The meeting of the ACES/Caltrans DES Structures Liaison Committee was held in person on Friday, February 2, 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.

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

Garrett Dekker reminded the Committee that meeting minutes do not include attachments unless they are ADA compatible.

A. Self Introductions

The meeting began with self-introductions for those present in Sacramento and attending virtually in Diamond Bar.

B. Changes to the Agenda

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

C. Review Previous Meeting Minutes (November 3, 2023)

The previous meeting minutes were distributed prior to the meeting. No comments were received on the minutes.

II. DES/ACEC Updates

A. General: Rich Foley/Ruth Fernandes

Rich Foley provided general DES updates.

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

Structure Technical Policy (STP) Updates:

- STP 5.4, Deck Closure Pour and Associated Requirements, will be updated to minimize the waiting period, and considers the instantaneous deflection calculated and the width of the bay.
- STP 20.32 Seismic Design Criteria for Tunnels and accompanying BDM: Requires a hazard evaluation of the FEE and SEE.

- California Amendments to AASHTO LRFD will be released as needed. The entire set
 of "Blue Sheets" are available on the Caltrans website, and the first page will list a
 summary of amendments and whether they are addenda or errata, with the most
 recent changes formatted in bold font. Refer to STP 1.1 for implementation criteria.
- Deactivated Memos:
 - MTD 9-6 Permit Upgrading, Load Ratings (SM&I)
 - MTD 1-31 Constructability Review
 - Bridge and Earth Retaining Structure Numbering System request for Asset Identification is moving to Caltrans Standard Operating Procedures
 - STP 16.8 Overhang Design is replaced by the CA Amendments to LRFD
 - o MTD 10-1 Reinforced Concrete Strength Requirements
 - Designer can still specify 3,600-psi concrete strength to avoid requiring trial batching
- The proposed email service for future update announcements is still pending.

Technical Research Updates:

Chris Traina provided technical research updates.

- Overview:
 - The Office of Earthquake Engineering Analysis & Research is responsible for research in the Division of Engineering Services and manages the geotechnical structures research program, in coordination with Division of Research. Proposals submitted to the earthquake engineering research program manager go through a review and edit process, before being sent to the Division of Engineering Services Technical Steering Committee where they are reviewed and ranked. The proposals are then forwarded to Division of Research, where they undertake a similar procedure for review and ranking. Ranked proposals are then reviewed and approved by the Research and Deployment advisory committee.
- Research-cycle Timeline:
 - Begins in September, involving multiple steps leading to the submission of research requests by mid-November (after the meeting this timeline changed with call for proposals in July and a submittal date of mid-January). The Technical Steering Committee (TSC) comprised of experienced members from various

subdivisions, reviews and ranks the research requests. Following the TSC's review, requests are sent to the Structures Policy Board for further examination. Additional briefings are conducted with the TSC to discuss progress and findings.

Funding Approval:

- When evaluating new research contracts, the primary focus is on what key areas the Structures Policy Boards have identified as research central to advancing and meeting needs in these areas.
- The maximum value for these proposals is capped at \$5 million.
- Last year, out of the ranked research, five contracts were approved for funding, with an initial budget of around \$3.5 million. Later in the year, extra funds became available from a contract with Pacific Earthquake Engineering Research Center (PEER), allowing for the allocation of \$900,000 to nimble projects capable of completion within two years, including BIM.

Look Ahead:

- This year's total of active contracts has risen to 32, and 50 new contracts anticipated for the next year, with the majority of the newly added contracts related to seismic research.
- The partnership with PEER has been beneficial in broadening research opportunities, enabling the submission of proposals from up to 13 different universities, offering a diverse range of research possibilities.
- Upcoming research projects include 10 contracts totaling \$4.9 million, with approvals and contract finalizations expected by May 2025.
- Highlight on Construction Inspection Training for surge of new engineers:
- Caltrans is coordinating with the Concrete Bridge Engineering Institute (CBEI) at the University of Texas at Austin, which offers intensive workforce training and certification programs.

C. Contracting Opportunities: Hamid Sadraie/Sid Pedaballi

Sid Pedaballi provided contracting updates:

 There is rapid growth in contract opportunities compared to last year, with projections indicating a continued trend. The current portfolio has already achieved \$500 million in contracts secured for this year, with the increase in contract size attributed to greater workload demands. There are ongoing efforts to address associated staffing and

recruitment challenges, as well as implementing a proactive contract procurement strategy, securing contracts one year in advance to mitigate internal and external challenges.

