000 At the request of AC Transit, an advanced flashing beacon and loop detector system is to be installed along the Essex Onramp at the Bus Ramp merge along the Lower Deck of the Bay Bridge, and are to be made along the Bus Ramp structure to accommodate operational items. These modifications were the outcome of the Bus testing performed in April 2017. The NTE amount requested for this new CCO is \$250,000 to incorporate the flashing beacon advance notification system. This change has been categorized as "Owner Requested".

BSF CCO#19 – Bus Ramp/Mainline striping for bus merge - \$80,000 At the request of AC Transit, striping modifications are to be made along the Lower Deck Mainline and First/Essex on ramp lane lines. These modifications were the outcome of the Bus testing performed in April 2017. The NTE amount requested for this new CCO is \$70,000 to incorporate all striping modifications from the bus testing along Bay Bridge Mainline. This change has been categorized as "Owner Requested".

The attached change order logs provide further detail on all CCOs presented to the CRC to-date.

Agenda Item #9 - Construction Amendments and Changes Log (Transit Center)

11/	Agenda item #3 - construction Amendments and changes log (Transit Center)									
11/	17/2017			Date No	Amount No	CCO Final				
Trade Package	CCO/CR No.	Total Value	Date submitted to CRC	Exceptions Taken by CRC	Exceptions Taken by CRC	Approved Amount	CCO Category	Contingency Source	Fund Source	CCO Issue
							Own	er Requested		
7.2	COR 311408	\$3,300,000	5/8/2017	5/19/2017	\$3,300,000		Owner Requested	TJPA	CFD	W-Systems Impact to Structural Concrete Package. COR submitted at \$6.3M, but \$3M due to inefficiencies /delays- no merit
7.2	COR 310937	\$800,000	8/31/2017	8/31/2017	\$800,000		Owner Requested	TJPA	TIFIA	Pour backs for curbs, other curb issues related to W2 system
							,			Changes to the GL 35 Seismic Joints due to the OCS footing interrupting the joints and replacing the SJ cover with
7.6	COR 311367	\$260,000	11/7/2016	11/18/2016	\$260,000		Owner Requested	TJPA	CFD	1" steel plate
7.0	COR	62.000.000	44/40/2047					s & Omissions	CED.	
7.2 8.4	COR 311044	\$3,000,000	11/10/2017				Errors & Omissions	TJPA TJPA	CFD CFD	General Closeout Items
10.2	COR	\$300,000 \$1,010,000	11/10/2017 11/10/2017				Errors & Omissions Errors & Omissions	TJPA	CFD	ASI 141 Changes for Metal Panel System Gray Water System Clarification RFIs
10.2	COR	\$450,000	11/10/2017				Errors & Omissions	TJPA	CFD	RFI T-6805 Wrapping Fuel Oil Piping in Lieu of 2 Hour Enclosure
18.1	COR 312068	\$300,000	11/10/2017				Errors & Omissions	TJPA	TIFIA	Changes to Cal Trans Substation Building Lot Elevations
18.1	COR 310480	\$700,000	11/10/2017				Errors & Omissions	TJPA	TIFIA	Revised sizes for Link Beams per ASI 150
18.1	COR 311099	\$1,500,000	11/10/2017				Errors & Omissions	TJPA	City Financing	Hinge 9 Expansion Joint
18.1	COR	\$1,000,000	11/10/2017				Errors & Omissions	TJPA	CFD	General Closeout Items
7.2	COR 311981	\$900,000	8/31/2017	8/31/2017	\$900,000		Errors & Omissions	TJPA	CFD	Rebar Changes from Bid Including ASI 128
7.2	COR	\$310,000	8/31/2017	8/31/2017	\$310,000		Errors & Omissions	TJPA	CFD	Escalator Issues - Added Mid-Span Support.
10.2	COR 311439	\$500,000	5/8/2017	5/19/2017	\$500,000		Errors & Omissions	TJPA	CFD	DBI Venting Requirements per RFI T-5141
