Toll Bridge Seismic Retrofit Program Report

TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Second Quarter Report

June 30, 2007

TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS · BAY AREA TOLL AUTHORITY · CALIFORNIA TRANSPORTATION COMMISSION

Toll Bridge Program Oversight Committee
Department of Transportation
Office of the Director
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

August 13, 2007

Mr. James C. Ghilmetti, Chair
California Transportation Commission
1120 N Street, Room 2221
Sacramento, CA 95814

Mr. John Chalker, Vice-Chair
California Transportation Commission
1120 N Street, Room 2221
Sacramento, CA 95814

Dear Commissioners Ghilmetti and Chalker:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the 2007 Second Quarter "Toll Bridge Seismic Retrofit Program Report," prepared pursuant to California Streets and Highways Code Section 30952.2. The Second Quarter report includes project progress and activities for the Toll Bridge Seismic Retrofit Program through June 30, 2007.

California Streets and Highways Code Section 30952.1 established the TBPOC to exercise project oversight and control over the Toll Bridge Seismic Retrofit Program. The TBPOC is comprised of the Director of the Department of Transportation (Department), the Executive Director of the Bay Area Toll Authority (BATA), and the Executive Director of the California Transportation Commission (CTC). The TBPOC's program oversight and control activities include review and approval of contract bid documents, review and resolution of project issues, evaluation and approval of project change orders and claims, and the issuance of monthly and quarterly program progress reports.

As highlighted in the Second Quarter report, the San Francisco-Oakland Bay Bridge (SFOBB) will be closed in both directions over the upcoming Labor Day Weekend to reconstruct a portion of the upper roadway deck near the Yerba Buena Island Tunnel. The bridge closure is scheduled to start at 8:00 pm Friday evening August 31st and last through 5:00 am Tuesday morning September 4th. The TBPOC is implementing extensive public and media outreach campaigns to familiarize the public with the impacts of the bridge closure.

On July 17, 2007, the Department awarded the Oakland Touchdown Phase 1 (OTD 1) contract of the SFOBB East Span Seismic Replacement Project to MCM Construction. The low bid was $20.6 million less than the engineer's estimate. The OTD 1 contract will construct the westbound approach and most of the eastbound approach to the new SFOBB East Span from Oakland.

In addition to oversight responsibilities over the Toll Bridge Seismic Retrofit Program, the TBPOC also oversees the delivery of the New Benicia-Martinez Bridge, a $1.2 billion Regional Measure 1 Toll Bridge Program project. The TBPOC is pleased to report that the construction of the New Benicia-Martinez Bridge is complete and is scheduled to open to traffic over the weekend of August 25, 2007.

The TBPOC is committed to providing the Legislature with comprehensive and timely reporting on the Toll Bridge Seismic Retrofit Program. If there are any questions or if any additional information is required, please do not hesitate to contact the members of the TBPOC.

Sincerely,

WILL KEMPTON
Director
California Department of Transportation
Chair, TBPOC

JOHN F. BARNA, JR.
Executive Director
California Transportation Commission

STEVE HEMINGER
Executive Director
Bay Area Toll Authority

TOLL BRIDGE PROGRAM
OVERSIGHT COMMITTEE

CALTRANS BAY AREA TOLL AUTHORITY CALIFORNIA TRANSPORTATION COMMISSION

Toll Bridge Program Oversight Committee
Department of Transportation
Office of the Director
1120 N Street
P.O. Box 942873
Sacramento, CA 94273-0001

August 13, 2007

Mr. Gregory Schmidt
Secretary of the Senate
State Capital, Room 3044
Sacramento, CA 95814

Mr. E Dotson Wilson
Chief Clerk of the Assembly
State Capital, Room 3196
Sacramento, CA 95814

Dear Messrs. Schmidt and Wilson:

The Toll Bridge Program Oversight Committee (TBPOC) is pleased to submit the 2007 Second Quarter "Toll Bridge Seismic Retrofit Program Report," prepared pursuant to California Streets and Highways Code Section 30952.2. The Second Quarter report includes project progress and activities for the Toll Bridge Seismic Retrofit Program through June 30, 2007.

California Streets and Highways Code Section 30952.1 established the TBPOC to exercise project oversight and control over the Toll Bridge Seismic Retrofit Program. The TBPOC is comprised of the Director of the Department of Transportation (Department), the Executive Director of the Bay Area Toll Authority (BATA), and the Executive Director of the California Transportation Commission (CTC). The TBPOC's program oversight and control activities include review and approval of contract bid documents, review and resolution of project issues, evaluation and approval of project change orders and claims, and the issuance of monthly and quarterly program progress reports.

As highlighted in the Second Quarter report, the San Francisco-Oakland Bay Bridge (SFOBB) will be closed in both directions over the upcoming Labor Day Weekend to reconstruct a portion of the upper roadway deck near the Yerba Buena Island Tunnel. The bridge closure is scheduled to start at 8:00 pm Friday evening August 31st and last through 5:00 am Tuesday morning September 4th. The TBPOC is implementing extensive public and media outreach campaigns to familiarize the public with the impacts of the bridge closure.

On July 17, 2007, the Department awarded the Oakland Touchdown Phase 1 (OTD 1) contract of the SFOBB East Span Seismic Replacement Project to MCM Construction. The low bid was $20.6 million less than the engineer's estimate. The OTD 1 contract will construct the westbound approach and most of the eastbound approach to the new SFOBB East Span from Oakland.

In addition to oversight responsibilities over the Toll Bridge Seismic Retrofit Program, the TBPOC also oversees the delivery of the New Benicia-Martinez Bridge, a $1.2 billion Regional Measure 1 Toll Bridge Program project. The TBPOC is pleased to report that the construction of the New Benicia-Martinez Bridge is complete and is scheduled to open to traffic over the weekend of August 25, 2007.

The TBPOC is committed to providing the Legislature with comprehensive and timely reporting on the Toll Bridge Seismic Retrofit Program. If there are any questions or if any additional information is required, please do not hesitate to contact the members of the TBPOC.

Sincerely,

WILL KEMPTON
Director
California Department of Transportation
Chair, TBPOC

JOHN F. BARNA, JR.
Executive Director
California Transportation Commission

STEVE HEMINGER
Executive Director
Bay Area Toll Authority

Table of Contents

Executive Summary 1
Program Overview 4
Table 2-Toll Bridge Seismic Retrofit Program—Cost Summary 5
Table 3-Toll Bridge Seismic Retrofit Program—Schedule Summary 6
Program Costs 7
Baseline and Projected Budget 7
Program Schedule 8
Baseline and Projected Schedule 8
Program Funding and Financing 9
Funding Status 10
Program Financing 11
Project Status 12
Ongoing Construction Projects 12
SFOBB West Approach 12
Milestones Achieved 12
Project Funding 12
Major Risk Issues 13
SFOBB East Span Seismic Replacement 15
Milestones Achieved – East Span Contracts 18
Project Funding 21
Baseline and Projected Budget and Schedule 21
Major Risk Issues 23
SFOBB East Span Project Replacement Risk Management Plan 23
Completed Projects 24
Risk Management Program 27
Other Toll Bridges 29
Dumbarton and Antioch Bridges 29
Summary of TBPOC Expenses 30
Appendices 31
Appendix A-1 32
Appendix A-2 33
Appendix B. 34
Appendix C. 36
Appendix D. 37

Executive Summary

The Toll Bridge Program Oversight Committee (TBPOC) submits the 2007 Second Quarter Report ending June 30, 2007, for the Toll Bridge Seismic Retrofit Program (TBSRP) in accordance with Assembly Bill (AB) 144 and Senate Bill (SB) 66. This report provides the following:

1. Information on the progress of each project in the program.
2. Baseline budget for Capital Outlay (CO) and Capital Outlay Support (COS).
3. Current projected costs for CO and COS.
4. Expenditures to date.
5. Comparison of the baseline schedule to the March 2007 projected schedule.
6. Summary of the milestones achieved during the quarter.
7. Major risk assessment for the remaining projects.
8. Summary of expenses incurred by the TBPOC in performing its duties.

Major Milestones During the Second Quarter 2007

Significant progress on the completion of the seismic retrofit projects continued during this past quarter. Only one of the seven toll bridges in the TBSRP remains to be retrofitted. Appendix D includes a gallery of photos of construction activities on the bridge projects. The major milestones achieved during the quarter include:

- The San Francisco-Oakland Bay Bridge (SFOBB) West Approach Project is 81 percent complete as of June 20, 2007 and is on schedule to finish in August 2009. The demolition of the final 3000-foot section of the old I-80 freeway structure was completed mid April 2007, and was done on a compressed schedule from the as-planned 110 days to 17 days. Major ongoing work during the quarter includes the rebuilding of the new EB 80 structure with pile and column installation continuing throughout the summer, with falsework installation to follow. An extensive public outreach effort continues and will be necessary until the spring of 2008 for the construction of the EB80 adjacent to Stillman Street area. Harrison Off ramp falsework is complete and concrete for stem/soffit was poured in June 2007. Frame 7U temporary supports and falsework started in mid June and will continue through August 2007.

- The SFOBB East Span Seismic Replacement Project Skyway contract is expected to be completed in December 2007. Remaining work includes final post-tensioning of the bridge segments and spans, installation of cantilevered

T1 Foundation

bicycle/pedestrian pathway and service platforms, electrical, polyester overlay, painting and punch list work.

- The SFOBB East Span Seismic Replacement Project Self-Anchored Suspension (SAS) Marine Foundation East Pier and Tower Pier (E2/T1) contract is on schedule to be completed by March 2008. At the East Pier (E2) foundation, all piles are complete and pile head connections have all been welded. At the Tower Pier (T1), all steel foundation casings and rock sockets have been installed. The basketball court-sized T1 footing box was set into place on March 17, 2007. The T1 bottom slab concrete has been placed and the bottom lift rebar cages for the E2 pier columns have been fabricated.

- For the SFOBB East Span Seismic Replacement Project SAS Superstructure contract, American Bridge/Flour (ABF), the prime contractor for the project, has mobilized staff to their field offices at Pier 7 in Oakland and in China. ABF and their subcontractors continue to prepare and submit requests for information and submittals for Caltrans review and response. A final baseline schedule has been accepted by Caltrans. The contractor continues to finalize agreements with manufacturers, fabricators, suppliers and subcontractors. Design of the crane barge to be used to lift heavy tower and deck sections has been completed and barge fabrication is currently in progress in Oregon. Falsework pads for the W2 Capbeam on Yerba Buena Island have been completed and are being erected. Zhenhua Port Machinery Company (ZPMC) of Shanghai, China, who was contracted to supply and fabricate all the major steel structures in SAS including the tower, orthotropic box girders, and bike paths, is currently setting up their facilities to begin fabrication of the SAS tower and deck sections. ZPMC has prepared initial test mockups of the bridge sections and plans to begin production fabrication later in the fall of 2007 as final shop drawing submittals are approved.

- On the Project Yerba Buena Island Detour temporary structures contract, Caltrans is designing the East and West tie-ins from the existing bridge and tunnel to the detour structure. The construction of the tie-ins are being managed by Caltrans to be completed in conjunction with the SAS schedule to minimize impacts to the traveling public. YBI Detour Viaduct fabrication continues in Korea and is expected to begin shipment in November 2007.

- Construction has also begun on advanced Yerba Buena Island Transition Permanent Structures (YBITS) foundation work. Foundation and columns at Pier W3 were completed, while work on the foundation of W4L and the retrofitting of the upper deck approach to the Yerba Buena Island Tunnel are in progress, as well. The upper deck approach superstructure will require a three day weekend-long closure of the Bay Bridge to demolish the existing structure and roll in the replacement upper roadway. This is currently planned to occur during the Labor Day weekend of 2007. These actions are significantly advancing the permanent SFOBB East Span structure construction on Yerba Buena Island to reduce risk to the SFOBB East Span Seismic Retrofitting Project.

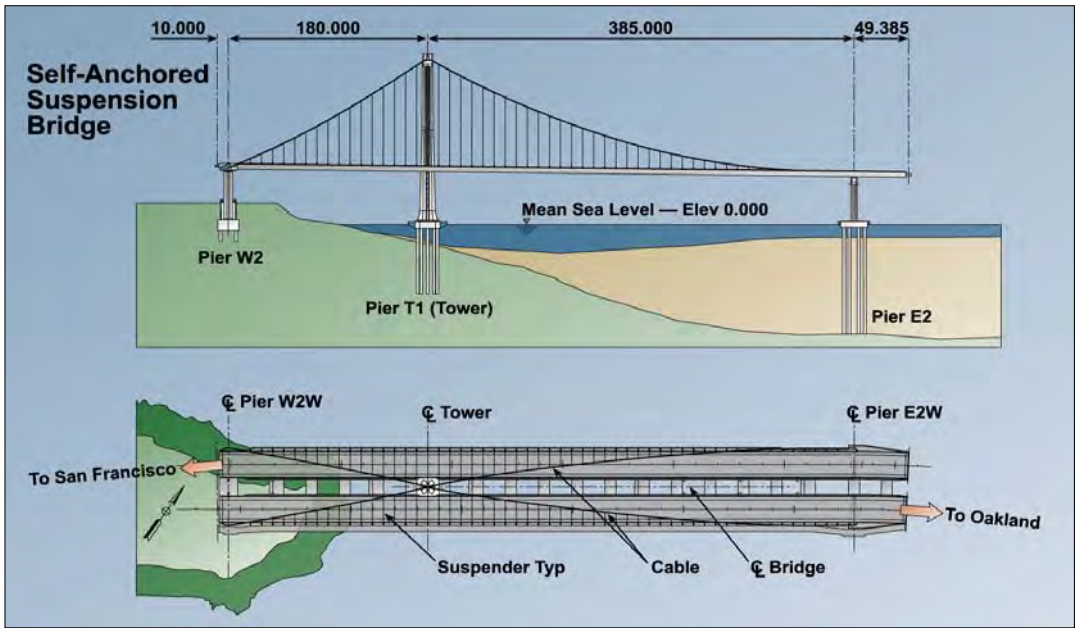
- The SFOBB East Span Seismic Replacement Project Oakland Touchdown (OTD) Submarine Cable contract was approved by Caltrans on

Cable for the Oakland Touchdown Submarine cable project

January 11, 2007. The contract will replace the existing submerged electrical cable from Oakland to Treasure Island. Additional non-program funding to support allocation beyond the $9.6 million of available program funds has been made available by the Treasure Island Development Authority. On January 11, 2007, Caltrans approved a contract with Manson Construction for the submarine cable contract. Notice to proceed was issued on February 6, 2007. The cable was completely installed and energized in late July. The contractor is now de-mobilizing.

- The SFOBB East Span Seismic Replacement Project OTD #1 contract was advertised on February 26, 2007. Bids opened on June 5, 2007, and the contract was awarded July 17, 2007. There were 4 bids submitted, with the lowest bid being $178.0 million which was $20.6 million below the engineer's estimate. This contract will construct the westbound approach structure from the toll plaza to the new Skyway and a significant portion of the eastbound approach structure. The contract is scheduled to be completed in October 2009.

- In March 2007, the TBPOC approved a number of changes to the Yerba Buena Island Detour contract to better integrate the detour work into the current project schedule and to reduce overall project risks by advancing Yerba Buena Island Transition Structures (YBITS) foundation work into the YBI Detour contract. These changes increased the YBI Detour contract budget by $202.5 million and decreased the YBITS contract by $23.2 million. The net project increase will be funded from the existing program contingency and does not change the overall Toll Bridge Seismic Retrofit Program budget.



