

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

April 17, 2007

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PREPARE REPLY FOR SIGNATURE

REVIEW/DISCUSS WITH

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ROADWAY DESIGN UNIT

MEMORANDUM TO:

Division Engineers, Branch Managers, Unit Heads

FROM:

W. F. Rosser, P.E.

State Highway Administrator

SUBJECT:

New/Unique Processes

New or unique processes are defined as construction materials, methods, or procedures that are new to the location (State, Division) in which they are being utilized. This includes changes to existing design standards, standard specifications, and standard drawings.

In an effort to ensure everyone involved in the development and construction of a project that contains a new and/or unique process is aware and has an opportunity to comment on the new and/or unique process, the following requirements shall be implemented.

- 1. The following information will be added within the Roadway Design cover letter submitted to the Division along with the plans for the combined, final design, and pre-let field inspection. The Roadway Design Project Engineer shall request a review to determine if the project contains any new or unique construction techniques, processes, and/or products that are unfamiliar to the Department, Division, or Resident Engineer who will be assigned the project. If there are new or unique items, then the Division Engineer should notify the Roadway Design Project Engineer so that special provisions, details, technical bulletins, etc. can be provided prior to the inspection.
- 2. The following comments will be added to the combined, final design, and pre-let <u>field</u> inspection questions.

"Does this project contain any new or unique construction techniques, processes, and/or products that are unfamiliar to the Department, Division, or Resident Engineer who will be assigned the project? If so, a draft project special provision, details along with a Technical Bulletin (if available) of this unique construction technique, process, and/or product should be supplied to you for review and comment during this field inspection. Based solely on the nature of this new or unique construction technique, process, and/or product, do you recommend:

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- (a) Internal and/or external constructability review to be held.
- (b) Technical Bulletin to be prepared.
- (c) Training to be provided to the Resident Engineer and staff.
- 3. The following item will be added to the <u>checklist</u> that is now sent with the field inspection letters, commitments, questions, etc.
 - "Review draft project special provision (if applicable) for unique construction technique, process, and/or product with Division Construction Engineer and field inspection attendees (be specific). Discuss need for internal and/or external constructability review, technical bulletin, and training based on unique item."
- 4. If there is a new or unique construction technique, process, and/or product on a project, the responsible unit (unit that has requested the new or unique process or has been deemed as the most knowledgeable unit regarding the new or unique process) will coordinate with the Specifications Section to develop a draft project special provision (as mentioned in items 1 & 2) and determine if technical bulletins and training are available/warranted. This information will be forwarded to the Roadway Design Project Engineer prior to the Final Design Field Inspection, the Pre-Let Field Inspection, or the Combined Field Inspection.

Notification of the use of a new/unique process to the Roadway Design Project Engineer is a requirement. It is every employee's responsibility, at any level, to make the Roadway Design Project Engineer aware of new/unique processes proposed so that assistance (technical bulletins, training, etc.) can be provided to make the new/unique process successful on a project.

If new/unique processes are identified on a construction project, the Division Construction Engineer, Resident Engineer, and Roadway or Bridge Construction Engineer shall ensure that appropriate training is provided and frequent project reviews are performed during the unique construction activity.

Field Engineers must ensure that training is being implemented as provided and any questions or problems are correctly addressed during construction. Our contractors and inspection personnel shall ensure the specific details for success of the unique process are properly constructed and documented.

These frequent project reviews during construction shall include the responsible and knowledgeable engineer(s) or representative(s) from the Unit that recommended the process to be implemented on this particular project. Field inspections shall include interaction with DOT engineers, construction technicians, and contractor personnel to ensure success of the process and that attention is given to details.

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These changes are effective immediately. Please provide this information to your staff so they can be incorporated in the project development process.

WFR/tm

cc: Steve Varnedoe, P.E., Chief Engineer - Operations
Debbie Barbour, P.E., Director of Preconstruction
Jon Nance, P.E., Director of Field Operations
Lacy Love, P.E., Director of Asset Management
Calvin Leggett, P.E., Manager, Program Development Branch