

**ACEC / Caltrans Division of Engineering Services
Structures Liaison Committee**

MEETING MINUTES ~~(FINAL)~~

DATE: April 26, 2012

TIME: 10:00 AM – 12:00 PM

MAIN LOCATION: California Department of Transportation
Division of Engineering Services
1801 30th Street, Room 102 (Farmers Market 1 Building, 1st Floor)
Sacramento, CA 95816

VIDEO CONFERENCE LOCATION: District 12 Office, Room 333
3337 Michelson Drive, Irvine

MEETING MINUTES: Shawn M. Cullers

I. Call to Order

- A. Self-introductions
- B. Changes to Agenda
 - *Majid Sarraf requested that the “SDC Technical Questions - Sample Abutment Details” be revised to “Ductile Shear key Details”*
 - *Additional Technical Questions – SDC Mass Inertia of Pile Caps*
- B. Review Previous Meeting Minutes
 - *Shawn Cullers asked if Caltrans had an update to the forensic review of the Mission Bridge load rating for P13 loading noted during the previous meeting. John Fujimoto noted that an early version of Conspan was used and that improper modeling likely caused the inadequate design for live load.*

II. Status/Reports on Technical Topics

- A. Tracking and Publishing Consultant Questions (Tom Walker/Sudhakar Vatti)
 - *Sudhakar Vatti noted that two options being considered – 1) Online depository of questions and answers and 2) each specialist has their own website. Sue Hida noted that the key to an effective solution will be the use of the internet but Caltrans intranet and internet is out of date and requires maintenance/updating. Caltrans is currently updating intranet first and will then move onto updating the internet portions of their site. An internet solution to tracking and publishing consultant questions will be delayed until Caltrans updates their intranet and internet sites.*
 - *During the interim, the committee will continue posting questions in meeting minutes. Caltrans will continue to post to Caltrans website.*

Action Items:

Caltrans to provide update on next meeting.

- B. SDC Technical Questions – Ductile Shearkey Details (Majid Sarraf)
 - *John Fujimoto noted that details were provided to the Caltrans Technical Research*

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Group for comment. Technical Research Group noted that the proposed detail could potentially be used but also noted that this is only one of many possible solutions. Any further development of the concept should go through the Technical Research Group.

- *Sudhakar Vatti noted that Caltrans cannot post details to the committee website due to concern with the Caltrans “recommending” specific details and designs. All future posting of technical items including sketches and designs will be reviewed by Caltrans and Caltrans’ will decide what items will be posted on the website. Handouts of technical items will be handed out internally within the committee only.*
- *Majid Sarraf noted that the details provided at the last meeting of the ductile shearkey connection were approved by US patent office a month ago. Majid would be willing to meet with Caltrans to discuss providing rights to Caltrans for the use of the proposed detail.*

C. Bridge Site Data Submittal – Update OSFP Guidelines (Nien Wang/John Fujimoto)

- *Y. Nien Wang noted that Caltrans will be providing BSDS files on the OSFP website. John Fujimoto noted that the OSFP Information and Procedures Guide Section 4-1 makes reference to editable documents (Attachment 4-1.1). The document is currently inactive and will be reactivated following a conversion to English units. This should be accomplished by the next meeting. Until the link is reactivated, John noted that the Caltrans Liaison Engineer can provide Attachment 4-1.1 to the consultants.*

D. 2010 Structure CADD Guideline Update (Sudhakar Vatti)

- *Victor Beltran, who provides OSFP CAD review, discussed the changes to Caltrans CADD Standards. To conform to road plans structure plans to use uppercase text for callouts, dimensions and labels. XS sheet details not used should be crossed out. Example sheets attached. All files to be left in default model space at Expedite submittal. Notes will follow the normal capitalization; upper and lower case. Y. Nien Wang noted that the Bridge Design Details Manual June 2010 provided additional details including notes in upper and lower case and callouts all upper case.*
- *It is unclear how abbreviations within callouts should be accounted for. It was noted that recent Caltrans recommendations were to maintain the upper and lower case format shown on the standard abbreviation list in the Standard Plans. It was noted that the abbreviations and notes were not consistent in the examples provided. Y. Nien Wang suggested that written guidelines be provided.*
- *Questions should be directed to Victor at (916) 227-9804 or victor_Beltran@dot.ca.gov.*

Action Items:

Caltrans to verify how abbreviations and notes should be provided and also provide update of CAD example that will be included in the published meeting minutes.

