

**ACEC/Caltrans DES
Structures Liaison Committee
Meeting Minutes
November 1, 2024**

The ACES/Caltrans DES Structures Liaison Committee meeting was held in person on Friday, November 1, 2024, from 10:00 AM to 12:00 PM PST in Room 102 of the Farmers Market Building (#1) at 1801 30th Street in Sacramento, CA. A virtual link to attend the meeting was also made available through Microsoft Teams.

I. Call to Order

Posted meeting minutes are available on the Caltrans website linked below:

<https://dot.ca.gov/programs/engineering-services/special-funded-projects-and-local-assistance>

A. Self-Introductions

The meeting began with self-introductions for those present in Sacramento.

B. Changes to the Agenda

Garrett Dekker asked for proposed changes to the agenda; no changes were requested.

C. Review Previous Meeting Minutes (August 2, 2024)

The previous meeting minutes were distributed prior to the meeting. An edit was requested to the Accelerated Bridge Construction Sub-Committee section. Garrett noted that the minutes would be updated, verified for ADA compliance, then posted on the Caltrans website.

II. DES/ACEC Updates

A. General: Rich Foley/Jim Foster

Rich reported that, as of August 2024, John Lammers is the Deputy Division Chief of Structure Construction. Jim Foster is now the Deputy Division Chief of Structures and Engineering Services.

B. Technical: Structures Technical Policies, Technical Research: Don Nguyen-Tan/Chris Traina

STP Updates: Don Nguyen-Tan

- Bridge Standard Plan B0-5, which includes deck details, has removed the deck truss bar. This is due to deck performance issues such as early initial cracking. Details on implementation are forthcoming.
- Bridge Design Memo (BDM) 9.4 will be published within a couple of weeks. It will be updated to remove the deck truss bars.

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- Chapter 10.1 has been added to Bridge Design Practice (BDP), which includes examples of shallow foundations.
- Structure Technical Policy (STP) 1.2 has clarified the differences between the terms “must” and “shall”.
- STP 16.2, The title was updated to “Modifications to Existing Bridges that Increase Dead Load”. There was also an addition to allow use of AASHTO LRFD Bridge Design Specifications to perform structure load rating. Soon, more guidance will be provided where different permit trucks such as P5, P7, P9, P11, P13, P15 can be used for load rating.
- STP 16.10, Overlays on Existing Bridge Decks, had a minor update in the reference.
- BDM 4.7, Maximum Moments and Shears for HL-93 and P15 Loads, includes new footnotes that clarify each type of load related to truck lanes.
- STP 10.10, Vertical Ground Anchors, is anticipated to be released within a couple of weeks. BDM 10.10 will follow about a month afterward.
- STP 1.4 will be removed. A Type Selection Meeting and Report will still be required, but the requirement is sufficiently described in other documents.

Technical Research Updates: Chris Traina

- The Seismic Advisory Board has reviewed the changes to Seismic Design Criteria 2.0 and provided comments. The comments are being addressed.
- Seismic Design Criteria 2.1 will be published in December of this year.
- There are currently 10 research projects with a total budget of \$5M from Federal funds.

C. Contracting Opportunities: Hamid Sadraie/Sid Pedaballi

Contracting Updates: Sid Pedaballi

- DPAC Look Ahead Report Summary:
 - There are \$200M worth of contracts in various stages.
- Material Engineering:
 - There are three upcoming contracts in various locations throughout the State.
- Structure Construction:

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- There is one contract with District 4, a painting contract for the San Francisco Oakland Bay Bridge.
- Additional Notes:
 - Caltrans has observed a general decline in the number of bids received on A&E contracts. Consultants were encouraged to provide feedback if there are specific reasons for the decline.
 - It was noted that DBE subconsultant replacements require DPAC approval.

D. Local Assistance: Robert Peterson/Andy Chou

Andy Chou provided the Local Assistance and Highway Bridge Program (HBP) update:

- Caltrans Headquarters announced a staffing update for the HBP team. There are two new engineers. The goal is to have three HBP managers and three HBP engineers.
- The October financial constraint program is complete. The constraint list will be posted on the HBP website soon. However, this list has been provided to the Districts for distribution to local agencies. It was announced that 200 projects have received programming.
- The Bridge Formula Program (BFP) currently accounts for about half the HBP budget. It is anticipated that BFP is going away after IIJA and only the core apportionment funding for HBP will remain.
- The Division of Local Assistance (DLA) website is going through interface changes.
- The 2024 Caltrans Construction Standards have been released. DLA will be releasing an implementation memo for these standards for projects off the State highway system soon. It is anticipated that the 2023 Caltrans Construction Standards may be used until January 31st, 2025. Refer to the upcoming memo for details.
- Local Assistance Program Guidelines (LAPG) Forms 6-A and 6-D are being updated.

