SAN JUAN HARBOR, PUERTO RICO NAVIGATION IMPROVEMENTS STUDY

Final Integrated Feasibility Report & Environmental Assessment

APPENDIX E Real Estate Plan

June 2018



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REAL ESTATE PLAN

1. STATEMENT OF PURPOSE

This Real Estate Plan (REP) focuses on the Recommended Plan and is provided in support of San Juan Harbor Feasibility Study and Environmental Assessment. Physical constraints and the associated inefficiencies, which limit the system's ability to safely and efficiently serve the forecasted vessel fleet and process the forecasted cargo volumes, generate the need for modifications to the existing navigation system in San Juan Harbor. The purpose of this feasibility study includes identifying and recommending a comprehensive set of navigation modifications that would reasonably maximize, consistent with protecting the Nation's environment, San Juan Harbor's contribution to net National Economic Development (NED) benefits by addressing those physical constraints and inefficiencies. Based on the results of the anticipated vessel fleet and cargo volume changes, modifications to improve the efficiency of the navigation system at San Juan Harbor have a high potential to provide significant benefits to the national economy.

This report is preliminary and written to the level of detail of the main report, other details may be added and is intended for planning purposes only. Both the final real property lines and land values estimates are subject to change even after approval of this report. There may be modifications to the plans that occur during Pre-construction, Engineering and Design (PED) phase, thus changing the final acquisition area(s) and/or administrative and land costs.

2. PROJECT AND STUDY AUTHORIZATION

The authority for conducting this Feasibility Study is provided by House Report 109-738 - 109th Congress (2005-2006) December 29, 2006, As Reported by the Transportation and Infrastructure Committee documents the resolution approving the navigation study.

"WATER RESOURCES SURVEY RESOLUTIONS APPROVED BY THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE Mr. Fortuno: San Juan Harbor, PR, Docket number: 2764, Date filed: February 23, 2006 (navigation project). September 20, 2006. Resolution adopted by the Committee on Transportation and Infrastructure."

A Limited Reevaluation Report, completed in August 2002, concluded that there was a potential Federal interest in pursuing navigation improvements at San Juan Harbor. A Federal interest exists when the economic benefits exceed the costs to build and maintain a potential project over the period of analysis. That conclusion led to the initiation of the feasibility study and provision of Federal funding following execution of the Feasibility Cost Sharing Agreement in September 2015.

3. PROJECT LOCATION

San Juan Harbor is located on the north coast of the island of Puerto Rico, about one-third of the distance west along the coast from the northeast corner. It is the largest commercial port in Puerto Rico and one of the largest in the Caribbean. Figures 3-1, 3-2, and 3-3 show the project location.



Figure 3-1 Project Vicinity/Location Map

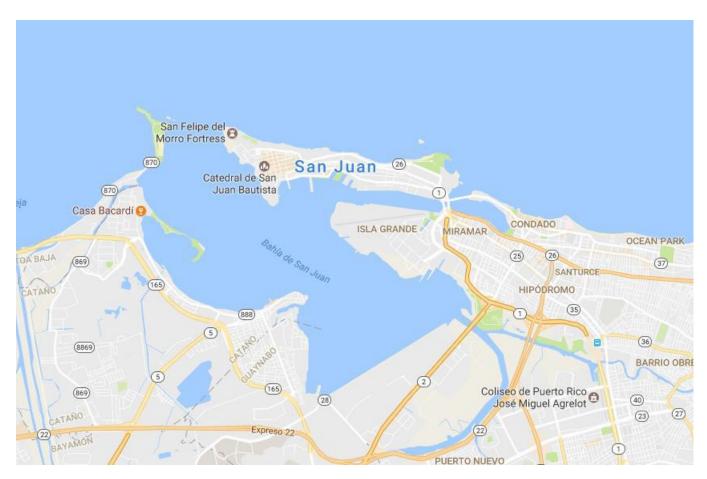


Figure 3-2 Project Vicinity/Location Map



4. PROJECT DESCRIPTION

The San Juan Harbor study area encompasses the bar (entrance) channel, offshore material disposal sites, inner harbor channels, and any extension of the water bodies and shorelines that could be impacted by proposed improvements. The entrance channel accesses the Atlantic Ocean to the north between Isla de Cabras and Old San Juan. The project will include the southern boundary of the Bar Channel and run southeast to Anegado Channel. From there, the project will extend to the east and will incorporate both the San Antonio Approach Channel and the San Antonio Channel. The project continues south along the Army Terminal Channel to the Army Terminal Turning Basin. The Ocean Dredged Material Disposal Site (ODMDS) is located approximately 2.2 nautical miles northwest of San Juan Harbor. Figure 4-1 shows the recommended project plan.