E. Technical Questions (Walt LaFranchi/Sudhakar Vatti)

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- *Walt LaFranchi noted that the standard retaining wall sheets have been updated and posted to Caltrans website on April 20. Y. Nien Wang recommended that all consultants download the new standard plans.*
- *Mark Reno noted that the link provided on the Caltrans form for requesting bridge numbers is an intranet link. Mark is working with Caltrans Structures to update the form with an intranet and internet link.*
- *Y. Nien Wang introduced a question presented by AMC Consulting Engineers regarding pile cap mass inertia in SDC. Ming Chen with AMC provided additional background information noting that the question came from a project with a time history analysis where AMC's prime consultant did not require the time history results and only required the V_p and M_p from the column per the FBD in SDC Figure 7.11 and Figure 7.12. The FBD does not include the mass of inertia of the pile cap which is not technically correct. Sudhakar Vatti asked this question to Caltrans earthquake engineering personal and the response was that the FBD's are meant for pushover analysis and not for time history. Sudhakar noted that based on his conversations with Mike Keever that for time history analysis, the soil structure will need to be modeled and it raises the questions of where does the modeling end. Majid Sarraf noted that the pile cap inertia may be minimal unless there was liquefiable soil around the pile cap and flexible piles. It was noted that the equations in SDC would be good enough to estimate forces. Ming noted that for this particular project, the mass of the pile cap increased the pile demand 30%. Mark Ashley suggested that Caltrans add a note to SDC stating that the mass inertia is not included. Ming Chen noted that the biggest concern was that the diagram be shown correctly for engineers using SDC. Nien noted that it is the responsibility of the engineer for the design of individual bridges and that the SDC is a guide.*
- *Walt LaFranchi asked if there will be an update to SDC. Sue Hida stated that there will not be any this year.*

Action Items:

Mark to provide update on bridge number request form at next meeting.

Caltrans to discuss adding a note or updating the FBD shown in SDC to show pile cap inertia.

III. Updates

A. DES Updates (Lam Nguyen)

- *Not many changes in DES from last meeting. Ryan Chamberlain is now Division Chief of Planning. Rene Halverson is now Assistant Director of Office Business Economic Opportunity. District Directors in Districts 5 & 8 have retired. Rachel Falsetti is Acting Director for District 5. Syed Raza is Acting District Director For District 8*

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B. DES Updates: Memo to Designers, Technical Research, IQA (Sue Hida)

- *Memo to Designers*
 - a) *7-1 and 7-2 Bearings – reviewers provided good comments expect another draft.*

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- b) *Earth Retaining Systems – MTD 5-12 and 2-12 – comments required them to be pulled. Caltrans will resolve and reissue.*
- c) *MTD 20-8 – Fault Crossings is in Tech. Pub.*
- d) *MTD 3-7 pile data form recently updated and reposted.*
- *BDA 5-1 Concrete anchorage*
- *New XS Sheets for CIP bottom culverts*
- *New Standard Plans on drainage inlets and pipe inlets for pipe culvert headwalls*
- *New XS Sheets for Signs and luminaires issued – more to be delivered later this year.*
- *SSL MSEPlus Retaining Wall system has been suspended from the QPL. SSL will need to provide performance evaluation and remedial evaluations by May 30 for in service walls. Walls in the shop drawings phase will require notes on the shop drawings stating that 1) no deformed wire will be used 2) longitudinal wires shall have a minimum 1” dia. bend radius and a radius not less than 2x the bar diameter 3) bearing wire shall be the same size as the longitudinal wire 4) require a QA/QC plan shown on the working drawings. Caltrans is recommending that local agencies not use SSL MSEPlus systems in the future until the system can be reevaluated. Concern is with deformed wire walls. Caltrans is concerned that the older specifications allowed the use of deformed wire. The new specifications do not allow deformed wire. SSL has provided a list of all MSE Plus systems constructed in California including local agency structures. Structures Construction also created a list and compared it to the list from SSL. A letter was provided to Local Assistance regarding SSL that was intended to be distributed to the local agencies.*
- *Technical Research - Caltrans will not have any solicitations for new research [topic](#) this year. The existing funds will be required for existing research.*

Action Items:

Caltrans to provide consultants with SSL and Structure Construction List of SSL MSE Plus systems constructed in California.

C. Technical Workshops:

- *2010 Specifications Training (April 18, 2012) - Update*
Sudhakar Vatti provided an overview of the seminar and noted there was good turnout and good feedback. Y. Nien Wang provided agenda and photos for the Sacramento location. This was the first time using a webinar format. A total of six locations were provided in the seminar flyer. The locations were tied to the district/region committee representative. Some sites had two sites due to the size of the service area. The webinar format allowed for a large crowd and minimized travel time for attendees. Mark Reno noted that the Sacramento area received a large number of local agency staff because the flyer was sent to Jim Day in District 2 Local Assistance who distributed the flyer to the local agencies. The question was asked whether the distribution should be made to both consultants and local agencies. Lam Nguyen noted that it should go to both local agency and consultants and that the local agencies would benefit from this type of seminar. Mark recommended that the committee members send the flyers to the local assistance engineers within the Districts and have them distribute based on their agency distribution lists.

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Y. Nien Wang proposed having another, shorten version of the seminar in the next few months. The committee discussed this and decided that another specification seminar should be delayed until the attendees have had the opportunity to write 2010 specifications. This would allow the next specifications seminar to be focused on specific issues that have been identified by the specification writers.

The Pro and Con list was distributed and discussed.

