



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

NOV 15 2019

DAEN

SUBJECT: Matagorda Ship Channel Improvement Project, Port Lavaca, Texas

THE SECRETARY OF THE ARMY

1. I submit for transmission to Congress my report on the review of completed deep draft navigation works for the Matagorda Ship Channel in the vicinity of the City of Port Lavaca, Texas. It is accompanied by the report of the Galveston District Engineer and the Southwestern Division Engineer. These reports are in partial response to Section 216 of Public Law 91-611, 91st Congress, House Resolution 19877, and dated 31 December 1970. Section 216 of the 1970 Flood Control Act authorizes the Secretary of the Army to review the operation of projects constructed by the Corps of Engineers when found advisable due to significantly changed physical, economic or environmental conditions. The Matagorda Ship Channel was originally authorized by the Rivers and Harbors Act of 1958. Project construction of the Matagorda Ship Channel was completed in 1966.
2. The reporting officers recommend authorizing a plan to modify the Matagorda Ship Channel in the vicinity of Port Lavaca, Texas. The recommended plan is the National Economic Development (NED) Plan which includes: addition of a new 1,200 foot turning basin in the Lavaca Bay reach to accommodate the larger vessels; extending the entrance channel 13,000 feet to allow for deepening to -49 feet Mean Lower Low Water (MLLW); dredging of a 1,600 foot long sediment trap in the area of the offshore bar; widening the entrance channel from 300 to 550 feet, and the Main channel from 200 to 300 feet; deepening the Entrance Channel from -40 to -49 feet, and the Main Channel from -38 to -47 feet MLLW; relocating 16 pipelines; a 165 acre sand engine as Beneficial Use of dredged material; and modifications to aids to navigation. Unavoidable environmental impacts would be fully compensated for by the creation of approximately 130 acres of oyster reef habitat, and approximately 2 acres of marsh. These mitigation features would be monitored for up to five years to ensure their performance. The recommended plan also includes a Dredged Material Management Plan to address Operations and Maintenance materials for the designed life of the project to ensure project performance.
3. The Calhoun Port Authority, Calhoun County, Texas, is the non-federal cost-sharing sponsor for all features.
4. Project costs for the Federal Base Plan are allocated to the commercial navigation purpose and are based on October 2019 price levels.

- a. Project First Cost. The estimated project first cost of construction is \$218,324,000 which includes the cost of constructing General Navigation Features (GNFs) of \$124,580,000, Fish and Wildlife costs of \$26,924,000, lands, easements, rights-of-way and relocations (LERRs) costs of \$33,444,000, Planning, Engineering and Design (PED) of \$20,375,000 and Construction Management of \$13,002,000.
  - b. Estimated Federal and Non-Federal Share. The estimated federal share and non-federal share are \$138,661,000 and \$79,664,000, respectively, in accordance with the cost sharing provisions of Section 101(a) of WRDA 1986, as amended (33 U.S.C. 2211(a)).
  - c. Additional 10 Percent Payment. In addition to payment by the non-federal sponsor of its share of the total cost of construction of the GNFs during construction, the non-federal sponsor must pay an additional 10 percent of the cost of the GNFs in cash over a period not to exceed 30 years, with interest, in accordance with Section 101(a)(2) of WRDA 1986, as amended (33 U.S.C. 2211(a)(2)). The value of LERRs and the costs of utility relocations, should they become necessary, will be credited toward this amount in accordance with Section 101(a)(3) of WRDA 1986, as amended (33 U.S.C. 2211(a)(3)).
  - d. Associated Costs. Estimated associated costs of \$7,952,000 will be the responsibility of the non-federal sponsor for dredging of non-federal berthing areas adjacent to the federal channel. Aids to navigation (a U.S. Coast Guard expense) for this project improvement are approximately \$1,883,000.
  - e. Authorized Project Cost and Section 902 Calculation. The project first cost for the purpose of calculating the maximum cost of the project pursuant to Section 902 of WRDA 1986, as amended (33 U.S.C. 2280), includes the total cost of construction of the GNFs, and should they become necessary the value of LERRs and the costs of utility relocations. Accordingly, as set forth in paragraph 4.a, above, based on October 2019 prices, the total estimated project first cost for these purposes is \$218,324,000. Based on October 2019 price levels, a discount rate of 2.75 percent, and a 50-year period of economic analysis, the project average annual benefits and costs are estimated at \$35,876,000 and \$15,900,000, respectively, with resulting net excess benefits of \$19,976,000 and a benefit-to-cost ratio of 2.26 to 1.
  - f. Operation and Maintenance Costs. The additional annual cost of operation and maintenance for this recommended plan is estimated to be \$7,112,000 in accordance with Section 101(b)(1) of WRDA 1986, as amended (33 U.S.C. 2211(b)(1)).
5. The goals and objectives included in the Campaign Plan of the Corps have been fully integrated into the Matagorda Ship Channel study process. The recommended plan was developed in coordination and consultation with various federal, state and local agencies using a systematic and regional approach to formulating solutions and evaluating the benefits and impacts that would result.

