

Appendix D – Real Estate Plan

Matagorda Ship Channel,
Port Lavaca, Texas

Feasibility Report and Environmental Impact Statement,
Review of Completed Projects,
Calhoun and Matagorda Counties

May 2018

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This Real Estate Plan has been prepared in accordance with ER 405-1-12 dated 1 May 1998.

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Acronyms

AOM	Assumption of Maintenance
CBRA	Coastal Barrier Resources Act
CRBS	Coastal Barrier Resources Systems
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CPA	Calhoun Port Authority
DA	Disposal Area
FEIS	Final Environmental Impact Statement
FWOPC	Future without Project Conditions
GIWW	Gulf Intracoastal Waterway
HTRW	Hazardous, Toxic, and Radiological Water
LERRD	Lands, Easements, Rights-of-way, Relocations, and Disposal
MLLW	Mean Lower Low Water
MLT	mean low tide
MSC	Matagorda Ship Channel
MSCIP	Matagorda Ship Channel Improvement Project
NFS	non-federal sponsor
NOAA	National Oceanic and Atmospheric Administration
NPL	National Priority List
ODMDS	Ocean Dredged Material Disposal Site
PA	Placement Area(s)
PL	Public Law
PPA	Project Partnership Agreement
REP	Real Estate Plan
RHA	River and Harbor Act
USACE	U.S. Army Corps of Engineers
WRDA	Water Resources Development Act

1 General Background

This Real Estate Plan (REP) is the real estate work product of the U.S. Army Corps of Engineers (USACE), Galveston District, Real Estate Division that supports project plan formulation for the Matagorda Ship Channel, TX Section 216-Review of Completed Projects Draft Integrated Feasibility Report and Environmental Impact Assessment. It identifies and describes the lands, easements, rights-of-way, relocations, and disposals (LERRD) required for the construction, operation and maintenance of the proposed project, including those required for relocations (i.e., P.L. 91-646 relocations and utility/facility relocations), borrow material, and dredged or excavated material disposal. Furthermore, the REP describes the estimated LERRD value, together with the estimated administrative and incidental costs attributable to providing LERRD, and the acquisition process.

2 Project Type & Applicability

The Galveston District of the Corps is conducting feasibility study and environmental impact statement of the Matagorda Ship Channel (MSC). The MSC is located 125 miles southwest of Galveston, Texas and 80 miles northeast of Corpus Christi, Texas (Figure 1). The MSC extends approximately 26 miles from the Port turning basin in Lavaca Bay into the Gulf of Mexico, providing deep-water access from the Gulf to the Port (Figure 2). The MSC entrance passes through a man-made cut in the western end of Matagorda Peninsula, a landform that separates Matagorda Bay from the Gulf of Mexico (Figure 3). The channel runs through Matagorda Bay and Lavaca Bay to the Port. The northern portion of the MSC is located in Calhoun County and the southern portion and entrance channel is in Matagorda County.

The MSC Federal deep-draft navigation channel serves Port Lavaca/Point Comfort operations such as: Formosa Plastics Corporation U.S.A., Simplot Fertilizer, INEOS Nitriles, and Invista. The MSC is also used by barges, commercial fisherman, crew and supply boats, and other commercial traffic to Port O'Connor, Palacios, and Port Lavaca in Calhoun County, Texas. Construction of the MSC was completed in 1966.

2.1 Project Authority

- Congress originally authorized navigation improvements in the Matagorda Bay area under the River and Harbor Act (RHA) of June 25, 1910. This authorization provided for an 8 mile long channel measuring 7 feet deep and 80 feet wide from deep water in lower Matagorda Bay to Port Lavaca.
- The RHA of August 30, 1935 authorized the upper end of the channel to be extended a distance of about 1 mile to the shoreline at the entrance of Lynn Bayou.
- The RHA of August 26, 1937 authorized the enlargement of the channel from Lynn Bayou at Port Lavaca to deep water in Matagorda Bay near Port O'Connor. This channel had a depth of 9 feet and a width of 100 feet and was approximately 11 miles long. This Act provided for a channel extension 100 feet wide and 6 feet deep from Port Lavaca, via Lavaca Bay, Lavaca River, and Navidad River, to Red Bluff located at about mile 3 on the Navidad River, for a total distance of 20 miles.
- The RHA of March 2, 1945 extended channel provided for a "harbor of refuge" 9 feet deep near Port Lavaca with an approach channel 9 feet deep and 100 feet wide.
- The RHA of July 3, 1958 as described in House Document 388, 84th Congress, second session, authorized the construction of a deep draft-navigation channel from the Gulf of

Mexico through Pass Cavallo, 38 feet deep, 300 feet wide and approximately 6 miles long; an inner channel 36 feet deep, 200 feet wide and approximately 22 miles long across Matagorda and Lavaca Bay, a turning basin at Point Comfort, 36 feet deep and 1,000 feet square; and dual jetties at the channel entrance (these are the dimensions of the present day channel). During preconstruction project design, hydraulic modeling indicated the location of the entrance channel should be moved from Pass Cavallo to a man-made cut across Matagorda Peninsula. The relocated entrance channel would provide a shorter and straighter entrance channel, shorter jetties, a short length of channel in which current velocities would be relatively high, and the probability that periodic maintenance requirements would be reduced.

- The RHA of July 3, 1958, as described in House Document 131, 84th Congress, first session, also authorized the channel from Pass Cavallo to Port Lavaca to be deepened to 12 feet and widened to 125 feet from the 12-foot depth in Matagorda Bay to the Turning Basin at Port Lavaca. Authorization was given for the channel to the Harbor of Refuge near Port Lavaca to be enlarged to 12 feet and 125 wide over a distance of 2.1 miles.
- The Flood Control Act of 1970, Section 216, authorizes studies to review the operation of completed Federal projects, and recommends project modifications when found advisable due to significantly changed physical or economic conditions.

2.2 Proposed Project Alternatives

Below are the alternatives for the MSC that will be screened further based on preliminary cost estimates from similar navigation studies and best professional judgment.

The proposed Matagorda Ship Channel Improvement Project consist of three reaches. Those reaches are the Lavaca Bay Reach for Stations 118+502 to 75+000, including the Calhoun Port Authority (CPA) facilities and the turning basin, Matagorda Bay Reach form Stations 75+000 to 6+000 and Offshore Reach from Stations 6+000 to -23+000.

2.2.1 Future without Project Conditions

The Future without Project Conditions (FWOPC) would retain a 38-foot deep navigation channel with its current maintenance dredging program. The restrictive depth and width of the MSC would prevent some vessels from entering with full loads or prevent the use of the channel by larger vessels altogether. Below, Table 1, list the existing channel conditions.

Table 1 - Existing MSC Channel Sections and Dimension

Channel Section	Authorized Depth ¹ (ft)	Width (ft)	Length
Outer Bar and Jetty Channel	40	300	3.2 mi
Channel to Point Comfort	38	200 – 300	20.9 mi
Approach Channel to Turning Basin	38	200 – 300	1.1 mi
Point Comfort Channel to Turning Basin	38	1,000	1,000 ft
Point Comfort Turning Basin Extension (North & South)	38	300	1,279 ft

¹Authorized depth referenced as Mean Lower Low Water (MLLS)

The Measures being considered in development of alternative to be considered are:

2.2.2 Structural Channel Modification

- Deepening of Existing Channel – dredging the existing MSC deeper, by two-foot increments, from 41' MLLW in the Main channel, and from the existing 43' in the entrance channel.
- Widening of Existing Channel – widening the existing MSC entrance channel from 300' to 600', and from 200' to 350' in the main channel.
- Vessel Passing lane – widening a portion of the single lane channel towards the mid-point of the main channel such that vessels heading towards the port could pull over and stop to the side, in order to allow a ship returning to the Gulf to pass.
- Modification of Existing Turning Basin - physically expanding the existing 1,000' by 1,000' by 47' deep turning basin at Port Comfort, to 1,200' by 1,200' and by the new economically justified depth for the design vessel.
- New Turning Basin – dredging a 1,200' diameter turning-basin to the northwest side of the ship channel at STA 114+004.58 where the channel curves into the existing turning point/port.

2.2.3 Non-Structural Modification

- Modifications to Pilot's Rules – easing the current pilot's rules, as practicable, to allow for more efficient loading and maneuvering of vessels within the bay.
- Modification to Tug Assist – increase the number of tugs (from two to four) currently used to safely escort (pull/push) the design vessel.
- Split Deliveries – shipping and/or receiving large loads on two or more vessels.
- Light Loading – loading the design vessel below its maximum storage capacity.

2.2.4 Tentatively Selected Plan

The tentatively selected alternative for project is to deepen the existing MSC from 41' deeper to 47' MLLW within the main channel and deepen the existing entrance channel from 43' to 49' MLLW. Widen the existing MSC entrance channel from 300' to 600', and from 200' to 350' in the main channel and dredge the turning basin from 1,000' to 1,200'.

