TO: District Directors of Operations, District Directors of Production, District Design Engineers, District Structures and Facilities Engineers, District Geotechnical Engineers, District Maintenance Engineers, District Construction Engineers, District Structures Design Engineers

FROM: William Nickas, P.E., State Structures Design Engineer


SUBJECT: Temporary Design Bulletin C05-11
Main Span Superstructure Continuity

REQUIREMENTS
Add the following paragraph to section 2.11.7, Main Span Length, of the Structures Design Guidelines:

Where the vessel traffic volume, at high level fixed bridges, is such that the risk analysis results in channel pier strength requirements in excess of 1,500 kips, a continuous girder superstructure is required. The channel span will be set at a minimum of 200 feet or as specified by the Department.

COMMENTARY
Additional safety and structural redundancy is provided at bridge locations where large volumes of commercial traffic exist. Safety considerations and unknowns surrounding the probability of vessel collision justify the relatively small additional construction expense.

BACKGROUND
There has been a trend to provide ever deeper and longer simple span girder designs at channel span locations. The simple span design lacks beneficial redundancy.

IMPLEMENTATION
This policy is effective on all designs started on or after September 1, 2005. For designs started before September 1, 2005, no changes are required.

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