STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

CONTRACT CHANGE ORDER

Change Requested by: Engineer

CCO 88	Suppl. No. 0	Contract No. 04 - 0120F4	Road SF-80-13.2/13.9	FED. AID LOC.:

To: **AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENT**

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. ***NOTE: This change order is not effective until approved by the Engineer.***

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

Adjustment of Compensation at Lump Sum:

Provide additional project management personnel to identify, coordinate, and propose resolutions to Mechanical, Electrical, and Piping (MEP) issues. Attachment A & B contains a list of MEP issues, from Contractor submitted RFI's, in which this extra work is required. This CCO also fully resolves Notice of Potential Claim 1, dated January 26, 2007.

For this work, the Contractor will be paid the sum of $437,000.00. This agreed lump sum constitutes full compensation including all mark-ups, all direct and indirect costs, all overhead expenses, and all associated project impacts associated with this change.

This agreed lump sum does not provide any payments for contract scope changes related to the resolution of individual MEP issues, from Contractor submitted RFI's. If required, contract scope changes resulting from the resolution of MEP issues including, but not limited to, those in Attachment A & B will be addressed in other change orders.

No extension of contract time is warranted for this change.

Estimated cost of Adjustment of Compensation at Lump Sum $437,000.00

Estimated Cost: Increase ☑ Decrease ☐ **$437,000.00**

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by

Signature	Resident Engineer	Date
	Bill Shedd for Gary Pursell, P.E., Sup.T.E.	1-22-09

Approval Recommended by

Signature	Supervising Transportation Engineer	Date
Gary Pursell	Gary Pursell, Sup. TE	1/22/09

Engineer Approval by

Signature	Principal Transporation Engineer	Date
Gary Pursell	Peter Siegenthaler, Prin. TE	1/28/09

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.

Contractor Acceptance by

Signature	(Print name and title)	Date
Michael D. Flowers	Michael D. Flowers Project Director	1-27-09

Attachment A

(Electrical RFIs)

RFI	REV		SUBJECT
98	0		Location of Pipe Brackets on Counterweight Box
104	0		Clearance Between Barrier and Luminaire Support Box
104	1		Clearance Between Barrier and Luminaire Support Box
139	2		Tower Work Points
156	0		Future Light Pipe Penetrations
157	0		Conduit Route Outside Metal Barrier
157	1		Conduit Route Outside Metal Barrier
158	0		Light Circuit A3009 and A3010
159	0		Manufacturer and Make for Lighting
159	1		Manufacturer and Make for Lighting
160	0		Undeground Conduit Duct Bank
160	1		Undeground Conduit Duct Bank
203	0		Location of Future Lamp Housing
210	0		Legend for Lighting Fixtures
211	0		Lighting Fixture MAT
212	0		Light Circuit A3009 and A3010
217	0		Location of PB-LTG and PB-Com
217	1		Location of PB-LTG and PB-Com
217	2		Location of PB-LTG and PB-Com
218	0		PS-6 Layout at Bike Path
218	1		PS-6 Layout at Bike Path
218	2		PS-6 Layout at Bike Path
222	0		Steel Barrier Diaphragm & Connection Plate Layout
223	0		Pipe support PS-14 and PS-7 Layout Along Main Span Barrier
228	0		Suspender Bracket Lighting
228	1		Suspender Bracket Lighting
228	2		Suspender Bracket Lighting
232	0		PS-7 Layout at the Traffic Barriers
233	0		Piping at Bikepath in Confilict with Light Post housing
233	1		Piping at Bikepath in Confilict with Light Post housing
233	2		Piping at Bikepath in Confilict with Light Post housing
233	3		Piping at Bikepath in Confilict with Light Post housing
242	0		Receptacle in Metal Barrier
244	0		Lighting Conduit in Crossbeam without service platform
249	0		Light Pipe Conduit at Pier W2 and at East Transition
249	1		Light Pipe Conduit at Pier W2 and at East Transition
252	0		Tower Shaft conduit Penetration Conflicts
261	0		Conduit in Luminaire Support Box and Barrier Rail
264	0		Duplex Receptacle in Metal Barrier
264	1		Duplex Receptacle in Metal Barrier
270	0		Suspension Cable Conduit Support
289	0		Detail at Tower Transition
290	0		Strong Motion Detection System
299	0		Conduits Through Eastbound OBG between PP40 and PP41
317	0		Service Platform Issues (Candraft Tensor)

