



DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF ENGINEERS
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

08 JUN 1998

CECW-PE (10-1-7a)

SUBJECT: Baltimore Harbor Anchorages and Channels, Maryland and Virginia

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the Baltimore Harbor anchorages and channels study of navigational improvements. It is accompanied by the report of the district and division engineers. These reports are in final response to a resolution passed by the Committee on Environment and Public Works, United States Senate, on 23 June 1988. This resolution requested the review of existing reports of the Chief of Engineers on Baltimore Harbor with a view to determining feasible improvements for navigation, including anchorages and branch channels. This feasibility study was done in cooperation with the Maryland Department of Transportation. Preconstruction engineering and design activities for this proposed project will be continued under the authority provided by the resolution cited above.
2. The reporting officers recommend a plan to modify the existing project for Baltimore Harbor anchorages and channels. The plan of improvement consists of the following improvements:
 - a. West Dundalk Channel - widening of the existing 42-foot deep mean lower low water (MLLW), 3,800-foot long, and 350-foot wide channel to 500 feet, with additional widening at the bends and entrances. Channel depth will remain at the existing depth of 42 feet MLLW.
 - b. Seagirt-Dundalk Connecting Channel - widening of the existing 42-foot deep MLLW, 3,000-foot long, and 350-foot wide channel to 500 feet, with additional widening at bends and entrances. Channel depth will remain at the existing depth of 42 feet MLLW.
 - c. East Dundalk Channel - widening of the existing 38-foot deep MLLW, 3,800-foot long, and 300-foot wide channel to 400 feet, with tapering to existing channel bends and flares. Channel depth will remain at the existing depth of 38 feet MLLW.
 - d. South Locust Point Channel - construction of a new 36-foot deep MLLW, 400-foot wide, and approximately 1,800 feet long, east branch channel to the South Locust Point Marine Terminal, with additional widening at the bends and entrances.

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e. Deepening of anchorage number three to 42 feet deep MLLW, for a width of 2,200 feet and a length of 2,200 feet. The remaining portion of anchorage number three, just west of the improved area, would remain at its currently authorized depth of 35 feet MLLW, for a width of 1,500 feet and a length of 2,300 feet.

f. Deepening of anchorage number four to 42 feet deep MLLW, for a width of 1,800 feet and a length of 1,800 feet.

g. Construction of a new turning basin at the head of Fort McHenry Channel to 50 feet deep MLLW, for a width of 1,200 feet and a length of 1,200 feet.

h. Federal assumption of non-Federal maintenance associated with the State of Maryland constructed connecting branch channel extension to the south-east point of the Seagirt Marine Terminal, the East Connecting Channel, the West Dundalk Channel, the West Seagirt Channel and the South Locust Point Marine Terminal Channel, as further defined in the feasibility report.

i. Deauthorization of anchorage number one.

3. The recommended plan also includes actions to be undertaken by the U.S. Coast Guard as follows:

a. Official recognition of the commercial shipping anchorage implemented by the U. S. Coast Guard in the area of the Annapolis anchorage grounds. This action would increase safety by reducing potential conflicts between commercial and recreational vessels. These boundaries should be marked on the appropriate navigation charts.

b. Buoys and range lights realigned, as appropriate, to enhance maneuverability in the anchorages and branch channels following implementation of the improvements.

c. More strict enforcement of the rules and regulations governing use of the various anchorages by commercial vessels implemented by the appropriate governing officials and/or agencies.

4. The recommended plan would reduce waterborne transportation costs by reducing the waiting time for departing vessels to clear the harbor before a vessel anchored at Annapolis can proceed to a berth. Also, transportation costs would be reduced by the more efficient alignment and dimensions of the connecting channels between the main channel and the Seagirt/Dundalk berth complex and construction of a loop channel at the South Locust Point Marine Terminal, resulting in a decrease of the total time required for pilots to maneuver large vessels during berthing and deberthing operations. As an integral part of a plan to provide a system of improved channels serving the Baltimore Harbor, the reporting officers recommend Federal assumption of non-

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Federal maintenance associated with the State of Maryland constructed connecting channel extension to the south-east point of the Seagirt Marine Terminal, the East Connecting Channel, the West Dundalk Channel, the West Seagirt Channel and the South Locust Point Marine Terminal Channel, as further defined in the feasibility report. Since each channel is an integral part of a navigation loop within the Baltimore harbor system of improved channels, the reporting officers determined that Federal maintenance is warranted.

5. Project costs are allocated to the commercial navigation project purpose. Based on October 1997 prices, the estimated cost of the recommended anchorage and channel project is \$27,692,000, of which \$19,126,000 would be Federal and \$8,566,000 would be non-Federal. The non-Federal portion includes an additional payment of 10 percent of the construction of the general navigation features (GNF), less credit for the proportionate share of the dredged material placement site dikes constructed on Hart-Miller Island. Dredged material placement site for this project was provided by the Maryland Port Administration in their project that raised the perimeter dike on Hart-Miller Island to an elevation of 44 feet, providing a capacity to accept 30 million cubic yards of dredged material. The current estimated cost of the Hart-Miller Island improvements attributable to the Baltimore Harbor Anchorages and Channels project is \$1,957,000. In accordance with the Water Resources Development Act (WRDA) of 1986 the State will pay 100 percent of the costs and receive credit towards Lands, Easements, Rights-of-Way, Relocations, Disposal (LERRD) for this portion, since construction was initiated before 12 October 1996. This credit is subject to a Department of Army audit and ultimate use as a disposal site by the Baltimore Harbor and Anchorages project. In accordance with WRDA 1996 future dredged material containment facilities will be cost shared as GNF. Average annual benefits and costs based on an interest rate of 7 1/8 percent are estimated at \$9,447,000 and \$2,270,000, respectively, with a resulting benefit-cost ratio of 4.3. The proposed plan is the national economic development (NED) plan.

