Letter of Transmittal

TO: Toll Bridge Program Oversight Committee (TBPOC)

DATE: October 28, 2014

FR: Program Management Team (PMT)

RE: TBPOC Meeting Materials Packet – November 4, 2014

Herewith is the TBPOC Meeting Materials Packet for the November 4th meeting. The packet includes memoranda and reports that will be presented at the meeting. A Table of Contents is provided following the Agenda to help locate specific topics.
## Final Agenda

**TBPOC REGULAR MEETING**  
November 4, 2014  
Executive Session: 1:00pm – 2:00pm  
Regular Session: 2:00pm – 4:00pm  
1120 N Street, Conference Room 2116, Sacramento, CA

<table>
<thead>
<tr>
<th>Item Number/ Topic</th>
<th>Presenter</th>
<th>Time</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. EXECUTIVE SESSION</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Self-Anchored Suspension (SAS) Span Contract Change Order (CCO) 150-S2 Final (Install BASE cameras on Piers W2 and E2, on tower base (T1), and at bike path belvedere at Panel Point 117)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>b. 504/288 Addendum Follow-Up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. CHAIR’S REPORT</strong></td>
<td>S. Heminger, BATA</td>
<td>Information</td>
<td></td>
</tr>
<tr>
<td><strong>3. CONSENT CALENDAR</strong></td>
<td>A. Fremier, BATA</td>
<td>Approval</td>
<td></td>
</tr>
</tbody>
</table>
| a. TBPOC Regular/ Urgent Meeting Minutes  
1. TBPOC September 30, 2014 Minutes*  
2. TBPOC October 15, 2014 Minutes* | | | |
| **4. PROGRESS REPORTS** | A. Banani, CT | 20 min | Information |
| a. Capital Outlay Support (COS) Third Quarter 2014 Update* | | | |
| b. Risk Management Third Quarter 2014 Update* | R. Foley, CT | 20 min | Information |
| c. 2014 Third Quarter Project Progress and Financial Update** | A. Fremier, BATA | 10 min | Approval |
| **5. SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES** | | | |
| a. SAS Update  
1. SFOBB Self-Anchored Suspension Bridge Evaluation of the ASTM 354 Grade BD Rods Report**  
2. Tower Base Update** | S. Heminger, BATA | 30 min | Approval |
| b. Bridge Information Model (BrIM) Update* | B. Casey, CT  
B. Maroney, CT  
M. Whiteside, CT  
K. Brown, CT | 15 min | Approval |
<p>| <strong>6. OTHER BUSINESS</strong> | | | |
| a. Report on matters discussed and actions taken at Urgent Meeting | NA | NA | NA |</p>
<table>
<thead>
<tr>
<th>Item Number/ Topic</th>
<th>Presenter</th>
<th>Time</th>
<th>Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. Report on matters discussed and actions taken during Executive Session</td>
<td>S. Heminger, BATA</td>
<td>5 min</td>
<td>Information</td>
</tr>
</tbody>
</table>

7. **GENERAL PUBLIC COMMENT**

Next TBPOC Regular Meeting:
**December 3, 2014, 10:00am – 1:00pm, Oakland, CA**

* Attachments
**Attachments to be sent under separate cover

**Accessibility and Title VI:** TBPOC provides services/accommodations upon request to persons with disabilities and individuals who are limited-English proficient who wish to address Committee matters. For accommodations or translations assistance, please call the Metropolitan Transportation Commission (MTC) at 510.817.5757 or 510.817.5769 for TDD/TTY. We require three working days' notice to accommodate your request.

**可及性和法令第六章:** MTC根据要求向希望来委员会讨论有关事宜的残疾人士及英语有限者提供服务/方便。需要便利设施或翻译协助者，请致电 510.817.5757 或 510.817.5769 TDD/TTY。我们要求您在三个工作日前告知，以满足您的要求。

**Acceso y el Titulo VI:** El TBPOC puede proveer asistencia/facilitar la comunicación a las personas discapacitadas y los individuos con conocimiento limitado del ingles quienes quieran dirigirse a la Comité. Para solicitar asistencia, por favor llame a la Comisión Metropolitano de Transporte (MTC) al numero 510.817.5757 o al 510.817.5769 para TDD/TTY. Requerimos que solicite asistencia con tres dias habiles de anticipacion para poderle proveer asistencia.