6. In accordance with the Corps Engineering Circular on review of decision documents, all technical, engineering, and scientific work underwent an open, dynamic, and vigorous review process to ensure technical quality. This included District Quality Control (DQC), Agency Technical Review (ATR), an Independent External Peer Review (IEPR) (Type I), and a Corps Headquarters policy and legal review. All concerns of the DQC and ATR have been addressed and incorporated into the final report. Battelle Memorial Institute completed the Type I IEPR in February 2019. Overall, 12 comments were identified and documented; 2 comments were rated as having high significance, 2 comments were rated medium/high, 4 comments were rated medium, 3 comments as medium/low, and 1 comment was rated low. The high comments pertained to geotechnical engineering analysis and HTRW assumptions, and reasonableness of economic assumptions. Medium to low comments were related to the technical specialties of Economics, Environmental (natural resources and HTRW), and Hydraulics / Coastal Engineering. All comments from the above referenced reviews have been addressed and incorporated into the final documents. Overall, the reviews resulted in improvements to the technical quality of the report.

7. Washington level review indicates that the project recommended by the reporting officers is technically sound, environmentally and socially acceptable, cost effective, and economically justified. The plan complies with all 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 administrative and legislative policies and guidelines. The views of interested parties, including federal, state, and local agencies were considered.

8. I concur with the findings, conclusions, and recommendation of the reporting officers. Accordingly, I recommend that navigation improvements for Matagorda Shipping Channel, Port Calhoun, Texas be authorized in accordance with the reporting officers' recommended plan at an estimated cost of \$218,324,000, with such modifications as in the discretion of the Chief of Engineers may be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of federal and state laws and policies, including Section 101 of WRDA 1986, as amended (33 U.S.C. 2211). The non-federal sponsor would provide the non-federal cost share and all lands, easements, and rights of way, including those necessary for the borrowing of material and the disposal of dredged or excavated material, and would perform or assure the performance of all relocations, including utility relocations. This recommendation is subject to the non-federal sponsor agreeing to comply with all applicable federal laws and policies including that the non-federal sponsor must agree with the following requirements prior to project implementation.

a. Provide, during the periods of design and construction, funds necessary to make its total contribution for commercial navigation equal to 25 percent of the cost of design and construction of the GNFs attributable to dredging to a depth in excess of -20 feet MLLW but not in excess of -50 feet MLLW;

b. Provide all lands, easement, and rights-of-way, including those necessary for the borrowing of material and placement of dredged or excavated material, and perform or assure

DAEN

SUBJECT: Matagorda Ship Channel Improvement Project, Port Lavaca, Texas

performance of all relocations, including utility relocations, all as determined by the government to be necessary for the construction or operation and maintenance of the GNFs, all in compliance with applicable provisions of the Uniform Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S.C. 4601-4655) and the regulations contained in 49 C.F.R. Part 24;

c. Pay with interest, over a period not to exceed 30 years following completion of the period of construction of the GNFs, an additional amount equal to 10 percent of the total cost of construction of GNFs less the amount of credit afforded by the government for the value of the lands, easements, and rights-of-way, and relocations, including utility relocations, provided by the non-federal sponsor for the GNFs. If the amount of credit afforded by the government for the value of lands, easements, and rights-of-way, and relocations, including utility relocations, provided by the non-federal sponsor equals or exceeds 10 percent of the total cost of construction of the GNFs, 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, and rights-of-way, and relocations, including utility relocations, in excess of 10 percent of the total costs of construction of the GNFs;

d. Provide, operate, and maintain, at no cost to the government, 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 government, including but not limited to providing depths in the berths at adjacent terminals at least equal to that of the adjacent federal channel and turning basin;

e. Prevent obstructions or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) such as any new developments on project lands, easements, and rights-of-way or the addition of facilities which might reduce the outputs produced by the project, hinder operation and maintenance of the project, or interfere with the project's proper function;

f. Hold and save the United States free from all damages arising from the construction or operation and maintenance 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;

g. Perform, or ensure performance of, 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 and Rights-of-way that the federal government determines to be necessary for the construction or operation and maintenance of the GNFs. However, for lands, easements, or rights-of-way that the federal government determines to be subject to the navigation servitude, only the federal 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;

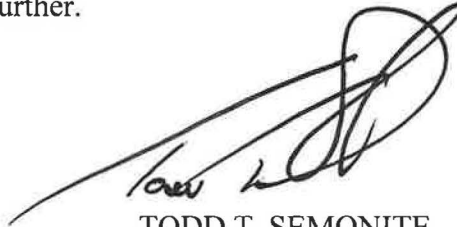
DAEN

SUBJECT: Matagorda Ship Channel Improvement Project, Port Lavaca, Texas

h. Assume complete financial responsibility, as between the federal government and the non-federal sponsor, for all necessary cleanup and response costs of any hazardous substances regulated under CERCLA that are located in, on, or under LER that the federal government determines to be necessary for the construction or operation and maintenance of the project; and

i. Agree, as between the Federal government and the non-Federal sponsor, that the non-Federal sponsor shall be considered the operator of the local service facilities for the purpose of CERCLA liability, and, to the maximum extent practicable, perform its obligations in a manner that will not cause liability to arise under CERCLA.

9. 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 state of Texas and the Calhoun Port Authority, Calhoun County, Texas, interested federal agencies, and other parties will be advised of any significant modifications and will be afforded an opportunity to comment further.

A handwritten signature in black ink, appearing to read 'TODD T. SEMONITE', with a large, stylized flourish extending from the end of the signature.

TODD T. SEMONITE  
Lieutenant General, USA  
Chief of Engineers