

BDF



South Carolina
Department of Transportation

955 Park Street
Post Office Box 191
Columbia, South Carolina 29202-0191

Office of the Director
(803) 737-1302 • Fax (803) 737-2038

Deputy Director of Engineering
(803) 737-1314 • Fax (803) 737-2038

Deputy Director of Finance and Administration
(803) 737-1240 • Fax (803) 737-1719

Deputy Director of Mass Transit
(803) 737-9720 • Fax (803) 737-9739

DM0297

February 28, 1997

MEMORANDUM TO GROUP LEADERS AND CONSULTANTS

SUBJECT: Classes of Concrete for National Highway System Bridges
and "Other Select Bridges"

Beginning immediately, the Bridge Design Office will require new and replacement bridge decks on the National Highway System to use either Class E Concrete or Class 45 Concrete for bridge deck concrete. Class E Concrete will be specified for projects using English units and Class 45 Concrete will be specified for projects using Metric units. Approach slab concrete shall be the same as specified for the bridge deck concrete.

When designing structures with Class E Concrete a $f'c = 4,000$ psi should be used in design. When designing structures with Class 45 Concrete a $f'c = 30$ MPa should be used in design.

Substructure concrete shall be specified as Class D Concrete for English projects and specified as Class 30 MPa for Metric projects.

The class of concrete specified in bridge barrier parapets shall be Class D Concrete or Class 30 MPa as applicable.

For "Other Select Bridges" with an estimated deck area of 50,000 square feet or more, the designer should verify the required concrete types with the Bridge Design Engineer.

Rocque L. Kneece
Bridge Design Engineer

cc: Assistant Bridge Design Engineers

REL/slb