3 Purpose and Scope

The purpose of this report is to reduce transportation costs and increase operational efficiencies of maritime commerce movement through the Port. A variety of products are transported along the MSC, including aluminum ore, chemicals and allied products. The need for this project is derived from an analysis of current and projected vessel transits, cargo tonnage, and capacity at existing and proposed terminal facilities. This need is becoming more critical given increasing levels of maritime traffic, increasing vessel size, and growing number of channel users active in the oil and petrochemical industry. By expanding channel dimension, cargo vessels could reduce or eliminate light loading measures, and larger cargo vessels, unable to transit the exiting channel configuration, could begin calling on the Port and adjacent facilities.

3.1 Previous Studies

There have been several previous studies performed related to the authorization and construction of the MSC.

- General Design Memorandum, (No. 3) Matagorda Ship Channel, (1963): this memorandum describes the design and specifications of the proposed deep-draft channel from the Gulf through the Matagorda Peninsula, across Matagorda and Lavaca Bays, and includes a turning basin at Point Comfort, Texas, with jetties at the Gulf entrance. These improvements were proposed in lieu of a channel through Pass Cavallo.
- Matagorda Ship Channel Texas Reconnaissance Report, (1989): this report presents the results of a preliminary investigation of deep-draft navigation improvements to the MSC and concludes that the Reconnaissance Study demonstrated that deepening the MSC to 42 ft MLT while maintaining the existing width was economically justified, in the Federal interest, and in accordance with current policies and budget priorities.
- Matagorda Ship Channel Jetties Section 216 Initial Appraisal Report, (2000): this study assessed the situation at the MSC jetties, identified preliminary alternatives, and recommended further study.
- Matagorda Ship Channel, Texas Reconnaissance Report, Section 905(b) Analysis, (2004): this 905(b) analysis was performed to determine whether there is a Federal interest in providing channel and jetty improvements to the MSC. The report documents the basis for the positive finding of Federal interest and established the scope of feasibility phase.
- Matagorda Ship Channel Point Comfort Channel Extension, Assumption of Maintenance Decision Document, (2006): this analysis addresses the requirements of Section 509 of WRDA 1996 for the Federal AOM for the Point Comfort Turning Basin.

4 Real Estate Requirements

The MSC is an existing Federal project. The Non-Federal Sponsor (NFS) is required to furnish all LERRD for the proposed cost-share project. Figures 4 through 8 show the four (4) existing perpetual easements and eighteen (18) existing disposal areas. Described below are the existing required easements along with a brief description of the necessary additional easements required.

4.1 Existing Real Estate Requirements

4.1.1 Existing USACE Interest

- A perpetual easement and right-of-way for navigation purposes to construct, dredge, reconstruct, enlarge, replace, maintain, operate and repair a navigation channel and waterway and jetties and related facilities and spoil-disposal areas for the deposit of sand, silt and spoil from the original construction and future maintenance, enlargement, reconstruction and repair of said project in, over, on, along and across tract MSC3 100E-1 was acquired 9 August 1967 from the Matagorda County Navigation District No. 2 (Figure 5).
- A perpetual right and easement to enter upon, dig or cut away and removed on tract MSC3 100E-2 in the prosecution of the work of constructing, maintaining or improving the Matagorda Ship Channel, or any enlargement thereof, and to maintain the portion so cut away and remove as a part of the navigable waters was acquired 7 August 1963 from Matagorda County Navigation District No. 2 (Figure 5).
- A perpetual easement to prosecute the work of constructing, maintaining or improving the Matagorda Ship Channel on tracts MSC3 100-1 and MSC3 100-2 was acquired 7 August 1963 from Matagorda County Navigation District No. 2 (Figure 5).

4.1.2 Existing USACE Placement Area

Existing placement areas (PA) currently in use for maintenance dredge material placement that are to be excluded from this project are PA 5 to PA 12 (Figure 7), PA 17 to PA 18 (Figure 6), and PA 116-B (Figure 7).

Existing placement areas currently in use for maintenance dredged material placement that will be included in this project are:

- PA 14 to PA 16 totaling over 300 acres are open water unconfined placement areas (Figure 9).
- PA 19 is an unconfined, partially emergent placement area encompassing approximately 90 acres. About 23 acres is emergent, with the remainder being wetland or open water (Figure 10).
- Disposal Area (DA) 2 (Sundown Island) is a designated placement area used for both Matagorda Ship Channel and Gulf Intracoastal Waterway maintenance material disposal, located near the Matagorda Ship Channel Entrance (Figure 11).
- A perpetual easement to dispose of dredged material on tract DA 3 was acquired 9 August 1967 from the Matagorda County Navigation District No. 2 (Figure 11).
- PA 1 is an Ocean Dredged Material Disposal Site (ODMDS) (Figure 11).

4.2 New Real Estate Requirements

4.2.1 Real Estate Placement Area Requirements

For new work and future maintenance of the MSC, a non-standard estate easement will be required on placement areas needed. CPA has one upland placement area PA P1 (Figure 12) and own 505 acres of bay bottom that they can create land (Figure 13). The district will seek approval of the non-standard estate by separate request to Head Quarters (HQ).

4.2.2 Estates Needed for New Requirements

Standard Estate # 8. Chanel Improvement Easement

A perpetual and assignable right and easement to construct, operate, and maintain channel improvement works on, over and across (the land described in Schedule A) (Tracts Nos. ____, ____ and ____) for the purposes as authorized by the Act of Congress approved _____, including the right to clear, cut, fell, remove and dispose of any and all timber, trees, underbrush, buildings, improvements and/ or other obstructions therefrom; to excavate: dredge, cut away, and remove any or all of said land and to place thereon dredge or spoil material; and form such other purposes as may be required in connection with said work of improvement; reserving, however, to the owners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

Standard Estate #13. Utility and/or Pipeline Easement

A perpetual and assignable easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for the location, construction, operation, maintenance, alteration; repair and patrol of (overhead) (underground) (specifically name type of utility or pipeline); together with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions and other vegetation, structures, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however,

to existing easements for public roads and highways, public utilities, railroads and pipelines.

Standard Estate # 15. Temporary Work Area Easement

A temporary easement and right-of-way in, on, over and across (the land described in Schedule A) (Tracts Nos. _____, _____ and _____), for a period not to exceed _____, beginning with date possession of the land is granted to the United States, for use by the United States, its representatives, agents, and contractors as (borrow area) (work area), including the right to (borrow and/or deposit fill, spoil and waste material thereon) (move, store and remove equipment and supplies, and erect and remove temporary structures on the land and to perform any other work necessary and incident to the construction of the _____ Project, together _____ with the right to trim, cut, fell and remove therefrom all trees, underbrush, obstructions, and any other vegetation, structure, or obstacles within the limits of the right-of-way; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

Non-Standard Perpetual Dredged Material Placement Easement

A perpetual and assignable right and easement on, over, and across (the land described in Schedule A) (Tracts Nos. _____, _____, and _____), for the location, construction, operation, maintenance and patrol of a dredged material disposal facility, including the right to borrow and/or deposit fill, spoil and dredged material thereon, the right to move, store and remove equipment and supplies, and the right to perform any other work necessary and incident to said facility, together with the right to trim, cut, fell, and remove therefrom all trees, underbrush, obstructions, and any vegetation, structures, or obstacles within the limits of the easement; reserving, however, to the landowners, their heirs and assigns, all such rights and privileges as may be used without interfering with or abridging the rights and easement hereby acquired; subject, however, to existing easements for public roads and highways, public utilities, railroads and pipelines.

Maintenance dredging of the Federal Project channel is a 100% Federal responsibility and is accomplished through Federal dredging contracts. Perpetual easements conveyed to the Federal Government are needed to assure all project placement areas, which are built for the purpose of supporting the Federal navigation project, are available to the Government as often and for as long as they are needed to support the project. The Government is also responsible for managing the navigation project to assure sufficient placement area capacity exists to meet the needs of the Federal navigation project now and in the future.

Perpetual easements allow the Government to better restrict/control non-federal use, maximum quantities placed by non-federal interests, and remove any potential for interference with federal dredge contractors. Finally, the Government has certain Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liabilities already as an operator and transporter of materials put into the placement area. Perpetual easements provide the property interest necessary for the Government to issue outgrants to non-federal users that will require testing and approval of non-federal dredged materials prior to placement into the Federal project placement areas, thus protecting the Government from additional CERCLA liability.

4.3 Mitigation

Mitigation for impacts to oyster reefs from construction is require to be performed by the NFS. Figure 14 shows oyster reefs located within the project area. Approximately 133 mitigation acres will be required for impacts to oyster reefs from placement of dredged material. During the development of the Mitigation Plan potential locations will be reviewed by the PDT to ensure no one entity will benefit from the proposed Mitigation Plan. Exact locations have yet to be determined however, once selected and finalized, the REP will be updated to include this information.

4.4 Borrow Material

The proposed project does not require borrow material.

4.5 Access/Staging Area

There is an assumption that access/staging areas will be required for the project, once placement areas are selected and finalized, the REP will be updated to include this information as well as the duration for any work area easements necessary. The estate necessary will be a temporary work easement as described in section 4.2.3 of this REP.

4.6 Recreation Features

There are no recreations features proposed for this project.