Attachment A

(Electrical RFIs)

317	1		Service Platform Issues (Candraft Tensor)
317	2		Service Platform Issues
317	3		Service Platform Issues
326	0		Luminaire Support Box Pipe Sleeves
334	0		Conduit Penetrations Through Diaphragm Plates of Barrier Rail
334	1		Conduit Penetrations Through Diaphragm Plates of Barrier Rail
335	0		Light Pole Shims
374	0		Universal Concrete Insert
375	0		Cable Tray Support
376	0		Location of Seismic Sensor 29-2
377	0		Cable Trays at East Transition
378	0		Pipe Beam Conduits
379	0		Tower Conduit Penetrations at Elevation 89.950 m.
379	1		Tower Conduit Penetrations at Elevation 89.950 m.
387	0		Tower Conduit Penetrations Between Stiffeners A3 and A4
401	0		Pier 1 Tower Base Pylon Lights
402	0		Pier 1 Tower Conduit Penetration
402	1		Pier 1 Tower Conduit Penetration
431	0		Penetrations Through Tower Skin for Dehumification System @ Elev. 9M
432	0		Typical Utility Conduit/Pipe Penetration Detail
432	1		Typical Utility Conduit/Pipe Penetration Detail
450	0		Pipe Sleeve Identification
450	1		Pipe Sleeve Identification
451	0		Redesigned Conduit Routing
451	1		Redesigned Conduit Routing
453	0		Coordination of Electrical System Attachments to the OBG and Tower Steel
460	0		Mech Expansion Joint in Close Proximity to Cable Tray at Pier
460	1		Mech Expansion Joint in Close Proximity to Cable Tray at Pier
461	0		Fixture Visors
462	0		Seismic Boxes - Material Type
463	0		Seismic Sensor Enclosure 23-3 at Tower Base
464	0		Light and Sign Pole Pedestal Placement and Detail
466	0		Tower Aesthetic Lights Attached to Bike Path
467	0		Suspender Up-Lights Attached to OBG and Counterweight
472	0		15 kV Splice Box
472	1		15 kV Splice Box
472	2		15 kV Splice Box
472	3		15 kV Splice Box
474	0		Nema 4X Wireway
475	0		MVDS Conduit Routing
476	0		Cable Tray
476	1		Cable Tray
480	0		Bike Path Pipe Supports at Transition to Skyway
485	0		Pipe Conflicts at Tower South Access, and Platform Steel
485	1		Pipe Conflicts at Tower South Access, and Platform Steel
485	2		Pipe Conflicts at Tower South Access, and Platform Steel

Attachment A

(Electrical RFIs)

