

DEPARTMENT OF THE ARMY OFFICE OF THE CHIEF OF ENGINEERS 2600 ARMY PENTAGON WASHINGTON, DC 20310-2600

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SUBJECT: Tampa Harbor, Pinellas and Hillsborough Counties, Florida, Deep Draft Navigation

THE SECRETARY OF THE ARMY

- 1. I submit for transmission to Congress my report on deep draft navigation recommendations for Tampa Harbor, Florida. It is accompanied by the report of the Jacksonville District and South Atlantic Division Engineers. This study is an interim response to the authorization in the July 23, 1997, resolution adopted by the Committee on Transportation and Infrastructure of the United States House of Representatives (Docket 2533). The authorization provided that the Secretary of the Army review the report of the Chief of Engineers on the Tampa Harbor, Florida, published as House Document 401, 91st Congress, 2nd Session and other pertinent reports, with a view of determining if the authorized project should be modified in any way at this time, with particular reference to a deep draft anchorage. The Tampa Harbor Federal Navigation Project was authorized by Section 101 of the River and Harbor Act of 1970. Preconstruction engineering and design activities will continue under current authorities.
- 2. The reporting officers recommend authorizing a plan for navigation improvements to increase transportation efficiencies in the Tampa Harbor Federal Navigation Channel. The National Economic Development (NED) plan includes a channel depth of 45 feet with associated improvements. Based on Fiscal Year (FY) 2024 price levels, a 2.75-percent discount rate, and a 50-year period of analysis, the project first cost of the NED plan is \$651,333,000, with average annual benefits of \$82,291,000, average annual costs of \$25,454,000, and a benefit-to-cost ratio of 3.2. Alternatively, the non-federal sponsor, Port Tampa Bay, requested a locally preferred plan (LPP) of 47 feet with associated improvements. The LPP has positive net benefits and is economically justified. An NED Policy Exception was approved by the Assistant Secretary of the Army for Civil Works (ASA(CW)) on February 2, 2024. The Recommended Plan is the LPP and includes the following features:
- a. Deepening Main Stem Cuts to 47': Egmont Cuts 1 and 2 (deepened to 49' to account for more pronounced wind, waves, and currents present in the Gulf of Mexico), Mullet Key Cut, Cuts A to F (Tampa Bay), Gadsden Point Cut, Cuts A and C (Hillsborough Bay), Big Bend Entrance Channel, Big Bend Turning Basin, Big Bend

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East Channel, Cut D (Hillsborough Bay) to Station 61+30, Port Sutton Channel, Port Sutton Turning Basin, East Bay Turning Basin, and East Bay Channel.

- b. Deepening Upper Channels: Lower Sparkman Channel to Cut D (Hillsborough Bay) at Station 61+30 (41'), Upper Sparkman Channel (41'), Ybor Channel (39'), Port Sutton Terminal Channel (42'), East Bay Extensions 1 and 2 (39').
- c. Extension of Egmont Cut 1: The entrance channel will be extended approximately 9,900' to access natural depths of 49' consistent with the depth of Egmont Cuts 1 and 2.
- d. Extension of Federal Channel: Two (2) areas previously constructed by the NFS will be deepened to 47' and incorporated into the federal project to access end benefits from these berths. These areas are located at Big Bend (east of the turning basin and existing channel extension) and at the eastern extent of the East Bay Channel.
- e. Turn Widener Improvements: Wideners to accommodate safe navigation of channel intersections will be expanded at four locations: 1) Cut F (TB) to Gadsden Point Cut; 2) entrance to the Big Bend Channel; 3) Cut C (HB) to Alafia River Channel; and 4) Hooker's Point/Port Sutton Channel.
- f. Turning Basin Improvements: Expand the northern extent of the East Bay Turning Basin to accommodate the design vessel.
- g. Under the Recommended Plan, approximately 4.1 million cubic yards (mcy) of dredged material would be placed in the Ocean Dredged Material Disposal Site (ODMDS) and 3.3 mcy would be placed at Dredged Material Management Area 3-D. The Recommended Plan also includes beneficial use of dredged material at the following sites: East Bay Port Expansion Site (4.8 mcy); Egmont Key island restoration (3.7 mcy); in-bay hardbottom creation (3.5 mcy); and offshore hardbottom creation (1.8 mcy). This dredged material would otherwise be placed at the ODMDS.

Sparkman Channel, Ybor Channel, and Port Sutton Terminal Channel are currently authorized to the depths proposed in the Recommended Plan. This study confirmed that construction to these depths continues to be economically justified. All other channel segments require additional authorization to deepen to the recommended depths.

3. Port Tampa Bay is the non-federal cost sharing sponsor for all features of the project. The federal government operates and maintains the existing Tampa Harbor federal channel, the improvements proposed for Tampa Harbor are available to the federal government under the doctrine of navigational servitude. Acquisition is limited to the standard Temporary Work Area Easements for the placement of the dredged material for beneficial use. Based on October 2023 price levels, the estimated project first cost is \$1,079,316,000, which includes the value of lands, easements, rights-of-way, and relocations (LERR), including the real property interests required for dredged

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material placement facilities. Total LERR costs are estimated to be \$7,966,000. The current project plan requires the relocation of two utilities and real estate administrative expenses.

