

INTEROFFICE MEMORANDUM

DATE: July 31, 1974

TO: BRIDGE DESIGN PERSONNEL

FROM: Veral Pinkerton, Bridge Engineer

SUBJECT: OFFICE POLICY: Section 5 - Concrete Design

Our office policy regarding certain portions of Section 5 - Concrete Design of the 1974 AASHTO Interim Specifications will be as follows:

1. 1.5.22 - Splices in Reinforcement.

All splices shall be detailed using 40 diameters unless otherwise required. If additional length is required, this will be shown on the plans.

2. 1.5.11 - Limits for Reinforcement of Compression Members.

For columns which have reinforcing steel equal to or less than 1% of the column area the following shall apply. (This is the same policy we have used in the past.)

- (a) Ties may be spaced from 12 to 18 inches apart depending, in general, on the rate of batter of the column.
- (b) The ties shall be so arranged that every corner bar shall be supported by a tie and auxiliary ties shall be provided to support intermediate longitudinal bars whose distance from any tied bar exceeds 2 feet.
- (c) Ties shall be #4 or larger. Columns requiring more than 1% longitudinal reinforcing steel shall be handled as a special case.

3. 1.5.34 - Slenderness Effects in Compression Members

The following procedure shall be used regarding the moment magnifier:

- (a) Calculate the magnifier in accordance with the specifications.
- (b) Calculate the deflection required to produce this magnification.
- (c) Compare this calculated deflection with the maximum allowable or possible deflection.

If the calculated deflection is less than the possible deflection, use the calculated magnifier. If the calculated deflection is more than the possible deflection, calculate a new magnifier based on the loading and the eccentricity due to the maximum possible deflection.

VP:bw