



**DEPARTMENT OF THE ARMY**  
**OFFICE OF THE CHIEF OF ENGINEERS**  
**WASHINGTON, D.C. 20310-2600**

**REPLY TO  
ATTENTION OF**

0 3 MAR 2003

CECW-PM (1105-2-10a)

SUBJECT: Atlantic Intracoastal Waterway Bridge Replacement at Deep Creek, Chesapeake, Virginia

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the replacement of the existing U.S. Army Corps of Engineers highway bridge which crosses the Atlantic Intracoastal Waterway (AIWW) Dismal Swamp Canal (DSC) in the community of Deep Creek in the City of Chesapeake, Virginia. It is accompanied by the report of the district and division engineers. These reports are in response to Section 216 of the Flood Control Act of 1970 which authorizes the Secretary of the Army and the Chief of Engineers to undertake investigations for modifying completed projects (the DSC Canal and bridges) or their operations. Preconstruction engineering and design activities for this project will continue under the cited authority.
2. The reporting officers recommend the national economic development (NED) plan which consists of a low-level, 5-lane, split leaf, pit bascule bridge, with separate 2-lane and 3-lane leafs. The eastbound leaf would be 75 feet long, 40 feet wide, and would have two vehicle lanes and a pedestrian sidewalk. The westbound lane would have 3 vehicle lanes and be approximately 48 feet wide. The two spans would be separated by a space of approximately 1.5 feet. The roadway centerline would be approximately 100 feet south of the existing bridge centerline. The new deck elevation would be approximately 17.0 feet National Geodetic Vertical Datum (NGVD), which would be 5.5 to 7 feet above average ground elevation in the vicinity and approximately 2 feet above the existing bridge deck. The higher deck would require modifications to the approach roads on either side of the bridge to tie into existing road elevations on Cedar Road and Old Mill Road, as well as tying into the intersecting portions of George Washington Highway and Route 17. This work would require demolition of three commercial structures and relocation of those businesses. No major utility relocations would be required. This recommendation is subject to the non-Federal sponsor, the City of Chesapeake, Virginia, agreeing to assume full ownership of the recommended replacement

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bridge including all associated operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) costs, and to operate and maintain the bridge in accordance with regulations prescribed by the Secretary of the Army. The existing Deep Creek Bridge is a two-lane, single-leaf bascule bridge that was constructed in 1934 at a cost of \$64,000. The bridge is now outdated, and, while structurally sound, it is functionally obsolete in that it does not conform to existing standards for traffic load limits and roadway geometry. Traffic congestion and delays are commonplace. Potential adverse impacts to vessel traffic on the AIWW could result due to malfunction of the bridge which has been used for almost twice its originally estimated useful life. Numerous alternatives were evaluated including closure of the AIWW at this location, a high level bridge, and several lift bridges having different numbers of traffic lanes.

3. The total first cost of the NED plan (including improvements to intersections and approach roads) is estimated at \$22,178,000. The Federal Government will pay 100 percent of the NED bridge replacement and approach road cost, including lands, easements, rights of way, relocations, and disposal sites. Average annual benefits and costs for the NED plan are estimated to be \$15,652,000 and \$6,991,300, respectively. The resulting benefit-cost ratio for the NED plan is 2.24 to 1.0. Non-Federal interests are required to assume full ownership and all OMRR&R costs for the NED plan after construction. Annual operation and maintenance costs for the NED plan are estimated at \$222,100 annually. Project economics are based on October 2002 price levels and the current Federal interest rate of 5 7/8 percent.

4. I concur in the findings, conclusions, and recommendations of the reporting officers. Washington level review indicate that the plan developed is technically sound, economically justified, and environmentally and socially acceptable. The plan conforms with essential elements of the U.S. Water Resources Council's Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies and complies with other administration and legislative policies and guidelines.

5. Accordingly, I recommend that the existing Corps highway bridge at Deep Creek in Chesapeake, Virginia, be replaced in accordance with the reporting officers' recommended NED plan with such modifications as in the discretion of the Chief of Engineers may be advisable. Also, this recommendation is subject to the non-Federal sponsor agreeing to comply with all applicable Federal laws and policies and other requirements including, but not limited to:

a. Accept full ownership of the recommended Atlantic Intracoastal Waterway replacement bridge, with ownership rights subordinate to the Federal Government's right to operate, maintain, repair, and rehabilitate the Dismal Swamp Canal;

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b. For as long as the bridge replacement project remains authorized, insure that the bridge remains toll free, and operate, maintain, repair, replace, and rehabilitate the completed project, or functional portion of the project, including mitigation features, at no cost to the Federal Government, in a manner compatible with the project authorized purposes, and in accordance with applicable Federal and State laws and any specific directions prescribed by the Federal Government;

c. Grant the Federal Government a right to enter, at reasonable times and in a reasonable manner, upon property that the non-Federal sponsor owns or controls for access to the project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project;

d. Hold and save the United States free from all damages arising from the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the United States or its contractors;

e. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project to the extent and in such detail as will properly reflect total project costs and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments at 32 C.F.R., Section 33.20;

f. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements, or rights-of-way that the Federal Government determines the city must provide for the construction, operation, and maintenance of the project; except that, the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Federal Government determines to be subject to the navigation servitude without prior specific written direction by the Federal Government;

g. Assume complete financial responsibility, as between the Federal Government and the non-Federal sponsor, for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Federal Government determines the city must provide for the construction operation, or maintenance of the project;

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h. Agree that, as between the Federal Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and, to the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project in a manner that will not cause liability to arise under CERCLA;

i. Prescribe and enforce regulations to prevent obstruction of or encroachment on the navigation project that would hinder its operation or maintenance;

j. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR part 24, in acquiring lands, easements, and rights-of-way required for the construction, operation, and maintenance of the project, including those necessary for relocations, borrow materials, and dredged or excavated material disposal, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act; and

k. Comply with all applicable Federal and State laws and regulations, including, but not limited to, Section 601 of the Civil Rights Act of 1964, Public Law 88-352 (U.S.C. 2000d), and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army."

6. The recommendation contained herein reflects the information available at this time and current departmental policies governing formulation of individual projects. It does not reflect program and budgeting priorities inherent in the formulation of a national civil works construction program nor the perspective of higher review levels within the executive branch. Consequently, the recommendation may be modified before it is transmitted to Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the sponsor, the City of Chesapeake, Virginia; the Commonwealth of Virginia; interested Federal agencies; and other parties will be advised of any modifications and will be afforded an opportunity to comment further.



ROBERT B. FLOWERS  
Lieutenant General, U.S. Army  
Chief of Engineers