498	0		Pipe Support at Bike Path West of PP9
499	0		Revised Layout for Dehumidification Penetrations and Attachments at West Cable Anchorage
543	0		Electrical Penetrations and Conduit Support at Tower
561	0		Pull Boxes and Conduit at Barrier, West of PP10
563	0		Fog Detection System
564	0		Ground Cable Tower Base
565	0		Conduits Inside Steel Box Pedestal for Light Pole and Overhead Sign
565	1		Conduits Inside Steel Box Pedestal for Light Pole and Overhead Sign
565	2		Conduits Inside Steel Box Pedestal for Light Pole and Overhead Sign
565	3		Conduits Inside Steel Box Pedestal for Light Pole and Overhead Sign
565	4		Conduits Inside Steel Box Pedestal for Light Pole and Overhead Sign
573	0		4" and 2-1/2" Piping Drops to Underside of Bike Path
583	0		Interference between electrical conduits and standard platform inside crossbeam
584	0		Interference between Type VII cable tray support and catwalk to crossbeam access
584	1		Interference between Type VII cable tray support and catwalk to crossbeam access
585	0		Conflicts between pipe supports, drainage flumes and pole pedestals along OBG
591	0		Electrical work in area of bike path West of PP9
604	0		Fiber Optic Outside Plant Cable
611	0		Cable railing base plates and drainage diverter plates type 1 interference
612	0		Cable railing base plates and drainage diverter plates type 3 interference
613	0		Modification to Barrier (and related) details - Constructability issues
631	0		Temporary Power for Navigation Warning and Fog Detection Systems
675	0		Cable Tray Geometry and Supports
678	0		Call Box Mounting
678	1		Call Box Mounting
687	0		Dyson Corporation MFSQA
706	0		Pull Box PB-3A @ Tower Platform 53.85
707	0		Utility Panels and Pull Boxes @ Tower Platform Elev. 53.85
707	1		Utility Panels and Pull Boxes @ Tower Platform Elev. 53.85
707	2		Utility Panels and Pull Boxes @ Tower Platform Elev. 53.85
707	3		Utility Panels and Pull Boxes @ Tower Platform Elev. 53.85
707	4		Utility Panels and Pull Boxes @ Tower Platform Elev. 53.85
726	0		Pull Boxes A,B, C, D @ Tower Platform Elev. 53.85
726	1		Pull Boxes A,B, C, D @ Tower Platform Elev. 53.85
729	0		Design Review for Utility Platform @ Eastbound Structure between Crossbeam and Tower
734	0		Elevator General Arrangement
734	1		Elevator General Arrangement
734	2		Elevator General Arrangement
789	0		Conduit Routing @ West End
793	0		Cable Tray Supports @ West End OBG
794	0		Cable Tray Supports Type I, II, and III
794	1		Cable Tray Supports Type I, II, and III
811	0		Transverse Cable Tray Support Layout
811	1		Transverse Cable Tray Support Layout
814	0		Cable Tray Supports Inside OBG in Vicinity of PP117 to PP119

Attachment A

(Electrical RFIs)

834	0		Additional Pipe Sleeves for Electrical Penetrations in OBG Side Plates Near PPs 14, 32, 50, 80, 110
834	1		Additional Pipe Sleeves for Electrical Penetrations in OBG Side Plates Near PPs 14, 32, 50, 80, 110
839	0		Pole Pedestal Pipe Sleeve Arrangement
845	0		Cable Tray Supprts @ East End OBG, Vicinity of PP125 to PP127
857	0		Support for Conduits Routed to Platform at EB Structure
857	1		Support for Conduits Routed to Platform at EB Structure
861	0		Catwalk Interference and Obstruction
867	0		Catwalk Details at Xbeam
873	0		Navigation Light Mounting and Fixture Details
878	0		MEP Markups on Previously Returned Submittals 108, 115, 131, 139, 140, 143, 149, 169, 170
897	0		MEP/OBG Deck Level Conflicts Resolution
897	1		MEP/OBG Deck Level Conflicts Resolution
919	0		Cable Tray Location at PP114 and PP110
919	1		Cable Tray Location at PP114 and PP110
941	0		Tower Marker Lights Type MAP, at Tower Head
942	0		Aviation Light Type AV-1 @ Tower Head
949	0		Paint Requirements for all Exposed Electrical Conduits
968	0		Bike Path Light Fixture Quantity
969	0		Bike Path Lighting Metal Clad Cable Connector
969	1		Bike Path Lighting Metal Clad Cable Connector
1013	0		OBG-MEP Desk Penetrations-Pipe Sleeve Sizes & Locations
1026	0		Anchorage for cable tray in girders
1029	0		Electrical Penetrations and Attachments for Lifts 3 and 4
1029	1		Electrical Penetrations and Attachments for Lifts 3 and 4
1029	2		Electrical Penetrations and Attachments for Lifts 3 and 4
1029	3		Electrical Penetrations and Attachments for Lifts 3 and 4
1038	0		Penetrations on Design 964/1204
1064	0		Barrier Mounted Sign interferes with 2.5" Water Pipe
1065	0		CCTV cameras
1100	0		Fuse holder & Fuses for Luminaires MSR, MAU and MAD
1100	1		Fuse holder & Fuses for Luminaires MSR, MAU and MAD
1122	0		Confirmation of Cooper B-Line B22 and B22A for MEP Channel Struts
1133	0		Fiber Optic Manhole 27-Type P Cabinet
1134	0		Panels, Circuit Breakers, Transformer at Tower Elev 89.95
1136	0		Service platform equipment racks & interference with stairs
1161	0		Electrical Safety Switches
1166	0		Layout and detail for miscellaneous barrier attachments
1204	0		Level of Illumination for Roadway Lights
1219	0		Pipe Support Changes at Bikepath
1225	0		Misc. Service Platform Details
1237	0		Hand Stanchion Pad
1244	0		MEP Changes effecting the Cable Bands
1325	0		Luminaire Support at Crossbeam
1326	0		Additional MEP Penetrations