**Meeting Conduct:** In the event that any public meeting conducted by TBPOC is willfully interrupted or disrupted by a person or by a group or groups of persons so as to render the orderly conduct of the meeting unfeasible, the Chair may order the removal of those individuals who are willfully disrupting the meeting. Such individuals may be subject to arrest. If order cannot be restored by such removal, the members of the committee may direct that the meeting room be cleared (except for representatives of the press or other news media not participating in the disturbance), and the session may continue on matters appearing on the agenda.
<table>
<thead>
<tr>
<th>INDEX TAB</th>
<th>AGENDA ITEM</th>
<th>DESCRIPTION</th>
</tr>
</thead>
</table>
| 1         | 1           | **EXECUTIVE SESSION**  
a. Self-Anchored Suspension (SAS) Span Contract Change Order (CCO) 150-S2 Final (Install BASE cameras on Piers W2 and E2, on tower base (T1), and at bike path belvedere at Panel Point 117)  
b. 504/288 Addendum Follow-Up |
| 2         | 2           | **CHAIR’S REPORT** |
| 3         | 3           | **CONSENT CALENDAR**  
a. TBPOC Regular/Urgent Meeting Minutes  
   1. TBPOC September 30, 2014 Minutes*  
   2. TBPOC October 15, 2014 Minutes |
| 4         | 4           | **PROGRESS REPORTS**  
a. Capital Outlay Support (COS) Third Quarter 2014 Update*  
b. Risk Management Third Quarter 2014 Update *  
c. 2014 Third Quarter Project Progress and Financial Update** |
| 5         | 5           | **SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES**  
a. SAS Update  
   1. SFOBB Self-Anchored Suspension Bridge Evaluation of the ASTM 354 Grade BD Rods Report**  
   2. Tower Base Update**  
b. Bridge Information Model (BrIM) Update * |
| 6         | 6           | **OTHER BUSINESS**  
a. Report on matters discussed and actions taken at Urgent Meeting  
b. Report on matters discussed and actions taken during Executive Session |
| 7         | 7           | **GENERAL PUBLIC COMMENT** |

* Attachments  
** Attachments to be sent out under separate cover
ITEM 1: EXECUTIVE SESSION

a. Self-Anchored Suspension Span (SAS) Contract Change Order (CCO) 150-S2 Final (Install BASE cameras on Piers W2 and E2, on tower base (T1), and at bike path belvedere at Panel Point 117)

b. 504/288 Addendum Follow-Up
ITEM 2: CHAIR’S REPORT
TO: Toll Bridge Program Oversight Committee (TBPOC)

DATE: October 28, 2014

FR: Andrew Fremier, Deputy Executive Director, Operations, MTC/ BATA

RE: Agenda No. - 3a1
   Consent Calendar
   Item- TBPOC Regular/Urgent Meeting Minutes
   TBPOC September 30, 2014 Minutes

Recommendation:
APPROVAL

Cost:
NA

Schedule Impacts:
NA

Discussion:
The Program Management Team has reviewed and requests TBPOC approval of the September 30, 2014 Regular Meeting Minutes.

Attachment(s):
September 30, 2014 Regular Meeting Minutes
# TBPOC Regular Meeting Minutes

September 30, 2014, 11:00am – 1:00pm  
325 Burma Road, Oakland CA

**Attendees:** TBPOC Members: Steve Heminger (Chair), Malcolm Dougherty, Andre Boutros  
PMT Members: Tony Anzano, Andrew Fremier, Stephen Maller  
Participants: Ade Akinsanya, Ali Banani, Karin Betts, Bill Casey, Michele DiFrancia, Rich Foley, Ted Hall, Beatriz Lacson, Peter Lee, Brian Maroney, Dan McElhinney, Leah Robinson-Leach, Bijan Sartipi, Trish Stoops, Ken Terpstra, Deanna Vilcheck  
Lori Fogarty (OMCA); John W. Fisher (TBSSRP); Marwan Nader (TY Lin/MN JV); Fastener, Materials & Corrosion Specialty Consultants: Jeffrey Gorman, Alan Pense, Herbert E. Townsend, Louis Raymond, Douglas Williams