Program Overview

Seven of the nine state-owned toll bridges were identified for seismic retrofit in the TBSRP:

1. Benicia-Martinez Bridge
2. Carquinez Bridge
3. San Mateo-Hayward Bridge
4. Vincent Thomas Bridge
5. San Diego-Coronado Bridge
6. Richmond-San Rafael Bridge
7. SFOBB (west span, west approach replacement, and east span replacement).

Seismic retrofit of these complex structures presents an extremely difficult engineering challenge and nowhere in the world has a bridge seismic safety program of this size been undertaken. Although the Dumbarton and the Antioch bridges were not included in the program, Caltrans is continuing to work on seismic vulnerability studies to assess the potential for necessary retrofit work on these structures. See discussion on page 29.

As shown in *Table 1-TBSRP Project Status*, a significant portion of the TBSRP is complete. Only the SFOBB West Approach and new East Span Seismic Replacement projects remain to be seismically retrofitted.

The Second Quarter 2007 forecast for those projects indicates that they will be completed within the current TBPOC approved cost and schedule estimates. *Tables 2 and 3* on the following pages provide a summary of the cost, schedule, and status of all the TBSRP projects.

Table 1-TBSRP Project Status

Toll Bridge Seismic Retrofit Projects	Seismic Safety Status
San Francisco-Oakland Bay Bridge East Span Replacement	Construction
San Francisco-Oakland Bay Bridge West Approach Replacement	Construction
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit	Complete
San Mateo-Hayward Bridge Seismic Retrofit	Complete
Richmond-San Rafael Bridge Seismic Retrofit	Complete
Carquinez Bridge Eastbound Seismic Retrofit	Complete
Benicia-Martinez Bridge Seismic Retrofit	Complete
San Diego-Coronado Bridge Seismic Retrofit	Complete
Vincent Thomas Bridge Seismic Retrofit	Complete

Table 2-Toll Bridge Seismic Retrofit Program—Cost Summary ($Millions)

Project	Work Status	AB 144 / SB 66 Budget (07/2005)	Approved Changes	Current Approved Budget (06/2007)	Actual Cost To Date (06/2007)	2nd Quarter 2007	At-Completion Variance	Cost Status
a	b	c	d	e = c + d	f	g	h = g - e	i
Capital Outlay Support		959.4	-	959.4	511.1	977.1	17.7	
Capital Outlay Construction								
Skyway	Construction	1,293.0	-	1,293.0	1,164.6	1,293.0	-	
SAS E2/T1 Foundations	Construction	313.5	-	313.5	230.1	313.5	-	
SAS Superstructure	Construction	1,753.7	-	1,753.7	275.1	1,767.4	13.7	
YBI Detour	Design/ Const	131.9	202.5	334.4	61.1	334.4	-	
YBI Transition Structures	Design	299.3	(23.2)	276.1	-	276.1	-	
Oakland Touchdown		283.8	-	283.8	1.6	302.5	18.7	
* OTD Submarine Cable	Construction	-	-	-	1.6	9.6	-	
* OTD No. 1 (Westbound)	Design	-	-	-	-	226.5	-	
* OTD No. 2 (Eastbound)	Design	-	-	-	-	62.0	-	
* OTD Electrical Systems	Design	-	-	-	-	4.4	-	
Existing Bridge Demolition	Design	239.2	-	239.2	-	222.0	(17.2)	
Stormwater Treatment Measures	Construction	15.0	3.3	18.3	11.5	18.3	-	
			-				-	
Right-of-Way and Environmental Mitigation		72.4	-	72.4	38.8	72.4	-	
Total SFOBB East Span Replacement Project		5,486.6	179.2	5,665.8	2,383.8	5,674.7	8.9	
SFOBB West Approach Replacement	Construction							
Capital Outlay Support		120.0	-	120.0	94.8	120.0	-	
Capital Outlay Construction		309.0	-	309.0	246.5	309.0	-	
Total SFOBB West Approach Replacement		429.0	-	429.0	341.3	429.0	-	
Richmond-San Rafael Bridge Retrofit	Construction							
Capital Outlay Support		134.0	(7.0)	127.0	126.4	127.0	-	
							-	
Total Richmond-San Rafael Bridge Retrofit		914.0	(89.0)	825.0	792.6	825.0	-	
Program Completed Projects	Complete							
Capital Outlay Support		219.8	-	219.8	219.4	219.8	-	
Capital Outlay Construction		705.6	-	705.6	698.1	705.6	-	
Total Program Completed Projects		925.4	-	925.4	917.5	925.4	-	
			-				-	
Program Contingency		900.0	(90.2)	809.8	-	800.9	(8.9)	
Total Toll Bridge Seismic Retrofit Program		8,685.0	-	8,685.0	4,459.9	8,685.0	-	

Within Approved Schedule and Budget

Potential Cost and Schedule Impacts: Likely future need for Program Contingency Allocation

Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming

Note: Details may not sum to totals due to rounding effects.

Table 3-Toll Bridge Seismic Retrofit Program—Schedule Summary

Project	AB 144 / SB 66 Project Complete Baseline (07/2005)	Approved Changes (Months)	Project Complete Current Approved Schedule (07/2007)	Project Complete Schedule Forecast (06/2007)	Schedule Variance (Months)	Schedule Status	Remarks
a	b	c	d= b + c	e	f = e – d	g	h
SFOBB East Span Replacement Project							
Skyway	Apr 07	8	Dec 07	Dec 07	-	●	.
SAS Superstructure	Mar 12	12	Mar 13	Mar 13	-	●	See Note.
YBI Transition Structures	Nov 13	12	Nov 14	Nov 14	-	●	In March 2006, the TBPOC approved the split of the YBI contract into three contracts.
• OTD Submarine Cable	n/a		Jan 08	Jan 08	-	●	This contract was approved on January 11, 2007.
• OTD Westbound	n/a		Jan 10	Jan 10	-	●	After bid opening on June 5, the contract was awarded on July 17.
• OTD Eastbound	n/a		Nov 14	Nov 14	-	●	See Note.
Existing Bridge Demolition	Sep 14	12	Sep 15	Sep 15	-	●	See Note.
Stormwater Treatment Measures	Mar 08	-	Mar 08	Mar 08	-	●	Forecast based on actual award date and duration in Contractor's A+B bid.
Open to Traffic Date: Westbound	Sep 11	12	Sep 12	Sep 12	-	●	See Note.
Open to Traffic Date: Eastbound	Sep 12	12	Sep 13	Sep 13	-	●	See Note.
SFOBB West Approach Replacement	Aug 09	-	Aug 09	Aug 09	-	●	
• Seismic Retrofit	Aug 05	-	Aug 05	Oct 05	2	●	Seismic retrofit completed July 29, 2005. Formal acceptance of this contract on October 28, 2005. $89 million has been transferred to Program Contingency.
• Public Access Project	n/a	-	May 07	Sep 07	4	●	

Note: Schedules for selected projects and the Open to Traffic dates were extended by 12 months from the AB 144/SB 66 baseline schedule due to Addenda #5 and #7 on the SAS Superstructure contract in response to bidder inquiries and to reduce costs.

Program Costs

Baseline and Projected Budget

The 2005 AB 144/SB 66 baseline budget is $7.785 billion for CO and COS plus $900 million in program contingency for a total baseline budget of $8.685 billion. The Second Quarter 2007 forecast for the program remains steady at the $8.685 billion budget. The Second Quarter 2007 forecast for the SFOBB East Span Project has increased to $5.675 billion due to a revised construction cost estimate on the OTD #1 and YBI Detour contracts.

Additional cost estimate and expenditure detail for the TBSRP are included in Appendices A-1 and A-2. The details of the cost estimates and expenditures for the SFOBB East Span are shown in Appendix B.

West Approach

Table 4-Toll Bridge Seismic Retrofit Program Baseline (AB 144/SB 66) And Forecasts ($ Millions)

Contracts	AB 144 / SB 66 Baseline Budget	Approved Changes	Current Approved Budget	2nd Quarter 2007 Forecast	Difference from Current Approved Budget
Completed Projects					
Benicia-Martinez	177.8	-	177.8	177.8	-
Carquinez	114.2	-	114.2	114.2	-
San Mateo-Hayward	163.5	-	163.5	163.5	-
Vincent Thomas	58.5	-	58.5	58.5	-
San Diego-Coronado	103.5	-	103.5	103.5	-
SFOBB West Span	307.9	-	307.9	307.9	-
Ongoing Projects					
Richmond-San Rafael	914.0	(89.0)	825.0	825.0	-
SFOBB West Approach	429.0	-	429.0	429.0	-
SFOBB East Span	5,486.6	179.2	5,665.8	5,674.7	(8.9)
Miscellaneous Program Costs	30.0	-	30.0	30.0	-
Subtotal	7,785.0	90.2	7,875.2	7,884.1	(8.9)
Program Contingency	900.0	(90.2)	809.8	800.9	8.9
Total Program	8,685.0	-	8,685.0	8,685.0	-

Program Schedule

Baseline and Projected Schedule

Seismic retrofit on six of the seven toll bridges in the TBSRP is complete. These structures include the Benicia-Martinez, Carquinez, Richmond-San Rafael, San Mateo-Hayward, Vincent Thomas, and San Diego-Coronado bridges. Seismic retrofitting of the SFOBB west span was completed in June 2004. The SFOBB West Approach and East Span Seismic Replacement projects are currently under construction. The current June 2007 schedule calls for achieving seismic safety and opening to traffic the SFOBB new east span in 2013.

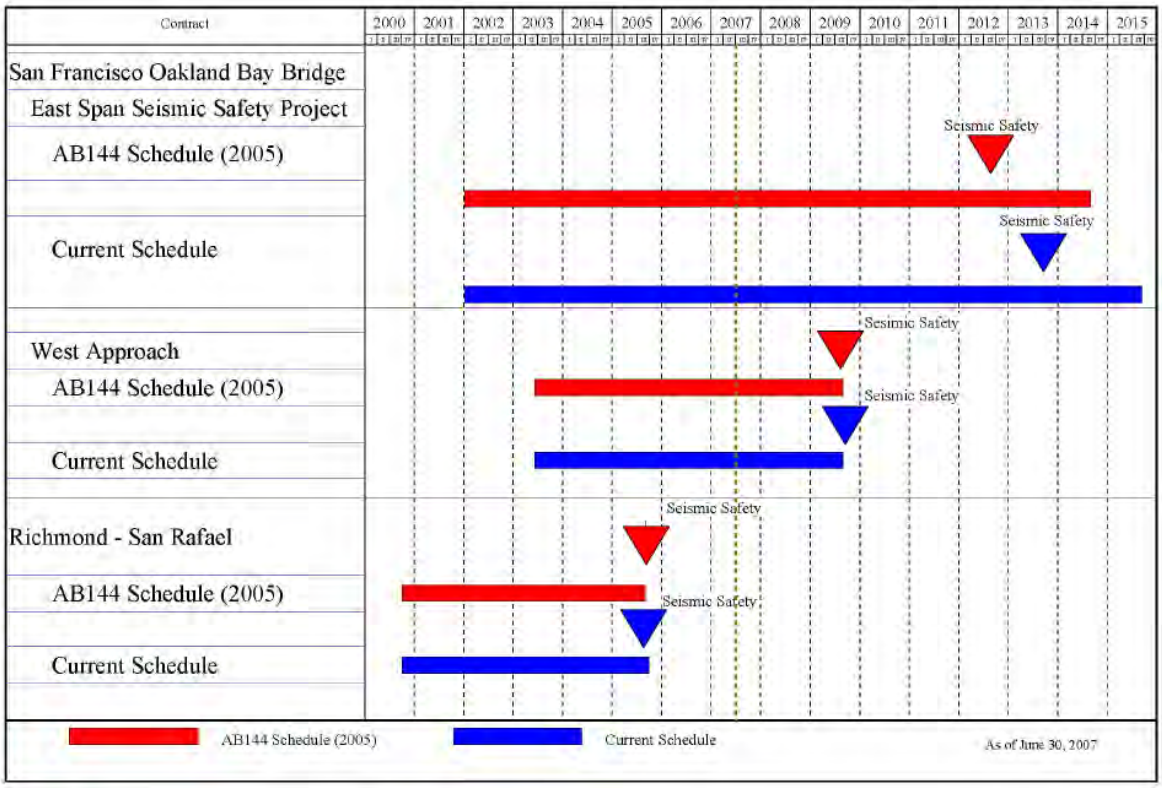
The 12 months of schedule extension was granted by addendum to the SFOBB East Span Seismic Replacement Project SAS contract based on bidder inquiries received during advertisements. While the 12 month schedule extension for the SAS has also extended the schedules for YBITS and OTD contracts accordingly, Caltrans is scheduling the contracts to accommodate the possibility of early SAS completion-based incentives also included in the SAS addendum.

On the YBI Detour contract, the TPBOC has approved a forecast completion extension to 2010 to reduce overall program risks by advancing work from the YBITS contracts into the SSD contract. The extension will not impact the open-to-traffic date for the new east span and facilitate possibilities to accelerate opening of the new bridge.

It is estimated that all of the construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015, marked by the planned demolition of the existing SFOBB east span. *Chart 1-Toll Bridge Seismic Retrofit Program Schedule*, shows the baseline, AB 144/SB 66 project schedule versus the projected completion schedules for the TBSRP projects under construction.

Chart 1-Toll Bridge Seismic Retrofit Program Schedule

Baseline AB 144/SB 66 vs. Projected Schedule



Program Funding and Financing

AB 144 established a funding level of $8.685 billion for the TBSRP. The bill specifies funding sources for the program, as shown in *Table 5-Program Budget*.

Table 5-Program Budget as of June 30, 2007 ($ Millions)

	Budgeted	Funding Available & Contributions
Financing		
Seismic Surcharge Revenue AB 1171	2,282.0	2,282.0
Seismic Surcharge Revenue AB 144	2,150.0	2,150.0
BATA Consolidation	820.0	820.0
Subtotal - Financing	**5,252.0**	**5,252.0**
Contributions		
Proposition 192	790.0	789.0
San Diego Coronado Toll Bridge Revenue Fund	33.0	33.0
Vincent Thomas Bridge	15.0	6.9
State Highway Account[(1)(2)]	745.0	745.0
Public Transportation Account[(1)(3)]	130.0	90.0
ITIP/SHOPP/Federal Contingency	448.0	-
Federal Highway Bridge Replacement and Rehabilitation (HBRR)	642.0	500.0
SHA - East Span Demolition	300.0	
SHA - "Efficiency Savings"[(4)]	130.0	2.0
Redirect Spillover	125.0	
Motor Vehicle Account	75.0	75.0
Subtotal - Contributions	**3,433.0**	**2,240.9**
Total Funding	**8,685.0**	**7,657.9**
Allocated to date		**6,017.3**
Remaining Unallocated		**1,640.6**

(1) The California Transportation Commission adopted a new schedule and changed the PTA/SHA split on December 15, 2005.

(2) To date, $645 million has been transferred from the SHA to the TBSRP, including the full $290 million transfer scheduled by the CTC to occur in 2005-06. An additional $100 million has been expended directly from the account.

(3) To date, $130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.

(4) To date, $2 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" for 2005-06 identifed under AB 144. Approximately $128 million remains to be distributed as scheduled by the CTC.

Notes: Program budget includes $900 million program contingency.

Funding Status

The program's financial status of revenues and expenditures is summarized in the table below, *Table 6-Toll Bridge Seismic Retrofit Program Financial Status.* The figures include the surcharge revenues collected, transfers from the SHA and the PTA, and expenditures from the Toll Bridge Seismic Retrofit Account (TBSRA) and the Seismic Retrofit Bond Act of 1996 (Proposition 192).