Attachment A

(Electrical RFIs)

1334	0		Fog Detection Panel
1334	1		Fog Detection Panel
1338	0		Catwalk Configuration and Cable Tray location Clarification in Lift OBE 13
1338	1		Catwalk Configuration and Cable Tray location Clarification in Lift OBE 13
1413	0		Light fixture F4 Layout in West and East Girders
1472	0		Tower Light Fixture Plates

Attachment B

(Mechanical RFIs)

RFI	REV		SUBJECT
9	0		Domestic Water Piping material
10	0		Compressed Air Piping material
11	0		Painting versus hot dip galvanized
43	0		Copies of Skyway Piping Submittal
102	0		Bolt Spacing at Barrier Connection to Deck plate
103	0		Plane of the top of the barrier
107	0		Log of Pre-1998 Test Borings and Foundation Details for the YBI Torpedo Building
116	0		Support Size for PS-3 with Bolted Connection
117	0		Height of Pipe off Deck with Detail as Drawn for PS-5
118	0		Intake Louvers
119	0		Diaphragm Penetrations
120	0		Duct Penetration Opening
120	1		Duct Penetration Opening
121	0		Penetration in Girders, Walls, or Structures within the Dehumidification Zone
122	0		Louver at Tower Skirt
122	1		Louver at Tower Skirt
123	0		PS-13 Connection to Structure
124	0		Dehumidification System Exhaust
125	0		Dehumidification System Humidistat
177	0		Section D-D Drawing M-12 and PS-2 Detail
180	0		Conduit Routing Dehumidifier #3
189	0		PS-20 Conflicts
202	0		Barrier Support-Bolt spacing at connection
207	0		OBG Longitudinal Trusses
224	0		Safety Railing and Handrail Controlling Dimensions and Details
225	0		Tower Access Safety Issues
225	1		Tower Access Safety Issues
238	0		Rods at Barrier Connection to Longitudinal Truss
239	0		Ladder Positioning at Tower Head
243	0		PS-17 Dimension Conflict With Details
245	0		Conflict with 6" CCSF Reclaimed Water and 12" CCSF Water
256	0		Service Platform Location Connection to Crossbeam
256	1		Service Platform Location Connection to Crossbeam
265	0		PS-1 Plate on Girder
276	0		Flex connectors on CCSF Risers
291	0		Base of West Pier Piping
292	0		Incorrect coordinates on Drawing 13/1204
301	0		Barrier Anchor Rod Tention
302	0		Concrete Luminaire Support Anchor Bolts
303	0		Light Pole Connection to Crossbeams
338	0		6" CCSF Reclaimed Water Reroute
356	0		Maintenance Traveler Warranty
373	0		Pipe Offsets in Conflict with Bridge Deck
373	1		Pipe Offsets in Conflict with Bridge Deck
389	0		PS-14 Location at Transition to Bridge Deck

