Memorandum

To: STRUCTURE POLICY BOARD
    DES DEPUTIES

Date: December 29, 2016

From: THOMAS A. OSTROM
    Deputy Division Chief
    Structure Policy & Innovation
    Division of Engineering Services

Subject: NEW MEMO TO DESIGNER (MTD) 20-21 SEISMIC REQUIREMENTS FOR HEADED REINFORCEMENT

The new MTD 20-21 specifies the requirements for using headed bar reinforcement in seismic applications, such as pile extension connections to slab superstructures. Also, the use of headed bar reinforcement is recommended for general purpose applications to reduce congestion in bridge components and allow for better concrete flow. Minimum development length for hooked bars is also specified in this memo.

The Seismic Design Criteria (SDC) Version 1.7, Section 8.2.1 specified minimum straight bar development length of 24 d₀ for column longitudinal bars into cap beams, and did not allow development length reduction for using hooked or headed bars. MTD 20-21 supercedes SDC 1.7, Section 8.2.1. The next version of the SDC will be updated to reflect these changes.

For questions or concerns on application to a specific project, consultants/local agencies should contact the Structure Liaison Engineer. Caltrans staff may contact Foued Zayati, Senior Bridge Engineer, at (916) 227-4112.

c: Chief – Division of Design
    Chief – Division of Local Assistance
    Chief – Structure Maintenance and Investigation
    Chief – Division of Engineering Services
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