Table 6-Toll Bridge Seismic Retrofit Program Financial Status as of June 30, 2007 ($ Millions)

Revenues:	
Toll Surcharge(1)	687.9
SMIF Interest	97.9
Bond Revenue (Seismic Bond of 1996)	789.0
Bond Revenue (Toll Revenue Bonds)	1,062.0
Commercial Paper(2)	80.0
SANDAG	33.0
Vincent Thomas(3)	6.9
Federal Highway Bridge Replacement and Rehabilitation	500.0
Transfers to TBSRA:	
Motor Vehicle Account	75.0
State Highway Account(4)	745.0
Public Transportation Account(5)	90.0
State Highway Account "Efficiency Savings"(6)	2.0
Total Revenues and Transfers	**4,168.7**
Expenditures :	
Capital Outlay	3,483.6
State Operations	976.3
Total Expenditures	**4,459.9**
Encumbrances:	
Capital Outlay	1,551.8
State Operations	5.6
Total Encumbrances	**1,557.4**
Total Expenditures and Encumbrances	**6,017.3**

(1) The Toll Surcharge is dedicated to repayment of bonds beginning September 1, 2003. Toll Surcharge shown here is only toll revenue collected prior to that date.

(2) $80 Million in Commercial Paper issued on or about April 5, 2005.

(3) No additional funding is expected from the Vincent Thomas Toll Revenue Account.

(4) To date, $645 million has been transferred from the SHA to the TBSRP, including the full $290 million transfer scheduled by the CTC to occur in 2005-06. An additional $100 million has been expended directly from the account.

(5) To date, $130 million has been transferred from the PTA to the TBSRP, including the full amount of all transfers scheduled by the CTC.

(6) To date, $2 million has been transferred from the SHA to the TBSRP, representing the commitment of "Efficiency Savings" for 2005-06 identifed under AB 144. Approximately $128 million remains to be distributed as scheduled by the CTC.

Program Financing

As discussed above, AB 144 consolidated the administration of all toll revenues collected on the state-owned Bay Area toll bridges and financing of the TBSRP under the jurisdiction of BATA. BATA has direct programmatic responsibilities for the administration of all toll revenues collected on the state-owned bridges in the Bay Area and responsibilities for financial management of the TBSRP program, including:

- Administrative responsibility for collection and accounting of all toll revenues.
- Authorization to increase tolls on the state-owned bridges by $1.00 effective January 1, 2007.
- Project level toll-setting authority as necessary to cover additional cost increases beyond the funded program contingency in order to complete the TBSRP.
- Assumption of funding all of the roadway and bridge structure maintenance from Caltrans once bridge seismic retrofit projects are completed.

In accordance with its responsibilities provided under the law, in September 2005 BATA adopted a finance plan for the TBSRP. The major components of the finance plan include:

- Issuing $6.2 billion in debt, including defeasance of $1.5 billion in outstanding State Infrastructure Bank bonds and commercial paper.
- Increasing tolls on the state-owned bridges by $1.00, (from $3.00 to $4.00 for two-axle vehicles), effective January 1, 2007.
- Securing the maximum amount of state funding early in the construction schedule to most efficiently use toll funds (see the following discussion concerning the CTC funding schedule).
- Locking in current interest rates to the extent possible in order to improve the chances that the entire toll program construction and the operations and maintenance can be delivered within the $4.00 auto toll level.

In September 2005, BATA approved a Finance Plan for the TBSRP and other toll bridge improvement programs dependent on toll revenues from the state-owned bridges. The finance plan called for $6.2 billion in new debt issuances, including defeasance of the existing outstanding I-Bank bonds. Consistent with the finance plan in December 2005, BATA approved the issuance of up to $1.0 billion of 2006 toll bridge revenue bonds in February 2006. The bond issuance will provide adequate cash flow to fund the SAS contract for the East Span Replacement project, which was awarded on May 3, 2006.

Furthermore, in March 2006, BATA approved the issuance of $1.2 billion in bonds to defease the I-Bank bonds approved in October 2005. Additionally, pursuant to the law, BATA held two public hearings- one in October and one in November 2005 - to receive public testimony regarding the proposed $1.00 seismic surcharge toll increase beginning on January 1, 2007 on the state-owned toll bridges in the Bay Area. BATA approved the toll increase on January 25, 2006.

Pursuant to AB 144, on September 29, 2005, the CTC adopted a schedule - revised in December 2005 - for the transfer of state funds to BATA to fund the TBSRP. The schedule contains the timing and sources of the state contributions, which begin Fiscal Year (FY) 2005-06 and distributes the contributions over the years of project construction to ensure a timely balance between state sources and the contributions from toll funds. In December 2005, the CTC re-adopted the schedule to reflect opportunities to maximize the use of available PTA funds and correct prior transfer transactions. The CTC's December 2005 revised schedule for the

Aerial view of West Approach

transfer of funds allows BATA to pledge the state fund contribution to the financing of the TBSRP per BATA's adopted finance plan. The CTC schedule is included in Appendix C.

In March 2007, BATA approved the issuance of $825 million in 2007 Toll Bridge Revenue Bonds. The financing will be used primarily to fund seismic retrofit projects. Upon issuance of the 2007 bonds, BATA's debt total will be $4.9 billion.

Project Status

Ongoing Construction Projects

SFOBB West Approach

The SFOBB West Approach Seismic Retrofit Project will remove and replace the west approach to the SFOBB, which includes all of the westbound mainline and most of the eastbound mainline from 4th Street to the SFOBB west anchorage, and all of the connecting entrances and exit ramps in downtown San Francisco. The construction work, which began in June 2003, is approximately 81 percent complete. Completion of this project is scheduled for 2009.

Upon completion of the retrofit project, the west approach mainline and ramps will have the same number of traffic lanes as before, but with improved highway geometrics. The mainline eastbound and westbound structures will be adjacent to each other at 4th Street and transition to a double-deck configuration with their own independent support system from Rincon Hill to the anchorage in order to tie into the existing SFOBB.

Milestones Achieved

The San Francisco-Oakland Bay Bridge (SFOBB) West Approach Project is 81 percent complete as of June 20, 2007 and is on schedule to finish in August 2009. The demolition of the final 3000-foot section of the old I-80 freeway structure was completed mid April 2007, and was done on a compressed schedule from the as-planned 110 days to 17 days. Major ongoing work during this quarter includes, rebuilding of the new EB 80 structure, with pile and column installation continuing throughout the summer, with falsework installation to follow. An extensive public outreach effort continues and will be necessary until the spring of 2008 for the construction of the EB80 adjacent to Stillman Street area. Harrison Street Off ramp falsework is complete and concrete for stem/soffit was poured in June 2007. The deck pour is scheduled for July 2007. Frame 7U temporary supports and falsework started in mid June and will continue through August 2007.

Project Funding

The AB 144/SB 66 baseline budget totals $429 million for the project with $309 million for CO and $120 million for COS. See *Table 7-Baseline and Estimated Budget Need for SFOBB West Approach*

Table 7-Baseline and Estimated Budget Need for SFOBB West Approach ($ Million)

	AB 144/ SB 66 Budget	2nd Quarter 2007 Forecast	Difference
COS	120.0	120.0	-
CO	309.0	309.0	-
Total	429.0	429.0	-

Major Risk Issues

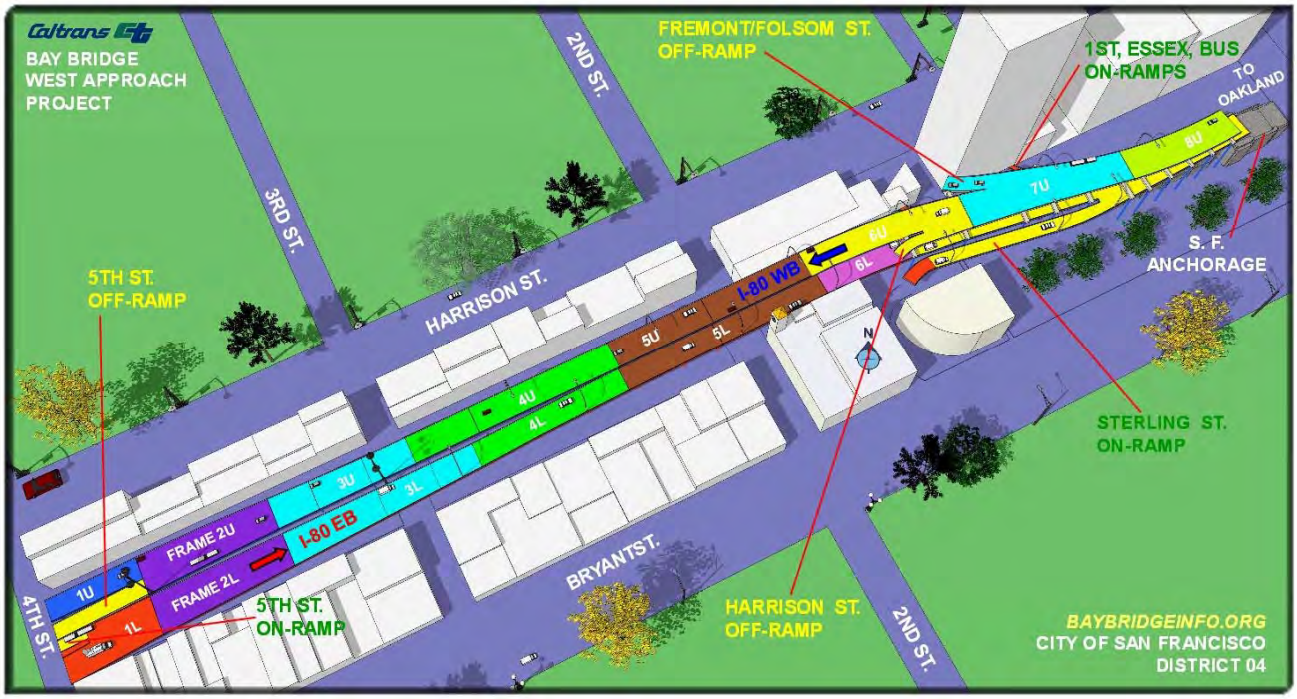
Caltran's West Approach Risk Response Team is continuing with its efforts to manage project risks. Updated risk assessments have been regularly performed during the Second Quarter as a standard project management practice.

Lessons learned to this point in the project continue to be important aspects of the implementation plans designed to mitigate risk, for example:

- The aggressive informational campaigns have proven successful in keeping the public fully informed of upcoming demolition operations that would affect traffic, thereby mitigating adverse public perception. Regional and local information campaigns were launched during spring 2007 to proactively address public concerns related to upcoming work on the interim eastbound detour and subsequent demolition work.

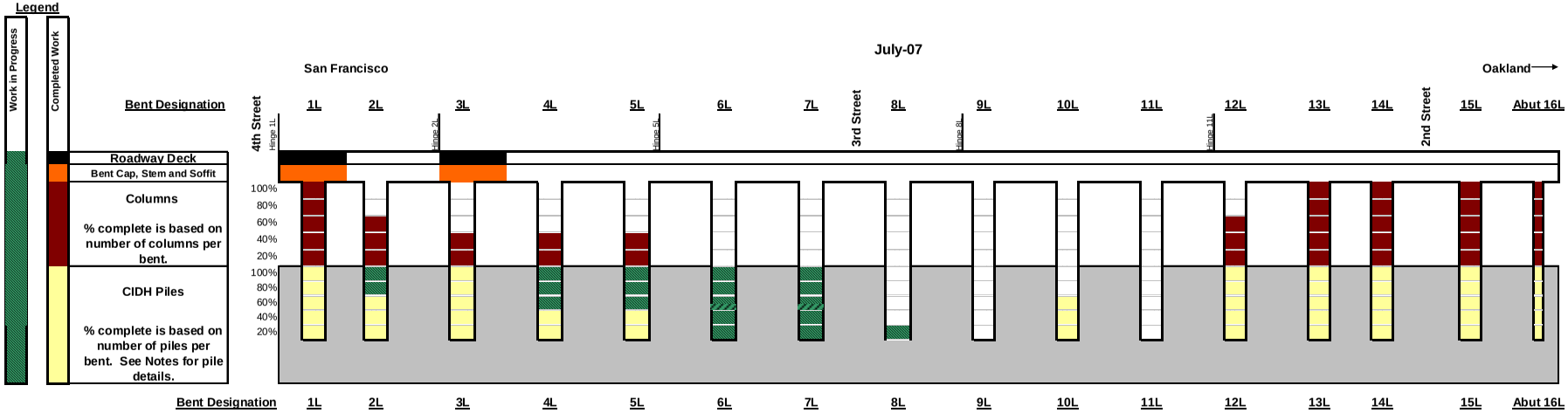
- Equipment and labor resources were increased during low traffic times such as nights and weekends. This strategy reduced inconveniences to the surrounding residents and businesses and minimized impact to the regional motorists while maintaining the level of production required for the project to remain on the target schedule.

- A high-priority risk issue currently being addressed by Caltrans concerns investigation and testing for the identification of pile anomalies that must be completed timely so as to avoid construction impact. To respond to this risk, Caltrans Construction staff coordinates closely with Structure Design and Caltrans Material Engineering and Testing Service (METS) staff daily on pile investigation and testing issues, and proactively monitors this effort. Tracking of the testing effort is done at the individual pile level of detail. Team participation in Risk Management meetings has proven to be valuable in addressing this issue.



West Approach New I-80 Eastbound Westbound Model (Under Construction)

SFOBB West Approach Retrofit Progress Diagram
Mainline Eastbound 80 Rebuilding



Notes:
1. Bents 1L and 2L each have 5 - 84" Cast In Drilled Hole (CIDH) piles.
2. Bents 3L through 5L each have 5 - 90" Cast In Drilled Hole (CIDH) piles.
3. Bents 6L through 8L each have 4 - 90" Cast In Drilled Hole (CIDH) piles.
4. Bents 9L through 15L each have 3 - 72" Cast In Drilled Hole (CIDH) piles.
5. Abutment 16L has 18 - 30" Cast In Drilled Hole (CIDH) piles.
6. Average Pile lengths are as follows:
   - Bents 1L through 3L = 90',
   - Bent 4L = 75'
   - Bent 5L = 80'
   - Bents 6L through 8L = 75'
   - Bent 9L = 60'
   - Bent 10L = 70'
   - Bents 11L and 12L = 73'
   - Bent 13L = 70'
   - Bents 14L and 15L = 67'
   - Abutment 16L = 40'
7. Items of work this chart does not include:
   - Lower Deck Retrofit
   - Sterling on-ramp reconstruction

SFOBB East Span Seismic Replacement

The SFOBB East Span Seismic Replacement project will be seismically retrofitted through the complete replacement of the existing span. The project includes construction of the Skyway portion of the bridge (See *SFOBB East Span Replacement Project* picture below), which consists of two parallel concrete structures, each approximately 1.3 miles in length; an SAS bridge consisting of a 510-foot tower supporting a bridge deck connecting the Skyway bridge to YBI, transition structures on YBI and on the east end of the bridge connecting to the toll plaza area, and demolition of the existing east span.

The SFOBB East Span Project now consists of 21 contracts. Construction of the Oakland Touchdown (OTD) Approach Structures and the Yerba Buena Island Transition Structures (YBITS) has been split into multiple contracts to facilitate construction flow and acceleration of work elements off the critical path for the completion of the new east span.