Caltrans will be reviewing a new memo from the Office of Civil Rights (OCR) regarding DBE use and commitments on consultant contracts.

- Caltrans is projecting an expenditure of \$90 to \$96 million for this fiscal year, with expectations to exceed \$100 million the following year.
 - To refine these projections and enhance financial planning, Caltrans is engaging consultants and seeking insights from contractors on their anticipated expenditures to provide a more accurate financial forecast.
- METS contract scope changes:
 - A new contract is being introduced: moving forward, the North region contract will be divided into two separate contracts.
 - The South region will maintain a statewide contract and a South-specific alternative delivery contract.
- Approximately 40 to 43 contracts total are expected moving forward following execution.
 - There is no update on timing of the District 59 Load Rating Contract as load rating is now required to be performed as part of the associated design contract.

D. Local Assistance: Robert Peterson

Local Assistance and Highway Bridge Program for Local Agencies update:

- Statistics:
 - Total funds programmed for the year: \$593 million
 - Funds received for obligations to date: \$45 million (approximately 8%)
 - Number of projects awaiting funds: 238 (in either the construction phase, right-ofway phase, or PE phase)
- Communication between local assistance engineers and local agencies is taking place to ensure they claim allocated funds.
 - There is a requirement for agencies to inform SLA by the deadline if they will claim their funds (beginning of February)
 - Consequences of not claiming funds:
 - This is considered a delivery failure, and any funds are moved to the next fiscal year in the Federal Transportation Improvement Program (FTIP)

- Agencies failing to claim funds must wait for the next Open Allocation (OA) period to access funds for the following Federal fiscal year
- For agencies that have funds reserved in the Highway Bridge Program (HBP) and starting new projects at the Preliminary Engineering (PE) phase:
- o Projects in the PE phase are listed in the FTIP two years in advance.
- Agencies are expected to be ready to initiate their projects once the year listed in the FTIP becomes current.
- The HBP website lists all projects, indicating which have claimed their obligations and which have not.
- If an agency fails to claim their reserved funds, their project is removed from the HBP.
- Caltrans's focus is on delivery of local agency projects, which previously had been authorized under Advance Construction (AC). The local entities that were then selffunding up front, can now receive federal funding allowing for reimbursement of expenses.
 - The continuation beyond 2026 of the current Bridge Formula Program (BFP), part
 of the Infrastructure Investment and Jobs Act (IIJA), which is currently providing
 funding, is uncertain beyond the current authorization.
- New funding applications are added to the pool of existing unfunded applications.
 Prioritization of projects occurs based on available funding and project importance.
 Projects critical to bridge safety, such as seismic or scour issues, are given top priority, and can leapfrog older ones if they address urgent safety concerns.
- Economic inflation is impacting project costs, as seen in the trend of increasing bids for projects, resulting in a portion of the new IIJA funding being absorbed by these rising costs.

E. Statewide ACEC Committee: Garrett Dekker

Headquarters update:

- Local Assistance:
 - Sub consultants can now submit financial data directly to Caltrans during review.
 - https://www.localassistanceblog.com/2024/01/25/subconsultantconfidential-documents-and-the-independent-office-of-audits-andinvestigations/
 - The 2024 updates to the Local Assistance Procedures Manual have been released.
- Design:
 - o Introduction of a new traffic calming guide to aid designers.

Construction:

 Development of a full-service construction language template and associated documents is pending review by Caltrans legal team.

DPAC:

- A new cost proposal spreadsheet for Caltrans contracts is in development, with the non-prevailing wage part nearing completion.
- Financial reviews are transitioning to auditors via the Office of Audits and Investigations, aiming to expedite the negotiation process.
- DPAC is introducing template language to permit lower-level staff on contracts going forward, easing the experience requirement on a case-by-case basis.
- Escalation rates are set to be adjusted based on Bureau of Labor Statistics indices, marking the first update since the implementation of new rates.

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

No updates were provided.

III. Sub-committees

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

Habib Hotaki gave the ABC update:

- The 2nd edition of the ABC manual was released in October 2023. The manual is not yet publicly available due to editorial issues.
 - Ongoing ABC training for over 400 structure construction professionals, focusing on new ABC construction methods.
 - Three active research projects with Iowa State University: UHPC deck overlay project, UHPC hollow abutment project and an ABC substructure project.

