



SOUTH CAROLINA

DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

P.O. BOX 191

COLUMBIA, S.C. 29202

October 25, 1989

**MEMORANDUM TO DESIGN GROUP LEADERS & CONSULTANTS**

Subject: Safety Factors for Driven Pile Foundations

Design Memorandum DM0989 dated September 14, 1989 requires the safety factors for driven pile foundations to be shown on the plans. The safety factor selected will depend on design factors such as quantity of subsurface information and geotechnical analysis, as well as construction factors such as the use of load test, index piles and wave equation. The following safety factors are to be used based on the construction control procedures to be specified in the Special Provisions:

Static Load Test/Wave Equation	2.00
Dynamic Load Test (PDA)/Wave Equation	2.25
Index Piles/Wave Equation	2.50
Wave Equation	2.75

These safety factors may be modified to fit the requirements of individual projects after consultation with the appropriate Assistant Bridge Design Engineer. Some conditions for which modifications may be considered are piles bearing on rock, uniform soil stratum, and additional geotechnical information exceeding the normal level of information.

Group Leaders should consult with the appropriate Assistant Bridge Design Engineer to determine the level of construction monitoring that will be required for each individual project. Consultants should discuss construction monitoring with the Consultant Coordinator in the Bridge Design Office.

  
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