The current 21 SFOBB east span contracts are identified on the following pages: Eight contracts are **complete**:

- Interim Retrofit (Existing Bridge)
- East Span Retrofit (Existing Bridge)
- Pile Installation Demonstration
- OTD Geofill
- YBI Archaeology
- United States Coast Guard (USCG) Road Relocation on YBI
- SAS Land Foundations (W2)
- YBI Electrical Substation

Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary

Contract	AB 144/SB 66 Baseline Pro	Approved Changes	Current Approved Schedule	2nd Quarter 2007 Forecast Project Completion Date	Variance (Months)
Skyway	April 2007	8	December 2007	December 2007	-
YBI Detour*	July 2007	36	June 2010	June 2010	-
Stormwater Treatment Measures	March 2008	-	March 2008	March 2008	-
SAS E2/T1 Foundations	June 2008	(3)	March 2008	March 2008	-
Open to Traffic: Westbound	September 2011	12	September 2012	September 2012	-
SAS Superstructure	March 2012	12	March 2013	March 2013	-
Open to Traffic: Eastbound	September 2012	12	September 2013	September 2013	-
Oakland Touchdown (OTD)	December 2013	12	December 2014	December 2014	-
OTD Submarine Cable	n/a		January 2008	January 2008	-
OTD No. 1 (Westbound)	n/a		January 2010	January 2010	-
OTD No. 2 (Eastbound)	n/a		November 2014	November 2014	-
YBI Transition Structure*	December 2013	12	November 2014	November 2014	-
Existing Bridge Demolition*	September 2014	12	September 2015	September 2015	-

Note: The new east span forecast to be fully open to traffic in September 2013. Construction activities will continue beyond that date to complete the project, including demolition of the existing structure.

Six contracts are under **construction**: Note that percent complete figures for construction contracts are based on actual payments made divided by the contract amount.

- Skyway contract (96 percent complete)
- The YBI Detour (51 percent complete)
- SAS Marine Foundations (E2/T1) (83 percent complete)
- SAS (19 percent complete)
- Stormwater Treatment Measures (78 percent complete)
- OTD Submarine Cable Relocation (99 percent complete)

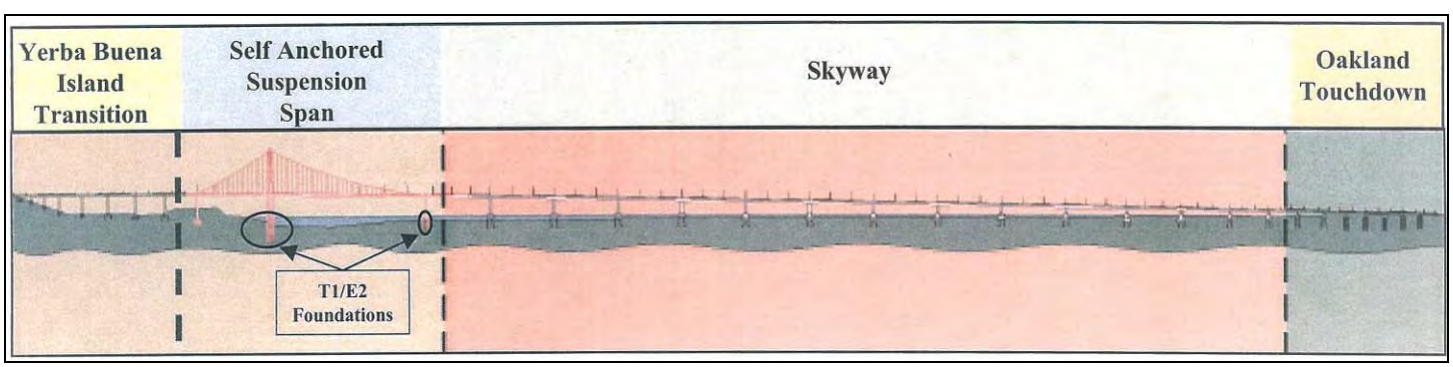
Seven contracts are in **design**:

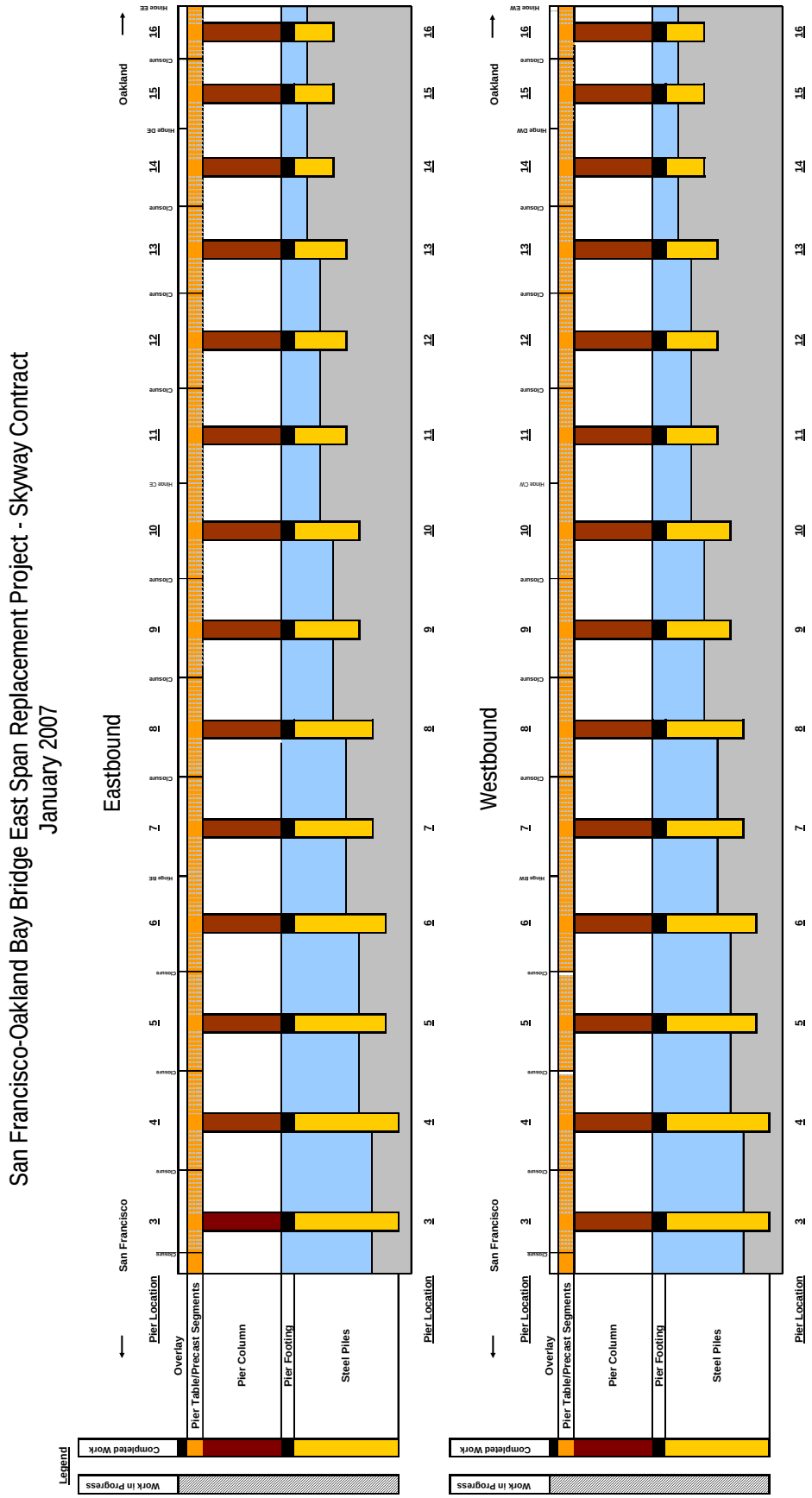
- OTD #1 contract: Caltrans opened four bids for the contract on June 5, 2007. Caltrans awarded the contract to MCM Construction on July 17, 2007.
- OTD #2 contract: The contract is planned to be advertised in summer 2010.
- OTD portions of the corridor electrical contract: This scope may be executed as a separate contract, or alternatively, may be included within OTD #2 contract and/or the other contracts within the east span corridor.
- YBITS #1 (design 80 percent complete to date)
- YBITS #2 (design 80 percent complete to date)
- YBITS #3 contract
- Existing Bridge Demolition design (ten percent complete to date)

The forecast completion date as compared to the AB 144/SB 66 baseline completion date for each of the major components of the SFOBB East Span Seismic Replacement project is shown in *Table 8-SFOBB East Span Seismic Replacement Project Schedule Summary* on page 15.

The approved East Span opening date has been extended by 12 months by the TBPOC through addendum issued on the SAS contract based on bidder inquiries received during advertisement. The current approved schedule does not include the potential for schedule reduction based on an early completion incentive on the SAS contract of six months that was also included in the addendum.

The completion of the Skyway contract has been revised from April 2007 to December 2007 as approved by the TBPOC due to a Contract Change Order executed with the Contractor that resolves a variety of construction issues. The schedule for the YBI Detour contract has been extended to take into account the 12-month change to the SAS contract schedule and the incorporation of additional work scope from the YBITS contract. This extension is not expected to impact the new east span open-to-traffic date.




San Francisco-Oakland Bay Bridge East Span Replacement Project - Skyway Contract
January 2007
Eastbound
Westbound
San Francisco
Oakland
Pier Location
Overlay
Pier Table/Precast Segments
Pier Column
Pier Footing
Steel Piles
Closure
Hinge EE
Hinge DE
Hinge CE
Hinge BE
Hinge EW
Hinge DW
Hinge CW
Hinge BW
Legend
Completed Work
Work in Progress

Milestones Achieved – East Span Contracts

- The Skyway contract is 96 percent complete as of June 2007. The foundation work is complete including the installation of the fenders around six of the pier footings. The eastbound and westbound structures are 100 percent complete with the erection of all 452 segments (refer to diagram on page 17). The final closure pour was completed in February, 2007.

- An overall settlement has been reached with the Contractor to resolve all cost and schedule impacts posed by claims related to hinge pipe beam fabrication, service platforms, electrical appurtenances, polyester concrete overlay, modular joints and other tasks to be completed that were known as of August 1, 2006. A time extension of 220 working days, extending the project completion date to December 2007 has been approved by the TBPOC. The change in schedule to the Skyway contract will not delay the open-to-traffic date for the new East Span project, nor will this settlement negatively impact the overall budget for the Skyway contract or the project. Various Notices of Potential Change (NOPCs) have been issued by the Contractor on behalf of their Steel Orthotropic Box Girder (SOBG) fabrication subcontractor concerning issues related to that work scope that has been completed. All of these NOPCs have been recommended to be heard by the Dispute Review Board.

- The E2/T1 contract is 83 percent complete as of June 2007. At the East Pier (E2), foundation pile driving has been completed. E2 footing frames have been welded to the piles. At the Tower Pier (T1), all steel foundation casings have been fabricated. All 13 rock sockets that tie the SAS tower foundation (T1) to bedrock have been installed. The T1 footing box was delivered and installed at the project site on March 17, 2007. The lightweight (LW) concrete has been placed in the inner cells of E2E. Rebar for the footing wall is in progress. The bottom lift rebar cages for the E2 Pier columns have been fabricated. Rebar for the top lift of the E2 Pier columns is in progress at Pier 7.

- The SFOBB East Span Seismic Replacement Project SAS Superstructure contract is 19 percent complete based on payments to the Contractor as of June 2007. The Contractor has mobilized staff to the field office at Pier 7 in Oakland. Development of various administrative submittals, including schedule updates, is continuing. A final baseline schedule has been submitted by the Contractor and was accepted by Caltrans. The Contractor has finalized agreements with various manufacturers, fabricators, suppliers and subcontractors, including Zhenhua Port Machinery Company (ZPMC), of Shanghai, China, to supply and fabricate all the major steel structures in the SAS. Caltrans is working to set up facilities and to organize resources in China that will ensure an effective Owner's presence in the steel fabrication shops operated by ZPMC. The design of the crane barge to be used to lift the heavy tower and deck sections has been completed and fabrication is in progress in Oregon. The falsework pads for the W2 Capbeam on the Yerba Buena Island have been completed. Caltrans is also taking risk mitigation measures to address potential issues during construction due to structural steel plate conflicts and welding methods.

Yerba Buena Island Contracts

- For the Yerba Buena Island (YBI) Detour contract, Caltrans and its consultants have assumed design responsibilities from the Contractor for the design of the East and West tie-ins from the existing bridge and tunnel to the detour structure. Completion of their design is being managed by Caltrans and is to be completed in conjunction with the SAS schedule to minimize impacts to the traveling public. The viaduct segment is being fabricated in South Korea.

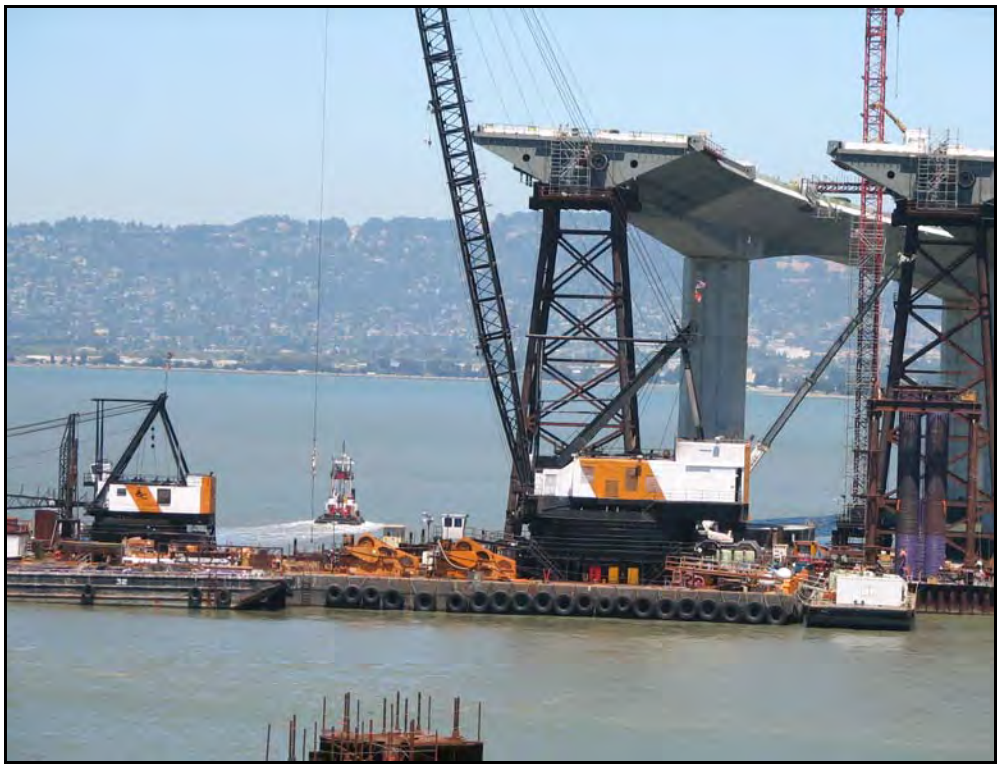
- The YBITS #1 contract will construct structures necessary to connect the new SAS to the existing

- AS for the YBI tunnel, to minimize schedule and construction risk, TBPOC approved the option to accelerate portions of YBITS #1 work, including shifting critical path work to the YBI Detour contractor. The YBITS foundation work was added to the YBI Detour contract because foundation work is always the highest risk element of structure construction. Early construction of the foundations would significantly reduce risk to the east span corridor schedule. Preparation of final PS&E packages is currently underway.