- a. The federal share of the project first cost for initial construction is estimated at \$488,521,000 and the non-federal share is estimated at \$589,362,000 in accordance with the provision of Section 101(a) of WRDA 1986, as amended (33 U.S.C. § 2211(a)).
- b. The non-federal sponsor shall pay an additional 10 percent of construction costs for General Navigation Features (GNF) of the project, estimated at \$64,337,000, less any credit for the value of LERR required for the project, over a period not to exceed 30 years, in accordance with Section 101(a)(2) of WRDA 1986, as amended (33 U.S.C. § 2211(a)(2)).
- c. The annual cost of operation, maintenance, repair, replacement, and rehabilitation (OMRR&R) for the Recommended Plan is a federal cost and is estimated to be \$452,000 per year. OMRR&R activities include maintenance dredging of the sediments anticipated to shoal in the channel as a result of the Recommended Plan.
- d. Estimated associated costs include \$321,047,000 in non-federal costs for local service facility construction and berthing area costs (LSF) and \$7,938,000 in utility relocations. Federal costs for aids to navigation, which are a U.S. Coast Guard expense are minimal. Associated costs are not included as part of the total project first cost for authorization.
- 4. Based on the fiscal year (FY) 2024 2.75 percent discount rate and a 50-year period of analysis, the average annual equivalent (AAEQ) benefits are estimated at \$90,593,000 and AAEQ costs are estimated at \$51,638,000, with AAEQ net benefits of \$38,856,000 and a benefit-to-cost ratio (BCR) of 1.8 to 1.
- 5. The Command Philosophy Notice established on January 25, 2023, outlined a vision to beneficially use 70 percent of USACE dredged materials by 2030. Two percentages were calculated for the percent beneficial use of dredged material resulting from the navigation improvements in the Tampa Harbor Federal Navigation Channel. The first percentage (approximately 65 percent beneficial use of dredged material) was calculated based on the beneficial use sites included in the cost estimate for the Recommended Plan (offshore and in-bay hardbottom creation, placement at Egmont Key, and East Bay Port Expansion). These beneficial use sites were identified as least cost placement. The second percentage (approximately 80 percent beneficial use of dredged material) assumes a "best case" scenario for maximizing beneficial use opportunities for the Recommended Plan that utilizes all beneficial use sites identified in the Tampa Harbor, Florida, General Reevaluation Report. The additional beneficial use sites beyond those in the cost estimate include beach placement at Ft. DeSoto, placement for seagrass resilience, Alafia Banks island restoration, dredged hole

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restoration, and open water conversion to uplands at MetroPort and for the Manatee County boat ramp. Any of these sites could be further developed and coordinated for use during preconstruction engineering and design or for maintenance dredging of the improved channel. If these sites are pursued and are determined to not be least cost placement, the non-federal sponsor will pay for the difference between the cost of the beneficial use placement and the least cost placement option.

- 6. All compliance with required applicable environmental laws and regulations has been completed. A water quality certification pursuant to section 401 of the Clean Water Act of 1972, as amended, will be obtained from the Florida Department of Environmental Protection prior to the start of construction.
- 7. In accordance with USACE policy on the review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and rigorous review process. The comprehensive review process included District Quality Control Review, Agency Technical Review, Type I Independent External Peer Review, and Headquarters Policy and Legal Compliance review to confirm the planning analyses, alternative design and safety, and the quality of decisions. Washington-level review indicates that the plan recommended by the reporting officers complies with all essential elements of the U.S. Water Resources Council's Economic and Environmental Principles, Requirements, and Guidelines for Water and Land Related Resources Implementation Studies, as well as other administrative and legislative policies and guidelines. The views of interested parties, including federal, state, and local agencies, were considered and all comments from public reviews have been addressed and incorporated into the final report documents where appropriate.
- 8. USACE decision documents recognize cost risk and uncertainty surrounding implementation. All cost estimates will carry a degree of uncertainty. The estimated total project first cost for the Recommended Plan at the 80% confidence interval is estimated at \$1,079,316,000. This does not include LSF estimated at a cost of \$321,047,000. This project carries a degree of uncertainty such that if the main drivers described below are realized, the first cost for the Recommended Plan could increase to approximately \$1,218,543,000. The Recommended Plan has various construction and nonconstruction components. These components range from 40 to 70 percent in project definition. The overall Recommended Plan is at 30 percent design maturity. Based on the recommended project design of the construction components and scope definition of the non-construction components, the total project cost is designated as a Class 3 estimate. The total project first cost includes a contingency value of \$304,636,000, which is approximately 40 percent of the estimated base project cost of \$761,589,000. The cost contingencies are intended to cover cost and schedule increases due to the identified project risks and their probability of occurrence. Changes to assumptions or the basis of design can result in additional risks not currently identified. For the Recommended Plan project first costs, the currently known major uncertainty drivers are the following: 1) funding allocations and the ability of the non-federal sponsor to