6. Washington level review indicates that the proposed plan is technically sound, economically justified, and environmentally and socially acceptable. The proposed project complies with applicable U.S. Army Corps of Engineers planning procedures and regulations. Also, the views of interested parties, including Federal, State, and local agencies have been considered.

7. Accordingly, I recommend that improvements to the existing Baltimore Harbor and Channels project be modified to provide navigation improvements generally in accordance with the reporting officers' recommended plan, and with such modifications as in the discretion of the Chief of Engineers may be advisable. I further recommend Federal assumption of non-Federal maintenance of certain channels as indicated in paragraph 2 and as further documented in the feasibility report, and that the non-Federal sponsor receive credit towards project LERRDs the cost of the Hart-Miller Island improvements attributable to the Baltimore Harbor anchorages and channels project. My recommendation is subject to cost-sharing, financing, and other applicable requirements of WRDA 1986, as amended by Section 201 of WRDA 1996. Also, this

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recommendation is subject to the non-Federal sponsor agreeing to comply with applicable Federal laws and policies, including the following requirements:

a. Provide, operate, maintain, repair, replace, and rehabilitate, at its own expense, the local service facilities in a manner compatible with the project's authorized purposes and in accordance with applicable Federal and State laws and regulations and any specific directions prescribed by the Federal Government;

b. Provide all lands, easements, and rights-of-way, and perform or ensure the performance of all relocations determined by the Federal Government to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation features;

c. Accomplish all removals determined necessary by the Federal Government other than those removals specifically assigned to the Federal Government;

d. Provide, during the period of construction, a cash contribution equal to the following percentages of the total cost of construction of the general navigation features:

- 10 percent of the cost attributable to dredging to a depth less than or equal to 20 feet;
- 25 percent of the costs attributable to dredging to a depth in excess of 20 feet but not in excess of 45 feet;
- 50 percent of the costs attributable to dredging to a depth in excess of 45 feet;

e. In the case of project features greater than 45 feet in depth, provide 50 percent of the excess cost of operation and maintenance of the project over that cost which the Secretary determines would be incurred for operation and maintenance if the project had a depth of 45 feet.

f. Provide all lands, easements, rights-of-way, and relocations and cost share in accordance with Section 101 of WRDA 86 as amended by Section 201 of WRDA 96 in the event that improvements to current dredged material placement sites or new placement facilities are needed for project construction or maintenance, excluding improvements to Hart-Miller Island referred to in paragraph 4 of this report.

g. Repay with interest, over a period not to exceed 30 years following completion of the period of construction of the project, up to an additional 10 percent of the total cost of construction of general navigation features depending upon the amount of credit given for the value of lands, easements, rights-of-way, and relocations provided by the non-Federal sponsor for the general navigation features as well as the value of the improvements made to Hart-Miller Island (currently estimated at \$1,957,000), in raising the north cell dike from 28 feet to 44 feet.

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If the amount of credit exceeds 10 percent of the total cost of construction of the general navigation features, the non-Federal sponsor shall not be required to make any contribution under this paragraph, nor shall it be entitled to any refund for the value of lands, easements, rights-of-way, and relocations in excess of 10 percent of the total cost of construction of the general navigation features;

h. Give 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 general navigation features for the purpose of inspection, and, if necessary, for the purpose of operating, maintaining, repairing, replacing, and rehabilitating the general navigation features;

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

j. Keep, and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project, for a minimum of 3 years after completion of the accounting for which such books, records, documents, and other evidence is required, to the extent and in such detail as will properly reflect total cost of construction of the general navigation features, 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 CFR, Section 33.20;

k. Perform, or cause to be performed, any investigations for hazardous substances as 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 to be necessary for the construction, operation, maintenance, repair, replacement, or rehabilitation of the general navigation features. However, for lands that the Government determines to be subject to the navigation servitude, only the Government shall perform such investigation unless the Federal Government provides the non-Federal sponsor with prior specific written direction, in which case the non-Federal sponsor shall perform such investigations in accordance with such written direction;

l. 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 to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation features;

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m. To the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA;

n. 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, and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, required for construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation features, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act;

o. 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 (42 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;" and

p. Provide a cash contribution equal to the non-Federal cost sharing percentage of the project's total historic preservation mitigation and data recovery costs attributable to commercial navigation that are in excess of 1 percent of the total amount authorized to be appropriated for commercial navigation.

8. 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 State of Maryland, interested Federal agencies, and other parties will be advised of any modifications and will be afforded an opportunity to comment further.



JOE N. BALLARD
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Chief of Engineers