- A need was identified to accelerate work on pier W3L due to the SAS contractor need for access to that area. The YBI Detour contractor, CC Myers, completed that work and the SAS contractor has been granted access to that area ahead of schedule.

- The YBITS #2 contract includes demolition of the YBI Detour temporary structure, completion of the new eastbound on-ramp, completion of the bike path section on YBI and reconstruction of local and affected facilities at YBI. Eastbound traffic will be placed on the new structure in this contract. The majority of the design work is complete. Preparation of detailed plans and quantity calculations are in progress. The decision on the accelerated work will impact design work on this contract.

- The YBITS #3 contract is for landscaping, and includes slope restoration, vegetation restoration and plant maintenance for the areas affected by YBI construction. A planting concept and preliminary plans have been developed for a majority of the area. Determination of the extent of the U.S. Coast Guard area to be landscaped is still pending. Development of the final plans has not been completed.



E2 Foundation & Portion of the Skyway Bridge

Oakland Touchdown Contracts

- The OTD Submarine Cable contract will replace the existing submarine electrical cable from Oakland to Treasure Island. The cable relocation contract will place a new electrical cable(s) between the East Bay and Treasure Island because the existing electrical cable providing power to the island is close to foundation work necessary for the construction of the OTD #1 contract, which was advertised in February 2007. On January 11, 2007, Caltrans approved a contract with Manson Construction for the submarine cable contract. Notice to proceed was issued on February 6, 2007. The cable was completely installed and energized in late July. The contractor is now de-mobilizing.

- The OTD #1 contract includes construction of all of the marine foundations, westbound bridge section and roadway approach for the section that connects the new Skyway portion to the roadway west of the Oakland Toll Plaza. Design work is complete. PS&E were submitted to the Caltrans Office Engineer on September 1, 2006. Caltrans opened four bids for the contract on June 5, 2007. Caltrans awarded the contract to MCM Construction on July 17, 2007. Contract completion is scheduled for January 2010. The contract will include workaround specification language to minimize risks from a delayed submarine cable contract.

- The OTD #2 contract includes construction of the remaining eastbound bridge section and roadway approach for the section that connects the new Skyway portion to the roadway west of the Oakland Toll Plaza. This work will occur once the westbound traffic is shifted onto the new SAS. Design work for the structures portion of the OTD #2 contract is substantially complete. Design work on the roadway portion is ongoing.

- A fourth contract could incorporate most of the electrical elements from OTD, as well as from other segments of the east span into a single contract and is currently being scoped. The inclusion of this work into another existing contract is also being considered.

Other Contracts

- The Stormwater Treatment Measures contract is 78 percent complete as of June 2007 The Stormwater Project was required as part of the environmental mitigation package for the SFOBB Seismic Safety Project by the Regional Water Quality Control Board. The project will reduce the concentration of stormwater runoff pollutants including industrial chemicals, asbestos from brake pads, hydrocarbons, and heavy metals, from entering into the adjacent Emeryville Crescent. The Emeryville Crescent is a 558-acre tidal marsh and cove that supports up to 14,000 shorebirds and thousands of other birds including the endangered clapper rail, which nests and forages in the vegetative cover of the marsh. This area has been described as supporting the largest number of shorebird species regularly occurring at one place within San Francisco Bay (Bodega Bay Institute, 1978). The project will provide water treatment of at least 85% of the average annual runoff from a 155-acre shed area in the vicinity of the SFOBB Toll Plaza. By removing toxins from the SFOBB runoff, Caltrans will enhance the habitat quality of the Emeryville Crescent and by extension, the San Francisco Bay. Current work includes construction of the Bioretention basis, completion of the drainage systems along Emeryville crescent area, shoulder paving on WB 80 from Powell St. on ramp west towards Maritime off ramp, electrical work for pump stations, and highway lighting.

- Design on the Existing Bridge Demolition contract is 10 percent complete. Design work has been temporarily suspended to assign engineering resources to higher priority tasks, and will resume at a later time. The contract schedule completion date has been extended by 12 months due to a 12-month SAS contract extension.

Project Funding

Baseline and Projected Budget and Schedule

The AB 144/SB 66 baseline budget for the SFOBB east span is $5.486 billion with $4.527 billion for CO and $959.4 million for COS. The current approved budget for SFOBB east span is $5.666 billion with $4.707 billion for CO and $959.4 million for COS. This amount does not include program contingencies. See *Table 9-SFOBB East Span Replacement Cost Summary.*

The TBPOC re-evaluates project and contract cost forecasts continuously. The estimate-at-completion as of March 31, 2007, includes revised forecasts from AB 144/SB 66 budget, as follows:

- A forecast increase in the cost of COS to $977.1 million as a result of a detailed staffing and consultant contract cost forecast completed as of the end of the First Quarter 2007. This forecast includes considerations of revised and increased construction contract schedules as mentioned elsewhere in this report that require coverage by staff and consultants.
- A forecast $13.7 million increase for the SAS Superstructure contract to cover actions taken to

Table 9-SFOBB East Span Replacement Cost Summary ($ Millions)

Contract	AB 144/SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (06/2007)	2nd Quarter 2007 Forecast	Variance
a	b	c	d = b + c	e	f	g = f - d
Capital Outlay Support	959.4	-	959.4	511.1	977.1	17.7
Capital Outlay	-	-	-	-	-	-
Skyway	1,293.0	-	1,293.0	1,164.6	1,293.0	-
SAS E2/T1 Foundations	313.5	-	313.5	230.1	313.5	-
SAS Superstructure	1,753.7	-	1,753.7	275.1	1,767.4	13.7
YBI South/South Detour	131.9	202.5	334.4	61.1	334.4	-
YBI Transition Structures	299.3	(23.2)	276.1	-	276.1	-
Oakland Touchdown	283.8	-	283.8	1.6	302.5	18.7
OTD Submarine Cable				1.6	9.6	
OTD Westbound				-	226.5	
OTD Eastbound				-	62.0	
OTD Electrical Systems				-	4.4	
Existing Bridge Demolition	239.2	-	239.2	-	222.0	(17.2)
Stormwater Treatment Measures	15.0	3.3	18.3	11.5	18.3	-
East Span Completed Projects	90.3	-	90.3	89.3	90.3	-
Right-of-Way and Environmental Mitigation	72.4	-	72.4	38.8	72.4	-
Other Budgeted Capital	35.1	(3.3)	31.8	0.6	7.7	(24.1)
TOTAL	5,486.6	179.2	5,665.8	2,383.8	5,674.7	8.9

Note: Details may not sum to totals due to rounding effects.

encourage additional bidders for the project, including the bidder's stipend for the lowest three responsive bidders.

- A forecast $18.7 million increase in the CO for the OTD contract due to an approved Engineer's Estimate for the OTD #1 contract. The COS for the contract was also increased to cover the additional work to split the contract and to administer four separate contracts over a longer duration rather than the original single contract.

- A forecast $17.2 million decrease for the Bridge Demolition Contract due to a re-evaluation of the cost escalation rates for the project.

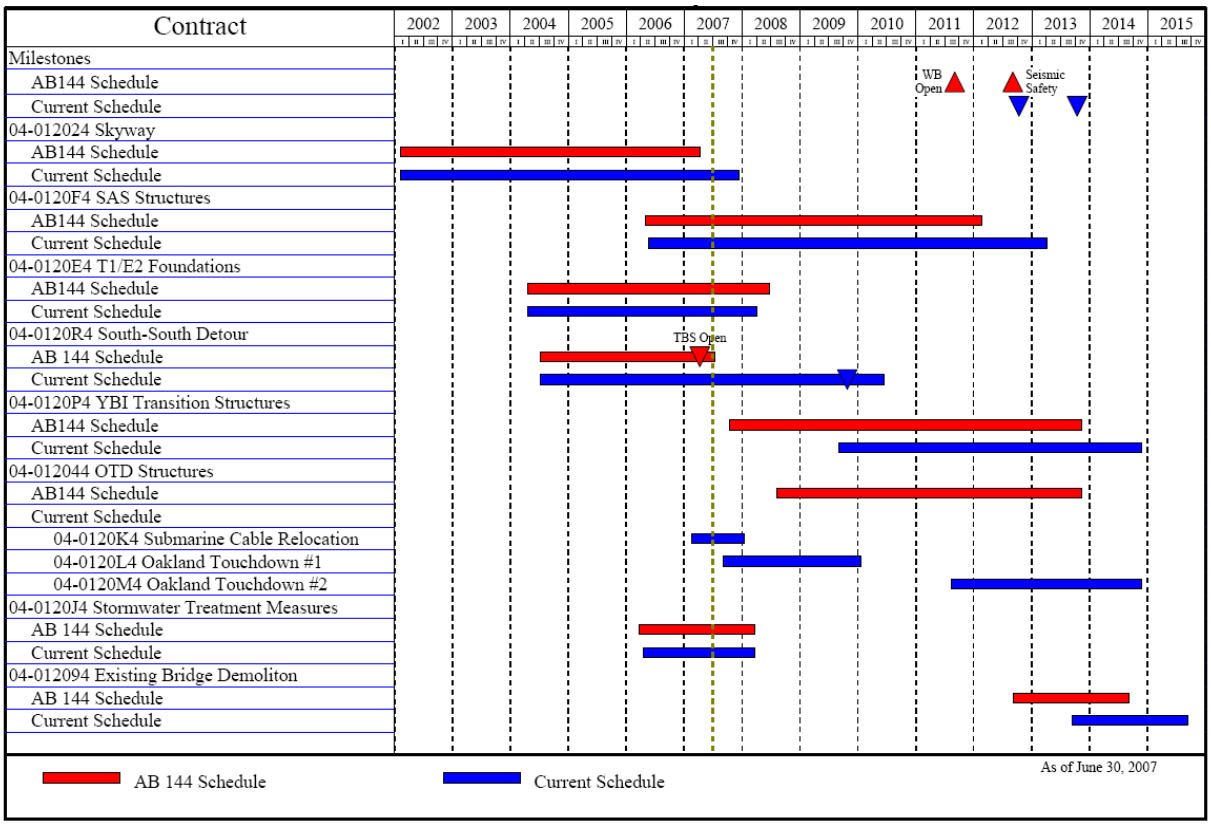
- All of the variances discussed above can be funded from a combination of other budgeted capital and Toll Bridge Seismic Retrofit Program Contingency. The forecast for the SFOBB east span has increased by $8.9 million to $5.675 billion.

- The current June 2007 schedule calls for achieving seismic safety and opening to traffic the SFOBB new east span in 2013. The 12 months of schedule extension was granted by addenda to the SFOBB East Span Seismic Replacement Project SAS contract based on bidder inquires received during advertisements.

- In March 2007, the TBPOC approved a number of changes to the YBI Detour contract to better integrate the detour work into the current project schedule and to reduce overall project risks by advancing YBITS foundation work into the SSD contract. These changes increased the overall YBI Detour contract budget by $202.5 million and decreased the YBITS contract by $23.2 million.

- While the 12 month schedule extension for the

Chart 2-San Francisco-Oakland Bay Bridge East Span Corridor Schedule Baseline AB 144/SB 66 vs. Current Projected



SAS has also extended the schedules for YBITS and OTD contracts accordingly, Caltrans is scheduling the contracts to accommodate the possibility of an early SAS completion based on incentives also included by the SAS addenda.

For the YBI Detour contract, the amount of delay to this contract is yet to be fully determined and is subject to analysis by Caltrans and negotiation with the Contractor. This delay is not expected to impact the open-to-traffic for the new east span.

It is estimated that all of the construction activities for the SFOBB East Span Seismic Replacement project will be completed by 2015, marked by the planned demolition of the existing SFOBB east span.

The comparison of the AB 144/SB 66 baseline schedule and the current projected schedule is shown in *Chart 2-SFOBB East Span Corridor Schedule, Baseline AB 144/SB 66 vs. Current Projected* on page 22. It should be noted that the schedules shown in *Chart 2* do not at this time account for the potential "worst-case" issues that may affect the schedule identified in the SFOBB East Span Seismic Retrofit Project Risk Management Plan.

Major Risk Issues

SFOBB East Span Project Replacement Risk Management Plan

Caltrans continues to implement comprehensive risk management on all SFOBB East Span Seismic Replacement Project contracts in accordance with AB 144. Currently, Caltrans and BATA have embarked on an initiative to manage risk jointly. Risk response efforts continue to focus on encouraging responsive bids for future contracts and mitigating the estimated cost/schedule impact of identified risks. See "Risk Management Program" on page 27 for more information.

Quarterly Environmental Compliance Highlights

SFOBB east span environmental tasks for the current quarter are focused on mitigation monitoring. All weekly, monthly, and annual compliance reports to resource agencies have been delivered on time with no comments from receiving agencies. Key successes this quarter are as follows:

- Bird monitoring was conducted weekly in the active construction areas. In addition, American peregrine falcon and California clapper rail nest monitoring occurred. The East Span peregrine falcon pair successfully hatched two eggs on or about April 21, 2007. On May 15, biologists from the Santa Cruz Predatory Bird Research Group (SCPBRG) removed the two nestlings from the Pier E3 site. The nestlings, one male and one female, were taken to the SCPBRG facility for rearing and eventual release. The rationale for removing the nestlings was that they would have a low probability of successfully fledging from the Pier E3 site.

- Turbidity monitoring was conducted without incident in April during pile clean out at Pier E2

and in June during excavation on Treasure Island and at the Oakland Mole for the Navy submarine cable replacement project.

- Monitoring for herring spawning activity within the project construction limits began in December and will continue through March 31 each year. Physical monitoring in January 2007 during pile-drilling and decanting activities at Pier 1 did not detect any herring spawning within 200 meters of Caltrans construction operations.

- Environmentally Sensitive Area (ESA) buoys have been placed in the vicinity of Treasure Island to protect eelgrass from construction activities for the Navy submarine cable project.

- On June 11, 2007, Caltrans submitted Amendment No. 17 to the San Francisco Bay Conservation and Development Commission (BCDC), requesting that the permit be amended to allow for an additional year of eelgrass monitoring at the North Basin eelgrass pilot program site. An additional year of monitoring will enable Caltrans to better assess the feasibility of continuing restoration efforts. Amendment No. 17 also requests a one-year time extension for commencement of hazardous waste and infrastructure removal at Skaggs Island. Currently, the United States Fish and Wildlife Service is in the process of procuring a Scope of Work and cost estimate for projected cleanup activities. Caltrans anticipates that the ensuing Scope of Work will facilitate the commencement of removal and cleanup activities on Skaggs Island by August 1, 2008; subsequently, Caltrans is requesting a one-year extension for initiation of these activities to August 1, 2008. The extension does not affect the overall cost or schedule of the East Bay extension project.

Completed Projects

Seismic retrofit and project close-out has been completed on the Benicia-Martinez, Carquinez, San Mateo-Hayward, Vincent Thomas, San Diego-Coronado toll bridges and on the west span of the SFOBB. See Table 10-Cost Comparison AB 144/SB 66, First Quarter 2007 Forecast and Expenditures through March 2007 for Completed Projects on the following page. The Richmond-San Rafael Bridge project expenditures have not been completely closed because Caltrans is in discussions with regulatory agencies regarding potential mitigations for impacts on fish in the project area. Caltrans awarded a contract for the construction of a public access lot on the Marin side of the Richmond-San Rafael Bridge to comply with a Bay Conservation and Development Commission (BCDC) permit condition.