5 Non-Federal Sponsor

The Non-Federal Sponsor (NFS) is the Calhoun Port Authority (CPA) formally known as the Calhoun County Navigation District. CPA has authority and capability to furnish lands, easements and right-of-way in accordance with the Project Cost Agreement. The CPA is highly capable of performing the real estate acquisition required by this project. The CPA has not had to acquire real estate in the past in support of the Federal channel.

5.1 NFS Real Estate Interest

CPA owns approximately 505 acres of submerged land located in Matagorda Bay, Calhoun County, Texas (Figure 13). This acreage was acquired by deed from the State of Texas on 25 April 1998.

5.2 NFS Real Estate Placement Area Interest

5.2.1 New Work Placement Area (Figure15)

Table 2 illustrates the proposed placement areas that will be utilized for placement of dredged material from new work being performed.

Table 2: New Work Placement Areas

New Work Placement Areas			
Placement Area	Ownership	Types of Placement Areas	Acres
ER3/D	CPA	Confined PA	539.2
P1	CPA	Confined PA	248
NP6	CPA	Unconfined PA	
NP5	CPA	Unconfined PA	
NP4	CPA	Unconfined PA	
NP3	CPA	Unconfined PA	441
NP2	CPA	Unconfined PA	1433
NP7	CPA	Unconfined PA	

5.2.2 Maintenance Placement Areas (Figure 16)

Table 3 illustrates the proposed placement areas that will be utilized for placement of maintenance dredged material after new work has been performed.

Table 3: New Work Maintenance Placement Areas

New Work Maintenance Placement Areas		
Placement Area	Ownership	Type of Placement Area
A1	CPA	Unconfined PA
P1	CPA	Confined PA
OP10	CPA	Unconfined PA
OP9	CPA	Unconfined PA
OP8	CPA	Unconfined PA
OP7	CPA	Unconfined PA
OP6	CPA	Unconfined PA
OP5	CPA	Unconfined PA
OP4	CPA	Unconfined PA
OP3	CPA	Unconfined PA
OP2	CPA	Unconfined PA
OP11	CPA	Unconfined PA

6 Existing Federal Projects and Federally Owned Lands

The existing MSC is a Federal project that has used PA 1, PA 5 to 12, PA 14 to 19, PA 116-B, DA 2 and DA 3, which are used for unconfined placement of maintenance dredged material (Figures 6, 7, 8). The Gulf Intracoastal Waterway (GIWW) crosses the MSC. There are no impacts anticipated to the GIWW, and no additional lands will be purchased or leased in this area. Within the project area are Coastal Barrier Resources System, Texas Audubon Society bird sanctuary, and Otherwise Protected Areas (Figure 17).

The Coastal Barrier Resources Act (CBRA) of 1982 established the John H. Chafee Coastal Barrier Resources Systems (CBRS), a defined set of geographic units along the Atlantic, Gulf of Mexico, Great lakes, U.S. Virgin Islands, and Puerto Rico coasts. Most new Federal expenditures and financial assistance are prohibited within the CBRS, unless those activities qualify for an exception under Section 6 of CBRA (16 U.S.C. § 3505).

The RHA of July 3, 1958 authorized the construction of a deep draft-navigation channel from the Gulf of Mexico across Matagorda and Lavaca Bay. While the proposed project footprint is within the CBRS it is expected to receive an exception under Section 6:

A federal expenditure is allowable within the CBRS, if it meets any of the following exceptions (16 U.S.C § 3505(a)(1)-(5)):

The maintenance or construction of improvements of existing federal navigation channels (including the Intercostal Waterway) and related structures (such as jetties), include ng the disposal of dredge materials related to such maintenance or construction. A federal navigation channel or a related structure is an existing channel or structure, respectively, if it was authorized before the date on which the relevant System unit or portion of the System unit was included with the CBRS.

7 Navigation Servitude

Navigation Servitude emanated from the Commerce Clause of the Constitution of the United States, Article I; Section 8, Clause 3. The servitude gives the Federal Government the right to use the “Navigable Waters” of the United States without compensation for navigation projects. These are non-transferable rights, and are not considered interest in real property. The Federal Government’s right under the navigation servitude exist irrespective of the ownership of the banks and bed of a stream below the ordinary high water mark and irrespective of western water rights under prior appropriation doctrine. The MSC is with navigable waters, therefore, there are not real estate requirements associated with the channel.

8 Induced Flooding

There will be no induced flooding as a result of the construction of the project. Dredging and placement of material in the bay will have no effect on drainage on land. The footprints of the placement areas relative to the entire bay system are insignificant, and widening and deepening the channel would not increase flooding. Upland PA P1 would not induce flooding, since within the PA water is contained by levees, and a drainage system for the site will be developed (Figure 18).

9 Baseline Cost Estimate for Real Estate

The costs listed below Table 4 reflect the estimated real estate costs for the proposed feasibility study. The baseline cost estimate is subject to change through final draft.

Table 4: Baseline Cost Estimate

Matagorda Ship Channel				
Non Federal Cost	Account		Amount	Contingency
	0112	Project Related Administration	\$50,000.00	\$12,500.00
	0113	Pipeline Removal Administration Only (\$3,000 x 22 Pipelines)	\$66,000.00	\$16,500.00
		Subtotal	\$116,000.00	\$29,000.00
Non Federal Total				\$145,000.00
Federal Cost	Account		Amount	Contingency
	0112	Project Related Administration	\$30,000.00	\$7,500.00
	0113	Pipeline Removal Administration Only (\$2,000 x 22 Pipelines)	\$44,000.00	\$11,000.00
		Subtotal	\$74,000.00	\$18,500.00
Federal Total				\$92,500.00
GRAND TOTAL				\$237,500.00

10 Public Law 91-646 Relocations

There are no residential houses, businesses, or farms that would be required for the relocation associated with PL 91-646.

11 Mineral and Energy Activity

No mineral activity will be interrupted by the project. Predominantly the type of mineral activity in the vicinity of the project is oil and gas exploration and production. Based on the lack of local history of mineral activities and potential difficulties with title issues, mineral rights will not be acquired. No mineral exploration or production activity would be performed due to the project.

12 Assessment of Project Sponsor Land Acquisition Capabilities

The NFS, CPA, has the authority and capability to furnish lands, easements and rights-of-way. The CPA is highly capable of performing the real estate acquisition required by this project (Exhibit B). The CPA is well acquainted with Federal Real Estate Acquisition Regulations including the provisions of PL 91-646. The CPA has not had to acquire real estate in the past in support of the federal channel.

13 Zoning in Lieu of Acquisition

CPA owns the majority of the land required for the proposed project area, therefore no zoning in lieu of acquisition is expected.

14 Acquisition Schedule

CPA owns the majority of the placement areas required for the project. Therefore, there is no need for an acquisition schedule.

15 Facility/Utility/Pipeline Relocations

Clearance requirements for underground pipelines, cables, and conduits crossing deep draft channels are given in the USACE Galveston District (1998) SWGOM 1145-2-15: "Regulatory Permit Insurance, Inspection, Reporting, and Clearance Requirements Deep Draft Channels District Policies and Practices". The Galveston District's policy states that existing pipelines (measured from the top of the pipe) shall have, "a minimum of 20 ft. below the authorized project depth of the channel plus a distance of 50 ft. on each side of the channel measured from the bottom edge of cut and perpendicular to the centerline". Any of these items that are not deep enough to comply with the District's clearance requirements with the proposed channel template will have to be removed or relocated.

Based on available information, approximately 22 pipelines will need to be removed or relocated (Table 5). Other than the Buckeye Gulf Coast acrylonitrile and ammonia pipelines, all other pipelines are either natural gas or natural gas liquids gathering or transmission lines.

Figure 19 provides maps of oil and gas wells and petroleum pipelines. One well is located within PA P1, the Railroad commission of Texas indicates that this well is a dry hole and that no active wells are located within one mile of PA P1 (Figure 20).

Table 5: Pipelines that may require removal/relocation

	Approximate Channel Station	Owner	No	Size (in.)	Depth (ft.)	USACE Permit No.	Length (miles)	Status
Lavaca Bay	105+594	Neumin Production Company	1	4.5	--	--	9.37	In Service
	91+075	Texas Eastern Transmission Co.	1	30	-50	3560	2000	In Service
	91+307	Buckeye Gulf Coast*	1	8	--	82533	2000	In Service
	91+260	Buckeye Gulf Coast*	1	8	--	82576	2000	In Service
	82+960	Exxon Corporation	1	8	-50	3552	1500	
	82+960	Exxon Corporation	1	4	-50	3555	1500	
	82+960	Exxon Corporation	1	2	-50	3556	1500	
	83+000	Onyx Natural Gas, L.C.	1	9	--	--	1500	
	82+500	Onyx Pipeline Company	1	8.63				Abandoned
	80+025	Humble	1	4	-50	3555	2000	
	76+579	Delhi Gas Pipeline Co.	1	6 5/8	-50	4702	2000	
76+457	Valero Interstate Transmission Co.	1	6.6	--	82679	2000	In Service	
Matagorda Bay	72+949	Lavaca Pipeline Co.	2	2.5	~-52	4566	2000	In Service
	72+949	Lavaca Pipeline Co.	2	8	~-52	4566	2000	In Service
	72+949	Lavaca Pipeline Co.	2	9	--	--	2000	
	42+598	Lavaca Pipeline Co.	1	16	--	6729	2000	In Service
	42+575	Goldston Oil Corp.	1	3	--	3573	2000	
	41+???	Lavaca Pipeline Co.						In Service
22+000	Union Oil Company of California	1	9	--	--	2000	In Service	
Offshore	-18+767	Genesis Offshore Holdings, LLC**	1	24	-65	14794	2000	In Service

*The Buckeye Gulf Coast pipelines are permitted to a depth of -70 feet; however, this depth has not been confirmed, and for the cost estimate it was assumed that these pipelines would require removal.

