

(c) Where highway fills are to be used as dams to permanently impound water more than 50 acre-feet ( $6.17 \times 10^4$  cubic metres) in volume or 25 feet (7.6 metres) deep, the hydrologic, hydraulic, and structural design of the fill and appurtenant spillways shall have the approval of the State or Federal agency responsible for the safety of dams or like structures within the State, prior to authorization by the Division Administrator to advertise for bids for construction.

**§ 650.117 Content of design studies.**

(a) The detail of studies shall be commensurate with the risk associated with the encroachment and with other economic, engineering, social or environmental concerns.

(b) Studies by highway agencies shall contain:

(1) The hydrologic and hydraulic data and design computations,

(2) The analysis required by § 650.115(a), and

(3) For proposed direct Federal highway actions, the reasons, when applicable, why FEMA criteria (44 CFR 60.3, formerly 24 CFR 1910.3) are demonstrably inappropriate.

(c) For encroachment locations, project plans shall show:

(1) The magnitude, approximate probability of exceedance and, at appropriate locations, the water surface elevations associated with the overtopping flood or the flood of § 650.115(a)(1)(ii), and

(2) The magnitude and water surface elevation of the base flood, if larger than the overtopping flood.

**Subpart B—Erosion and Sediment Control on Highway Construction Projects**

SOURCE: 59 FR 37939, July 26, 1994, unless otherwise noted.

**§ 650.201 Purpose.**

The purpose of this subpart is to prescribe policies and procedures for the control of erosion, abatement of water pollution, and prevention of damage by sediment deposition from all construction projects funded under title 23, United States Code.

**§ 650.203 Policy.**

It is the policy of the Federal Highway Administration (FHWA) that all highways funded in whole or in part under title 23, United States Code, shall be located, designed, constructed and operated according to standards that will minimize erosion and sediment damage to the highway and adjacent properties and abate pollution of surface and ground water resources. Guidance for the development of standards used to minimize erosion and sediment damage is referenced in § 650.211 of this part.

**§ 650.205 Definitions.**

*Erosion control measures and practices* are actions that are taken to inhibit the dislodging and transporting of soil particles by water or wind, including actions that limit the area of exposed soil and minimize the time the soil is exposed.

*Permanent erosion and sediment control measures and practices* are installations and design features of a construction project which remain in place and in service after completion of the project.

*Pollutants* are substances, including sediment, which cause deterioration of water quality when added to surface or ground waters in sufficient quantity.

*Sediment control measures and practices* are actions taken to control the deposition of sediments resulting from surface runoff.

*Temporary erosion and sediment control measures and practices* are actions taken on an interim basis during construction to minimize the disturbance, transportation, and unwanted deposition of sediment.

**§ 650.207 Plans, specifications and estimates.**

(a) Emphasis shall be placed on erosion control in the preparation of plans, specifications and estimates.

(b) All reasonable steps shall be taken to insure that highway project designs for the control of erosion and sedimentation and the protection of water quality comply with applicable standards and regulations of other agencies.

[39 FR 36332, Oct. 9, 1974]

**§ 650.209 Construction.**

(a) Permanent erosion and sediment control measures and practices shall be established and implemented at the earliest practicable time consistent with good construction and management practices.

(b) Implementation of temporary erosion and sediment control measures and practices shall be coordinated with permanent measures to assure economical, effective, and continuous control throughout construction.

(c) Erosion and sediment control measures and practices shall be monitored and maintained or revised to insure that they are fulfilling their intended function during the construction of the project.

(d) Federal-aid funds shall not be used in erosion and sediment control actions made necessary because of contractor oversight, carelessness, or failure to implement sufficient control measures.

(e) Pollutants used during highway construction or operation and material from sediment traps shall not be stockpiled or disposed of in a manner which makes them susceptible to being washed into any watercourse by runoff or high water. No pollutants shall be deposited or disposed of in watercourses.

**§ 650.211 Guidelines.**

(a) The FHWA adopts the AASHTO Highway Drainage Guidelines, Volume III, “Erosion and Sediment Control in Highway Construction,” 1992,<sup>1</sup> as guidelines to be followed on all construction projects funded under title 23, United States Code. These guidelines are not intended to preempt any requirements made by or under State law if such requirements are more stringent.

(b) Each State highway agency should apply the guidelines referenced in paragraph (a) of this section or apply its own guidelines, if these guide-

<sup>1</sup>This document is available for inspection from the FHWA headquarters and field offices as prescribed by 49 CFR part 7, appendix D. It may be purchased from the American Association of State Highway and Transportation Officials offices at Suite 225, 444 North Capitol Street, NW., Washington, DC 20001.

lines are more stringent, to develop standards and practices for the control of erosion and sediment on Federal-aid construction projects. These specific standards and practices may reference available resources, such as the procedures presented in the AASHTO “Model Drainage Manual,” 1991.<sup>2</sup>

(c) Consistent with the requirements of section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (Pub. L. 101-508, 104 Stat. 1388-299), highway construction projects funded under title 23, United States Code, and located in the coastal zone management areas of States with coastal zone management programs approved by the United States Department of Commerce, National Oceanic and Atmospheric Administration, should utilize “Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters,” 84-B-92-002, U.S. EPA, January 1993.<sup>3</sup> State highway agencies should refer to this Environmental Protection Agency guidance document for the design of projects within coastal zone management areas.

**Subpart C—National Bridge Inspection Standards**

SOURCE: 69 FR 74436, Dec. 14, 2004, unless otherwise noted.

**§ 650.301 Purpose.**

This subpart sets the national standards for the proper safety inspection and evaluation of all highway bridges in accordance with 23 U.S.C. 151.

**§ 650.303 Applicability.**

The National Bridge Inspection Standards (NBIS) in this subpart apply to all structures defined as highway bridges located on all public roads.

<sup>2</sup>This document is available for inspection from the FHWA headquarters and field offices as prescribed by 49 CFR part 7, appendix D. It may be purchased from the American Association of State Highway and Transportation Officials offices at Suite 225, 444 North Capitol Street, NW., Washington, DC 20001.

<sup>3</sup>This document is available for inspection and copying as prescribed by 49 CFR part 7, appendix D.