Table 10-Cost Comparison AB 144/SB 66, Second Quarter 2007 Forecast and Expenditures through June 30, 2007 for Completed Projects ($ Millions)

Project	AB 144/ SB 66 Budget	Approved Changes	Current Approved Budget	Cost To Date (06/2007)	2nd Quarter 2007 Forecast	Variance
a	b	c	d = b + c	e	f	g = f - d
San Francisco-Oakland Bay Bridge West Span Seismic Retrofit Project	307.9	-	307.9	301.1	307.9	-
Carquinez Bridge Retrofit Project	114.2	-	114.2	114.2	114.2	-
Benicia-Martinez Bridge Retrofit Project	177.8	-	177.8	177.8	177.8	-
San Mateo-Hayward Bridge Retrofit Project	163.5	-	163.5	163.4	163.5	-
Richmond-San Rafael Bridge Retrofit Project	914.0	(89.0)	825.0	792.6	825.0	-
Vincent Thomas Bridge Retrofit Project	58.5	-	58.5	58.4	58.5	-
San Diego-Coronado Bridge Retrofit Project	103.5	-	103.5	102.6	103.5	-
TOTAL	1,839.4	(89.0)	1,750.4	1,710.1	1,750.4	-

Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined. Although seismic retrofit of the Richmond-San Rafael and San Diego-Coronado bridges are complete, environmental mitigation/monitoring work is still ongoing.

discussions with regulatory agencies regarding potential mitigations for impacts on fish in the project area. Caltrans awarded a contract for the construction of a public access lot on the Marin side of the Richmond-San Rafael Bridge to comply with a Bay Conservation and Development Commission (BCDC) permit condition. The Richmond-San Rafael Public Access Project will provide public access to the Bay shoreline at the north end of the Richmond-San Rafael Bridge in Marin County. This contract will be completed in 2007.

To close out the Richmond-San Rafael Seismic Retrofit Project, Caltrans faces potential exposures concerning the environmental mitigation for negative impacts on fish, which is currently being discussed with regulatory agencies. Final savings for the Richmond-San Rafael Bridge project will be based on the resolution of pending negotiations with environmental permitting agencies regarding the cost of pile driving mitigation. Initial project cost savings in the amount of $89 million have been transferred to the Toll Bridge Seismic Retrofit Program Contingency, as directed by the TBPOC.

Richmond–San Rafael Bridge Seismic Retrofit
Existing rock slope protection to remain
Remove existing loose concrete
Install new rock slope protection
Picnic Table
Trash Receptacle
SAN FRANCISCO BAY
Parking
Install new rock slope protection
(reduced elevation at ESA)
Pedestrian Bridge
Environmentally Sensitive Area (ESA)
Bench (Typ)
Install new rock slope protection
Pedestrian Pathway
Existing rock slope
protection to remain
40m
11m
18m
Existing right of way
Existing
Bus Stop
Sidewalk
FRANCISCO BLVD
Rte 580 NB
Rte 580 SB
LEGEND
Landscape
Rock slope protection
Revised Exhibit A
Public Access Area
BCDC Mitigation – Permit No. 1-97, Amendment No. 3
April 6, 2006
0
20
40 Feet
SCALE
Caltrans
CT/8265 | DISTRICT 4 | A/V MULTIMEDIA GRAPHICS SERVICES | 04/06/06

Risk Management Program

The following is a summary of risk management developments during the Second Quarter of 2007.

Schedule Risks

The Self-Anchored Suspension (SAS) Superstructure contract schedule is driving the critical path for corridor completion. An SAS construction schedule from the contractor has been approved by Caltrans. The SAS schedule has been combined with schedules of the other contracts to form a corridor schedule. This schedule was distilled into about 200 interconnected activities for purposes of corridor schedule risk analysis. About 50 schedule delay risks are inserted into the corridor schedule logic in places where they may affect the fabrication, construction and other activities.

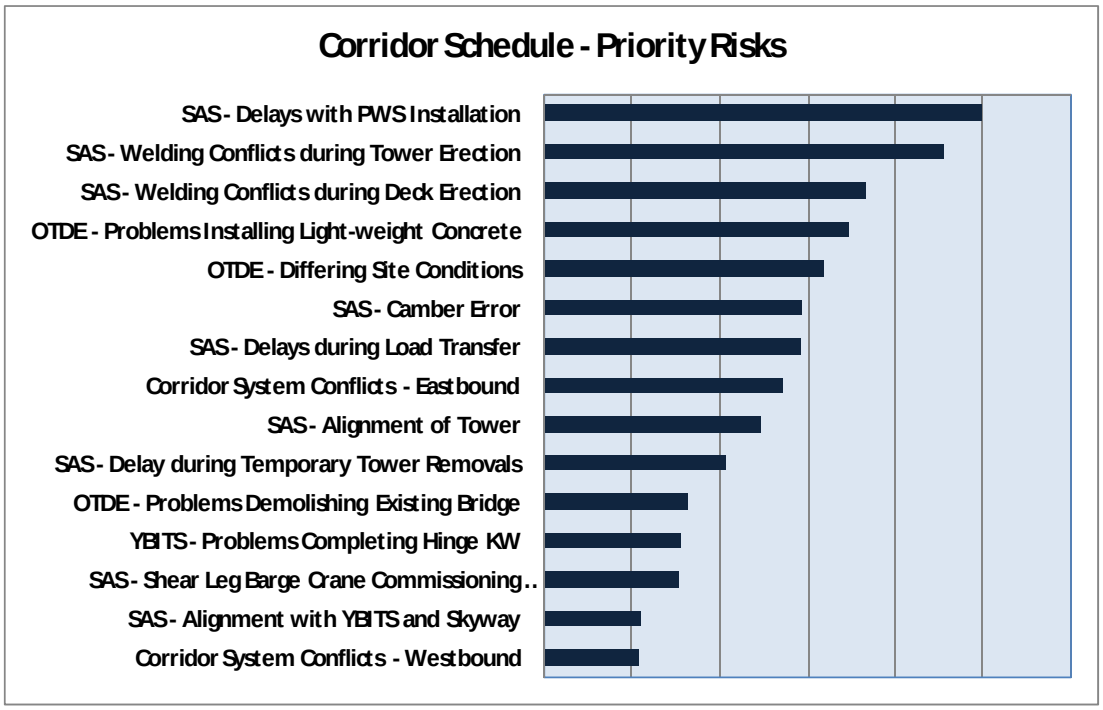
Ongoing schedule risks analysis will refine the probability of meeting key milestones and establish the cost of potential delays on each contract. Preliminary indications are that the corridor schedule is most sensitive to the following risks:

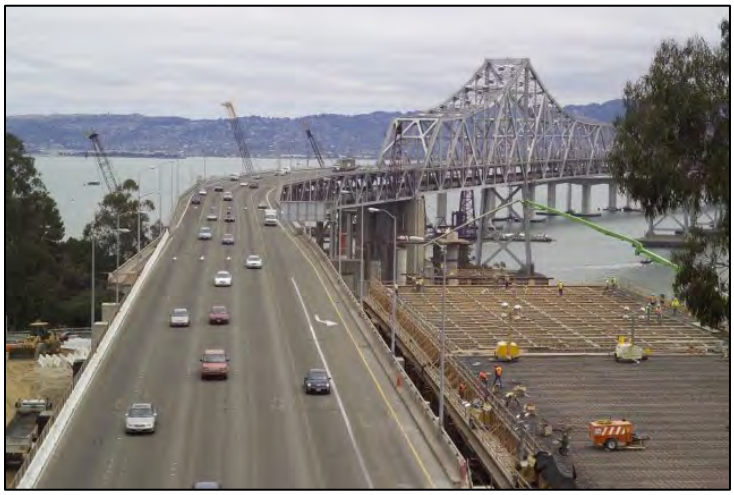
Mitigation activities are ongoing to reduce the potential impact of these schedule risks.

Major Risk Issues

SAS Contract

- Barge Crane: The US Coast Guard has raised questions as to whether mounting the crane on the barge in China is a violation of the Jones Act, and whether the pontoons manufactured in China ought to be considered part of the hull of the barge. The barge crane is on the critical path of the SAS schedule, and any change to the contractor's current manufacturing and assembly plan could potentially affect the corridor schedule. The contractor is working expeditiously to resolve the issues with the US Coast Guard.
- Potential welding conflicts in tower and deck fabrication are being mitigated by establishing a Caltrans presence at the fabricator to detect and resolve issues swiftly as they may arise.





East Span Pour for Tie-in

East Span Replacement Project

- Integration of systems and testing: Electrical hookups are one of the last elements of the bridge work. The final electrical and mechanical systems integration work must be completed before opening to traffic. The systems integration contractor, yet to be determined, could find problems with previous work of other contractors.
- The tugboat prevailing wage differential decision is in the courts. The ultimate ruling could be against the Department of Industrial Relations and Caltrans, affecting the cost of the Skyway and possibly SAS contracts, and several completed TBSRP projects.

YBI Detour Contract

- Revisions to the YBI Detour contract enhanced the detour viaduct design, improved the YBI viaduct by replacement instead of retrofit, and advanced some YBI Transition Structures foundation work to reduce corridor schedule risk. Many of the contract change orders are in negotiations and uncertainty remains about the final cost of the change orders.
- Delivery of the East Tie-in design is critical to meeting the planned date for switching traffic to the detour. A champion has been appointed to drive design delivery and the contractor is providing input about the moving system substructure and possible construction sequencing with design.
- Viaduct fabrication has been moved to a Korean fabricator. Next shipment is due in October 2007. While viaduct fabrication is not currently on the critical path, it is essential for meeting the traffic switch date. Caltrans is monitoring it closely to ensure that it will not delay the schedule.

Other Toll Bridges

Dumbarton and Antioch Bridges

State Route 84 crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west. The Route consists of three lanes in each direction and an eight-foot bicycle/pedestrian lane. The AADT of the Route is near 81,000. The bridge is over 2 km in length and is positioned in an approximately normal geometry between two seismic faults which the USGS has reported to pose most of the significant seismic threat to the San Francisco Bay Area: the San Andreas Fault, some 15 km to the west of the bridge; and the Hayward Fault, some 13 km to the east of the bridge.

State Route 160 crosses the San Joaquin River between the city of Antioch and Sherman Island (leading to Rio Vista) via the Antioch Bridge. The Bridge carries a single lane of traffic in each direction. The AADT for the Route is slightly over 13,000 vehicles per day. The bridge is threatened by the Bird's Landing Seismic Zone, Cost Range/Sierra Nevada Boundary Zone and the San Andreas Fault.

Cost and Schedule

A preliminary cost estimate, schedule, and an initial risk analysis have been developed to complete a comprehensive seismic analysis for each bridge. The preliminary estimate and schedule were developed as a baseline assuming a complete geotechnical and geophysical investigation is required at each bridge.

Current Progress

These bridges are currently being evaluated for seismic safety and post-earthquake performance. Work is underway in three specific areas: seismology, geology and geotechnical engineering and bridge structural engineering.

Work in the area of seismology is defining the seismic groundmotions used for design. Recommended Safety Evaluation (SE) level motions have been developed for both bridges and are currently under review by and external and independent Seismic Safety Peer Review Panel (SSPRP). SE motions represent future large earthquakes. Work in this area to be completed in the near future includes finalizing the SE motions, developing lower level Functional Evaluation (FE) motions, and multiple earthquake time-histories that can be used in the checking phase of the projects.

Work in the area of geology and geotechnical engineering includes field drilling and studying of soil samples to identify soil types, locations and engineering properties. This work supports work in defining how the soil at the bridge sites move during earthquakes and how the rigidly the bridge's foundations are held in the soil. The drilling operations are complete at both bridge sites; information is being shared with the seismologic team and the bridge structure team.

The compilation of the work performed on the seismology, geology and geotechnical engineering aspects at each bridge are currently being incorporated into the structural engineering done by designers. The structures design team has been evaluating the structural and material properties of the bridges and incorporating all known data to date into their computer models. To further understand the existing features of these bridges, the design teams, geologist, and earthquake engineers conducted field reviews at each bridge.

In early 2008, the determination of the category of retrofit, should one be required, will be chosen. In early 2009, completion of the current analysis and selection of a retrofit strategy will be determined.

Summary of TBPOC Expenses

Pursuant to Streets and Highways Code Section 30952.1 (d), expenses incurred by Caltrans, BATA, and the California Transportation Commission (CTC) for costs directly related to the duties associated with the TBPOC are to be reimbursed by toll revenues. *Table 11-Toll Bridge Program Oversight Committee Actual Expenses: July 1, 2005 through June 30, 2007* shows expenses through *June 30, 2007*, for TBPOC functioning, support, and monthly and quarterly reporting.

Table 11-Toll Bridge Program Oversight Committee

Expenses: July 1, 2005 through June 30, 2007 ($ Millions)

Agency/Program Activity	Expenses
BATA	0.2
Caltrans	0.5
CTC	0.1
Reporting	1.4
Total Program	2.2

Appendices

A. TBSRP All Bridges AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through June 30, 2007 (A-1 and A-2).

B. TBSRP East Span Only AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures through June 30, 2007.

C. CTC First Quarter Schedule.

D. Project/Contract Photographs.

Appendix A-1.

Toll Bridge Seismic Retrofit Program
AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2007

($ millions)

Bridge	AB 144/SB 66 Baseline	TBPOC Current Approved Budget	First Quarter 2007 Forecast	Second Quarter 2007 Forecast	Variance (2nd Q07-1st Q07)	Expenditures Through June 2007
Benicia-Martinez						
Capital Outlay Support	38.1	38.1	38.1	38.1	-	38.1
Capital Outlay	139.7	139.7	139.7	139.7	-	139.7
Total	177.8	177.8	177.8	177.8	-	177.8
Carquinez						
Capital Outlay Support	28.7	28.7	28.7	28.7	-	28.8
Capital Outlay	85.5	85.5	85.5	85.5	-	85.4
Total	114.2	114.2	114.2	114.2	-	114.2
San Mateo-Hayward						
Capital Outlay Support	28.1	28.1	28.1	28.1	-	28.1
Capital Outlay	135.4	135.4	135.4	135.4	-	135.3
Total	163.5	163.5	163.5	163.5	-	163.4
Vincent Thomas						
Capital Outlay Support	16.4	16.4	16.4	16.4	-	16.4
Capital Outlay	42.1	42.1	42.1	42.1	-	42.0
Total	58.5	58.5	58.5	58.5	-	58.4
San Diego-Coronado						
Capital Outlay Support	33.5	33.5	33.5	33.5	-	33.2
Capital Outlay	70.0	70.0	70.0	70.0	-	69.4
Total	103.5	103.5	103.5	103.5	-	102.6
Richmond-San Rafael						
Capital Outlay Support	134.0	127.0	127.0	127.0	-	126.4
Capital Outlay	780.0	698.0	698.0	698.0	-	666.2 *
Total	914.0	825.0	825.0	825.0	-	792.6
West Span Retrofit						
Capital Outlay Support	75.0	75.0	75.0	75.0	-	74.8
Capital Outlay	232.9	232.9	232.9	232.9	-	226.3
Total	307.9	307.9	307.9	307.9	-	301.1
West Approach						
Capital Outlay Support	120.0	120.0	120.0	120.0	-	94.8
Capital Outlay	309.0	309.0	309.0	309.0	-	246.5
Total	429.0	429.0	429.0	429.0	-	341.3
SFOBB East Span						
Capital Outlay Support	959.4	959.4	977.1	977.1	-	511.1
Capital Outlay	4,492.1	4,674.6	4,686.6	4,689.9	3.3	1,872.1
Other Budgeted Capital	35.1	31.8	11.0	7.7	(3.3)	0.6
Total	5,486.6	5,665.8	5,674.7	5,674.7	-	2,383.8
Miscellaneous Program Costs	30.0	30.0	30.0	30.0	-	24.7
Subtotal Capital Outlay Support	1,463.2	1,456.2	1,473.9	1,473.9	-	976.4
Subtotal Capital Outlay	6,321.8	6,419.0	6,410.2	6,410.2	-	3,483.5
Subtotal Toll Seismic Retrofit	7,785.0	7,875.2	7,884.1	7,884.1	-	4,459.9
Program Contingency	900.0	809.8	800.9	800.9	-	-
Total Toll Seismic Retrofit Program	**8,685.0**	**8,685.0**	**8,685.0**	**8,685.0**	**-**	**4,459.9**

Notes: * Budget for Richmond-San Rafael Bridge include $16.9 million of deck joint rehabilitation work that's considered to be eligible for seismic retrofit program funding.
(Due to the rounding of numbers, the totals above are shown within $0.1).