Convened: 11:10 AM

<table>
<thead>
<tr>
<th></th>
<th>Items</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1. | **EXECUTIVE SESSION**  
a. Public Information Program  
b. SFOBB 504’ and 288’ Spans Dismantling Contract Addendum Items | • The TBPOC **APPROVED** an addendum to the SFOBB 504’ and 288’ Spans Dismantling Contract in an amount not to exceed $3 million for presented items, plus capital outlay support cost. |
| 2. | **CHAIR’S REPORT**  
• NA |  |
| 3. | **CONSENT CALENDAR**  
a. TBPOC Regular/Urgent Meeting Minutes  
1. TBPOC September 15, 2014 Minutes  
2. TBPOC August 28, 2014 Minutes  
b. 2015 TBPOC Meeting Calendar | • The TBPOC **APPROVED** the Consent Calendar, as presented. |
4. **PROGRAM ISSUES**  
   a. Bay Bridge Salvage Agreement  
      • A. Fremier, Deputy Executive Director, BATA, provided a brief update on the TBPOC direction to develop an agreement with the Oakland Museum of California (OMCA), and requested TBPOC approval to allocate $4.3 million for the Bay Bridge Steel Creative Reuse Program, to cover the capital and capital outlay support costs to salvage 600 tons of bridge steel, as well as OMCA administration.  
         o L. Fogarty, Executive Director of the OMCA, summarized the selection process as open, rigorous and detailed, would avail of outside expertise, would focus on public projects in California, be administered in two phases within a two-year timeframe. She noted that OMCA would work closely with the Department and ensure that the visual characteristics of the bridge are retained, per the MOA.  
         o Discussion items included: cost estimate; timeframe alignment with demolition project schedule; steel storage and transport; working with a reduced budget for a lesser amount of steel.  
   
   b. TBSRP Capital Outlay Support (COS) Update  
      • A. Banani presented a Capital Outlay Support (COS) Update covering FY 14/15 Budget vs. Expenditure and FY 14/15 Unbudgeted Additional Work.  
      • Discussion items included: requested quarterly COS updates; reformatting presentations to reflect year-to-date amounts; minimizing cost of delays and unbudgeted work.  

   • The TBPOC **APPROVED** a budget in an amount not to exceed $2.2 million for the Bay Bridge Steel Creative Reuse Program.  

5. **SAN FRANCISCO-OAKLAND BAY BRIDGE UPDATES**  
   a. SAS Update  

   • A. Banani to give a 3rd Quarter COS update at the TBPOC November 4, 2014 meeting. Delays and unbudgeted work presented to be accompanied by a PMT-developed plan on how to mitigate increasing costs.
Items | Action
--- | ---
1. A354 Grade BD High Strength Steel Rods Testing Update
- B. Maroney, Deputy Program Manager, Caltrans, reported that a final report, “San Francisco-Oakland Bay Bridge, Self-Anchored Suspension Bridge, Evaluation of the ASTM A354 Grade BD Rods”, has been provided to the TBPOC and public covering the results of the testing program effort which was carried out with the help of the best and brightest experts, some of whom are present today.
  - The Chair and Caltrans Director M. Dougherty indicated that the report is now open to public review.
  - A. Fremier noted that Toll Bridge Seismic Safety Peer Review Panel (TBSSPRP) opinion on the report is requested prior to the TBPOC November 4, 2014 meeting.
  - Discussion items included: phase two of Gorman Test, the only test still in progress (scheduled to complete March 2015); working with the ASTM to modify A354BD specification on toughness.
- B. Casey gave a slide presentation on the water recently observed at the base of tower shaft near a number of A354BD anchor rods.
  - Not a stress corrosion cracking issue; may lead to long-term corrosion if water is allowed to

- Staff to post the report “San Francisco-Oakland Bay Bridge, Self-Anchored Suspension Bridge, Evaluation of the ASTM A354 Grade BD Rods” to the project website today.
- TBPOC to provide an update of their 2013 report at their November 4, 2014 meeting, and take action on accepting the final report presented today.
<table>
<thead>
<tr>
<th>Items</th>
<th>Action</th>
</tr>
</thead>
</table>
| • stand—a maintenance issue; in process of removing water and dehumidifying.  
  ➢ Source and level of water being investigated.  
  • The Chair thanked the team members for their work and public spiritedness, and extended the Committee’s appreciation for their efforts to extend the life of our bridge. |        |

6. **OTHER BUSINESS**
   a. Report on matters discussed and actions taken at Urgent Meeting  
      • NA  
   b. Report on matters discussed and actions taken during Executive Session  
      • The Chair reported that the TBPOC approved Item 1b above at the Executive Session.  

   Next TBPOC Meeting  
   • The next TBPOC regular meeting is on November 4, 2014, 1:00pm – 4:00pm, in Sacramento.  

