FEMA

Summary: Revision to Figure D.2.8-3, Wave Runup Guidance for Vertical Wall, From Shore Protectional Manual (USACE, 1984)

Audience

This procedure memorandum is intended for use by all users of the current Appendix D of the *Guidelines and Specifications for Flood Hazard Mapping Partners*, the *Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update, Final Draft*, February 2007.

Purpose

The purpose of this procedure memorandum is to redefine and correct an error for a coefficient for relative structure depth used in Figure D.2.8-3 presented in Appendix D of the *Guidelines and Specifications for Flood Hazard Mapping Partners,* the *Atlantic Ocean and Gulf of Mexico Coastal Guidelines Update, Final Draft*, February 2007. This revision corrects Figure D.2.8-3 so that it is consistent with the U.S. Army Corps of Engineers 1984 *Shore Protection Manual* figure from which it was derived.

The procedure for estimating wave runup on vertical structures relies on the use of Figure D.2.8-3, provided the wave steepness and the depth at the toe of the structure. The curves presented in the study guidelines enable the estimation of wave runup on vertical structures given the wave steepness and relative structure depth. The uppermost curve previously was assigned a coefficient of 0.60 and is changed to 1.50 with this procedure memorandum, for consistency with the *Shore Protection Manual*. Example figures and the redefined figure are included in the procedure memorandum.

For all new detailed coastal study starts in Fiscal Year 2010 making use of this procedure for estimating wave runup on vertical structures, the coefficient for structure depth is redefined. Letters of map revision submitted for studies completed prior to issuance of this procedure memorandum will use the redefined coefficient. A corrected Figure D.2.8-3 is included in the procedure memorandum.

Risk MAP Guidance

This document is a component of Risk MAP Guidance. The Risk MAP program is managed by FEMA to develop flood risk information and work with communities to help them understand and act on the data to manage the risks. Risk MAP Guidance defines the product and process standards and best practices for the program:

- **Standards are contained in the document "Guidelines and Standards for Flood Risk Analysis and Mapping" (G&S document) which primarily contain standards, but currently substantial best practice information are also included.**
- **Procedure Memos supersede portions of the G&S document or address new issues not currently covered. In most cases they will be integrated into the G&S document over time.**
- **Operating Guidance describes best practices that support the Risk MAP standards.**

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