10.4	COR311110	\$325,000	8/31/2017	8/31/2017	\$350,000		Errors & Omissions	TJPA	CFD	TG10.4 ASI 141 Electrical Changes
10.4	COR 311105	\$2,300,000	11/7/2016	11/18/2016	\$2,300,000		Errors & Omissions	TJPA/CMGC	CFD	Hardened Conduit RFI T-3669
13.1	COR 311561	\$350,000	8/31/2017	8/31/2017	\$350,000		Errors & Omissions	TJPA	CFD	Shoe Design Changes at Bus Fountain
13.1	COR 311562	\$100,000	8/31/2017	8/31/2017	\$100,000		Errors & Omissions	TJPA	City Financing	Change to Glass Type for Bus Glass Wall
					ı			ule Mitigation		
8.6R	COR 312232	\$530,000	11/10/2017				Schedule Mitigation	CMGC	CFD	Storage of W-14 Ceiling Panels
16.0	COR 311825	\$600,000	11/10/2017				Schedule Mitigation	TJPA	CFD	Skanska Inefficiency Costs
							Co	ordination		
7.2/7.6	CR T-449	\$375,000	8/31/2017	8/31/2017	\$375,000		Coordination	CMGC	CFD	Curb Extension at Elevator Fronts for All Elevator Shafts
7.2/7.0	CRT 443	\$373,000	8/31/2017	8/31/2017	\$373,000		Coordination	CIVIGC	CID	Curb Extension at Elevator Fronts for All Elevator Sharts
							Code	Compliance		
10.4	COR 311826	\$500,000	8/31/2017	8/31/2017	\$500,000		Code Compliance	TJPA	CFD	Fire Management System Changes
		, ,	, ,	, , ,	, ,		F	·	-	
							\$	ettlement		
7.1	COR 310296.1	\$672,750	8/22/2016	8/24/2016	\$672,750		BBII Settlement	TJPA	CFD	Removal of Sand Inclusions in Bus Deck level cast node pads
		,					<u> </u>	Procurement		
4.2	COR	\$550,000	11/10/2017				Scope Procurement	TJPA	CFD	OCS Fiberglass Support System Installation
5.10	COR 310496	\$1,400,000	11/10/2017				Scope Procurement	TJPA	CFD	Overhead Protection at First and Fremont
5.10	COR 310505.1	\$1,108,000	11/10/2017				Scope Procurement	TJPA	CFD	Site Dewatering
5.10	COR 310841.1	\$2,170,000	11/10/2017				Scope Procurement	TJPA	CFD	Furnish Site Dumpsters for LEED Related Construction Waste
5.10	COR 312079	\$500,000	11/10/2017				Scope Procurement	TJPA	CFD	Provide Plywood Backer Boards for IDF/MDF Rooms
5.10	COR	\$2,000,000	11/10/2017				Scope Procurement	TJPA	CFD	Additional Temporary Facilities for Phased Completion
7.2	COR 310599 COR 311646	\$650,000 \$370,000	11/10/2017		ļ		Scope Procurement	CMGC CMGC	CFD CFD	Deck Steel Plates at Tall Curbs
7.2 10.4	CR T-517	\$3,70,000	11/10/2017		-		Scope Procurement	TJPA	CFD	Roof Built Up Slab
10.4	COR 311034	**\$1,100,000	11/10/2017 8/31/2017				Scope Procurement	TJPA/Reimbursable	SFPUC	TG10.4 Revised ERRCS Scope From ASI 134 SFPUC Switchgear and Cabling Additional Work. **Estimate increased
4.2	CR T-383.A	\$2,800,000	2/6/2017	2/17/2017	\$2,800,000		Scope Procurement Scope Procurement	TJPAJ Reimbursable TJPA	CFD	Traction Power on Fremont and Beale Streets
10.4	COR 311394	\$600,000	8/31/2017	8/31/2017	\$600,000		Scope Procurement	TJPA	CFD	E2 Pylon Beacon Power per RFI T-4988
13.1	COR 311740	\$300,000	8/31/2017	8/31/2017	\$300,000		Scope Procurement	TJPA	City Financing	Contract Grow Monthly Maintenance and Storage
14.1B	CR T-462	\$280,000	8/31/2017	8/31/2017	\$280,000		Scope Procurement	TJPA	CFD	Addition of LED skirt lighting, increased foot candela and other emergency backup elements
		,,	.,,1/	, -, -, -, -, -, -, -, -, -, -, -, -, -,	,,					0.0,

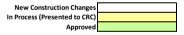
Agenda Item #9 - Construction Amendments and Changes Log (Transit Center)

