


Memorandum

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To: DES DEPUTIES
Division of Engineering Services

Date: October 22, 2012

From: Barton Newton
Deputy Division Chief
Structure Policy and Innovation
DIVISION OF ENGINEERING SERVICES,



Subject: New *Memo to Designers* 11-25 "Anchorage Zone Design"

Memo to Designer (MTD) 11-25, "Anchorage Zone Design ", dated October 2012, is effective immediately. This new memo outlines the requirements for general zone design in post-tensioned concrete structures, and ensures adequate design of web thickness and stirrups within the general zone to resist localized bursting stresses caused by post-tensioning forces.

Analysis of the general zone is complex and best done using 3D finite element methods. This has led to a wide variation in designs for this zone. Additionally, it can be difficult for designers and checkers to agree on a set of assumptions. This led the Structural Analysis Committee (SAC) to request research using our on-call contract with David Evans and Associates. The results of this study, coupled with analysis done by a SAC committee work team, yielded a simplified approach to addressing bursting stresses in the general zone.

This new MTD 11-25 is required on all projects not yet type-selected and may be used as a reference on those past Type Selection. Redesign or Contract Change Orders are not required solely due to the content of this MTD.

Consultants and Local Agencies who have questions or concerns on the application of MTD 11-25 should contact their Structure Liaison Engineer. Caltrans staff may contact the Post-Tensioned Concrete Committee Chair, Marc Friedheim, at 227-8480 or the SAC Chair, Toorak Zokaie, at 227-8579.

Attachment:

cc: Terry Abbott - Division of Design
Denix Anbiah - Division of Local Assistance
Dolores Valls - Structure Maintenance and Investigation
Karla Sutliff - Division of Engineering Services
Toorak Zokaie - Technical Committee Chair
Marc Friedheim - Technical Committee Chair
Susan Hida - Technical Manager