**The Genesis Offshore Holdings, LLC pipeline located at station -19+000 is within 1 foot of meeting the District's clearance requirements. This pipeline could potentially receive a variance, but for the cost estimate it was assumed that the pipeline would require removal.

CPA owns the submerged lands where the pipelines cross the channel. The lease agreements require the pipeline owners to remove/relocate the lines at the owner's expense if required by improvements to the MSC.

“ANY CONCLUSION OR CATEGORIZATION CONTAINED IN THIS REAL ESTATE PLAN, OR ELSEWHERE IN THIS PROJECT REPORT, THAT AN ITEM IS A UTILITY OR FACILITY RELOCATION TO BE PREFORMED BY THE NON-FEDERAL SPONSOR AS PART OF ITS LERRD RESPONSIBILITY IS PRELIMINARY ONLY. THE GOVERNMENT WILL MAKE A FINAL DETERMINATION OF THE RELOCATIONS NECESSARY FOR THE CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PROJECT AFTER FURTHER ANALYSIS AND COMPLETION AND APPROVAL OF FINAL ATTORNEY’S OPINIONS OF COMPENSABILITY FOR EACH OF THE IMPACTED UTILITIES AND FACILITIES.”

16 Hazardous, Toxic, and Radiological Waste or Other Environmental Contaminants

PA ER3/D is located within the Alcoa (Point Comfort)/Lavaca Bay Superfund Site (Figure 21). This area has sediments that have been shown to have elevated levels of mercury, and is undergoing recovery through sedimentation. This area is already owned by CPA, no properties with known hazardous or toxic wastes will be purchased or leased.

An evaluation of the potential to encounter Hazardous, Toxic, and Radiological Water (HTRW) was conducted as part of the Final Environmental Impact Statement (FEOS) for the Matagorda Ship Channel Improvement Project located in Matagorda and Calhoun counties, Texas dated July 2009. The evaluation included the MSC, inclusive of both dredge locations and adjacent properties within a 2 mile radius of the channel. The assessment consisted of a review of recent and historic aerial photographs and a review of regulatory agency database information. This evaluation concluded that the potential for encountering impacted material during the construction of the project is very limited.

The following text can be found in Section 4.8.2 of MSCIP FEIS:

Impacts associated with regulated facilities are most likely to be encountered near the source of the contaminants. These sources included, but are not limited to, industry located in the Point Comfort area. According to a review of the database records and research of the environmental history of the region, the industrial activity adjacent to Lavaca Bay has caused measureable impacts to the terrestrial and marine environments adjacent to this and adjacent waterways.

The industrial activity adjacent to Lavaca Bay is extensive and is primarily related to two large industrial complexes located immediately adjacent to the project. Industrial activity at the Alcoa Point Comfort Operation and Formosa has resulted in quantifiable impacts to groundwater, surface water, soil and sediment. Recent corrective action performed at both facilities has minimized the potential to encounter impacted media during project construction. However, in spite of prior remedial activities, the potential for the project to encounter impacted media remains. The documented areas impacted by previous industrial activity are isolated to the portion of Lavaca Bay adjacent to Point Comfort. According to the regulatory agency database report, the northern extent of the project enters into an area defined as an NPL (Superfund) site. This area has been defined as having been impacted by contaminant releases from the Alco facility. Data provided by NOAA delineates elevated levels of mercury within sediment in the vicinity of Dredge Island. The concentration of mercury within the impacted areas range from below detection limits to 2.00 mg/kg. The portion of dredged material that will result from the project is proposed to be used to create a clay cap over the impacted area of bay floor. This aspect of the project will result in a positive impact to the environment by encapsulating mercury-impacted sediment and eliminating future exposure potential.

17 Attitudes of the Landowner

CPA is the owner of the majority of the project lands. As owner it is supportive and in favor of the project.

18 Sponsor Notification of Risk

An example of a letter notifying the NFS of the risk in acquiring lands prior to the signing of the Project Partnership Agreement (PPA) is shown in Exhibit C.