Appendix A-2.

Toll Bridge Seismic Retrofit Program - SAS Alternative
AB 144 Baseline Budget, Forecasts and Expenditures Through June 30, 2007

($ in millions)

Bridge	AB 144 Baseline Budget	TBPOC Current Approved Budget	Expenditures to date and Encumbrances as of June 2007 See Note (1)	Estimated Costs not yet Spent or Encumbered as of June 2007	Total Forecast as of June 2007 (Columns C +D)
Other Completed Projects					
Capital Outlay Support	144.9	144.9	144.6	0.3	144.9
Capital Outlay	472.6	472.6	472.8	(0.1)	472.7
Total	617.5	617.5	617.4	0.2	617.6
Richmond-San Rafael					
Capital Outlay Support	134.0	127.0	126.4	0.6	127.0
Capital Outlay	698.0	698.0	673.3	24.7	698.0
Project Reserves	82.0	-	-	-	-
Total	914.0	825.0	799.7	25.3	825.0
West Span Retrofit					
Capital Outlay Support	75.0	75.0	74.8	0.2	75.0
Capital Outlay	232.9	232.9	232.8	0.1	232.9
Total	307.9	307.9	307.6	0.3	307.9
West Approach					
Capital Outlay Support	120.0	120.0	95.5	24.5	120.0
Capital Outlay	309.0	309.0	299.9	9.1	309.0
Total	429.0	429.0	395.4	33.6	429.0
SFOBB East Span -Skyway					
Capital Outlay Support	197.0	197.0	167.0	30.0	197.0
Capital Outlay	1,293.0	1,293.0	1,238.1	54.9	1,293.0
Total	1,490.0	1,490.0	1,405.1	84.9	1,490.0
SFOBB East Span -SAS- Superstructure					
Capital Outlay Support	214.6	214.6	44.5	170.1	214.6
Capital Outlay	1,753.7	1,753.7	1,527.6	239.8	1,767.4
Total	1,968.3	1,968.3	1,572.1	409.9	1,982.0
SFOBB East Span -SAS- Foundations					
Capital Outlay Support	62.5	51.5	31.9	19.6	51.5
Capital Outlay	339.9	339.9	303.7	36.2	339.9
Total	402.4	391.4	335.6	55.8	391.4
Small YBI Projects					
Capital Outlay Support	10.6	10.6	10.2	0.4	10.6
Capital Outlay	15.6	15.6	16.2	(0.5)	15.7
Total	26.2	26.2	26.4	(0.1)	26.3
South/South Detour					
Capital Outlay Support	29.5	39.5	25.5	14.0	39.5
Capital Outlay	131.9	334.4	171.5	162.9	334.4
Total	161.4	373.9	197.0	176.9	373.9
YBI - Transition Structures					
Capital Outlay Support	78.7	78.7	14.7	64.0	78.7
Capital Outlay	299.4	276.1	0.1	276.0	276.1
Total	378.1	354.8	14.8	340.0	354.8
Oakland Touchdown					
Capital Outlay Support	74.4	74.4	25.1	67.0	92.1
Capital Outlay	283.8	283.8	9.8	292.7	302.5
Total	358.2	358.2	34.9	359.7	394.6
East Span Other Small Project					
Capital Outlay Support	212.3	213.3	196.7	16.6	213.3
Capital Outlay	170.8	170.8	89.4	57.2	146.6
Total	383.1	384.1	286.1	73.8	359.9
Existing Bridge Demolition					
Capital Outlay Support	79.7	79.7	0.3	79.4	79.7
Capital Outlay	239.2	239.2	-	222.0	222.0
Total	318.9	318.9	0.3	301.4	301.7
Miscellaneous Program Costs	30.0	30.0	24.9	5.1	30.0
Total Capital Outlay Support (2)	1,463.2	1,456.2	982.1	491.8	1,473.9
Total Capital Outlay	6,321.8	6,419.0	5,035.2	1,375.0	6,410.2
Program Total	**7,785.0**	**7,875.2**	**6,017.3**	**1,866.8**	**7,884.1**

(1). Funds allocated to project or contract for Capital Outlay and Support needs includes Capital Outlay Support total allocation for FY 06/07.
(2). Total Capital Outlay Support includes program indirect costs.
(Due to the rounding of numbers, the totals above are shown within $0.1).

Appendix B.

Toll Bridge Seismic Retrofit Program - SFOBB East Span Only
AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2007

($ millions)

East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget See Note (1)	First Quarter 2007 Forecast	Second Quarter 2007 Forecast	Variance (2nd Q07 - 1st Q07)	Expenditures Through June 2007
SFOBB East Span -Skyway						
Capital Outlay Support	197.0	197.0	197.0	197.0	-	165.8
Capital Outlay	1,293.0	1,293.0	1,293.0	1,293.0	-	1,164.6
Total	1,490.0	1,490.0	1,490.0	1,490.0	-	1,330.4
SFOBB East Span -SAS- E2/T1 Foundations						
Capital Outlay Support	52.5	41.5	41.5	41.5	-	22.6
Capital Outlay	313.5	313.5	313.5	313.5	-	230.1
Total	366.0	355.0	355.0	355.0	-	252.7
SFOBB East Span -SAS- Superstructure						
Capital Outlay Support	214.6	214.6	214.6	214.6	-	42.1
Capital Outlay	1,753.7	1,753.7	1,767.4	1,767.4	-	275.1
Total	1,968.3	1,968.3	1,982.0	1,982.0	-	317.2
SFOBB East Span -SAS- W2 Foundations						
Capital Outlay Support	10.0	10.0	10.0	10.0	-	9.2
Capital Outlay	26.4	26.4	26.4	26.4	-	25.8
Total	36.4	36.4	36.4	36.4	-	35.0
South/South Detour						
Capital Outlay Support	29.5	39.5	39.5	39.5	-	24.9
Capital Outlay	131.9	334.4	334.4	334.4	-	61.1
Total	161.4	373.9	373.9	373.9	-	86.0
YBI - Transition Structures						
Capital Outlay Support	78.7	78.7	78.7	78.7	-	14.5
Capital Outlay	299.3	276.1	276.1	276.1	-	-
Total	378.0	354.8	354.8	354.8	-	14.5
Oakland Touchdown (Total, including the following split contracts and prior-to-split expenses)						
Capital Outlay Support	74.4	74.4	92.1	92.1	-	25.0
Capital Outlay	283.8	283.8	302.5	302.5	-	1.6
Total	358.2	358.2	394.6	394.6	-	26.6
Oakland Touchdown Contract - Submarine Cable						
Capital Outlay Support	-	-	3.0	3.0	-	0.6
Capital Outlay	-	-	9.6	9.6	-	1.6
Total	-	-	12.6	12.6	-	2.2
Oakland Touchdown Contract No. 1 (Westbound)						
Capital Outlay Support	-	-	49.9	49.9	-	4.2
Capital Outlay	-	-	226.5	226.5	-	-
Total	-	-	276.4	276.4	-	4.2
Oakland Touchdown Contract No. 2 (Eastbound)						
Capital Outlay Support	-	-	15.8	15.8	-	0.3
Capital Outlay	-	-	62.0	62.0	-	-
Total	-	-	77.8	77.8	-	0.3
Oakland Touchdown Contract - Electrical Systems						
Capital Outlay Support	-	-	1.4	1.4	-	0.1
Capital Outlay	-	-	4.4	4.4	-	-
Total	-	-	5.8	5.8	-	0.1

Appendix B. (Cont'd.)

Toll Bridge Seismic Retrofit Program - SFOBB East Span Only
AB 144/SB 66 Baseline Budget, Forecasts, and Expenditures Through June 30, 2007

($ millions)

East Span Contract	AB 144/SB 66 Baseline	TBPOC Current Approved Budget See Note (1)	First Quarter 2007 Forecast	Second Quarter 2007 Forecast	Variance (2nd Q07 - 1st Q07)	Expenditures Through June 2007
YBI/SAS (Archeology)						
Capital Outlay Support	1.1	1.1	1.1	1.1	-	1.1
Capital Outlay	1.1	1.1	1.1	1.1	-	1.1
Total	2.2	2.2	2.2	2.2	-	2.2
YBI - USCG Rd Relocation						
Capital Outlay Support	3.0	3.0	3.0	3.0	-	2.7
Capital Outlay	3.0	3.0	3.0	3.0	-	2.8
Total	6.0	6.0	6.0	6.0	-	5.5
YBI - Substation and Viaduct						
Capital Outlay Support	6.5	6.5	6.5	6.5	-	6.4
Capital Outlay	11.6	11.6	11.6	11.6	-	11.3
Total	18.1	18.1	18.1	18.1	-	17.7
Oakland Geofill						
Capital Outlay Support	2.5	2.5	2.5	2.5	-	2.5
Capital Outlay	8.2	8.2	8.2	8.2	-	8.2
Total	10.7	10.7	10.7	10.7	-	10.7
Pile Installation Demonstration Project						
Capital Outlay Support	1.8	1.8	1.8	1.8	-	1.8
Capital Outlay	9.2	9.2	9.2	9.2	-	9.3
Total	11.0	11.0	11.0	11.0	-	11.1
Existing Bridge Demolition						
Capital Outlay Support	79.7	79.7	79.7	79.7	-	0.3
Capital Outlay	239.2	239.2	222.0	222.0	-	-
Total	318.9	318.9	301.7	301.7	-	0.3
Stormwater Treatment Measures						
Capital Outlay Support	6.0	8.0	8.0	8.0	-	6.9
Capital Outlay	15.0	18.3	15.0	18.3	3.3	11.5
Total	21.0	26.3	23.0	26.3	3.3	18.4
Right-of-way and Environmental Mitigation						
Capital Outlay Support	-	-	-	-	-	-
Capital Outlay	72.4	72.4	72.4	72.4	-	38.8
Total	72.4	72.4	72.4	72.4	-	38.8
Sunk Cost - Existing East Span Retrofit						
Capital Outlay Support	39.5	39.5	39.5	39.5	-	39.5
Capital Outlay	30.8	30.8	30.8	30.8	-	30.8
Total	70.3	70.3	70.3	70.3	-	70.3
Environmental Phase (Expended)						
Capital Outlay Support	97.7	97.7	97.7	97.7	-	97.7
Project Expenditures, Pre-splits						
Capital Outlay Support	44.9	44.9	44.9	44.9	-	44.9
Non-project Specific Costs						
Capital Outlay Support	20.0	19.0	19.0	19.0	-	3.2
Subtotal East Span Capital Outlay Support	959.4	959.4	977.1	977.1	-	511.1
Subtotal East Span Capital Outlay and Sunk Costs	4,492.1	4,674.6	4,686.6	4,689.9	3.3	1,872.1
Other Budgeted Capital	35.1	31.8	11.0	7.7	(3.3)	0.6
Total SFOBB East Span	**5,486.6**	**5,665.8**	**5,674.7**	**5,674.7**	**-**	**2,383.8**

(1) Current contract allotment to install two submarine electrical cables is $11.5 million. Additional non-program funding to support this allocation beyond the $9.6 million of available programs funds has been made available by the Treasure Island Development Authority.

(Due to the rounding of numbers, the totals above are shown within $0.1).

Appendix C.

CTC TBSRP Contributions
Adopted December 2005

Schedule of Contributions to the Toll Bridge Seismic Retrofit Program ($ million)

Source	Description	2005-06 (Actual)	2006-07 (Actual)	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Total
AB 1171	SHA	290									290
	PTA	80	40								120
	Highway Bridge Replacement and Rehabilitation (HBRR)	100	100	100	42						342
	Contingency				1	99	100	100	148		448
AB 144	SHA*	2	8				53	50	17		130
	Motor Vehicle Account (MVA)	75									75
	Spillover		125								125
	SHA**									300	300
	Total	547	273	100	43	99	153	150	165	300	1830

** Caltrans Efficiency Savings*

*** SFOBB East Span Demolition Cost*

Appendix D.

Project/Contract Photographs

SFOBB East Span Replacement Project

Skyway Contract

Bike path rail

Bridge Rail Erection

Concrete Finishing of the Soffit

Sandblasting Soffit

Skyway Contract (Cont'd.)

