



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

REPLY TO
ATTENTION OF:

29 DEC 2000

CECW-PM (10-1-7a)

SUBJECT: Port of Los Angeles Channel Deepening Project, California

THE SECRETARY OF THE ARMY

1. In response to a request from the Assistant Secretary of the Army for Civil Works (ASA(CW)) dated 13 March 2000, I am submitting my report on improvements to the existing -45-foot mean lower low water (MLLW) navigation project at the Los Angeles Harbor, California, proposed by the Port of Los Angeles. My report is accompanied by the feasibility report prepared by the Port of Los Angeles (the non-Federal sponsor) which evaluates the advisability of increasing channel depths and making other improvements at the Port of Los Angeles in the interest of navigation. The Port of Los Angeles submitted its report to the ASA(CW) pursuant to authority provided by Section 203 of the Water Resources Development Act (WRDA) of 1986, Public Law 99-662.
2. Section 101(b)(5) of the Water Resources Development Act of 2000 (WRDA 2000) authorized construction of the Los Angeles Harbor, California, project for navigation subject to completion of a favorable report of the Chief of Engineers not later than 31 December 2000 and subject to the conditions recommended in that final report. The authorizing language for this Los Angeles Harbor project reflects an earlier total project cost estimate of \$153,313,000, with an estimated Federal cost of \$43,735,000 and an estimated non-Federal cost of \$109,578,000. The cost estimate for the project has been refined to reflect current information on the project conditionally authorized by Section 101(b)(5) of WRDA 2000. This report constitutes the final report of the Chief of Engineers required by WRDA 2000.
3. The Port of Los Angeles is part of the Los Angeles-Long Beach Harbor complex, the largest West Coast harbor complex handling the highest volume of containerized cargo in the nation. The existing -45-foot MLLW depth of the Port of Los Angeles main container channel constrains access to the larger, deeper draft container ships, which have drafts of up to -47.6 feet MLLW. To address this problem, the non-Federal sponsor recommends deepening the existing -45-foot-deep main channel, east basin channel, west basin channel and turning basins to a depth of -53 feet MLLW. The recommended plan of improvement would require dredging and disposal of approximately 6.6 million cubic yards (mcy) of material. Approximately 2.4 mcy of dredged material would be deposited in the designated LA-3 ocean disposal site; approximately 1.7 mcy of dredged material would be disposed of at the Southwest Slip; about 1.5 mcy would be deposited at Pier 300; and approximately 1 mcy would be disposed of at the Cabrillo shallow water habitat site. About 0.46 mcy of the 6.6 mcy of dredged material would be from non-

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Federal berthing areas. Placement of dredged material at the Cabrillo site would lead to creation of valuable shallow water habitat, which, in combination with mitigation credits accrued by the Port of Los Angeles would mitigate for loss of habitat caused by the recommended navigation improvements. The recommended plan is the locally preferred plan (LPP).

4. Based on October 1999 price levels, the total estimated cost of the general navigation features (GNF) and associated lands, easements, rights-of-way, and relocations (LERR) for the project recommended is \$101,771,000. General navigation features account for approximately \$83,187,000, while \$18,584,000 is associated with the non-Federal LERR requirements. The Federal share of the first cost of the GNF is estimated at \$41,593,500, and the non-Federal share of the GNF is estimated at \$41,593,500, including the additional 10 percent (\$8,319,000) non-Federal share of GNF, less the creditable LERR of \$8,319,000 required by Public Law 99-662. There is expected to be no remaining non-Federal cash required upon completion of construction over 30 years because the LERR estimate is \$18,584,000 which is in excess of 10 percent of GNF. Also included in the recommended plan at 100 percent non-Federal responsibility are non-Federal associated costs for construction and development of berthing areas and other local service facilities at \$22,813,000, and other utility owner costs for removals at \$5,827,000. Also at 100 percent non-Federal responsibility is \$21,477,000 associated with LPP costs, disposing the dredged material at sites preferred by the sponsor, in excess of the national economic development (NED) plan costs. With these costs, the estimated total first cost of the project recommended is \$151,888,000, with the Federal share at \$41,593,500 and non-Federal share at \$110,294,500, as shown below.

	Total	Federal (\$)	Non-Federal
GNF	83,187,000	41,593,500	41,593,500
LERR *	18,584,000		18,584,000
Total for Navigation:	101,771,000	41,593,500	60,177,500
(Additional Cash Contribution Over-Time)		(8,319,000)	8,319,000
(Credit to Sponsor for LERR Against Additional Contribution)		8,319,000	(8,319,000)
Associated Non-Federal Requirements:			
Berthing Dredging	3,273,000		3,273,000
Wharf Upgrades	17,400,000		17,400,000
Required Owner Removals*	5,827,000		5,827,000
PED&Const.Mangmt.	2,140,000		2,140,000
LPP Preferred Disposal	21,477,000		21,477,000
Estimated Total First Cost:	\$151,888,000	\$41,593,500	\$110,294,500

* Any conclusion or categorization in this report or the feasibility report that an item is a utility or facility relocation, a deep draft utility relocation, or a removal is preliminary only. The Federal Government will make final determinations of the relocations, deep draft utility relocations, and removals necessary for implementation of the project after further analysis on the necessity of, and the appropriate categorization for, such items of work.

5. Total average annual cost, based on a discount rate of 6.625 percent and a 50-year period of analysis, is estimated at \$11,290,000. Total average annual economic benefits are estimated at \$53,730,000. The net average annual benefits amount to \$42,440,000. The overall benefit-to-cost ratio of the recommended plan is 4.7 to 1.

