9.4—GENERAL DESIGN REQUIREMENTS

9.4.2—Deck Drainage

The following shall supplement *A9.4.2*.

Refer to *D2.3.2.2.4* and *D2.6.6* for additional requirements on cross and longitudinal slopes of deck surface and deck drainage.

9.5—LIMIT STATES

9.5.5—Extreme Event Limit States

The following shall supplement *A9.5.5*.

Approved crash tested concrete bridge railing reinforcement details for the barrier and deck reinforcement may be used for the deck overhang design, if the design fits the crash tested variables.

9.6—ANALYSIS

9.6.1—Methods of Analysis

The following shall replace *A9.6.1*.

Approximate elastic methods of analysis specified in *A4.6.2.1*, refined methods specified in *A4.6.3.2*, or the traditional design method specified in *A9.7.3* may be used for various limit states as permitted in *A9.5*.

The empirical design method for bridge decks in *A9.7.2* is not allowed.

9.7—CONCRETE DECK SLABS

9.7.1—General

9.7.1.1—Minimum Depth and Cover

The following shall replace *A9.7.1.1*.

For all bridge spans except movable bridge spans, the minimum and maximum overall deck thickness shall be 8.0 inch and 9.5 inch, respectively, and shall vary in 0.5 inch increments. The overall deck thickness shall include a 0.5 inch sacrificial thickness, which shall be included in the weight calculations and excluded from the design thickness. The design thickness equals to the overall deck

C9.7.1.1

The following shall replace *AC9.7.1.1*.

The 0.5 inch sacrificial thickness is provided to account for the construction tolerance surface texturing, grinding, and the expected future wearing of the bridge deck surface due to applied live loads. Sacrificial concrete must be accounted for as an added dead load but cannot be utilized in the calculations of composite section properties.