Trade Package	CCO/CR No.	Total Value	Date submitted to CRC	Date No Exceptions Taken by CRC	Amount No Exceptions Taken by CRC	CCO Final Approved Amount	CCO Category	Contingency Source	Fund Source	CCO Issue
								Executed		
7.2	CCO 0324	\$455,000	2/6/2017	2/17/2017	\$455,000	\$428,811	Owner Requested	TJPA	City Financing	Gantry Beams at Ground Level above Transformer Vaults per ASI 121
7.2	CCO 0312	\$750,000	11/7/2016	11/18/2016	\$750,000	\$708,975	Owner Requested	TJPA	TIFIA	Additional Wall Plates at Lower Concourse Walls
7.2	CCO 0269.1	\$325,000	8/22/2016	8/24/2016	\$325,000	\$254,308	Owner Requested	TJPA	Land Sales	Added plate to short curbs to support deformed bars per RFI T-3184 and added plates for tall curbs between GL 10-20
7.2	CCO 0291	\$368,000	8/22/2016	8/24/2016		\$317,592	Owner Requested	TJPA	Land Sales	Install additional rebar, formwork and concrete for Partition walls at Lower Concourse per ASI 128.
7.6	CCO 0316	\$694,000	8/22/2016	8/24/2016	\$694,000	\$546,055	Owner Requested	TJPA/Reimbursable	Salesforce Tower	Added seismic joint at Salesforce Tower Pedestrian Bridge per ASI 137
10.3	CCO 0304	\$118,000	2/6/2017	2/17/2017	\$118,000	\$117,841	Owner Requested	TJPA	City Financing	Roof Park scope, Heat Pump Changes, & Duct Reroute per ASI 128
13.1	CCO 0366	\$420,000	2/6/2017	2/17/2017		\$7,185	Owner Requested	TJPA	City Financing	Landscape Changes per ASI 138
7.2	*CCO 0426	\$1,000,000	2/6/2017	2/17/2017	\$1,000,000	\$443,801	Errors & Omissions	TJPA	TIFIA	Built Up Slabs in Ground Level and Roof Level
7.3	*CCO 0412	\$97,000	8/31/2017	8/31/2017	\$97,000	\$76,576	Errors & Omissions	TJPA	City Financing	Roof Park Restaurant Cable Guardrail Continuity Plate per RFI T-5041 Series
8.11R	*CCO 0416	\$912,000	5/8/2017	5/19/2017	\$912,000	\$859,088	Errors & Omissions	TJPA	TIFIA	W-13 Frame Modifications
8.11R	*CCO 1063	\$270,000	5/8/2017	5/19/2017	\$270,000	\$254,915	Errors & Omissions	TJPA	TIFIA	W-12 Perimeter Expansion Joint Infill Plate
10.2	*CCO 0402	\$660,000	8/31/2017	8/31/2017	\$660,000	\$617,304	Errors & Omissions	TJPA	TIFIA	ASI 138 Revisions
10.2	CCO 0343	\$800,000	2/6/2017	3/22/2017		\$673,785	Errors & Omissions	TJPA	TIFIA	Connection to Sewer Mains per RFI T-5029
13.2	CCO 0362	\$300,000	5/8/2017	5/19/2017	\$300,000	\$297,101	Errors & Omissions	TJPA	City Financing	Add FC 4 Layers and revision to INS-14 per ASI 138
18.1	CCO 0290.1	\$736,000	8/22/2016	8/24/2016	\$736,000	\$691,702	Errors & Omissions	TJPA	Bridge Loan	Revisions to the Bus Ramp Cable Stay Hinge 8 Expansion Joint per ASI 150-015.
18.1	CCO 0373.1	\$475,000	8/22/2016	8/24/2016	\$475,000	\$367,498	Errors & Omissions	TJPA	TIFIA	Revisions to the Bus Ramp Cable Stay Hinge 9 Expansion Joint per ASI 150-016.