Attachment B

(Mechanical RFIs)

403	0		Conflicts at W2
404	0		Support at Expansion Loops
433	0		Payment of Maintenance Travelers
452	0		Coordination of Mechanical System Attachments to the OBG and Tower Steel
465	0		Tower Aesthetic Lights attached to OBG, Crossbeam and Counterweight
468	0		Lighting Details No. 1, Deck Mounting Bracket Conflict
481	0		The Location and Elevation at Skyway for 2-1/2" CW and 4" CA
482	0		Pipe Offsets at Tower North Access
487	R0		Request for Under Bay Utility Infomation
488	0		Embed Plates at W2 Pier Cap
490	0		Barrier Diverter Plate Thickness
495	0		Pipe Support PS-18 at base of Pier W2E and W2W
511	0		Gap at Hinge A
530	0		Rolled Shapes material substitution for utility duct pipe sleeves
536	0		Elevator Options
538	0		Elevator Floor and Ceiling Materials
577	0		Elevator Landings, Safety Gates, and Enclosures
603	0		Pipe Support PS-13
605	1		Cable Railing Termination @ East and West ends of the Brdige
676	0		PS-22 Pipe Supports at OBG East End
681	0		Deck Drainage
710	0		Traveler Scaffold Mechanical Equipment Stop Order
738	0		Additional Pipe Support at W2 Cap Beam for 10 NPS Sewer Line
743	0		Pipe Sleeve Material Substitution
749	0		Anticipated Interferences for Pipe Support Embed Plates @ W2 Cap Beam
790	0		Cable Tray Transverse Beam Location
790	1		Cable Tray Transverse Beam Location
807	0		Barrier Flume Specifications
918	0		Elevator Buffer Support Detail
933	0		Oversized Bolt hole in steel barrier
933	1		Oversized Bolt hole in steel barrier
934	0		Alternate Fittings for Ductile Iron Pipe
954	0		Service Platform Angle Size Confirmation
993	0		No Cost or time impacts in the performance of our Work
1049	0		Traveler Suspension Connection
1050	0		Fixed Stair System for SAS Eastbound Travelers
1066	0		Traveler Details for Bikepath
1067	0		Access ladder Details for Bikepath Traveler
1091	0		P.E. stamp for traveler submittals
1091	1		Engineer's Stamp Requirment for Traveler Scaffold working/shop drawings.
1092	0		Cable rail interferences
1141	0		Pad eye interference with Mechanical piping
1160	0		PS-12 (anchor pipe support) clarification
1164	0		Pipe, fittings and valves welding quality control
1168	0		CCO 44 (Handrail Penetrations) in barrier at call boxes
1189	0		Tower Head Access Opening

Attachment B

(Mechanical RFIs)

1205	0		Paint Specification for Ductile Iron pipe
1249	0		Dehumidification Support Details for West Cable Anchorage
1404	0		Booster Pump and Expansion Tank Layout at 53m Platform
1404	1		Booster Pump and Expansion Tank Layout at 53m Platform
1404	2		Booster Pump and Expansion Tank Layout at 53m Platform
1404	3		Booster Pump and Expansion Tank Layout at 53m Platform
1414	0		Pipe Support Conflict at Bike Path PP121
1414	1		Pipe Support Conflict at Bike Path PP121
1417	1		Oversize Holes & Hole Spacing in OBG Deck Plates for Flumes
1426	0		Misc. Attachments for MEP Purpose
1433	0		Messenger Cable-eval by CABLE group
1439	0		conflicts between CCO 42S1 sheets and structural stiffener layout
1462	0		Existing Ground Cables at Pier E2
1471	0		East Cable Anchorage Dehumidification System Issue
1568	0		Suspension Cable