Jack Abcaruis noted that many local agencies are resisting the conversion to the 2010 specifications. Jack asked whether there was a deadline at which time Caltrans will not update the 2006 specifications. Ruth Fernandez noted during the seminar that it was April/June but that she would need to verify the actual date. Mark Reno noted that local agencies cannot constantly update specifications due to funding limits and that a hard deadline for terminating the updates to the 2006 Specifications may necessitate their move to the 2010 specifications.

- *Winter Training Opportunities (Rob Stott)*
Rob Stott discussed the Caltrans Winter Training that was primarily concerned with prestressing and deck construction. The training was geared towards construction personal. Included design, construction, examples of what can go wrong, how systems are approved, shop drawing review. The format (seminar or webinar) was discussed. Y. Nien Wang handed out an example flyer for webinar training at the end of May. It was decided the format would be a webinar. Region representatives can have two or three host sites. Mark Ashley noted that having one person per firm was limiting for the specifications seminar. Mark Reno noted that the flyer should be geared towards construction personal if the training is intended for construction personal. Rob noted that the prestress manual is being updated; hopefully the update it will be available before the class. The specific date and time for the webinar will be determined.

Action Items:

Sudhakar to work with Construction and Nien to update webinar flyer for Winter Training.

D. ACEC Updates

- *Invoicing on Caltrans Contracts (John Fujimoto, Mark Ashley)*
Mark Ashley provided an overview of the status of the invoicing including addressing Lam Nguyen's comments. Mark distributed copies of invoice handout. Summary of invoice items included adding signature blocks for consultant project manager and sub certification, added box noting that should be printed on company letterhead, contract summary – added tables including information from DPAC table, added table to summarize EA total previous billing, billing to date, and no duplicate EA in task order breakdown. Proposed invoice needs to be approved by Caltrans. Revisions sent to John Fujimoto with letter of transmittal detailing revisions. John Fujimoto noted he met with Consultant Services Unit and they commented that the information is contract specific and each project may require additional items. Lam Nguyen noted that the current invoicing varies

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within District and that the Statewide Consultants Unit is looking at electronic invoicing. Four entities are involved including District Special Needs, OBO requirements (UDBE, SBA, etc), Accounting, and DPAC requirements. All four entity requirements need to be addressed. The goal is to distribute an example to receive comments from the entities.

- *ACEC/DES Structures Liaison Committee 2010/11 Annual Report (Tom Walker) Report has been approved. No more comments.*

Action Items:

Caltrans to post Committee Report on website.

- E. Project Development Oversight/Updates/Contracting Opportunities (John Fujimoto)
 - *Structures Local Assistance Liaison Engineer ~~Lee Way Yiwei~~ Hu passed away in February. Interim Liaison Engineer for District 4 is Paul Cotter.*
 - *Contracting Opportunities*
 - a) *Two geotechnical investigation statewide contracts (north and south) anticipated to be advertised in June 2012. 3 year design and 3 year construction support.*
- F. Statewide Committee Report (Nien)
 - *Y. Nien Wang noted that he received an email from Statewide ACEC Chair Elect, John Moosazadeh, requesting that ACEC/Caltrans Structures Liaison subcommittee present information regarding subcommittee items to statewide committee at the quarterly meetings. The next meeting is scheduled for May 17. Lam Nguyen noted that Tom Post was at the last meeting and represented the subcommittee. Tom is stepping down as chair and will no longer be a part of that committee. Nien asked if anyone would be interested in representing the subcommittee at the ACEC Statewide meeting. Nien discussed the meeting minutes of the Caltrans Headquarter Liaison Committee meeting minutes.*

IV. 2012 Meeting Schedule

~~January 20th (Friday)~~

~~April 26th (Thursday)~~

July 26th (Thursday)

October 25th (Thursday)

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Distribution:

Sudhakar Vatti, Caltrans
John Fujimono, Caltrans
Lam Nguyen, Caltrans
Tony Marquez, Caltrans
Rob Stott, Caltrans
Barton Newton, Caltrans
Sue Hida, Caltrans
Mike Keever, Caltrans
Dolores Valls, Caltrans
Robert Pieplow, Caltrans
John Stayton, Caltrans
James Davis, Caltrans

Walt LaFranchi, URS Corporation
Wei Koo, WKE
Mark Ashley, TY Lin International
Thomas Post, HNTB
Jay Holombo, TY Lin International
Y. Nien Wang, HNTB
Jim Frost, Simon Wong Engineering
Tom Walker, Mark Thomas & Company
Jack Abcarius, Nolte Associates
Chandu Shenoy, Nolte Associates
Mark Reno, Quincy Engineering
Steve Tayanipour, Huitt Zollars
Todd Goolkasian, Cornerstone Struct. Eng.
Greg Zeiss, HDR
Majid Sarraf, TTG
Ayman Salama, TRC
Kevin Coates, WKE
Syed Kazmi, URS
Po Chen, Mark Thomas & Company
Sunny Jhutti, AECOM
Kevin Thompson, Arora
Patricia Preston, Apex Civil Engineering
Greg Brown, HNTB

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Structures Liaison Committee**

VIDEO CONFERENCE SIGN IN SHEET

Date: April 26, 2012

ATTENDEES BY VIDEO

NAME	AFFILIATION
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