7.2	CCO 1059	\$1,200,000	2/6/2017	2/17/2017	\$1,200,000	\$895,298	Schedule Mitigation	CMGC	TIFIA	Schedule Recovery for TG 7.2 scope, premium time only, using CM/GC Contingency per contract.
7.1	CCO 1043	\$425,000	2/6/2017	2/17/2017	\$425,000	**\$425,742	Skanska Settlement	CMGC	TIFIA	Seismic Upgrades to Access Trestle. ** Final amount \$742 over NTE of \$425,000.
n/a	*CCO 0410	\$42,000	8/31/2017	8/31/2017	\$42,000	\$41,689	Scope Procurement	TJPA	City Financing	Roof Park Restaurant Handrail IPE Wood Cap
7.2	CCO 0393.1	\$250,000	2/6/2017	2/17/2017	\$250,000	\$87,153	Scope Procurement	TJPA	MTC AB1171	Drum Café Revisions
7.2	CCO 0328	\$445,000	11/7/2016	11/18/2016	\$445,000	\$434,946	Scope Procurement	TJPA	City Financing	West Throat Vent Shaft Concrete
7.3	CCO 0370	\$60,000	5/8/2017	5/19/2017	\$60,000	\$56,579	Scope Procurement	TJPA	City Financing	Bent Plate Embed and SS Base Plate from ASI 128 for Roof Park Restaurant
7.6	CCO 1035	\$330,000	8/22/2016	8/24/2016	\$330,000	\$307,144	Scope Procurement	CMGC	Land Sales	Installation of Mat Slab walls at water storage tank previously not procured.
8.6R	CCO 0344	\$480,000	5/8/2017	5/19/2017	\$480,000	\$476,903	Scope Procurement	TJPA	TIFIA	ASI 140 Drop-in Span Aluminum Enclosure, VE Item.
8.6R	CCO 0309	\$250,000	2/6/2017	2/17/2017	\$250,000	\$249,554	Scope Procurement	TJPA	City Financing	Procurement of the W2 and W3 head of wall assembly
8.11R	*CCO 0378	\$480,000	8/31/2017	8/31/2017	\$480,000	\$475,387	Scope Procurement	TJPA	TIFIA	Procurement of Glazing Door Hardware Package previously not procured. **Estimate increased
10.2	CCO 0186	\$1,486,000	8/22/2016	8/24/2016	\$1,486,000	\$1,232,298	Scope Procurement	TJPA	Prop K	Revisions and additions to plumbing system per ASI 128.
10.4	CCO 0284	\$1,330,000	11/7/2016	11/18/2016	\$1,330,000	\$1,202,996	Scope Procurement	TJPA	TIFIA	Phase 1.5 ASI 144
10.4	CCO 0293.1	\$1,100,000	8/22/2016	8/24/2016	\$1,100,000	\$861,630	Scope Procurement	TJPA	TIFIA	Procurement of the pathway that supports the Emergency Response System per ASI 134.
10.4	CCO 0379	\$390,000	3/22/2017	3/22/2017	\$390,000	\$275,056	Scope Procurement	TJPA	TIFIA	Added Stairwell Lighting per RFI T-5585.1
13.2	CCO 0277	\$435,000	8/22/2016	8/24/2016	\$435,000	\$401,828	Scope Procurement	TJPA	Land Sales	Procurement and installation of the W2 Roof Trellis and Outriggers per ASI 128 and 138
16.8	CCO 0287	\$261,000	8/22/2016	8/24/2016	\$261,000	\$252,310	Scope Procurement	TJPA	Land Sales	Installation of the Rooftop Restaurant Fireproofing per ASI 128
	Total	52,654,750		CCO F	inal Approved Total	\$13,913,306				

