State of California DEPARTMENT OF TRANSPORTATION

## Memorandum

To:

CPD 16-13, "Bridge Deck Crack Prevention" Attachment 4

California State Transportation Agency

Serious drought. Help save water!

Date: August 11, 2016

JEFF WILEY, Deputy Division Chief, Structure Design STEVE ALTMAN, Deputy Division Chief, Structure Construction SHIRA RAJENDRA, Deputy Division Chief, Program/Project & Resource Management ROBERTO LACALLE, Deputy Division Chief, Materials Engineering & Testing Services &/Geotechnical Services DOLORES VALLS, Chief, Structure Maintenance And Investigation

THOMAS A OSTROM MANNON State Bridge Engineer Structure Policy & Innovation Host for From: **Division of Engineering Service** 

## Subject: CONSTRUCTION SPECIFICATIONS FOR BRIDGE DECK CRACK PREVENTION

The Bridge Preservation and Concrete Committees have developed new construction specifications to reduce concrete bridge deck cracks caused by volumetric changes of concrete, see attached. The new construction specifications should significantly reduce long-term costs associated with the repair of deck cracking and mitigate safety risks associated with use of methacrylate currently used for crack repair.

For projects that have not been advertised, the plans, specifications and estimate must be updated to include the new specifications.

For projects that have been advertised, the Project Engineer shall request that an addendum be issued to incorporate the revisions. See "Structure Design Alert".

For projects in construction, it is recommended that these changes be incorporated by Contract Change Order, if it is administratively appropriate.

Forward technical questions related to the crack-less deck specifications to Craig Knapp, Concrete Committee Chairperson, at 916-227-8554.

Attachments:

- 1) Construction Special Provisions 51-1.01C(1), 51-1.02B, 51-1.03H, 90-1.01C, 90-1.02A, and 90-1.02K
- 2) Structure Design Alert, Concrete Bridge Decks, March 18, 2016
- c: Michael D. Keever, Chief, Division of Engineering Services Craig Knapp, State Bridge Engineer Support Erol Kaslan, Structure Maintenance & Investigations Don Reding Jr., Structure Quality Management Michael Lee, Structure Maintenance & Investigations Structure Design Office Chiefs Structure Policy & Innovation Office Chiefs Sudhakar Vatti, Program Project & Resource Management