E. Statewide ACEC Committee: Garrett Dekker

Garrett Dekker shared updates from the Statewide ACEC Committee.

- Contract negotiations for the first progressive design build (PDB) project are near complete. The next PDB project in the queue is the I-5 Managed Lanes project in District 12 and will be released soon.
- DPAC has a new cost proposal spreadsheet to be used with any new Caltrans contracts.
- The issue regarding fair and reasonable wages is still under discussion and no decision has been made yet.
- Caltrans is finalizing their 2024 Strategic Plan.

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F. Construction Management and Inspection Updates: John Lammers/Frank Martin/Jon Rohrer

- With consultant resident engineers now permitted on State projects, Jon Rohrer advocated for consultant structure representatives to have the same legal protections as Caltrans resident engineers. Jason Tom reported that this issue is being addressed in the Statewide ACEC Committee.
- Jason Tom reported that for new DES A&E contracts, consultants providing inspection services are provided the same protections as Caltrans in regard to the safety of construction personnel. There will be a 9-hour Winter Training Session on foundations that will tentatively be held on April 3, 2025.

III. Sub-committees

A. ABC (Accelerated Bridge Construction): Garrett Dekker/Habib Hotaki

Habib Hotaki gave the ABC update:

- Design: District 3 has a project that consists of a steel tub girder with precast deck panels connected using UHPC connections. District 4 has a project that consists of a three-span bridge. It has a composite superstructure with two types of precast box girders and precast slabs.
- Research: Caltrans continued conducting three studies with Iowa State University:
 - The report for deck overlays using Ultra-High-Performance Concrete (UHPC) is being finalized. The data analysis and testing are complete.
 - The ABC pile to footing to column connection study is also near complete. The final report is being drafted.
 - Research of precast hollow abutments using UHPC is in the beginning stages. Currently, numerical analysis is being performed to design the abutments.
 - There is another project in the works with the University of Nevada, Reno related to pocket and seismic connections. This project has yet to be approved.
- Construction Completed: The Kings River Bridge has been completed. The Panther Creek and Hunter Creek Bridges in District 1 were both completed and had a ribbon cutting event in June. The projects are the first steel tied arch with prefabricated elements in District 1.
- Additional Information: The Accelerated Bridge Construction - University Transportation Center (ABC-UTC) will host a webinar on November 21st at 10 am Pacific Standard Time (PST). There will be discussions and case studies regarding the long-term performance of prefabricated connections.

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B. Alternative Project Delivery Methods: Mark Reno/Jason Chou

Mark Reno encouraged consultants to contact him with their experiences on progressive design build projects in other states. Mark is organizing a presentation on lessons learned with this type of project delivery method.

C. BIM (Building Information Model): Doug Dunrud/Bobby Zermeno

- Arup will provide an hour-long webinar in mid-January 2025 to discuss the BART Silicon Valley Extension project. The webinar will be open to everyone, and a flyer should start going out mid-November 2024.
- The 2nd Annual BIM Summit is scheduled for March 11th and 12th, 2025 in Sacramento. It will be held in person. Anyone interested should email Bobby. The 2025 BIM summit will have presentations as well as break-out rooms. Doug and Bobby are gathering names of ACEC representatives who would be interested in presenting.

D. Technical Subcommittee: Garrett Dekker (Jack Abcarius)/Jason Chou

Garrett reported that three questions were asked since the last quarterly meeting:

- The first was whether the posts and the handrail from the Type 85 barriers (when used as an inboard barrier) caused a snagging condition for bicyclists. Caltrans' response was that rub rails should be deep enough to protect a wide range of bicycle handlebar heights. They also stressed where Type 85 barriers are used, the path should be 12 feet wide instead of 10 feet. This way there is a two feet buffer to prevent the snagging from occurring.
- The second question shared was related to the language in LAPG Chapter 6. The LAPG states that local agencies may self-perform a seismic analysis to determine whether a structure is vulnerable to collapse under the maximum credible earthquake. It was asked whether the "maximum credible earthquake" should instead be the Safety Evaluation Earthquake described by the SDC. Caltrans responded that all seismic guidance should be taken from SDC, therefore the Safety Evaluation Earthquake should be used.
- The last question received was related to the Trenching and Shoring Manual. Within the manual there is an equation for at-rest lateral earth pressure (Eq 4-12) which has an incorrect mathematical sign. Caltrans responded that they would fix this equation in the next edition of the Trenching and Shoring Manual.