19 References

2014. URS Corporation. DRAFT Section 204(f) Feasibility Report – Matagorda Ship Channel Improvement Project.

1989. U.S. Army Corps of Engineers. Matagorda Ship Channel, Texas – Reconnaissance Report.

Exhibits A

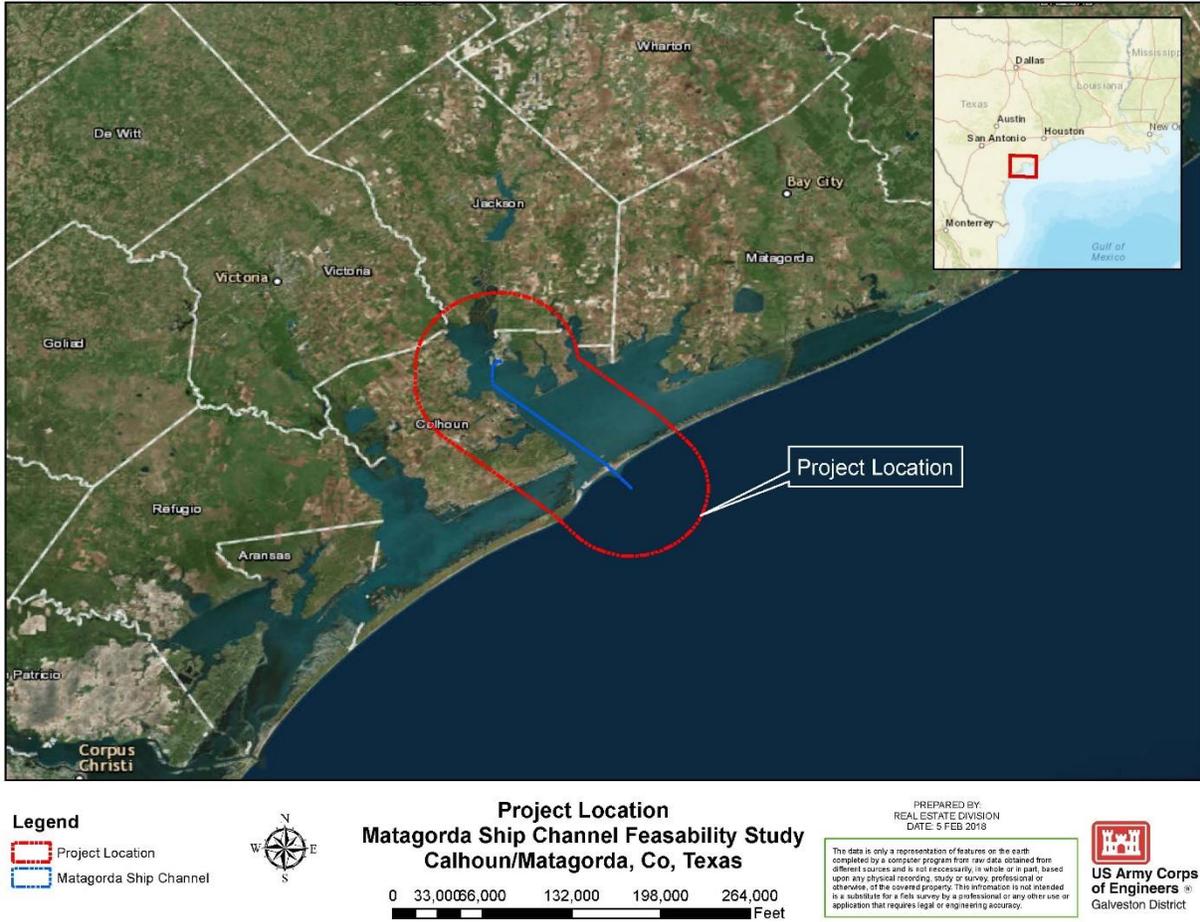


Figure 1 : Project Location



Figure 2 : Matagorda Ship Channel Project Area



Figure 3 : Matagorda Ship Channel Entrance



Figure 4 : SWG Existing Interest Easements/Placement Area



Figure 5 : Existing Real Estate Easements

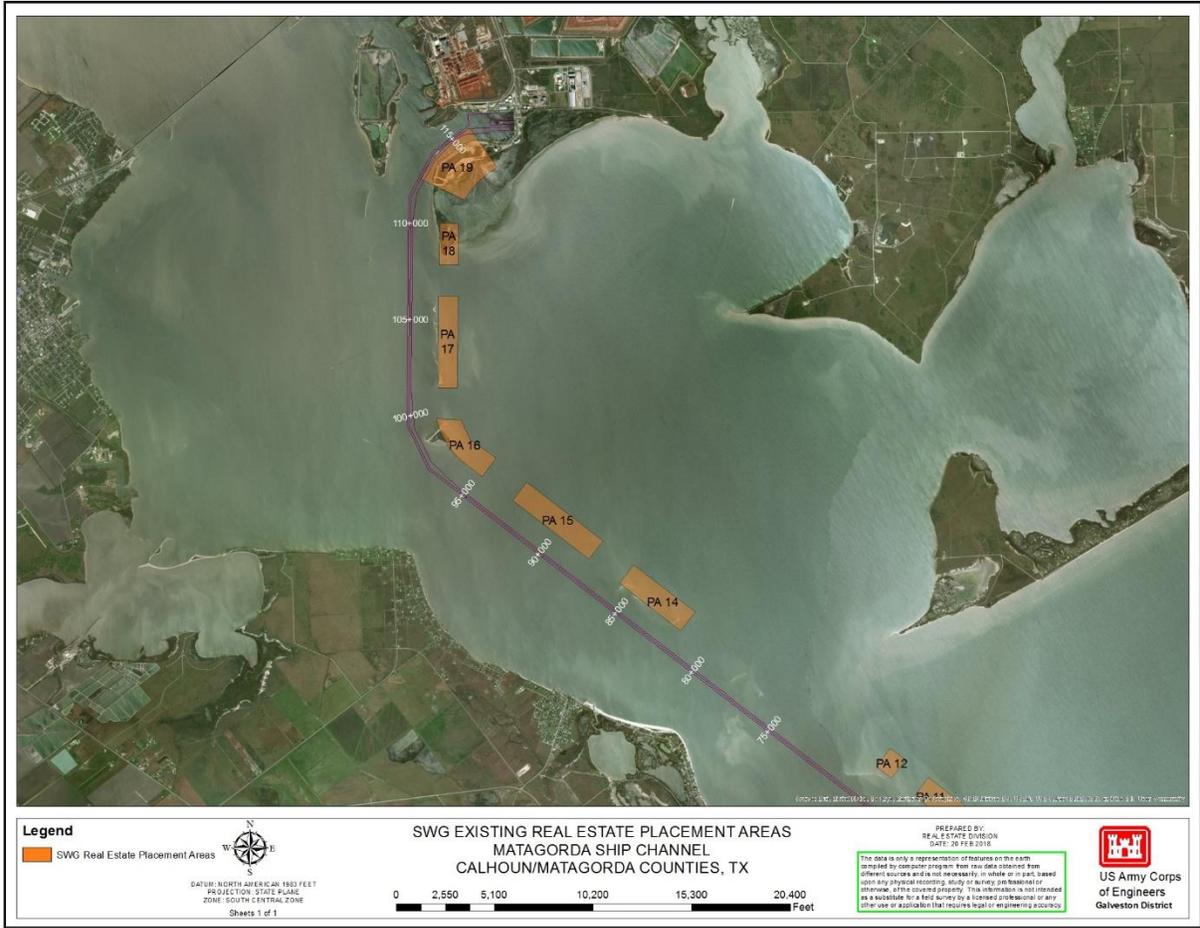


Figure 6 : Existing Real Estate Placement Areas

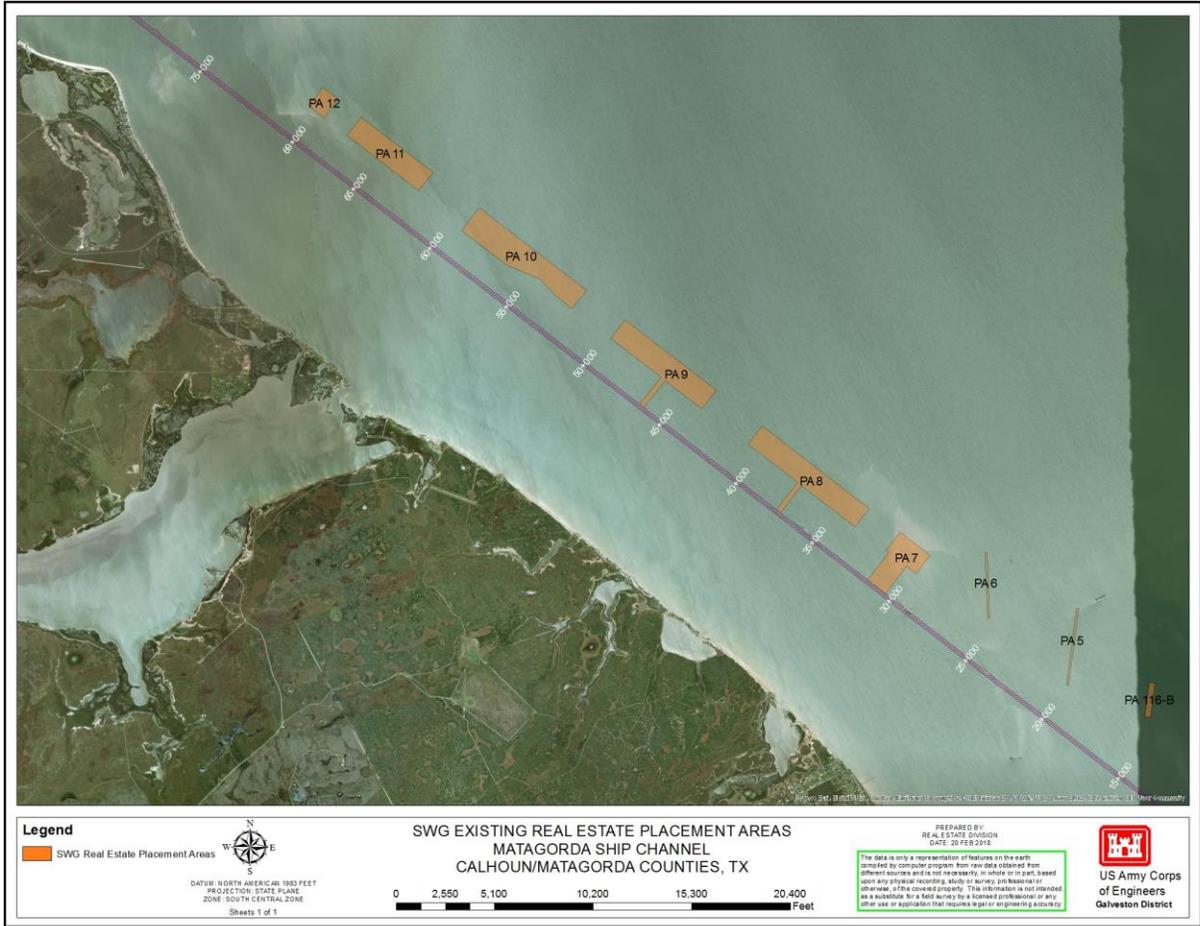


Figure 7 : Existing Real Estate Placement Areas

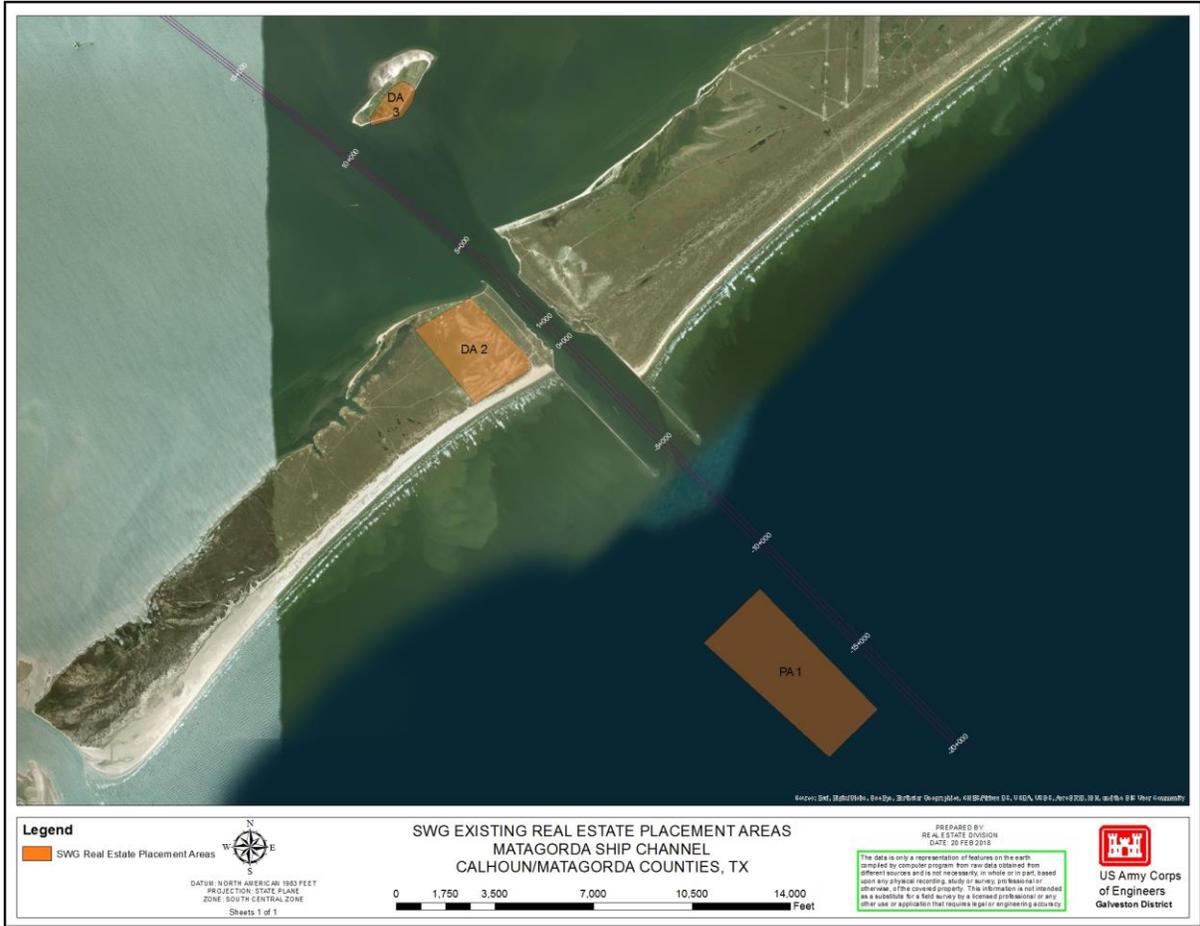


Figure 8 : Existing Real Estate Placement Areas



Figure 9 : Existing Placement Areas for New Work



Figure 10 : Existing Placement Area for New Work



Figure 11 : Existing Placement Areas for New Work



Legend

 NEW WORK PA



**UPLAND PLACEMENT AREA P1
MATAGORDA SHIP CHANNEL
CALHOUN/MATAGORDA COUNTIES, TEXAS**

0 475 950 1,900 2,850 3,800 Feet

PREPARED BY:
REAL ESTATE DIVISION
DATE: 5 FEB 2016

The data is only a representation of features on the earth completed by a computer program from raw data obtained from other sources and is not necessarily in whole or in part based upon any physical recording, study or survey, professional or otherwise, of the covered property. This information is not intended to be a substitute for a field survey by a professional or any other use or application that requires legal or engineering accuracy.