7. **GENERAL PUBLIC COMMENT**  
   • D. R. Darr of Analatom, Inc. gave a brief introduction to Analatom’s Structural Health Monitoring technology related to detection, monitoring, and recording environmental conditions known to cause stress corrosion cracking.  
   • D. Grieshaber of the Bay Bridge House Project inquired as to when they might receive a response to their organization’s formal request for Bay Bridge steel and concrete for their proposed project.  
   • G. DeMar inquired as to when a report  
   • Staff via OMCA to provide a response to Bay Bridge House and other interested parties as part of the agreement and process approved today.  
   • Staff to obtain from the TBSSPRP
### Items

<table>
<thead>
<tr>
<th>Item 3a1_TBPOC_093014_MtgMin_04Nov14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Items</strong></td>
</tr>
<tr>
<td>on the solution to the misaligned main cable rod problem (clearances of anchor rods) would be forthcoming.</td>
</tr>
<tr>
<td><strong>Action</strong></td>
</tr>
<tr>
<td>a written letter on the 2-mm clearance requirement for anchor rods by the TBPOC November 4, 2014 meeting.</td>
</tr>
</tbody>
</table>

Adjourned: 1:24 PM

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**TBPOC REGULAR MEETING MINUTES**  
September 30, 2014, 11:00am – 1:00pm

**APPROVED BY:**

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**STEVE HEMINGER**, TBPOC Chair  
Executive Director, Bay Area Toll Authority  

**ANDRE BOUTROS**  
Executive Director, California Transportation Commission  

**MALCOLM DOUGHERTY**  
Director, California Department of Transportation
Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC)

DATE: October 28, 2014

FR: Andrew Fremier, Deputy Executive Director, Operations, MTC/ BATA

RE: Agenda No. - 3a2

Item- Consent Calendar

TBPOC Regular/Urgent Meeting Minutes

TBPOC October 15, 2014 Minutes

Recommendation:

APPROVAL

Cost:

NA

Schedule Impacts:

NA

Discussion:

The Program Management Team has reviewed and requests TBPOC approval of the October 15, 2014 Urgent Meeting Minutes.

Attachment(s):

October 15, 2014 Urgent Meeting Minutes
## TBPOC URGENT MEETING MINUTES
October 15, 2014, 4:45pm – 5:00pm

**Attendees:** TBPOC Members: Steve Heminger (Chair), Malcolm Dougherty, Andre Boutros  
PMT Members: Tony Anziano, Andrew Fremier  
Participants: Bill Casey, John Goodman, Beatriz Lacson, Peter Lee, Brian Maroney, Bijan Sartipi

Convened: 4:53 PM

<table>
<thead>
<tr>
<th>Items</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> EXECUTIVE SESSION</td>
<td></td>
</tr>
</tbody>
</table>
a. Tower Rod Inspection Update |  
b. SFOBB Self-Anchored Suspension (SAS) Bridge Evaluation of the ASTM 354 Grade BD Rods |
| **2.** CHAIR’S REPORT |  
• NA |
| **3.** OTHER BUSINESS |  
a. Report on matters discussed and actions taken at Urgent Meeting  
• NA  
b. Report on matters discussed and actions taken during Executive Session  
• The Chair reported that Items 1a and 1b above were discussed but no action was taken.  
Next TBPOC Meeting  
• The next TBPOC regular meeting is on November 4, 2014, 1:00pm – 4:00pm, Sacramento. |
| **6.** GENERAL PUBLIC COMMENT |  
• No public comments received. |

Adjourned: 4:54 PM
TBPOC URGENT MEETING MINUTES
October 15, 2014, 4:45pm – 5:00pm

APPROVED BY:

_____________________________ ____________________________
STEVE HEMINGER, TBPOC Chair
Executive Director, Bay Area Toll Authority
Date

_____________________________ ____________________________
ANDRE BOUTROS
Executive Director, California Transportation Commission
Date

_____________________________ ____________________________
MALCOLM DOUGHERTY
Director, California Department of Transportation
Date
TO: Toll Bridge Program Oversight Committee (TBPOC)  
DATE: October 28, 2014  
FR: Ali Banani, COS Project Controls Manager, Caltrans  
RE: Agenda No. - 4a  
   Progress Reports  
   Item- Capital Outlay Support (COS) Third Quarter 2014 Update,  

Recommendation:  
For Information Only  

Cost:  
NA  

Schedule Impacts:  
NA  

Discussion:  
A capital outlay support (COS) update will be provided at the TBPOC November 4, 2014 meeting.  