Deepen Cut-6 to 46 feet. Deepen Anegado Channel to 44 feet. This depth will extend to the Army Terminal Turning Basin. The Army Terminal Channel will be widen by 50 feet on both the east and west sides. The San Antonio Approach Channel, San Antonio Channel and Extension, and Cruise Ship Basin East will be excavated to a depth of 36 feet. All dredged material will be relocated to the ODMDS. The purple square in the northwest corner of Figure 3-3 represents the ODMDS.



Figure 4-1: Recommended Plan Area Overview

5. REAL ESTATE REQUIREMENTS

The requirements for Lands, Easements, Rights-of-way and Relocations (LERR) should include the rights to construct, operate, and maintain channel improvement works in connection with the proposed navigation improvement project. Based on the proposed project footprints, the necessary rights exist for construction, operation and maintenance (O&M) under navigational servitude. Construction for the proposed widening would take place within the channel from barges which would prevent any impacts to adjacent uplands. In addition, side slopes are not being laid back to such a degree where impacts to private, adjacent uplands would occur. There are no additional lands, easements, or rights-of-way to be acquired by the NFS in furtherance of the construction of the proposed project.

Note: There are no real estate requirements for upland dredged material disposal sites for the placement of dredged material. Section 201 of WRDA 96 redefined disposal site preparation costs as being General Navigation Features and not a real estate requirement.

6. ESTATE TO BE ACQUIRED

Since no land acquisition is required for the proposed project, no estates are recommended.

7. FEDERALLY OWNED LAND

There are no Federally-owned lands lying fully or partially within the LER for the proposed project.

8. NON-FEDERALLY-OWNED LAND

There are no Non-Federally owned lands necessary for the project.

9. NON-FEDERAL OPERATION AND MAINTENANCE RESPONSIBILITIES

Puerto Rico Ports Authority (PRPA) will be the Non-Federal Sponsor (NFS) for the project. The NFS has the responsibility to acquire all real estate interests required for the project. The NFS shall accomplish all alterations and relocations of facilities, structures and improvements determined by the government to be necessary for the construction of the project. The Federal Government will have operation and maintenance responsibility for the project once construction has been completed. Local service facility have operation and maintenance responsibility for own berthing area. Future periodic nourishments are considered construction and will be performed in accordance with the Project Partnership Agreement, when approved.

10. NON-FEDERAL AUTHORITY TO PARTICIPATE IN PROJECTS

The non-Federal Sponsor's authority to participate is derived through its creation by Puerto Rico Act No. 125, approved on May 7, 1942, as amended. The Port has experience in land acquisition. The Non-Federal sponsor has participated in other Federally sponsored projects.

The Assessment of the NFS Real Estate Acquisition Capability is attached as Exhibit 1.

11. NAVIGATION SERVITUDE

The navigation servitude is the dominant right of the Government under the Commerce Clause of the U.S. Constitution (U.S. CONST. Art. I, §8, cl.3) to use, control and regulate the navigable waters of the United States and the submerged lands hereunder for various commerce-related purposes including navigation and flood control. In tidal areas, the servitude extends to all lands below the mean high water mark. In non-tidal areas, the servitude extends to all lands within the bed and banks of a navigable stream that lie below the ordinary high water mark. United States v. Cress, 243 U.S. 316, 37 S.Ct. 380, 61 L.Ed. 746 (1917), Kaiser Aetna v. United States, 444 U.S. 164, 100 S.Ct. 383, 62 L.Ed.2d 332 (1979). The Government's rights under the navigation servitude exist irrespective of the ownership of the banks and bed of a stream below the ordinary high water mark.

The proposed project set out herein follows an existing navigable watercourse and potential widening of this channel falls within the jurisdiction of the navigable waters of the United States which is identified as that area below the mean high water mark. Furthermore, it is readily apparent that said purposes of the proposed project have a nexus to navigation. As a result of applying the Determination of Availability two-step process, the issue of navigational servitude is deemed applicable to this project as it relates to the Federal assumption of maintenance responsibilities.

12. ATTITUDE OF OWNERS

Puerto Rico Ports Authority and local communities fully support the project.

13. MINERALS

Preliminary assessment indicates no known present or anticipated mineral or sub-surface mineral extraction activities within the vicinity of the proposed area which may affect construction, operation, or maintenance of the project.