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

Mark provided his update on information gathered in discussion with Utah DOT:

- Utah DOT has been utilizing Progressive Design-Build (PDB) and other alternative delivery methods to enhance project value by reducing time and costs while improving quality.
- Caltrans is currently initiating pilot projects using the PDB method, aiming to streamline project delivery and reduce costs, and UDOT's insights may be beneficial for Caltrans' pilot projects.

 Virtual or in-person workshops discussing the experiences of different states with PDB could provide valuable learning opportunities for Caltrans and consultants as it moves forward with its pilot projects.

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

Bobby Zermeno was unable to attend, so Darren Fagundes with Cornerstone Structural provided the update on Bobby's behalf:

- The November 17 BIM webinar featured four presentations and a Q&A session. Topics covered included BIM adoption in bridge design, strategy, digital delivery processes, and pilot projects.
 - Doug Dunrud discussed the application of BIM in the Interstate bridge replacement project.
 - Mark Weaver shared insights on BIM's role in the California High Speed Rail Madera-to-Merced segment.
 - Kevin Schlereth from HNTB addressed model-based delivery challenges faced by state DOTs and resolution strategies.
 - The event was attended by 68 professionals from 21 consulting firms and six public agencies, including engineers, designers, and digital delivery experts.
- Caltrans is conducting a BIM implementation survey among consultants.
 - The survey aims to assess the current status of BIM adoption and practices with plans to use the information to assist in their strategic planning for BIM4I.

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

Garrett noted that there were no new questions submitted to the subcommittee since the last meeting.

- There was one outstanding question regarding upgrading to a MASH-compliant barrier on bridge rehabilitation projects, which involves assessing the existing railing system and determining if it meets current safety standards.
 - Since determination is dependent on many project-specific variables, it is recommended to refer project-specific questions to the OSFP liaison on a caseby-case basis.
- Other inquiries about Caltrans policy can be sent to Garrett D. or Jack A., who will then forward them to Caltrans for consideration.

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

Garrett provided the following updates:

• The in-person ABC workshop is scheduled for March 7 at the Capital Event Center.

John Lammers provided the following updates:

 2024 Caltrans Winter Training, scheduled for 4/4/24, 8:00 AM to 5:00 PM, will cover Alternative Delivery, Precast Concrete, Soil Nails, Ground Anchors, and ABC construction.

IV. Discussion Items

A. STP 2.6 Update

Joel Magana reported that Caltrans is currently assessing the risks associated with the design of bridge abutments due to scour for abutments founded on piles. Caltrans is investigating a risk assessment formula (taking into account ADT and detour length) to quantify risk to ensure that policy decisions are not made blindly, consistent with FHWA guidance, and follow a risk-based approach to asset management.

The ACEC small-committee will have a chance to review the final-draft STP prior to publication by Caltrans.

B. Construction Inflation

Garrett noted that according to the 4/3/2023 Structure Cost Index, construction costs appear to be stabilizing after rapid increases in recent years.

C. Consideration and Recruiting of Foundation, Geotechnical Member

Garrett Dekker reported that the committee is investigating forming a subcommittee focused on geotechnical matters beginning next year, led by a consultant and co-chaired by a Caltrans representative. Further discussions on this proposal are planned to be conducted offline.

D. Annual Report

Mark will prepare the Annual Report for the Committee.

E. Caltrans 100 Year Anniversary

Lance S. reported that Caltrans' is currently planning for this significant milestone 100 Year Anniversary celebration, to be held on April 17, 2024 at the Transportation Laboratory. The event will feature kiosks representing various subdivisions, showcasing video vignettes of their work. In addition to internal efforts, Caltrans is considering partnerships with experienced consultants for additional vignettes and event assistance. Interested parties are encouraged to reach out to Lance S. for more information or to get involved in this event with activities such as setup, manning a kiosk, distributing information, etc.

V. Miscellaneous Questions: Open Forum

None.

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 1: Districts 1,2,3,9,10:	Mark Reno	Consor
Member 2: District 11:	Jack Abcarius	NV5

Member 3: District 4: Garrett Dekker Moffatt & Nichol

Member 4: Districts 7,8,12: Michael Van Duyn HNTB

Member 5: Districts 5,6: Bobby Zermeno Cornerstone Structural Engineering

Member 6 (CM&I): Districts 1-6 and 9-10 Frank Martin, Psomas Member 7 (CM&I): Districts 7-8 and 11-12 Jon Rohrer, HDR

Attachments:

None