Attached is a copy of the presentation “Capital Outlay Support (COS) Update, November 2014”.  

Attachment(s):  
Capital Outlay Support (COS) Update, November 2014
Capital Outlay Support (COS) Update

November 2014
## FY 14/15 Forecast

<table>
<thead>
<tr>
<th></th>
<th>FY Budget</th>
<th>Expenditures Thru Sept/2014</th>
<th>FY Forecast</th>
<th>Budget Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFOBB</td>
<td>$38.4 M</td>
<td>$14.0 M</td>
<td>$49.0 M</td>
<td>$10.6 M</td>
</tr>
<tr>
<td>Dumbarton</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Access Road</td>
<td>0</td>
<td>$0.4 M</td>
<td>$0.8 M</td>
<td>$0.8 M</td>
</tr>
<tr>
<td>Total</td>
<td>$38.4 M</td>
<td>$14.4 M</td>
<td>$49.8 M</td>
<td>$11.4 M</td>
</tr>
</tbody>
</table>

- **Forecast:** $49.8 M
- **Budget:** $38.4 M
### FY 14/15 Expenditure Analysis

<table>
<thead>
<tr>
<th>Category</th>
<th>Budget</th>
<th>FY Expenditures* Thru Sept 2014</th>
<th>FY Forecast</th>
<th>Budget Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Staff</td>
<td>$18.8 M</td>
<td>$6.2 M</td>
<td>$24.5 M</td>
<td>$5.7 M**</td>
</tr>
<tr>
<td>TY Lin/MN Str. Design</td>
<td>$4.2 M</td>
<td>$2.4 M</td>
<td>$6.0 M</td>
<td>$1.8 M</td>
</tr>
<tr>
<td>TY Lin Dismantling</td>
<td>$2.5 M</td>
<td>$0.7 M</td>
<td>$2.5 M</td>
<td>0</td>
</tr>
<tr>
<td>METS (Alta Vista)</td>
<td>$5.0 M</td>
<td>$2.0 M</td>
<td>$5.0 M</td>
<td>0</td>
</tr>
<tr>
<td>A/E Others</td>
<td>$7.9 M</td>
<td>$3.1 M</td>
<td>$11.8 M</td>
<td>$3.9 M</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$38.4 M</strong></td>
<td><strong>$14.4 M</strong></td>
<td><strong>$49.8 M</strong></td>
<td><strong>$11.4 M</strong></td>
</tr>
</tbody>
</table>

### Expenditure Composition

- **State Staff**: 43%
- **TY Lin/MN Str. Design**: 17%
- **TY Lin Dismantling**: 5%
- **METS (Alta Vista)**: 16%
- **A/E Others**: 22%

* Expenditures are an estimate based on A/E invoices and late time sheets for services performed thru Sept 2014.

** Reduction of 26 PYs by January 1, 2015 is required to address the state staff overrun cost.
## FY 14/15 Unbudgeted Additional Work (in Millions)

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary raises, Indirect cost rate increase and other adjustments</td>
<td>$1.70</td>
</tr>
<tr>
<td>CM/GC Contract (executed in August)</td>
<td>$0.95</td>
</tr>
<tr>
<td>Dumbarton Public Access Road</td>
<td>$0.80</td>
</tr>
<tr>
<td>Four months delay in contract completion for SAS</td>
<td>$3.50</td>
</tr>
<tr>
<td>Three Months delay in contract completion for OTD2</td>
<td>$1.00</td>
</tr>
<tr>
<td>New Geotechnical Engineering Contract</td>
<td>$0.60</td>
</tr>
<tr>
<td>Six months delay in the start of 504/288 dismantling</td>
<td>-$4.00</td>
</tr>
<tr>
<td>TY Lin Added Work</td>
<td>$1.80</td>
</tr>
<tr>
<td>- Review Submittal for tower base</td>
<td></td>
</tr>
<tr>
<td>- Maintenance Manual for YBI &amp; OTD</td>
<td></td>
</tr>
<tr>
<td>- Corrosion Specialist effort</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$ 6.35</strong></td>
</tr>
</tbody>
</table>
East Span CO & COS Cash Flow

- **Capital (in millions)**
  - Current Approved Budget: $5,091.5M
  - Forecast at Completion: $5,152.4M
  - Expenditure thru September'14: $4,702.2M

- **Support (in millions)**
  - Current Approved Budget: $1,305.5M
  - Forecast at Completion: $1,345.4M
  - Expenditure thru September'14: $1,244.6M
TO: Toll Bridge Program Oversight Committee (TBPOC)  DATE: October 28, 2014
FR: Rich Foley, Risk Manager, Caltrans
RE: Agenda No. - 4b  
     Item- Progress Reports  
     Item- Risk Management Third Quarter 2014 Update

Recommendation:  
For Information Only

Cost:  
NA

Schedule Impacts:  
NA

Discussion:  
A Risk Management third quarter 2014 update will be presented at the TBPOC November 4 meeting.