14. HAZARDOUS, TOXIC, AND RADIOACTIVE WASTE (HTRW)

There are no known HTRW identified within the project area.

15. INDUCED FLOODING

There will be no flooding induced by the construction or the operation and maintenance of the proposed project.

16. ZONING ORDINANCES

Application or enactment of zoning ordinances will not be used in lieu of acquisition.

17. RELOCATIONS ASSISTANCE (UNIFORM ACT 49 CFR PART 24)

No persons, businesses, or structures will be impacted by the project. There will be no relocations under 49 CFR Part 24 for this project.

18. RELOCATIONS, ALTERATIONS, VACATIONS, AND ABANDONMENTS

There are no structural utilities or facilities to be affected by the construction of the project. The project footprint has been verified by appropriate telephone, cable, and utility organizations. Correspondences captured in Appendix L of the main report, pages 13 through 19 and page 29, confirm there are no required relocations for cell phone, telephone, and cable companies. In addition, pages 25 through 28 and page 70 of Appendix L, confirm there are no required relocations for utilities.

19. STANDING TIMBER AND VEGETATIVE COVER

There is no timber or unusual vegetative cover in the project area.

20. RECREATION RESOURCES

There are no separable recreational lands identified for this project.

21. CULTURAL RESOURCES

A background investigation and cultural resources remote sensing survey of the San Juan Harbor channel Area of Potential Effect (APE) was conducted for the proposed project in consultation with the SHPO and the Instituto de Cultura Puertorriqueña. While background research revealed numerous shipwrecks within the project vicinity, no previously identified cultural resources were located within the APE. SEARCH, Inc. (SEARCH) conducted a remote sensing survey of the San Juan Harbor between 01 June and 06 June 2017. The survey included a magnetometer, side-scan sonar, and sub-bottom profiler investigation to locate previously unidentified cultural resources. Results of the remote-sensing survey did not identify any potentially significant anomalies in 10 of the 11 areas surveyed. The 10 areas cleared for potentially significant submerged cultural resources include Anegado Channel, San Antonio Channel, Anchorage Area E, Graving Dock Channel and Turning Basin, Puerto Nuevo Channel and Turning Basin, Army Terminal Channel and Turning Basin, and Anchorage Area F. While a number of magnetic anomalies were documented within these areas, previous navigational/channel improvements (primarily dredging) have likely impacted or removed potentially significant submerged cultural resources from within these areas. No further cultural resources investigations are recommended within these eight areas.

The only potentially significant cultural resources identified within the APE were located within the Anchorage Area F Expansion. Four clustered anomalies (comprised of 18 individual magnetic anomalies) and one individual anomaly (CA-21M) were identified that may represent potentially significant submerged cultural resources. These anomalies are recommended for avoidance or additional investigations in the form of diver identification to determine significance and eligibility for listing in the NRHP. However, proposed deepening and widening measures within the Anchorage Area F Expansion Area are not included in the Recommended Plan and the Anchorage Area F Expansion Area will not be dredged or otherwise maintained as a part of the San Juan Harbor Improvement Study.

Historic resources along the shoreline of the San Juan Harbor are currently protected from wave energy in the harbor by revetments. However, during the national environmental policy scoping process, various entities wanted to understand how the project may influence the wave climate in the Harbor and potential erosion to surrounding shorelines, therefore these historic resources are included in the APE (Section 2.4.18). Erosion of San Juan Harbor shorelines is controlled predominantly by wind waves and tidal currents. The relative infrequency of cargo vessel wakes compared with wind waves makes them a minor factor contributing to shoreline changes and erosion. Deepening the Federal navigation channel would reduce the shoreline impact of vessel wakes by reducing the number of vessels and increasing the range of tides during which vessels can transit the harbor. Therefore, the deeper alternatives have a progressively smaller vessel wake impact on surrounding shorelines. Because of this, it has been determined that all of the deepening alternatives would generally result in lower impacts to shorelines and existing protective revetments. Therefore, no adverse impacts to historic properties, including Castillo de San Felipe del Morro, are anticipated.

Economic analysis also indicates that fewer total vessels would call on San Juan Harbor under the with project conditions compared to the future without project condition (No Action Alternative). Since fewer vessels would be calling on the port with the proposed project, there would be no effect on the viewshed of historic properties, including Old San Juan Historic District. None of the project alternatives would result in a change in the existing use of San Juan Harbor, which is an historic seaport and would continue to remain so. Commercial and recreational vessel traffic patterns, shoreline land uses, and natural resources that define the aesthetic (including noise and visual) characteristics of the harbor would remain subject to the traffic and use trends that would govern the with and without-project future conditions. Accordingly, the historic resources in or nearby the APE would not be adversely affected by any of the project alternatives.