Figure 12 : Upland Placement Area P1

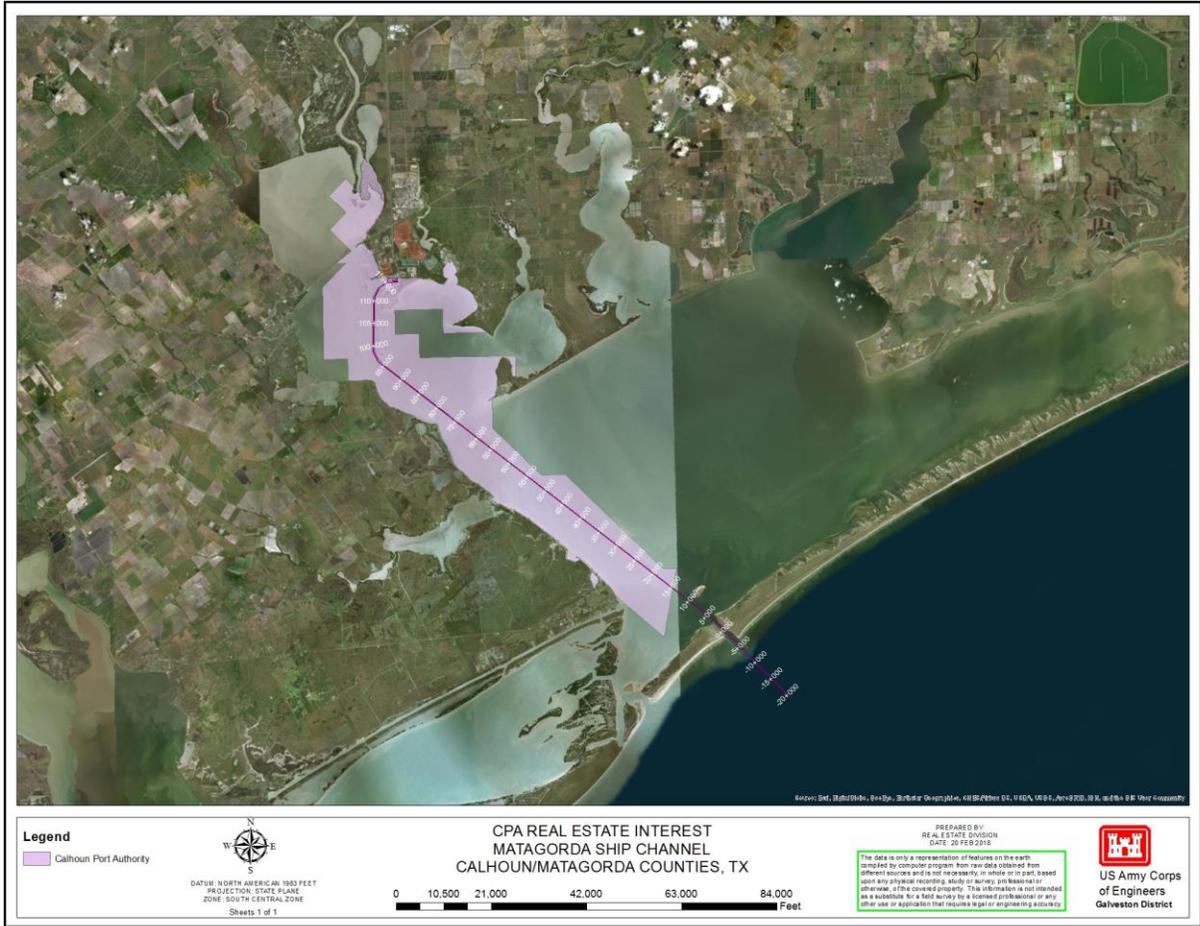


Figure 13 : Calhoun Port Authority Real Estate Interest

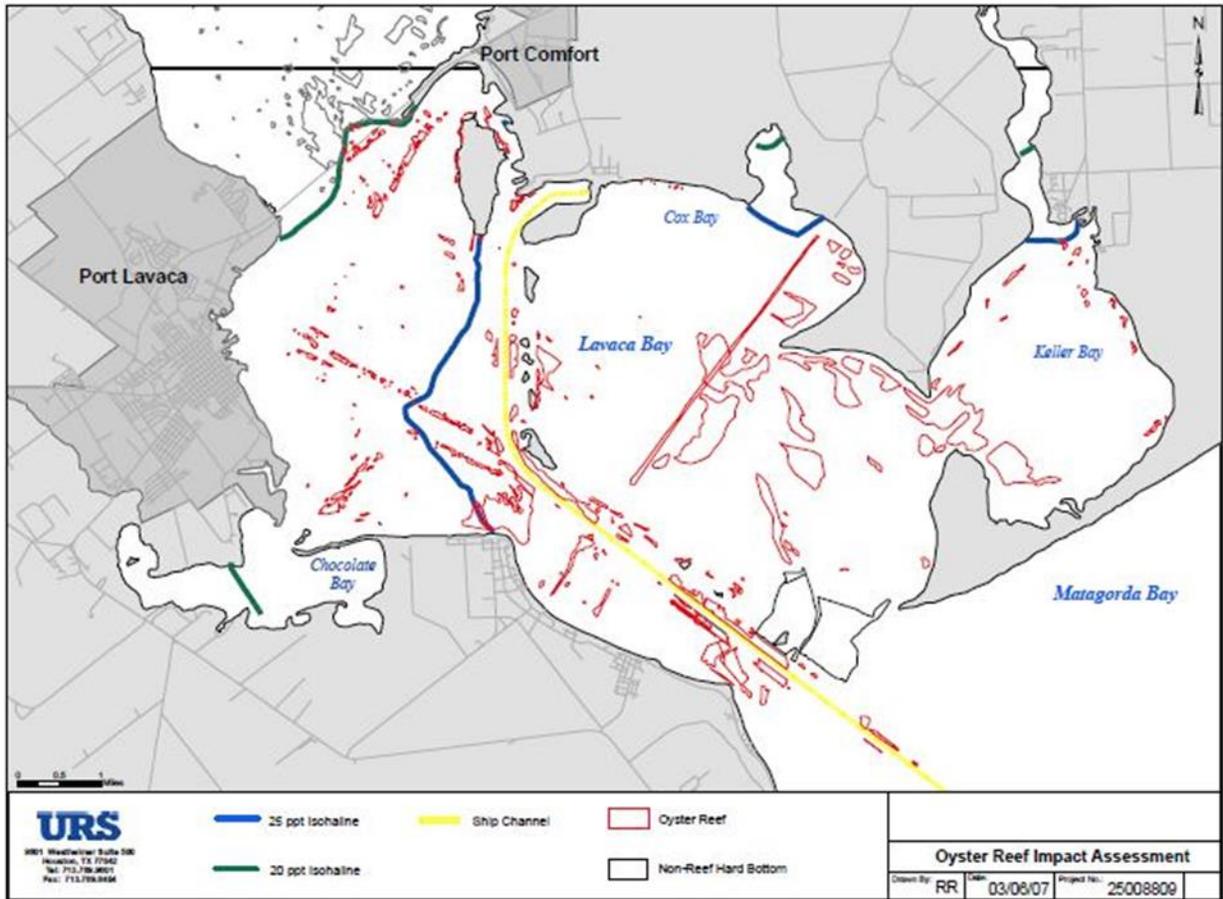
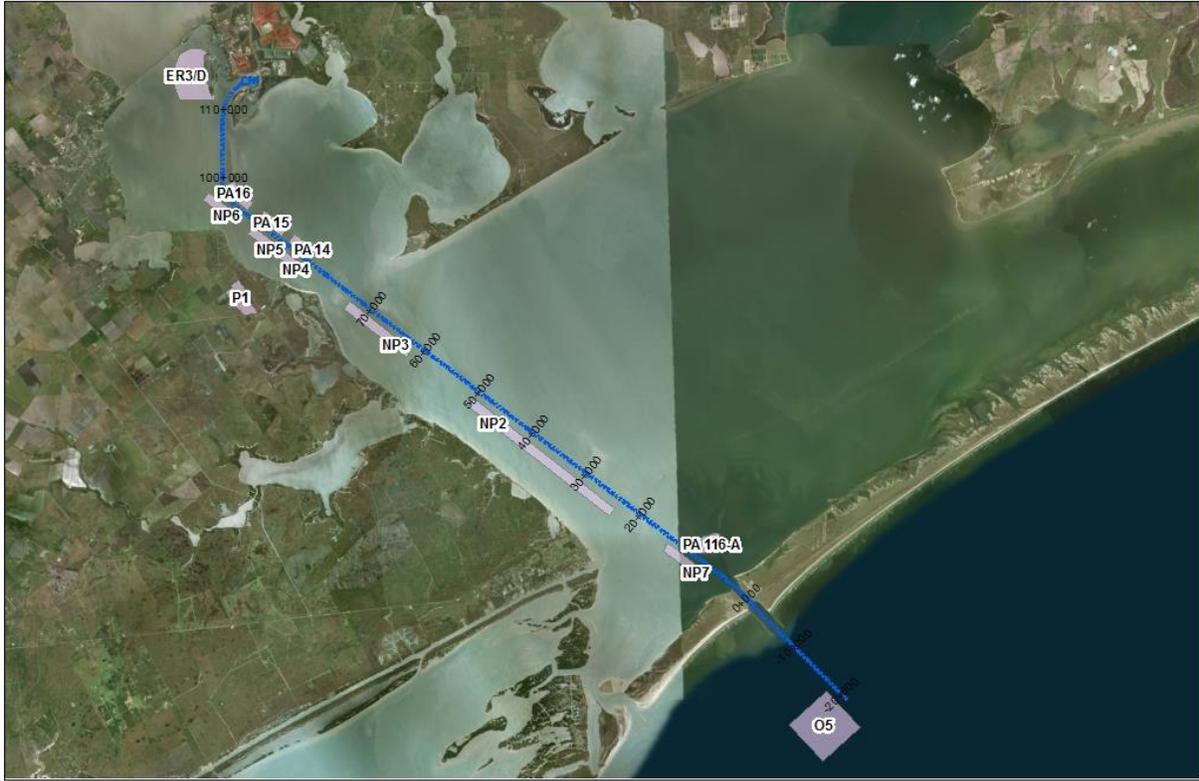


Figure 14 : Oyster Reefs within Lavaca Bay

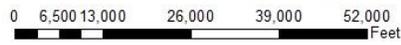


Legend

 NEW WORK PA



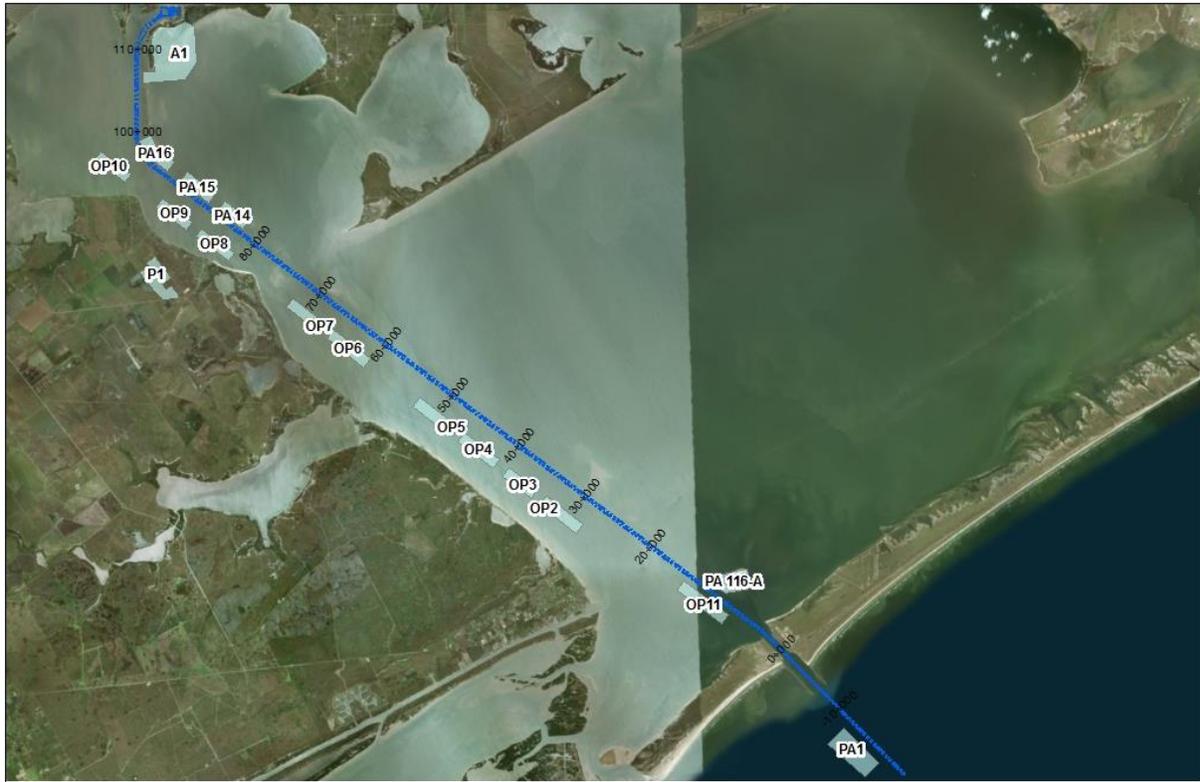
**MAINTENANCE PLACEMENT AREAS
MATAGORDA SHIP CHANNEL
CALHOUN/MATAGORDA COUNTIES, TEXAS**



PREPARED BY:
REAL ESTATE DIVISION
DATE: 5 FEB 2016

The data is only a representation of features on the earth completed by a computer program from raw data obtained from other sources and is not necessarily in whole or in part based upon any physical recording, study or survey, professional or otherwise, of the covered property. This information is not intended to be a substitute for a field survey by a professional or any other use or application that requires legal or engineering accuracy.

Figure 13 : New Work Placement Areas



Legend

MAINTENANCE PA



**MAINTENANCE PLACEMENT AREAS
MATAGORDA SHIP CHANNEL
CALHOUN/MATAGORDA COUNTIES, TEXAS**

0 5,000 10,000 20,000 30,000 40,000 Feet

PREPARED BY:
REAL ESTATE DIVISION
DATE: 5 FEB 2016

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Figure 14 : New Work Maintenance Placement Areas

