

Memorandum of Understanding on Coordinating The Preparation and Processing of Environmental Projects.<sup>2</sup>

(d) The HA shall accomplish sufficient preliminary design and consultation during the environmental phase of project development to investigate bridge concepts, including the feasibility of any proposed movable bridges, the horizontal and vertical clearances that may be required, and other location considerations which may affect navigation. At least one fixed bridge alternative shall be included with any proposal for a movable bridge to provide a comparative analysis of engineering, social, economic and environmental benefit and impacts.

(e) The HA shall consider hydraulic, safety, environmental and navigational needs along with highway costs when designing a proposed navigable waterway crossing.

(f) For bridges where the risk of ship collision is significant, HA's shall consider, in addition to USCG requirements, the need for pier protection and warning systems as outlined in FHWA Technical Advisory 5140.19, Pier Protection and Warning Systems for Bridges Subject to Ship Collisions, dated February 11, 1983.

(g) Special navigational clearances shall normally not be provided for accommodation of floating construction equipment of any type that is not required for navigation channel maintenance. If the navigational clearances are influenced by the needs of such equipment, the USCG should be consulted to determine the appropriate clearances to be provided.

(h) For projects which require FHWA approval of plans, specifications and estimates, preliminary bridge plans shall be approved at the appropriate level by FHWA for structural concepts, hydraulics, and navigational clearances prior to submission of the permit application.

(i) If the HA bid plans contain alternative designs for the same configuration (fixed or movable), the permit application shall be prepared in sufficient detail so that all alternatives can be

evaluated by the USCG. If appropriate, the USCG will issue a permit for all alternatives. Within 30 days after award of the construction contract, the USCG shall be notified by the HA of the alternate which was selected. The USCG procedure for evaluating permit applications which contain alternates is presented in its Bridge Administration Manual (COMDT INST M16590.5).<sup>3</sup> The FHWA policy on alternates, Alternate Design for Bridges; Policy Statement, was published at 48 FR 21409 on May 12, 1983.

**§ 650.809 Movable span bridges.**

A fixed bridge shall be selected wherever practicable. If there are social, economic, environmental or engineering reasons which favor the selection of a movable bridge, a cost benefit analysis to support the need for the movable bridge shall be prepared as a part of the preliminary plans.

**PART 652—PEDESTRIAN AND BICYCLE ACCOMMODATIONS AND PROJECTS**

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AUTHORITY: 23 U.S.C. 109, 217, 315, 402(b)(1)(F); 49 CFR 1.48(b).

SOURCE: 49 FR 10662, Mar. 22, 1984, unless otherwise noted.

**§ 652.1 Purpose.**

To provide policies and procedures relating to the provision of pedestrian and bicycle accommodations on Federal-aid projects, and Federal participation in the cost of these accommodations and projects.

**§ 652.3 Definitions.**

(a) *Bicycle.* A vehicle having two tandem wheels, propelled solely by human

<sup>2</sup>FHWA Notice 6640.22 dated July 17, 1981, is available for inspection and copying as prescribed in 49 CFR part 7, appendix D.

<sup>3</sup>United States Coast Guard internal directives are available for inspection and copying as prescribed in 49 CFR part 7, appendix B.