Attached is a copy of the presentation, “TBPOC Briefing, Risk Management Results Third Quarter 2014”.

Attachment(s):  
TBPOC Briefing, Risk Management Results Third Quarter 2014
TBPOC Briefing
Risk Management Results
Third Quarter 2014
Summary Of Q3 Changes

$10 Million Increase in Total Draw this Quarter*

• $17 million Increase in Capital Outlay Forecast
  1. $13.1M increase in SAS Contract
  2. $7.3M Right of Way
  3. Misc. Increase/Decrease to other Contracts

• $6.5M Decrease in Capitol Outlay Risk*
  1. $8.3M Decrease in SAS Risk
  2. $16M Increase – 504/288 Delays to Bid Opening/Schedule and Foundations

• $19.6 million Increase in Capital Outlay Support Forecast*
  1. $17.7m – Antioch & Dumbarton Reserves moved to Program Contingency

• $45.7 million transferred to Program Contingency
  1. Antioch & Dumbarton Project Reserves – $25.3M
  2. Antioch & Dumbarton Capitol Outlay Support (COS) Reserves - $17.7M

* COS NUMBERS SUBJECT TO CHANGE OVER NEXT FEW WEEKS
## Q3 RMC Results

### 50% Probable Risk Management Cost

<table>
<thead>
<tr>
<th>Company &amp; Project</th>
<th>Q3 2014</th>
<th>Q2 2014</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Structures Dismantling</td>
<td>26,526,000</td>
<td>26,526,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>504' &amp; 288' Steel Structures Dismantling</td>
<td>70,197,000</td>
<td>55,122,000</td>
<td>15,075,000</td>
<td>27</td>
</tr>
<tr>
<td>Cantilever Dismantling</td>
<td>6,557,000</td>
<td>13,750,000</td>
<td>(7,193,000)</td>
<td>(52)</td>
</tr>
<tr>
<td>OTD2 Eastbound</td>
<td>2,922,000</td>
<td>3,487,000</td>
<td>(565,000)</td>
<td>(16)</td>
</tr>
<tr>
<td>OTD Detour</td>
<td>75,000</td>
<td>75,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Self-Anchor Suspension</td>
<td>19,072,000</td>
<td>27,431,000</td>
<td>(8,359,000)</td>
<td>(30)</td>
</tr>
<tr>
<td>YBI#1 Mainline Structures</td>
<td>1,167,000</td>
<td>1,167,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>YBI#2 Post Traffic Switch</td>
<td>39,104,000</td>
<td>42,302,000</td>
<td>(3,198,000)</td>
<td>(8)</td>
</tr>
<tr>
<td>Total East Span</td>
<td>165,620,000</td>
<td>169,860,000</td>
<td>(4,240,000)</td>
<td>(2)</td>
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<tr>
<td>Program-level risks (not in a contract)</td>
<td>9,392,000</td>
<td>11,659,000</td>
<td>(2,267,000)</td>
<td>(19)</td>
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<tr>
<td>Total Capital Outlay Risk</td>
<td>175,012,000</td>
<td>181,519,000</td>
<td>(6,507,000)</td>
<td>(4)</td>
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<tr>
<td>COS Risks</td>
<td>39,900,000</td>
<td>20,300,000</td>
<td>19,600,000</td>
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<tr>
<td>Total Risk</td>
<td>214,912,000</td>
<td>201,819,000</td>
<td>13,093,000</td>
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<tr>
<td>Draw on Program Contingency</td>
<td>170,912,000</td>
<td>115,519,000</td>
<td>55,393,000</td>
<td>48</td>
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<tr>
<td>Contract Contingency</td>
<td>44,000,000</td>
<td>86,300,000</td>
<td>(42,300,000)</td>
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<tr>
<td>Program Contingency Balance</td>
<td>135,210,000</td>
<td>89,510,000</td>
<td>45,700,000</td>
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<td>Total Contingency</td>
<td>179,210,000</td>
<td>175,810,000</td>
<td>3,400,000</td>
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COS NUMBERS SUBJECT TO CHANGE OVER THE NEXT FEW WEEKS
## COS Changes