^{*} Executed since last CRC meeting

11/17/2017

MODS and amounts paid directly by WOJV (not thru TJPA) are not included in this estimate



Contingency Tracking through October 2017 (\$millions) Tota

			Construction	CM/GC	Program	Contingency &
			Contingency	Contingency	Reserve	Reserve
le Package	s:	Baseline Budge Amounts	\$61.8	\$32.5	\$116.9	\$211.3
4.2	Utility Relocation - Mission St. AWSS	Contingency Usage Through Sep 2017	(\$28.9)	(\$4.0)	\$4.7	(\$28.3)
7.1	Structural Steel	Remaining Baseline Budge Amounts (Sep 2017)	\$32.9	\$28.5	\$121.6	\$183.0
7.2	Structural Concrete	Total Draws/Adds Oct 2017	(\$2.7)	\$0.0	(\$3.6)	(\$6.3)
7.3	Miscellaneous Metal	Remaining Balances	\$30.2	\$28.5	\$118.0	\$176.7
7.6	Topping Slabs, Bus Crash Rail and Expansion Joints					
8.6R	Metal Ceilings					

Trade Packages: 4.2 Utility Relocation - Mission St. AWSS 7.1 Structural Steel	
1	
7.1 Structural Steel	
7.2 Structural Concrete	
7.3 Miscellaneous Metal	
7.6 Topping Slabs, Bus Crash Rail and Expansion Joints	
8.6R Metal Ceilings	
8.11R Glass Curtain Wall/Skylights	
10.2 Plumbing	
10.3 Mechanical/HVAC	
10.4 Electrical	
10.5 Fire Protection and Suppression	
13.1 Landscaping and Irrigation	
13.2 Roofing/Waterproofing	
14.1B Escalators	
16.8 Fireproofing/Intumescent Spray	
18.1 Bus Ramp	

Agenda Item #9 -Construction Amendments and Changes Log (Bus Storage Facility)

11/8/	11/8/2017									
Trade Package	CCO/CR No.	Total Value	Date submitted to CRC	Date No Exceptions Taken by CRC	Amount No Exceptions Taken by CRC	CCO Final Approved Amount	CCO Category	Contingency Source	Fund Source	CCO Issue
BSF	CCO # 1	\$9,679	11/10/2017				Change Condition	TIDA	City Financina	Soil Testing Support
BSF	CCO#1							TJPA	City Financing	
BSF	CCO#2	\$628,317	11/10/2017				Change Condition	TJPA	City Financing	Class I & Class II Offhaul/Disposal - Additional Qty
		\$1,036					Change Condition	TJPA	City Financing	Buried Light Pole Foundation
BSF	CCO # 4	\$6,199	11/10/2017				Change Condition	TJPA	City Financing	Water Main Potholing for Re-design (T&M)
BSF	CCO # 5	\$21,131	11/10/2017				Change Condition	TJPA	City Financing	SS Line Relocation Bents 13-14 (LS)
BSF	CCO # 6	\$13,906	11/10/2017				Change Condition	TJPA	City Financing	Food Court Cleanup (T&M)
BSF	CCO # 7	\$7,905	11/10/2017				Change Condition	TJPA	City Financing	Abut A6 Unsuitable Matl R&R (T&M)
BSF	CCO#8	\$20,250	11/10/2017				Change Condition	TJPA	City Financing	Waterline Tie-In Location Change (LS)
BSF	CCO#9	\$1,251					Change Condition	TJPA	City Financing	Fence & Graffiti Repairs (T&M)
BSF	CCO #10	\$20,000	11/10/2017				Change Condition	TJPA	City Financing	Soundwall CIDH Pile Drilling Conditions
BSF	CCO # 11	\$33,699	11/10/2017				Change Condition	TJPA	City Financing	2nd Street OCS Removal & Replacement by SFMTA
BSF	CCO # 12	\$24,315	11/10/2017				Change Condition	TJPA	City Financing	SW1 Footing Conflict
BSF	CCO # 13	\$3,131	11/10/2017				Change Condition	TJPA	City Financing	SW3&4 Utility Conflicts
BSF	CCO # 14	\$99,194	11/10/2017				Change Condition	TJPA	City Financing	AW2 Buried Concrete Conflict
BSF	CCO # 15	\$221,914	11/10/2017				Change Condition	TJPA	City Financing	Class I Offhaul/Disposal Unit Price Adjustment
BSF	CCO # 16	\$43,925	11/10/2017				Change Condition	TJPA	City Financing	Class II Offhaul/Disposal Unit Price Adjustment
BSF	CCO # 17	\$10,000	11/10/2017				Owner Requested	TJPA	City Financing	Bus Link Striping and Signage
BSF	CCO # 18	\$250,000					Owner Requested	TJPA	City Financing	Flashing Beacon on Essex for Bus Merge
BSF	CCO # 19	\$80,000	11/10/2017				Owner Requested	TJPA	City Financing	Main Line Striping for Bus Merge
	Total	\$1,495,851		CCO F	inal Approved Total	\$0		<u> </u>		1

New Construction Changes	
n Process (Presented to CRC)	
Approved	