



Florida Department of Transportation

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SECRETARY

November 13, 2023

MATERIALS BULLETIN NO. 23-02

DCE MEMORANDUM NO. 23-04

(FHWA Approved: 11/7/2023)

TO: DISTRICT CONSTRUCTION ENGINEERS
DISTRICT MATERIALS AND RESEARCH ENGINEERS

FROM: Sue Zheng, P.E., Director, Office of Materials
Timothy Lattner P.E., Director, Office of Construction

COPIES: Will Watts, Dan Hurtado, Ananth Prasad (FTBA), Jose Ortiz (FHWA), Khoa Nguyen (FHWA)

SUBJECT: **RAPID AGGREGATE SUBSTITUTION PROCESS FOR STRUCTURAL CONCRETE MIXTURES**

DocuSigned by:
Xiaoyan Zheng
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Tim Lattner
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The Department has implemented revisions to subsection 9.2.6.5.1 of the FDOT Materials Manual Volume II (through Section 105 of the FY 2025-26 Standard Specifications), as listed below:

Section 9.2, Volume II – STRUCTURAL CONCRETE PRODUCTION FACILITIES GUIDE

The Department has streamlined the mix design approval process for aggregate substitutions.

This memorandum allows the incorporation of the revisions to the Materials Manual, Volume II, Section 9.2, into projects let before July 2025.

Revisions to the Materials Manual listed above are attached.

If there are any questions, contact David Cerlanek at (352) 955-6686.

This memorandum serves as blanket approval to process a \$0.00 contract change to incorporate any of the above referenced revisions and should be attached to the Work Order or Supplemental Agreement.

TL/SZ/hm

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9.2.6.5.1 **Aggregates**

Aggregate sources may be substituted within an approved base mix design provided that the aggregates are the same geological type, same size, and are from an approved source. The new aggregate must have a saturated surface dry (SSD) specific gravity within 0.08 of the SSD specific gravity of the original aggregate source.

To minimize concrete placement delays on ongoing construction projects, aggregate source substitution approvals may be accelerated if all the conditions below are met:

- (1) The proposed aggregate source substitution meets the requirements in **Specifications Section 346**.
- (2) The revised mix design is derived from an approved mix design (base mix design).
- (3) The revised mix design is adjusted to meet the theoretical yield requirements of base mix design.

Follow the process outlined below to request an accelerated aggregate substitution.

- (1) Submit the request in writing to the CEI, managing District Materials Office, and State Materials Office. State the intended use and environmental classification for the placement of the revised mix design.
- (2) Include the proposed revised mix design and a summary of the changes.
- (3) The CEI can provide preliminary approval of the revised design through email if the requirements of this bulletin are met.
- (4) The State Materials Office will review the revised mix design and provide a new mix design number within two business days.
- (5) After the new mix design number is issued, the producer quality control plan shall be updated accordingly.