<table>
<thead>
<tr>
<th>Contract</th>
<th>50% Probable COS Differential ($M)</th>
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<tr>
<td></td>
<td>Q3 2014</td>
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<tr>
<td>SAS</td>
<td>14.2</td>
</tr>
<tr>
<td>YBI Detour</td>
<td>0.0</td>
</tr>
<tr>
<td>YBITS #1</td>
<td>0.0</td>
</tr>
<tr>
<td>YBITS #2</td>
<td>7.3</td>
</tr>
<tr>
<td>OTD #2</td>
<td>5.7</td>
</tr>
<tr>
<td>OTD Detour</td>
<td>0.3</td>
</tr>
<tr>
<td>Program-level</td>
<td>7.6</td>
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<tr>
<td>Demolition</td>
<td>4.5</td>
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<tr>
<td><strong>Total East Span</strong></td>
<td><strong>39.6</strong></td>
</tr>
<tr>
<td>West Approach</td>
<td>0.3</td>
</tr>
<tr>
<td>Antioch</td>
<td>(7.2)</td>
</tr>
<tr>
<td>Dumbarton</td>
<td>(10.5)</td>
</tr>
<tr>
<td><strong>Total COS Risk</strong></td>
<td><strong>39.9</strong></td>
</tr>
</tbody>
</table>

* COS Cost Differential is measured from the current COS Budget

COS NUMBERS SUBJECT TO CHANGE OVER THE NEXT FEW WEEKS
POTENTIAL DRAW SUBJECT TO CHANGE AS A RESULT OF EXPECTED COS CHANGES
## 50% Probable Risk vs. Remaining Contingency

<table>
<thead>
<tr>
<th></th>
<th>50% Probable Risk</th>
<th>Remaining Contract Contingency</th>
<th>Draw on Program Contingency</th>
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</thead>
<tbody>
<tr>
<td>OTD1 Westbound</td>
<td>0</td>
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<td></td>
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<tr>
<td>E2/T1</td>
<td>0</td>
<td></td>
<td></td>
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<tr>
<td>SSD</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stormwater</td>
<td>0</td>
<td>1.0</td>
<td>-1.0</td>
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<tr>
<td>West Approach</td>
<td>0</td>
<td>12.6</td>
<td>-12.6</td>
</tr>
<tr>
<td>Submarine Cable</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Antioch</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td>Dumbarton</td>
<td>0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td><strong>Completed Projects</strong></td>
<td>0</td>
<td><strong>13.6</strong></td>
<td><strong>-13.6</strong></td>
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<tr>
<td>OTD2 Eastbound</td>
<td>2.9</td>
<td>0.1</td>
<td>2.8</td>
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<tr>
<td>OTD Detour</td>
<td>0.1</td>
<td>0.7</td>
<td>-0.6</td>
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<tr>
<td>Self-Anchor Suspension</td>
<td>19.0</td>
<td>5.6</td>
<td>13.4</td>
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<tr>
<td>YBI#1 Mainline Structures</td>
<td>1.2</td>
<td>3.9</td>
<td>-2.7</td>
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<tr>
<td>YBI#2 Post Traffic Switch</td>
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<tr>
<td>YBI#3</td>
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<td>-1.2</td>
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<td><strong>East Span Total</strong></td>
<td><strong>62.3</strong></td>
<td><strong>18.7</strong></td>
<td><strong>43.6</strong></td>
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<td>Program-level risks (not in a contract)</td>
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<td>9.4</td>
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<td>COS Risks</td>
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<td>39.9</td>
</tr>
<tr>
<td>Right-of-way and Mitigation</td>
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<td>-3.4</td>
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<tr>
<td><strong>Program-wide</strong></td>
<td><strong>49.3</strong></td>
<td><strong>3.4</strong></td>
<td><strong>45.9</strong></td>
</tr>
<tr>
<td>Marine Structures Dismantling</td>
<td>26.5</td>
<td>-0.1</td>
<td>26.6</td>
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<tr>
<td>504' &amp; 288' Steel Structures Dismantling</td>
<td>70.2</td>
<td>-0.1</td>
<td>70.3</td>
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<tr>
<td>Cantilever Dismantling</td>
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<td>8.5</td>
<td>-1.9</td>
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<tr>
<td><strong>Demolition Total</strong></td>
<td><strong>103.3</strong></td>
<td><strong>8.3</strong></td>
<td><strong>95.0</strong></td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>214.9</strong></td>
<td><strong>44.0</strong></td>
<td><strong>170.9</strong></td>
</tr>
<tr>
<td>Program Contingency Balance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DRAW ON PROGRAM SUBJECT TO CHANGE AS A RESULT OF EXPECTED COS CHANGES**
Challenge Going Forward

