

# 2015 ANNUAL REPORT

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

Prepared By: Mark Ashley, Committee Co-Chair  
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### Introduction

The ACEC / Caltrans Division of Engineering Services (DES) Structures Liaison Committee (the Committee) was formed in 1992 with the primary purpose of maintaining a professional working relationship between Caltrans DES and ACEC member firms that perform engineering services for transportation structure projects. The Committee Charter requires that an Annual Report on Committee activities be prepared each calendar year.

### Committee Meeting Dates

During the 2015 calendar year, the Committee met on the following dates:

January 23, 2015

May 1, 2015

July 24, 2015

October 23, 2015

Meeting minutes are prepared by the Committee Secretary, reviewed by DES and posted on the OSFP web site.

### Committee Members

DES had strong representation on the Committee with most DES Deputy Division Chiefs attending regularly. Shira Rajendra and Carlos Portillo served at different time as Committee Co-chairs. Caltrans' usual attendees included Bob Pieplow, Sudhakar Vatti, Susan Hida, Mike Keever, Shannon Post, Phil Stolarski, Vong Toan, Tom Ostom, Steve Altman, Richard Hartzell and Emil Vergara. Richard Hartzell attended the first two quarterly meetings and Emil Vergara attended the remainder in their roles as coordinators between ACEC and Caltrans committee members. Several guest speakers attended to address specific technical agenda topics.

The five regular members from ACEC were:

- Member 1: Districts 1-3, 9 & 10 – Mark Reno, Quincy Engineering
- Member 2: District 11 – Mark Ashley, TY Lin International
- Member 3: District 4 – Gary Antonucci, Moffatt and Nichol
- Member 4: Districts 7,8 and 12 – Y. Nien Wang, HNTB
- Member 5: Districts 5 & 6 – Shawn Cullers, Cornerstone Structural Engineering Group

For the 2015 meetings, the ACEC Committee Co-Chair was Mark Ashley and the Committee Secretary was Gary Antonucci.

## Major Topics

A standing agenda was utilized throughout the year. Regular agenda items included the following:

- Technical Workshops
- DES Updates
- Guidance and Standards, Technical Research, IQA, Design Software
- Project Development Oversight / Contracting Opportunities
- ACEC Statewide Committee Report
- Technical Issues

### ***Technical Workshops***

The committee coordinated on arrangements for the Steel Bridge Forum, 2010 Specifications Training, Structures Design Build Seminar, Caltrans Education Committee Presentations and Structures Construction Winter Training. See “Significant Accomplishments” below for further details.

### ***DES Updates***

Caltrans reported throughout the year on the structures COS workload, personnel changes and other current news and events related to DES.

### ***Guidance and Standards, Technical Research, IQA***

Caltrans kept the committee informed about updates to Bridge Memos to Designers, Local Assistance Manuals, the structures technical research program, the new seismic screening methodology, Caltrans Strategic Direction including the latest IQA requirements, the 4<sup>th</sup> Edition of the Bridge Design Practice Manual, the 2015 Standard Specifications, the AASHTO Subcommittee on Bridges and Structures, and the availability of the LRFD version of CTAbut design software

### ***Project Development Oversight / Contracting Opportunities***

The issue of local agencies’ continued use of the 2006 Standard Specifications was discussed and addressed. Caltrans also kept the committee updated on upcoming contracting opportunities based on DPAC’s Look-Ahead Report.

### ***ACEC Statewide Committee Report***

Members of the ACEC / Caltrans Headquarters Liaison Committee reported on topics being discussed during their bi-monthly meetings. These included Local Assistance Consultant Selection Training, the DPAC Consultant Selection pilot program, contract negotiation issues, and audit/overhead and compensation issues.

### ***Technical Topics***

The committee served as a forum throughout the year for questions and discussion of various technical topic and issues. These included, designing for liquefaction/lateral spreading, the affect of element level inspection on Sufficiency Ratings, static load testing for large CISS piles, and bridge hydraulic design criteria.

## Significant Accomplishments.

From its inception, this committee has always emphasized education and training as one of its key activities. Significant accomplishments in 2015 included sponsorship or support for the following educational/training events.

### **California Steel Bridge Forum**

Caltrans and ACEC collaborated on preparations for this seminar on steel bridge design held at the Translab on February 4, 2015. Topics including economic fabrication details, fatigue resistance, short span bridges, accelerated construction and seismic design specifications were presented by steel bridge design experts brought together by Caltrans and the National Steel Bridge Alliance. Attendance was limited to 80 people, split about equally between Caltrans and consultant staff.

### **Design Build Workshop**

As a component of the Caltrans design-build pilot program, this workshop was coordinated by Caltrans and ACEC to gather feedback and discuss issues and potential improvements for the design-build delivery process, particularly with respect to structures and related geotechnical work. Held on March 20, 2015, the workshop was attended by about 30 people split equally between Caltrans and consultant staff. The workshop was led by a professional facilitator and was preceded by an online survey of the participants.

### **Structures Construction Winter Training**

Once again this year, Caltrans provided a condensed version of their annual Structures Construction Winter Training to engineering consultant and local agency staff. Held on April 14, 2015, the subject of this year's training was "Foundations" and included presentations on foundation design, new CIDH piling topics, micropiles, driven piling, and reverse circulation. ACEC organized webinar sites in Sacramento, San Jose, Visalia, Santa Maria, Los Angeles and San Diego that facilitated attendance for approximately 150 people.

### **2010 Specifications Training**

ACEC and Caltrans organized a workshop on preparation of structure special provisions based on the 2010 Standard Specifications. The workshop was held in the Los Angeles area on July 29, 2015 and was attended by approximately 50 people, half of whom were consultant staff and the other half local agency staff. Caltrans provided a senior specifications engineer to assist with the workshop and answer questions.

### **Caltrans DES Education Committee BIM Presentation**

Caltrans has invited consulting firms to provide technical presentations to the DES Education Committee and to attend the afternoon sessions of the monthly presentations. On October 21, 2015, an ACEC firm member assisted with a presentation entitled "Building/Bridge Information Modeling (BIM)." About 30 Caltrans engineers attended each of the three sessions. A few consultant staff attended the afternoon session at the Translab.

### **Future Plans (for the coming year)**

The committee will plan to continue meeting quarterly throughout 2016 and continue to work collaboratively on technical issues, project development oversight and education. The following education/training events are anticipated in 2016:

- Steel Bridge Practice and Caltrans Policy Update – Late Winter 2016
- 2015 Specifications Workshop in Northern California
- DES Education Committee Presentations
- Structures Construction Winter Training on Trenching and Shoring – Spring 2016

## **Closing Statement**

The Committee continues to be well attended and serve as an effective interface between DES and the ACEC design community in the area of transportation structures. Of particular value, is the opportunity for direct communications and the introduction of trending design and construction issues which are of mutual interest to both parties. This Committee continues to strive for areas of collaboration for the mutual benefit of both parties particularly in the areas of education and the effectiveness of project delivery. This year's meetings produced quality discussions and a considerable exchange of information on important and relevant topics. 2015 also provided multiple platforms for information transfer and exchange that has increased our ability to plan and initiate collaborative efforts and improve delivery of transportation structures throughout California.