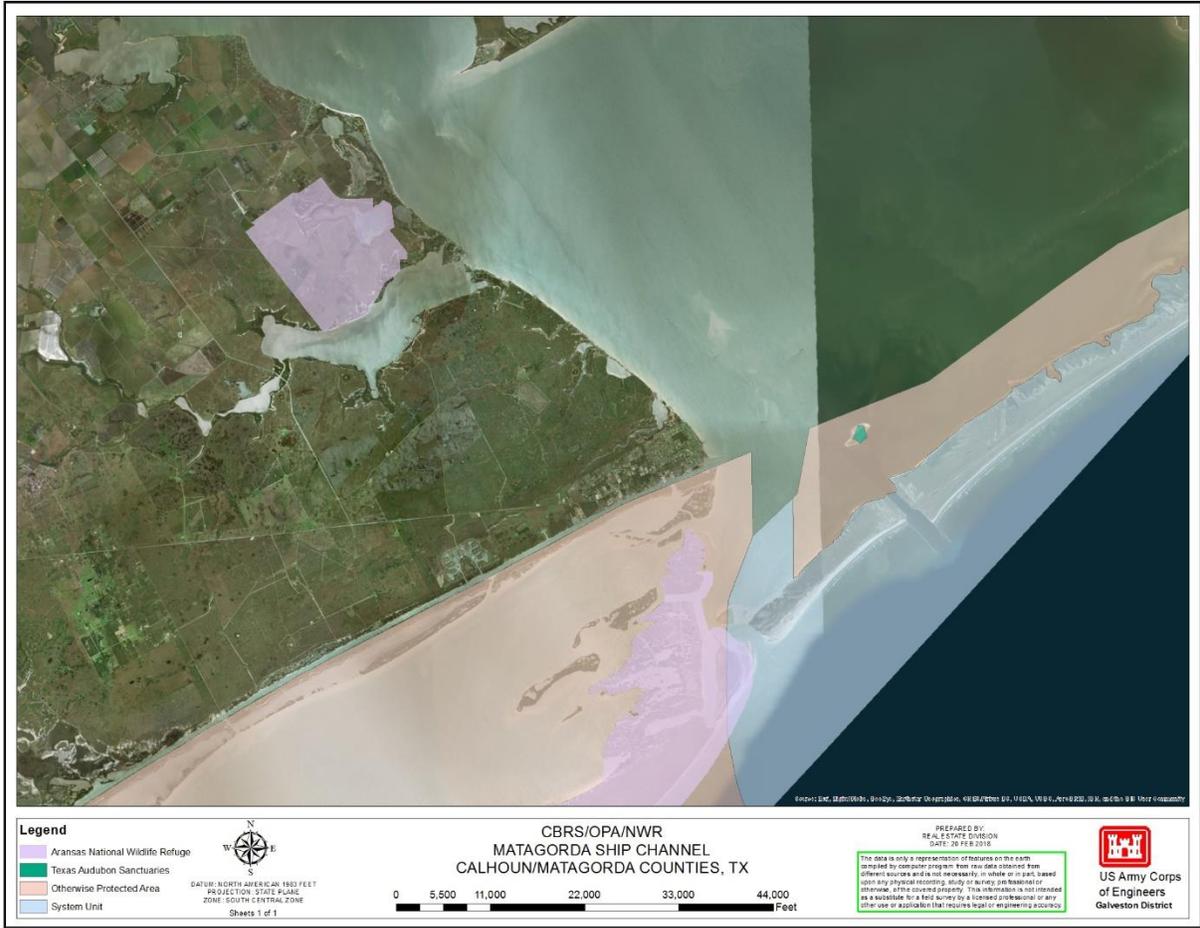


Figure 17: Coastal Barrier Resources System/Otherwise Protected Area



Figure 18: Upland Placement Area P1



Figure 19: Pipelines within Project

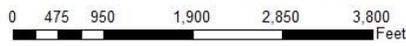


Legend

- NEW WORK PA
- Pipeline



**PIPELINES AROUND PA P1
MATAGORDA SHIP CHANNEL
CALHOUN/MATAGORDA COUNTIES, TEXAS**



PREPARED BY:
REAL ESTATE DIVISION
DATE: 5 FEB 2018

The data is only a representation of features on the earth compiled by a computer program from raw data obtained from different sources and is not necessarily in order or in any way intended for use in any legal proceeding, study or survey, or otherwise of the land or property. This information is intended as a substitute for a survey, or a professional or any other use of application that requires legal or engineering accuracy.

Figure 20: Pipelines around PA P1



Legend

NEW WORK PA



**HTRW
MATAGORDA SHIP CHANNEL
CALHOUN/MATAGORDA COUNTIES, TEXAS**

0 650 1,300 2,600 3,900 5,200 Feet

PREPARED BY:
REAL ESTATE DIVISION
DATE: 5 FEB 2018

The data is only a representation of features on the earth compiled by a computer program from raw data obtained from different sources and is not necessarily in shape or form based upon any ground recording, study or survey, professional or otherwise, of the land or property. This information is not intended to be a substitute for a field survey by a professional or any other use or application that requires legal or engineering accuracy.

Figure 21: Hazardous, Toxic, and Radiological Waste

Exhibits B

Assessment of Non-Federal Acquisition Capability

**ASSESSMENT OF NON-FEDERAL SPONSOR'S
REAL ESTATE ACQUISITION CAPABILITY
MATAGORDA SHIP CHANNEL IMPROVEMENT PROJECT**

I. Legal Authority:

- a. Does the sponsor have legal authority to acquire and hold title to real property for project purposes? (yes/no) **YES**
- b. Does the sponsor have the power of eminent domain for this project?(yes/no) **YES**
- c. Does the sponsor have “quick-take” authority for this project? (yes/no) **NO**
- d. Are any of the lands/interests in land required for the project located outside the sponsor’s political boundary? (yes/no) **YES. Properties on the Matagorda Peninsula adjacent to the federal channel are in Matagorda County. Efforts are underway to enter into a Local Cooperation Agreement with the Port of Bay City, Texas (formerly the Matagorda County Navigation District No. 2), the political entity capable of obtaining lands/interest in land on the Matagorda Peninsula.**
- e. Are any of the lands/interests in land required for the project owned by an entity whose property the sponsor cannot condemn? (yes/no) **YES. See response I.d. above plus the CPA does not have the right of condemnation for bay bottom owned by the Texas General Land Office.**

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? (yes/no) **NO**
- b. If the answer to II.a. is “yes”, has a reasonable plan been developed to provide such training? (yes/no)
- c. Does the sponsor’s in-house staff have sufficient real estate acquisition experience to meet its responsibilities for the project? (yes/no) **YES**
- d. If the sponsor’s projected in-house staffing level sufficient considering its other work load, if any, and the project schedule? (yes/no) **NO**
- e. Can the sponsor obtain contractor support, if required in a timely fashion? (yes/no) **YES**
- f. Will the sponsor likely request USACE assistance in acquiring real estate? (yes/no) (If “yes”, provide description) **YES**

III. Other Project Variables:

- a. Will the sponsor's staff be located within reasonable proximity to the project site? (yes/no) **YES**
- b. Has the sponsor approved the project/real estate schedule/milestones? (yes/no) **NO. Updated Project/Real Estate Schedule/Milestones have not been provided to NFS.**

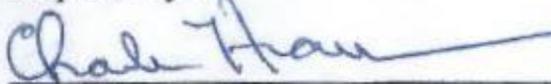
IV. Overall Assessment:

- a. Has the sponsor performed satisfactorily on other USACE projects? (yes/no) **YES**
- b. With regard to this project, the sponsor is anticipated to be: highly capable/fully capable/moderately capable/marginally capable/insufficiently capable. (If sponsor is believed to be "insufficiently capable," provide explanation) **Fully Capable**

V. Coordination

- a. Has this assessment been coordinated with the sponsor? (yes/no) **YES**
- b. Does the sponsor concur with this assessment? (yes/no) (If "no," provide explanation) **YES**

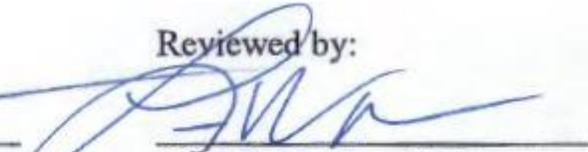
Prepared by:



Charles R. Hausmann, CPA
Port Director
Calhoun Port Authority

Date: February 9, 2018

Reviewed by:



Lisa McCracken Mairs
Real Estate Division
Galveston District
U.S. Army Corp of Engineers

Date: 14 Feb 2018

Exhibits C

Risk Letter



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P. O. BOX 1229
GALVESTON, TEXAS 77553-1229

Reply to
Attention to
Real Estate Division

David M. Knuckey, P.E.
Director, Engineering Services
Calhoun Port Authority
2313 F.M. 1593 South
P.O. Box 397
Point Comfort, Texas 77978

Dear Mr. Knuckey:

It is our understanding that there are currently no land acquisitions are being contemplated for the proposed Matagorda Ship Channel Project. However, in the event that the Calhoun Port Authority is required to acquire lands in the future, there are risks associated to these acquisitions if lands are acquired prior to execution of a Project Partnership Agreement (PPA) with the Federal Government. We appreciate your support for this proposed project, but our regulations require us to inform you that if for any reason, the PPA fails to be signed or if Congress fails to authorize or fund the project, any land(s) you have acquired or any money you have spent in your efforts to acquire land(s) will be at the sole risk of the Calhoun Port Authority. Furthermore, for any property that qualifies for Federal participation in the proposed project, your acquisition efforts must be in compliance with all of the provisions of P.L. 91-646, the Federal Relocation Assistance Law.

Please ensure that all records are kept regarding purchase price and real estate administrative expenses such as title evidence, surveys and appraisal fees. This information will be necessary for you to receive credit in the event of Federal Authorization. Please be advised our regulations dictate that credit will not be given for real estate administrative costs for any properties acquired five or more years prior to execution of a PPA.

If you have any questions, please contact Mrs. Lisa McCracken Mairs at (409) 766-3913 or Lisa.M.Mairs@usace.army.mil.

Sincerely,

Timothy J. Nelson
Chief, Real Estate Division
Galveston District
U.S. Army Corps of Engineers