- Project close-out - YBITS1 & OTD2 (Near Term) & SAS
- Environmental Risks Continue to Increase Based on Communication with National and State Agencies
- Some opportunities for cost mitigation include:
  1. Eliminate the risk related to cost estimate uncertainty of 504/288 and Marine Foundations contracts if bids come in under the estimates.
  2. Obtain Concurrence to Leave Foundations – E2 & E19-E22
ITEM 4: PROGRESS REPORTS

c. 2014 Third Quarter Project Progress and Financial Update

(memo forthcoming)
ITEM 5: SFOBB UPDATES

a. SAS Update
1. SFOBB Self-Anchored Suspension Bridge Evaluation of the ASTM 354 Grade BD Rods Report

2. Tower Base Update

(memos forthcoming)
Memorandum

TO: Toll Bridge Program Oversight Committee (TBPOC)  
DATE: October 28, 2014

FR: Brian Maroney, Deputy Program Manager, Caltrans  
    Mike Whiteside, Structure Specifications Manager, Caltrans  
    Ken Brown, Chief Structures Maintenance – Toll Bridges, Caltrans

RE: Agenda No. - 5b  
    Item- San Francisco-Oakland Bay Bridge (SFOBB) Updates  
         Bridge Information Model (BrIM) DB Pilot Program Update

Recommendation:  
APPROVAL

Staff is requesting that the TBPOC approve/endorse the attached BRIM Pilot Program proposal for submittal to the BATA/Caltrans Rehab Program for potential funding and implementation.

Cost Impact:  
N/A

Schedule Impact:  
N/A

Discussion:  
At the March 13, 2014 TBPOC meeting, Brian Maroney and Mike Whiteside presented a proposal for the development of a pilot project for BrIM Database for the SFOBB Corridor. The TBPOC expressed interest in the proposal and requested additional clarification regarding potential cost advantages of using a BrIM database on bridge lifecycle maintenance and rehabilitation costs. An estimate has been developed for the purposes of this proposal to evaluate costs for future maintenance and rehabilitation of the New East Spans for its 150 year design life with and without a BrIM database. The use of a BrIM database for the lifecycle maintenance and rehabilitation of the New East Spans will result in a net cost advantage of $300M - $350M in 2014 dollars.

It is strongly recommended that a pilot project for a BrIM Database for the SFOBB New East Spans be implemented on an immediate basis. Time is of the essence. A delay in the development of BrIM Database for this lifeline bridge would only increase
the risk of loss of valuable design and construction information that may have to be regenerated in the future at significant additional costs, if even possible. Immediate implementation of the pilot project will allow for the consolidation and preservation of design and construction information for the SFOBB New East Spans that history has shown to be vulnerable to loss.

It is further recommended that a special purpose 3D BrIM database (BrIM Database) be developed as the pilot project for the SFOBB New East Spans. The BrIM model for this database will capture the entire New East Spans in complete as-built geometry with block level detail for all concrete and steel components. All structural elements of the New East Spans that are designed to take damage and are expected to require repairs after a design level earthquake will be modeled in complete as-built detail. A database for design drawings, structural & strength properties, and as-built shop drawings for the aforementioned elements of the New East Spans will be integrated into the BrIM model.

The schedule for completion of this effort is **24 months**. A funding of **$10M** is hereby requested from the BATA Toll Bridge Rehabilitation funds for the BrIM Database pilot project for the SFOBB New East Spans with an allocation of $5M per year. An oversight group comprising of BATA and Caltrans representatives will be assigned to guide and evaluate the progress of this program every three months. As an option, this project may be extended to include the SFOBB West Spans in order to provide a comprehensive BrIM Database for the entire SFOBB Corridor.

The TBPOC is hereby requested to provide its support and endorsement to the proposed BrIM Database pilot project.

**Attachment(s):**

NA
ITEM 6: OTHER BUSINESS

a. Report on matters discussed and actions taken at Urgent Meeting

b. Report on matters discussed and actions taken during Executive Session
ITEM 7: GENERAL PUBLIC COMMENT