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provide their share of funds and obtain all required real estate interests in a timely fashion; 2) market conditions, bidding climate, and potential variations in major material costs and bid assumptions; and 3) construction schedule, beneficial use placement, and any changes to assumptions on productivity, construction sequencing, and costs. As the project moves into the next phases, USACE will focus risk management and mitigation on the primary cost and other significant risk drivers to the extent within USACE control. However, there still exists the potential for other unanticipated and uncontrollable changes in environmental or economic conditions that could further increase the total project first cost beyond the current estimate and/or necessitate changes in the project's design.

- 9. In full consideration of the risks as documented in the preceding paragraphs in this report, I concur in the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend that the navigation improvements for Tampa Harbor, Florida, be authorized in accordance with the reporting officers' Recommended Plan at an estimated cost of \$1,079,316,000 for initial construction, with such modifications as in the discretion of the Chief of Engineers may be advisable. Federal implementation of the project for deep draft navigation includes, but is not limited to, the following items of local cooperation to be undertaken by the non-federal sponsor in accordance with applicable federal laws, regulations, and policies:
 - a. Provide the non-federal share of construction costs, as further specified below:
- 1) Provide, during design, 25 percent of the costs of design for the general navigation features of the NED plan and 100 percent of the costs of design for the general navigation features of the project in excess of the costs of design for the NED plan in accordance with the terms of the design agreement for the project;
- 2) Provide, during construction, 25 percent of the costs of the GNF allocated to the NED plan with a channel depth in excess of 20 feet but not in excess of 50 feet;
- 3) Provide, during construction, 100 percent of the costs of the GNF of the project in excess of the costs of the NED plan;
- b. Provide all lands, easements, and rights-of-way, including those required for relocations and dredged material placement facilities, acquire or compel the removal of obstructions, and perform or ensure the performance of all relocations, including utility relocations, as determined by the federal government to be necessary for the construction, operation, and maintenance of the GNF;
- c. For each relocation of a utility, or portion thereof, located in or under navigable waters of the United States that is required to accommodate a channel depth over 45 feet, pay to the owner of the utility at least one half of the owner's relocation costs, unless the owner voluntarily agrees to waive all or a portion of the NFS contribution;

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- d. Pay, with interest over a period not to exceed 30 years following completion of construction of the GNF, an additional amount equal to 10 percent of the construction costs of the GNF for the NED plan less the amount of credit afforded by the federal government for the value of the real property interests and relocations, including utility relocations, provided by the non-federal sponsor for the GNF, with such credit limited to the value of the real property interests and relocations required for the NED plan, except for the value of the real property interests and relocations provided for mitigation required for the NED plan, which is included in the construction costs of the GNF;
- e. Provide 100 percent of the excess cost of operation and maintenance of the project over the cost for which the federal government would incur for operation and maintenance of the NED plan;
- f. Ensure that the LSF are constructed, operated, and maintained at no cost to the federal government, and that all applicable licenses and permits necessary for construction, operation, and maintenance of such work are obtained;
- g. Give the federal government a right to enter, at reasonable times and in a reasonable manner, upon the real property interests that the NFS owns or controls for the purpose of operating and maintaining the project;
- h. Hold and save the federal government free from all damages arising from design, construction, operation and maintenance of the project, except for damages due to the fault or negligence of the federal government or its contractors;
- i. Perform, or ensure performance of, any investigations for hazardous, toxic, and radioactive waste (HTRW) that are determined necessary to identify the existence and extent of any HTRW regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, and any other applicable law, that may exist in, on, or under real property interests that the federal government determines to be necessary for construction, operation and maintenance of the GNF;
- j. Agree, as between the federal government and the NFS, to be solely responsible for the performance and costs of cleanup and response of any HTRW regulated under applicable law that are located in, on, or under real property interests required for construction, operation, and maintenance of the project, including the costs of any studies and investigations necessary to determine an appropriate response to the contamination, without reimbursement or credit by the federal government;
- k. Perform the NFS responsibilities in a manner that will not cause HTRW liability to arise under applicable law to the maximum extent practicable; and

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I. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, as amended, (42 U.S.C. 4630 and 4655) and the Uniform Regulations contained in 49 C.F.R Part 24, in acquiring real property interests necessary for construction, operation, and maintenance of the project including those necessary for relocations, and placement area improvements; and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

10. 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 or the perspective of higher review levels within the Executive Branch. Consequently, the recommendation may be modified before it is transmitted to the Congress as a proposal for authorization and implementation funding. However, prior to transmittal to Congress, the NFS, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

SCOTT A. SPELLMON Lieutenant General, USA Chief of Engineers