E. Education Training/Seminar/Webinar: Michael Van Duyn/Lance Schrey

- The DES Winter Training event will be held for consultants on April 3, 2025. The subject will be structure foundations, and it will be approximately nine hours.
- Caltrans DES Education Webinars: Garrett will send an announcement for consultant sign-ups. The next two webinar subjects are as follows:
 - November 20, 2024, Bridge Foundations, Risks, Response, Rising to Challenges presented by Caltrans Geotechnical Services.

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- December 18, 2024, Bridge Design Academy Overview by Austin Young from Caltrans Bridge Design.

IV. Discussion Items

A. STP 2.6 Update: Don Nguyen-Tan

Caltrans is currently working on a California Amendment to reinsert the check flood. The bullet items for the 10th edition of the LRFD have substantial updates. The goal is to incorporate about 25 percent of the bullet items into the 10th edition of the California Amendment. Also, there will be a BDM that will accompany STP 2.6, but there is not a specified date for its release. Currently, the BDM is undergoing an internal review.

Andy noted that when it comes to approach roadway eligibility, HBP does not pay to construct what they call “Island Bridges”. This is where the approach roadway is under water while the bridge remains dry. He also noted that there is a slight conflict between STP 2.6 and HBP policy and they are currently in discussions to clarify.

B. OSFP Information Procedures Guide

There is a new proposed chapter of the OSFP Information and Procedures Guide that will provide guidance on the use of lightweight concrete in bridges. Historically, Caltrans has experienced challenges with the durability of lightweight concrete. For seismic design, it is Caltrans' preference to use response modification systems, such as base isolation, instead of lightweight concrete to reduce the seismic demands. During Type Selection, justification for using lightweight concrete will need to include a cost comparison between lightweight concrete versus the non-lightweight alternative. Garrett agreed to setup a subcommittee for consultants to provide feedback on the proposed guidance.

V. Miscellaneous Questions: Open Forum

In two months, skid testing for bridge decks should have new specifications that will move away from the current Caltrans testing method into an ASTM testing method. More information will be shared at the next scheduled meeting.

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VI. 2024 Meeting Schedule:

Q1: February 2, 2024 (1st Friday)
Q2: May 3, 2024 (1st Friday)

Q3: August 2, 2024 (1st Friday)
Q4: November 1, 2024 (1st Friday)

VII. Distribution:

A. Caltrans:

Rich Foley	Caltrans DES	Sid Pedaballi	Caltrans PD & SCM
Jason Chou	Caltrans SES	Robert Peterson	Caltrans HQ/LA
Jim Foster	Caltrans SES	John Lammers	Caltrans SC
Nina Choy	Caltrans GS	Don Nguyen-Tan	Caltrans BD
Tim Greutert	Caltrans METS	Chris Traina	Caltrans EE
Sudhakar Vatti	Caltrans BD	Mike Lee	Caltrans SM&I
Vassil Simeonov	Caltrans SM&I		
Hamid Sadraie	Caltrans PPM & OE		

B. ACEC Regular Committee Members:

Member No.:	District(s):	Contact:
1	1, 2, 3, 9, 10	Mark Reno, <i>Conzor</i>
2	11	Jack Abcarius, <i>NV5</i>
3	4	Garrett Dekker, <i>Moffatt & Nichol</i>
4	7, 8, 12	Miguel Carbuccia (acting for Mike Van Duyn), <i>HNTB</i>
5	5, 6	Bobby Zermeno, <i>Cornerstone Structural Engineering Group</i>
6 (CM&I)	1-6, 9-10	Frank Martin, <i>Psomas</i>
7 (CM&I)	7-8, 11-12	Jon Rohrer, <i>HDR</i>

Attachments:

Caltrans Org Charts.pdf