6. The national economic development (NED) plan differs from the locally preferred plan in that it considers only benefits to navigation, and does not consider any benefits that may result from land creation. The NED plan would involve deepening the navigation channels and turning basins to -53 feet MLLW. The construction footprint for channel deepening of the NED plan is identical to the LPP except that the selection of disposal sites differs from the LPP. The NED plan of improvement would require dredging and disposal of approximately 6.6 mcy of material. Approximately 3.9 mcy of dredged material would be deposited at the LA-3 ocean disposal site; approximately 1.7 mcy of dredged material would be disposed of at the Southwest Slip; and approximately 1 mcy would be disposed of at the Cabrillo shallow water habitat site. No material would be disposed of at Pier 300 for the NED plan. However, the LPP would divert about 1.5 mcy from the LA-3 site for beneficial use to expand Pier 300 to meet future terminal needs. Based on October 1999 price levels, the total estimated first cost of the NED plan would be \$130,411,000. General navigation features account for \$83,187,000 of this cost, while the non-Federal cost of LERR, and associated costs for construction and development of berthing areas and other local service facilities would amount to about \$47,224,000. The Federal and non-Federal share of the first cost of the NED plan are estimated at \$41,593,500 and \$88,817,500, respectively.

7. In accordance with Section 101 of Public Law 99-662, as amended by Section 201 of Public Law 104-303, the non-Federal sponsor must pay 25 percent of the GNF costs for water depths between -20 feet MLLW and -45 feet MLLW, and 50 percent of the GNF costs for water depths deeper than -45 feet MLLW. After construction of the GNF is completed, the non-Federal sponsor is required to provide an additional 10 percent of the cost of GNF, less the creditable LERR, over a period not to exceed 30 years.

8. There is not expected to be an incremental increase in Federal channel operations and maintenance (O&M) requirements associated with deepening the channel from -45 feet to -53 feet MLLW. The non-Federal share of the average annual O&M cost is estimated at \$128,000, and includes maintenance dredging of berths and maintenance of diking and wharves.

9. In accordance with provisions of Section 203 of Public Law 99-662, if the proposed project is authorized, the Secretary shall credit towards the non-Federal share of the cost of construction of such project an amount equal to the portion of the cost of developing such study that would have been the responsibility of the United States if such study were developed by the Secretary. The non-Federal sponsor's cost for the study is estimated at \$3,200,000. That portion of the study

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cost that would have been the responsibility of the Federal Government is currently estimated at \$1,600,000. However, the actual amount of study costs eligible for credit will be subject to a detailed audit of the non-Federal sponsor's expenditures. This estimated credit of \$1,600,000 is not reflected in Federal/non-Federal project cost sharing shown in paragraph 4 above.

10. Washington level review indicates that the proposed plan is technically sound, economically justified, and environmentally and socially acceptable. The proposed project 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. Also, the views of interested parties, including Federal, State, and local agencies, have been considered.

11. I concur with the findings and conclusions of the Port of Los Angeles. Accordingly, I recommend implementation of the authorized deep-draft navigation improvements generally in accordance with the recommended plan, with such modifications as in the discretion of the Chief of Engineers may later be advisable. My recommendation is subject to cost sharing, financing, and other applicable requirements of Public Law 99-662 and Public Law 104-303 for this kind of project. I further recommend that the non-Federal sponsor receive credit under Section 203 of Public Law 99-662 for the Federal portion of study costs, subject to an audit of the non-Federal sponsor's actual expenditures. Also, this recommendation is subject to the non-Federal sponsor agreeing to comply with applicable Federal laws and policies, including the following requirements:

a. Enter into an agreement, which provides, through the execution of the project cooperation agreement, 25 percent of design costs.

b. Provide, during construction, any additional funds needed to cover the non-Federal share of design costs.

c. 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 of the NED plan (which include the construction of land-based and aquatic dredged material disposal facilities that are necessary for the disposal of dredged material required for project construction, operation, or maintenance and for which a contract for the Federal facility's construction or improvement was not awarded on or before 12 October 1996):

(1) 25 percent of the costs attributable to dredging to a depth in excess of -20 feet MLLW but not in excess of -45 feet MLLW.

(2) 50 percent of the costs attributable to dredging to a depth in excess of -45 feet MLLW.

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d. Provide, during construction, 100 percent of the costs of the project which exceed what would be necessary to complete the NED plan.

e. Pay 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 of the NED plan. The value of lands, easements, rights-of-way, relocations and deep draft utility relocations provided by the non-Federal sponsor for the general navigation features, described below, may be credited toward this required payment. The value of deep draft utility relocations for which credit may be afforded shall be that portion borne by the non-Federal sponsor, but not to exceed 50 percent, of deep draft utility relocation costs. If the amount of credit equals or 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, relocations and deep draft utility relocations in excess of 10 percent of the total cost of construction of the general navigation features.

f. Provide all lands, easements, and rights-of-way, and perform or ensure the performance of all relocations and deep draft utility relocations determined by the Federal Government to be necessary for the construction, operation, maintenance, repair, replacement, and rehabilitation of the general navigation features (including all lands, easements, rights-of-way, relocations and deep draft utility relocations necessary for dredged material disposal facilities).

g. 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.

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

i. 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 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.

j. 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.

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k. 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.

l. 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.

m. 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.

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

o. 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.

p. 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),

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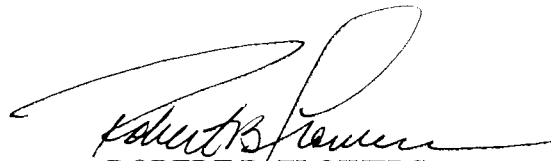
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and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army."

q. Provide a cash contribution equal to the non-Federal cost share 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.

r. In the case of project features greater than -45 feet below MLLW 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 below MLLW.

s. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is authorized.



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