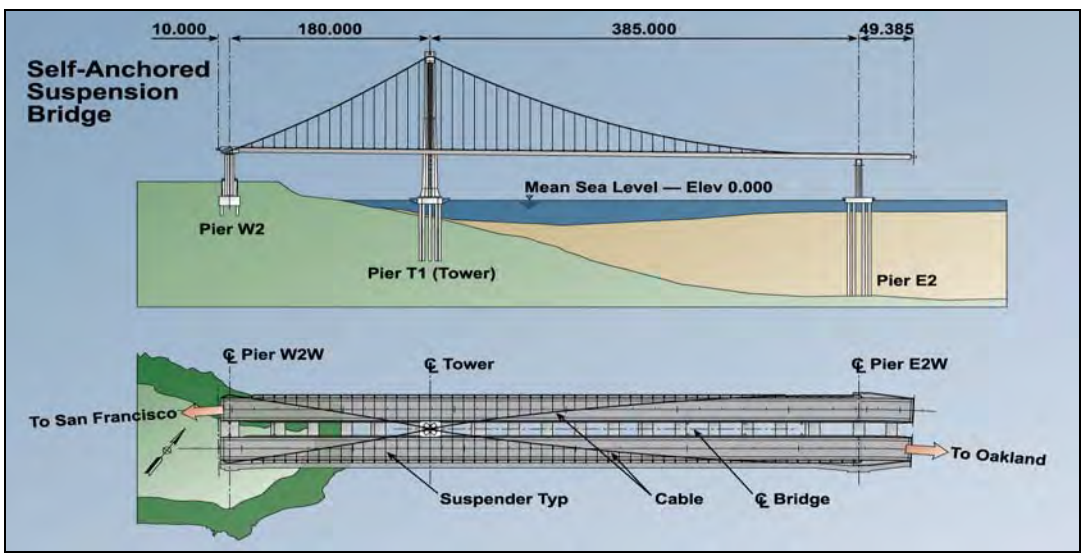
Dismantling tower crane

Skyway Bridge Looking from Yerba Buena Island

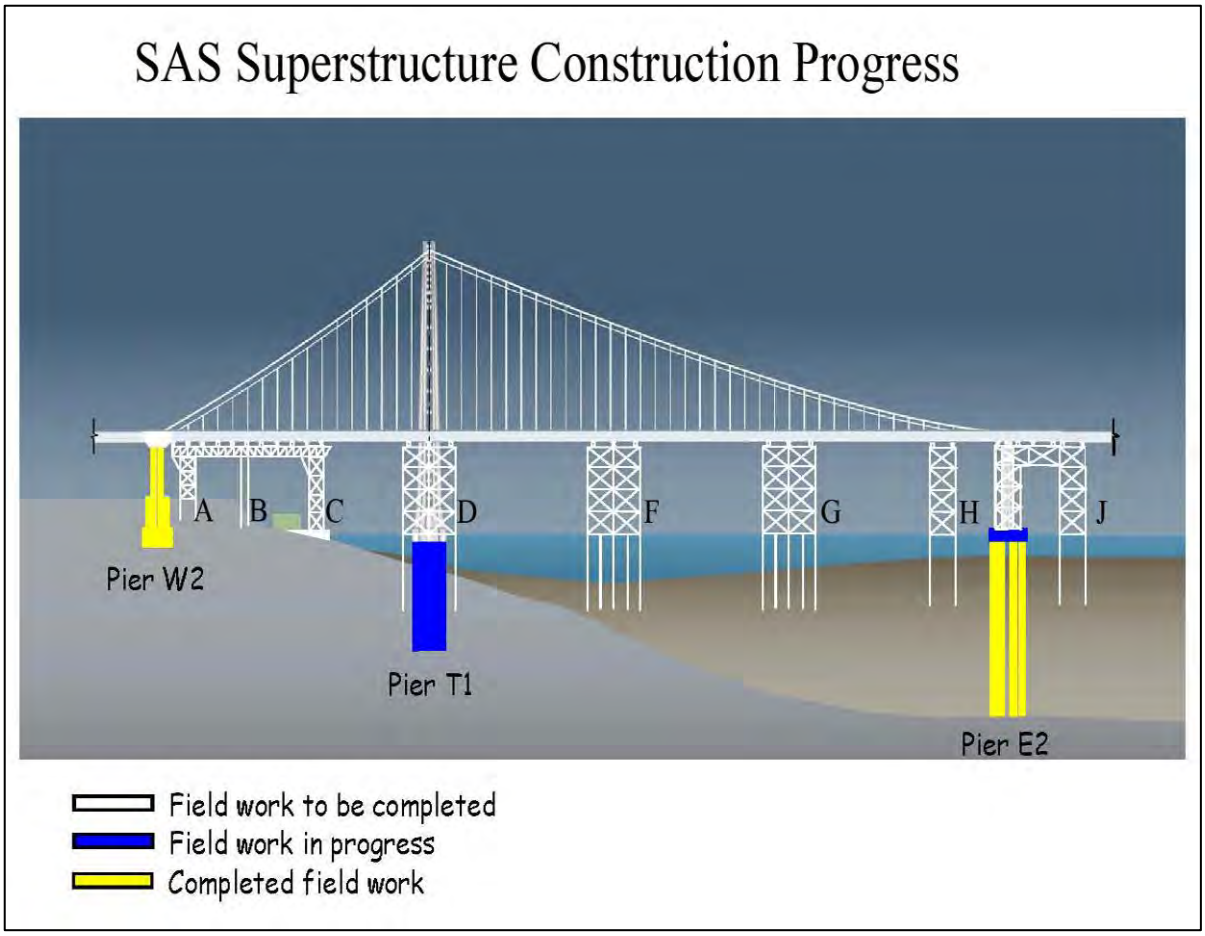
Deck Overlay

SAS Superstructure Contract

SAS Superstructure Artist Rendition



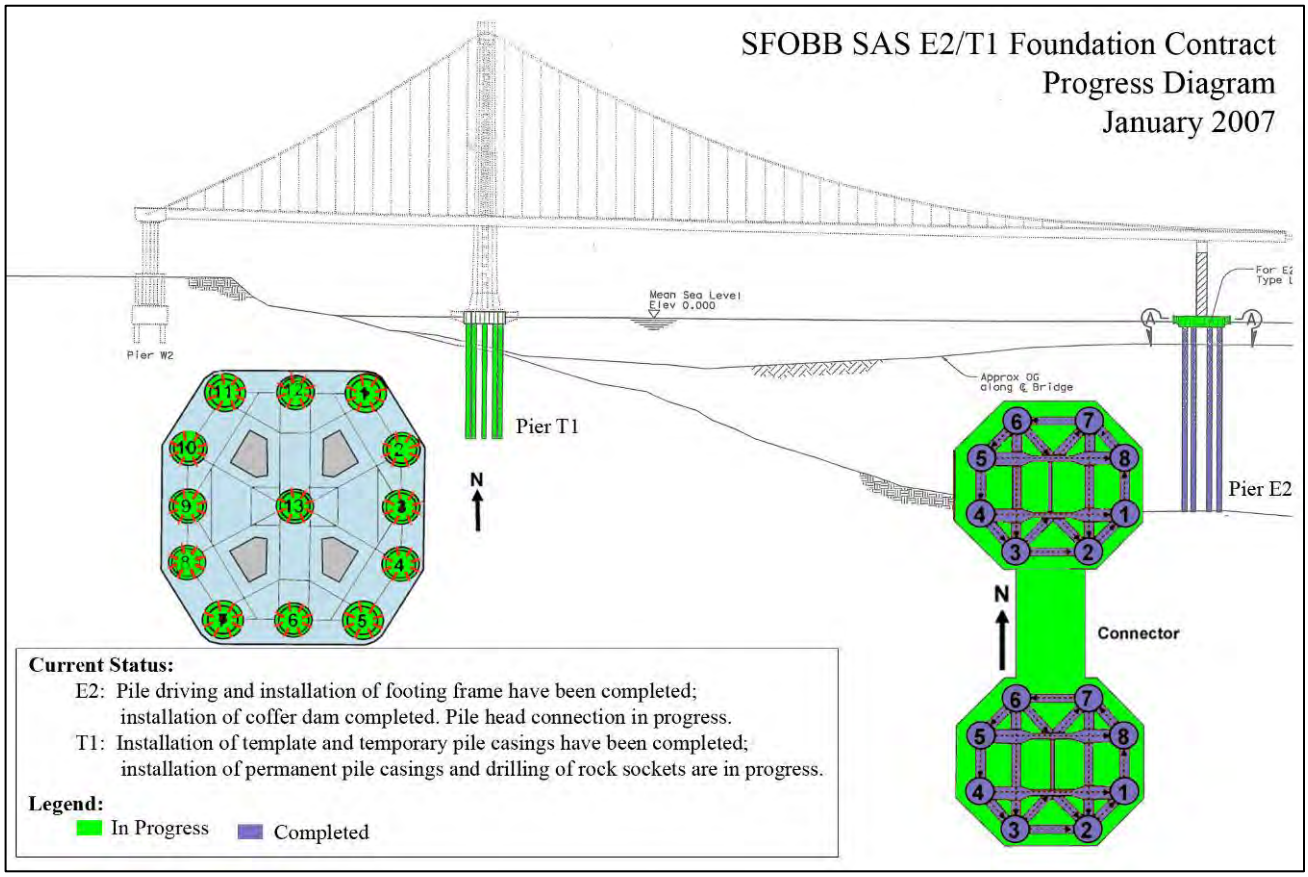
SAS Superstructure Contract (Cont'd.)



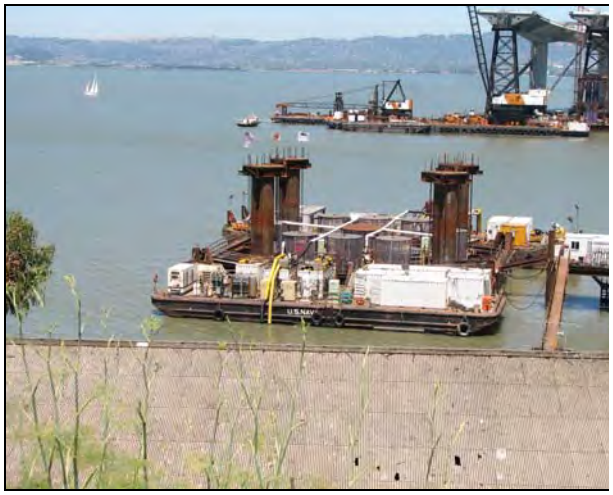
W2 & W3 Bents for the Transition Structure

W2 Bent for the Transition Structure

SAS E2/T1 Foundations Contract



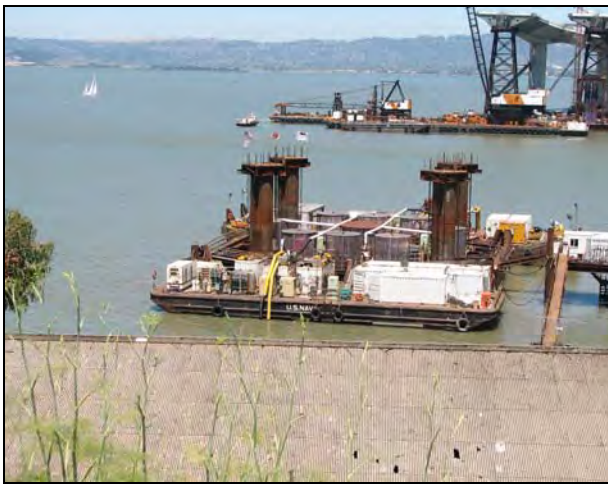
E2 Foundation & Portion of the Skyway Bridge



T1 Foundation

SAS E2/T1 Foundations Contract (Cont'd.)

T1 = Foundation for the 530-foot steel tower
E2 = Eastern Support of the suspension roadway
W2 = Western Support of the suspension roadway



T1 – Foundation

E2&T1 Foundation, with Skyway at the Background

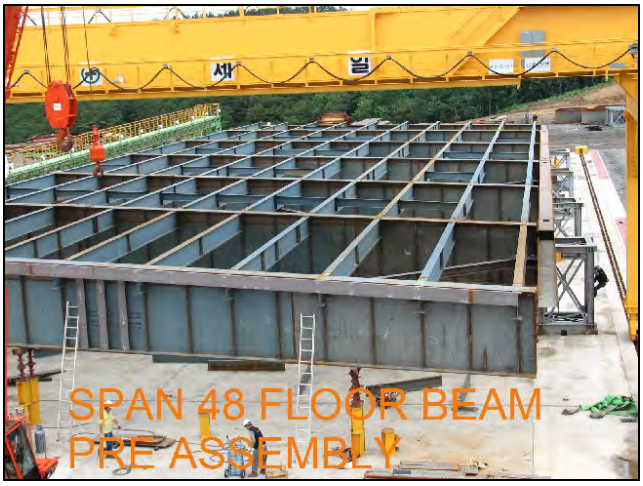
Viaduct Fabrication for YBI in Korea

Fabrication Facility in Korea

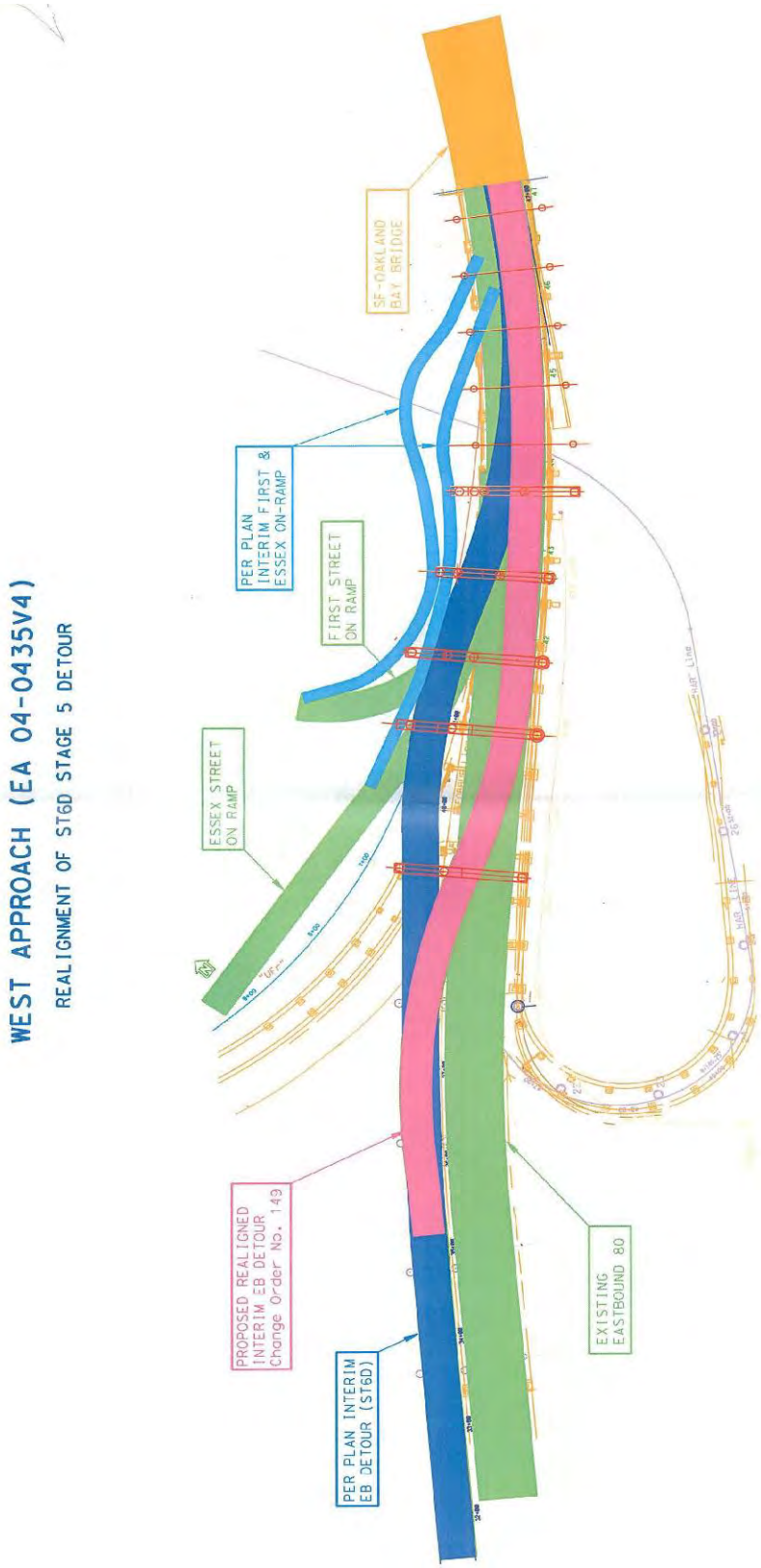
Fabrication of the Viaduct at the Dongkuk Facility

Viaduct - floor beam 9-10 production welding

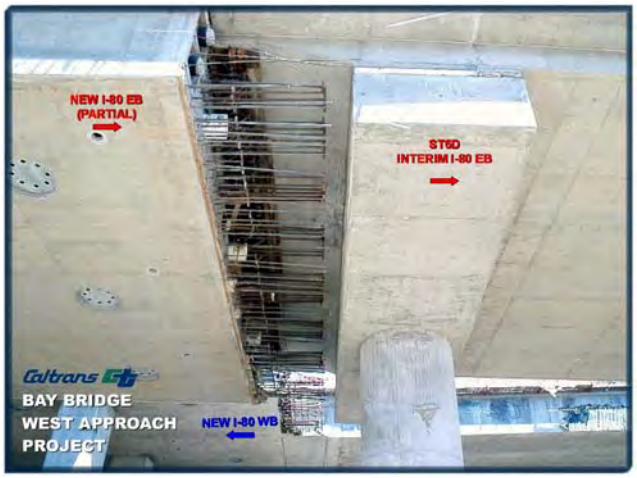
Viaduct - Paint inspection-adhesion test



SFOBB West Approach Replacement Project



SFOBB West Approach Replacement Project (Cont'd.)



SFOBB West Approach Replacement Project (Cont'd.)

West Approach Overhead View