Based on the results of the submerged cultural resources survey of San Juan Harbor and historic property viewshed and wake analysis, the Corps has determined that the Recommended Plan for the San Juan Harbor Improvement Study poses no effect to historic properties listed or eligible for listing in the NRHP. Consultation with the Puerto Rico SHPO and the National Park Service (NPS) was initiated in letters dated 07 November 2016. Consultation with the Instituto de Cultura Puertorriqueña was initiated via phone and email on 03 May 2017. The Puerto Rico SHPO concurred with the determination of no historic properties affected by letter dated December 5, 2017.

22. OUTSTANDING RIGHTS

There are no known outstanding rights in the project area.

23. MITIGATION

There is no mitigation required.

24. ACQUISITION/ADMINISTRATIVE COST

Federal and Non-Federal administrative costs of \$66,000 have been included for the project. The cost includes project real estate planning, mapping, review, oversight, and monitoring costs.

25. SUMMARY OF PROJECT REAL ESTATE COSTS

The following cost figures are subject to change prior to construction:

	st figures are subject to change prior to construction:	
BASELINE COS	ST ESTIMATE FOR REAL ESTATE (BCERE)	
CATEGORY		
		COST
A. Lands:		
I. Lar	nds	\$0.00
II. Im	provements	\$0.00
III. S	everance Damages	\$0.00
IV. N	1inerals	\$0.00
V. To	otal Lands & Damages	\$0.00
B. ADMINISTR	ATIVE COSTS	
I. Fed	deral Review of Non-Federal Sponsor	
	1. Sub-Total:	\$30,000.00
	2. Contingency (10%)	\$3,000.00
	3. Sub-Total:	\$33,000.00
II. No	on-Federal Sponsor Administrative Costs	
	1. Utility Relocation negotiations (if necessary)	\$0.00
	2. NFS Legal reviews	\$7,500.00
	3. Document Preparations	\$10,000.00
	4. Authorization for Entry for Construction	\$7,500.00
	5. Crediting Package (not applicable)	\$0.00
	6. Miscellaneous NFS Administrative Costs	\$5,000.00
	7. Contingency (10%)	\$3,000.00
	8. Sub-Total:	\$33,000.00
C. OTHER		
III. U	tility/Facility Relocation for 12" Spare	\$0.00
IV. P	ublic Law 91-646 Relocation Costs	\$0.00
D. TOTAL RE C	COST ESTIMATE	\$66,000.00

26. REAL ESTATE ACQUISITION SCHEDULE

All the lands required for the project are covered by navigation servitude and are available immediately.

27. CHART OF ACCOUNTS FOR PROJECT

PROJECT PLANNING Other Project Partnership Agreement	ТОТ	ΓALS
Project Partnership Agreement		
· - J · · · · · · · · · · · · · · · ·	\$	-
Contingencies (10%)	\$	-
Subtotal	\$	-
Administrative Costs		
Acquisition by non-Federal sponsor	\$30,	,000.00
Acq/Review of non-Federal sponsor	\$30,	,000.00
Contingencies (10%)	\$6,0	00.00
01 FEATURE ACCOUNT-LANDS AND DAMAGES	TOT	ΓALS
LAND PAYMENTS	\$	-
By Government	\$	-
By non-Federal sponsor	\$	-
By Government on behalf of non-Federal sponsor	\$	-
Review of non-Federal sponsor	\$	-
Contingencies (10%)	\$	-
02 FEATURE ACCOUNT - UTILITY RELOCATION		
Pipeline Relocation by non-Federal sponsor	\$	-
PL 91-646 Assistance Payments		
By Government	\$	-
By non-Federal sponsor	\$	-
By Government on behalf of non-Federal sponsor	\$	-
Review of non-Federal sponsor	\$	-
TOTALS		00.00
Note: The contingency percent is based on the risk cost analysis	_	

EXHIBIT NO. 1

FINAL- ASSESSMENT OF NON-FEDERAL SPONSOR'S

REAL ESTATE ACQUISITION

CAPABILITY FOR

SAN JUAN HARBOR FEASIBILITY STUDY

EXHIBIT 1

SAN JUAN HARBOR FEASIBILITY STUDY ASSESSMENT OF NON-FEDERAL SPONSOR'S REAL ESTATE ACQUISITION CAPABILITY

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? As per section 6, paragraphs (h) through (k) of the Puerto Rico Ports Authority Act, Act No. 125 of May 7, 1942, as amended, the NFS has legal authority to acquire and hold title to real property for the project.
- b. Does the sponsor have the power of eminent domain for this project? As per section 6, paragraphs (h) through (k) of the Puerto Rico Ports Authority Act, Act No. 125 of May 7, 1942, as amended, the NFS has the power of eminent domain for the project.
- c. Does the sponsor have "quick-take" authority for the project? As per section 6, paragraphs (h) through (k) of the Puerto Rico Ports Authority Act, Act No. 125 of May 7, 1942, as amended, the NFS has "quick-take" authority for the project.
- d. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? No
- e. Are any of the interests in land required for the project located outside the sponsor's political boundary? No

II. Human Resource Requirements:

- a. Will the sponsor's in-house staff require training to become familiar with the real estate requirements of Federal projects including P.L. 91-646, as amended? No
- b. If the answer to II.a. is "yes," has a reasonable plan been developed to provide such training? No
- c. Does the sponsor's in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? Yes
- d. Is the sponsor's projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? Yes
- e. Can the sponsor obtain contractor support, if required, in a timely fashion? Unknown at this time
- f. Will the sponsor likely request USACE assistance in acquiring real estate? No

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? Yes
- b. Has the sponsor approved the project/real estate schedule/milestones? Project milestone will be developed during PED, will be a joint effort between RE, PM, and NFS

IV. Overall Assessment:

- a. Has the sponsor performed satisfactorily on other USACE projects? Yes
- b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. highly capable

V. Coordination:

- a. Has this assessment been coordinated with the sponsor? Yes, the sponsor coordinated and verified via email on 5/30/2017.
- b. Does the sponsor concur with this assessment? Yes, the sponsor confirmed concurrence via email on 5/30/2017.

DATE: 7 March 2018

Prepared by:

CHRISTOPHER D. BUKOLT Realty Specialist Intern Real Estate Division Jacksonville District

Reviewed and approved by:

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Hansler A. Bealyer

Chief, Acquisition Branch

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EXHIBIT 2



DEPARTMENT OF THE ARMY

JACKSONVILLE DISTRICT CORPS OF ENGINEERS
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207

March 29, 2018

Real Estate Division Acquisition Branch

Mr. Romel Pedraza Puerto Rico Ports Authority P. 0. Box 362829 San Juan, Puerto Rico 00936

Dear Mr. Pedraza:

The intent of this letter is to formally advise the Puerto Rico Ports Authority (PRPA) as the non-Federal sponsor for the San Juan Harbor Improvement Feasibility Study, of the risks associated with land acquisition prior to the execution of the Project Partnership Agreement (PPA) or prior to the Government's formal notice to proceed with acquisition. If a non-federal sponsor deems it necessary to commence acquisition prior to an executed PPA for whatever reason, the non-federal sponsor assumes full and sole responsibility for any and all costs, responsibility, or liability arising out of the acquisition effort.

Generally, these risks include, but may not be limited to, the following:

- 1. Congress may not appropriate funds to construct the proposed project;
- 2. The proposed project may otherwise not be funded or approved for construction;
- 3. A PPA mutually agreeable to the non-federal sponsor and the Government may not be executed and implemented;
- 4. The non-federal sponsor may incur liability and expense by virtue of its ownership of contaminated lands, or interests therein, whether such liability should arise out of local, state, or Federal laws or regulations including liability arising out of CERCLA, as amended;
- 5. The non-federal sponsor may acquire interests or estates that are later determined by the Government to be inappropriate, insufficient, or otherwise not required for the project;

- 6. The non-federal sponsor may initially acquire insufficient or excessive real property acreage which may result in additional negotiations and/or benefit payments under P.L. 91-646 as well as the payment of additional fair market value to affected landowners which could have been avoided by delaying acquisition until after PPA execution and the Government's notice to commence acquisition and performance of LERRD; and
- 7. The non-federal sponsor may incur costs or expenses in connection with its decision to acquire or perform LERRD in advance of the executed PPA and the Government's notice to proceed which may not be creditable under the provisions of Public Law 99-662 or the PPA.

We appreciate the Port Authority's participation in this project. Should you have questions or concerns pertaining to this letter please feel free to contact Mr. Christopher Bukolt at Christopher.d.bukolt@usace.army.mil (904) 232-3401.

Sincerely

Derrick D. Moton

Chief (Acting), Real Estate Division